

WBS No: 1EBB0102
 Activity ID: 1EBB120000

Rockv Flats Closure Project
Baseline Cost and Basis of Estimate

Project: Baseline Devl
 WBS Filter: 1EBB
 Activity Filter: *

Starts In FY *

WBS No: 1EBB0102 Title: Subcontractor Mgmt & Administration
 Activity ID: 1EBB120000 Description: Utilities Mgmt/Ovrsght & Admin FY00 Cost Risk 2 Schedule Risk 2

Line Item	Description	Quantity	Units	BOE Type	Labor Hours/Unit	Labor Hours Total	Labor Cost Total	Materials/ Sub Cost	Contingency & Escalation	Total Prime Cost	Burden Cost	Total Cost
100	Utilities Mgmt/Oversight and Admin.	1.00	each	HC	688	688	27.888	16.558	0	44.446	13.609	58.055
200	Engineering Support	1.00	each	EE	0	0	0	4.860	0	4.860	0	4.860
300	Analytical Services	1.00	each	EE	0	0	0	972	0	972	0	972
400	Records Disposition	40.00	each	EE	0	0	0	725	0	725	0	725
Total for Activity 1EBB120000:						688	27.888	23.116	0	51.004	13.609	64.613

Line Item 100 - Utilities Mgmt/Oversight and Admin.

BOE

Historical Data Source - Initial estimate is taken from FY98 Basis Of Estimate Tool(BEST) as modified by the RFCSS proposal.
 Item Desc -Management/Oversight, Administration and System Individual to support utilities systems de-activation and D&D.
 Breakdown of Historical Data:
 Item - Management/Oversight and Admin.
 Unit Cost -3,620 hrs. \$100,000 Materials/SubCost
 Unit Cost Adjustment factor - FY 99 budget is used as the base year. FY00 thru 05 are adjusted based on the D&D schedule.
 Revised Unit Cost -same as FY00
 Basis for adjustment -None
 This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

Resources

Cost Element	Skill	Department	Curve	Quantity	Units
750 STRAIGHT TIME BASE	M010 FOREMEN / TEAM LEADS / GROUP	C220S Utility Operations	Linear	344.04	Hours
Factors 1810 hrs	0.36123 May 2000 Earned Value Factor				
			0.52618 [SYS 061300]	0.526183 - Target	
750 STRAIGHT TIME BASE	M020 MANAGERS (GRADE 69 - 72)	C220S Utility Operations	Linear	344.04	Hours
Factors 1810 hrs.	0.36123 May 2000 Earned Value Factor				
			0.52618 [SYS 061300]	0.526183 - Target	
A53 E-2	0000 NONE	C220S Utility Operations	Linear	13.609.00	Dollars
Factors 70000 dollars	1.02283 -- FY00 Escalation --	0.36123 May 2000 Earned Value Factor			
			0.52618 [SYS 061300]	0.526183 - Target	
A5C SUPPLIES	0000 NONE	C220S Utility Operations	Linear	1.929.26	Dollars
Factors 10000 dollars	1.015 -- FY00 Escalation --	0.36123 May 2000 Earned Value Factor			
			0.52618 [SYS 061300]	0.526183 - Target	
A5M TRAVEL/TRAIN/RELOCAT	0000 NONE	C220S Utility Operations	Linear	950.37	Dollars
Factors 5000 dollars	0.36123 May 2000 Earned Value Factor				
			0.52618 [SYS 061300]	0.526183 - Target	
A5T TAXES	0000 NONE	C220S Utility Operations	Linear	69.45	Dollars
Factors 360 dollars	1.015 -- FY00 Escalation --	0.36123 May 2000 Earned Value Factor			
			0.52618 [SYS 061300]	0.526183 - Target	

Line Item 200 - Engineering Support

BOE

This activity provides for Engineering support for utility system termination impacts associated with site closure support, such as steam line termination, electrical distribution, and utility distribution, as built drawing updates and operating procedures.
 This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

Resources

Cost Element	Skill	Department	Curve	Quantity	Units
A53 E-2	0000 NONE	C200S Engineering Services	Linear	4.860.36	Dollars
Factors 25000 dollars	1.02283 -- FY00 Escalation --	0.36123 May 2000 Earned Value Factor			
			0.52618 [SYS 061300]	0.526183 - Target	

Line Item 300 - Analytical Services

BOE

Provide analytical lab services for general lab samples etc. for all plant utilities.
 This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

Resources

Cost Element	Skill	Department	Curve	Quantity	Units
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WBS No: 1EBB0102
 Activity ID: 1EBB120000

Rockv Flats Closure Project
Baseline Cost and Basis of Estimate

Project: Baseline Devl
 WBS Filter: 1EBB
 Activity Filter: *
 Starts In FY: *

A5H	SUBCONTRACTED SRVS	0000	NONE	K267S	Analytical Laboratory Services	Linear	972.07	Dollars
<i>Factors</i> 5000 dollars		1.02283 -- FY00 Escalation --		0.36123 May 2000 Earned Value Factor		0.52618 [SYS 061300] 0.526183 - Target		

Line Item 400 - Records Disposition

BOE
 This line item provides budget for records disposition activities for all the Utility Operations prior to delivery of the records to the building dock or pick up point.
 This estimate is based on a memo from F. Terrell, IRM, dated 4-12-99 subject: 2006 Records Disposition Planning Template - FDT -005-99.
 Unit cost is \$50 per box.
 This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

<i>Cost Element</i>		<i>Skill</i>		<i>Department</i>		<i>Curve</i>	<i>Quantity</i>	<i>Units</i>
A55	SOURCE ONE	0000	NONE	K215S	Information Resource Mat	Linear	18.14	Dollars
<i>Factors</i> 50 dollars		1.02283 -- FY00 Escalation --		0.67401 January 2000 Earned Value Factor		0.52618 [SYS 061300] 0.526183 - Target		

Activity ID: 1EBB120100 Description: Utilities Mamt/Ovrscht & Admin FY01

Cost Risk 2 Schedule Risk 2

Line Item	Description	Quantity	Units	BOE Type	Labor Hours/Unit	Labor Hours Total	Labor Cost Total	Materials/ Sub Cost	Contingency & Escalation	Total Prime Cost	Burden Cost	Total Cost
100	Utilities Mamt/Oversight and Admin.	1.00	each	HC	3.219	3.219	130.483	90.814	0	221.297	62.240	283.537
200	Engineering Support	1.00	each	EE	0	0	0	22.741	0	22.741	0	22.741
300	Analytical Services	1.00	each	EE	0	0	0	4.548	0	4.548	0	4.548
400	Records Disposition	40.00	each	EE	0	0	0	1.819	0	1.819	0	1.819
SYS	Contingency And Escalation	1.00	ea	EE	0	0	0	0	16.575	16.575	0	16.575
Total for Activity 1EBB120100:						3.219	130.483	119.922	16.575	266.981	62.240	329.221

Line Item 100 - Utilities Mgmt/Oversight and Admin.

BOE
 Historical Data Source - Initial estimate is taken from FY98 Basis Of Estimate Tool(BEST) as modified by the RFCSS proposal.
 Item Desc -Management/Oversight, Administration and System Individual to support utilities systems de-activation and D&D.
 Breakdown of Historical Data:
 Item - Management/Oversight and Admin.
 Unit Cost -3,620 hrs. \$100,000 Materials/SubCost
 Unit Cost Adjustment factor - FY 99 budget is used as the base year. FY00 thru 05 are adjusted bsd on the D&D schedule.
 Revised Unit Cost -same as FY00
 Basis for adjustment -None
 This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

<i>Cost Element</i>		<i>Skill</i>		<i>Department</i>		<i>Curve</i>	<i>Quantity</i>	<i>Units</i>
750	STRAIGHT TIME BASE	M010	FOREMEN / TEAM LEADS / GROUP	C220S	Utility Operations	Linear	1.609.71	Hours
<i>Factors</i> 1810 hrs						0.88934 [SYS 061400] .88934200 - Svstem		
750	STRAIGHT TIME BASE	M020	MANAGERS (GRADE 69 - 72)	C220S	Utility Operations	Linear	1.609.71	Hours
<i>Factors</i> 1810 hrs.						0.88934 [SYS 061400] .88934200 - Svstem		
A53	E-2	0000	NONE	C220S	Utility Operations	Linear	63.675.20	Dollars
<i>Factors</i> 70000 dollars		1.02283 -- FY00 Escalation --				0.88934 [SYS 061400] .88934200 - Svstem		
A5C	SUPPLIES	0000	NONE	C220S	Utility Operations	Linear	9.026.82	Dollars
<i>Factors</i> 10000 dollars		1.015 -- FY00 Escalation --				0.88934 [SYS 061400] .88934200 - Svstem		
A5M	TRAVEL/TRAIN/RELOCAT	0000	NONE	C220S	Utility Operations	Linear	17.786.84	Dollars
<i>Factors</i> 20000 dollars						0.88934 [SYS 061400] .88934200 - Svstem		
A5T	TAXES	0000	NONE	C220S	Utility Operations	Linear	324.97	Dollars
<i>Factors</i> 360 dollars		1.015 -- FY00 Escalation --				0.88934 [SYS 061400] .88934200 - Svstem		

WBS No: 1EBB0102
 Activity ID: 1EBB120100

Rockv Flats Closure Project
Baseline Cost and Basis of Estimate

Project Baseline Devl
 WBS Filter 1EBB
 Activity Filter *

Starts In FY *

Line Item 200 - Engineering Support

BOE This activity provides for Engineering support for utility system termination impacts associated with site closure support, such as steam line termination, electrical distribution, and utility distribution, as built drawing updates and operating procedures.
 This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

Resources	Cost Element	Skill	Department	Curve	Quantity	Units
A53	E-2	0000 NONE	C200S Engineering Services	Linear	22.741.14	Dollars
Factors 25000 dollars 1.02283 -- FY00 Escalation --						
0.88934 [SYS 061400].88934200 - System						

Line Item 300 - Analytical Services

BOE Provide analytical lab services for general lab samples etc. for all plant utilities.
 This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

Resources	Cost Element	Skill	Department	Curve	Quantity	Units
A5H	SUBCONTRACTED SRVS	0000 NONE	K267S Analytical Laboratory Services	Linear	4.548.23	Dollars
Factors 5000 dollars 1.02283 -- FY00 Escalation --						
0.88934 [SYS 061400].88934200 - System						

Line Item 400 - Records Disposition

BOE This line item provides budget for records disposition activities for all the Utility Operations prior to delivery of the records to the building dock or pick up point.
 This estimate is based on a memo from F. Terrell, IRM, dated 4-12-99 subject: 2006 Records Disposition Planning Template - FDT -005-99.
 Unit cost is \$50 per box.
 This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

Resources	Cost Element	Skill	Department	Curve	Quantity	Units
A55	SOURCE ONE	0000 NONE	K215S Information Resource Mat	Linear	45.48	Dollars
Factors 50 dollars 1.02283 -- FY00 Escalation --						
0.88934 [SYS 061400].88934200 - System						

Line Item SYS - Contingency And Escalation

Resources	Cost Element	Skill	Department	Curve	Quantity	Units
CON	CONTINGENCY	0000 NONE	ZDEPT No Department	Linear	10,000.89	Dollars
Factors 10000.9 Dollars						
ESC	ESCALATION	0000 NONE	ZDEPT No Department	Linear	6,574.24	Dollars
Factors 6574.24 Dollars						

Activity ID: 1EBB120200 Description: Utilities Mgmt/Ovrsght & Admin FY02

Cost Risk 2 Schedule Risk 2

Line Item	Description	Quantity	Units	BOE Type	Labor Hours/Unit	Labor Hours Total	Labor Cost Total	Materials/ Sub Cost	Contingency & Escalation	Total Prime Cost	Burden Cost	Total Cost
100	Utilities Mgmt/Oversight and Admin.	1.00	each	HC	3,219	3,219	130,483	90,814	0	221,297	46,061	267,357
200	Engineering Support	1.00	each	EE	0	0	0	22,741	0	22,741	0	22,741
300	Analytical Services	1.00	each	EE	0	0	0	4,548	0	4,548	0	4,548
400	Records Disposition	30.00	each	EE	0	0	0	1,364	0	1,364	0	1,364
SYS	Contingency And Escalation	1.00	ea	EE	0	0	0	0	44,243	44,243	0	44,243
Total for Activity 1EBB120200:						3,219	130,483	119,468	44,243	294,193	46,061	340,254

Line Item 100 - Utilities Mgmt/Oversight and Admin.

BOE Historical Data Source - Initial estimate is taken from FY98 Basis Of Estimate Tool(BEST) as modified by the RFCSS proposal.
 Item Desc -Management/Oversight, Administration and System Individual to support utilities systems de-activation and D&D.
 Breakdown of Historical Data:
 Item - Management/Oversight and Admin.
 Unit Cost -3,620 hrs. \$100,000 Materials/SubCost
 Unit Cost Adjustment factor - FY 99 budget is used as the base year. FY00 thru 05 are adjusted based on the D&D schedule.
 Revised Unit Cost -same as FY00
 Basis for adjustment -None

WBS No: 1EBB0102
 Activity ID: 1EBB120200

Rockv Flats Closure Project
Baseline Cost and Basis of Estimate

Project: Baseline Devl
 WBS Filter: 1EBB
 Activity Filter: *

Starts In FY *

This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

Resources	Cost Element	Skill	Department	Curve	Quantity	Units
	750 STRAIGHT TIME BASE	M010 FOREMEN / TEAM LEADS / GROUP	C220S Utility Operations	Linear	1.609.71	Hours
Factors 1810 hrs						
0.88934 [SYS 061400] .88934200 - System						
	750 STRAIGHT TIME BASE	M020 MANAGERS (GRADE 69 - 72)	C220S Utility Operations	Linear	1.609.71	Hours
Factors 1810 hrs.						
0.88934 [SYS 061400] .88934200 - System						
	A53 E-2	0000 NONE	C220S Utility Operations	Linear	63.675.20	Dollars
Factors 70000 dollars 1.02283 -- FY00 Escalation --						
0.88934 [SYS 061400] .88934200 - System						
	A5C SUPPLIES	0000 NONE	C220S Utility Operations	Linear	9.026.82	Dollars
Factors 10000 dollars 1.015 -- FY00 Escalation --						
0.88934 [SYS 061400] .88934200 - System						
	A5M TRAVEL/TRAIN/RELOCAT	0000 NONE	C220S Utility Operations	Linear	17.786.84	Dollars
Factors 20000 dollars						
0.88934 [SYS 061400] .88934200 - System						
	A5T TAXES	0000 NONE	C220S Utility Operations	Linear	324.97	Dollars
Factors 360 dollars 1.015 -- FY00 Escalation --						
0.88934 [SYS 061400] .88934200 - System						

Line Item 200 - Engineering Support

BOE This activity provides for Engineering support for utility system termination impacts associated with site closure support, such as steam line termination, electrical distribution, and utility distribution, as built drawing updates and operating procedures.
 This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

Resources	Cost Element	Skill	Department	Curve	Quantity	Units
	A53 E-2	0000 NONE	C200S Engineering Services	Linear	22.741.14	Dollars
Factors 25000 dollars 1.02283 -- FY00 Escalation --						
0.88934 [SYS 061400] .88934200 - System						

Line Item 300 - Analytical Services

BOE Provide analytical lab services for general lab samples etc. for all plant utilities.
 This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

Resources	Cost Element	Skill	Department	Curve	Quantity	Units
	A5H SUBCONTRACTED SRVS	0000 NONE	K267S Analytical Laboratory Services	Linear	4.548.23	Dollars
Factors 5000 dollars 1.02283 -- FY00 Escalation --						
0.88934 [SYS 061400] .88934200 - System						

Line Item 400 - Records Disposition

BOE This line item provides budget for records disposition activities for all the Utility Operations prior to delivery of the records to the building dock or pick up point.
 This estimate is based on a memo from F. Terrell, IRM, dated 4-12-99 subject: 2006 Records Disposition Planning Template - FDT -005-99.
 Unit cost is \$50 per box.
 This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

Resources	Cost Element	Skill	Department	Curve	Quantity	Units
	A55 SOURCE ONE	0000 NONE	K215S Information Resource Mgt	Linear	45.48	Dollars
Factors 50 Dollars 1.02283 -- FY00 Escalation --						
0.88934 [SYS 061400] .88934200 - System						

Line Item SYS - Contingency And Escalation

Resources	Cost Element	Skill	Department	Curve	Quantity	Units

WBS No: 1EBB0102
 Activity ID: 1EBB120200

Rockv Flats Closure Project
Baseline Cost and Basis of Estimate

Project Baseline Devl
 WBS Filter 1EBB
 Activity Filter *

Starts In FY *

CON	CONTINGENCY	0000	NONE	ZDEPT	No Department	Linear	30,409.77	Dollars
<i>Factors</i> 30409.8 Dollars								
ESC	ESCALATION	0000	NONE	ZDEPT	No Department	Linear	13,833.03	Dollars
<i>Factors</i> 13833.0 Dollars								

Activity ID: 1EBB120300 Description: Utilities Mgmt/Ovrsht & Admin FY03

Cost Risk 2 Schedule Risk 2

Line Item	Description	Quantity	Units	BOE Type	Labor Hours/Unit	Labor Hours Total	Labor Cost Total	Materials/ Sub Cost	Contingency & Escalation	Total Prime Cost	Burden Cost	Total Cost
100	Utilities Mgmt/Oversight and Admin.	1.00	each	HC	3.219	3.219	130,483	90,814	0	221,297	45,147	266,444
200	Engineering Support	1.00	each	EE	0	0	0	22,741	0	22,741	0	22,741
300	Analytical Services	1.00	each	EE	0	0	0	4,548	0	4,548	0	4,548
400	Records Disposition	30.00	each	EE	0	0	0	1,364	0	1,364	0	1,364
SYS	Contingency And Escalation	1.00	lea	EE	0	0	0	0	81,815	81,815	0	81,815
Total for Activity 1EBB120300:						3.219	130,483	119,468	81,815	331,766	45,147	376,913

Line Item 100 - Utilities Mgmt/Oversight and Admin.

BOE

Historical Data Source - Initial estimate is taken from FY98 Basis Of Estimate Tool(BEST) as modified by the RFCSS proposal.
 Item Desc -Management/Oversight, Administration and System Individual to support utilities systems de-activation and D&D.
 Breakdown of Historical Data:
 Item - Management/Oversight and Admin.
 Unit Cost -3,620 hrs. \$100,000 Materials/SubCost
 Unit Cost Adjustment factor - FY 99 budget is used as the base year. FY00 thru 05 are adjusted based on the D&D schedule.
 Revised Unit Cost -same as FY00
 Basis for adjustment -None
 This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

Resources

Cost Element	Skill	Department	Curve	Quantity	Units
750 STRAIGHT TIME BASE	M010 FOREMEN / TEAM LEADS / GROUP	C220S Utility Operations	Linear	1,609.71	Hours
<i>Factors</i> 1810 hrs					
750 STRAIGHT TIME BASE	M020 MANAGERS (GRADE 69 - 72)	C220S Utility Operations	Linear	1,609.71	Hours
<i>Factors</i> 1810 hrs.					
A53 E-2	0000 NONE	C220S Utility Operations	Linear	63,675.20	Dollars
<i>Factors</i> 70000 dollars 1.02283 -- FY00 Escalation --					
A5C SUPPLIES	0000 NONE	C220S Utility Operations	Linear	9,026.82	Dollars
<i>Factors</i> 10000 dollars 1.015 -- FY00 Escalation --					
A5M TRAVEL/TRAIN/RELOCAT	0000 NONE	C220S Utility Operations	Linear	17,786.84	Dollars
<i>Factors</i> 20000 dollars					
A5T TAXES	0000 NONE	C220S Utility Operations	Linear	324.97	Dollars
<i>Factors</i> 360 dollars 1.015 -- FY00 Escalation --					

Line Item 200 - Engineering Support

BOE

This activity provides for Engineering support for utility system termination impacts associated with site closure support, such as steam line termination, electrical distribution, and utility distribution, as built drawing updates and operating procedures.
 This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

Resources

Cost Element	Skill	Department	Curve	Quantity	Units
A53 E-2	0000 NONE	C200S Engineering Services	Linear	22,741.14	Dollars
<i>Factors</i> 25000 dollars 1.02283 -- FY00 Escalation --					

0.88934 [SYS 061400] .88934200 - Svsstem

WBS No: 1EBB0102
 Activity ID: 1EBB120300

Rockv Flats Closure Project
Baseline Cost and Basis of Estimate

Project: Baseline Devl
 WBS Filter: 1EBB
 Activity Filter: *

Starts In FY *

Line Item 300 - Analytical Services

BOE Provide analytical lab services for general lab samples etc. for all plant utilities.
 This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

Resources		Cost Element	Skill	Department	Curve	Quantity	Units
A5H	SUBCONTRACTED SRVS	0000	NONE	K267S	Analytical Laboratory Services	Linear	4,548.23 Dollars

Factors 5000 dollars 1.02283 -- FY00 Escalation --

0.88934 [SYS 061400] .88934200 - System

Line Item 400 - Records Disposition

BOE This line item provides budget for records disposition activities for all the Utility Operations prior to delivery of the records to the building dock or pick up point.
 This estimate is based on a memo from F. Terrell, IRM, dated 4-12-99 subject: 2006 Records Disposition Planning Template - FDT -005-99.
 Unit cost is \$50 per box.
 This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

Resources		Cost Element	Skill	Department	Curve	Quantity	Units
A55	SOURCE ONE	0000	NONE	K215S	Information Resource Mat	Linear	45.48 Dollars

Factors 50 Dollars 1.02283 -- FY00 Escalation --

0.88934 [SYS 061400] .88934200 - System

Line Item SYS - Contingency And Escalation

BOE

Resources		Cost Element	Skill	Department	Curve	Quantity	Units
CON	CONTINGENCY	0000	NONE	ZDEPT	No Department	Linear	59,185.25 Dollars
ESC	ESCALATION	0000	NONE	ZDEPT	No Department	Linear	22,629.65 Dollars

Factors 59185.3 Dollars 22629.7 Dollars

Cost Risk 2 Schedule Risk 2

Activity ID: 1EBB120400 Description: Utilities Mgmt/Ovsrht & Admin FY04

Line Item	Description	Quantity	Units	BOE Type	Labor Hours/Unit	Labor Hours Total	Labor Cost Total	Materials/ Sub Cost	Contingency & Escalation	Total Prime Cost	Burden Cost	Total Cost
100	Utilities Mgmt/Oversight and Admin.	1.00	each	HC	3.219	3,219	130,483	90,814	0	221,297	36,796	258,093
200	Engineering Support	1.00	each	EE	0	0	0	22,741	0	22,741	0	22,741
300	Analytical Services	1.00	each	EE	0	0	0	4,548	0	4,548	0	4,548
400	Records Disposition	30.00	each	EE	0	0	0	1,364	0	1,364	0	1,364
SYS	Contingency And Escalation	1.00	ea	EE	0	0	0	0	40,944	40,944	0	40,944
Total for Activity 1EBB120400:						3,219	130,483	119,468	40,944	290,895	36,796	327,691

Line Item 100 - Utilities Mgmt/Oversight and Admin.

BOE Historical Data Source - Initial estimate is taken from FY98 Basis Of Estimate Tool(BEST) as modified by the RFCSS proposal.
 Item Desc -Management/Oversight, Administration and System Individual to support utilities systems de-activation and D&D.
 Breakdown of Historical Data:
 Item - Management/Oversight and Admin.
 Unit Cost -3,620 hrs. \$100,000 Materials/SubCost
 Unit Cost Adjustment factor - FY 99 budget is used as the base year. FY00 thru 05 are adjusted based on the D&D schedule.
 Revised Unit Cost -same as FY00
 Basis for adjustment -None
 This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

Resources		Cost Element	Skill	Department	Curve	Quantity	Units
750	STRAIGHT TIME BASE	M010	FOREMEN / TEAM LEADS / GROUP	C220S	Utility Operations	Linear	1,609.71 Hours
750	STRAIGHT TIME BASE	M020	MANAGERS (GRADE 69 - 72)	C220S	Utility Operations	Linear	1,609.71 Hours

Factors 1810 hrs

0.88934 [SYS 061400] .88934200 - System

0.88934 [SYS 061400] .88934200 - System

WBS No: 1EBB0102
 Activity ID: 1EBB120400

Rockv Flats Closure Project
Baseline Cost and Basis of Estimate

Project: Baseline Devl
 WBS Filter: 1EBB
 Activity Filter: *

Starts In FY *

A53	E-2	0000	NONE	C220S	Utility Operations	Linear	63,675.20	Dollars
<i>Factors</i>		70000 dollars	1.02283 -- FY00 Escalation --				0.88934 [SYS 061400] .88934200 - System	
A5C	SUPPLIES	0000	NONE	C220S	Utility Operations	Linear	9,026.82	Dollars
<i>Factors</i>		10000 dollars	1.015 -- FY00 Escalation --				0.88934 [SYS 061400] .88934200 - System	
A5M	TRAVEL/TRAIN/RELOCAT	0000	NONE	C220S	Utility Operations	Linear	17,786.84	Dollars
<i>Factors</i>		20000 dollars					0.88934 [SYS 061400] .88934200 - System	
A5T	TAXES	0000	NONE	C220S	Utility Operations	Linear	324.97	Dollars
<i>Factors</i>		360 dollars	1.015 -- FY00 Escalation --				0.88934 [SYS 061400] .88934200 - System	

Line Item 200 - Engineering Support

BOE This activity provides for Engineering support for utility system termination impacts associated with site closure support, such as steam line termination, electrical distribution, and utility distribution, as built drawing updates and operating procedures.
 This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

<i>Cost Element</i>		<i>Skill</i>		<i>Department</i>		<i>Curve</i>	<i>Quantity</i>	<i>Units</i>
A53	E-2	0000	NONE	C200S	Engineering Services	Linear	22,741.14	Dollars
<i>Factors</i>		25000 dollars	1.02283 -- FY00 Escalation --				0.88934 [SYS 061400] .88934200 - System	

Line Item 300 - Analytical Services

BOE Provide analytical lab services for general lab samples etc. for all plant utilities.
 This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

<i>Cost Element</i>		<i>Skill</i>		<i>Department</i>		<i>Curve</i>	<i>Quantity</i>	<i>Units</i>
A5H	SUBCONTRACTED SRVS	0000	NONE	K267S	Analytical Laboratory Services	Linear	4,548.23	Dollars
<i>Factors</i>		5000 dollars	1.02283 -- FY00 Escalation --				0.88934 [SYS 061400] .88934200 - System	

Line Item 400 - Records Disposition

BOE This line item provides budget for records disposition activities for all the Utility Operations prior to delivery of the records to the building dock or pick up point.
 This estimate is based on a memo from F. Terrell, IRM, dated 4-12-99 subject: 2006 Records Disposition Planning Template - FDT -005-99.
 Unit cost is \$50 per box.
 This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

<i>Cost Element</i>		<i>Skill</i>		<i>Department</i>		<i>Curve</i>	<i>Quantity</i>	<i>Units</i>
A55	SOURCE ONE	0000	NONE	K215S	Information Resource Mat	Linear	45.48	Dollars
<i>Factors</i>		50 Dollars	1.02283 -- FY00 Escalation --				0.88934 [SYS 061400] .88934200 - System	

Line Item SYS - Contingency And Escalation

<i>Cost Element</i>		<i>Skill</i>		<i>Department</i>		<i>Curve</i>	<i>Quantity</i>	<i>Units</i>
CON	CONTINGENCY	0000	NONE	ZDEPT	No Department	Linear	13,411.45	Dollars
<i>Factors</i>		13411.5 Dollars						
ESC	ESCALATION	0000	NONE	ZDEPT	No Department	Linear	27,532.37	Dollars
<i>Factors</i>		27532.4 Dollars						

Activity ID: 1EBB120500

Description: Utilities Mamt/Ovrsht & Admin FY05

Cost Risk 2 Schedule Risk 2

Line Item	Description	Quantity	Units	BOE Type	Labor Hours/Unit	Labor Hours Total	Labor Cost Total	Materials/ Sub Cost	Contingency & Escalation	Total Prime Cost	Burden Cost	Total Cost
100	Utilities Mamt/Oversight and Admin.	0.50	each	HC	3,219	1,610	65,242	45,407	0	110,648	22,704	133,352
200	Engineering Support	0.50	each	EE	0	0	0	11,371	0	11,371	0	11,371

WBS No: 1EBB0102
 Activity ID: 1EBB120500

Rockv Flats Closure Project
Baseline Cost and Basis of Estimate

Project Baseline Devl
 WBS Filter 1EBB
 Activity Filter *

Starts In FY *

300	Analytical Services	0.50	each	EE	0	0	0	2,274	0	2,274	0	2,274
400	Records Disposition	15.00	each	EE	0	0	0	682	0	682	0	682
SYS	Contingency And Escalation	1.00	ea	EE	0	0	0	0	78,998	78,998	0	78,998
Total for Activity 1EBB120500:					1.610	65.242	59.734	78.998	203.973	22.704	226.677	

Line Item 100 - Utilities Mgmt/Oversight and Admin.

BOE
 Historical Data Source - Initial estimate is taken from FY98 Basis Of Estimate Tool(BEST) as modified by the RFCSS proposal.
 Item Desc -Management/Oversight, Administration and System Individual to support utilities systems de-activation and D&D.
 Breakdown of Historical Data:
 Item - Management/Oversight and Admin.
 Unit Cost -3,620 hrs. \$100,000 Materials/SubCost
 Unit Cost Adjustment factor - FY 99 budget is used as the base year. FY00 thru 05 are adjusted based on the D&D schedule.
 Revised Unit Cost -same as FY00
 Basis for adjustment -None
 This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

Resources

Cost Element	Skill	Department	Curve	Quantity	Units
750 STRAIGHT TIME BASE	M010 FOREMEN / TEAM LEADS / GROUP	C220S Utility Operations	Linear	1,609.71	Hours
Factors 1810 hrs					
0.88934 [SYS 061400] .88934200 - System					
750 STRAIGHT TIME BASE	M020 MANAGERS (GRADE 69 - 72)	C220S Utility Operations	Linear	1,609.71	Hours
Factors 1810 hrs.					
0.88934 [SYS 061400] .88934200 - System					
A53 E-2	0000 NONE	C220S Utility Operations	Linear	63,675.20	Dollars
Factors 70000 dollars 1.02283 -- FY00 Escalation --					
0.88934 [SYS 061400] .88934200 - System					
A5C SUPPLIES	0000 NONE	C220S Utility Operations	Linear	9,026.82	Dollars
Factors 10000 dollars 1.015 -- FY00 Escalation --					
0.88934 [SYS 061400] .88934200 - System					
A5M TRAVEL/TRAIN/RELOCAT	0000 NONE	C220S Utility Operations	Linear	17,786.84	Dollars
Factors 20000 dollars					
0.88934 [SYS 061400] .88934200 - System					
A5T TAXES	0000 NONE	C220S Utility Operations	Linear	324.97	Dollars
Factors 360 dollars 1.015 -- FY00 Escalation --					
0.88934 [SYS 061400] .88934200 - System					

Line Item 200 - Engineering Support

BOE
 This activity provides for Engineering support for utility system termination impacts associated with site closure support, such as steam line termination, electrical distribution, and utility distribution, as built drawing updates and operating procedures.
 This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

Resources

Cost Element	Skill	Department	Curve	Quantity	Units
A53 E-2	0000 NONE	C200S Engineering Services	Linear	22,741.14	Dollars
Factors 25000 dollars 1.02283 -- FY00 Escalation --					
0.88934 [SYS 061400] .88934200 - System					

Line Item 300 - Analytical Services

BOE
 Provide analytical lab services for general lab samples etc. for all plant utilities.
 This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

Resources

Cost Element	Skill	Department	Curve	Quantity	Units
A5H SUBCONTRACTED SRVS	0000 NONE	K267S Analytical Laboratory Services	Linear	4,548.23	Dollars
Factors 5000 dollars 1.02283 -- FY00 Escalation --					
0.88934 [SYS 061400] .88934200 - System					

Line Item 400 - Records Disposition

BOE
 This line item provides budget for records disposition activities for all the Utility Operations prior to delivery of the records to the building dock or

WBS No: 1EBB0102
 Activity ID: 1EBB120500

Rockv Flats Closure Project
Baseline Cost and Basis of Estimate

Project: Baseline Devl
 WBS Filter: 1EBB
 Activity Filter: *

Starts In FY *

pick up point.
 This estimate is based on a memo from F. Terrell, IRM, dated 4-12-99 subject: 2006 Records Disposition Planning Template - FDT -005-99.
 Unit cost is \$50 per box.
 This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

Resources	Cost Element	Skill	Department	Curve	Quantity	Units
	A55 SOURCE ONE	0000 NONE	K215S Information Resource Mat	Linear	45.48	Dollars
Factors	50 Dollars	1.02283 -- FY00 Escalation --				
				0.88934	[SYS 061400]	.88934200 - System

Line Item SYS - Contingency And Escalation

Resources	Cost Element	Skill	Department	Curve	Quantity	Units
	CON CONTINGENCY	0000 NONE	ZDEPT No Department	Linear	56,120.04	Dollars
Factors	56120.0 Dollars					
	ESC ESCALATION	0000 NONE	ZDEPT No Department	Linear	22,877.82	Dollars
Factors	22877.8 Dollars					

Activity ID: 1EXXX1205 Description: Utilities Mgmt/Ovrsht & Admin FY06

Cost Risk 2 Schedule Risk 2

Line Item	Description	Quantity	Units	BOE Type	Labor Hours/Unit	Labor Hours Total	Labor Cost Total	Materials/ Sub Cost	Contingency & Escalation	Total Prime Cost	Burden Cost	Total Cost
100	Utilities Mgmt/Oversight and Admin.	0.48	each	HC	3,219	1,553	62,952	43,814	0	106,766	21,907	128,673
200	Engineering Support	0.48	each	EE	0	0	0	10,972	0	10,972	0	10,972
300	Analytical Services	0.48	each	EE	0	0	0	2,194	0	2,194	0	2,194
400	Records Disposition	14.47	each	EE	0	0	0	658	0	658	0	658
SYS	Contingency And Escalation	1.00	ea	EE	0	0	0	0	120,959	120,959	0	120,959
Total for Activity 1EXXX1205:						1,553	62,952	57,638	120,959	241,550	21,907	263,457

Line Item 100 - Utilities Mgmt/Oversight and Admin.

BOE
 Historical Data Source - Initial estimate is taken from FY98 Basis Of Estimate Tool(BEST) as modified by the RFCSS proposal.
 Item Desc -Management/Oversight, Administration and System Individual to support utilities systems de-activation and D&D.
 Breakdown of Historical Data:
 Item - Management/Oversight and Admin.
 Unit Cost -3,620 hrs. \$100,000 Materials/SubCost
 Unit Cost Adjustment factor - FY 99 budget is used as the base year. FY00 thru 05 are adjusted based on the D&D schedule.
 Revised Unit Cost -same as FY00
 Basis for adjustment -None
 This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

Resources	Cost Element	Skill	Department	Curve	Quantity	Units
	750 STRAIGHT TIME BASE	M010 FOREMEN / TEAM LEADS / GROUP	C220S Utility Operations	Linear	1,609.71	Hours
Factors	1810 hrs					
				0.88934	[SYS 061400]	.88934200 - System
	750 STRAIGHT TIME BASE	M020 MANAGERS (GRADE 69 - 72)	C220S Utility Operations	Linear	1,609.71	Hours
Factors	1810 hrs.					
				0.88934	[SYS 061400]	.88934200 - System
	A53 E-2	0000 NONE	C220S Utility Operations	Linear	63,675.20	Dollars
Factors	70000 dollars	1.02283 -- FY00 Escalation --				
				0.88934	[SYS 061400]	.88934200 - System
	A5C SUPPLIES	0000 NONE	C220S Utility Operations	Linear	9,026.82	Dollars
Factors	10000 dollars	1.015 -- FY00 Escalation --				
				0.88934	[SYS 061400]	.88934200 - System
	A5M TRAVEL/TRAIN/RELOCAT	0000 NONE	C220S Utility Operations	Linear	17,786.84	Dollars
Factors	20000 dollars					
				0.88934	[SYS 061400]	.88934200 - System

WBS No: 1EBB0102
 Activity ID: 1EXXX1205

Rockv Flats Closure Project
Baseline Cost and Basis of Estimate

Project: Baseline Devl
 WBS Filter: 1EBB
 Activity Filter: *

Starts In FY: *

A5T	TAXES	0000	NONE	C220S	Utility Operations	Linear	324.97	Dollars
<i>Factors</i> 360 dollars		1.015 -- FY00 Escalation --						

0.88934 [SYS 061400].88934200 - System

Line Item 200 - Engineering Support

BOE This activity provides for Engineering support for utility system termination impacts associated with site closure support, such as steam line termination, electrical distribution, and utility distribution, as built drawing updates and operating procedures.
 This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

<i>Cost Element</i>		<i>Skill</i>		<i>Department</i>		<i>Curve</i>	<i>Quantity</i>	<i>Units</i>
A53	E-2	0000	NONE	C200S	Engineering Services	Linear	22,741.14	Dollars
<i>Factors</i> 25000 dollars		1.02283 -- FY00 Escalation --						

0.88934 [SYS 061400].88934200 - System

Line Item 300 - Analytical Services

BOE Provide analytical lab services for general lab samples etc. for all plant utilities.
 This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

<i>Cost Element</i>		<i>Skill</i>		<i>Department</i>		<i>Curve</i>	<i>Quantity</i>	<i>Units</i>
A5H	SUBCONTRACTED SRVS	0000	NONE	K267S	Analytical Laboratory Services	Linear	4,548.23	Dollars
<i>Factors</i> 5000 dollars		1.02283 -- FY00 Escalation --						

0.88934 [SYS 061400].88934200 - System

Line Item 400 - Records Disposition

BOE This line item provides budget for records disposition activities for all the Utility Operations prior to delivery of the records to the building dock or pick up point.
 This estimate is based on a memo from F. Terrell, IRM, dated 4-12-99 subject: 2006 Records Disposition Planning Template - FDT -005-99.
 Unit cost is \$50 per box.
 This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

<i>Cost Element</i>		<i>Skill</i>		<i>Department</i>		<i>Curve</i>	<i>Quantity</i>	<i>Units</i>
A55	SOURCE ONE	0000	NONE	K215S	Information Resource Mat	Linear	45.48	Dollars
<i>Factors</i> 50 Dollars		1.02283 -- FY00 Escalation --						

0.88934 [SYS 061400].88934200 - System

Line Item SYS - Contingency And Escalation

<i>Cost Element</i>		<i>Skill</i>		<i>Department</i>		<i>Curve</i>	<i>Quantity</i>	<i>Units</i>
CON	CONTINGENCY	0000	NONE	ZDEPT	No Department	Linear	89,175.27	Dollars
<i>Factors</i> 89175.3 Dollars								
ESC	ESCALATION	0000	NONE	ZDEPT	No Department	Linear	31,784.12	Dollars
<i>Factors</i> 31784.1 Dollars								

WBS No: 1EBB02 Title: Energy Mgmt/Poll. Prevention/Tech. Supp.

Activity ID: 1EBB200000 Description: Energy Management FY00

Cost Risk 1 Schedule Risk 1

Line Item	Description	Quantity	Units	BOE Type	Labor Hours/Unit	Labor Hours Total	Labor Cost Total	Materials/ Sub Cost	Contingency & Escalation	Total Prime Cost	Burden Cost	Total Cost
100	Energy Engineer	1.00	each	HC	344	344	11,759	0	0	11,759	5,738	17,497
200	Energy Management Subcontracts	1.00	each	HC	0	0	0	5,175	0	5,175	0	5,175
Total for Activity 1EBB200000:						344	11,759	5,175	0	16,933	5,738	22,672

Line Item 100 - Energy Engineer

BOE The labor requirement to achieve base minimum scope completion consists of 1 FTE on duty during normal scheduled work hours for the FY, time is estimated at 1810 hours for the fiscal year and no overtime compensation is expected. Tasks to be accomplished are utility nominations, utility invoice review & verification, Prepare quarterly and annual energy consumption report, Prepare annual IHEM study and project status and call for annual IHEM study and projects, update site 10yr energy conservation plan, coordinate efforts for restricted curtailed natural gas deliveries, perform facility energy audits, develop potential energy conservation projects, educate site personnel on energy conservation and investigate opportunities for funding and accomplishing energy saving proposals. BOE was developed by interviewing the WAD 39 manager who has been in utilities management and oversight for over 3 years.
 This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

WBS No: 1EBB02
 Activity ID: 1EBB20000

Rockv Flats Closure Project
Baseline Cost and Basis of Estimate

Project Baseline Devl
 WBS Filter 1EBB
 Activity Filter *

Starts In FY *

Resources	Cost Element	Skill	Department	Curve	Quantity	Units
	750 STRAIGHT TIME BASE	E130 OTHER ENGINEERS	K260S Site Operations	Linear	343.72	Hours
<i>Factors</i> 1810 hours 0.3609 May 2000 Earned Value						
0.52618 [SYS 061300] 0.526183 - Target						

Line Item 200 - Energy Management Subcontracts

BOE The resource compositions for this activity consists of 2 low cost energy savings projects at \$5,000 each based on interviews with the WAD 39 manager who has been in utilities management and oversight for over 3 years, 3000 energy savings awareness kits at a estimated cost of \$1.75 each, and 150 hours of subcontracted support at an estimated cost of \$80 per hour to assist in specialized energy studies and facility energy audits. The correlation between actual costs and performance of the work may require that this estimate be updated during FY-00.
 This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

Resources	Cost Element	Skill	Department	Curve	Quantity	Units
	A5C SUPPLIES	0000 NONE	K260S Site Operations	Linear	996.97	Dollars
<i>Factors</i> 3000 Energy Pamphlets 1.75 Each 0.3609 May 22						
0.52618 [SYS 061300] 0.526183 - Target						
	A5H SUBCONTRACTED SRVS	0000 NONE	K260S Site Operations	Linear	2,278.79	Dollars
<i>Factors</i> 150 Hours Subcontract Support 80 Dollars/Hour 0.3609 May 22						
0.52618 [SYS 061300] 0.526183 - Target						
	A5H SUBCONTRACTED SRVS	0000 NONE	K260S Site Operations	Linear	1,898.99	Dollars
<i>Factors</i> 5000 Dollars Per Project 2 Projects 0.3609 May 22						
0.52618 [SYS 061300] 0.526183 - Target						

Activity ID: 1EBB201000 Description: Energy Management FY01

Cost Risk 1 Schedule Risk 1

Line Item	Description	Quantity	Units	BOE Type	Labor Hours/Unit	Labor Hours Total	Labor Cost Total	Materials/ Sub Cost	Contingency & Escalation	Total Prime Cost	Burden Cost	Total Cost
100	Energy Engineer	1.00	each	HC	1.610	1.610	55,068	0	0	55,068	26,268	81,336
200	Energy Management Subcontracts	1.00	each	HC	0	0	0	24,235	0	24,235	0	24,235
SYS	Contingency And Escalation	1.00	ea	EE	0	0	0	0	5,545	5,545	0	5,545
Total for Activity 1EBB201000:						1.610	55,068	24,235	5,545	84,848	26,268	111,115

Line Item 100 - Energy Engineer

BOE The labor requirement to achieve base minimum scope completion consists of 1 FTE on duty during normal scheduled work hours for the FY, time is estimated at 1810 hours for the fiscal year and no overtime compensation is expected. Tasks to be accomplished are utility nominations, utility invoice review & verification, Prepare quarterly and annual energy consumption report, Prepare annual IHEM study and project status and call for annual IHEM study and projects, update site 10yr energy conservation plan, coordinate efforts for restricted curtailed natural gas deliveries, perform facility energy audits, develop potential energy conservation projects, educate site personnel on energy conservation and investigate opportunities for funding and accomplishing energy saving proposals. BOE was developed by interviewing the WAD 39 manager who has been in utilities management and oversight for over 3 years.
 This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

Resources	Cost Element	Skill	Department	Curve	Quantity	Units
	750 STRAIGHT TIME BASE	E130 OTHER ENGINEERS	K260S Site Operations	Linear	1,609.71	Hours
<i>Factors</i> 1810 hours						
0.88934 [SYS 061400] .88934200 - System						

Line Item 200 - Energy Management Subcontracts

BOE The resource compositions for this activity consists of 2 low cost energy savings projects at \$5,000 each based on interviews with the WAD 39 manager who has been in utilities management and oversight for over 3 years, 3000 energy savings awareness kits at a estimated cost of \$1.75 each, and 150 hours of subcontracted support at an estimated cost of \$80 per hour to assist in specialized energy studies and facility energy audits. The correlation between actual costs and performance of the work may require that this estimate be updated during FY-00.
 This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

Resources	Cost Element	Skill	Department	Curve	Quantity	Units
	A5C SUPPLIES	0000 NONE	K260S Site Operations	Linear	4,669.05	Dollars
<i>Factors</i> 3000 Energy Pamphlets 1.75 Each						
0.88934 [SYS 061400] .88934200 - System						

WBS No: 1EBB02
 Activity ID: 1EBB201000

Rockv Flats Closure Project
Baseline Cost and Basis of Estimate

Project: Baseline Devl
 WBS Filter: 1EBB
 Activity Filter: *
 Starts In FY: *

A5H	SUBCONTRACTED SRVS	0000	NONE		K260S	Site Operations		Linear	10.672.10	Dollars
<i>Factors</i>		150	Hours Subcontract Support	80	Dollars/Hour				0.88934	[SYS 061400] .88934200 - Svstem
A5H	SUBCONTRACTED SRVS	0000	NONE		K260S	Site Operations		Linear	8.893.42	Dollars
<i>Factors</i>		5000	Dollars Per Project	2	Projects				0.88934	[SYS 061400] .88934200 - Svstem

Line Item SYS - Contingency And Escalation

BOE

Resources

<i>Cost Element</i>		<i>Skill</i>		<i>Department</i>		<i>Curve</i>	<i>Quantity</i>	<i>Units</i>
CON	CONTINGENCY	0000	NONE	ZDEPT	No Department	Linear	3.325.15	Dollars
<i>Factors</i>		3325.15 Dollars						
ESC	ESCALATION	0000	NONE	ZDEPT	No Department	Linear	2.219.91	Dollars
<i>Factors</i>		2219.91 Dollars						

Activity ID: 1EBB202000

Description: Energy Management FY02

Cost Risk 1 Schedule Risk 1

Line Item	Description	Quantity	Units	BOE Type	Labor Hours/Unit	Labor Hours Total	Labor Cost Total	Materials/ Sub Cost	Contingency & Escalation	Total Prime Cost	Burden Cost	Total Cost
100	Energy Engineer	1.00	each	HC	1.610	1.610	55,068	0	0	55,068	19,439	74,507
200	Energy Management Subcontracts	1.00	each	HC	0	0	0	24,235	0	24,235	0	24,235
SYS	Contingency And Escalation	1.00	ea	EE	0	0	0	0	14,597	14,597	0	14,597
Total for Activity 1EBB202000:						1.610	55,068	24,235	14,597	93,899	19,439	113,338

Line Item 100 - Energy Engineer

BOE

The labor requirement to achieve base minimum scope completion consists of 1 FTE on duty during normal scheduled work hours for the FY, time is estimated at 1810 hours for the fiscal year and no overtime compensation is expected. Tasks to be accomplished are utility nominations, utility invoice review & verification, Prepare quarterly and annual energy consumption report, Prepare annual IHEM study and project status and call for annual IHEM study and projects, update site 10yr energy conservation plan, coordinate efforts for restricted curtailed natural gas deliveries, perform facility energy audits, develop potential energy conservation projects, educate site personnel on energy conservation and investigate opportunities for funding and accomplishing energy saving proposals. BOE was developed by interviewing the WAD 39 manager who has been in utilities management and oversight for over 3 years.

This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

Resources

<i>Cost Element</i>		<i>Skill</i>		<i>Department</i>		<i>Curve</i>	<i>Quantity</i>	<i>Units</i>	
750	STRAIGHT TIME BASE	E130	OTHER ENGINEERS	K260S	Site Operations	Linear	1.609.71	Hours	
<i>Factors</i>		1810 hours							
0.88934 [SYS 061400] .88934200 - Svstem									

Line Item 200 - Energy Management Subcontracts

BOE

The resource compositions for this activity consists of 2 low cost energy savings projects at \$5,000 each based on interviews with the WAD 39 manager who has been in utilities management and oversight for over 3 years, 3000 energy savings awareness kits at a estimated cost of \$1.75 each, and 150 hours of subcontracted support at an estimated cost of \$80 per hour to assist in specialized energy studies and facility energy audits. The correlation between actual costs and performance of the work may require that this estimate be updated during FY-00.

This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

Resources

<i>Cost Element</i>		<i>Skill</i>		<i>Department</i>		<i>Curve</i>	<i>Quantity</i>	<i>Units</i>	
A5C	SUPPLIES	0000	NONE	K260S	Site Operations	Linear	4.669.05	Dollars	
<i>Factors</i>		3000	Energy Pamphlets	1.75	Each				
0.88934 [SYS 061400] .88934200 - Svstem									
A5H	SUBCONTRACTED SRVS	0000	NONE	K260S	Site Operations	Linear	10.672.10	Dollars	
<i>Factors</i>		150	Hours Subcontract Support	80	Dollars/Hour				
0.88934 [SYS 061400] .88934200 - Svstem									
A5H	SUBCONTRACTED SRVS	0000	NONE	K260S	Site Operations	Linear	8.893.42	Dollars	
<i>Factors</i>		5000	Dollars Per Project	2	Projects				
0.88934 [SYS 061400] .88934200 - Svstem									

Line Item SYS - Contingency And Escalation

BOE

Resources

<i>Cost Element</i>		<i>Skill</i>		<i>Department</i>		<i>Curve</i>	<i>Quantity</i>	<i>Units</i>
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WBS No: 1EBB02
 Activity ID: 1EBB202000

Rockv Flats Closure Project
Baseline Cost and Basis of Estimate

Project: Baseline Devl
 WBS Filter: 1EBB
 Activity Filter: *

Starts In FY: *

CON	CONTINGENCY	0000	NONE	ZDEPT	No Department	Linear	9,982.38	Dollars
<i>Factors</i> 9982.38 Dollars								
ESC	ESCALATION	0000	NONE	ZDEPT	No Department	Linear	4,614.35	Dollars
<i>Factors</i> 4614.35 Dollars								

Activity ID: 1EBB203000 Description: Energy Management FY03

Cost Risk 1 Schedule Risk 1

Line Item	Description	Quantity	Units	BOE Type	Labor Hours/Unit	Labor Hours Total	Labor Cost Total	Materials/ Sub Cost	Contingency & Escalation	Total Prime Cost	Burden Cost	Total Cost
100	Energy Engineer	1.00	each	HC	1.610	1.610	55,068	0	0	55,068	19,054	74,122
200	Energy Management Subcontracts	1.00	each	HC	0	0	0	24,235	0	24,235	0	24,235
SYS	Contingency And Escalation	1.00	ea	EE	0	0	0	0	26,979	26,979	0	26,979
Total for Activity 1EBB203000:						1.610	55,068	24,235	26,979	106,282	19,054	125,335

Line Item 100 - Energy Engineer

BOE
 The labor requirement to achieve base minimum scope completion consists of 1 FTE on duty during normal scheduled work hours for the FY, time is estimated at 1810 hours for the fiscal year and no overtime compensation is expected. Tasks to be accomplished are utility nominations, utility invoice review & verification, Prepare quarterly and annual energy consumption report, Prepare annual IHEM study and project status and call for annual IHEM study and projects, update site 10yr energy conservation plan, coordinate efforts for restricted curtailed natural gas deliveries, perform facility energy audits, develop potential energy conservation projects, educate site personnel on energy conservation and investigate opportunities for funding and accomplishing energy saving proposals. BOE was developed by interviewing the WAD 39 manager who has been in utilities management and oversight for over 3 years.
 This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

Resources	Cost Element	Skill	Department	Curve	Quantity	Units		
750	STRAIGHT TIME BASE	E130	OTHER ENGINEERS	K260S	Site Operations	Linear	1,609.71	Hours
<i>Factors</i> 1810 hours								

0.88934 [SYS 061400] .88934200 - System

Line Item 200 - Energy Management Subcontracts

BOE
 The resource compositions for this activity consists of 2 low cost energy savings projects at \$5,000 each based on interviews with the WAD 39 manager who has been in utilities management and oversight for over 3 years, 3000 energy savings awareness kits at a estimated cost of \$1.75 each, and 150 hours of subcontracted support at an estimated cost of \$80 per hour to assist in specialized energy studies and facility energy audits. The correlation between actual costs and performance of the work may require that this estimate be updated during FY-00.
 This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

Resources	Cost Element	Skill	Department	Curve	Quantity	Units		
A5C	SUPPLIES	0000	NONE	K260S	Site Operations	Linear	4,669.05	Dollars
<i>Factors</i> 3000 Energy Pamphlets 1.75 Each								
0.88934 [SYS 061400] .88934200 - System								
A5H	SUBCONTRACTED SRVS	0000	NONE	K260S	Site Operations	Linear	10,672.10	Dollars
<i>Factors</i> 150 Hours Subcontract Support 80 Dollars/Hour								
0.88934 [SYS 061400] .88934200 - System								
A5H	SUBCONTRACTED SRVS	0000	NONE	K260S	Site Operations	Linear	8,893.42	Dollars
<i>Factors</i> 5000 Dollars Per Project 2 Projects								
0.88934 [SYS 061400] .88934200 - System								

Line Item SYS - Contingency And Escalation

Resources	Cost Element	Skill	Department	Curve	Quantity	Units		
CON	CONTINGENCY	0000	NONE	ZDEPT	No Department	Linear	19,436.49	Dollars
<i>Factors</i> 19436.5 Dollars								
ESC	ESCALATION	0000	NONE	ZDEPT	No Department	Linear	7,542.48	Dollars
<i>Factors</i> 7542.48 Dollars								

Activity ID: 1EBB204000 Description: Energy Management FY04

Cost Risk 1 Schedule Risk 1

Line Item	Description	Quantity	Units	BOE Type	Labor Hours/Unit	Labor Hours Total	Labor Cost Total	Materials/ Sub Cost	Contingency & Escalation	Total Prime Cost	Burden Cost	Total Cost
200	Energy Management Subcontracts	1.00	each	HC	0	0	0	24,012	0	24,012	0	24,012
SYS	Contingency And Escalation	1.00	ea	EE	0	0	0	0	3,401	3,401	0	3,401

WBS No: 1EBB02
 Activity ID: 1EBB204000

Rockv Flats Closure Project
Baseline Cost and Basis of Estimate

Project: Baseline Devl
 WBS Filter: 1EBB
 Activity Filter: *

Starts In FY *

Total for Activity 1EBB204000:	0	0	24,012	3,401	27,413	0	27,413
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Line Item 200 - Energy Management Subcontracts

BOE Subcontracted services support of 30 hours per month, at an estimated cost of \$75 per hour, to perform utility invoice review/validation to compile actual consumption data and to prepare mandated quarterly and annual energy consumption performance reports.
 This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

Resources		Cost Element	Skill	Department	Curve	Quantity	Units
A5H	SUBCONTRACTED SRVS	0000	NONE	K260S Site Operations	Linear	24,012.23	Dollars
Factors	30	Hours Subcontract Support	75	Dollars/Hour	12	Months	

0.88934 [SYS 061400] .88934200 - Svsstem

Line Item SYS - Contingency And Escalation

Resources		Cost Element	Skill	Department	Curve	Quantity	Units
CON	CONTINGENCY	0000	NONE	ZDEPT No Department	Linear	1,095.23	Dollars
Factors	1095.23	Dollars					
ESC	ESCALATION	0000	NONE	ZDEPT No Department	Linear	2,305.57	Dollars
Factors	2305.57	Dollars					

Activity ID: 1EXXX20400

Description: Energy Management FY05

Cost Risk 1 Schedule Risk 1

Line Item	Description	Quantity	Units	BOE Type	Labor Hours/Unit	Labor Hours Total	Labor Cost Total	Materials/ Sub Cost	Contingency & Escalation	Total Prime Cost	Burden Cost	Total Cost
200	Energy Management Subcontracts	1.00	each	HC	0	0	0	23,907	0	23,907	0	23,907
SYS	Contingency And Escalation	1.00	lea	EE	0	0	0	0	12,653	12,653	0	12,653
Total for Activity 1EXXX20400:						0	0	23,907	12,653	36,560	0	36,560

Line Item 200 - Energy Management Subcontracts

BOE Subcontracted services support of 30 hours per month, at an estimated cost of \$75 per hour, to perform utility invoice review/validation to compile actual consumption data and to prepare mandated quarterly and annual energy consumption performance reports.
 This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

Resources		Cost Element	Skill	Department	Curve	Quantity	Units
A5H	SUBCONTRACTED SRVS	0000	NONE	K260S Site Operations	Linear	24,012.23	Dollars
Factors	30	Hours Subcontract Support	75	Dollars/Hour	12	Months	

0.88934 [SYS 061400] .88934200 - Svsstem

Line Item SYS - Contingency And Escalation

Resources		Cost Element	Skill	Department	Curve	Quantity	Units
CON	CONTINGENCY	0000	NONE	ZDEPT No Department	Linear	8,949.03	Dollars
Factors	8949.03	Dollars					
ESC	ESCALATION	0000	NONE	ZDEPT No Department	Linear	3,703.62	Dollars
Factors	3703.62	Dollars					

WBS No: 1EBB03

Title: Sitewide Excavation

Activity ID: 1EBB300000

Description: Excavation Support FY00

Cost Risk 1 Schedule Risk 1

Line Item	Description	Quantity	Units	BOE Type	Labor Hours/Unit	Labor Hours Total	Labor Cost Total	Materials/ Sub Cost	Contingency & Escalation	Total Prime Cost	Burden Cost	Total Cost
100	K-H Labor	1.00	each	HC	34	34	876	0	0	876	427	1,303
200	Subcontract Support Labor	1.00	each	HC	0	0	0	5,045	0	5,045	0	5,045
300	Misc. Non-Labor	1.00	each	HC	0	0	0	2,591	0	2,591	0	2,591
Total for Activity 1EBB300000:						34	876	7,636	0	8,512	427	8,939

Line Item 100 - K-H Labor

BOE Estimate based on historical data from FY98 and estimator's experience with similar work scope (Estimator is person responsible for the work scope in this WBS element and has been involved with oversight of this type for many years).
 Item - K-H Labor

WBS No: 1EBB03
 Activity ID: 1EBB300000

Rockv Flats Closure Project
Baseline Cost and Basis of Estimate

Project: Baseline Devl
 WBS Filter: 1EBB
 Activity Filter: *

Starts In FY *

Unit - Excavation Coordinator for survey and assessments for buried utilities and objects (K312S/750/P050)
 Unit Cost - 1 FTE = 1,810 hours
 Unit cost adjustment - Assume 90% of time will charged to projects and 10% of time will be charged to this activity for staff meetings, training, etc.

This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

Resources	Cost Element	Skill	Department	Curve	Quantity	Units
	750 STRAIGHT TIME BASE	P050 COMPLIANCE INSPECTORS	K260S Site Operations	Linear	34.37	Hours
<i>Factors</i>	1810 Hours	0.1 10% of Time	0.3609 May 22			
				0.52618	[SYS 061300]	0.526183 - Target

Line Item 200 - Subcontract Support Labor

BOE Estimate estimator's experience with similar work scope (Estimator is person responsible for the work scope in this WBS element and has been involved with oversight of this type for many years).

Item - Subcontract support for Excavation oversight
 Unit - Excavation Coordinators (K260S/A51/P050)
 Unit cost - 1910 hours/year x \$68/hours x 2 people x 10% = \$25,133
 Unit cost adjustment - Assume 90% of time will be charged to projects and 10% of time will be charged to this activity for staff meetings, training etc.

This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

Resources	Cost Element	Skill	Department	Curve	Quantity	Units
	A51 MACTEC	P050 COMPLIANCE INSPECTORS	K260S Site Operations	Linear	5.04544	Dollars
<i>Factors</i>	1910 Hours	68 Dollars/Hour	0.1 10% of Time	2 People		
	0.3609 May 22	1.02283 -- FY00 Escalation --		0.52618	[SYS 061300]	0.526183 - Target

Line Item 300 - Misc. Non-Labor

BOE Estimate estimator's experience with similar work scope (Estimator is person responsible for the work scope in this WBS element and has been involved with oversight of this type for many years).

Item - miscellaneous non-labor expenses
 Unit - Office and presentation supplies (K312S/A5C)
 Unit cost - \$250/person x 3 people = 750
 Unit - Vehicle lease (D216S/A5L)
 Unit cost - Two (2) vehicles x \$330/month/vehicle x 12 months = \$7,920
 Unit - Construction class tuition for Construction Mgr. (OSHA training and claims resolution training)(K312S/A5M)
 Unit cost - Two classes x \$800/class
 Unit - Travel to construction classes in Denver area (K312S/A5M)
 Unit cost - Two classes x \$100/class
 Unit cost adjustments - None

This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

Resources	Cost Element	Skill	Department	Curve	Quantity	Units
	A5C SUPPLIES	0000 NONE	K260S Site Operations	Linear	142.42	Dollars
<i>Factors</i>	250 Dollars/Misc. Supplies	3 Individuals	0.3609 May 22			
				0.52618	[SYS 061300]	0.526183 - Target
	A5C SUPPLIES	0000 NONE	K260S Site Operations	Linear	385.50	Dollars
<i>Factors</i>	2000 Locator Paint	0.3609 May 22	1.015 -- FY00 Escalation --			
				0.52618	[SYS 061300]	0.526183 - Target
	A5L RENTALS	0000 NONE	K260S Site Operations	Linear	1.52656	Dollars
<i>Factors</i>	330 Dollars/Vehicle/Month	2 Vehicles	12 Months	1.015 -- FY00 Escalation --		
	0.3609 May 22			0.52618	[SYS 061300]	0.526183 - Target

WBS No: 1EBB03
 Activity ID: 1EBB300000

Rockv Flats Closure Project
Baseline Cost and Basis of Estimate

Project: Baseline Devl
 WBS Filter: 1EBB
 Activity Filter: *

Starts In FY: *

A5M	TRAVEL/TRAIN/RELOCAT	0000	NONE		K260S	Site Operations		Linear	37.98	Dollars
<i>Factors</i>	100	Dollars/Class for Travel	2	Classes	0.3609	May 22			0.52618	[SYS 061300] 0.526183 - Target
A5M	TRAVEL/TRAIN/RELOCAT	0000	NONE		K260S	Site Operations		Linear	308.40	Dollars
<i>Factors</i>	800	Dollars/Class for Tuition	2	Classes	1.015	-- FY00 Escalation --		0.3609	May 22	0.52618 [SYS 061300] 0.526183 - Target
A5R	MISC EXPENSES	0000	NONE		K260S	Site Operations		Linear	189.90	Dollars
<i>Factors</i>	1000	Dollars/Calibration	0.3609	May 22					0.52618 [SYS 061300] 0.526183 - Target	

Activity ID: 1EBB301000 Description: Excavation Support FY01

Cost Risk: 1 Schedule Risk: 1

Line Item	Description	Quantity	Units	BOE Type	Labor Hours/Unit	Labor Hours Total	Labor Cost Total	Materials/ Sub Cost	Contingency & Escalation	Total Prime Cost	Burden Cost	Total Cost
100	K-H Labor	1.00	each	HC	161	161	4.102	0	0	4.102	1.956	6.058
200	Subcontract Support Labor	1.00	each	HC	0	0	0	23.629	0	23.629	0	23.629
300	Misc. Non-Labor	1.00	each	HC	0	0	0	12.133	0	12.133	0	12.133
ISYS	Contingency And Escalation	1.00	ea	EE	0	0	0	0	2.197	2.197	0	2.197
Total for Activity 1EBB301000:						161	4.102	35.762	2.197	42.060	1.956	44.017

Line Item 100 - K-H Labor

BOE Estimate based on historical data from FY98 and estimator's experience with similar work scope (Estimator is person responsible for the work scope in this WBS element and has been involved with oversight of this type for many years).

Item - K-H Labor
 Unit - Excavation Coordinator for survey and assessments for buried utilities and objects (K312S/750/P050)
 Unit Cost - 1 FTE = 1,810 hours
 Unit cost adjustment - Assume 90% of time will be charged to projects and 10% of time will be charged to this activity for staff meetings, training, etc.

This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

Resources	Cost Element	Skill	Department	Curve	Quantity	Units		
750	STRAIGHT TIME BASE	P050	COMPLIANCE INSPECTORS	K260S	Site Operations	Linear	160.97	Hours
<i>Factors</i>	1810	Hours	0.1	10% of Time			0.88934	[SYS 061400] .88934200 - System

Line Item 200 - Subcontract Support Labor

BOE Estimate estimator's experience with similar work scope (Estimator is person responsible for the work scope in this WBS element and has been involved with oversight of this type for many years).

Item - Subcontract support for Excavation oversight
 Unit - Excavation Coordinators (K260S/A51/P050)
 Unit cost - 1910 hours/year x \$68/hours x 2 people x 10% = \$25,133
 Unit cost adjustment - Assume 90% of time will be charged to projects and 10% of time will be charged to this activity for staff meetings, training etc.

This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

Resources	Cost Element	Skill	Department	Curve	Quantity	Units			
A51	MACTEC	P050	COMPLIANCE INSPECTORS	K260S	Site Operations	Linear	23.628.96	Dollars	
<i>Factors</i>	1910	Hours	68	Dollars/Hour	0.1	10% of Time	2	People	0.88934 [SYS 061400] .88934200 - System
			1.02283	-- FY00 Escalation --					

Line Item 300 - Misc. Non-Labor

BOE Estimate estimator's experience with similar work scope (Estimator is person responsible for the work scope in this WBS element and has been involved with oversight of this type for many years).

Item - miscellaneous non-labor expenses
 Unit - Office and presentation supplies (K312S/A5C)

WBS No: 1EBB03
 Activity ID: 1EBB301000

Rockv Flats Closure Project
Baseline Cost and Basis of Estimate

Project: Baseline Devl
 WBS Filter: 1EBB
 Activity Filter: *

Starts In FY *

Unit cost - \$250/person x 3 people = 750
 Unit - Vehicle lease (D216S/A5L)
 Unit cost - Two (2) vehicles x \$330/month/vehicle x 12 months = \$7,920
 Unit - Construction class tuition for Construction Mgr. (OSHA training and claims resolution training)(K312S/A5M)
 Unit cost - Two classes x \$800/class
 Unit - Travel to construction classes in Denver area (K312S/A5M)
 Unit cost - Two classes x \$100/class
 Unit cost adjustments - None

This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

Resources		Cost Element	Skill	Department	Curve	Quantity	Units
A5C	SUPPLIES	0000	NONE	K260S	Site Operations	Linear	1,805.36 Dollars
Factors	2000	Locator Paint		1.015	-- FY00 Escalation --		
						0.88934	ISYS 0614001.88934200 - Svsystem
A5C	SUPPLIES	0000	NONE	K260S	Site Operations	Linear	667.01 Dollars
Factors	250	Dollars/Misc. Supplies	3	Individuals			
						0.88934	ISYS 0614001.88934200 - Svsystem
A5L	RENTALS	0000	NONE	K260S	Site Operations	Linear	7,149.24 Dollars
Factors	330	Dollars/Vehicle/Month	2	Vehicles	12	Months	1.015 -- FY00 Escalation --
						0.88934	ISYS 0614001.88934200 - Svsystem
A5M	TRAVEL/TRAIN/RELOCAT	0000	NONE	K260S	Site Operations	Linear	177.87 Dollars
Factors	100	Dollars/Class for Travel	2	Classes			
						0.88934	ISYS 0614001.88934200 - Svsystem
A5M	TRAVEL/TRAIN/RELOCAT	0000	NONE	K260S	Site Operations	Linear	1,444.29 Dollars
Factors	800	Dollars/Class for Tuition	2	Classes	1.015	-- FY00 Escalation --	
						0.88934	ISYS 0614001.88934200 - Svsystem
A5R	MISC EXPENSES	0000	NONE	K260S	Site Operations	Linear	889.34 Dollars
Factors	1000	Dollars/Calibration					
						0.88934	ISYS 0614001.88934200 - Svsystem

Line Item SYS - Contingency And Escalation

Resources		Cost Element	Skill	Department	Curve	Quantity	Units
CON	CONTINGENCY	0000	NONE	ZDEPT	No Department	Linear	1,317.21 Dollars
Factors	1317.21	Dollars					
ESC	ESCALATION	0000	NONE	ZDEPT	No Department	Linear	879.38 Dollars
Factors	879.382	Dollars					

Activity ID: 1EBB302000 Description: Excavation Support FY02

Cost Risk 1 Schedule Risk 1

Line Item	Description	Quantity	Units	BOE Type	Labor Hours/Unit	Labor Hours Total	Labor Cost Total	Materials/ Sub Cost	Contingency & Escalation	Total Prime Cost	Burden Cost	Total Cost
100	K-H Labor	1.00	each	HC	161	161	4,102	0	0	4,102	1,448	5,549
200	Subcontract Support Labor	1.00	each	HC	0	0	0	23,629	0	23,629	0	23,629
300	Misc. Non-Labor	1.00	each	HC	0	0	0	12,133	0	12,133	0	12,133
SYS	Contingency And Escalation	1.00	ea	EE	0	0	0	0	6,107	6,107	0	6,107
Total for Activity 1EBB302000:						161	4,102	35,762	6,107	45,971	1,448	47,418

Line Item 100 - K-H Labor

BOE Estimate based on historical data from FY98 and estimator's experience with similar work scope (Estimator is person responsible for the work scope in this WBS element and has been involved with oversight of this type for many years).

Item - K-H Labor
 Unit - Excavation Coordinator for survey and assessments for buried utilities and objects (K312S/750/P050)
 Unit Cost - 1 FTE = 1,810 hours
 Unit cost adjustment - Assume 90% of time will be charged to projects and 10% of time will be charged to this activity for staff meetings,

WBS No: 1EBB03
 Activity ID: 1EBB302000

Rockv Flats Closure Project
Baseline Cost and Basis of Estimate

Project: Baseline Devl
 WBS Filter: 1EBB
 Activity Filter: *

Starts In FY *

training, etc.
 This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

Resources	Cost Element	Skill	Department	Curve	Quantity	Units
	750 STRAIGHT TIME BASE	P050 COMPLIANCE INSPECTORS	K260S Site Operations	Linear	160.97	Hours
<i>Factors</i>	1810 Hours	0.1 10% of Time				

0.88934 ISYS 0614001.88934200 - Svsstem

Line Item 200 - Subcontract Support Labor

BOE
 Estimate estimator's experience with similar work scope (Estimator is person responsible for the work scope in this WBS element and has been involved with oversight of this type for many years).
 Item - Subcontract support for Excavation oversight
 Unit - Excavation Coordinators (K260S/A51/P050)
 Unit cost - 1910 hours/year x \$68/hours x 2 people x 10% = \$25,133
 Unit cost adjustment - Assume 90% of time will be charged to projects and 10% of time will be charged to this activity for staff meetings, training etc.
 This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

Resources	Cost Element	Skill	Department	Curve	Quantity	Units
	A51 MACTEC	P050 COMPLIANCE INSPECTORS	K260S Site Operations	Linear	23.628.96	Dollars
<i>Factors</i>	1910 Hours	68 Dollars/Hour	0.1 10% of Time	2 People		

0.88934 ISYS 0614001.88934200 - Svsstem

Line Item 300 - Misc. Non-Labor

BOE
 Estimate estimator's experience with similar work scope (Estimator is person responsible for the work scope in this WBS element and has been involved with oversight of this type for many years).
 Item - miscellaneous non-labor expenses
 Unit - Office and presentation supplies (K312S/A5C)
 Unit cost - \$250/person x 3 people = 750
 Unit - Vehicle lease (D216S/A5L)
 Unit cost - Two (2) vehicles x \$330/month/vehicle x 12 months = \$7,920
 Unit - Construction class tuition for Construction Mgr. (OSHA training and claims resolution training)(K312S/A5M)
 Unit cost - Two classes x \$800/class
 Unit - Travel to construction classes in Denver area (K312S/A5M)
 Unit cost - Two classes x \$100/class
 Unit cost adjustments - None
 This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

Resources	Cost Element	Skill	Department	Curve	Quantity	Units
	A5C SUPPLIES	0000 NONE	K260S Site Operations	Linear	1.805.36	Dollars
<i>Factors</i>	2000 Locator Paint		1.015 -- FY00 Escalation --			

0.88934 ISYS 0614001.88934200 - Svsstem

	A5C SUPPLIES	0000 NONE	K260S Site Operations	Linear	667.01	Dollars
<i>Factors</i>	250 Dollars/Misc. Supplies	3 Individuals				

0.88934 ISYS 0614001.88934200 - Svsstem

	A5L RENTALS	0000 NONE	K260S Site Operations	Linear	7.149.24	Dollars
<i>Factors</i>	330 Dollars/Vehicle/Month	2 Vehicles	12 Months	1.015 -- FY00 Escalation --		

0.88934 ISYS 0614001.88934200 - Svsstem

	A5M TRAVEL/TRAIN/RELOCAT	0000 NONE	K260S Site Operations	Linear	177.87	Dollars
<i>Factors</i>	100 Dollars/Class for Travel	2 Classes				

0.88934 ISYS 0614001.88934200 - Svsstem

	A5M TRAVEL/TRAIN/RELOCAT	0000 NONE	K260S Site Operations	Linear	1.444.29	Dollars
<i>Factors</i>	800 Dollars/Class for Tuition	2 Classes	1.015 -- FY00 Escalation --			

0.88934 ISYS 0614001.88934200 - Svsstem

WBS No: 1EBB03
 Activity ID: 1EBB302000

Rockv Flats Closure Project
Baseline Cost and Basis of Estimate

Project: Baseline Devl
 WBS Filter: 1EBB
 Activity Filter: *

Starts In FY: *

A5R	MISC EXPENSES	0000	NONE	K260S	Site Operations	Linear	889.34	Dollars
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Factors: 1000 Dollars/Calibration

0.88934 [SYS 061400] .88934200 - System

Line Item SYS - Contingency And Escalation

BOE

Resources	Cost Element	Skill	Department	Curve	Quantity	Units		
CON	CONTINGENCY	0000	NONE	ZDEPT	No Department	Linear	4.176.41	Dollars
Factors: 4176.42 Dollars								
ESC	ESCALATION	0000	NONE	ZDEPT	No Department	Linear	1.930.54	Dollars
Factors: 1930.54 Dollars								

Activity ID: 1EBB303000

Description: Excavation Support FY03

Cost Risk: 1 Schedule Risk: 1

Line Item	Description	Quantity	Units	BOE Type	Labor Hours/Unit	Labor Hours Total	Labor Cost Total	Materials/ Sub Cost	Contingency & Escalation	Total Prime Cost	Burden Cost	Total Cost
100	K-H Labor	1.00	each	HC	161	161	4.102	0	0	4.102	1.419	5.521
200	Subcontract Support Labor	1.00	each	HC	0	0	0	23.629	0	23.629	0	23.629
300	Misc. Non-Labor	1.00	each	HC	0	0	0	12.133	0	12.133	0	12.133
SYS	Contingency And Escalation	1.00	ea	EE	0	0	0	0	11.324	11.324	0	11.324
Total for Activity 1EBB303000:						161	4.102	35.762	11.324	51.187	1.419	52.607

Line Item 100 - K-H Labor

BOE

Estimate based on historical data from FY98 and estimator's experience with similar work scope (Estimator is person responsible for the work scope in this WBS element and has been involved with oversight of this type for many years).

Item - K-H Labor
 Unit - Excavation Coordinator for survey and assessments for buried utilities and objects (K312S/750/P050)
 Unit Cost - 1 FTE = 1,810 hours
 Unit cost adjustment - Assume 90% of time will be charged to projects and 10% of time will be charged to this activity for staff meetings, training, etc.

This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

Resources	Cost Element	Skill	Department	Curve	Quantity	Units		
750	STRAIGHT TIME BASE	P050	COMPLIANCE INSPECTORS	K260S	Site Operations	Linear	160.97	Hours
Factors: 1810 Hours 0.1 10% of Time								

0.88934 [SYS 061400] .88934200 - System

Line Item 200 - Subcontract Support Labor

BOE

Estimate estimator's experience with similar work scope (Estimator is person responsible for the work scope in this WBS element and has been involved with oversight of this type for many years).

Item - Subcontract support for Excavation oversight
 Unit - Excavation Coordinators (K260S/A51/P050)
 Unit cost - 1910 hours/year x \$68/hours x 2 people x 10% = \$25,133
 Unit cost adjustment - Assume 90% of time will be charged to projects and 10% of time will be charged to this activity for staff meetings, training etc.

This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

Resources	Cost Element	Skill	Department	Curve	Quantity	Units		
A51	MACTEC	P050	COMPLIANCE INSPECTORS	K260S	Site Operations	Linear	23.628.96	Dollars
Factors: 1910 Hours 68 Dollars/Hour 0.1 10% of Time 2 People								

0.88934 [SYS 061400] .88934200 - System

Line Item 300 - Misc. Non-Labor

BOE

Estimate estimator's experience with similar work scope (Estimator is person responsible for the work scope in this WBS element and has been involved with oversight of this type for many years).

WBS No: 1EBB03
 Activity ID: 1EBB303000

Rockv Flats Closure Project
Baseline Cost and Basis of Estimate

Project: Baseline Devl
 WBS Filter: 1EBB
 Activity Filter: *

Starts In FY *

Item - miscellaneous non-labor expenses
 Unit - Office and presentation supplies (K312S/A5C)
 Unit cost - \$250/person x 3 people = 750
 Unit - Vehicle lease (D216S/A5L)
 Unit cost - Two (2) vehicles x \$330/month/vehicle x 12 months = \$7,920
 Unit - Construction class tuition for Construction Mgr. (OSHA training and claims resolution training)(K312S/A5M)
 Unit cost - Two classes x \$800/class
 Unit - Travel to construction classes in Denver area (K312S/A5M)
 Unit cost - Two classes x \$100/class
 Unit cost adjustments - None

This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

Resources

Cost Element	Skill	Department	Curve	Quantity	Units
A5C SUPPLIES	0000 NONE	K260S Site Operations	Linear	1,805.36	Dollars
<i>Factors</i> 2000 Locator Paint 1.015 -- FY00 Escalation --					
0.88934 ISYS 0614001.88934200 - System					
A5C SUPPLIES	0000 NONE	K260S Site Operations	Linear	667.01	Dollars
<i>Factors</i> 250 Dollars/Misc. Supplies 3 Individuals					
0.88934 ISYS 0614001.88934200 - System					
A5L RENTALS	0000 NONE	K260S Site Operations	Linear	7,149.24	Dollars
<i>Factors</i> 330 Dollars/Vehicle/Month 2 Vehicles 12 Months 1.015 -- FY00 Escalation --					
0.88934 ISYS 0614001.88934200 - System					
A5M TRAVEL/TRAIN/RELOCAT	0000 NONE	K260S Site Operations	Linear	177.87	Dollars
<i>Factors</i> 100 Dollars/Class for Travel 2 Classes					
0.88934 ISYS 0614001.88934200 - System					
A5M TRAVEL/TRAIN/RELOCAT	0000 NONE	K260S Site Operations	Linear	1,444.29	Dollars
<i>Factors</i> 800 Dollars/Class for Tuition 2 Classes 1.015 -- FY00 Escalation --					
0.88934 ISYS 0614001.88934200 - System					
A5R MISC EXPENSES	0000 NONE	K260S Site Operations	Linear	889.34	Dollars
<i>Factors</i> 1000 Dollars/Calibration					
0.88934 ISYS 0614001.88934200 - System					

Line Item SYS - Contingency And Escalation

BOE

Resources

Cost Element	Skill	Department	Curve	Quantity	Units
CON CONTINGENCY	0000 NONE	ZDEPT No Department	Linear	8,158.01	Dollars
<i>Factors</i> 8158.01 Dollars					
ESC ESCALATION	0000 NONE	ZDEPT No Department	Linear	3,165.78	Dollars
<i>Factors</i> 3165.78 Dollars					

Activity ID: 1EBB304000

Description: Excavation Support FY04

Cost Risk 1 Schedule Risk 1

Line Item	Description	Quantity	Units	BOE Type	Labor Hours/Unit	Labor Hours Total	Labor Cost Total	Materials/ Sub Cost	Contingency & Escalation	Total Prime Cost	Burden Cost	Total Cost
100	K-H Labor	1.00	each	HC	161	161	4,102	0	0	4,102	1,157	5,258
200	Subcontract Support Labor	1.00	each	HC	0	0	0	23,629	0	23,629	0	23,629
300	Misc. Non-Labor	1.00	each	HC	0	0	0	12,133	0	12,133	0	12,133
SYS	Contingency And Escalation	1.00	ea	EE	0	0	0	0	5,810	5,810	0	5,810
Total for Activity 1EBB304000:						161	4,102	35,762	5,810	45,673	1,157	46,830

Line Item 100 - K-H Labor

BOE

Estimate based on historical data from FY98 and estimator's experience with similar work scope (Estimator is person responsible for the work scope in this WBS element and has been involved with oversight of this type for many years).

Item - K-H Labor
 Unit - Excavation Coordinator for survey and assessments for buried utilities and objects (K312S/750/P050)
 Unit Cost - 1 FTE = 1,810 hours

WBS No: 1EBB03
 Activity ID: 1EBB304000

Rockv Flats Closure Project
Baseline Cost and Basis of Estimate

Project: Baseline Devl
 WBS Filter: 1EBB
 Activity Filter: *

Starts In FY *

Unit cost adjustment - Assume 90% of time will be charged to projects and 10% of time will be charged to this activity for staff meetings, training, etc.
 This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

Resources	Cost Element	Skill	Department	Curve	Quantity	Units
	750 STRAIGHT TIME BASE	P050 COMPLIANCE INSPECTORS	K260S Site Operations	Linear	160.97	Hours
Factors	1810 Hours	0.1 10% of Time				

0.88934 [SYS 061400] .88934200 - Svstem

Line Item 200 - Subcontract Support Labor

BOE
 Estimate estimator's experience with similar work scope (Estimator is person responsible for the work scope in this WBS element and has been involved with oversight of this type for many years).
 Item - Subcontract support for Excavation oversight
 Unit - Excavation Coordinators (K260S/A51/P050)
 Unit cost - 1910 hours/year x \$68/hours x 2 people x 10% = \$25,133
 Unit cost adjustment - Assume 90% of time will be charged to projects and 10% of time will be charged to this activity for staff meetings, training etc.
 This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

Resources	Cost Element	Skill	Department	Curve	Quantity	Units
	A51 MACTEC	P050 COMPLIANCE INSPECTORS	K260S Site Operations	Linear	23.628.96	Dollars
Factors	1910 Hours	68 Dollars/Hour	0.1 10% of Time	2 People		

1.02283 -- FY00 Escalation --
 0.88934 [SYS 061400] .88934200 - Svstem

Line Item 300 - Misc. Non-Labor

BOE
 Estimate estimator's experience with similar work scope (Estimator is person responsible for the work scope in this WBS element and has been involved with oversight of this type for many years).
 Item - miscellaneous non-labor expenses
 Unit - Office and presentation supplies (K312S/A5C)
 Unit cost - \$250/person x 3 people = 750
 Unit - Vehicle lease (D216S/A5L)
 Unit cost - Two (2) vehicles x \$330/month/vehicle x 12 months = \$7,920
 Unit - Construction class tuition for Construction Mgr. (OSHA training and claims resolution training) (K312S/A5M)
 Unit cost - Two classes x \$800/class
 Unit - Travel to construction classes in Denver area (K312S/A5M)
 Unit cost - Two classes x \$100/class
 Unit cost adjustments - None
 This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

Resources	Cost Element	Skill	Department	Curve	Quantity	Units
	A5C SUPPLIES	0000 NONE	K260S Site Operations	Linear	1.805.36	Dollars
Factors	2000 Locator Paint		1.015 -- FY00 Escalation --			
	A5C SUPPLIES	0000 NONE	K260S Site Operations	Linear	667.01	Dollars
Factors	250 Dollars/Misc. Supplies	3 Individuals				
	A5L RENTALS	0000 NONE	K260S Site Operations	Linear	7.149.24	Dollars
Factors	330 Dollars/Vehicle/Month	2 Vehicles	12 Months	1.015 -- FY00 Escalation --		
	A5M TRAVEL/TRAIN/RELOCAT	0000 NONE	K260S Site Operations	Linear	177.87	Dollars
Factors	100 Dollars/Class for Travel	2 Classes				

0.88934 [SYS 061400] .88934200 - Svstem

WBS No: 1EBB03
 Activity ID: 1EBB304000

Rockv Flats Closure Project
Baseline Cost and Basis of Estimate

Project Baseline Devl
 WBS Filter 1EBB
 Activity Filter *

Starts In FY *

A5M	TRAVEL/TRAIN/RELOCAT	0000	NONE	K260S	Site Operations	Linear	1,444.29	Dollars
<i>Factors</i>	800 Dollars/Class for Tuition	2	Classes	1.015	-- FY00 Escalation --			
							0.88934	[SYS 061400] .88934200 - Svsystem
A5R	MISC EXPENSES	0000	NONE	K260S	Site Operations	Linear	889.34	Dollars
<i>Factors</i>	1000 Dollars/Calibration							
							0.88934	[SYS 061400] .88934200 - Svsystem

Line Item SYS - Contingency And Escalation

BOE

Resources

Cost Element	Skill	Department	Curve	Quantity	Units
CON CONTINGENCY	0000 NONE	ZDEPT No Department	Linear	1,870.99	Dollars
<i>Factors</i>	1870.99 Dollars				
ESC ESCALATION	0000 NONE	ZDEPT No Department	Linear	3,938.61	Dollars
<i>Factors</i>	3938.61 Dollars				

Activity ID: 1EBB305000

Description: Excavation Support FY05

Cost Risk 1 Schedule Risk 1

Line Item	Description	Quantity	Units	BOE Type	Labor Hours/Unit	Labor Hours Total	Labor Cost Total	Materials/ Sub Cost	Contingency & Escalation	Total Prime Cost	Burden Cost	Total Cost
100	K-H Labor	1.00	each	HC	161	161	4,102	0	0	4,102	1,427	5,529
200	Subcontract Support Labor	1.00	each	HC	0	0	0	23,629	0	23,629	0	23,629
300	Misc. Non-Labor	1.00	each	HC	0	0	0	12,133	0	12,133	0	12,133
SYS	Contingency And Escalation	1.00	lea	EE	0	0	0	0	21,853	21,853	0	21,853
Total for Activity 1EBB305000:						161	4,102	35,762	21,853	61,716	1,427	63,144

Line Item 100 - K-H Labor

BOE

Estimate based on historical data from FY98 and estimator's experience with similar work scope (Estimator is person responsible for the work scope in this WBS element and has been involved with oversight of this type for many years).

Item - K-H Labor
 Unit - Excavation Coordinator for survey and assessments for buried utilities and objects (K312S/750/P050)
 Unit Cost - 1 FTE = 1,810 hours
 Unit cost adjustment - Assume 90% of time will charged to projects and 10% of time will be charged to this activity for staff meetings, training, etc.

This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

Resources

Cost Element	Skill	Department	Curve	Quantity	Units			
750 STRAIGHT TIME BASE	P050 COMPLIANCE INSPECTORS	K260S Site Operations	Linear	160.97	Hours			
<i>Factors</i>	1810 Hours	0.1 10% of Time						
							0.88934	[SYS 061400] .88934200 - Svsystem

Line Item 200 - Subcontract Support Labor

BOE

Estimate estimator's experience with similar work scope (Estimator is person responsible for the work scope in this WBS element and has been involved with oversight of this type for many years).

Item - Subcontract support for Excavation oversight
 Unit - Excavation Coordinators (K260S/A51/P050)
 Unit cost - 1910 hours/year x \$68/hours x 2 people x 10% = \$25,133
 Unit cost adjustment - Assume 90% of time will be charged to projects and 10% of time will be charged to this activity for staff meetings, training etc.

This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

Resources

Cost Element	Skill	Department	Curve	Quantity	Units			
A51 MACTEC	P050 COMPLIANCE INSPECTORS	K260S Site Operations	Linear	23,628.96	Dollars			
<i>Factors</i>	1910 Hours	68 Dollars/Hour	0.1 10% of Time	2	People			
							0.88934	[SYS 061400] .88934200 - System

WBS No: 1EBB03
 Activity ID: 1EBB305000

Rockv Flats Closure Project
Baseline Cost and Basis of Estimate

Project: Baseline Devl
 WBS Filter: 1EBB
 Activity Filter: *

Starts In FY *

Line Item 300 - Misc. Non-Labor

BOE
 Estimate estimator's experience with similar work scope (Estimator is person responsible for the work scope in this WBS element and has been involved with oversight of this type for many years).
 Item - miscellaneous non-labor expenses
 Unit - Office and presentation supplies (K312S/A5C)
 Unit cost - \$250/person x 3 people = 750
 Unit - Vehicle lease (D216S/A5L)
 Unit cost - Two (2) vehicles x \$330/month/vehicle x 12 months = \$7,920
 Unit - Construction class tuition for Construction Mgr. (OSHA training and claims resolution training)(K312S/A5M)
 Unit cost - Two classes x \$800/class
 Unit - Travel to construction classes in Denver area (K312S/A5M)
 Unit cost - Two classes x \$100/class
 Unit cost adjustments - None
 This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

Resources		Cost Element	Skill	Department	Curve	Quantity	Units
A5C	SUPPLIES	0000	NONE	K260S	Site Operations	Linear	667.01 Dollars
Factors	250	Dollars/Misc. Supplies	3	Individuals			
							0.88934 [SYS 061400] .88934200 - System
A5C	SUPPLIES	0000	NONE	K260S	Site Operations	Linear	1,805.36 Dollars
Factors	2000	Locator Paint		1.015 -- FY00 Escalation --			
							0.88934 [SYS 061400] .88934200 - System
A5L	RENTALS	0000	NONE	K260S	Site Operations	Linear	7,149.24 Dollars
Factors	330	Dollars/Vehicle/Month	2	Vehicles	12	Months	1.015 -- FY00 Escalation --
							0.88934 [SYS 061400] .88934200 - System
A5M	TRAVEL/TRAIN/RELOCAT	0000	NONE	K260S	Site Operations	Linear	177.87 Dollars
Factors	100	Dollars/Class for Travel	2	Classes			
							0.88934 [SYS 061400] .88934200 - System
A5M	TRAVEL/TRAIN/RELOCAT	0000	NONE	K260S	Site Operations	Linear	1,444.29 Dollars
Factors	800	Dollars/Class for Tuition	2	Classes	1.015 -- FY00 Escalation --		
							0.88934 [SYS 061400] .88934200 - System
A5R	MISC EXPENSES	0000	NONE	K260S	Site Operations	Linear	889.34 Dollars
Factors	1000	Dollars/Calibration					
							0.88934 [SYS 061400] .88934200 - System

Line Item SYS - Contingency And Escalation

BOE

Resources		Cost Element	Skill	Department	Curve	Quantity	Units
CON	CONTINGENCY	0000	NONE	ZDEPT	No Department	Linear	15,456.06 Dollars
Factors	15456.1	Dollars					
ESC	ESCALATION	0000	NONE	ZDEPT	No Department	Linear	6,396.61 Dollars
Factors	6396.61	Dollars					

Activity ID: 1EXXX30501 Description: Excavation Support FY06

Cost Risk 1 Schedule Risk 1

Line Item	Description	Quantity	Units	BOE Type	Labor Hours/Unit	Labor Hours Total	Labor Cost Total	Materials/ Sub Cost	Contingency & Escalation	Total Prime Cost	Burden Cost	Total Cost
100	K-H Labor	0.96	each	HC	161	155	3,958	0	0	3,958	1,377	5,335
200	Subcontract Support Labor	0.96	each	HC	0	0	0	22,800	0	22,800	0	22,800
300	Misc. Non-Labor	0.96	each	HC	0	0	0	11,707	0	11,707	0	11,707
SYS	Contingency And Escalation	1.00	ea	EE	0	0	0	0	33,436	33,436	0	33,436
Total for Activity 1EXXX30501:						155	3,958	34,507	33,436	71,900	1,377	73,278

Line Item 100 - K-H Labor

BOE
 Estimate based on historical data from FY98 and estimator's experience with similar work scope (Estimator is person responsible for the work scope in this WBS element and has been involved with oversight of this type for many years).

WBS No: 1EBB03
 Activity ID: 1EXXX30501

Rockv Flats Closure Project
Baseline Cost and Basis of Estimate

Project: Baseline Devl
 WBS Filter: 1EBB
 Activity Filter: *

Starts In FY *

Item - K-H Labor
 Unit - Excavation Coordinator for survey and assessments for buried utilities and objects (K312S/750/P050)
 Unit Cost - 1 FTE = 1,810 hours
 Unit cost adjustment - Assume 90% of time will be charged to projects and 10% of time will be charged to this activity for staff meetings, training, etc.
 This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

Resources	Cost Element	Skill	Department	Curve	Quantity	Units
	750 STRAIGHT TIME BASE	P050 COMPLIANCE INSPECTORS	K260S Site Operations	Linear	160.97	Hours
Factors	1810 Hours	0.1 10% of Time				

0.88934 [SYS 061400] .88934200 - Ssystem

Line Item 200 - Subcontract Support Labor

BOE
 Estimate estimator's experience with similar work scope (Estimator is person responsible for the work scope in this WBS element and has been involved with oversight of this type for many years).
 Item - Subcontract support for Excavation oversight
 Unit - Excavation Coordinators (K260S/A51/P050)
 Unit cost - 1910 hours/year x \$68/hours x 2 people x 10% = \$25,133
 Unit cost adjustment - Assume 90% of time will be charged to projects and 10% of time will be charged to this activity for staff meetings, training etc.
 This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

Resources	Cost Element	Skill	Department	Curve	Quantity	Units
	A51 MACTEC	P050 COMPLIANCE INSPECTORS	K260S Site Operations	Linear	23.628.96	Dollars
Factors	1910 Hours	68 Dollars/Hour 1.02283 -- FY00 Escalation --	0.1 10% of Time	2 People		

0.88934 [SYS 061400] .88934200 - Ssystem

Line Item 300 - Misc. Non-Labor

BOE
 Estimate estimator's experience with similar work scope (Estimator is person responsible for the work scope in this WBS element and has been involved with oversight of this type for many years).
 Item - miscellaneous non-labor expenses
 Unit - Office and presentation supplies (K312S/A5C)
 Unit cost - \$250/person x 3 people = 750
 Unit - Vehicle lease (D216S/A5L)
 Unit cost - Two (2) vehicles x \$330/month/vehicle x 12 months = \$7,920
 Unit - Construction class tuition for Construction Mgr. (OSHA training and claims resolution training)(K312S/A5M)
 Unit cost - Two classes x \$800/class
 Unit - Travel to construction classes in Denver area (K312S/A5M)
 Unit cost - Two classes x \$100/class
 Unit cost adjustments - None
 This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

Resources	Cost Element	Skill	Department	Curve	Quantity	Units
	A5C SUPPLIES	0000 NONE	K260S Site Operations	Linear	667.01	Dollars
Factors	250 Dollars/Misc. Supplies	3 Individuals				
	A5C SUPPLIES	0000 NONE	K260S Site Operations	Linear	1.805.36	Dollars
Factors	2000 Locator Paint		1.015 -- FY00 Escalation --			
	A5L RENTALS	0000 NONE	K260S Site Operations	Linear	7.149.24	Dollars
Factors	330 Dollars/Vehicle/Month	2 Vehicles	12 Months	1.015 -- FY00 Escalation --		

0.88934 [SYS 061400] .88934200 - Ssystem

0.88934 [SYS 061400] .88934200 - Ssystem

0.88934 [SYS 061400] .88934200 - Ssystem

WBS No: 1EBB03
 Activity ID: 1EXXX30501

Rockv Flats Closure Project
Baseline Cost and Basis of Estimate

Project Baseline Devl
 WBS Filter 1EBB
 Activity Filter *

Starts In FY *

A5M	TRAVEL/TRAIN/RELOCAT	0000	NONE	K260S	Site Operations	Linear	1,444.29	Dollars
<i>Factors</i>	800 Dollars/Class for Tuition	2	Classes	1.015	-- FY00 Escalation --			
							0.88934	[SYS 061400] .88934200 - Ssystem
A5M	TRAVEL/TRAIN/RELOCAT	0000	NONE	K260S	Site Operations	Linear	177.87	Dollars
<i>Factors</i>	100 Dollars/Class for Travel	2	Classes					
							0.88934	[SYS 061400] .88934200 - Ssystem
A5R	MISC EXPENSES	0000	NONE	K260S	Site Operations	Linear	889.34	Dollars
<i>Factors</i>	1000 Dollars/Calibration							
							0.88934	[SYS 061400] .88934200 - Ssystem

Line Item SYS - Contingency And Escalation

BOE

Resources	<i>Cost Element</i>	<i>Skill</i>	<i>Department</i>	<i>Curve</i>	<i>Quantity</i>	<i>Units</i>
	CON CONTINGENCY	0000 NONE	ZDEPT No Department	Linear	24,548.77	Dollars
<i>Factors</i>	24548.8 Dollars					
	ESC ESCALATION	0000 NONE	ZDEPT No Department	Linear	8,886.79	Dollars
<i>Factors</i>	8886.8 Dollars					

WBS No: 1EBB040102 Title: Sewage Treatment Plant
Activity ID: 1EBB412000 Description: STP Operations FY00

Cost Risk 1 Schedule Risk 2

Line Item	Description	Quantity	Units	BOE Type	Labor Hours/Unit	Labor Hours Total	Labor Cost Total	Materials/ Sub Cost	Contingency & Escalation	Total Prime Cost	Burden Cost	Total Cost
LFEAWM1501	Operate Waste Water Treatment Plant	1.00	ea	HC	1,615	1,615	42,144	13,687	0	55,830	20,566	76,396
LFEAWM1503	Conduct of Operations	1.00	ea	HC	514	514	22,860	8,972	0	31,832	11,156	42,988
LFEAWM1504	NPDES Compliance	1.00	ea	HC	179	179	5,093	8,236	0	13,329	2,485	15,814
Total for Activity 1EBB412000:						2,308	70,097	30,895	0	100,992	34,207	135,199

Line Item LFEAWM1501 - Operate Waste Water Treatment Plant

BOE

Historical Data Source:
 WAD number 2, 1.1.04.01.04.02, overall WBS Spending Variance Report rpt_002a dated 10/16/98, located in T893B cube 95.

Item Desc:
 Provide for routine operations of the Waste Waster Treatment Plant (WWTP).

Breakdown of Historical Data:

1. Item: Operate WWTP
 Units: 1 Lot
 Unit Cost: FY98 Hours 9,668
 FY98 Subcontracted dollars \$228,381
 FY98 Supplies \$92,761

Unit Cost Adjustment factor: percent

Revised Unit Cost:
 FY00 Hours 9,540
 FY00 Subcontracted dollars \$21,552
 FY00 Supplies \$ 58,000

Basis for adjustment:
 Improved plant upgrades and completion of upgrades.

This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

Resources	<i>Cost Element</i>	<i>Skill</i>	<i>Department</i>	<i>Curve</i>	<i>Quantity</i>	<i>Units</i>
	750 STRAIGHT TIME BASE	M010 FOREMEN / TEAM LEADS / GROUP	C222S Water System Operations	Linear	306.32	Hours
<i>Factors</i>	1810 Hours/vr	0.32163	May 2000 Earned Value Factor			
0.52618 [SYS 061300] 0.526183 - Target						

WBS No: 1EBB040102
 Activity ID: 1EBB412000

Rockv Flats Closure Project
Baseline Cost and Basis of Estimate

Project Baseline Devl
 WBS Filter 1EBB
 Activity Filter *

Starts In FY *

750	STRAIGHT TIME BASE	M020	MANAGERS (GRADE 69 - 72)	C222S	Water System Operations	Linear	79.20	Hours
<i>Factors</i> 468 9 hours per week 0.32163 May 2000 Earned Value Factor							0.52618	[SYS 061300] 0.526183 - Target
750	STRAIGHT TIME BASE	M020	MANAGERS (GRADE 69 - 72)	C222S	Water System Operations	Linear	6.77	Hours
<i>Factors</i> 40 Hours 0.32163 May 2000 Earned Value Factor							0.52618	[SYS 061300] 0.526183 - Target
750	STRAIGHT TIME BASE	R070	WASTE TREATMENT OPERATOR A	KE10H	Indust/Site Srvs Steelworkers	Linear	918.96	Hours
<i>Factors</i> 5430 3 FTE for WWTP 0.32163 May 2000 Earned Value Factor							0.52618	[SYS 061300] 0.526183 - Target
750	STRAIGHT TIME BASE	S020	ENVIRONMENTAL SCIENTISTS	C222S	Water System Operations	Linear	110.00	Hours
<i>Factors</i> 650 hours 0.32163 May 2000 Earned Value Factor							0.52618	[SYS 061300] 0.526183 - Target
751	OVERTIME BASE & PRE.	M010	FOREMEN / TEAM LEADS / GROUP	C222S	Water System Operations	Linear	67.70	Hours
<i>Factors</i> 400 5 hrs/wk @ 52 weeks 0.32163 May 2000 Earned Value Factor							0.52618	[SYS 061300] 0.526183 - Target
751	OVERTIME BASE & PRE.	R070	WASTE TREATMENT OPERATOR A	KE10H	Indust/Site Srvs Steelworkers	Linear	125.57	Hours
<i>Factors</i> 742 112 hrs Vac. cov:110 hrs holiday 0.32163 January 2000 Earned Value Factor							0.52618	[SYS 061300] 0.526183 - Target
A5C	SUPPLIES	0000	NONE	C222S	Water System Operations	Linear	9,963.04	Dollars
<i>Factors</i> 58870 \$24,280 General Supplies:\$7,500 0.32163 May 2000 Earned Value Factor							0.52618	[SYS 061300] 0.526183 - Target
A5H	SUBCONTRACTED SRVS	0000	NONE	C222S	Water System Operations	Linear	2,596.53	Dollars
<i>Factors</i> 15342.5 Analytical Costs 0.32163 May 2000 Earned Value Factor							0.52618	[SYS 061300] 0.526183 - Target
A5H	SUBCONTRACTED SRVS	P030	BUYERS PROCUREMENT AND CON	C222S	Water System Operations	Linear	199.41	Dollars
<i>Factors</i> 1178.3 dollars 0.32163 May 2000 Earned Value Factor							0.52618	[SYS 061300] 0.526183 - Target
A5L	RENTALS	0000	NONE	C106S	Business Management Office	Linear	927.59	Dollars
<i>Factors</i> 5481 Vehicle Lease 0.32163 May 2000 Earned Value Factor							0.52618	[SYS 061300] 0.526183 - Target

Line Item LFEAWM1503 - Conduct of Operations

BOE

Historical Data Source:
 WAD number 2, 1.1.04.01.04.02, overall WBS Spending Variance Report rpt_002a dated 10/16/98, located in T893B cube 95.

Item Desc:
 Operations should include activities required to support Conduct of Operations which includes general housekeeping, training and qualifications, procedure generation, and for administration of Shift Orders, PODs, PATs commitments and budgets.

Breakdown of Historical Data:

1. Item: Conduct Of operations
 Units: 1 Lot
 Unit Cost: FY98 Hours 2,888
 FY98 Subcontracted Dollars \$ 228,381
 FY98 Supplies \$ 92,761

Unit Cost Adjustment factor: 25 percent increase

Revised Unit Cost:
 FY00 Hours 3,424
 FY00 Subcontracted dollars \$26,336
 FY00 Supplies \$ 0

Basis for adjustment:

- Hours have been increased by approximately 18.5 percent due to increased operational procedures.
- Although actual costs were not collected at the line item level, historical costs by skill codes, employee names, charge numbers, departments and suffixes were used to support the BOE.

WBS No: 1EBB040102
 Activity ID: 1EBB412000

Rockv Flats Closure Project
Baseline Cost and Basis of Estimate

Project Baseline Devl
 WBS Filter 1EBB
 Activity Filter *

Starts In FY *

Increased costs are due to activity being required to support RMRS Program Compliance.
 This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

Resources

Cost Element	Skill	Department	Curve	Quantity	Units
750 STRAIGHT TIME BASE	E050 ENVIRONMENTAL ENGINEERS	C222S Water System Operations	Linear	1.69	Hours
Factors 10 hours 0.32163 May 2000 Earned Value Factor					
0.52618 ISYS 0613001 0.526183 - Target					
750 STRAIGHT TIME BASE	M020 MANAGERS (GRADE 69 - 72)	C222S Water System Operations	Linear	25.65	Hours
Factors 151.58 hours 0.32163 May 2000 Earned Value Factor					
0.52618 ISYS 0613001 0.526183 - Target					
750 STRAIGHT TIME BASE	M020 MANAGERS (GRADE 69 - 72)	C222S Water System Operations	Linear	306.32	Hours
Factors 1810 hours 0.32163 May 2000 Earned Value Factor					
0.52618 ISYS 0613001 0.526183 - Target					
750 STRAIGHT TIME BASE	P050 COMPLIANCE INSPECTORS	C222S Water System Operations	Linear	50.77	Hours
Factors 300 4 Work Instr @ 40 hrs/WI:4 DMRs @ 0.32163 May 2000 Earned Value Factor					
0.52618 ISYS 0613001 0.526183 - Target					
750 STRAIGHT TIME BASE	P090 INDUSTRIAL HYGIENISTS	C222S Water System Operations	Linear	50.09	Hours
Factors 296 8 hrs/week 0.32163 May 2000 Earned Value Factor					
0.52618 ISYS 0613001 0.526183 - Target					
750 STRAIGHT TIME BASE	P170 OTHER ADMINISTRATIVE & PROFF	C222S Water System Operations	Linear	79.20	Hours
Factors 468 Hours 0.32163 May 2000 Earned Value Factor					
0.52618 ISYS 0613001 0.526183 - Target					
A5H SUBCONTRACTED SRVS	0000 NONE	C222S Water System Operations	Linear	4,590.74	Dollars
Factors 27125.9 PPRs:Billings:BCPs:Budqet 0.32163 May 2000 Earned Value Factor					
0.52618 ISYS 0613001 0.526183 - Target					
A5H SUBCONTRACTED SRVS	P150 TRAINERS	C222S Water System Operations	Linear	2,178.43	Dollars
Factors 12872 dollars 0.32163 May 2000 Earned Value Factor					
0.52618 ISYS 0613001 0.526183 - Target					
A5H SUBCONTRACTED SRVS	S020 ENVIRONMENTAL SCIENTISTS	C222S Water System Operations	Linear	346.20	Dollars
Factors 2045.66 1 audit @ 80 hrs:12 doc reviews @ 4 0.32163 May 2000 Earned Value Factor					
0.52618 ISYS 0613001 0.526183 - Target					
A5M TRAVEL/TRAIN/RELOCAT	0000 NONE	C222S Water System Operations	Linear	874.99	Dollars
Factors 5170.15 misc safetv odc 0.32163 May 2000 Earned Value Factor					
0.52618 ISYS 0613001 0.526183 - Target					
A5M TRAVEL/TRAIN/RELOCAT	0000 NONE	C222S Water System Operations	Linear	981.58	Dollars
Factors 5800 4 FTE @ \$500 Cert Tra:5 FTE @ 0.32163 May 2000 Earned Value Factor					
0.52618 ISYS 0613001 0.526183 - Target					

Line Item LFEAWM1504 - NPDES Compliance

BOE

Historical Data Source:
 WAD number 2, 1.1.04.01.04.02, overall WBS Spending Variance Report rpt_002a dated 10/16/98, located in T893B cube 95.

Item Desc:
 Operations of the WWTP should be in full compliance with the proposed NPDES permit, and provide for biosolid sampling/analysis. New permit implementation is expected this FY.

Breakdown of Historical Data:
 1. Item: Operate WWTP
 Units: 1 Lot
 Unit Cost: FY98 Hours 1,216
 FY98 Subcontracted dollars \$228,381
 FY98 Supplies \$92,761

Unit Cost Adjustment factor: 21 percent

Revised Unit Cost:

WBS No: 1EBB040102
 Activity ID: 1EBB412000

Rockv Flats Closure Project
Baseline Cost and Basis of Estimate

Project: Baseline Devl
 WBS Filter: 1EBB
 Activity Filter: *

Starts In FY *

FY00 Hours 1,362
 FY00 Subcontracted dollars \$28,264
 FY00 Supplies \$0

Basis for adjustment:
 1. Hours have been increased by approximately 21 percent due to increased support required to comply with the NPDES permit process.

This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

Resources

Cost Element	Skill	Department	Curve	Quantity	Units
750 STRAIGHT TIME BASE	P170 OTHER ADMINISTRATIVE & PROFE	C222S Water System Operations	Linear	101.54	Hours
<i>Factors</i> 600 Mod Spill Resp Proc 200 hrs:Prep 0.32163 May 2000 Earned Value Factor					
750 STRAIGHT TIME BASE	R070 WASTE TREATMENT OPERATOR A	KE10H Indust/Site Srvs Steelworkers	Linear	6.77	Hours
<i>Factors</i> 40 hours 0.32163 May 2000 Earned Value Factor					
750 STRAIGHT TIME BASE	S020 ENVIRONMENTAL SCIENTISTS	C222S Water System Operations	Linear	70.93	Hours
<i>Factors</i> 200 10 Guidance request @ 20 0.67401 January 2000 Earned Value Factor					
A5H SUBCONTRACTED SRVS	0000 NONE	C222S Water System Operations	Linear	3,548.59	Dollars
<i>Factors</i> 20968.0 Analytical Costs 0.32163 May 2000 Earned Value Factor					
A5H SUBCONTRACTED SRVS	0000 NONE	C222S Water System Operations	Linear	1,343.88	Dollars
<i>Factors</i> 7940.76 subc support 0.32163 May 2000 Earned Value Factor					
A5H SUBCONTRACTED SRVS	P150 TRAINERS	C222S Water System Operations	Linear	3,343.98	Dollars
<i>Factors</i> 19759 dollars 0.32163 May 2000 Earned Value Factor					

Activity ID: 1EBB412010 Description: STP Operations FY01

Cost Risk 1 Schedule Risk 2

Line Item	Description	Quantity	Units	BOE Type	Labor Hours/Unit	Labor Hours Total	Labor Cost Total	Materials/ Sub Cost	Contingency & Escalation	Total Prime Cost	Burden Cost	Total Cost
LFEAWM1501	Operate Waste Water Treatment Plant	1.00	ea	HC	8.484	8.484	221.464	71.923	0	293.387	105.639	399.026
LFEAWM1503	Conduct of Operations	1.00	ea	HC	2.700	2.700	120.131	47.244	0	167.375	57.302	224.677
LFEAWM1504	NPDES Compliance	1.00	ea	HC	747	747	20,473	43,516	0	63,990	9,766	73,755
SYS	Contingency And Escalation	1.00	ea	EE	0	0	0	0	36.634	36.634	0	36.634
Total for Activity 1EBB412010:						11.931	362.069	162.683	36.634	561.385	172.707	734.092

Line Item LFEAWM1501 - Operate Waste Water Treatment Plant

BOE
 Historical Data Source:
 WAD number 2, 1.1.04.01.04.02, overall WBS Spending Variance Report rpt_002a dated 10/16/98, located in T893B cube 95.

Item Desc:
 Provide for routine operations of the Waste Waster Treatment Plant (WWTP).

Breakdown of Historical Data:

1. Item: Operate WWTP
 Units: 1 Lot
 Unit Cost: FY98 Hours 9,668
 FY98 Subcontracted dollars \$228,381
 FY98 Supplies \$92,761

Unit Cost Adjustment factor: percent

Revised Unit Cost:
 FY01 Hours 9,540
 FY01 Subcontracted dollars \$21,552
 FY01 Supplies \$ 58,000

WBS No: 1EBB040102
 Activity ID: 1EBB412010

Rockv Flats Closure Project
Baseline Cost and Basis of Estimate

Project Baseline Devl
 WBS Filter 1EBB
 Activity Filter *

Starts In FY *

Basis for adjustment:
 Improved plant upgrades and completion of upgrades.
 This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

Resources

Cost Element	Skill	Department	Curve	Quantity	Units
750 STRAIGHT TIME BASE	M010 FOREMEN / TEAM LEADS / GROUP	C222S Water System Operations	Linear	1,609.71	Hours
<i>Factors</i> 1810 Hours/vr					
0.88934 [SYS 061400] .88934200 - System					
750 STRAIGHT TIME BASE	M020 MANAGERS (GRADE 69 - 72)	C222S Water System Operations	Linear	416.21	Hours
<i>Factors</i> 468 9 hours per week					
0.88934 [SYS 061400] .88934200 - System					
750 STRAIGHT TIME BASE	M020 MANAGERS (GRADE 69 - 72)	C222S Water System Operations	Linear	35.57	Hours
<i>Factors</i> 40 Hours					
0.88934 [SYS 061400] .88934200 - System					
750 STRAIGHT TIME BASE	R070 WASTE TREATMENT OPERATOR A	KE10H Indust/Site Srvs Steelworkers	Linear	4,829.13	Hours
<i>Factors</i> 5430 3 FTE for WWTP					
0.88934 [SYS 061400] .88934200 - System					
750 STRAIGHT TIME BASE	S020 ENVIRONMENTAL SCIENTISTS	C222S Water System Operations	Linear	578.07	Hours
<i>Factors</i> 650 hours					
0.88934 [SYS 061400] .88934200 - System					
751 OVERTIME BASE & PRE.	M010 FOREMEN / TEAM LEADS / GROUP	C222S Water System Operations	Linear	355.74	Hours
<i>Factors</i> 400 5 hrs/wk @ 52 weeks					
0.88934 [SYS 061400] .88934200 - System					
751 OVERTIME BASE & PRE.	R070 WASTE TREATMENT OPERATOR A	KE10H Indust/Site Srvs Steelworkers	Linear	659.89	Hours
<i>Factors</i> 742 112 hrs Vac. cov:110 hrs holiday					
0.88934 [SYS 061400] .88934200 - System					
A5C SUPPLIES	0000 NONE	C222S Water System Operations	Linear	52,355.56	Dollars
<i>Factors</i> 58870 \$24,280 General Supplies:\$7,500					
0.88934 [SYS 061400] .88934200 - System					
A5H SUBCONTRACTED SRVS	0000 NONE	C222S Water System Operations	Linear	13,644.69	Dollars
<i>Factors</i> 15342.5 Analytical Costs					
0.88934 [SYS 061400] .88934200 - System					
A5H SUBCONTRACTED SRVS	P030 BUYERS PROCUREMENT AND CON	C222S Water System Operations	Linear	1,047.91	Dollars
<i>Factors</i> 1178.3 dollars					
0.88934 [SYS 061400] .88934200 - System					
A5L RENTALS	0000 NONE	C106S Business Management Office	Linear	4,874.48	Dollars
<i>Factors</i> 5481 Vehicle Lease					
0.88934 [SYS 061400] .88934200 - System					

Line Item LFEAWM1503 - Conduct of Operations

BOE
 Historical Data Source:
 WAD number 2, 1.1.04.01.04.02, overall WBS Spending Variance Report rpt_002a dated 10/16/98, located in T893B cube 95.

Item Desc:
 Operations should include activities required to support Conduct of Operations which includes general housekeeping, training and qualifications, procedure generation, and for administration of Shift Orders, PODs, PATs commitments and budgets.

Breakdown of Historical Data:

1. Item: Conduct Of operations
 Units: 1 Lot
 Unit Cost: FY98 Hours 2,888
 FY98 Subcontracted Dollars \$ 228,381
 FY98 Supplies \$ 92,761

Unit Cost Adjustment factor: 25 percent increase

WBS No: 1EBB040102
 Activity ID: 1EBB412010

Rockv Flats Closure Project
Baseline Cost and Basis of Estimate

Project Baseline Devl
 WBS Filter 1EBB
 Activity Filter *

Starts In FY *

Revised Unit Cost:
 FY01 Hours 3,424
 FY01 Subcontracted dollars \$26,336
 FY01 Supplies \$ 0

Basis for adjustment:
 1. Hours have been increased by approximately 18.5 percent due to new operational procedures.
 2. Although actual costs were not collected at the line item level, historical costs by skill codes, employee names, charge numbers, departments and suffixes were used to support the BOE.

This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

Resources

Cost Element		Skill		Department		Curve	Quantity	Units
750	STRAIGHT TIME BASE	E050	ENVIRONMENTAL ENGINEERS	C222S	Water System Operations	Linear	8.89	Hours
<i>Factors</i> 10 hours							0.88934	[SYS 061400] .88934200 - System
750	STRAIGHT TIME BASE	M020	MANAGERS (GRADE 69 - 72)	C222S	Water Svstem Operations	Linear	1,609.71	Hours
<i>Factors</i> 1810 hours							0.88934	[SYS 061400] .88934200 - System
750	STRAIGHT TIME BASE	M020	MANAGERS (GRADE 69 - 72)	C222S	Water Svstem Operations	Linear	134.81	Hours
<i>Factors</i> 151.58 hours							0.88934	[SYS 061400] .88934200 - System
750	STRAIGHT TIME BASE	P050	COMPLIANCE INSPECTORS	C222S	Water Svstem Operations	Linear	266.80	Hours
<i>Factors</i> 300 4 Work Instr @ 40 hrs/WI:4 DMRs @							0.88934	[SYS 061400] .88934200 - System
750	STRAIGHT TIME BASE	P090	INDUSTRIAL HYGIENISTS	C222S	Water Svstem Operations	Linear	263.25	Hours
<i>Factors</i> 296 8 hrs/week							0.88934	[SYS 061400] .88934200 - System
750	STRAIGHT TIME BASE	P170	OTHER ADMINISTRATIVE & PROFE	C222S	Water Svstem Operations	Linear	416.21	Hours
<i>Factors</i> 468 Hours							0.88934	[SYS 061400] .88934200 - System
A5H	SUBCONTRACTED SRVS	0000	NONE	C222S	Water Svstem Operations	Linear	24,067.73	Dollars
<i>Factors</i> 27062.4 PPRs:Billinas:BCPs:Budaget							0.88934	[SYS 061400] .88934200 - System
A5H	SUBCONTRACTED SRVS	P150	TRAINERS	C222S	Water Svstem Operations	Linear	11,600.58	Dollars
<i>Factors</i> 13044 dollars							0.88934	[SYS 061400] .88934200 - System
A5H	SUBCONTRACTED SRVS	S020	ENVIRONMENTAL SCIENTISTS	C222S	Water Svstem Operations	Linear	1,819.29	Dollars
<i>Factors</i> 2045.66 1 audit @ 80 hrs;12 doc reviews @ 4							0.88934	[SYS 061400] .88934200 - System
A5M	TRAVEL/TRAIN/RELOCAT	0000	NONE	C222S	Water Svstem Operations	Linear	4,598.03	Dollars
<i>Factors</i> 5170.15 misc safety odc							0.88934	[SYS 061400] .88934200 - System
A5M	TRAVEL/TRAIN/RELOCAT	0000	NONE	C222S	Water Svstem Operations	Linear	5,158.18	Dollars
<i>Factors</i> 5800 4 FTE @ \$500 Cert Tra:5 FTE @							0.88934	[SYS 061400] .88934200 - System

Line Item LFEAWM1504 - NPDES Compliance

BOE

Historical Data Source:
 WAD number 2, 1.1.04.01.04.02, overall WBS Spending Variance Report rpt_002a dated 10/16/98, located in T893B cube 95.

Item Desc:
 Operations of the WWTP should be in full compliance with the proposed NPDES permit, and provide for biosolid sampling/analysis. New permit implementation is expected this FY.

Breakdown of Historical Data:
 1. Item: Operate WWTP

WBS No: 1EBB040102
 Activity ID: 1EBB412010

Rockv Flats Closure Project
Baseline Cost and Basis of Estimate

Project: Baseline Devl
 WBS Filter: 1EBB
 Activity Filter: *

Starts In FY *

Units: 1 Lot
 Unit Cost: FY98 Hours 1,216
 FY98 Subcontracted dollars \$228,381
 FY98 Supplies \$92,761

Unit Cost Adjustment factor: 21 percent

Revised Unit Cost:
 FY01 Hours 1,362
 FY01 Subcontracted dollars \$28,264
 FY01 Supplies \$0

Basis for adjustment:
 1. Hours have been increased by approximately 21 percent due to increased support required to comply with the NPDES permit process.

This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

Resources	Cost Element	Skill	Department	Curve	Quantity	Units
	750 STRAIGHT TIME BASE	P170 OTHER ADMINISTRATIVE & PROFE	C222S Water Svstem Operations	Linear	533.61	Hours
Factors	600 Mod Spill Resp Proc 200 hrs:Prep					
	750 STRAIGHT TIME BASE	R070 WASTE TREATMENT OPERATOR A	KE10H Indust/Site Svrs Steelworkers	Linear	35.57	Hours
Factors	40 hours					
	750 STRAIGHT TIME BASE	S020 ENVIRONMENTAL SCIENTISTS	C222S Water Svstem Operations	Linear	177.87	Hours
Factors	200 10 Guidance request @ 20					
	A5H SUBCONTRACTED SRVS	0000 NONE	C222S Water Svstem Operations	Linear	7.062.05	Dollars
Factors	7940.76 subc support					
	A5H SUBCONTRACTED SRVS	0000 NONE	C222S Water Svstem Operations	Linear	18.647.74	Dollars
Factors	20968.0 Analytical Costs					
	A5H SUBCONTRACTED SRVS	P150 TRAINERS	C222S Water Svstem Operations	Linear	17.806.41	Dollars
Factors	20022 dollars					

Line Item SYS - Contingency And Escalation

Resources	Cost Element	Skill	Department	Curve	Quantity	Units
	CON CONTINGENCY	0000 NONE	ZDEPT No Department	Linear	21.967.85	Dollars
Factors	21967.9 Dollars					
	ESC ESCALATION	0000 NONE	ZDEPT No Department	Linear	14.665.98	Dollars
Factors	14666 Dollars					

Activity ID: 1EBB412020

Description: STP Operations FY02

Cost Risk 1 Schedule Risk 2

Line Item	Description	Quantity	Units	BOE Type	Labor Hours/Unit	Labor Hours Total	Labor Cost Total	Materials/ Sub Cost	Contingency & Escalation	Total Prime Cost	Burden Cost	Total Cost
LFEAWM1501	Operate Waste Water Treatment Plant	1.00	ea	HC	8.484	8.484	221.464	71.923	0	293.387	78.177	371.564
LFEAWM1503	Conduct of Operations	1.00	ea	HC	2.700	2.700	120.131	47.482	0	167.613	42.406	210.019
LFEAWM1504	NPDES Compliance	1.00	ea	HC	747	747	20.473	43.766	0	64.239	7.227	71.467
SYS	Contingency And Escalation	1.00	ea	EE	0	0	0	0	96.539	96.539	0	96.539
Total for Activity 1EBB412020:						11.931	362.069	163.171	96.539	621.778	127.810	749.588

Line Item LFEAWM1501 - Operate Waste Water Treatment Plant

BOE
 Historical Data Source:
 WAD number 2, 1.1.04.01.04.02, overall WBS Spending Variance Report rpt_002a dated 10/16/98, located in T893B cube 95.
 Item Desc:
 Provide for routine operations of the Waste Waster Treatment Plant (WWTP).

WBS No: 1EBB040102
 Activity ID: 1EBB412020

Rockv Flats Closure Project
Baseline Cost and Basis of Estimate

Project: Baseline Devl
 WBS Filter: 1EBB
 Activity Filter: *

Starts In FY *

Breakdown of Historical Data:

1. Item: Operate WWTP
 Units: 1 Lot
 Unit Cost: FY98 Hours 9,668
 FY98 Subcontracted dollars \$228,381
 FY98 Supplies \$92,761

Unit Cost Adjustment factor: percent

Revised Unit Cost:
 FY02 Hours 9,540
 FY02 Subcontracted dollars \$21,552
 FY02 Supplies \$ 58,000

Basis for adjustment:
 Improved plant upgrades and completion of upgrades.

This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

Resources

Cost Element	Skill	Department	Curve	Quantity	Units
750 STRAIGHT TIME BASE	M010 FOREMEN / TEAM LEADS / GROUP	C222S Water Svstem Operations	Linear	1,609.71	Hours
<i>Factors</i> 1810 Hours/vr					
750 STRAIGHT TIME BASE	M020 MANAGERS (GRADE 69 - 72)	C222S Water Svstem Operations	Linear	416.21	Hours
<i>Factors</i> 468 9 hours per week					
750 STRAIGHT TIME BASE	M020 MANAGERS (GRADE 69 - 72)	C222S Water Svstem Operations	Linear	35.57	Hours
<i>Factors</i> 40 Hours					
750 STRAIGHT TIME BASE	R070 WASTE TREATMENT OPERATOR A	KE10H Indust/Site Svrs Steelworkers	Linear	4,829.13	Hours
<i>Factors</i> 5430 3 FTE for WWTP					
750 STRAIGHT TIME BASE	S020 ENVIRONMENTAL SCIENTISTS	C222S Water Svstem Operations	Linear	578.07	Hours
<i>Factors</i> 650 hours					
751 OVERTIME BASE & PRE.	M010 FOREMEN / TEAM LEADS / GROUP	C222S Water Svstem Operations	Linear	355.74	Hours
<i>Factors</i> 400 5 hrs/wk @ 52 weeks					
751 OVERTIME BASE & PRE.	R070 WASTE TREATMENT OPERATOR A	KE10H Indust/Site Svrs Steelworkers	Linear	659.89	Hours
<i>Factors</i> 742 112 hrs Vac. cov:110 hrs holiday					
A5C SUPPLIES	0000 NONE	C222S Water Svstem Operations	Linear	52,355.56	Dollars
<i>Factors</i> 58870 \$24,280 General Supplies:\$7,500					
A5H SUBCONTRACTED SRVS	0000 NONE	C222S Water Svstem Operations	Linear	13,644.69	Dollars
<i>Factors</i> 15342.5 Analytical Costs					
A5H SUBCONTRACTED SRVS	P030 BUYERS PROCUREMENT AND CON	C222S Water Svstem Operations	Linear	1,047.91	Dollars
<i>Factors</i> 1178.3 dollars					
A5L RENTALS	0000 NONE	C106S Business Management Office	Linear	4,874.48	Dollars
<i>Factors</i> 5481 Vehicle Lease					
				0.88934	ISYS 0614001.88934200 - Svstem

Line Item LFEAWM1503 - Conduct of Operations

BOE Historical Data Source:

WBS No: 1EBB040102
 Activity ID: 1EBB412020

Rockv Flats Closure Project
Baseline Cost and Basis of Estimate

Project: Baseline Devl
 WBS Filter: 1EBB
 Activity Filter: *

Starts In FY *

WAD number 2, 1.1.04.01.04.02, overall WBS Spending Variance Report rpt_002a dated 10/16/98, located in T893B cube 95.

Item Desc:
 Operations should include activities required to support Conduct of Operations which includes general housekeeping, training and qualifications, procedure generation, and for administration of Shift Orders, PODs, PATs commitments and budgets.

Breakdown of Historical Data:

1. Item: Conduct Of operations
 Units: 1 Lot
 Unit Cost: FY98 Hours 2,888
 FY98 Subcontracted Dollars \$ 228,381
 FY98 Supplies \$ 92,761

Unit Cost Adjustment factor: 25 percent increase

Revised Unit Cost:
 FY02 Hours 3,424
 FY02 Subcontracted dollars \$26,336
 FY02 Supplies \$ 0

Basis for adjustment:
 1. Hours have been increased by approximately 18.5 percent due to new operational procedures.
 2. Although actual costs were not collected at the line item level, historical costs by skill codes, employee names, charge numbers, departments and suffixes were used to support the BOE.

This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

Resources

Cost Element		Skill		Department		Curve	Quantity	Units
750	STRAIGHT TIME BASE	E050	ENVIRONMENTAL ENGINEERS	C222S	Water System Operations	Linear	8.89	Hours
<i>Factors</i> 10 hours								
0.88934 [SYS 061400] .88934200 - System								
750	STRAIGHT TIME BASE	M020	MANAGERS (GRADE 69 - 72)	C222S	Water System Operations	Linear	1,609.71	Hours
<i>Factors</i> 1810 hours								
0.88934 [SYS 061400] .88934200 - System								
750	STRAIGHT TIME BASE	M020	MANAGERS (GRADE 69 - 72)	C222S	Water System Operations	Linear	134.81	Hours
<i>Factors</i> 151.58 hours								
0.88934 [SYS 061400] .88934200 - System								
750	STRAIGHT TIME BASE	P050	COMPLIANCE INSPECTORS	C222S	Water System Operations	Linear	266.80	Hours
<i>Factors</i> 300 4 Work Instr @ 40 hrs/WI:4 DMRs @								
0.88934 [SYS 061400] .88934200 - System								
750	STRAIGHT TIME BASE	P090	INDUSTRIAL HYGIENISTS	C222S	Water System Operations	Linear	263.25	Hours
<i>Factors</i> 296 8 hrs/week								
0.88934 [SYS 061400] .88934200 - System								
750	STRAIGHT TIME BASE	P170	OTHER ADMINISTRATIVE & PROFE	C222S	Water System Operations	Linear	416.21	Hours
<i>Factors</i> 468 Hours								
0.88934 [SYS 061400] .88934200 - System								
A5H	SUBCONTRACTED SRVS	0000	NONE	C222S	Water System Operations	Linear	24,143.43	Dollars
<i>Factors</i> 27147.5 PPRs:Billings:BCPs:Budget								
0.88934 [SYS 061400] .88934200 - System								
A5H	SUBCONTRACTED SRVS	P150	TRAINERS	C222S	Water System Operations	Linear	11,763.33	Dollars
<i>Factors</i> 13227 dollars								
0.88934 [SYS 061400] .88934200 - System								
A5H	SUBCONTRACTED SRVS	S020	ENVIRONMENTAL SCIENTISTS	C222S	Water System Operations	Linear	1,819.29	Dollars
<i>Factors</i> 2045.66 1 audit @ 80 hrs:12 doc reviews @ 4								
0.88934 [SYS 061400] .88934200 - System								

WBS No: 1EBB040102
 Activity ID: 1EBB412020

Rockv Flats Closure Project
Baseline Cost and Basis of Estimate

Project: Baseline Devl
 WBS Filter: 1EBB
 Activity Filter: *

Starts In FY: *

A5M	TRAVEL/TRAIN/RELOCAT	0000	NONE	C222S	Water Svstem Operations	Linear	5,158.18	Dollars
<i>Factors</i> 5800 4 FTE @ \$500 Cert Tra:5 FTE @								
							0.88934	[SYS 061400] .88934200 - Svstem
A5M	TRAVEL/TRAIN/RELOCAT	0000	NONE	C222S	Water Svstem Operations	Linear	4,598.03	Dollars
<i>Factors</i> 5170.15 misc safety odc								
							0.88934	[SYS 061400] .88934200 - Svstem

Line Item LFEAWM1504 - NPDES Compliance

BOE

Historical Data Source:
 WAD number 2, 1.1.04.01.04.02, overall WBS Spending Variance Report rpt_002a dated 10/16/98, located in T893B cube 95.
 Item Desc:
 Operations of the WWTP should be in full compliance with the proposed NPDES permit, and provide for biosolid sampling/analysis. New permit implementation is expected this FY.

Breakdown of Historical Data:
 1. Item: Operate WWTP
 Units: 1 Lot
 Unit Cost: FY98 Hours 1,216
 FY98 Subcontracted dollars \$228,381
 FY98 Supplies \$92,761

Unit Cost Adjustment factor: 21 percent

Revised Unit Cost:
 FY02 Hours 1,362
 FY02 Subcontracted dollars \$28,264
 FY02 Supplies \$0

Basis for adjustment:
 1. Hours have been increased by approximately 21 percent due to increased support required to comply with the NPDES permit process.

This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

Resources

	Cost Element		Skill		Department	Curve	Quantity	Units
750	STRAIGHT TIME BASE	P170	OTHER ADMINISTRATIVE & PROFE	C222S	Water Svstem Operations	Linear	533.61	Hours
<i>Factors</i> 600 Mod Spill Resp Proc 200 hrs:Prep								
							0.88934	[SYS 061400] .88934200 - Svstem
750	STRAIGHT TIME BASE	R070	WASTE TREATMENT OPERATOR A	KE10H	Indust/Site Svrs Steelworkers	Linear	35.57	Hours
<i>Factors</i> 40 hours								
							0.88934	[SYS 061400] .88934200 - Svstem
750	STRAIGHT TIME BASE	S020	ENVIRONMENTAL SCIENTISTS	C222S	Water Svstem Operations	Linear	177.87	Hours
<i>Factors</i> 200 10 Guidance request @ 20								
							0.88934	[SYS 061400] .88934200 - Svstem
A5H	SUBCONTRACTED SRVS	0000	NONE	C222S	Water Svstem Operations	Linear	18,647.74	Dollars
<i>Factors</i> 20968.0 Analytical Costs								
							0.88934	[SYS 061400] .88934200 - Svstem
A5H	SUBCONTRACTED SRVS	0000	NONE	C222S	Water Svstem Operations	Linear	7,062.05	Dollars
<i>Factors</i> 7940.76 subc support								
							0.88934	[SYS 061400] .88934200 - Svstem
A5H	SUBCONTRACTED SRVS	P150	TRAINERS	C222S	Water Svstem Operations	Linear	18,056.31	Dollars
<i>Factors</i> 20303 dollars								
							0.88934	[SYS 061400] .88934200 - Svstem

Line Item SYS - Contingency And Escalation

BOE

Resources

	Cost Element		Skill		Department	Curve	Quantity	Units
CON	CONTINGENCY	0000	NONE	ZDEPT	No Department	Linear	66,020.59	Dollars
<i>Factors</i> 66020.6 Dollars								

WBS No: 1EBB040102
 Activity ID: 1EBB412020

Rockv Flats Closure Project
Baseline Cost and Basis of Estimate

Project: Baseline Devl
 WBS Filter: 1EBB
 Activity Filter: *

Starts In FY: *

ESC	ESCALATION	0000	NONE	ZDEPT	No Department	Linear	30,517.96	Dollars
Factors		30518	Dollars					

Activity ID: 1EBB412030 Description: STP Operations FY03

Cost Risk 1 Schedule Risk 2

Line Item	Description	Quantity	Units	BOE Type	Labor Hours/Unit	Labor Hours Total	Labor Cost Total	Materials/ Sub Cost	Contingency & Escalation	Total Prime Cost	Burden Cost	Total Cost
LFEAWM1501	Operate Waste Water Treatment Plant	1.00	ea	HC	8.484	8.484	221.464	71.923	0	293.387	76.627	370.014
LFEAWM1503	Conduct of Operations	1.00	ea	HC	2.700	2.700	120.131	48.175	0	168.305	41.565	209.871
LFEAWM1504	NPDES Compliance	1.00	ea	HC	747	747	20.473	44.480	0	64.954	7.084	72.037
SYS	Contingency And Escalation	1.00	ea	EE	0	0	0	0	178.821	178.821	0	178.821
Total for Activity 1EBB412030:						11.931	362.069	164.577	178.821	705.467	125.276	830.743

Line Item LFEAWM1501 - Operate Waste Water Treatment Plant

BOE
 Historical Data Source:
 WAD number 2, 1.1.04.01.04.02, overall WBS Spending Variance Report rpt_002a dated 10/16/98, located in T893B cube 95.
 Item Desc:
 Provide for routine operations of the Waste Waster Treatment Plant (WWTP).
 Breakdown of Historical Data:
 1. Item: Operate WWTP
 Units: 1 Lot
 Unit Cost: FY98 Hours 9,668
 FY98 Subcontracted dollars \$228,381
 FY98 Supplies \$92,761
 Unit Cost Adjustment factor: percent
 Revised Unit Cost:
 FY00 Hours 9,540
 FY00 Subcontracted dollars \$21,552
 FY00 Supplies \$ 58,000
 Basis for adjustment:
 Improved plant upgrades and completion of upgrades.
 This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

Resources	Cost Element	Skill	Department	Curve	Quantity	Units
	750 STRAIGHT TIME BASE	M010 FOREMEN / TEAM LEADS / GROUP	C222S Water Svstem Operations	Linear	1,609.71	Hours
Factors	1810	Hours/vr				
					0.88934	[SYS 061400] .88934200 - Svstem
	750 STRAIGHT TIME BASE	M020 MANAGERS (GRADE 69 - 72)	C222S Water Svstem Operations	Linear	416.21	Hours
Factors	468	9 hours per week				
					0.88934	[SYS 061400] .88934200 - Svstem
	750 STRAIGHT TIME BASE	M020 MANAGERS (GRADE 69 - 72)	C222S Water Svstem Operations	Linear	35.57	Hours
Factors	40	Hours				
					0.88934	[SYS 061400] .88934200 - Svstem
	750 STRAIGHT TIME BASE	R070 WASTE TREATMENT OPERATOR A	KE10H Indust/Site Svrs Steelworkers	Linear	4,829.13	Hours
Factors	5430	3 FTE for WWTP				
					0.88934	[SYS 061400] .88934200 - Svstem
	750 STRAIGHT TIME BASE	S020 ENVIRONMENTAL SCIENTISTS	C222S Water Svstem Operations	Linear	578.07	Hours
Factors	650	hours				
					0.88934	[SYS 061400] .88934200 - Svstem
	751 OVERTIME BASE & PRE.	M010 FOREMEN / TEAM LEADS / GROUP	C222S Water Svstem Operations	Linear	355.74	Hours
Factors	400	5 hrs/wk @ 52 weeks				
					0.88934	[SYS 061400] .88934200 - Svstem

WBS No: 1EBB040102
 Activity ID: 1EBB412030

Rockv Flats Closure Project
Baseline Cost and Basis of Estimate

Project Baseline Devl
 WBS Filter 1EBB
 Activity Filter * Starts In FY *

751	OVERTIME BASE & PRE.	R070	WASTE TREATMENT OPERATOR A	KE10H	Indust/Site Svcs Steelworkers	Linear	659.89	Hours
<i>Factors</i> 742 112 hrs Vac. cov:110 hrs holiday							0.88934	[SYS 061400] .88934200 - System
A5C	SUPPLIES	0000	NONE	C222S	Water Svstem Operations	Linear	52.355.56	Dollars
<i>Factors</i> 58870 \$24.280 General Supplies:\$7.500							0.88934	[SYS 061400] .88934200 - System
A5H	SUBCONTRACTED SRVS	0000	NONE	C222S	Water Svstem Operations	Linear	13.644.69	Dollars
<i>Factors</i> 15342.5 Analytical Costs							0.88934	[SYS 061400] .88934200 - System
A5H	SUBCONTRACTED SRVS	P030	BUYERS PROCUREMENT AND CON	C222S	Water Svstem Operations	Linear	1.047.91	Dollars
<i>Factors</i> 1178.3 dollars							0.88934	[SYS 061400] .88934200 - System
A5L	RENTALS	0000	NONE	C106S	Business Management Office	Linear	4.874.48	Dollars
<i>Factors</i> 5481 Vehicle Lease							0.88934	[SYS 061400] .88934200 - System

Line Item LFEAWM1503 - Conduct of Operations

BOE

Historical Data Source:
 WAD number 2, 1.1.04.01.04.02, overall WBS Spending Variance Report rpt_002a dated 10/16/98, located in T893B cube 95.
 Item Desc:

Item Desc:
 Operations should include activities required to support Conduct of Operations which includes general housekeeping, training and qualifications, procedure generation, and for administration of Shift Orders, PODs, PATs commitments and budgets.

Breakdown of Historical Data:

1. Item: Conduct Of operations
 Units: 1 Lot
 Unit Cost: FY98 Hours 2,888
 FY98 Subcontracted Dollars \$ 228,381
 FY98 Supplies \$ 92,761

Unit Cost Adjustment factor: 25 percent increase

Revised Unit Cost:
 FY03 Hours 3,424
 FY03 Subcontracted dollars \$26,336
 FY03 Supplies \$ 0

Basis for adjustment:
 1. Hours have been increased by approximately 18.5 percent due to new operational procedures.
 2. Although actual costs were not collected at the line item level, historical costs by skill codes, employee names, charge numbers, departments and suffixes were used to support the BOE.

This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

Resources

	Cost Element		Skill		Department	Curve	Quantity	Units
750	STRAIGHT TIME BASE	E050	ENVIRONMENTAL ENGINEERS	C222S	Water Svstem Operations	Linear	8.89	Hours
<i>Factors</i> 10 hours							0.88934	[SYS 061400] .88934200 - System
750	STRAIGHT TIME BASE	M020	MANAGERS (GRADE 69 - 72)	C222S	Water Svstem Operations	Linear	1.609.71	Hours
<i>Factors</i> 1810 hours							0.88934	[SYS 061400] .88934200 - System
750	STRAIGHT TIME BASE	M020	MANAGERS (GRADE 69 - 72)	C222S	Water Svstem Operations	Linear	134.81	Hours
<i>Factors</i> 151.58 hours							0.88934	[SYS 061400] .88934200 - System

WBS No: 1EBB040102
 Activity ID: 1EBB412030

Rockv Flats Closure Project
Baseline Cost and Basis of Estimate

Project: Baseline Devl
 WBS Filter: 1EBB
 Activity Filter: *

Starts In FY: *

750	STRAIGHT TIME BASE	P050	COMPLIANCE INSPECTORS	C222S	Water Svstem Operations	Linear	266.80	Hours
<i>Factors</i> 300 4 Work Instr @ 40 hrs/Wl:4 DMRs @								
						0.88934	[SYS 061400]	.88934200 - Svstem
750	STRAIGHT TIME BASE	P090	INDUSTRIAL HYGIENISTS	C222S	Water Svstem Operations	Linear	263.25	Hours
<i>Factors</i> 296 8 hrs/week								
						0.88934	[SYS 061400]	.88934200 - Svstem
750	STRAIGHT TIME BASE	P170	OTHER ADMINISTRATIVE & PROFE	C222S	Water Svstem Operations	Linear	416.21	Hours
<i>Factors</i> 468 Hours								
						0.88934	[SYS 061400]	.88934200 - Svstem
A5H	SUBCONTRACTED SRVS	0000	NONE	C222S	Water Svstem Operations	Linear	24.370.64	Dollars
<i>Factors</i> 27403 PPRs:Billings:BCPs:Budget								
						0.88934	[SYS 061400]	.88934200 - Svstem
A5H	SUBCONTRACTED SRVS	P150	TRAINERS	C222S	Water Svstem Operations	Linear	12.228.45	Dollars
<i>Factors</i> 13750 dollars								
						0.88934	[SYS 061400]	.88934200 - Svstem
A5H	SUBCONTRACTED SRVS	S020	ENVIRONMENTAL SCIENTISTS	C222S	Water Svstem Operations	Linear	1.819.29	Dollars
<i>Factors</i> 2045.66 1 audit @ 80 hrs:12 doc reviews @ 4								
						0.88934	[SYS 061400]	.88934200 - Svstem
A5M	TRAVEL/TRAIN/RELOCAT	0000	NONE	C222S	Water Svstem Operations	Linear	5.158.18	Dollars
<i>Factors</i> 5800 4 FTE @ \$500 Cert Tra:5 FTE @								
						0.88934	[SYS 061400]	.88934200 - Svstem
A5M	TRAVEL/TRAIN/RELOCAT	0000	NONE	C222S	Water Svstem Operations	Linear	4.598.03	Dollars
<i>Factors</i> 5170.15 misc safety odc								
						0.88934	[SYS 061400]	.88934200 - System

Line Item LFEAWM1504 - NPDES Compliance

BOE

Historical Data Source:
 WAD number 2, 1.1.04.01.04.02, overall WBS Spending Variance Report rpt_002a dated 10/16/98, located in T893B cube 95.

Item Desc:
 Operations of the WWTP should be in full compliance with the proposed NPDES permit, and provide for biosolid sampling/analysis. New permit implementation is expected this FY.

Breakdown of Historical Data:
 1. Item: Operate WWTP
 Units: 1 Lot
 Unit Cost: FY98 Hours 1,216
 FY98 Subcontracted dollars \$228,381
 FY98 Supplies \$92,761

Unit Cost Adjustment factor: 21 percent

Revised Unit Cost:
 FY03 Hours 1,362
 FY03 Subcontracted dollars \$28,264
 FY03 Supplies \$0

Basis for adjustment:
 1. Hours have been increased by approximately 21 percent due to increased support required to comply with the NPDES permit process.

This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

Resources

	Cost Element		Skill		Department	Curve	Quantity	Units
750	STRAIGHT TIME BASE	P170	OTHER ADMINISTRATIVE & PROFE	C222S	Water Svstem Operations	Linear	533.61	Hours
<i>Factors</i> 600 Mod Spill Resp Proc 200 hrs:Prep								
						0.88934	[SYS 061400]	.88934200 - Svstem
750	STRAIGHT TIME BASE	R070	WASTE TREATMENT OPERATOR A	KE10H	Indust/Site Svrs Steelworkers	Linear	35.57	Hours
<i>Factors</i> 40 hours								
						0.88934	[SYS 061400]	.88934200 - System

WBS No: 1EBB040102
 Activity ID: 1EBB412030

Rockv Flats Closure Project
Baseline Cost and Basis of Estimate

Project Baseline Devl
 WBS Filter 1EBB
 Activity Filter * Starts In FY *

750	STRAIGHT TIME BASE	S020	ENVIRONMENTAL SCIENTISTS	C222S	Water Svstem Operations	Linear	177.87	Hours
<i>Factors</i> 200 10 Guidance request @ 20							0.88934	[SYS 061400] .88934200 - Svstem
A5H	SUBCONTRACTED SRVS	0000	NONE	C222S	Water Svstem Operations	Linear	18.647.74	Dollars
<i>Factors</i> 20968.0 Analytical costs							0.88934	[SYS 061400] .88934200 - Svstem
A5H	SUBCONTRACTED SRVS	0000	NONE	C222S	Water Svstem Operations	Linear	7.062.05	Dollars
<i>Factors</i> 7940.76 subc support							0.88934	[SYS 061400] .88934200 - Svstem
A5H	SUBCONTRACTED SRVS	P150	TRAINERS	C222S	Water Svstem Operations	Linear	18.770.45	Dollars
<i>Factors</i> 21106 dollars							0.88934	[SYS 061400] .88934200 - Svstem

Line Item SYS - Contingency And Escalation

BOE

Resources

Cost Element	Skill	Department	Curve	Quantity	Units
CON CONTINGENCY	0000 NONE	ZDEPT No Department	Linear	128.828.30	Dollars
<i>Factors</i> 128828 Dollars					
ESC ESCALATION	0000 NONE	ZDEPT No Department	Linear	49.992.80	Dollars
<i>Factors</i> 49992.8 Dollars					

Activity ID: 1EBB412040 Description: STP Operations FY04

Cost Risk 1 Schedule Risk 2

Line Item	Description	Quantity	Units	BOE Type	Labor Hours/Unit	Labor Hours Total	Labor Cost Total	Materials/ Sub Cost	Contingency & Escalation	Total Prime Cost	Burden Cost	Total Cost
LFEAWM1501	Operate Waste Water Treatment Plant	1.00	ea	HC	8.484	8.484	221.464	71.923	0	293.387	62.453	355.840
LFEAWM1503	Conduct of Operations	1.00	ea	HC	2.700	2.700	120.131	48.853	0	168.984	33.877	202.861
LFEAWM1504	NPDES Compliance	1.00	ea	HC	747	747	20.473	45.310	0	65.783	5.773	71.557
SYS	Contingency And Escalation	1.00	ea	EE	0	0	0	0	89.262	89.262	0	89.262
Total for Activity 1EBB412040:						11.931	362.069	166.086	89.262	617.416	102.103	719.520

Line Item LFEAWM1501 - Operate Waste Water Treatment Plant

BOE

Historical Data Source:
 WAD number 2, 1.1.04.01.04.02, overall WBS Spending Variance Report rpt_002a dated 10/16/98, located in T893B cube 95.

Item Desc:
 Provide for routine operations of the Waste Waster Treatment Plant (WWTP).
 Breakdown of Historical Data:

1. Item: Operate WWTP
 Units: 1 Lot
 Unit Cost: FY98 Hours 9,668
 FY98 Subcontracted dollars \$228,381
 FY98 Supplies \$92,761

Unit Cost Adjustment factor: percent

Revised Unit Cost:
 FY04 Hours 9,540
 FY04 Subcontracted dollars \$21,552
 FY04 Supplies \$ 58,000

Basis for adjustment:
 Improved plant upgrades and completion of upgrades.

This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

Resources

Cost Element	Skill	Department	Curve	Quantity	Units
750 STRAIGHT TIME BASE	M010 FOREMEN / TEAM LEADS / GROUP	C222S Water Svstem Operations	Linear	1.609.71	Hours
<i>Factors</i> 1810 Hours/yr					

0.88934 [SYS 061400] .88934200 - Svstem

WBS No: 1EBB040102
 Activity ID: 1EBB412040

Rockv Flats Closure Project
Baseline Cost and Basis of Estimate

Project Baseline Devl
 WBS Filter 1EBB
 Activity Filter *

Starts In FY *

750	STRAIGHT TIME BASE	M020	MANAGERS (GRADE 69 - 72)	C222S	Water Svstem Operations	Linear	416.21	Hours
<i>Factors</i> 468 9 hours per week							0.88934	[SYS 061400].88934200 - Svstem
750	STRAIGHT TIME BASE	M020	MANAGERS (GRADE 69 - 72)	C222S	Water Svstem Operations	Linear	35.57	Hours
<i>Factors</i> 40 Hours							0.88934	[SYS 061400].88934200 - Svstem
750	STRAIGHT TIME BASE	R070	WASTE TREATMENT OPERATOR A	KE10H	Indust/Site Svrs Steelworkers	Linear	4,829.13	Hours
<i>Factors</i> 5430 3 FTE for WWTP							0.88934	[SYS 061400].88934200 - Svstem
750	STRAIGHT TIME BASE	S020	ENVIRONMENTAL SCIENTISTS	C222S	Water Svstem Operations	Linear	578.07	Hours
<i>Factors</i> 650 hours							0.88934	[SYS 061400].88934200 - Svstem
751	OVERTIME BASE & PRE.	M010	FOREMEN / TEAM LEADS / GROUP	C222S	Water Svstem Operations	Linear	355.74	Hours
<i>Factors</i> 400 5 hrs/wk @ 52 weeks							0.88934	[SYS 061400].88934200 - Svstem
751	OVERTIME BASE & PRE.	R070	WASTE TREATMENT OPERATOR A	KE10H	Indust/Site Svrs Steelworkers	Linear	659.89	Hours
<i>Factors</i> 742 112 hrs Vac. cov:110 hrs holiday							0.88934	[SYS 061400].88934200 - Svstem
A5C	SUPPLIES	0000	NONE	C222S	Water Svstem Operations	Linear	52,355.56	Dollars
<i>Factors</i> 58870 \$24,280 General Supplies:\$7,500							0.88934	[SYS 061400].88934200 - Svstem
A5H	SUBCONTRACTED SRVS	0000	NONE	C222S	Water Svstem Operations	Linear	13,644.69	Dollars
<i>Factors</i> 15342.5 Analytical Costs							0.88934	[SYS 061400].88934200 - Svstem
A5H	SUBCONTRACTED SRVS	P030	BUYERS PROCUREMENT AND CON	C222S	Water Svstem Operations	Linear	1,047.91	Dollars
<i>Factors</i> 1178.3 dollars							0.88934	[SYS 061400].88934200 - Svstem
A5L	RENTALS	0000	NONE	C106S	Business Management Office	Linear	4,874.48	Dollars
<i>Factors</i> 5481 Vehicle Lease							0.88934	[SYS 061400].88934200 - System

Line Item LFEAWM1503 - Conduct of Operations

BOE

Historical Data Source:
 WAD number 2, 1.1.04.01.04.02, overall WBS Spending Variance Report rpt_002a dated 10/16/98, located in T893B cube 95.

Item Desc:
 Operations should include activities required to support Conduct of Operations which includes general housekeeping, training and qualifications, procedure generation, and for administration of Shift Orders, PODs, PATs commitments and budgets.

Breakdown of Historical Data:

1. Item: Conduct Of operations
 Units: 1 Lot
 Unit Cost: FY98 Hours 2,888
 FY98 Subcontracted Dollars \$ 228,381
 FY98 Supplies \$ 92,761

Unit Cost Adjustment factor: 25 percent increase

Revised Unit Cost:
 FY04 Hours 3,424
 FY04 Subcontracted dollars \$26,336
 FY04 Supplies \$ 0

Basis for adjustment:
 1. Hours have been increased by approximately 18.5 percent due to new operational procedures.
 2. Although actual costs were not collected at the line item level, historical costs by skill codes, employee names, charge numbers, departments and suffixes were used to support the BOE.

WBS No: 1EBB040102
 Activity ID: 1EBB412040

Rockv Flats Closure Project
Baseline Cost and Basis of Estimate

Project Baseline Devl
 WBS Filter 1EBB
 Activity Filter *

Starts In FY *

This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

Resources

Cost Element	Skill	Department	Curve	Quantity	Units
750 STRAIGHT TIME BASE <i>Factors</i> 10 hours	E050 ENVIRONMENTAL ENGINEERS	C222S Water System Operations	Linear	8.89	Hours
750 STRAIGHT TIME BASE <i>Factors</i> 1810 hours	M020 MANAGERS (GRADE 69 - 72)	C222S Water System Operations	Linear	1,609.71	Hours
750 STRAIGHT TIME BASE <i>Factors</i> 151.58 hours	M020 MANAGERS (GRADE 69 - 72)	C222S Water System Operations	Linear	134.81	Hours
750 STRAIGHT TIME BASE <i>Factors</i> 300 4 Work Instr @ 40 hrs/WI:4 DMRs @	P050 COMPLIANCE INSPECTORS	C222S Water System Operations	Linear	266.80	Hours
750 STRAIGHT TIME BASE <i>Factors</i> 296 8 hrs/week	P090 INDUSTRIAL HYGIENISTS	C222S Water System Operations	Linear	263.25	Hours
750 STRAIGHT TIME BASE <i>Factors</i> 468 Hours	P170 OTHER ADMINISTRATIVE & PROFE	C222S Water System Operations	Linear	416.21	Hours
A5H SUBCONTRACTED SRVS <i>Factors</i> 27558 PPRs:Billings:BCPs:Budget	0000 NONE	C222S Water System Operations	Linear	24,508.49	Dollars
A5H SUBCONTRACTED SRVS <i>Factors</i> 14358 dollars	P150 TRAINERS	C222S Water System Operations	Linear	12,769.17	Dollars
A5H SUBCONTRACTED SRVS <i>Factors</i> 2045.66 1 audit @ 80 hrs:12 doc reviews @ 4	S020 ENVIRONMENTAL SCIENTISTS	C222S Water System Operations	Linear	1,819.29	Dollars
A5M TRAVEL/TRAIN/RELOCAT <i>Factors</i> 5800 4 FTE @ \$500 Cert Tra:5 FTE @	0000 NONE	C222S Water System Operations	Linear	5,158.18	Dollars
A5M TRAVEL/TRAIN/RELOCAT <i>Factors</i> 5170.15 misc safetv odc	0000 NONE	C222S Water System Operations	Linear	4,598.03	Dollars

Line Item LFEAWM1504 - NPDES Compliance

BOE

Historical Data Source:
 WAD number 2, 1.1.04.01.04.02, overall WBS Spending Variance Report rpt_002a dated 10/16/98, located in T893B cube 95.

Item Desc:
 Operations of the WWTP should be in full compliance with the proposed NPDES permit, and provide for biosolid sampling/analysis. New permit implementation is expected this FY.

Breakdown of Historical Data:
 1. Item: Operate WWTP
 Units: 1 Lot
 Unit Cost: FY98 Hours 1,216
 FY98 Subcontracted dollars \$228,381
 FY98 Supplies \$92,761

Unit Cost Adjustment factor: 21 percent

Revised Unit Cost:
 FY04 Hours 1,362
 FY04 Subcontracted dollars \$28,264

WBS No: 1EBB040102
 Activity ID: 1EBB412040

Rockv Flats Closure Project
Baseline Cost and Basis of Estimate

Project: Baseline Devl
 WBS Filter: 1EBB
 Activity Filter: *

Starts In FY *

FY04 Supplies \$0

Basis for adjustment:
 1. Hours have been increased by approximately 21 percent due to increased support required to comply with the NPDES permit process.

This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

Resources

Cost Element	Skill	Department	Curve	Quantity	Units
750 STRAIGHT TIME BASE	P170 OTHER ADMINISTRATIVE & PROFE	C222S Water Svstem Operations	Linear	533.61	Hours
Factors 600 Mod Spill Resp Proc 200 hrs:Prep					
0.88934 [SYS 061400] .88934200 - System					
750 STRAIGHT TIME BASE	R070 WASTE TREATMENT OPERATOR A	KE10H Indust/Site Svrs Steelworkers	Linear	35.57	Hours
Factors 40 hours					
0.88934 [SYS 061400] .88934200 - System					
750 STRAIGHT TIME BASE	S020 ENVIRONMENTAL SCIENTISTS	C222S Water Svstem Operations	Linear	177.87	Hours
Factors 200 10 Guidance request @ 20					
0.88934 [SYS 061400] .88934200 - System					
A5H SUBCONTRACTED SRVS	0000 NONE	C222S Water Svstem Operations	Linear	18.647.74	Dollars
Factors 20968.0 Analytical Costs					
0.88934 [SYS 061400] .88934200 - System					
A5H SUBCONTRACTED SRVS	0000 NONE	C222S Water Svstem Operations	Linear	7.062.05	Dollars
Factors 7940.76 subc support					
0.88934 [SYS 061400] .88934200 - System					
A5H SUBCONTRACTED SRVS	P150 TRAINERS	C222S Water Svstem Operations	Linear	19.600.21	Dollars
Factors 22039 dollars					
0.88934 [SYS 061400] .88934200 - System					

Line Item SYS - Contingency And Escalation

BOE

Resources

Cost Element	Skill	Department	Curve	Quantity	Units
CON CONTINGENCY	0000 NONE	ZDEPT No Department	Linear	28.746.95	Dollars
Factors 28747 Dollars					
ESC ESCALATION	0000 NONE	ZDEPT No Department	Linear	60.515.00	Dollars
Factors 60515 Dollars					

Activity ID: 1EBB412100

Description: STP Maintenance FY00

Cost Risk 2 Schedule Risk 2

Line Item	Description	Quantity	Units	BOE Type	Labor Hours/Unit	Labor Hours Total	Labor Cost Total	Materials/ Sub Cost	Contingency & Escalation	Total Prime Cost	Burden Cost	Total Cost
LFEAWM1510	Maintenance of the WWTP	1.00	ea	HC	838	838	19,028	27,196	0	46,224	9,286	55,509
LFEAWM1515	Bio Solids Land application	1.00	each	VQ	0	0	0	9,721	0	9,721	0	9,721
LFEAWM1520	Proposed changes to facilitate Land Application	1.00	each	VQ	0	0	0	7,777	0	7,777	0	7,777
LFEAWM1525	FY00 Pump Replacement	1.00	each	VQ	0	0	0	2,916	0	2,916	0	2,916
LFEAWM1530	Sampling Improvements for NPDES Permit	1.00	each	VQ	0	0	0	4,860	0	4,860	0	4,860
Total for Activity 1EBB412100:						838	19,028	52,470	0	71,498	9,286	80,783

Line Item LFEAWM1510 - Maintenance of the WWTP

BOE

Historical Data Source:
 WAD number 2, 1.1.04.01.04.02, overall WBS Spending Variance Report rpt_002a dated 10/16/98, located in T893B cube 95.

Item Desc:
 Provide maintenance as required to ensure proper operations of the WWTP. Proper maintenance is required to ensure NPDES permit compliance.

Breakdown of Historical Data:
 1. Item: Maintenance of WWTP
 Units: 1 Lot

WBS No: 1EBB040102
 Activity ID: 1EBB412100

Rockv Flats Closure Project
Baseline Cost and Basis of Estimate

Project: Baseline Devl
 WBS Filter: 1EBB
 Activity Filter: *

Starts In FY *

Unit Cost: FY98 Hours 9,008
 FY98 Subcontracted dollars \$228,381
 FY98 Supplies \$ 92,761

Unit Cost Adjustment factor: 8 percent reduction

Revised Unit Cost:
 FY00 Dollars \$ 265,450
 FY00 Hours 5,700
 FY00 Subcontracted dollars \$99,118
 FY00 Supplies \$30,000

Basis for adjustment:
 1. Hours have been reduced by approximately 36 percent due to maintenance tasks being performed by the Sewage Treatment plant operators.

This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

Resources

Cost Element		Skill		Department		Curve	Quantity	Units
750	STRAIGHT TIME BASE	C010	CARPENTERS	KE10H	Indust/Site Srvs Steelworkers	Back Loaded	100.19	Hours
Factors	592	15% of total craft hours	0.32163	May 2000 Earned Value Factor				
						0.52618 [SYS 061300]	0.526183	- Target
750	STRAIGHT TIME BASE	C020	ELECTRICIANS	KE10H	Indust/Site Srvs Steelworkers	Back Loaded	333.57	Hours
Factors	1971	50% of total craft hours	0.32163	May 2000 Earned Value Factor				
						0.52618 [SYS 061300]	0.526183	- Target
750	STRAIGHT TIME BASE	C040	MAINTENANCE MACHINIST (incl Exp	KE10H	Indust/Site Srvs Steelworkers	Back Loaded	33.34	Hours
Factors	197	5% of total craft hours	0.32163	May 2000 Earned Value Factor				
						0.52618 [SYS 061300]	0.526183	- Target
750	STRAIGHT TIME BASE	C070	PAINTERS	KE10H	Indust/Site Srvs Steelworkers	Back Loaded	33.34	Hours
Factors	197	5% of total craft hours	0.32163	May 2000 Earned Value Factor				
						0.52618 [SYS 061300]	0.526183	- Target
750	STRAIGHT TIME BASE	C080	PLUMBERS AND PIPEFITTERS	KE10H	Indust/Site Srvs Steelworkers	Back Loaded	166.87	Hours
Factors	986	25% of Total Craft Hours	0.32163	May 2000 Earned Value Factor				
						0.52618 [SYS 061300]	0.526183	- Target
750	STRAIGHT TIME BASE	M010	FOREMEN / TEAM LEADS / GROUP	C222S	Water System Operations	Back Loaded	101.54	Hours
Factors	600	.4 hrs/craft hour @ 3943 craft hours	0.32163	May 2000 Earned Value Factor				
						0.52618 [SYS 061300]	0.526183	- Target
750	STRAIGHT TIME BASE	P030	BUYERS PROCUREMENT AND CON	C222S	Water System Operations	Back Loaded	17.60	Hours
Factors	104	69 packages @ 1.51 hrs/package	0.32163	May 2000 Earned Value Factor				
						0.52618 [SYS 061300]	0.526183	- Target
750	STRAIGHT TIME BASE	P170	OTHER ADMINISTRATIVE & PROFF	C222S	Water System Operations	Back Loaded	12.69	Hours
Factors	75	10 calibrations/month @ 4.58	0.32163	May 2000 Earned Value Factor				
						0.52618 [SYS 061300]	0.526183	- Target
750	STRAIGHT TIME BASE	S020	ENVIRONMENTAL SCIENTISTS	C222S	Water System Operations	Back Loaded	5.08	Hours
Factors	30	69 packages @ .43 hrs/package	0.32163	May 2000 Earned Value Factor				
						0.52618 [SYS 061300]	0.526183	- Target
750	STRAIGHT TIME BASE	T070	MAINT. TECHS. (INSTRUMENT TEC	KE10H	Indust/Site Srvs Steelworkers	Linear	6.77	Hours
Factors	40	hours	0.32163	May 2000 Earned Value Factor				
						0.52618 [SYS 061300]	0.526183	- Target
751	OVERTIME BASE & PRE.	C010	CARPENTERS	KE10H	Indust/Site Srvs Steelworkers	Back Loaded	4.06	Hours
Factors	24	15% of Total Craft OT Hours	0.32163	May 2000 Earned Value Factor				
						0.52618 [SYS 061300]	0.526183	- Target
751	OVERTIME BASE & PRE.	C020	ELECTRICIANS	KE10H	Indust/Site Srvs Steelworkers	Back Loaded	13.37	Hours
Factors	79	50% of total craft OT hours	0.32163	May 2000 Earned Value Factor				
						0.52618 [SYS 061300]	0.526183	- Target

WBS No: 1EBB040102
 Activity ID: 1EBB412100

Rockv Flats Closure Project
Baseline Cost and Basis of Estimate

Project: Baseline Devl
 WBS Filter: 1EBB
 Activity Filter: *

Starts In FY: *

751	OVERTIME BASE & PRE.	C040	MAINTENANCE MACHINIST (incl Exp	KE10H	Indust/Site Svcs Steelworkers	Back Loaded	1.35	Hours	
<i>Factors</i> 8 5% of Total Craft OT Hours 0.32163 May 2000 Earned Value Factor									
							0.52618	[SYS 061300]	0.526183 - Target
751	OVERTIME BASE & PRE.	C070	PAINTERS	KE10H	Indust/Site Svcs Steelworkers	Back Loaded	1.35	Hours	
<i>Factors</i> 8 5% of Total Craft OT Hours 0.32163 May 2000 Earned Value Factor									
							0.52618	[SYS 061300]	0.526183 - Target
751	OVERTIME BASE & PRE.	C080	PLUMBERS AND PIPEFITTERS	KE10H	Indust/Site Svcs Steelworkers	Back Loaded	6.60	Hours	
<i>Factors</i> 39 25% of Total Craft OT Hours 0.32163 May 2000 Earned Value Factor									
							0.52618	[SYS 061300]	0.526183 - Target
A5C	SUPPLIES	0000	NONE	C222S	Water System Operations	Back Loaded	4.034.47	Dollars	
<i>Factors</i> 23839 10.87 hrs/package @ 69 packages 0.32163 May 2000 Earned Value Factor									
							0.52618	[SYS 061300]	0.526183 - Target
A5C	SUPPLIES	0000	NONE	C222S	Water System Operations	Back Loaded	5.077.14	Dollars	
<i>Factors</i> 30000 Dollars/yr 0.32163 May 2000 Earned Value Factor									
							0.52618	[SYS 061300]	0.526183 - Target
A5H	SUBCONTRACTED SRVS	0000	NONE	C222S	Water System Operations	Linear	64.91	Dollars	
<i>Factors</i> 383.56 dollars 0.32163 May 2000 Earned Value Factor									
							0.52618	[SYS 061300]	0.526183 - Target
A5H	SUBCONTRACTED SRVS	0000	NONE	C222S	Water System Operations	Linear	722.01	Dollars	
<i>Factors</i> 4266.22 dollars.47 packages @ 2 hrs/package 0.32163 May 2000 Earned Value Factor									
							0.52618	[SYS 061300]	0.526183 - Target
A5H	SUBCONTRACTED SRVS	E130	OTHER ENGINEERS	C222S	Water System Operations	Back Loaded	16.335.10	Dollars	
<i>Factors</i> 96521.4 69 packages @ \$69/hr 0.32163 May 2000 Earned Value Factor									
							0.52618	[SYS 061300]	0.526183 - Target
A5L	RENTALS	0000	NONE	C222S	Water System Operations	Linear	927.59	Dollars	
<i>Factors</i> 5481 Dollars 0.32163 May 2000 Earned Value Factor									
							0.52618	[SYS 061300]	0.526183 - Target
A5R	MISC EXPENSES	0000	NONE	C222S	Water System Operations	Back Loaded	34.69	Dollars	
<i>Factors</i> 205 Dollars/yr 0.32163 May 2000 Earned Value Factor									
							0.52618	[SYS 061300]	0.526183 - Target

Line Item LFEAWM1515 - Bio Solids, Land application

BOE	Vendor Name: International Engineering
	Vendor Quote: \$50,000
	Date of Quote: March 1999
	Quote Received by: RMRS procurement
	Item being quoted: Bio Solids, Land application
	Other Info: N/A
	Availability: FY00
	This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

Resources	Cost Element	Skill	Department	Curve	Quantity	Units
	A5H SUBCONTRACTED SRVS	E130 OTHER ENGINEERS	C222S Water System Operations	Linear	9.720.72	Dollars
<i>Factors</i> 51141.5 dollars 0.36123 May 2000 Earned Value Factor						
0.52618 [SYS 061300] 0.526183 - Target						

Line Item LFEAWM1520 - Proposed changes to facilitate Land Application

BOE	Vendor Name: International Engineering
	Vendor Quote: \$40,000
	Date of Quote: March 1999

WBS No: 1EBB040102
 Activity ID: 1EBB412100

Rockv Flats Closure Project
Baseline Cost and Basis of Estimate

Project: Baseline Devl
 WBS Filter: 1EBB
 Activity Filter: *

Starts In FY *

Quote Received by: RMRS procurement
 Item being quoted: Proposed changes to facilitate Land Application
 Other Info: N/A
 Availability: FY00
 This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

Resources	Cost Element	Skill	Department	Curve	Quantity	Units
	A5H SUBCONTRACTED SRVS	E130 OTHER ENGINEERS	C222S Water System Operations	Linear	7.776.57	Dollars
<i>Factors</i> 40913.2 Dollars		0.36123 May 2000 Earned Value Factor		0.52618 [SYS 061300] 0.526183 - Target		

Line Item LFEAWM1525 - FY00 Pump Replacement

BOE
 Vendor Name: International Engineering
 Vendor Quote: \$15,000
 Date of Quote: March 1999
 Quote Received by: RMRS procurement
 Item being quoted: FY00 Pump Replacement
 Other Info: N/A
 Availability: FY00
 This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

Resources	Cost Element	Skill	Department	Curve	Quantity	Units
	A5H SUBCONTRACTED SRVS	E130 OTHER ENGINEERS	C222S Water System Operations	Linear	2.916.22	Dollars
<i>Factors</i> 15342.5 Dollars		0.36123 May 2000 Earned Value Factor		0.52618 [SYS 061300] 0.526183 - Target		

Line Item LFEAWM1530 - Sampling Improvements for NPDES Permit

BOE
 Vendor Name: International Engineering
 Vendor Quote: \$25,000
 Date of Quote: March 1999
 Quote Received by: RMRS procurement
 Item being quoted: Sampling Improvements for NPDES Permit
 Other Info: N/A
 Availability: FY00
 This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

Resources	Cost Element	Skill	Department	Curve	Quantity	Units
	A5H SUBCONTRACTED SRVS	E130 OTHER ENGINEERS	C222S Water System Operations	Linear	4.860.36	Dollars
<i>Factors</i> 25570.8 Dollars		0.36123 May 2000 Earned Value Factor		0.52618 [SYS 061300] 0.526183 - Target		

Activity ID: 1EBB412110 Description: STP Maintenance FY01

Cost Risk 2 Schedule Risk 2

Line Item	Description	Quantity	Units	BOE Type	Labor Hours/Unit	Labor Hours Total	Labor Cost Total	Materials/ Sub Cost	Contingency & Escalation	Total Prime Cost	Burden Cost	Total Cost
LFEAWM1510	Maintenance of the WWTP	1.00	ea	HC	4.402	4.402	99.991	143.133	0	243.124	47.696	290.820

WBS No: 1EBB040102
 Activity ID: 1EBB412110

Rockv Flats Closure Project
Baseline Cost and Basis of Estimate

Project Baseline Devl
 WBS Filter 1EBB
 Activity Filter * Starts In FY *

LFEAWM1515	INF/EFF Tank Modifications	1.00	each	VQ	0	0	0	45.482	0	45.482	0	45.482		
LFEAWM1520	Ops. Improvements to meet Treatment Requirements	1.00	each	VQ	0	0	0	36.386	0	36.386	0	36.386		
LFEAWM1525	Overall Facility Evaluations	1.00	each	VQ	0	0	0	13.645	0	13.645	0	13.645		
LFEAWM1530	Monitoring Systems Improvements	1.00	each	VQ	0	0	0	22.741	0	22.741	0	22.741		
SYS	Contingency And Escalation	1.00	lea	EE	0	0	0	0	21.687	21.687	0	21.687		
Total for Activity 1EBB412110:								4.402	99.991	261.387	21.687	383.065	47.696	430.761

Line Item LFEAWM1510 - Maintenance of the WWTP

BOE
 Historical Data Source:
 WAD number 2, 1.1.04.01.04.02, overall WBS Spending Variance Report rpt_002a dated 10/16/98, located in T893B cube 95.

Item Desc:
 Provide maintenance as required to ensure proper operations of the WWTP. Proper maintenance is required to ensure NPDES permit compliance.

Breakdown of Historical Data: (Please note that actual costs were not collected at the line item level.)

1. Item: Maintenance of WWTP
 Units: 1 Lot
 Unit Cost: FY98 Hours 9,008
 FY98 Subcontracted dollars \$228,381
 FY98 Supplies \$ 92,761

Unit Cost Adjustment factor: 8 percent reduction

Revised Unit Cost:
 FY01 Dollars \$ 265,450
 FY01 Hours 5,700
 FY01 Subcontracted dollars \$99,118
 FY01 Supplies \$30,000

Basis for adjustment:
 1. Hours have been reduced by approximately 36 percent due to maintenance tasks being performed by the Sewage Treatment plant operators.

This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

Resources	Cost Element	Skill	Department	Curve	Quantity	Units
750	STRAIGHT TIME BASE	C010 CARPENTERS	KE10H Indust/Site Svcs Steelworkers	Back Loaded	526.49	Hours
<i>Factors</i> 592 15% of total craft hours						
750	STRAIGHT TIME BASE	C020 ELECTRICIANS	KE10H Indust/Site Svcs Steelworkers	Back Loaded	1,752.89	Hours
<i>Factors</i> 1971 50% of total craft hours						
750	STRAIGHT TIME BASE	C040 MAINTENANCE MACHINIST (incl Exp	KE10H Indust/Site Svcs Steelworkers	Back Loaded	175.20	Hours
<i>Factors</i> 197 5% of total craft hours						
750	STRAIGHT TIME BASE	C070 PAINTERS	KE10H Indust/Site Svcs Steelworkers	Back Loaded	175.20	Hours
<i>Factors</i> 197 5% of total craft hours						
750	STRAIGHT TIME BASE	C080 PLUMBERS AND PIPEFITTERS	KE10H Indust/Site Svcs Steelworkers	Back Loaded	876.89	Hours
<i>Factors</i> 986 25% of Total Craft Hours						
750	STRAIGHT TIME BASE	M010 FOREMEN / TEAM LEADS / GROUP	C222S Water System Operations	Back Loaded	533.61	Hours
<i>Factors</i> 600 .4 hrs/craft hour @ 3943 craft hours						

WBS No: 1EBB040102
 Activity ID: 1EBB412110

Rockv Flats Closure Project
Baseline Cost and Basis of Estimate

Project: Baseline Devl
 WBS Filter: 1EBB
 Activity Filter: *

Starts In FY *

750	STRAIGHT TIME BASE	P030	BUYERS PROCUREMENT AND CON	C222S	Water Svstem Operations	Back Loaded	92.49	Hours
<i>Factors</i> 104 69 packages @ 1.51 hrs/package								
750	STRAIGHT TIME BASE	P170	OTHER ADMINISTRATIVE & PROFE	C222S	Water Svstem Operations	Back Loaded	66.70	Hours
<i>Factors</i> 75 10 calibrations/month @ 4.58								
750	STRAIGHT TIME BASE	S020	ENVIRONMENTAL SCIENTISTS	C222S	Water Svstem Operations	Back Loaded	26.68	Hours
<i>Factors</i> 30 69 packages @ .43 hrs/package								
750	STRAIGHT TIME BASE	T070	MAINT. TECHS. (INSTRUMENT TEC	KE10H	Indust/Svte Srvs Steelworkers	Linear	35.57	Hours
<i>Factors</i> 40 hours								
751	OVERTIME BASE & PRE.	C010	CARPENTERS	KE10H	Indust/Svte Srvs Steelworkers	Back Loaded	21.34	Hours
<i>Factors</i> 24 15% of Total Craft OT Hours								
751	OVERTIME BASE & PRE.	C020	ELECTRICIANS	KE10H	Indust/Svte Srvs Steelworkers	Back Loaded	70.26	Hours
<i>Factors</i> 79 50% of total craft OT hours								
751	OVERTIME BASE & PRE.	C040	MAINTENANCE MACHINIST (incl Exp	KE10H	Indust/Svte Srvs Steelworkers	Back Loaded	7.11	Hours
<i>Factors</i> 8 5% of Total Craft OT Hours								
751	OVERTIME BASE & PRE.	C070	PAINTERS	KE10H	Indust/Svte Srvs Steelworkers	Back Loaded	7.11	Hours
<i>Factors</i> 8 5% of Total Craft OT Hours								
751	OVERTIME BASE & PRE.	C080	PLUMBERS AND PIPEFITTERS	KE10H	Indust/Svte Srvs Steelworkers	Back Loaded	34.68	Hours
<i>Factors</i> 39 25% of Total Craft OT Hours								
A5C	SUPPLIES	0000	NONE	C222S	Water Svstem Operations	Back Loaded	27,187.19	Dollars
<i>Factors</i> 30570 Dollars/yr								
A5C	SUPPLIES	0000	NONE	C222S	Water Svstem Operations	Back Loaded	20,912.88	Dollars
<i>Factors</i> 23515 10.87 hrs/package @ 69 packages								
A5H	SUBCONTRACTED SRVS	0000	NONE	C222S	Water Svstem Operations	Linear	341.12	Dollars
<i>Factors</i> 383.56 dollars								
A5H	SUBCONTRACTED SRVS	0000	NONE	C222S	Water Svstem Operations	Linear	3,794.13	Dollars
<i>Factors</i> 4266.22 dollars.47 packages @ 2 hrs/package								
A5H	SUBCONTRACTED SRVS	E130	OTHER ENGINEERS	C222S	Water Svstem Operations	Back Loaded	85,840.53	Dollars
<i>Factors</i> 96521.4 69 packages @ \$69/hr								
A5L	RENTALS	0000	NONE	C222S	Water Svstem Operations	Linear	4,874.48	Dollars
<i>Factors</i> 5481 Dollars								
A5R	MISC EXPENSES	0000	NONE	C222S	Water Svstem Operations	Back Loaded	182.32	Dollars
<i>Factors</i> 205 Dollars/yr								
0.88934 [SYS 061400] .88934200 - Svstem								

Line Item LFEAWM1515 - INF/EFF Tank Modifications

BOE
 Vendor Name: International Engineering
 Vendor Quote: \$50,000
 Date of Quote: March 1999

WBS No: 1EBB040102
 Activity ID: 1EBB412110

Rockv Flats Closure Project
Baseline Cost and Basis of Estimate

Project: Baseline Devl
 WBS Filter: 1EBB
 Activity Filter: *

Starts In FY *

Quote Received by: RMRS procurement
 Item being quoted: INF/EFF Tank Modifications
 Other Info: N/A
 Availability: FY01
 This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

Resources	Cost Element	Skill	Department	Curve	Quantity	Units
	A5H SUBCONTRACTED SRVS	E130 OTHER ENGINEERS	C222S Water System Operations	Linear	45.482.29	Dollars
Factors 51141.5 dollars						
0.88934 [SYS 061400] .88934200 - Svsstem						

Line Item LFEAWM1520 - Ops. Improvements to meet Treatment Requirements

BOE
 Vendor Name: International Engineering
 Vendor Quote: \$40,000
 Date of Quote: March 1999
 Quote Received by: RMRS procurement
 Item being quoted: Ops. Improvements to meet Treatment Requirements
 Other Info: N/A
 Availability: FY01
 This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

Resources	Cost Element	Skill	Department	Curve	Quantity	Units
	A5H SUBCONTRACTED SRVS	E130 OTHER ENGINEERS	C222S Water System Operations	Linear	36.385.83	Dollars
Factors 40913.2 Dollars						
0.88934 [SYS 061400] .88934200 - System						

Line Item LFEAWM1525 - Overall Facility Evaluations

BOE
 Vendor Name: International Engineering
 Vendor Quote: \$15,000
 Date of Quote: March 1999
 Quote Received by: RMRS procurement
 Item being quoted: Overall Facility Evaluations
 Other Info: N/A
 Availability: FY01
 This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

Resources	Cost Element	Skill	Department	Curve	Quantity	Units
	A5H SUBCONTRACTED SRVS	E130 OTHER ENGINEERS	C222S Water System Operations	Linear	13.644.69	Dollars
Factors 15342.5 Dollars						
0.88934 [SYS 061400] .88934200 - System						

Line Item LFEAWM1530 - Monitoring Systems Improvements

BOE
 Vendor Name: International Engineering
 Vendor Quote: \$25,000

WBS No: 1EBB040102
 Activity ID: 1EBB412110

Rockv Flats Closure Project
Baseline Cost and Basis of Estimate

Project Baseline Devl
 WBS Filter 1EBB
 Activity Filter *

Starts In FY *

Date of Quote: March 1999
 Quote Received by: RMRS procurement
 Item being quoted: Monitoring Systems Improvements
 Other Info: N/A
 Availability: FY01

This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

Resources	Cost Element	Skill	Department	Curve	Quantity	Units
	A5H SUBCONTRACTED SRVS	E130 OTHER ENGINEERS	C222S Water Svstem Operations	Linear	22,741.14	Dollars
Factors 25570.8 Dollars						

0.88934 [SYS 061400] .88934200 - Svstem

Line Item SYS - Contingency And Escalation

Resources	Cost Element	Skill	Department	Curve	Quantity	Units
	CON CONTINGENCY	0000 NONE	ZDEPT No Department	Linear	13,085.41	Dollars
Factors 13085.4 Dollars						
	ESC ESCALATION	0000 NONE	ZDEPT No Department	Linear	8,601.90	Dollars
Factors 8601.90 Dollars						

Activity ID: 1EBB412120 Description: STP Maintenance FY02

Cost Risk 2 Schedule Risk 2

Line Item	Description	Quantity	Units	BOE Type	Labor Hours/Unit	Labor Hours Total	Labor Cost Total	Materials/ Sub Cost	Contingency & Escalation	Total Prime Cost	Burden Cost	Total Cost
LFEAWM1510	Maintenance of the WWTP	1.00	ea	HC	4,402	4,402	99,991	143,458	0	243,449	35,297	278,746
LFEAWM1515	Bio Solids Support	1.00	each	VQ	0	0	0	45,482	0	45,482	0	45,482
LFEAWM1520	Instrumentation Evaluation	1.00	each	VQ	0	0	0	36,386	0	36,386	0	36,386
LFEAWM1525	Influent/ Effluent tank mixing system improvements	1.00	each	VQ	0	0	0	13,645	0	13,645	0	13,645
LFEAWM1530	Clarifier Mechanical Evaluation	1.00	each	VQ	0	0	0	22,741	0	22,741	0	22,741
SYS	Contingency And Escalation	1.00	ea	EE	0	0	0	0	59,337	59,337	0	59,337
Total for Activity 1EBB412120:						4,402	99,991	261,712	59,337	421,040	35,297	456,337

Line Item LFEAWM1510 - Maintenance of the WWTP

BOE	Description
	<p>Historical Data Source: WAD number 2, 1.1.04.01.04.02, overall WBS Spending Variance Report rpt_002a dated 10/16/98, located in T893B cube 95.</p> <p>Item Desc: Provide maintenance as required to ensure proper operations of the WWTP. Proper maintenance is required to ensure NPDES permit compliance.</p> <p>Breakdown of Historical Data: 1. Item: Maintenance of WWTP Units: 1 Lot Unit Cost: FY98 Hours 9,008 FY98 Subcontracted dollars \$228,381 FY98 Supplies \$ 92,761</p> <p>Unit Cost Adjustment factor: 8 percent reduction</p> <p>Revised Unit Cost: FY02 Dollars \$ 265,450 FY02 Hours 5,700 FY02 Subcontracted dollars \$99,118 FY02 Supplies \$30,000</p>

WBS No: 1EBB040102
 Activity ID: 1EBB412120

Rockv Flats Closure Project
Baseline Cost and Basis of Estimate

Project: Baseline Devl
 WBS Filter: 1EBB
 Activity Filter: *

Starts In FY *

Basis for adjustment:
 1. Hours have been reduced by approximately 36 percent due to maintenance tasks being performed by the Sewage Treatment plant operators.
 This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

Resources

Cost Element	Skill	Department	Curve	Quantity	Units
750 STRAIGHT TIME BASE	C010 CARPENTERS	KE10H Indust/Site Srvs Steelworkers	Back Loaded	526.49	Hours
<i>Factors</i> 592 15% of total craft hours					
0.88934 [SYS 061400] .88934200 - System					
750 STRAIGHT TIME BASE	C020 ELECTRICIANS	KE10H Indust/Site Srvs Steelworkers	Back Loaded	1,752.89	Hours
<i>Factors</i> 1971 50% of total craft hours					
0.88934 [SYS 061400] .88934200 - System					
750 STRAIGHT TIME BASE	C040 MAINTENANCE MACHINIST (incl Exp	KE10H Indust/Site Srvs Steelworkers	Back Loaded	175.20	Hours
<i>Factors</i> 197 5% of total craft hours					
0.88934 [SYS 061400] .88934200 - System					
750 STRAIGHT TIME BASE	C070 PAINTERS	KE10H Indust/Site Srvs Steelworkers	Back Loaded	175.20	Hours
<i>Factors</i> 197 5% of total craft hours					
0.88934 [SYS 061400] .88934200 - System					
750 STRAIGHT TIME BASE	C080 PLUMBERS AND PIPEFITTERS	KE10H Indust/Site Srvs Steelworkers	Back Loaded	876.89	Hours
<i>Factors</i> 986 25% of Total Craft Hours					
0.88934 [SYS 061400] .88934200 - System					
750 STRAIGHT TIME BASE	M010 FOREMEN / TEAM LEADS / GROUP	C222S Water System Operations	Back Loaded	533.61	Hours
<i>Factors</i> 600 .4 hrs/craft hour @ 3943 craft hours					
0.88934 [SYS 061400] .88934200 - System					
750 STRAIGHT TIME BASE	P030 BUYERS PROCUREMENT AND CON	C222S Water System Operations	Back Loaded	92.49	Hours
<i>Factors</i> 104 69 packages @ 1.51 hrs/package					
0.88934 [SYS 061400] .88934200 - System					
750 STRAIGHT TIME BASE	P170 OTHER ADMINISTRATIVE & PROFE	C222S Water System Operations	Back Loaded	66.70	Hours
<i>Factors</i> 75 10 calibrations/month @ 4.58					
0.88934 [SYS 061400] .88934200 - System					
750 STRAIGHT TIME BASE	S020 ENVIRONMENTAL SCIENTISTS	C222S Water System Operations	Back Loaded	26.68	Hours
<i>Factors</i> 30 69 packages @ .43 hrs/package					
0.88934 [SYS 061400] .88934200 - System					
750 STRAIGHT TIME BASE	T070 MAINT. TECHS. (INSTRUMENT TEC	KE10H Indust/Site Srvs Steelworkers	Linear	35.57	Hours
<i>Factors</i> 40 hours					
0.88934 [SYS 061400] .88934200 - System					
751 OVERTIME BASE & PRE.	C010 CARPENTERS	KE10H Indust/Site Srvs Steelworkers	Back Loaded	21.34	Hours
<i>Factors</i> 24 15% of Total Craft OT Hours					
0.88934 [SYS 061400] .88934200 - System					
751 OVERTIME BASE & PRE.	C020 ELECTRICIANS	KE10H Indust/Site Srvs Steelworkers	Back Loaded	70.26	Hours
<i>Factors</i> 79 50% of total craft OT hours					
0.88934 [SYS 061400] .88934200 - System					
751 OVERTIME BASE & PRE.	C040 MAINTENANCE MACHINIST (incl Exp	KE10H Indust/Site Srvs Steelworkers	Back Loaded	7.11	Hours
<i>Factors</i> 8 5% of Total Craft OT Hours					
0.88934 [SYS 061400] .88934200 - System					
751 OVERTIME BASE & PRE.	C070 PAINTERS	KE10H Indust/Site Srvs Steelworkers	Back Loaded	7.11	Hours
<i>Factors</i> 8 5% of Total Craft OT Hours					
0.88934 [SYS 061400] .88934200 - System					
751 OVERTIME BASE & PRE.	C080 PLUMBERS AND PIPEFITTERS	KE10H Indust/Site Srvs Steelworkers	Back Loaded	34.68	Hours
<i>Factors</i> 39 25% of Total Craft OT Hours					
0.88934 [SYS 061400] .88934200 - System					
A5C SUPPLIES	0000 NONE	C222S Water System Operations	Back Loaded	27,219.20	Dollars
<i>Factors</i> 30606 Dollars/vr					
0.88934 [SYS 061400] .88934200 - System					

WBS No: 1EBB040102
 Activity ID: 1EBB412120

Rockv Flats Closure Project
Baseline Cost and Basis of Estimate

Project: Baseline Devl
 WBS Filter: 1EBB
 Activity Filter: *

Starts In FY *

A5C	SUPPLIES	0000	NONE	C222S	Water Svstem Operations	Back Loaded	21,206.36	Dollars
<i>Factors</i> 23845 10.87 hrs/package @ 69 packages								
							0.88934	[SYS 061400].88934200 - Svstem
A5H	SUBCONTRACTED SRVS	0000	NONE	C222S	Water Svstem Operations	Linear	341.12	Dollars
<i>Factors</i> 383.56 dollars								
							0.88934	[SYS 061400].88934200 - Svstem
A5H	SUBCONTRACTED SRVS	0000	NONE	C222S	Water Svstem Operations	Linear	3,794.13	Dollars
<i>Factors</i> 4266.22 dollars.47 packages @ 2 hrs/package								
							0.88934	[SYS 061400].88934200 - Svstem
A5H	SUBCONTRACTED SRVS	E130	OTHER ENGINEERS	C222S	Water Svstem Operations	Back Loaded	85,840.53	Dollars
<i>Factors</i> 96521.4 69 packages @ \$69/hr								
							0.88934	[SYS 061400].88934200 - Svstem
A5L	RENTALS	0000	NONE	C106S	Business Management Office	Linear	4,874.48	Dollars
<i>Factors</i> 5481 Dollars								
							0.88934	[SYS 061400].88934200 - Svstem
A5R	MISC EXPENSES	0000	NONE	C222S	Water Svstem Operations	Back Loaded	182.32	Dollars
<i>Factors</i> 205 Dollars/yr								
							0.88934	[SYS 061400].88934200 - Svstem

Line Item LFEAWM1515 - Bio Solids Support

BOE	Vendor Name: International Engineering
	Vendor Quote: \$50,000
	Date of Quote: March 1999
	Quote Received by: RMRS procurement
	Item being quoted: Bio Solids Support
	Other Info: N/A
	Availability: FY02
	This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

Resources	<i>Cost Element</i>	<i>Skill</i>	<i>Department</i>	<i>Curve</i>	<i>Quantity</i>	<i>Units</i>
	A5H SUBCONTRACTED SRVS	E130 OTHER ENGINEERS	C222S Water Svstem Operations	Linear	45,482.29	Dollars
<i>Factors</i> 51141.5 dollars						
0.88934 [SYS 061400].88934200 - Svstem						

Line Item LFEAWM1520 - Instrumentation Evaluation

BOE	Vendor Name: International Engineering
	Vendor Quote: \$40,000
	Date of Quote: March 1999
	Quote Received by: RMRS procurement
	Item being quoted: Instrumentation Evaluation
	Other Info: N/A
	Availability: FY02
	This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

Resources	<i>Cost Element</i>	<i>Skill</i>	<i>Department</i>	<i>Curve</i>	<i>Quantity</i>	<i>Units</i>
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WBS No: 1EBB040102
 Activity ID: 1EBB412130

Rockv Flats Closure Project
Baseline Cost and Basis of Estimate

Project: Baseline Devl
 WBS Filter: 1EBB
 Activity Filter: *

Starts In FY: *

A5H	SUBCONTRACTED SRVS	E130	OTHER ENGINEERS	C222S	Water Svstem Operations	Linear	36,385.83	Dollars
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Factors 40913.2 Dollars

0.88934 [SYS 061400] .88934200 - Svstem

Line Item LFEAWM1525 - Influent/ Effluent tank mixing system improvements

BOE	Vendor Name: International Engineering Vendor Quote: \$15,000 Date of Quote: March 1999 Quote Received by: RMRS procurement Item being quoted: Influent/ Effluent tank mixing system improvements Other Info: N/A Availability: FY02 This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.											
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Resources	<i>Cost Element</i>	<i>Skill</i>	<i>Department</i>	<i>Curve</i>	<i>Quantity</i>	<i>Units</i>		
A5H	SUBCONTRACTED SRVS	E130	OTHER ENGINEERS	C222S	Water Svstem Operations	Linear	13,644.69	Dollars

Factors 15342.5 Dollars

0.88934 [SYS 061400] .88934200 - Svstem

Line Item LFEAWM1530 - Clarifier Mechanical Evaluation

BOE	Vendor Name: International Engineering Vendor Quote: \$25,000 Date of Quote: March 1999 Quote Received by: RMRS procurement Item being quoted: Clarifier Mechanical Evaluation Other Info: N/A Availability: FY02 This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.											
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Resources	<i>Cost Element</i>	<i>Skill</i>	<i>Department</i>	<i>Curve</i>	<i>Quantity</i>	<i>Units</i>		
A5H	SUBCONTRACTED SRVS	E130	OTHER ENGINEERS	C222S	Water Svstem Operations	Linear	22,741.14	Dollars

Factors 25570.8 Dollars

0.88934 [SYS 061400] .88934200 - Svstem

Line Item SYS - Contingency And Escalation

BOE												
Resources	<i>Cost Element</i>	<i>Skill</i>	<i>Department</i>	<i>Curve</i>	<i>Quantity</i>	<i>Units</i>						
CON	CONTINGENCY	0000	NONE	ZDEPT	No Department	Linear	40,784.55	Dollars				
Factors 40784.6 Dollars												
ESC	ESCALATION	0000	NONE	ZDEPT	No Department	Linear	18,552.39	Dollars				
Factors 18552.4 Dollars												

Activity ID: 1EBB412130 Description: STP Maintenance FY03

Cost Risk 2 Schedule Risk 2

Line Item	Description	Quantity	Units	BOE Type	Labor Hours/Unit	Labor Hours Total	Labor Cost Total	Materials/ Sub Cost	Contingency & Escalation	Total Prime Cost	Burden Cost	Total Cost
LFEAWM1510	Maintenance of the WWTP	1.00	ea	HC	4.402	4.402	99,991	144,392	0	244,384	34,597	278,981
LFEAWM1515	Bio Solids Support	1.00	each	VQ	0	0	0	45,482	0	45,482	0	45,482
LFEAWM1520	Ultraviolet Disinfection Evaluation	1.00	each	VQ	0	0	0	36,386	0	36,386	0	36,386

WBS No: 1EBB040102
 Activity ID: 1EBB412130

Rockv Flats Closure Project
Baseline Cost and Basis of Estimate

Project Baseline Devl
 WBS Filter 1EBB
 Activity Filter * Starts In FY *

LFEAWM1525	B990 Process Evaluation	1.00	each	VQ	0	0	0	13.645	0	13.645	0	13.645
LFEAWM1530	Buildina Integrity Evaluation	1.00	each	VQ	0	0	0	22.741	0	22.741	0	22.741
SYS	Contingency And Escalation	1.00	ea	EE	0	0	0	0	110.132	110.132	0	110.132
Total for Activity 1EBB412130:					4.402	99.991	262.646	110.132	472.769	34.597	507.366	

Line Item LFEAWM1510 - Maintenance of the WWTP

BOE
 Historical Data Source:
 WAD number 2, 1.1.04.01.04.02, overall WBS Spending Variance Report rpt_002a dated 10/16/98, located in T893B cube 95.

Item Desc:
 Provide maintenance as required to ensure proper operations of the WWTP. Proper maintenance is required to ensure NPDES permit compliance.

Breakdown of Historical Data:
 1. Item: Maintenance of WWTP
 Units: 1 Lot
 Unit Cost: FY98 Hours 9,008
 FY98 Subcontracted dollars \$228,381
 FY98 Supplies \$ 92,761

Unit Cost Adjustment factor: 8 percent reduction

Revised Unit Cost:
 FY03 Dollars \$ 265,450
 FY03 Hours 5,700
 FY03 Subcontracted dollars \$99,118
 FY03 Supplies \$30,000

Basis for adjustment:
 1. Hours have been reduced by approximately 36 percent due to maintenance tasks being performed by the Sewage Treatment plant operators.

This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

Resources	Cost Element	Skill	Department	Curve	Quantity	Units
	750 STRAIGHT TIME BASE	C010 CARPENTERS	KE10H Indust/Site Srvs Steelworkers	Linear	526.49	Hours
Factors	592	15% of total craft hours				
	750 STRAIGHT TIME BASE	C020 ELECTRICIANS	KE10H Indust/Site Srvs Steelworkers	Linear	1,752.89	Hours
Factors	1971	50% of total craft hours				
	750 STRAIGHT TIME BASE	C040 MAINTENANCE MACHINIST (incl Exp	KE10H Indust/Site Srvs Steelworkers	Linear	175.20	Hours
Factors	197	5% of total craft hours				
	750 STRAIGHT TIME BASE	C070 PAINTERS	KE10H Indust/Site Srvs Steelworkers	Linear	175.20	Hours
Factors	197	5% of total craft hours				
	750 STRAIGHT TIME BASE	C080 PLUMBERS AND PIPEFITTERS	KE10H Indust/Site Srvs Steelworkers	Linear	876.89	Hours
Factors	986	25% of Total Craft Hours				
	750 STRAIGHT TIME BASE	M010 FOREMEN / TEAM LEADS / GROUP	C222S Water Svstem Operations	Linear	533.61	Hours
Factors	600	.4 hrs/craft hour @ 3943 craft hours				
	750 STRAIGHT TIME BASE	P030 BUYERS PROCUREMENT AND CON	C222S Water Svstem Operations	Linear	92.49	Hours
Factors	104	69 packages @ 1.51 hrs/package				

WBS No: 1EBB040102
 Activity ID: 1EBB412130

Rockv Flats Closure Project
Baseline Cost and Basis of Estimate

Project Baseline Devl
 WBS Filter 1EBB
 Activity Filter *

Starts In FY *

750	STRAIGHT TIME BASE	P170	OTHER ADMINISTRATIVE & PROFE	C222S	Water Svstem Operations	Linear	66.70	Hours
<i>Factors</i> 75 10 calibrations/month @ 4.58								
750	STRAIGHT TIME BASE	S020	ENVIRONMENTAL SCIENTISTS	C222S	Water Svstem Operations	Linear	26.68	Hours
<i>Factors</i> 30 69 packages @ .43 hrs/package								
750	STRAIGHT TIME BASE	T070	MAINT. TECHS. (INSTRUMENT TEC	KE10H	Indust/Site Svrs Steelworkers	Linear	35.57	Hours
<i>Factors</i> 40 hours								
751	OVERTIME BASE & PRE.	C010	CARPENTERS	KE10H	Indust/Site Svrs Steelworkers	Linear	21.34	Hours
<i>Factors</i> 24 15% of Total Craft OT Hours								
751	OVERTIME BASE & PRE.	C020	ELECTRICIANS	KE10H	Indust/Site Svrs Steelworkers	Linear	70.26	Hours
<i>Factors</i> 79 50% of total craft OT hours								
751	OVERTIME BASE & PRE.	C040	MAINTENANCE MACHINIST (incl Exp	KE10H	Indust/Site Svrs Steelworkers	Linear	7.11	Hours
<i>Factors</i> 8 5% of Total Craft OT Hours								
751	OVERTIME BASE & PRE.	C070	PAINTERS	KE10H	Indust/Site Svrs Steelworkers	Linear	7.11	Hours
<i>Factors</i> 8 5% of Total Craft OT Hours								
751	OVERTIME BASE & PRE.	C080	PLUMBERS AND PIPEFITTERS	KE10H	Indust/Site Svrs Steelworkers	Linear	34.68	Hours
<i>Factors</i> 39 25% of Total Craft OT Hours								
A5C	SUPPLIES	0000	NONE	C222S	Water System Operations	Linear	27,386.84	Dollars
<i>Factors</i> 30794.5 Dollars/yr								
A5C	SUPPLIES	0000	NONE	C222S	Water System Operations	Linear	22,045.01	Dollars
<i>Factors</i> 24788 10.87 hrs/package @ 69 packages								
A5H	SUBCONTRACTED SRVS	0000	NONE	C222S	Water Svstem Operations	Linear	341.12	Dollars
<i>Factors</i> 383.56 dollars								
A5H	SUBCONTRACTED SRVS	0000	NONE	C222S	Water Svstem Operations	Linear	3,794.13	Dollars
<i>Factors</i> 4266.22 dollars.47 packages @ 2 hrs/package								
A5H	SUBCONTRACTED SRVS	E130	OTHER ENGINEERS	C222S	Water Svstem Operations	Linear	85,840.53	Dollars
<i>Factors</i> 96521.4 69 packages @ \$69/hr								
A5L	RENTALS	0000	NONE	C222S	Water Svstem Operations	Linear	4,802.45	Dollars
<i>Factors</i> 5400 Dollars								
A5R	MISC EXPENSES	0000	NONE	C222S	Water Svstem Operations	Linear	182.32	Dollars
<i>Factors</i> 205 Dollars/yr								
							0.88934	[SYS 061400] .88934200 - Svstem

Line Item LFEAWM1515 - Bio Solids Support

BOE	Vendor Name: International Engineering
	Vendor Quote: \$50,000
	Date of Quote: March 1999
	Quote Received by: RMRS procurement

WBS No: 1EBB040102
 Activity ID: 1EBB412130

Rockv Flats Closure Project
Baseline Cost and Basis of Estimate

Project: Baseline Devl
 WBS Filter: 1EBB
 Activity Filter: *

Starts In FY *

Item being quoted: Bio Solids Support
 Availability: FY03
 This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

Resources

Cost Element	Skill	Department	Curve	Quantity	Units
A5H SUBCONTRACTED SRVS	E130 OTHER ENGINEERS	C222S Water System Operations	Linear	45.482.29	Dollars

Factors 51141.5 dollars

0.88934 [SYS 061400] .88934200 - System

Line Item LFEAWM1520 - Ultraviolet Disinfection Evaluation

BOE

Vendor Name: International Engineering
 Vendor Quote: \$40,000
 Date of Quote: March 1999
 Quote Received by: RMRS procurement
 Item being quoted: Ultraviolet Disinfection Evaluation
 Other Info: N/A
 Availability: FY03
 This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

Resources

Cost Element	Skill	Department	Curve	Quantity	Units
A5H SUBCONTRACTED SRVS	E130 OTHER ENGINEERS	C222S Water System Operations	Linear	36.385.83	Dollars

Factors 40913.2 Dollars

0.88934 [SYS 061400] .88934200 - System

Line Item LFEAWM1525 - B990 Process Evaluation

BOE

Vendor Name: International Engineering
 Vendor Quote: \$15,000
 Date of Quote: March 1999
 Quote Received by: RMRS procurement
 Item being quoted: B990 Process Evaluation
 Other Info: N/A
 Availability: FY03
 This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

Resources

Cost Element	Skill	Department	Curve	Quantity	Units
A5H SUBCONTRACTED SRVS	E130 OTHER ENGINEERS	C222S Water System Operations	Linear	13.644.69	Dollars

Factors 15342.5 Dollars

0.88934 [SYS 061400] .88934200 - System

Line Item LFEAWM1530 - Building Integrity Evaluation

BOE

Vendor Name: International Engineering
 Vendor Quote: \$25,000
 Date of Quote: March 1999
 Quote Received by: RMRS procurement

WBS No: 1EBB040102
 Activity ID: 1EBB412130

Rockv Flats Closure Project
Baseline Cost and Basis of Estimate

Project: Baseline Devl
 WBS Filter: 1EBB
 Activity Filter: *

Starts In FY *

Item being quoted: Building Integrity Evaluation
 Other Info: N/A
 Availability: FY03
 This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

Resources	Cost Element	Skill	Department	Curve	Quantity	Units
	A5H SUBCONTRACTED SRVS	E130 OTHER ENGINEERS	C222S Water System Operations	Linear	22,741.14	Dollars
<i>Factors</i> 25570.8 Dollars						

0.88934 [SYS 061400] .88934200 - System

Line Item SYS - Contingency And Escalation

BOE

Resources	Cost Element	Skill	Department	Curve	Quantity	Units
	CON CONTINGENCY	0000 NONE	ZDEPT No Department	Linear	79,669.94	Dollars
<i>Factors</i> 79669.9 Dollars						
	ESC ESCALATION	0000 NONE	ZDEPT No Department	Linear	30,462.03	Dollars
<i>Factors</i> 30462.0 Dollars						

Activity ID: 1EBB412140 Description: STP Maintenance FY04

Cost Risk 2 Schedule Risk 2

Line Item	Description	Quantity	Units	BOE Type	Labor Hours/Unit	Labor Hours Total	Labor Cost Total	Materials/ Sub Cost	Contingency & Escalation	Total Prime Cost	Burden Cost	Total Cost
LFEAWM1510	Maintenance of the WWTP	1.00	ea	HC	4.402	4.402	99,991	145,393	0	245,385	28,198	273,582
LFEAWM1515	Aeration Basin Inspection	1.00	each	VQ	0	0	0	45,482	0	45,482	0	45,482
LFEAWM1520	STP Treatment Line Inspection	1.00	each	VQ	0	0	0	36,386	0	36,386	0	36,386
LFEAWM1525	Pump Inspections	1.00	each	VQ	0	0	0	13,645	0	13,645	0	13,645
LFEAWM1530	Bio Solids Support	1.00	each	VQ	0	0	0	22,741	0	22,741	0	22,741
SYS	Contingency And Escalation	1.00	ea	EE	0	0	0	0	55,949	55,949	0	55,949
Total for Activity 1EBB412140:						4.402	99,991	263,647	55,949	419,588	28,198	447,785

Line Item LFEAWM1510 - Maintenance of the WWTP

BOE

Historical Data Source:
 WAD number 2, 1.1.04.01.04.02, overall WBS Spending Variance Report rpt_002a dated 10/16/98, located in T893B cube 95.
 Item Desc:

Provide maintenance as required to ensure proper operations of the WWTP. Proper maintenance is required to ensure NPDES permit compliance.

Breakdown of Historical Data:

1. Item: Maintenance of WWTP
 Units: 1 Lot
 Unit Cost: FY98 Hours 9,008
 FY98 Subcontracted dollars \$228,381
 FY98 Supplies \$ 92,761

Unit Cost Adjustment factor: 8 percent reduction

Revised Unit Cost:
 FY04 Dollars \$265,450
 FY04 Hours 5,700
 FY04 Subcontracted dollars \$99,118
 FY04 Supplies \$30,000

Basis for adjustment:
 1. Hours have been reduced by approximately 36 percent due to maintenance tasks being performed by the Sewage Treatment plant operators.

This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

WBS No: 1EBB040102
 Activity ID: 1EBB412140

Rockv Flats Closure Project
Baseline Cost and Basis of Estimate

Project: Baseline Devl
 WBS Filter: 1EBB
 Activity Filter: *

Starts In FY *

Resources	Cost Element	Skill	Department	Curve	Quantity	Units
	750 STRAIGHT TIME BASE	C010 CARPENTERS	KE10H Indust/Site Srvs Steelworkers	Linear	526.49	Hours
<i>Factors</i>	592 15% of total craft hours					
	750 STRAIGHT TIME BASE	C020 ELECTRICIANS	KE10H Indust/Site Srvs Steelworkers	Linear	1,752.89	Hours
<i>Factors</i>	1971 50% of total craft hours					
	750 STRAIGHT TIME BASE	C040 MAINTENANCE MACHINIST (incl Exp	KE10H Indust/Site Srvs Steelworkers	Linear	175.20	Hours
<i>Factors</i>	197 5% of total craft hours					
	750 STRAIGHT TIME BASE	C070 PAINTERS	KE10H Indust/Site Srvs Steelworkers	Linear	175.20	Hours
<i>Factors</i>	197 5% of total craft hours					
	750 STRAIGHT TIME BASE	C080 PLUMBERS AND PIPEFITTERS	KE10H Indust/Site Srvs Steelworkers	Linear	876.89	Hours
<i>Factors</i>	986 25% of Total Craft Hours					
	750 STRAIGHT TIME BASE	M010 FOREMEN / TEAM LEADS / GROUP	C222S Water Svstem Operations	Linear	533.61	Hours
<i>Factors</i>	600 .4 hrs/craft hour @ 3943 craft hours					
	750 STRAIGHT TIME BASE	P030 BUYERS PROCUREMENT AND CON	C222S Water Svstem Operations	Linear	92.49	Hours
<i>Factors</i>	104 69 packages @ 1.51 hrs/package					
	750 STRAIGHT TIME BASE	P170 OTHER ADMINISTRATIVE & PROFE	C222S Water Svstem Operations	Linear	66.70	Hours
<i>Factors</i>	75 10 calibrations/month @ 4.58					
	750 STRAIGHT TIME BASE	S020 ENVIRONMENTAL SCIENTISTS	C222S Water Svstem Operations	Linear	26.68	Hours
<i>Factors</i>	30 69 packages @ .43 hrs/package					
	750 STRAIGHT TIME BASE	T070 MAINT. TECHS. (INSTRUMENT TEC	KE10H Indust/Site Srvs Steelworkers	Linear	35.57	Hours
<i>Factors</i>	40 hours					
	751 OVERTIME BASE & PRE.	C010 CARPENTERS	KE10H Indust/Site Srvs Steelworkers	Linear	21.34	Hours
<i>Factors</i>	24 15% of Total Craft OT Hours					
	751 OVERTIME BASE & PRE.	C020 ELECTRICIANS	KE10H Indust/Site Srvs Steelworkers	Linear	70.26	Hours
<i>Factors</i>	79 50% of total craft OT hours					
	751 OVERTIME BASE & PRE.	C040 MAINTENANCE MACHINIST (incl Exp	KE10H Indust/Site Srvs Steelworkers	Linear	7.11	Hours
<i>Factors</i>	8 5% of Total Craft OT Hours					
	751 OVERTIME BASE & PRE.	C070 PAINTERS	KE10H Indust/Site Srvs Steelworkers	Linear	7.11	Hours
<i>Factors</i>	8 5% of Total Craft OT Hours					
	751 OVERTIME BASE & PRE.	C080 PLUMBERS AND PIPEFITTERS	KE10H Indust/Site Srvs Steelworkers	Linear	34.68	Hours
<i>Factors</i>	39 25% of Total Craft OT Hours					
	A5C SUPPLIES	0000 NONE	C222S Water Svstem Operations	Linear	23,680.51	Dollars
<i>Factors</i>	26627 10.87 hrs/package @ 69 packages					
	A5C SUPPLIES	0000 NONE	C222S Water Svstem Operations	Linear	26,680.26	Dollars
<i>Factors</i>	30000 Dollars/yr					

WBS No: 1EBB040102
 Activity ID: 1EBB412140

Rockv Flats Closure Project
Baseline Cost and Basis of Estimate

Project: Baseline Devl
 WBS Filter: 1EBB
 Activity Filter: *

Starts In FY *

A5H	SUBCONTRACTED SRVS	0000	NONE	C222S	Water Svstem Operations	Linear	341.12	Dollars
<i>Factors</i> 383.56 dollars								
						0.88934	[SYS 061400]	.88934200 - Svstem
A5H	SUBCONTRACTED SRVS	0000	NONE	C222S	Water Svstem Operations	Linear	3,794.13	Dollars
<i>Factors</i> 4266.22 dollars.47 packadaes @ 2 hrs/package								
						0.88934	[SYS 061400]	.88934200 - Svstem
A5H	SUBCONTRACTED SRVS	E130	OTHER ENGINEERS	C222S	Water Svstem Operations	Linear	85,840.53	Dollars
<i>Factors</i> 96521.4 69 packadaes @ \$69/hr								
						0.88934	[SYS 061400]	.88934200 - Svstem
A5L	RENTALS	0000	NONE	C222S	Water Svstem Operations	Linear	4,874.48	Dollars
<i>Factors</i> 5481 Dollars								
						0.88934	[SYS 061400]	.88934200 - Svstem
A5R	MISC EXPENSES	0000	NONE	C222S	Water Svstem Operations	Linear	182.32	Dollars
<i>Factors</i> 205 Dollars/vr								
						0.88934	[SYS 061400]	.88934200 - Svstem

Line Item LFEAWM1515 - Aeration Basin Inspection

BOE
 Vendor Name: International Engineering
 Vendor Quote: \$50,000
 Date of Quote: March 1999
 Quote Received by: RMRS procurement
 Item being quoted: Aeration Basin Inspection
 Other Info: N/A
 Availability: FY04
 This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

<i>Cost Element</i>		<i>Skill</i>		<i>Department</i>		<i>Curve</i>	<i>Quantity</i>	<i>Units</i>
A5H	SUBCONTRACTED SRVS	E130	OTHER ENGINEERS	C222S	Water Svstem Operations	Linear	45,482.29	Dollars
<i>Factors</i> 51141.5 dollars								
						0.88934	[SYS 061400]	.88934200 - Svstem

Line Item LFEAWM1520 - STP Treatment Line Inspection

BOE
 Vendor Name: International Engineering
 Vendor Quote: \$40,000
 Date of Quote: March 1999
 Quote Received by: RMRS procurement
 Item being quoted: STP Treatment Line Inspection
 Other Info: N/A
 Availability: FY04
 This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

<i>Cost Element</i>		<i>Skill</i>		<i>Department</i>		<i>Curve</i>	<i>Quantity</i>	<i>Units</i>
A5H	SUBCONTRACTED SRVS	E130	OTHER ENGINEERS	C222S	Water Svstem Operations	Linear	36,385.83	Dollars
<i>Factors</i> 40913.2 Dollars								
						0.88934	[SYS 061400]	.88934200 - Svstem

Line Item LFEAWM1525 - Pump Inspections

BOE
 Vendor Name: International Engineering

WBS No: 1EBB040102
 Activity ID: 1EBB412140

Rockv Flats Closure Project
Baseline Cost and Basis of Estimate

Project: Baseline Devl
 WBS Filter: 1EBB
 Activity Filter: *

Starts In FY *

Vendor Quote: \$15,000
 Date of Quote: March 1999
 Quote Received by: RMRS procurement
 Item being quoted: Pump Inspections
 Other Info: N/A
 Availability: FY04
 This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

Resources	Cost Element	Skill	Department	Curve	Quantity	Units
	A5H SUBCONTRACTED SRVS	E130 OTHER ENGINEERS	C222S Water Svstem Operations	Linear	13.644.69	Dollars
<i>Factors</i> 15342.5 Dollars						

0.88934 [SYS 0614001.88934200 - Svstem

Line Item LFEAWM1530 - Bio Solids Support

BOE
 Vendor Name: International Engineering
 Vendor Quote: \$25,000
 Date of Quote: March 1999
 Quote Received by: RMRS procurement
 Item being quoted: Bio Solids Support
 Other Info: N/A
 Availability: FY04
 This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

Resources	Cost Element	Skill	Department	Curve	Quantity	Units
	A5H SUBCONTRACTED SRVS	E130 OTHER ENGINEERS	C222S Water Svstem Operations	Linear	22.741.14	Dollars
<i>Factors</i> 25570.8 Dollars						

0.88934 [SYS 0614001.88934200 - Svstem

Line Item SYS - Contingency And Escalation

BOE

Resources	Cost Element	Skill	Department	Curve	Quantity	Units
	CON CONTINGENCY	0000 NONE	ZDEPT No Department	Linear	18.326.58	Dollars
<i>Factors</i> 18326.6 Dollars						
	ESC ESCALATION	0000 NONE	ZDEPT No Department	Linear	37.622.63	Dollars
<i>Factors</i> 37622.6 Dollars						

Activity ID: 1EBB412250 Description: Portable Restrooms FY04

Cost Risk 1 Schedule Risk 2

Line Item	Description	Quantity	Units	BOE Type	Labor Hours/Unit	Labor Hours Total	Labor Cost Total	Materials/ Sub Cost	Contingency & Escalation	Total Prime Cost	Burden Cost	Total Cost
002	Portable Restroom	1.00	each	VQ	0	0	0	163.736	0	163.736	0	163.736
SYS	Contingency And Escalation	1.00	lea	EE	0	0	0	0	23.190	23.190	0	23.190
Total for Activity 1EBB412250:						0	0	163.736	23.190	186.926	0	186.926

Line Item 002 - Portable Restroom

BOE
 Vendor Name: Space Master & GE Capital
 Vendor Quote: \$180,000
 Date of Quote: March 1999

WBS No: 1EBB040102
 Activity ID: 1EBB412250

Rockv Flats Closure Project
Baseline Cost and Basis of Estimate

Project: Baseline Devl
 WBS Filter: 1EBB
 Activity Filter: *

Starts In FY *

Quote Received by: RFCSS procurement
 Item being quoted: Portable restrooms
 Other Info: N/A
 Availability: FY05
 This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

Resources	Cost Element	Skill	Department	Curve	Quantity	Units
A5H	SUBCONTRACTED SRVS	0000 NONE	C222S Water System Operations	Linear	163.736	20 Dollars
<i>Factors</i> 180000 Dolars 1.02283 -- FY00 Escalation -- 0.88934 [SYS 0614001.88934200 - System						

Line Item SYS - Contingency And Escalation

BOE

Resources	Cost Element	Skill	Department	Curve	Quantity	Units
CON	CONTINGENCY	0000 NONE	ZDEPT No Department	Linear	7.468	24 Dollars
<i>Factors</i> 7468.24 Dollars						
ESC	ESCALATION	0000 NONE	ZDEPT No Department	Linear	15.721	34 Dollars
<i>Factors</i> 15721.3 Dollars						

Activity ID: 1EBB412260 Description: Portable Restrooms FY05

Cost Risk 1 Schedule Risk 2

Line Item	Description	Quantity	Units	BOE Type	Labor Hours/Unit	Labor Hours Total	Labor Cost Total	Materials/ Sub Cost	Contingency & Escalation	Total Prime Cost	Burden Cost	Total Cost
0003	Portable restrooms	1.00	each	VQ	0	0	0	163.736	0	163.736	0	163.736
SYS	Contingency And Escalation	1.00	lea	EE	0	0	0	0	86.655	86.655	0	86.655
Total for Activity 1EBB412260: 0 0 163.736 86.655 250.391 0 250.391												

Line Item 0003 - Portable restrooms

BOE
 Vendor Name: Space Master & GE Capital
 Vendor Quote: \$180,000
 Date of Quote: March 1999
 Quote Received by: RFCSS procurement
 Item being quoted: Portable restrooms
 Other Info: N/A
 Availability: FY05
 This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

Resources	Cost Element	Skill	Department	Curve	Quantity	Units
A5H	SUBCONTRACTED SRVS	0000 NONE	C222S Water System Operations	Linear	163.736	20 Dollars
<i>Factors</i> 180000 dollars 1.02283 -- FY00 Escalation -- 0.88934 [SYS 0614001.88934200 - System						

Line Item SYS - Contingency And Escalation

BOE

Resources	Cost Element	Skill	Department	Curve	Quantity	Units
CON	CONTINGENCY	0000 NONE	ZDEPT No Department	Linear	61.289	89 Dollars
<i>Factors</i> 61289.9 Dollars						
ESC	ESCALATION	0000 NONE	ZDEPT No Department	Linear	25.365	27 Dollars
<i>Factors</i> 25365.3 Dollars						

Activity ID: 1EXXX41226 Description: Portable Restrooms FY06

Cost Risk 1 Schedule Risk 2

WBS No: 1EBB040102
 Activity ID: 1EXXX41226

Rockv Flats Closure Project
Baseline Cost and Basis of Estimate

Project Baseline Devl
 WBS Filter 1EBB
 Activity Filter *

Starts In FY *

Line Item	Description	Quantity	Units	BOE Type	Labor Hours/Unit	Labor Hours Total	Labor Cost Total	Materials/ Sub Cost	Contingency & Escalation	Total Prime Cost	Burden Cost	Total Cost
0003	Portable restrooms	0.96	each	VQ	0	0	0	157.991	0	157.991	0	157.991
SYS	Contingency And Escalation	1.00	ea	EE	0	0	0	0	132.586	132.586	0	132.586
Total for Activity 1EXXX41226:						0	0	157.991	132.586	290.577	0	290.577

Line Item 0003 - Portable restrooms

BOE
 Vendor Name: Space Master & GE Capital
 Vendor Quote: \$180,000
 Date of Quote: March 1999
 Quote Received by: RFCSS procurement
 Item being quoted: Portable restrooms
 Other Info: N/A
 Availability: FY05
 This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

Resources	Cost Element	Skill	Department	Curve	Quantity	Units
A5H	SUBCONTRACTED SRVS	0000 NONE	C222S Water Svstem Operations	Linear	163.736	20 Dollars
Factors 180000 dollars 1.02283 -- FY00 Escalation --						
0.88934 [SYS 061400] .88934200 - Svstem						

Line Item SYS - Contingency And Escalation

BOE

Resources	Cost Element	Skill	Department	Curve	Quantity	Units
CON	CONTINGENCY	0000 NONE	ZDEPT No Department	Linear	97.346	36 Dollars
Factors 97346.4 Dollars						
ESC	ESCALATION	0000 NONE	ZDEPT No Department	Linear	35.239	93 Dollars
Factors 35239.9 Dollars						

WBS No: 1EBB040103 Title: B891 Consol. Water Treatment Sys.
 Activity ID: 1EBB413000 Description: B891 GW Treatment Ops & Maint FY00

Cost Risk 2 Schedule Risk 2

Line Item	Description	Quantity	Units	BOE Type	Labor Hours/Unit	Labor Hours Total	Labor Cost Total	Materials/ Sub Cost	Contingency & Escalation	Total Prime Cost	Burden Cost	Total Cost
1	Operation and Maintenance of CWTF	1.00	each	HC	356	356	9,890	79,517	0	89,407	4,826	94,234
Total for Activity 1EBB413000:						356	9,890	79,517	0	89,407	4,826	94,234

Line Item 1 - Operation and Maintenance of CWTF

BOE
 Historical Data Source:
 WAD 83, Wadlet 1.1.03.08.04.02 FY98 Wadlet Spending Variance Report rpt_002a found in (FY98)Planning and Integration(P&I)Reporting Systems.
 Item Desc:
 Daily operation, maintenance and inspection of the Consolidated Water Treatment Facility to include Building 891, T900A & B, 881 Hillside French Drain, and collection well. This includes sampling labor and coordination, project management, plant support personnel, subcontract technical support, health and safety, supplies, and other administrative support. Information will be gathered for reports on a quarterly basis.
 Item Desc: Operation and maintenance of the consolidated water treatment facility.
 Breakdown of Historical Data:
 Item: Operation and maintenance of the consolidated water treatment facility.
 Units: 1 lot
 Unit Cost: \$417K
 Unit Cost Adjustment factor: 1.24
 Revised Unit Cost: \$476,654
 Hours 2,153

WBS No: 1EBB040103
 Activity ID: 1EBB413000

Rockv Flats Closure Project
Baseline Cost and Basis of Estimate

Project Baseline Devl
 WBS Filter 1EBB
 Activity Filter *

Starts In FY *

Basis for adjustment: The required funding for each fiscal year can vary according to the level of funding provided by other project accounts for water treatment services. The revised unit cost provides adequate funding for baseline operations. Additional scope supporting outside projects will require funding to be provided by the organization requiring the water treatment services. The referenced historical data was adjusted to reflect the fact that there an extraordinary amount of project accounts that provided funding in FY98.

This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

Resources

Cost Element		Skill		Department		Curve	Quantity	Units
750	STRAIGHT TIME BASE	C020	ELECTRICIANS	KE10H	Indust/Site Svcs Steelworkers	Linear	20.31	Hours
<i>Factors</i> 120 Hours		0.32163 January 2000 Earned Value Factor				0.52618 [SYS 061300] 0.526183 - Target		
750	STRAIGHT TIME BASE	E050	ENVIRONMENTAL ENGINEERS	C103S	Environmental Compliance	Linear	247.76	Hours
<i>Factors</i> 1464 hours		0.32163 May 2000 Earned Value Factor				0.52618 [SYS 061300] 0.526183 - Target		
750	STRAIGHT TIME BASE	E130	OTHER ENGINEERS	C222S	Water System Operations	Linear	8.12	Hours
<i>Factors</i> 48 hours		0.32163 May 2000 Earned Value Factor				0.52618 [SYS 061300] 0.526183 - Target		
750	STRAIGHT TIME BASE	L010	FIREFIGHTERS	K263S	Fire Tactical Operations	Linear	0.68	Hours
<i>Factors</i> 4 Hours		0.32163 May 2000 Earned Value Factor				0.52618 [SYS 061300] 0.526183 - Target		
750	STRAIGHT TIME BASE	P080	HEALTH PHYSICISTS	C222S	Water System Operations	Linear	8.12	Hours
<i>Factors</i> 48 Hours		0.32163 May 2000 Earned Value Factor				0.52618 [SYS 061300] 0.526183 - Target		
750	STRAIGHT TIME BASE	P090	INDUSTRIAL HYGIENISTS	C222S	Water System Operations	Linear	4.06	Hours
<i>Factors</i> 24 hours		0.32163 May 2000 Earned Value Factor				0.52618 [SYS 061300] 0.526183 - Target		
750	STRAIGHT TIME BASE	P170	OTHER ADMINISTRATIVE & PROFE	C222S	Water System Operations	Linear	5.42	Hours
<i>Factors</i> 32 hours		0.32163 May 2000 Earned Value Factor				0.52618 [SYS 061300] 0.526183 - Target		
750	STRAIGHT TIME BASE	P170	OTHER ADMINISTRATIVE & PROFE	C222S	Water System Operations	Linear	4.06	Hours
<i>Factors</i> 24 hours		0.32163 May 2000 Earned Value Factor				0.52618 [SYS 061300] 0.526183 - Target		
750	STRAIGHT TIME BASE	P170	OTHER ADMINISTRATIVE & PROFE	C252S	NG Metrology	Linear	1.69	Hours
<i>Factors</i> 10 hours		0.32163 May 2000 Earned Value Factor				0.52618 [SYS 061300] 0.526183 - Target		
750	STRAIGHT TIME BASE	R010	CHEMICAL SYSTEMS OPERATOR (	KE10H	Indust/Site Svcs Steelworkers	Linear	42.31	Hours
<i>Factors</i> 250 hours		0.32163 May 2000 Earned Value Factor				0.52618 [SYS 061300] 0.526183 - Target		
750	STRAIGHT TIME BASE	R070	WASTE TREATMENT OPERATOR A	KE10H	Indust/Site Svcs Steelworkers	Linear	6.77	Hours
<i>Factors</i> 40 HOURS		0.32163 May 2000 Earned Value Factor				0.52618 [SYS 061300] 0.526183 - Target		
750	STRAIGHT TIME BASE	T050	RADIATION CONTROL TECHNOLOGI	KE10H	Indust/Site Svcs Steelworkers	Linear	6.58	Hours
<i>Factors</i> 38.865 hours		0.32163 May 2000 Earned Value Factor				0.52618 [SYS 061300] 0.526183 - Target		
A5C	SUPPLIES	0000	NONE	C222S	Water System Operations	Linear	2,061.32	Dollars
<i>Factors</i> 1.015 -- FY00 Escalation --		12000 dollars		0.32163 May 2000 Earned Value Factor		0.52618 [SYS 061300] 0.526183 - Target		
A5H	SUBCONTRACTED SRVS	0000	NONE	C222S	Water System Operations	Linear	3,199.61	Dollars
<i>Factors</i> 18484 dollars		1.02283 -- FY00 Escalation --		0.32163 May 2000 Earned Value Factor		0.52618 [SYS 061300] 0.526183 - Target		
A5H	SUBCONTRACTED SRVS	0000	NONE	C222S	Water System Operations	Linear	1,038.61	Dollars
<i>Factors</i> 6000 Dollars		1.02283 -- FY00 Escalation --		0.32163 May 2000 Earned Value Factor		0.52618 [SYS 061300] 0.526183 - Target		

WBS No: 1EBB040103
 Activity ID: 1EBB413000

Rockv Flats Closure Project
Baseline Cost and Basis of Estimate

Project: Baseline Devl
 WBS Filter: 1EBB
 Activity Filter: *

Starts In FY *

A5H	SUBCONTRACTED SRVS	0000	NONE	C222S	Water System Operations	Linear	67,012.20	Dollars
<i>Factors</i> 387126 dollars 1.02283 -- FY00 Escalation -- 0.32163 May 2000 Earned Value Factor 0.52618 [SYS 061300] 0.526183 - Target								
A5H	SUBCONTRACTED SRVS	P030	BUYERS PROCUREMENT AND CON	C222S	Water System Operations	Linear	132.92	Dollars
<i>Factors</i> 767.843 subc support 1.02283 -- FY00 Escalation -- 0.32163 May 2000 Earned Value Factor 0.52618 [SYS 061300] 0.526183 - Target								
A5H	SUBCONTRACTED SRVS	P050	COMPLIANCE INSPECTORS	C222S	Water System Operations	Linear	4,349.58	Dollars
<i>Factors</i> 25127.3 subc support 1.02283 -- FY00 Escalation -- 0.32163 May 2000 Earned Value Factor 0.52618 [SYS 061300] 0.526183 - Target								
A5H	SUBCONTRACTED SRVS	P070	COST ESTIMATORS PLANNERS AN	C222S	Water System Operations	Linear	949.94	Dollars
<i>Factors</i> 5487.78 subc p&i support 1.02283 -- FY00 Escalation -- 0.32163 May 2000 Earned Value Factor 0.52618 [SYS 061300] 0.526183 - Target								
A5H	SUBCONTRACTED SRVS	P170	OTHER ADMINISTRATIVE & PROFF	C222S	Water System Operations	Linear	364.73	Dollars
<i>Factors</i> 2107 dOLLARS 1.02283 -- FY00 Escalation -- 0.32163 May 2000 Earned Value Factor 0.52618 [SYS 061300] 0.526183 - Target								
A5H	SUBCONTRACTED SRVS	S020	ENVIRONMENTAL SCIENTISTS	C222S	Water System Operations	Linear	408.54	Dollars
<i>Factors</i> 2414 dollars 0.32163 May 2000 Earned Value Factor 0.52618 [SYS 061300] 0.526183 - Target								

Activity ID: 1EBB413100 Description: B891 GW Treatment Ops & Maint FY01

Cost Risk 2 Schedule Risk 2

Line Item	Description	Quantity	Units	BOE Type	Labor Hours/Unit	Labor Hours Total	Labor Cost Total	Materials/ Sub Cost	Contingency & Escalation	Total Prime Cost	Burden Cost	Total Cost
1	Operation and Maintenance of CWTF	1.00	each	HC	2,048	2,048	55,662	435,673	0	491,335	26,551	517,886
SYS	Contingency And Escalation	1.00	ea	EE	0	0	0	0	27,456	27,456	0	27,456
Total for Activity 1EBB413100:						2,048	55,662	435,673	27,456	518,791	26,551	545,342

Line Item 1 - Operation and Maintenance of CWTF

BOE
 Historical Data Source:
 WAD 83, Wadlet 1.1.03.08.04.02 FY98 Wadlet Spending Variance Report rpt_002a found in (FY98)Planning and Integration(P&I)Reporting Systems.

Item Desc:
 Daily operation, maintenance and inspection of the Consolidated Water Treatment Facility to include Building 891, T900A & B, 881 Hillside French Drain, and collection well. This includes sampling labor and coordination, project management, plant support personnel, subcontract technical support, health and safety, supplies, and other administrative support. Information will be gathered for reports on a quarterly basis.

Item Desc: Operation and maintenance of the consolidated water treatment facility.
 Breakdown of Historical Data:
 Item: Operation and maintenance of the consolidated water treatment facility.
 Units: 1 lot
 Unit Cost: \$417K
 Unit Cost Adjustment factor: 1.24
 Revised Unit Cost: \$476,654
 Hours 2,153

Basis for adjustment: The required funding for each fiscal year can vary according to the level of funding provided by other project accounts for water treatment services. The revised unit cost provides adequate funding for baseline operations. Additional scope supporting outside projects will require funding to be provided by the organization requiring the water treatment services. The referenced historical data was adjusted to reflect the fact that there an extraordinary amount of project accounts that provided funding in FY98.

This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

Resources

Cost Element	Skill	Department	Curve	Quantity	Units
750 STRAIGHT TIME BASE	C020 ELECTRICIANS	KE10H Indust/Site Srvs Steelworkers	Linear	106.72	Hours
<i>Factors</i> 120 Hours					
750 STRAIGHT TIME BASE	E050 ENVIRONMENTAL ENGINEERS	C222S Water System Operations	Linear	1,302.00	Hours
<i>Factors</i> 1464 hours					

0.88934 [SYS 061400] 0.88934200 - System
 0.88934 [SYS 061400] 0.88934200 - System

WBS No: 1EBB040103
 Activity ID: 1EBB413100

Rockv Flats Closure Project
Baseline Cost and Basis of Estimate

Project Baseline Devl
 WBS Filter 1EBB
 Activity Filter *

Starts In FY *

750	STRAIGHT TIME BASE	E130	OTHER ENGINEERS	C222S	Water Svstem Operations	Linear	42.69	Hours
<i>Factors</i> 48 hours								
						0.88934	[SYS 061400]	.88934200 - Svstem
750	STRAIGHT TIME BASE	L010	FIREFIGHTERS	K263S	Fire Tactical Operations	Linear	3.56	Hours
<i>Factors</i> 4 Hours								
						0.88934	[SYS 061400]	.88934200 - Svstem
750	STRAIGHT TIME BASE	P080	HEALTH PHYSICISTS	C222S	Water Svstem Operations	Linear	42.69	Hours
<i>Factors</i> 48 Hours								
						0.88934	[SYS 061400]	.88934200 - Svstem
750	STRAIGHT TIME BASE	P090	INDUSTRIAL HYGIENISTS	C222S	Water Svstem Operations	Linear	21.34	Hours
<i>Factors</i> 24 hours								
						0.88934	[SYS 061400]	.88934200 - Svstem
750	STRAIGHT TIME BASE	P170	OTHER ADMINISTRATIVE & PROFE	C100S	Closure Site Services	Linear	8.89	Hours
<i>Factors</i> 10 hours								
						0.88934	[SYS 061400]	.88934200 - Svstem
750	STRAIGHT TIME BASE	P170	OTHER ADMINISTRATIVE & PROFE	C222S	Water Svstem Operations	Linear	28.46	Hours
<i>Factors</i> 32 hours								
						0.88934	[SYS 061400]	.88934200 - Svstem
750	STRAIGHT TIME BASE	P170	OTHER ADMINISTRATIVE & PROFE	C222S	Water Svstem Operations	Linear	21.34	Hours
<i>Factors</i> 24 hours								
						0.88934	[SYS 061400]	.88934200 - Svstem
750	STRAIGHT TIME BASE	R010	CHEMICAL SYSTEMS OPERATOR (	KE10H	Indust/Site Svrs Steelworkers	Linear	222.34	Hours
<i>Factors</i> 250 hours								
						0.88934	[SYS 061400]	.88934200 - Svstem
750	STRAIGHT TIME BASE	R070	WASTE TREATMENT OPERATOR A	KE10H	Indust/Site Svrs Steelworkers	Linear	35.57	Hours
<i>Factors</i> 40 HOURS								
						0.88934	[SYS 061400]	.88934200 - Svstem
750	STRAIGHT TIME BASE	T050	RADIATION CONTROL TECHNOLOGI	KE10H	Indust/Site Svrs Steelworkers	Linear	212.43	Hours
<i>Factors</i> 238.865 hours								
						0.88934	[SYS 061400]	.88934200 - Svstem
A5C	SUPPLIES	0000	NONE	C222S	Water Svstem Operations	Linear	10.832.19	Dollars
<i>Factors</i> 12000 dollars 1.015 -- FY00 Escalation --								
						0.88934	[SYS 061400]	.88934200 - Svstem
A5H	SUBCONTRACTED SRVS	0000	NONE	C222S	Water Svstem Operations	Linear	16.813.89	Dollars
<i>Factors</i> 1.02283 -- FY00 Escalation -- 18484 dollars								
						0.88934	[SYS 061400]	.88934200 - Svstem
A5H	SUBCONTRACTED SRVS	0000	NONE	C222S	Water Svstem Operations	Linear	369.934.70	Dollars
<i>Factors</i> 406680 dollars 1.02283 -- FY00 Escalation --								
						0.88934	[SYS 061400]	.88934200 - Svstem
A5H	SUBCONTRACTED SRVS	0000	NONE	C222S	Water Svstem Operations	Linear	5.457.87	Dollars
<i>Factors</i> 6000 Dollars 1.02283 -- FY00 Escalation --								
						0.88934	[SYS 061400]	.88934200 - Svstem
A5H	SUBCONTRACTED SRVS	P030	BUYERS PROCUREMENT AND CON	C222S	Water Svstem Operations	Linear	698.47	Dollars
<i>Factors</i> 767.843 subc support 1.02283 -- FY00 Escalation --								
						0.88934	[SYS 061400]	.88934200 - Svstem
A5H	SUBCONTRACTED SRVS	P050	COMPLIANCE INSPECTORS	C222S	Water Svstem Operations	Linear	22.856.93	Dollars
<i>Factors</i> 1.02283 -- FY00 Escalation -- 25127.3 subc support								
						0.88934	[SYS 061400]	.88934200 - Svstem
A5H	SUBCONTRACTED SRVS	P070	COST ESTIMATORS PLANNERS AN	C222S	Water Svstem Operations	Linear	4.991.93	Dollars
<i>Factors</i> 5487.78 subc p&i support 1.02283 -- FY00 Escalation --								
						0.88934	[SYS 061400]	.88934200 - Svstem

WBS No: 1EBB040103
 Activity ID: 1EBB413100

Rockv Flats Closure Project
Baseline Cost and Basis of Estimate

Project: Baseline Devl
 WBS Filter: 1EBB
 Activity Filter: *

Starts In FY: *

A5H	SUBCONTRACTED SRVS	P170	OTHER ADMINISTRATIVE & PROFF	C222S	Water Svstem Operations	Linear	1,916.62	Dollars
<i>Factors</i>		2107	dOLLARS	1.02283	-- FY00 Escalation --			
							0.88934	[SYS 061400] .88934200 - Svstem
A5H	SUBCONTRACTED SRVS	S020	ENVIRONMENTAL SCIENTISTS	C222S	Water Svstem Operations	Linear	2,169.99	Dollars
<i>Factors</i>		2440	dollars					
							0.88934	[SYS 061400] .88934200 - Svstem

Line Item SYS - Contingency And Escalation

BOE

Resources

<i>Cost Element</i>		<i>Skill</i>		<i>Department</i>		<i>Curve</i>	<i>Quantity</i>	<i>Units</i>
CON	CONTINGENCY	0000	NONE	ZDEPT	No Department	Linear	16,566.1	Dollars
<i>Factors</i>		16566.1 Dollars						
ESC	ESCALATION	0000	NONE	ZDEPT	No Department	Linear	10,889.99	Dollars
<i>Factors</i>		10890 Dollars						

Activity ID: 1EBB413200 Description: B891 GW Treatment Ops & Maint FY02

Cost Risk 2 Schedule Risk 2

Line Item	Description	Quantity	Units	BOE Type	Labor Hours/Unit	Labor Hours Total	Labor Cost Total	Materials/ Sub Cost	Contingency & Escalation	Total Prime Cost	Burden Cost	Total Cost
1	Operation and Maintenance of CWTF	1.00	each	HC	1.870	1.870	51,972	435,706	0	487,677	18,346	506,023
SYS	Contingency And Escalation	1.00	lea	EE	0	0	0	0	75,632	75,632	0	75,632
Total for Activity 1EBB413200:						1.870	51,972	435,706	75,632	563,309	18,346	581,655

Line Item 1 - Operation and Maintenance of CWTF

BOE

Historical Data Source:
 WAD 83, Wadlet 1.1.03.08.04.02 FY98 Wadlet Spending Variance Report rpt_002a found in (FY98)Planning and Integration(P&I)Reporting Systems.

Item Desc:
 Daily operation, maintenance and inspection of the Consolidated Water Treatment Facility to include Building 891, T900A & B, 881 Hillside French Drain, and collection well. This includes sampling labor and coordination, project management, plant support personnel, subcontract technical support, health and safety, supplies, and other administrative support. Information will be gathered for reports on a quarterly basis.

Item Desc: Operation and maintenance of the consolidated water treatment facility.
 Breakdown of Historical Data:
 Item: Operation and maintenance of the consolidated water treatment facility.
 Units: 1 lot
 Unit Cost: \$417K
 Unit Cost Adjustment factor: 1.24
 Revised Unit Cost: \$476,654
 Hours 2,153

Basis for adjustment: The required funding for each fiscal year can vary according to the level of funding provided by other project accounts for water treatment services. The revised unit cost provides adequate funding for baseline operations. Additional scope supporting outside projects will require funding to be provided by the organization requiring the water treatment services. The referenced historical data was adjusted to reflect the fact that there an extraordinary amount of project accounts that provided funding in FY98.

This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

Resources

<i>Cost Element</i>		<i>Skill</i>		<i>Department</i>		<i>Curve</i>	<i>Quantity</i>	<i>Units</i>
750	STRAIGHT TIME BASE	C020	ELECTRICIANS	KE10H	Indust/Site Svrs Steelworkers	Linear	106.72	Hours
<i>Factors</i>		120	Hours					
							0.88934	[SYS 061400] .88934200 - Svstem
750	STRAIGHT TIME BASE	E050	ENVIRONMENTAL ENGINEERS	C222S	Water Svstem Operations	Linear	1,302.00	Hours
<i>Factors</i>		1464	hours					
							0.88934	[SYS 061400] .88934200 - Svstem
750	STRAIGHT TIME BASE	E130	OTHER ENGINEERS	C222S	Water Svstem Operations	Linear	42.69	Hours
<i>Factors</i>		48	hours					
							0.88934	[SYS 061400] .88934200 - Svstem

WBS No: 1EBB040103
 Activity ID: 1EBB413200

Rockv Flats Closure Project
Baseline Cost and Basis of Estimate

Project Baseline Devl
 WBS Filter 1EBB
 Activity Filter *

Starts In FY *

750	STRAIGHT TIME BASE	L010	FIREFIGHTERS	K263S	Fire Tactical Operations	Linear	3.56	Hours
Factors 4 Hours								
						0.88934	[SYS 061400]	.88934200 - Svstem
750	STRAIGHT TIME BASE	P080	HEALTH PHYSICISTS	C222S	Water Svstem Operations	Linear	42.69	Hours
Factors 48 Hours								
						0.88934	[SYS 061400]	.88934200 - Svstem
750	STRAIGHT TIME BASE	P090	INDUSTRIAL HYGIENISTS	C222S	Water Svstem Operations	Linear	21.34	Hours
Factors 24 hours								
						0.88934	[SYS 061400]	.88934200 - Svstem
750	STRAIGHT TIME BASE	P170	OTHER ADMINISTRATIVE & PROFE	C222S	Water Svstem Operations	Linear	28.46	Hours
Factors 32 hours								
						0.88934	[SYS 061400]	.88934200 - Svstem
750	STRAIGHT TIME BASE	P170	OTHER ADMINISTRATIVE & PROFE	C222S	Water Svstem Operations	Linear	21.34	Hours
Factors 24 hours								
						0.88934	[SYS 061400]	.88934200 - Svstem
750	STRAIGHT TIME BASE	P170	OTHER ADMINISTRATIVE & PROFE	C222S	Water Svstem Operations	Linear	8.89	Hours
Factors 10 hours								
						0.88934	[SYS 061400]	.88934200 - Svstem
750	STRAIGHT TIME BASE	R010	CHEMICAL SYSTEMS OPERATOR (	KE10H	Indust/Site Svrs Steelworkers	Linear	222.34	Hours
Factors 250 hours								
						0.88934	[SYS 061400]	.88934200 - Svstem
750	STRAIGHT TIME BASE	R070	WASTE TREATMENT OPERATOR A	KE10H	Indust/Site Svrs Steelworkers	Linear	35.57	Hours
Factors 40 HOURS								
						0.88934	[SYS 061400]	.88934200 - Svstem
750	STRAIGHT TIME BASE	T050	RADIATION CONTROL TECHNOLIGI	KE10H	Indust/Site Svrs Steelworkers	Linear	34.56	Hours
Factors 38.865 hours								
						0.88934	[SYS 061400]	.88934200 - System
A5C	SUPPLIES	0000	NONE	C222S	Water Svstem Operations	Linear	10,832.19	Dollars
Factors 12000 dollars 1.015 -- FY00 Escalation --								
						0.88934	[SYS 061400]	.88934200 - System
A5H	SUBCONTRACTED SRVS	0000	NONE	C222S	Water Svstem Operations	Linear	16,813.89	Dollars
Factors 18484 dollars 1.02283 -- FY00 Escalation --								
						0.88934	[SYS 061400]	.88934200 - System
A5H	SUBCONTRACTED SRVS	0000	NONE	C222S	Water Svstem Operations	Linear	369,934.70	Dollars
Factors 406680 dollars 1.02283 -- FY00 Escalation --								
						0.88934	[SYS 061400]	.88934200 - System
A5H	SUBCONTRACTED SRVS	0000	NONE	C222S	Water Svstem Operations	Linear	5,457.87	Dollars
Factors 6000 Dollars 1.02283 -- FY00 Escalation --								
						0.88934	[SYS 061400]	.88934200 - System
A5H	SUBCONTRACTED SRVS	P030	BUYERS PROCUREMENT AND CON	C222S	Water Svstem Operations	Linear	698.47	Dollars
Factors 767.843 subc support 1.02283 -- FY00 Escalation --								
						0.88934	[SYS 061400]	.88934200 - System
A5H	SUBCONTRACTED SRVS	P050	COMPLIANCE INSPECTORS	C222S	Water Svstem Operations	Linear	22,856.93	Dollars
Factors 25127.3 subc support 1.02283 -- FY00 Escalation --								
						0.88934	[SYS 061400]	.88934200 - System
A5H	SUBCONTRACTED SRVS	P070	COST ESTIMATORS PLANNERS AN	C222S	Water Svstem Operations	Linear	4,991.93	Dollars
Factors 1.02283 -- FY00 Escalation -- 5487.78 subc p&i support								
						0.88934	[SYS 061400]	.88934200 - System
A5H	SUBCONTRACTED SRVS	P170	OTHER ADMINISTRATIVE & PROFE	C222S	Water Svstem Operations	Linear	1,916.62	Dollars
Factors 2107 dOLLARS 1.02283 -- FY00 Escalation --								
						0.88934	[SYS 061400]	.88934200 - System

WBS No: 1EBB040103
 Activity ID: 1EBB413200

Rockv Flats Closure Project
Baseline Cost and Basis of Estimate

Project Baseline Devl
 WBS Filter 1EBB
 Activity Filter *

A5H	SUBCONTRACTED SRVS	S020	ENVIRONMENTAL SCIENTISTS	C222S	Water System Operations	Linear	2,202.90	Dollars
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Factors 2477 dollars

0.88934 [SYS 061400] .88934200 - System

Line Item SYS - Contingency And Escalation

BOE

Resources

Cost Element	Skill	Department	Curve	Quantity	Units
CON CONTINGENCY	0000 NONE	ZDEPT No Department	Linear	51.984.69	Dollars

Factors 51984.7 Dollars

ESC ESCALATION	0000 NONE	ZDEPT No Department	Linear	23.647.20	Dollars
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Factors 23647.2 Dollars

Activity ID: 1EBB413300 Description: B891 GW Treatment Ops & Maint FY03

Cost Risk 2 Schedule Risk 2

Line Item	Description	Quantity	Units	BOE Type	Labor Hours/Unit	Labor Hours Total	Labor Cost Total	Materials/ Sub Cost	Contingency & Escalation	Total Prime Cost	Burden Cost	Total Cost
1	Operation and Maintenance of CWTF	1.00	each	HC	1.870	1.870	51.972	435.802	0	487.774	17.982	505.756
SYS	Contingency And Escalation	1.00	ea	EE	0	0	0	0	140.219	140.219	0	140.219
Total for Activity 1EBB413300:						1.870	51.972	435.802	140.219	627.993	17.982	645.976

Line Item 1 - Operation and Maintenance of CWTF

BOE

Historical Data Source:
 WAD 83, Wadlet 1.1.03.08.04.02 FY98 Wadlet Spending Variance Report rpt_002a found in (FY98)Planning and Integration(P&I)Reporting Systems.

Item Desc:
 Daily operation, maintenance and inspection of the Consolidated Water Treatment Facility to include Building 891, T900A & B, 881 Hillside French Drain, and collection well. This includes sampling labor and coordination, project management, plant support personnel, subcontract technical support, health and safety, supplies, and other administrative support. Information will be gathered for reports on a quarterly basis.

Item Desc: Operation and maintenance of the consolidated water treatment facility.
 Breakdown of Historical Data:
 Item: Operation and maintenance of the consolidated water treatment facility.
 Units: 1 lot
 Unit Cost: \$417K
 Unit Cost Adjustment factor: 1.24
 Revised Unit Cost: \$476,654
 Hours 2,153

Basis for adjustment: The required funding for each fiscal year can vary according to the level of funding provided by other project accounts for water treatment services. The revised unit cost provides adequate funding for baseline operations. Additional scope supporting outside projects will require funding to be provided by the organization requiring the water treatment services. The referenced historical data was adjusted to reflect the fact that there an extraordinary amount of project accounts that provided funding in FY98.

This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

Resources

Cost Element	Skill	Department	Curve	Quantity	Units
750 STRAIGHT TIME BASE	C020 ELECTRICIANS	KE10H Indust/Site Srvs Steelworkers	Linear	106.72	Hours

Factors 120 Hours

0.88934 [SYS 061400] .88934200 - System

750 STRAIGHT TIME BASE	E050 ENVIRONMENTAL ENGINEERS	C222S Water System Operations	Linear	1,302.00	Hours
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Factors 1464 hours

0.88934 [SYS 061400] .88934200 - System

750 STRAIGHT TIME BASE	E130 OTHER ENGINEERS	C222S Water System Operations	Linear	42.69	Hours
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Factors 48 hours

0.88934 [SYS 061400] .88934200 - System

750 STRAIGHT TIME BASE	L010 FIREFIGHTERS	K263S Fire Tactical Operations	Linear	3.56	Hours
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Factors 4 Hours

0.88934 [SYS 061400] .88934200 - System

WBS No: 1EBB040103
 Activity ID: 1EBB413300

Rockv Flats Closure Project
Baseline Cost and Basis of Estimate

Project: Baseline Devl
 WBS Filter: 1EBB
 Activity Filter: *

Starts In FY: *

750	STRAIGHT TIME BASE	P080	HEALTH PHYSICISTS	C222S	Water Svstem Operations	Linear	42.69	Hours	0.88934 [SYS 061400] .88934200 - Svstem
Factors 48 Hours									
750	STRAIGHT TIME BASE	P090	INDUSTRIAL HYGIENISTS	C222S	Water Svstem Operations	Linear	21.34	Hours	0.88934 [SYS 061400] .88934200 - Svstem
Factors 24 hours									
750	STRAIGHT TIME BASE	P170	OTHER ADMINISTRATIVE & PROFE	C222S	Water Svstem Operations	Linear	8.89	Hours	0.88934 [SYS 061400] .88934200 - Svstem
Factors 10 hours									
750	STRAIGHT TIME BASE	P170	OTHER ADMINISTRATIVE & PROFE	C222S	Water Svstem Operations	Linear	28.46	Hours	0.88934 [SYS 061400] .88934200 - Svstem
Factors 32 hours									
750	STRAIGHT TIME BASE	P170	OTHER ADMINISTRATIVE & PROFE	C222S	Water Svstem Operations	Linear	21.34	Hours	0.88934 [SYS 061400] .88934200 - Svstem
Factors 24 hours									
750	STRAIGHT TIME BASE	R010	CHEMICAL SYSTEMS OPERATOR (	KE10H	Indust/Site Svrs Steelworkers	Linear	222.34	Hours	0.88934 [SYS 061400] .88934200 - Svstem
Factors 250 hours									
750	STRAIGHT TIME BASE	R070	WASTE TREATMENT OPERATOR A	KE10H	Indust/Site Svrs Steelworkers	Linear	35.57	Hours	0.88934 [SYS 061400] .88934200 - Svstem
Factors 40 HOURS									
750	STRAIGHT TIME BASE	T050	RADIATION CONTROL TECHNOLOGI	KE10H	Indust/Site Svrs Steelworkers	Linear	34.56	Hours	0.88934 [SYS 061400] .88934200 - Svstem
Factors 38.865 hours									
A5C	SUPPLIES	0000	NONE	C222S	Water System Operations	Linear	10,832.19	Dollars	0.88934 [SYS 061400] .88934200 - Svstem
Factors 12000 dollars 1.015 -- FY00 Escalation --									
A5H	SUBCONTRACTED SRVS	0000	NONE	C222S	Water System Operations	Linear	369,934.70	Dollars	0.88934 [SYS 061400] .88934200 - Svstem
Factors 406680 dollars 1.02283 -- FY00 Escalation --									
A5H	SUBCONTRACTED SRVS	0000	NONE	C222S	Water Svstem Operations	Linear	5,457.87	Dollars	0.88934 [SYS 061400] .88934200 - Svstem
Factors 6000 Dollars 1.02283 -- FY00 Escalation --									
A5H	SUBCONTRACTED SRVS	0000	NONE	C222S	Water Svstem Operations	Linear	16,813.89	Dollars	0.88934 [SYS 061400] .88934200 - Svstem
Factors 1.02283 -- FY00 Escalation -- 18484 dollars									
A5H	SUBCONTRACTED SRVS	P030	BUYERS PROCUREMENT AND CON	C222S	Water Svstem Operations	Linear	698.47	Dollars	0.88934 [SYS 061400] .88934200 - Svstem
Factors 767.843 subc support 1.02283 -- FY00 Escalation --									
A5H	SUBCONTRACTED SRVS	P050	COMPLIANCE INSPECTORS	C222S	Water Svstem Operations	Linear	22,856.93	Dollars	0.88934 [SYS 061400] .88934200 - Svstem
Factors 1.02283 -- FY00 Escalation -- 25127.3 subc support									
A5H	SUBCONTRACTED SRVS	P070	COST ESTIMATORS PLANNERS AN	C222S	Water Svstem Operations	Linear	4,991.93	Dollars	0.88934 [SYS 061400] .88934200 - Svstem
Factors 5487.78 subc p&i support 1.02283 -- FY00 Escalation --									
A5H	SUBCONTRACTED SRVS	P170	OTHER ADMINISTRATIVE & PROFE	C222S	Water Svstem Operations	Linear	1,916.62	Dollars	0.88934 [SYS 061400] .88934200 - Svstem
Factors 2107 dOLLARS 1.02283 -- FY00 Escalation --									
A5H	SUBCONTRACTED SRVS	S020	ENVIRONMENTAL SCIENTISTS	C222S	Water Svstem Operations	Linear	2,299.84	Dollars	0.88934 [SYS 061400] .88934200 - Svstem
Factors 2586 dollars									

Line Item SYS - Contingency And Escalation
 BOE

WBS No: 1EBB040103
 Activity ID: 1EBB413300

Rockv Flats Closure Project
Baseline Cost and Basis of Estimate

Project Baseline Devl
 WBS Filter 1EBB
 Activity Filter *

Starts In FY *

Resources	Cost Element	Skill	Department	Curve	Quantity	Units
	CON CONTINGENCY	0000 NONE	ZDEPT No Department	Linear	101.435.20	Dollars
<i>Factors</i> 101435 Dollars						
	ESC ESCALATION	0000 NONE	ZDEPT No Department	Linear	38.784.06	Dollars
<i>Factors</i> 38784.1 Dollars						

Activity ID: 1EBB413400 Description: B891 GW Treatment Ops & Maint FY04

Cost Risk 2 Schedule Risk 2

Line Item	Description	Quantity	Units	BOE Type	Labor Hours/Unit	Labor Hours Total	Labor Cost Total	Materials/ Sub Cost	Contingency & Escalation	Total Prime Cost	Burden Cost	Total Cost
1	Operation and Maintenance of CWTF	1.00	each	HC	1.870	1.870	51.972	435.906	0	487.877	14.656	502.533
SYS	Contingency And Escalation	1.00	ea	EE	0	0	0	0	71.755	71.755	0	71.755
Total for Activity 1EBB413400:						1.870	51.972	435.906	71.755	559.633	14.656	574.289

Line Item 1 - Operation and Maintenance of CWTF

BOE
 Historical Data Source:
 WAD 83, Wadlet 1.1.03.08.04.02 FY98 Wadlet Spending Variance Report rpt_002a found in (FY98)Planning and Integration(P&I)Reporting Systems.

Item Desc:
 Daily operation, maintenance and inspection of the Consolidated Water Treatment Facility to include Building 891, T900A & B, 881 Hillside French Drain, and collection well. This includes sampling labor and coordination, project management, plant support personnel, subcontract technical support, health and safety, supplies, and other administrative support. Information will be gathered for reports on a quarterly basis.

Item Desc: Operation and maintenance of the consolidated water treatment facility.
 Breakdown of Historical Data:
 Item: Operation and maintenance of the consolidated water treatment facility.
 Units: 1 lot
 Unit Cost: \$417K
 Unit Cost Adjustment factor: 1.24
 Revised Unit Cost: \$476,654
 Hours 2,153

Basis for adjustment: The required funding for each fiscal year can vary according to the level of funding provided by other project accounts for water treatment services. The revised unit cost provides adequate funding for baseline operations. Additional scope supporting outside projects will require funding to be provided by the organization requiring the water treatment services. The referenced historical data was adjusted to reflect the fact that there an extraordinary amount of project accounts that provided funding in FY98.

This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

Resources	Cost Element	Skill	Department	Curve	Quantity	Units
	750 STRAIGHT TIME BASE	C020 ELECTRICIANS	KE10H Indust/Site Svcs Steelworkers	Linear	106.72	Hours
<i>Factors</i> 120 Hours						
0.88934 ISYS 0614001.88934200 - System						
	750 STRAIGHT TIME BASE	E050 ENVIRONMENTAL ENGINEERS	C222S Water Svstem Operations	Linear	1.302.00	Hours
<i>Factors</i> 1464 hours						
0.88934 ISYS 0614001.88934200 - System						
	750 STRAIGHT TIME BASE	E130 OTHER ENGINEERS	C222S Water Svstem Operations	Linear	42.69	Hours
<i>Factors</i> 48 hours						
0.88934 ISYS 0614001.88934200 - System						
	750 STRAIGHT TIME BASE	L010 FIREFIGHTERS	K263S Fire Tactical Operations	Linear	3.56	Hours
<i>Factors</i> 4 Hours						
0.88934 ISYS 0614001.88934200 - System						
	750 STRAIGHT TIME BASE	P080 HEALTH PHYSICISTS	C222S Water Svstem Operations	Linear	42.69	Hours
<i>Factors</i> 48 Hours						
0.88934 ISYS 0614001.88934200 - System						
	750 STRAIGHT TIME BASE	P090 INDUSTRIAL HYGIENISTS	C222S Water Svstem Operations	Linear	21.34	Hours
<i>Factors</i> 24 hours						
0.88934 ISYS 0614001.88934200 - System						

WBS No: 1EBB040103
 Activity ID: 1EBB413400

Rockv Flats Closure Project
Baseline Cost and Basis of Estimate

Project: Baseline Devl
 WBS Filter: 1EBB
 Activity Filter: *

Starts In FY: *

750	STRAIGHT TIME BASE	P170	OTHER ADMINISTRATIVE & PROFE	C222S	Water Svstem Operations	Linear	8.89	Hours
<i>Factors</i> 10 hours								
						0.88934	[SYS 061400]	.88934200 - Svstem
750	STRAIGHT TIME BASE	P170	OTHER ADMINISTRATIVE & PROFE	C222S	Water Svstem Operations	Linear	28.46	Hours
<i>Factors</i> 32 hours								
						0.88934	[SYS 061400]	.88934200 - Svstem
750	STRAIGHT TIME BASE	P170	OTHER ADMINISTRATIVE & PROFE	C222S	Water Svstem Operations	Linear	21.34	Hours
<i>Factors</i> 24 hours								
						0.88934	[SYS 061400]	.88934200 - Svstem
750	STRAIGHT TIME BASE	R010	CHEMICAL SYSTEMS OPERATOR (	KE10H	Indust/Site Svrs Steelworkers	Linear	222.34	Hours
<i>Factors</i> 250 hours								
						0.88934	[SYS 061400]	.88934200 - Svstem
750	STRAIGHT TIME BASE	R070	WASTE TREATMENT OPERATOR A	KE10H	Indust/Site Svrs Steelworkers	Linear	35.57	Hours
<i>Factors</i> 40 HOURS								
						0.88934	[SYS 061400]	.88934200 - Svstem
750	STRAIGHT TIME BASE	T050	RADIATION CONTROL TECHNOLOGI	KE10H	Indust/Site Svrs Steelworkers	Linear	34.56	Hours
<i>Factors</i> 38.865 hours								
						0.88934	[SYS 061400]	.88934200 - Svstem
A5C	SUPPLIES	0000	NONE	C222S	Water Svstem Operations	Linear	10.832.19	Dollars
<i>Factors</i> 1.015 -- FY00 Escalation -- 12000 dollars								
						0.88934	[SYS 061400]	.88934200 - Svstem
A5H	SUBCONTRACTED SRVS	0000	NONE	C222S	Water Svstem Operations	Linear	16.813.89	Dollars
<i>Factors</i> 18484 dollars 1.02283 -- FY00 Escalation --								
						0.88934	[SYS 061400]	.88934200 - Svstem
A5H	SUBCONTRACTED SRVS	0000	NONE	C222S	Water Svstem Operations	Linear	369.934.70	Dollars
<i>Factors</i> 406680 dollars 1.02283 -- FY00 Escalation --								
						0.88934	[SYS 061400]	.88934200 - Svstem
A5H	SUBCONTRACTED SRVS	0000	NONE	C222S	Water Svstem Operations	Linear	5.457.87	Dollars
<i>Factors</i> 6000 Dollars 1.02283 -- FY00 Escalation --								
						0.88934	[SYS 061400]	.88934200 - Svstem
A5H	SUBCONTRACTED SRVS	P030	BUYERS PROCUREMENT AND CON	C222S	Water Svstem Operations	Linear	698.47	Dollars
<i>Factors</i> 767.843 subc support 1.02283 -- FY00 Escalation --								
						0.88934	[SYS 061400]	.88934200 - Svstem
A5H	SUBCONTRACTED SRVS	P050	COMPLIANCE INSPECTORS	C222S	Water Svstem Operations	Linear	22.856.93	Dollars
<i>Factors</i> 25127.3 subc support 1.02283 -- FY00 Escalation --								
						0.88934	[SYS 061400]	.88934200 - Svstem
A5H	SUBCONTRACTED SRVS	P070	COST ESTIMATORS PLANNERS AN	C222S	Water Svstem Operations	Linear	4.991.93	Dollars
<i>Factors</i> 5487.78 subc p&i support 1.02283 -- FY00 Escalation --								
						0.88934	[SYS 061400]	.88934200 - Svstem
A5H	SUBCONTRACTED SRVS	P170	OTHER ADMINISTRATIVE & PROFE	C222S	Water Svstem Operations	Linear	1.916.62	Dollars
<i>Factors</i> 2107 dOLLARS 1.02283 -- FY00 Escalation --								
						0.88934	[SYS 061400]	.88934200 - Svstem
A5H	SUBCONTRACTED SRVS	S020	ENVIRONMENTAL SCIENTISTS	C222S	Water Svstem Operations	Linear	2.403.00	Dollars
<i>Factors</i> 2702 dollars								
						0.88934	[SYS 061400]	.88934200 - Svstem

Line Item SYS - Contingency And Escalation

BOE

Resources	Cost Element	Skill	Department	Curve	Quantity	Units		
CON	CONTINGENCY	0000	NONE	ZDEPT	No Department	Linear	23.504.01	Dollars
<i>Factors</i> 23504.0 Dollars								
ESC	ESCALATION	0000	NONE	ZDEPT	No Department	Linear	48.251.38	Dollars
<i>Factors</i> 48251.4 Dollars								

Activity ID: 1EBB413500 Description: B891 GW Treatment Ops & Maint FY05-2

Cost Risk 2 Schedule Risk 2

WBS No: 1EBB040103
 Activity ID: 1EBB413500

Rockv Flats Closure Project
Baseline Cost and Basis of Estimate

Project Baseline Devl
 WBS Filter 1EBB
 Activity Filter *

Starts In FY *

Line Item	Description	Quantity	Units	BOE Type	Labor Hours/Unit	Labor Hours Total	Labor Cost Total	Materials/ Sub Cost	Contingency & Escalation	Total Prime Cost	Burden Cost	Total Cost
1	Operation and Maintenance of CWTF	1.50	each	HC	713	1.069	29.771	251.269	0	281.040	10.360	291.400
SYS	Contingency And Escalation	1.00	lea	EE	0	0	0	0	208.350	208.350	0	208.350
Total for Activity 1EBB413500:						1.069	29.771	251.269	208.350	489.390	10.360	499.750

Line Item 1 - Operation and Maintenance of CWTF

BOE
 Historical Data Source:
 WAD 83, Wadlet 1.1.03.08.04.02 FY98 Wadlet Spending Variance Report rpt_002a found in (FY98)Planning and Integration(P&I)Reporting Systems.

Item Desc:
 Daily operation, maintenance and inspection of the Consolidated Water Treatment Facility to include Building 891, T900A & B, 881 Hillside French Drain, and collection well. This includes sampling labor and coordination, project management, plant support personnel, subcontract technical support, health and safety, supplies, and other administrative support. Information will be gathered for reports on a quarterly basis.

Item Desc: Operation and maintenance of the consolidated water treatment facility.
 Breakdown of Historical Data:
 Item: Operation and maintenance of the consolidated water treatment facility.
 Units: 1 lot
 Unit Cost: \$417K
 Unit Cost Adjustment factor: 0.65
 Revised Unit Cost: \$272,493
 Hours: 1,093

Basis for adjustment: Reduced funding will be required since the facility will only operate for approximately half of the fiscal year.

This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

Resources

Cost Element	Skill	Department	Curve	Quantity	Units
750 STRAIGHT TIME BASE	C020 ELECTRICIANS	KE10H Indust/Site Srvs Steelworkers	Linear	40.02	Hours
Factors 60 hours		0.75 Partial year factor			
			0.88934 [SYS 061400] .88934200 - System		
750 STRAIGHT TIME BASE	E050 ENVIRONMENTAL ENGINEERS	C222S Water System Operations	Linear	488.25	Hours
Factors 732 hours		0.75 Partial year factor			
			0.88934 [SYS 061400] .88934200 - System		
750 STRAIGHT TIME BASE	E130 OTHER ENGINEERS	C222S Water System Operations	Linear	16.01	Hours
Factors 24 hours		0.75 Partial year factor			
			0.88934 [SYS 061400] .88934200 - System		
750 STRAIGHT TIME BASE	L010 FIREFIGHTERS	K263S Fire Tactical Operations	Linear	1.33	Hours
Factors 2 hours		0.75 Partial year factor			
			0.88934 [SYS 061400] .88934200 - System		
750 STRAIGHT TIME BASE	P080 HEALTH PHYSICISTS	C222S Water System Operations	Linear	16.01	Hours
Factors 24 hours		0.75 Partial year factor			
			0.88934 [SYS 061400] .88934200 - System		
750 STRAIGHT TIME BASE	P090 INDUSTRIAL HYGIENISTS	C222S Water System Operations	Linear	16.01	Hours
Factors 24 hours		0.75 Partial year factor			
			0.88934 [SYS 061400] .88934200 - System		
750 STRAIGHT TIME BASE	P170 OTHER ADMINISTRATIVE & PROFF	C222S Water System Operations	Linear	10.67	Hours
Factors 16 hours		0.75 Partial year factor			
			0.88934 [SYS 061400] .88934200 - System		
750 STRAIGHT TIME BASE	P170 OTHER ADMINISTRATIVE & PROFF	C222S Water System Operations	Linear	8.00	Hours
Factors 12 hours		0.75 Partial year factor			
			0.88934 [SYS 061400] .88934200 - System		
750 STRAIGHT TIME BASE	P170 OTHER ADMINISTRATIVE & PROFF	C222S Water System Operations	Linear	6.67	Hours
Factors 10 hours		0.75 Partial year factor			
			0.88934 [SYS 061400] .88934200 - System		

WBS No: 1EBB040103
 Activity ID: 1EBB413500

Rockv Flats Closure Project
Baseline Cost and Basis of Estimate

Project Baseline Devl
 WBS Filter 1EBB
 Activity Filter *

Starts In FY *

750	STRAIGHT TIME BASE	R010	CHEMICAL SYSTEMS OPERATOR (	KE10H	Indust/Site Svcs Steelworkers	Linear	83.38	Hours
<i>Factors</i>		125	hours	0.75	Partial year factor			
						0.88934	[SYS 061400]	88934200 - Svsstem
750	STRAIGHT TIME BASE	R070	WASTE TREATMENT OPERATOR A	KE10H	Indust/Site Svcs Steelworkers	Linear	13.34	Hours
<i>Factors</i>		20	HOURS	0.75	Partial year factor			
						0.88934	[SYS 061400]	88934200 - Svsstem
750	STRAIGHT TIME BASE	T050	RADIATION CONTROL TECHNOLOGI	KE10H	Indust/Site Svcs Steelworkers	Linear	12.94	Hours
<i>Factors</i>		19.4	hours	0.75	Partial year factor			
						0.88934	[SYS 061400]	88934200 - Svsstem
A5C	SUPPLIES	0000	NONE	C222S	Water Svstem Operations	Linear	4.062.07	Dollars
<i>Factors</i>		1.015	-- FY00 Escalation --	6000	dollars	0.75	Partial year factor	
						0.88934	[SYS 061400]	88934200 - Svsstem
A5H	SUBCONTRACTED SRVS	0000	NONE	C222S	Water Svstem Operations	Linear	138.725.50	Dollars
<i>Factors</i>		1.02283	-- FY00 Escalation --	203340	dollars	0.75	Partial year factor	
						0.88934	[SYS 061400]	88934200 - Svsstem
A5H	SUBCONTRACTED SRVS	0000	NONE	C222S	Water Svstem Operations	Linear	4.093.41	Dollars
<i>Factors</i>		6000	Dollars	1.02283	-- FY00 Escalation --	0.75	Partial year factor	
						0.88934	[SYS 061400]	88934200 - Svsstem
A5H	SUBCONTRACTED SRVS	0000	NONE	C222S	Water Svstem Operations	Linear	6.305.21	Dollars
<i>Factors</i>		9242	dollars	1.02283	-- FY00 Escalation --	0.75	Partial year factor	
						0.88934	[SYS 061400]	88934200 - Svsstem
A5H	SUBCONTRACTED SRVS	P030	BUYERS PROCUREMENT AND CON	C222S	Water Svstem Operations	Linear	261.64	Dollars
<i>Factors</i>		383.5	subc support	1.02283	-- FY00 Escalation --	0.75	Partial year factor	
						0.88934	[SYS 061400]	88934200 - Svsstem
A5H	SUBCONTRACTED SRVS	P050	COMPLIANCE INSPECTORS	C222S	Water Svstem Operations	Linear	8.571.35	Dollars
<i>Factors</i>		12563.7	subc support	1.02283	-- FY00 Escalation --	0.75	Partial year factor	
						0.88934	[SYS 061400]	88934200 - Svsstem
A5H	SUBCONTRACTED SRVS	P070	COST ESTIMATORS PLANNERS AN	C222S	Water Svstem Operations	Linear	3.743.95	Dollars
<i>Factors</i>		5487.78	subc p&i support	1.02283	-- FY00 Escalation --	0.75	Partial year factor	
						0.88934	[SYS 061400]	88934200 - Svsstem
A5H	SUBCONTRACTED SRVS	P170	OTHER ADMINISTRATIVE & PROFE	C222S	Water Svstem Operations	Linear	718.73	Dollars
<i>Factors</i>		1053.5	dOLLARS	1.02283	-- FY00 Escalation --	0.75	Partial year factor	
						0.88934	[SYS 061400]	88934200 - Svsstem
A5H	SUBCONTRACTED SRVS	S020	ENVIRONMENTAL SCIENTISTS	C222S	Water Svstem Operations	Linear	1.030.53	Dollars
<i>Factors</i>		1545	dollars	0.75	Partial year factor			
						0.88934	[SYS 061400]	88934200 - Svsstem

Line Item SYS - Contingency And Escalation

BOE

Resources

Cost Element	Skill	Department	Curve	Quantity	Units
CON CONTINGENCY	0000 NONE	ZDEPT No Department	Linear	148.912.70	Dollars
<i>Factors</i>		148913	Dollars		
ESC ESCALATION	0000 NONE	ZDEPT No Department	Linear	59.437.52	Dollars
<i>Factors</i>		59437.5	Dollars		

Activity ID: 1EXXX41340 Description: B891 GW Treatment Ops & Maint FY05-1

Cost Risk 2 Schedule Risk 2

Line Item	Description	Quantity	Units	BOE Type	Labor Hours/Unit	Labor Hours Total	Labor Cost Total	Materials/ Sub Cost	Contingency & Escalation	Total Prime Cost	Burden Cost	Total Cost
1	Operation and Maintenance of CWTF	0.87	each	HC	1.870	1.633	45,390	380,704	0	426,094	15,796	441,889
SYS	Contingency And Escalation	1.00	ea	EE	0	0	0	0	236,379	236,379	0	236,379
Total for Activity 1EXXX41340:						1.633	45,390	380,704	236,379	662,473	15,796	678,269

Line Item 1 - Operation and Maintenance of CWTF

BOE

Historical Data Source:
 WAD 83, Wadlet 1.1.03.08.04.02 FY98 Wadlet Spending Variance Report rpt_002a found in (FY98)Planning and Integration(P&I)Reporting Systems.

WBS No: 1EBB040103
 Activity ID: 1EXXX41340

Rockv Flats Closure Project
Baseline Cost and Basis of Estimate

Project Baseline Devl
 WBS Filter 1EBB
 Activity Filter *

Starts In FY *

Item Desc:
 Daily operation, maintenance and inspection of the Consolidated Water Treatment Facility to include Building 891, T900A & B, 881 Hillside French Drain, and collection well. This includes sampling labor and coordination, project management, plant support personnel, subcontract technical support, health and safety, supplies, and other administrative support. Information will be gathered for reports on a quarterly basis.

Item Desc: Operation and maintenance of the consolidated water treatment facility.
 Breakdown of Historical Data:
 Item: Operation and maintenance of the consolidated water treatment facility.
 Units: 1 lot
 Unit Cost: \$417K
 Unit Cost Adjustment factor: 1.24
 Revised Unit Cost: \$476,654
 Hours 2,153

Basis for adjustment: The required funding for each fiscal year can vary according to the level of funding provided by other project accounts for water treatment services. The revised unit cost provides adequate funding for baseline operations. Additional scope supporting outside projects will require funding to be provided by the organization requiring the water treatment services. The referenced historical data was adjusted to reflect the fact that there an extraordinary amount of project accounts that provided funding in FY98.

This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

Resources

Cost Element	Skill	Department	Curve	Quantity	Units
750 STRAIGHT TIME BASE	C020 ELECTRICIANS	KE10H Indust/Site Srvs Steelworkers	Linear	106.72	Hours
<i>Factors</i> 120 Hours					
0.88934 ISYS 0614001 .88934200 - System					
750 STRAIGHT TIME BASE	E050 ENVIRONMENTAL ENGINEERS	C222S Water System Operations	Linear	1,302.00	Hours
<i>Factors</i> 1464 hours					
0.88934 ISYS 0614001 .88934200 - System					
750 STRAIGHT TIME BASE	E130 OTHER ENGINEERS	C222S Water System Operations	Linear	42.69	Hours
<i>Factors</i> 48 hours					
0.88934 ISYS 0614001 .88934200 - System					
750 STRAIGHT TIME BASE	L010 FIREFIGHTERS	K263S Fire Tactical Operations	Linear	3.56	Hours
<i>Factors</i> 4 Hours					
0.88934 ISYS 0614001 .88934200 - System					
750 STRAIGHT TIME BASE	P080 HEALTH PHYSICISTS	C222S Water System Operations	Linear	42.69	Hours
<i>Factors</i> 48 Hours					
0.88934 ISYS 0614001 .88934200 - System					
750 STRAIGHT TIME BASE	P090 INDUSTRIAL HYGIENISTS	C222S Water System Operations	Linear	21.34	Hours
<i>Factors</i> 24 hours					
0.88934 ISYS 0614001 .88934200 - System					
750 STRAIGHT TIME BASE	P170 OTHER ADMINISTRATIVE & PROFE	C222S Water System Operations	Linear	8.89	Hours
<i>Factors</i> 10 hours					
0.88934 ISYS 0614001 .88934200 - System					
750 STRAIGHT TIME BASE	P170 OTHER ADMINISTRATIVE & PROFE	C222S Water System Operations	Linear	28.46	Hours
<i>Factors</i> 32 hours					
0.88934 ISYS 0614001 .88934200 - System					
750 STRAIGHT TIME BASE	P170 OTHER ADMINISTRATIVE & PROFE	C222S Water System Operations	Linear	21.34	Hours
<i>Factors</i> 24 hours					
0.88934 ISYS 0614001 .88934200 - System					
750 STRAIGHT TIME BASE	R010 CHEMICAL SYSTEMS OPERATOR (	KE10H Indust/Site Srvs Steelworkers	Linear	222.34	Hours
<i>Factors</i> 250 hours					
0.88934 ISYS 0614001 .88934200 - System					
750 STRAIGHT TIME BASE	R070 WASTE TREATMENT OPERATOR A	KE10H Indust/Site Srvs Steelworkers	Linear	35.57	Hours
<i>Factors</i> 40 HOURS					
0.88934 ISYS 0614001 .88934200 - System					

WBS No: 1EBB040103
 Activity ID: 1EXXX41340

Rockv Flats Closure Project
Baseline Cost and Basis of Estimate

Project Baseline Devl
 WBS Filter 1EBB
 Activity Filter *

Starts In FY *

750	STRAIGHT TIME BASE	T050	RADIATION CONTROL TECHNOLIGI	KE10H	Indust/Site Srvs Steelworkers	Linear	34.56	Hours
<i>Factors</i> 38.865 hours								
A5C	SUPPLIES	0000	NONE	C222S	Water System Operations	Linear	10.832.19	Dollars
<i>Factors</i> 1.015 -- FY00 Escalation -- 12000 dollars								
A5H	SUBCONTRACTED SRVS	0000	NONE	C222S	Water System Operations	Linear	16.813.89	Dollars
<i>Factors</i> 18484 dollars 1.02283 -- FY00 Escalation --								
A5H	SUBCONTRACTED SRVS	0000	NONE	C222S	Water System Operations	Linear	369.934.70	Dollars
<i>Factors</i> 406680 dollars 1.02283 -- FY00 Escalation --								
A5H	SUBCONTRACTED SRVS	0000	NONE	C222S	Water System Operations	Linear	5.457.87	Dollars
<i>Factors</i> 6000 Dollars 1.02283 -- FY00 Escalation --								
A5H	SUBCONTRACTED SRVS	P030	BUYERS PROCUREMENT AND CON	C222S	Water System Operations	Linear	698.47	Dollars
<i>Factors</i> 767.843 subc support 1.02283 -- FY00 Escalation --								
A5H	SUBCONTRACTED SRVS	P050	COMPLIANCE INSPECTORS	C222S	Water System Operations	Linear	22.856.93	Dollars
<i>Factors</i> 25127.3 subc support 1.02283 -- FY00 Escalation --								
A5H	SUBCONTRACTED SRVS	P070	COST ESTIMATORS PLANNERS AN	C222S	Water System Operations	Linear	4.991.93	Dollars
<i>Factors</i> 5487.78 subc p&i support 1.02283 -- FY00 Escalation --								
A5H	SUBCONTRACTED SRVS	P170	OTHER ADMINISTRATIVE & PROFE	C222S	Water System Operations	Linear	1.916.62	Dollars
<i>Factors</i> 2107 dOLLARS 1.02283 -- FY00 Escalation --								
A5H	SUBCONTRACTED SRVS	S020	ENVIRONMENTAL SCIENTISTS	C222S	Water System Operations	Linear	2.403.00	Dollars
<i>Factors</i> 2702 dollars								
0.88934 [SYS 061400] .88934200 - System								

Line Item SYS - Contingency And Escalation

BOE

Resources

Cost Element	Skill	Department	Curve	Quantity	Units
CON CONTINGENCY	0000 NONE	ZDEPT No Department	Linear	167.923.60	Dollars
<i>Factors</i> 167924 Dollars					
ESC ESCALATION	0000 NONE	ZDEPT No Department	Linear	68.455.52	Dollars
<i>Factors</i> 68455.5 Dollars					

WBS No: 1EBB040104 Title: Water Plant
 Activity ID: 1EBB414000 Description: Operate Water Utility FY00

Cost Risk 2 Schedule Risk 1

Line Item	Description	Quantity	Units	BOE Type	Labor Hours/Unit	Labor Hours Total	Labor Cost Total	Materials/ Sub Cost	Contingency & Escalation	Total Prime Cost	Burden Cost	Total Cost
100	Water Plant Operations	1.00	each	HC	1.308	1.308	28.650	14.952	0	43.603	14.663	58.265
Total for Activity 1EBB414000:						1.308	28.650	14.952	0	43.603	14.663	58.265

Line Item 100 - Water Plant Operations

BOE

Historical Data Source - Initial estimate is taken from FY98 Basis Of Estimate Tool(BEST) as modified by the RFCSS proposal.
 Item Desc -This activity provides for the operation of the Sites Water Treatment Plant and ancillary water distribution system up to the external feed into the facilities. The Water plant will be manned only during treatment operations, 7 days per week.
 Breakdown of Historical Data:
 Item - Water plant operation.
 Units - 1 Lot
 Unit Cost - 7,227 hrs. - \$76,421 Materials/Sub Cost - \$3,600 Lease
 Unit Cost Adjustment factor - FY 99 budget is used as the base year. FY00 thru 05 are adjusted based on the D&D schedule.
 Revised Unit Cost - same as FY00

WBS No: 1EBB040104
 Activity ID: 1EBB414000

Rockv Flats Closure Project
Baseline Cost and Basis of Estimate

Project Baseline Devl
 WBS Filter 1EBB
 Activity Filter *

Starts In FY *

Basis for adjustment -none
 This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

Resources	Cost Element	Skill	Department	Curve	Quantity	Units
750	STRAIGHT TIME BASE	R070 WASTE TREATMENT OPERATOR A	KE10H Indust/Site Svcs Steelworkers	Linear	1,182.66	Hours
Factors 6215 hours 0.36164 May 2000 Earned Value Factor						
					0.52618	ISYS 0613001 0.526183 - Target
751	OVERTIME BASE & PRE.	R070 WASTE TREATMENT OPERATOR A	KE10H Indust/Site Svcs Steelworkers	Linear	125.02	Hours
Factors 657 hrs. 0.36164 May 2000 Earned Value Factor						
					0.52618	ISYS 0613001 0.526183 - Target
754	OTHER PREMIUMS	0000 NONE	C222S Water System Operations	Linear	1,395.86	Dollars
Factors 7335.41 d 0.36164 May 2000 Earned Value Factor						
					0.52618	ISYS 0613001 0.526183 - Target
A5C	SUPPLIES	0000 NONE	C220S Utility Operations	Linear	11,863.18	Dollars
Factors 61421 dollars 1.015 -- FY00 Escalation -- 0.36164 May 2000 Earned Value Factor						
					0.52618	ISYS 0613001 0.526183 - Target
A5L	RENTALS	0000 NONE	C106S Business Management Office	Linear	695.32	Dollars
Factors 3600 dollars 1.015 -- FY00 Escalation -- 0.36164 May 2000 Earned Value Factor						
					0.52618	ISYS 0613001 0.526183 - Target
A5M	TRAVEL/TRAIN/RELOCAT	0000 NONE	C220S Utility Operations	Linear	570.87	Dollars
Factors 3000 d 0.36164 May 2000 Earned Value Factor						
					0.52618	ISYS 0613001 0.526183 - Target
A5T	TAXES	0000 NONE	C220S Utility Operations	Linear	427.04	Dollars
Factors 2211 dollars 1.015 -- FY00 Escalation -- 0.36164 May 2000 Earned Value Factor						
					0.52618	ISYS 0613001 0.526183 - Target

Activity ID: 1EBB414010 Description: Operate Water Utility FY01

Cost Risk 2 Schedule Risk 1

Line Item	Description	Quantity	Units	BOE Type	Labor Hours/Unit	Labor Hours Total	Labor Cost Total	Materials/ Sub Cost	Contingency & Escalation	Total Prime Cost	Burden Cost	Total Cost
100	Water Plant Operations	1.00	each	HC	3.541	3.541	77.382	80.553	0	157.935	40.023	197.958
SYS	Contingency And Escalation	1.00	lea	EE	0	0	0	0	10.495	10.495	0	10.495
Total for Activity 1EBB414010:						3.541	77.382	80.553	10.495	168.430	40.023	208.453

Line Item 100 - Water Plant Operations

BOE
 Historical Data Source - Initial estimate is taken from FY98 Basis Of Estimate Tool(BEST) as modified by the RFCSS proposal.
 Item Desc -This activity provides for the operation and surveillance of the Sites Water treatment plant and ancillary water distribution system up to the external feed into the facilities. Two SOEs that are dual qualified in water plant and steam plant operations will man and operate the water plant.
 Breakdown of Historical Data:
 Item - Water plant operation.
 Units - 1 Lot
 Unit Cost -3,982 hrs. - \$76,421 Materials/Sub Cost - \$3,600 Lease
 Unit Cost Adjustment factor - FY 99 budget is used as the base year. FY00 thru 05 are adjusted based on the D&D schedule.
 Revised Unit Cost - same as FY00
 Basis for adjustment -none
 This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

Resources	Cost Element	Skill	Department	Curve	Quantity	Units
750	STRAIGHT TIME BASE	R070 WASTE TREATMENT OPERATOR A	KE10H Indust/Site Svcs Steelworkers	Linear	3,219.42	Hours
Factors 3620 hours						
					0.88934	ISYS 0614001 0.88934200 - System
751	OVERTIME BASE & PRE.	R070 WASTE TREATMENT OPERATOR A	KE10H Indust/Site Svcs Steelworkers	Linear	321.94	Hours
Factors 362 hrs.						
					0.88934	ISYS 0614001 0.88934200 - System

WBS No: 1EBB040104
 Activity ID: 1EBB414010

Rockv Flats Closure Project
Baseline Cost and Basis of Estimate

Project: Baseline Devl
 WBS Filter: 1EBB
 Activity Filter: *

Starts In FY *

754	OTHER PREMIUMS	0000	NONE	C222S	Water System Operations	Linear	6,523.69	Dollars
<i>Factors</i> 7335.41 d								
0.88934 [SYS 061400] .88934200 - System								
A5C	SUPPLIES	0000	NONE	C220S	Utility Operations	Linear	55,443.64	Dollars
<i>Factors</i> 61421 dollars 1.015 -- FY00 Escalation --								
0.88934 [SYS 061400] .88934200 - System								
A5L	RENTALS	0000	NONE	C106S	Business Management Office	Linear	3,249.66	Dollars
<i>Factors</i> 3600 dollars 1.015 -- FY00 Escalation --								
0.88934 [SYS 061400] .88934200 - System								
A5M	TRAVEL/TRAIN/RELOCAT	0000	NONE	C220S	Utility Operations	Linear	13,340.13	Dollars
<i>Factors</i> 15000 d								
0.88934 [SYS 061400] .88934200 - System								
A5T	TAXES	0000	NONE	C220S	Utility Operations	Linear	1,995.83	Dollars
<i>Factors</i> 2211 dollars 1.015 -- FY00 Escalation --								
0.88934 [SYS 061400] .88934200 - System								

Line Item SYS - Contingency And Escalation

BOE

Resources

Cost Element	Skill	Department	Curve	Quantity	Units
CON CONTINGENCY	0000 NONE	ZDEPT No Department	Linear	6,332.26	Dollars
<i>Factors</i> 6332.26 Dollars					
ESC ESCALATION	0000 NONE	ZDEPT No Department	Linear	4,162.61	Dollars
<i>Factors</i> 4162.61 Dollars					

Activity ID: 1EBB414020

Description: Operate Water Utility FY02

Cost Risk 2 Schedule Risk 1

Line Item	Description	Quantity	Units	BOE Type	Labor Hours/Unit	Labor Hours Total	Labor Cost Total	Materials/ Sub Cost	Contingency & Escalation	Total Prime Cost	Burden Cost	Total Cost
100	Water Plant Operations	1.00	each	HC	3,541	3,541	77,382	80,553	0	157,935	29,619	187,554
SYS	Contingency And Escalation	1.00	ea	EE	0	0	0	0	28,032	28,032	0	28,032
Total for Activity 1EBB414020:						3,541	77,382	80,553	28,032	185,967	29,619	215,586

Line Item 100 - Water Plant Operations

BOE

Historical Data Source - Initial estimate is taken from FY98 Basis Of Estimate Tool(BEST) as modified by the RFCSS proposal.
 Item Desc -This activity provides for the operation and surveillance of the Sites Water treatment plant and ancillary water distribution system up to the external feed into the facilities.
 Breakdown of Historical Data:
 Item - Water plant operation.
 Units - 1 Lot
 Unit Cost - 4,108 hrs. - \$76,421 Materials/Sub Cost - \$3,600 Lease
 Unit Cost Adjustment factor - FY 99 budget is used as the base year. FY00 thru 05 are adjusted based on the D&D schedule.
 Revised Unit Cost - same as FY00
 Basis for adjustment -none

 This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

Resources

Cost Element	Skill	Department	Curve	Quantity	Units
750 STRAIGHT TIME BASE	R070 WASTE TREATMENT OPERATOR A	KE10H Indust/Site Srvs Steelworkers	Linear	3,219.42	Hours
<i>Factors</i> 3620 hours					
0.88934 [SYS 061400] .88934200 - System					
751 OVERTIME BASE & PRE.	R070 WASTE TREATMENT OPERATOR A	KE10H Indust/Site Srvs Steelworkers	Linear	321.94	Hours
<i>Factors</i> 362 hrs.					
0.88934 [SYS 061400] .88934200 - System					
754 OTHER PREMIUMS	0000 NONE	C222S Water System Operations	Linear	6,523.69	Dollars
<i>Factors</i> 7335.41 d					
0.88934 [SYS 061400] .88934200 - System					

WBS No: 1EBB040104
 Activity ID: 1EBB414020

Rockv Flats Closure Project
Baseline Cost and Basis of Estimate

Project Baseline Devl
 WBS Filter 1EBB
 Activity Filter *

Starts In FY *

A5C	SUPPLIES	0000	NONE	C220S	Utility Operations	Linear	55,443.64	Dollars
<i>Factors</i> 61421 dollars		1.015 -- FY00 Escalation --				0.88934 [SYS 061400] .88934200 - System		
A5L	RENTALS	0000	NONE	C106S	Business Management Office	Linear	3,249.66	Dollars
<i>Factors</i> 3600 dollars		1.015 -- FY00 Escalation --				0.88934 [SYS 061400] .88934200 - System		
A5M	TRAVEL/TRAIN/RELOCAT	0000	NONE	C220S	Utility Operations	Linear	13,340.13	Dollars
<i>Factors</i> 15000 d						0.88934 [SYS 061400] .88934200 - System		
A5T	TAXES	0000	NONE	C220S	Utility Operations	Linear	1,995.83	Dollars
<i>Factors</i> 2211 dollars		1.015 -- FY00 Escalation --				0.88934 [SYS 061400] .88934200 - System		

Line Item SYS - Contingency And Escalation

BOE

Resources

<i>Cost Element</i>		<i>Skill</i>		<i>Department</i>		<i>Curve</i>	<i>Quantity</i>	<i>Units</i>
CON	CONTINGENCY	0000	NONE	ZDEPT	No Department	Linear	19,267.72	Dollars
<i>Factors</i> 19267.7 Dollars								
ESC	ESCALATION	0000	NONE	ZDEPT	No Department	Linear	8,764.65	Dollars
<i>Factors</i> 8764.65 Dollars								

Activity ID: 1EBB414030 Description: Operate Water Utility FY03

Cost Risk 2 Schedule Risk 1

Line Item	Description	Quantity	Units	BOE Type	Labor Hours/Unit	Labor Hours Total	Labor Cost Total	Materials/ Sub Cost	Contingency & Escalation	Total Prime Cost	Burden Cost	Total Cost
100	Water Plant Operations	1.00	each	HC	3,541	3,541	77,382	80,553	0	157,935	29,031	186,966
SYS	Contingency And Escalation	1.00	lea	EE	0	0	0	0	51,836	51,836	0	51,836
Total for Activity 1EBB414030:						3,541	77,382	80,553	51,836	209,771	29,031	238,802

Line Item 100 - Water Plant Operations

BOE

Historical Data Source - Initial estimate is taken from FY98 Basis Of Estimate Tool(BEST) as modified by the RFCSS proposal.
 Item Desc -This activity provides for the operation and surveillance of the Sites Water treatment plant and ancillary water distribution system up to the external feed into the facilities.
 Breakdown of Historical Data:
 Item - Water plant operation.
 Units - 1 Lot
 Unit Cost - 4,108 hrs. - \$76,421 Materials/Sub Cost - \$3,600 Lease
 Unit Cost Adjustment factor - FY 99 budget is used as the base year. FY00 thru 05 are adjusted based on the D&D schedule.
 Revised Unit Cost - same as FY00
 Basis for adjustment -none

 This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

Resources

<i>Cost Element</i>		<i>Skill</i>		<i>Department</i>		<i>Curve</i>	<i>Quantity</i>	<i>Units</i>
750	STRAIGHT TIME BASE	R070	WASTE TREATMENT OPERATOR A	KE10H	Indust/Site Srvs Steelworkers	Linear	3,219.42	Hours
<i>Factors</i> 3620 hours						0.88934 [SYS 061400] .88934200 - System		
751	OVERTIME BASE & PRE.	R070	WASTE TREATMENT OPERATOR A	KE10H	Indust/Site Srvs Steelworkers	Linear	321.94	Hours
<i>Factors</i> 362 hrs.						0.88934 [SYS 061400] .88934200 - System		
754	OTHER PREMIUMS	0000	NONE	C222S	Water System Operations	Linear	6,523.69	Dollars
<i>Factors</i> 7335.41 d						0.88934 [SYS 061400] .88934200 - System		
A5C	SUPPLIES	0000	NONE	C220S	Utility Operations	Linear	55,443.64	Dollars
<i>Factors</i> 61421 dollars		1.015 -- FY00 Escalation --				0.88934 [SYS 061400] .88934200 - System		

WBS No: 1EBB040104
 Activity ID: 1EBB414030

Rockv Flats Closure Project
Baseline Cost and Basis of Estimate

Project Baseline Devl
 WBS Filter 1EBB
 Activity Filter *

Starts In FY *

A5L	RENTALS	0000	NONE	C106S	Business Management Office	Linear	3,249.66	Dollars
<i>Factors</i>		3600	dollars	1.015	-- FY00 Escalation --			
							0.88934	[SYS 061400] .88934200 - System
A5M	TRAVEL/TRAIN/RELOCAT	0000	NONE	C220S	Utility Operations	Linear	13,340.13	Dollars
<i>Factors</i>		15000	d					
							0.88934	[SYS 061400] .88934200 - System
A5T	TAXES	0000	NONE	C220S	Utility Operations	Linear	1,995.83	Dollars
<i>Factors</i>		2211	dollars	1.015	-- FY00 Escalation --			
							0.88934	[SYS 061400] .88934200 - System

Line Item SYS - Contingency And Escalation

BOE

Resources	<i>Cost Element</i>	<i>Skill</i>	<i>Department</i>	<i>Curve</i>	<i>Quantity</i>	<i>Units</i>		
	CON	CONTINGENCY	0000 NONE	ZDEPT	No Department	Linear	37,498.22	Dollars
<i>Factors</i>		37498.2	Dollars					
	ESC	ESCALATION	0000 NONE	ZDEPT	No Department	Linear	14,337.55	Dollars
<i>Factors</i>		14337.6	Dollars					

Activity ID: 1EBB414040

Description: Operate Water Utility FY04

Cost Risk 2 Schedule Risk 1

Line Item	Description	Quantity	Units	BOE Type	Labor Hours/Unit	Labor Hours Total	Labor Cost Total	Materials/ Sub Cost	Contingency & Escalation	Total Prime Cost	Burden Cost	Total Cost
100	Water Plant Operations	1.00	each	HC	3.541	3.541	77.382	80,553	0	157,935	23,661	181,596
200	Transition Plan	1.00	each	EE	0	0	0	4,075	0	4,075	0	4,075
SYS	Contingency And Escalation	1.00	ea	EE	0	0	0	0	26,512	26,512	0	26,512
Total for Activity 1EBB414040:						3.541	77.382	84,628	26,512	188,522	23,661	212,183

Line Item 100 - Water Plant Operations

BOE

Historical Data Source - Initial estimate is taken from FY98 Basis Of Estimate Tool(BEST) as modified by the RFCSS proposal.
 Item Desc -This activity provides for the operation and surveillance of the Sites Water treatment plant and ancillary water distribution system up to the external feed into the facilities.
 Breakdown of Historical Data:
 Item - Water plant operation.
 Units - 1 Lot
 Unit Cost - 4,108 hrs. - \$76,421 Materials/Sub Cost - \$3,600 Lease
 Unit Cost Adjustment factor - FY 99 budget is used as the base year. FY00 thru 05 are adjusted based on the D&D schedule.
 Revised Unit Cost - same as FY00
 Basis for adjustment -none
 This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

Resources	<i>Cost Element</i>	<i>Skill</i>	<i>Department</i>	<i>Curve</i>	<i>Quantity</i>	<i>Units</i>		
	750	STRAIGHT TIME BASE	R070 WASTE TREATMENT OPERATOR A	KE10H	Indust/Site Srvs Steelworkers	Linear	3,219.42	Hours
<i>Factors</i>		3620	hours					
							0.88934	[SYS 061400] .88934200 - System
	751	OVERTIME BASE & PRE.	R070 WASTE TREATMENT OPERATOR A	KE10H	Indust/Site Srvs Steelworkers	Linear	321.94	Hours
<i>Factors</i>		362	hrs.					
							0.88934	[SYS 061400] .88934200 - System
	754	OTHER PREMIUMS	0000 NONE	C222S	Water System Operations	Linear	6,523.69	Dollars
<i>Factors</i>		7335.41	d					
							0.88934	[SYS 061400] .88934200 - System
	A5C	SUPPLIES	0000 NONE	C220S	Utility Operations	Linear	55,443.64	Dollars
<i>Factors</i>		61421	dollars	1.015	-- FY00 Escalation --			
							0.88934	[SYS 061400] .88934200 - System
	A5L	RENTALS	0000 NONE	C106S	Business Management Office	Linear	3,249.66	Dollars
<i>Factors</i>		3600	dollars	1.015	-- FY00 Escalation --			
							0.88934	[SYS 061400] .88934200 - System

WBS No: 1EBB040104
 Activity ID: 1EBB414040

Rockv Flats Closure Project
Baseline Cost and Basis of Estimate

Project Baseline Devl
 WBS Filter 1EBB
 Activity Filter * Starts In FY *

A5M	TRAVEL/TRAIN/RELOCAT	0000	NONE	C220S	Utility Operations	Linear	13,340.13	Dollars
<i>Factors</i> 15000 d								
							0.88934	[SYS 061400] .88934200 - Svsstem
A5T	TAXES	0000	NONE	C220S	Utility Operations	Linear	1,995.83	Dollars
<i>Factors</i> 2211 dollars 1.015 -- FY00 Escalation --								
							0.88934	[SYS 061400] .88934200 - Svsstem

Line Item 200 - Transition Plan

BOE
 Develop a formal system Transition Plan. This plan will address cold shutdown requirements, hazards assessment and mitigation, equipment utility isolations, records disposition, equipment fluid draining, securing the process, etc. Estimate was developed using the K-H Facility Transition Cost Estimate Worksheet.
 This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

Resources

Cost Element	Skill	Department	Curve	Quantity	Units	
A5H SUBCONTRACTED SRVS	0000 NONE	C220S Utility Operations	Linear	4,075.21	Dollars	
<i>Factors</i> 4480 dollars 1.02283 -- FY00 Escalation --						
0.88934 [SYS 061400] .88934200 - Svsstem						

Line Item SYS - Contingency And Escalation

BOE

Resources

Cost Element	Skill	Department	Curve	Quantity	Units
CON CONTINGENCY	0000 NONE	ZDEPT No Department	Linear	8,684.05	Dollars
<i>Factors</i> 8684.05 Dollars					
ESC ESCALATION	0000 NONE	ZDEPT No Department	Linear	17,827.48	Dollars
<i>Factors</i> 17827.5 Dollars					

Activity ID: 1EBB414100 Description: Water Plant/Dist Sys Corr Mtce FY00

Cost Risk 2 Schedule Risk 1

Line Item	Description	Quantity	Units	BOE Type	Labor Hours/Unit	Labor Hours Total	Labor Cost Total	Materials/ Sub Cost	Contingency & Escalation	Total Prime Cost	Burden Cost	Total Cost
100	Corrective Maintenance	1.00	each	HC	76	76	1,647	900	0	2,547	804	3,350
Total for Activity 1EBB414100:						76	1,647	900	0	2,547	804	3,350

Line Item 100 - Corrective Maintenance

BOE
 Historical Data Source - Initial estimate is taken from FY98 Basis Of Estimate Tool(BEST) as modified by the RFCSS proposal.
 Item Desc -Correctve maintenance.
 Breakdown of Historical Data:
 Item - This activity addresses basic corrective maintenance needs at a level necessary and sufficient to maintain safe and compliant operation.
 Unit Cost - 401 hrs. \$4,497 Materials / Sub Cost
 Unit Cost Adjustment factor - FY 99 budget is used as the base year. FY00 thru 05 are adjusted bsd on the D&D schedule.
 Revised Unit Cost - same as FY00
 Basis for adjustment -none
 The Engineering, Planning, Health & Safety and Environmental support functions for maintenance efforts are contained in WAD 025.
 This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

Resources

Cost Element	Skill	Department	Curve	Quantity	Units	
750 STRAIGHT TIME BASE	C010 CARPENTERS	KE10H Indust/Site Srvs Steelworkers	Linear	15.77	Hours	
<i>Factors</i> 82.88 h 0.36164 May 2000 Earned Value Factor						
0.52618 [SYS 061300] 0.526183 - Target						
750 STRAIGHT TIME BASE	C020 ELECTRICIANS	KE10H Indust/Site Srvs Steelworkers	Linear	9.51	Hours	
<i>Factors</i> 49.95 h 0.36164 May 2000 Earned Value Factor						
0.52618 [SYS 061300] 0.526183 - Target						
750 STRAIGHT TIME BASE	C020 ELECTRICIANS	KE10H Indust/Site Srvs Steelworkers	Linear	18.88	Hours	
<i>Factors</i> 99.2 hrs. 0.36164 May 2000 Earned Value Factor						
0.52618 [SYS 061300] 0.526183 - Target						
750 STRAIGHT TIME BASE	C070 PAINTERS	KE10H Indust/Site Srvs Steelworkers	Linear	9.51	Hours	
<i>Factors</i> 49.95 hrs 0.36164 May 2000 Earned Value Factor						
0.52618 [SYS 061300] 0.526183 - Target						

WBS No: 1EBB040104
 Activity ID: 1EBB414100

Rockv Flats Closure Project
Baseline Cost and Basis of Estimate

Project: Baseline Devl
 WBS Filter: 1EBB
 Activity Filter: * Starts In FY *

750	STRAIGHT TIME BASE	C080	PLUMBERS AND PIPEFITTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	9.51	Hours	
<i>Factors</i> 49.95 hrs 0.36164 May 2000 Earned Value Factor									
							0.52618	[SYS 061300]	0.526183 - Target
750	STRAIGHT TIME BASE	C090	STRUCTURAL AND METAL WORKE	KE10H	Indust/Site Srvs Steelworkers	Linear	9.51	Hours	
<i>Factors</i> 49.95 h 0.36164 May 2000 Earned Value Factor									
							0.52618	[SYS 061300]	0.526183 - Target
751	OVERTIME BASE & PRE.	C010	CARPENTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	0.77	Hours	
<i>Factors</i> 4.07 h 0.36164 May 2000 Earned Value Factor									
							0.52618	[SYS 061300]	0.526183 - Target
751	OVERTIME BASE & PRE.	C020	ELECTRICIANS	KE10H	Indust/Site Srvs Steelworkers	Linear	0.99	Hours	
<i>Factors</i> 5.18 h 0.36164 May 2000 Earned Value Factor									
							0.52618	[SYS 061300]	0.526183 - Target
751	OVERTIME BASE & PRE.	C020	ELECTRICIANS	KE10H	Indust/Site Srvs Steelworkers	Linear	0.49	Hours	
<i>Factors</i> 2.59 h 0.36164 May 2000 Earned Value Factor									
							0.52618	[SYS 061300]	0.526183 - Target
751	OVERTIME BASE & PRE.	C070	PAINTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	0.49	Hours	
<i>Factors</i> 2.59 h 0.36164 May 2000 Earned Value Factor									
							0.52618	[SYS 061300]	0.526183 - Target
751	OVERTIME BASE & PRE.	C080	PLUMBERS AND PIPEFITTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	0.49	Hours	
<i>Factors</i> 2.59 h 0.36164 May 2000 Earned Value Factor									
							0.52618	[SYS 061300]	0.526183 - Target
751	OVERTIME BASE & PRE.	C090	STRUCTURAL AND METAL WORKE	KE10H	Indust/Site Srvs Steelworkers	Linear	0.49	Hours	
<i>Factors</i> 2.59 h 0.36164 May 2000 Earned Value Factor									
							0.52618	[SYS 061300]	0.526183 - Target
A5C	SUPPLIES	0000	NONE	C220S	Utility Operations	Linear	868.53	Dollars	
<i>Factors</i> 4496.76 d 1.015 -- FY00 Escalation -- 0.36164 May 2000 Earned Value Factor									
							0.52618	[SYS 061300]	0.526183 - Target
A5T	TAXES	0000	NONE	C220S	Utility Operations	Linear	31.29	Dollars	
<i>Factors</i> 162 dollars 1.015 -- FY00 Escalation -- 0.36164 May 2000 Earned Value Factor									
							0.52618	[SYS 061300]	0.526183 - Target

Activity ID: 1EBB414110 Description: Water Plant/Dist Sys Corr Mtce FY01

Cost Risk 2 Schedule Risk 1

Line Item	Description	Quantity	Units	BOE Type	Labor Hours/Unit	Labor Hours Total	Labor Cost Total	Materials/ Sub Cost	Contingency & Escalation	Total Prime Cost	Burden Cost	Total Cost
100	Corrective Maintenance	1.00	each	HC	357	357	7,697	4,205	0	11,902	3,672	15,574
SYS	Contingency And Escalation	1.00	ea	EE	0	0	0	0	826	826	0	826
Total for Activity 1EBB414110:						357	7,697	4,205	826	12,728	3,672	16,400

Line Item 100 - Corrective Maintenance

BOE
 Historical Data Source - Initial estimate is taken from FY98 Basis Of Estimate Tool(BEST) as modified by the RFCSS proposal.
 Item Desc -Corrective maintenance.
 Breakdown of Historical Data:
 Item - This activity addresses basic corrective maintenance needs at a level necessary and sufficient to maintain safe and compliant operation.
 Unit Cost - 401 hrs. \$4,497 Materials / Sub Cost
 Unit Cost Adjustment factor - FY 99 budget is used as the base year. FY00 thru 05 are adjusted bsd on the D&D schedule.
 Revised Unit Cost - same as FY00
 Basis for adjustment -none
 The Engineering, Planning, Health & Safety and Environmental support functions for maintenance efforts are contained in WAD 025.
 This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

Resources	Cost Element	Skill	Department	Curve	Quantity	Units			
750	STRAIGHT TIME BASE	C010	CARPENTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	73.71	Hours	
<i>Factors</i> 82.88 h									
							0.88934	[SYS 061400]	.88934200 - System

WBS No: 1EBB040104
 Activity ID: 1EBB414110

Rockv Flats Closure Project
Baseline Cost and Basis of Estimate

Project Baseline Devl
 WBS Filter 1EBB
 Activity Filter *

Starts In FY *

750	STRAIGHT TIME BASE	C020	ELECTRICIANS	KE10H	Indust/Site Srvs Steelworkers	Linear	44.42	Hours
<i>Factors</i> 49.95 h								
						0.88934	[SYS 061400]	88934200 - Svsstem
750	STRAIGHT TIME BASE	C020	ELECTRICIANS	KE10H	Indust/Site Srvs Steelworkers	Linear	88.22	Hours
<i>Factors</i> 99.2 hrs.								
						0.88934	[SYS 061400]	88934200 - Svsstem
750	STRAIGHT TIME BASE	C070	PAINTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	44.42	Hours
<i>Factors</i> 49.95 hrs								
						0.88934	[SYS 061400]	88934200 - Svsstem
750	STRAIGHT TIME BASE	C080	PLUMBERS AND PIPEFITTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	44.42	Hours
<i>Factors</i> 49.95 hrs								
						0.88934	[SYS 061400]	88934200 - Svsstem
750	STRAIGHT TIME BASE	C090	STRUCTURAL AND METAL WORKE	KE10H	Indust/Site Srvs Steelworkers	Linear	44.42	Hours
<i>Factors</i> 49.95 h								
						0.88934	[SYS 061400]	88934200 - Svsstem
751	OVERTIME BASE & PRE.	C010	CARPENTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	3.62	Hours
<i>Factors</i> 4.07 h								
						0.88934	[SYS 061400]	88934200 - Svsstem
751	OVERTIME BASE & PRE.	C020	ELECTRICIANS	KE10H	Indust/Site Srvs Steelworkers	Linear	4.61	Hours
<i>Factors</i> 5.18 h								
						0.88934	[SYS 061400]	88934200 - Svsstem
751	OVERTIME BASE & PRE.	C020	ELECTRICIANS	KE10H	Indust/Site Srvs Steelworkers	Linear	2.30	Hours
<i>Factors</i> 2.59 h								
						0.88934	[SYS 061400]	88934200 - Svsstem
751	OVERTIME BASE & PRE.	C070	PAINTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	2.30	Hours
<i>Factors</i> 2.59 h								
						0.88934	[SYS 061400]	88934200 - System
751	OVERTIME BASE & PRE.	C080	PLUMBERS AND PIPEFITTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	2.30	Hours
<i>Factors</i> 2.59 h								
						0.88934	[SYS 061400]	88934200 - System
751	OVERTIME BASE & PRE.	C090	STRUCTURAL AND METAL WORKE	KE10H	Indust/Site Srvs Steelworkers	Linear	2.30	Hours
<i>Factors</i> 2.59 h								
						0.88934	[SYS 061400]	88934200 - Svsstem
A5C	SUPPLIES	0000	NONE	C220S	Utility Operations	Linear	4,059.14	Dollars
<i>Factors</i> 4496.76 d 1.015 -- FY00 Escalation --								
						0.88934	[SYS 061400]	88934200 - Svsstem
A5T	TAXES	0000	NONE	C220S	Utility Operations	Linear	146.23	Dollars
<i>Factors</i> 162 dollars 1.015 -- FY00 Escalation --								
						0.88934	[SYS 061400]	88934200 - System

Line Item SYS - Contingency And Escalation

BOE

Resources

Cost Element	Skill	Department	Curve	Quantity	Units
CON CONTINGENCY	0000 NONE	ZDEPT No Department	Linear	498.18	Dollars
<i>Factors</i> 498,179 Dollars					
ESC ESCALATION	0000 NONE	ZDEPT No Department	Linear	327.49	Dollars
<i>Factors</i> 327,486 Dollars					

Activity ID: 1EBB414120

Description: Water Plant/Dist Svs Corr Mtce FY02

Cost Risk 2 Schedule Risk 1

Line Item	Description	Quantity	Units	BOE Type	Labor Hours/Unit	Labor Hours Total	Labor Cost Total	Materials/ Sub Cost	Contingency & Escalation	Total Prime Cost	Burden Cost	Total Cost
100	Corrective Maintenance	1.00	each	HC	357	357	7,697	4,205	0	11,902	2,717	14,620
SYS	Contingency And Escalation	1.00	ea	EE	0	0	0	0	2,185	2,185	0	2,185
Total for Activity 1EBB414120:						357	7,697	4,205	2,185	14,088	2,717	16,805

WBS No: 1EBB040104
 Activity ID: 1EBB414120

Rockv Flats Closure Project
Baseline Cost and Basis of Estimate

Project Baseline Devl
 WBS Filter 1EBB
 Activity Filter *

Starts In FY *

Line Item 100 - Corrective Maintenance

BOE
 Historical Data Source - Initial estimate is taken from FY98 Basis Of Estimate Tool(BEST) as modified by the RFCSS proposal.
 Item Desc -Corrective maintenance.
 Breakdown of Historical Data:
 Item - This activity addresses basic corrective maintenance needs at a level necessary and sufficient to maintain safe and compliant operation.
 Unit Cost - 401 hrs. \$4,497 Materials / Sub Cost
 Unit Cost Adjustment factor - FY 99 budget is used as the base year. FY00 thru 05 are adjusted based on the D&D schedule.
 Revised Unit Cost - same as FY00
 Basis for adjustment -none
 The Engineering, Planning, Health & Safety and Environmental support functions for maintenance efforts are contained in WAD 025.
 This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

Resources		Cost Element	Skill	Department	Curve	Quantity	Units
750	STRAIGHT TIME BASE	C010	CARPENTERS	KE10H Indust/Site Svcs Steelworkers	Linear	73.71	Hours
Factors		82.88 h		0.88934 [SYS 061400] .88934200 - Svsstem			
750	STRAIGHT TIME BASE	C020	ELECTRICIANS	KE10H Indust/Site Svcs Steelworkers	Linear	88.22	Hours
Factors		99.2 hrs.		0.88934 [SYS 061400] .88934200 - Svsstem			
750	STRAIGHT TIME BASE	C020	ELECTRICIANS	KE10H Indust/Site Svcs Steelworkers	Linear	44.42	Hours
Factors		49.95 h		0.88934 [SYS 061400] .88934200 - Svsstem			
750	STRAIGHT TIME BASE	C070	PAINTERS	KE10H Indust/Site Svcs Steelworkers	Linear	44.42	Hours
Factors		49.95 hrs		0.88934 [SYS 061400] .88934200 - Svsstem			
750	STRAIGHT TIME BASE	C080	PLUMBERS AND PIPEFITTERS	KE10H Indust/Site Svcs Steelworkers	Linear	44.42	Hours
Factors		49.95 hrs		0.88934 [SYS 061400] .88934200 - Svsstem			
750	STRAIGHT TIME BASE	C090	STRUCTURAL AND METAL WORKE	KE10H Indust/Site Svcs Steelworkers	Linear	44.42	Hours
Factors		49.95 h		0.88934 [SYS 061400] .88934200 - Svsstem			
751	OVERTIME BASE & PRE.	C010	CARPENTERS	KE10H Indust/Site Svcs Steelworkers	Linear	3.62	Hours
Factors		4.07 h		0.88934 [SYS 061400] .88934200 - Svsstem			
751	OVERTIME BASE & PRE.	C020	ELECTRICIANS	KE10H Indust/Site Svcs Steelworkers	Linear	2.30	Hours
Factors		2.59 h		0.88934 [SYS 061400] .88934200 - Svsstem			
751	OVERTIME BASE & PRE.	C020	ELECTRICIANS	KE10H Indust/Site Svcs Steelworkers	Linear	4.61	Hours
Factors		5.18 h		0.88934 [SYS 061400] .88934200 - Svsstem			
751	OVERTIME BASE & PRE.	C070	PAINTERS	KE10H Indust/Site Svcs Steelworkers	Linear	2.30	Hours
Factors		2.59 h		0.88934 [SYS 061400] .88934200 - Svsstem			
751	OVERTIME BASE & PRE.	C080	PLUMBERS AND PIPEFITTERS	KE10H Indust/Site Svcs Steelworkers	Linear	2.30	Hours
Factors		2.59 h		0.88934 [SYS 061400] .88934200 - Svsstem			
751	OVERTIME BASE & PRE.	C090	STRUCTURAL AND METAL WORKE	KE10H Indust/Site Svcs Steelworkers	Linear	2.30	Hours
Factors		2.59 h		0.88934 [SYS 061400] .88934200 - Svsstem			
A5C	SUPPLIES	0000	NONE	C220S Utility Operations	Linear	4.059.14	Dollars
Factors		4496.76 d		1.015 -- FY00 Escalation --		0.88934 [SYS 061400] .88934200 - Svsstem	

WBS No: 1EBB040104
 Activity ID: 1EBB414120

Rockv Flats Closure Project
Baseline Cost and Basis of Estimate

Project Baseline Devl
 WBS Filter 1EBB
 Activity Filter *

Starts In FY *

AST	TAXES	0000	NONE	C220S	Utility Operations	Linear	146.23	Dollars
<i>Factors</i>		162	dollars	1.015	-- FY00 Escalation --			

0.88934 [SYS 061400] .88934200 - System

Line Item SYS - Contingency And Escalation

BOE

Resources

Cost Element	Skill	Department	Curve	Quantity	Units
CON	CONTINGENCY	0000 NONE	ZDEPT No Department	Linear	1,501.89 Dollars
<i>Factors</i>		1501.89 Dollars			
ESC	ESCALATION	0000 NONE	ZDEPT No Department	Linear	683.19 Dollars
<i>Factors</i>		683.192 Dollars			

Activity ID: 1EBB414130

Description: Water Plant/Dist Sys Corr Mtce FY03

Cost Risk 2 Schedule Risk 1

Line Item	Description	Quantity	Units	BOE Type	Labor Hours/Unit	Labor Hours Total	Labor Cost Total	Materials/ Sub Cost	Contingency & Escalation	Total Prime Cost	Burden Cost	Total Cost
100	Corrective Maintenance	1.00	each	HC	357	357	7,697	4,205	0	11,902	2,663	14,566
SYS	Contingency And Escalation	1.00	ea	EE	0	0	0	0	4,038	4,038	0	4,038
Total for Activity 1EBB414130:						357	7,697	4,205	4,038	15,941	2,663	18,604

Line Item 100 - Corrective Maintenance

BOE

Historical Data Source - Initial estimate is taken from FY98 Basis Of Estimate Tool(BEST) as modified by the RFCSS proposal.
 Item Desc -Correctve maintenance.
 Breakdown of Historical Data:
 Item - This activity addresses basic corrective maintenance needs at a level necessary and sufficient to maintain safe and compliant operation.
 Unit Cost - 401 hrs. \$4,497 Materials / Sub Cost
 Unit Cost Adjustment factor - FY 99 budget is used as the base year. FY00 thru 05 are adjusted bsd on the D&D schedule.
 Revised Unit Cost - same as FY00
 Basis for adjustment -none
 The Engineering, Planning, Health & Safety and Environmental support functions for maintenance efforts are contained in WAD 025.
 This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

Resources

Cost Element	Skill	Department	Curve	Quantity	Units
750	STRAIGHT TIME BASE	C010 CARPENTERS	KE10H Indust/Site Srvs Steelworkers	Linear	73.71 Hours
<i>Factors</i>		82.88	h		
0.88934 [SYS 061400] .88934200 - System					
750	STRAIGHT TIME BASE	C020 ELECTRICIANS	KE10H Indust/Site Srvs Steelworkers	Linear	88.22 Hours
<i>Factors</i>		99.2	hrs.		
0.88934 [SYS 061400] .88934200 - System					
750	STRAIGHT TIME BASE	C020 ELECTRICIANS	KE10H Indust/Site Srvs Steelworkers	Linear	44.42 Hours
<i>Factors</i>		49.95	h		
0.88934 [SYS 061400] .88934200 - System					
750	STRAIGHT TIME BASE	C070 PAINTERS	KE10H Indust/Site Srvs Steelworkers	Linear	44.42 Hours
<i>Factors</i>		49.95	hrs		
0.88934 [SYS 061400] .88934200 - System					
750	STRAIGHT TIME BASE	C080 PLUMBERS AND PIPEFITTERS	KE10H Indust/Site Srvs Steelworkers	Linear	44.42 Hours
<i>Factors</i>		49.95	hrs		
0.88934 [SYS 061400] .88934200 - System					
750	STRAIGHT TIME BASE	C090 STRUCTURAL AND METAL WORKE	KE10H Indust/Site Srvs Steelworkers	Linear	44.42 Hours
<i>Factors</i>		49.95	h		
0.88934 [SYS 061400] .88934200 - System					
751	OVERTIME BASE & PRE.	C010 CARPENTERS	KE10H Indust/Site Srvs Steelworkers	Linear	3.62 Hours
<i>Factors</i>		4.07	h		
0.88934 [SYS 061400] .88934200 - System					
751	OVERTIME BASE & PRE.	C020 ELECTRICIANS	KE10H Indust/Site Srvs Steelworkers	Linear	4.61 Hours
<i>Factors</i>		5.18	h		
0.88934 [SYS 061400] .88934200 - System					

WBS No: 1EBB040104
 Activity ID: 1EBB414130

Rockv Flats Closure Project
Baseline Cost and Basis of Estimate

Project: Baseline Devl
 WBS Filter: 1EBB
 Activity Filter: *

Starts In FY *

751	OVERTIME BASE & PRE.	C020	ELECTRICIANS	KE10H	Indust/Site Srvs Steelworkers	Linear	2.30	Hours	
<i>Factors</i> 2.59 h							0.88934 [SYS 061400] .88934200 - Svsystem		
751	OVERTIME BASE & PRE.	C070	PAINTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	2.30	Hours	
<i>Factors</i> 2.59 h							0.88934 [SYS 061400] .88934200 - Svsystem		
751	OVERTIME BASE & PRE.	C080	PLUMBERS AND PIPEFITTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	2.30	Hours	
<i>Factors</i> 2.59 h							0.88934 [SYS 061400] .88934200 - Svsystem		
751	OVERTIME BASE & PRE.	C090	STRUCTURAL AND METAL WORKE	KE10H	Indust/Site Srvs Steelworkers	Linear	2.30	Hours	
<i>Factors</i> 2.59 h							0.88934 [SYS 061400] .88934200 - Svsystem		
A5C	SUPPLIES	0000	NONE	C220S	Utility Operations	Linear	4.059.14	Dollars	
<i>Factors</i> 4496.76 d 1.015 -- FY00 Escalation --							0.88934 [SYS 061400] .88934200 - Svsystem		
A5T	TAXES	0000	NONE	C220S	Utility Operations	Linear	146.23	Dollars	
<i>Factors</i> 162 dollars 1.015 -- FY00 Escalation --							0.88934 [SYS 061400] .88934200 - Svsystem		

Line Item SYS - Contingency And Escalation

BOE

Resources

Cost Element	Skill	Department	Curve	Quantity	Units
CON CONTINGENCY	0000 NONE	ZDEPT No Department	Linear	2.921.31	Dollars
<i>Factors</i> 2921.31 Dollars					
ESC ESCALATION	0000 NONE	ZDEPT No Department	Linear	1.116.97	Dollars
<i>Factors</i> 1116.97 Dollars					

Activity ID: 1EBB414140

Description: Water Plant/Dist Sys Corr Mtce FY04

Cost Risk 2 Schedule Risk 1

Line Item	Description	Quantity	Units	BOE Type	Labor Hours/Unit	Labor Hours Total	Labor Cost Total	Materials/ Sub Cost	Contingency & Escalation	Total Prime Cost	Burden Cost	Total Cost
100	Corrective Maintenance	1.00	each	HC	357	357	7.697	4.205	0	11.902	2.171	14.073
SYS	Contingency And Escalation	1.00	lea	EE	0	0	0	0	2.009	2.009	0	2.009
Total for Activity 1EBB414140:						357	7.697	4.205	2.009	13.912	2.171	16.083

Line Item 100 - Corrective Maintenance

BOE

Historical Data Source - Initial estimate is taken from FY98 Basis Of Estimate Tool(BEST) as modified by the RFCSS proposal.
 Item Desc -Correctve maintenance.
 Breakdown of Historical Data:
 Item - This activity addresses basic corrective maintenance needs at a level necessary and sufficient to maintain safe and compliant operation.
 Unit Cost - 401 hrs. \$4,497 Materials / Sub Cost
 Unit Cost Adjustment factor - FY 99 budget is used as the base year. FY00 thru 05 are adjusted bsd on the D&D schedule.
 Revised Unit Cost - same as FY00
 Basis for adjustment -none
 The Engineering, Planning, Health & Safety and Environmental support functions for maintenance efforts are contained in WAD 025.
 This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

Resources

Cost Element	Skill	Department	Curve	Quantity	Units
750 STRAIGHT TIME BASE	C010 CARPENTERS	KE10H Indust/Site Srvs Steelworkers	Linear	73.71	Hours
<i>Factors</i> 82.88 h					
0.88934 [SYS 061400] .88934200 - Svsystem					
750 STRAIGHT TIME BASE	C020 ELECTRICIANS	KE10H Indust/Site Srvs Steelworkers	Linear	44.42	Hours
<i>Factors</i> 49.95 h					
0.88934 [SYS 061400] .88934200 - Svsystem					
750 STRAIGHT TIME BASE	C020 ELECTRICIANS	KE10H Indust/Site Srvs Steelworkers	Linear	88.22	Hours
<i>Factors</i> 99.2 hrs.					
0.88934 [SYS 061400] .88934200 - System					

WBS No: 1EBB040104
 Activity ID: 1EBB414140

Rockv Flats Closure Project
Baseline Cost and Basis of Estimate

Project: Baseline Devl
 WBS Filter: 1EBB
 Activity Filter: *

Starts In FY: *

750	STRAIGHT TIME BASE	C070	PAINTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	44.42	Hours
<i>Factors</i> 49.95 hrs								
						0.88934	[SYS 061400]	.88934200 - Svsystem
750	STRAIGHT TIME BASE	C080	PLUMBERS AND PIPEFITTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	44.42	Hours
<i>Factors</i> 49.95 hrs								
						0.88934	[SYS 061400]	.88934200 - Svsystem
750	STRAIGHT TIME BASE	C090	STRUCTURAL AND METAL WORKE	KE10H	Indust/Site Srvs Steelworkers	Linear	44.42	Hours
<i>Factors</i> 49.95 h								
						0.88934	[SYS 061400]	.88934200 - Svsystem
751	OVERTIME BASE & PRE.	C010	CARPENTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	3.62	Hours
<i>Factors</i> 4.07 h								
						0.88934	[SYS 061400]	.88934200 - Svsystem
751	OVERTIME BASE & PRE.	C020	ELECTRICIANS	KE10H	Indust/Site Srvs Steelworkers	Linear	4.61	Hours
<i>Factors</i> 5.18 h								
						0.88934	[SYS 061400]	.88934200 - Svsystem
751	OVERTIME BASE & PRE.	C020	ELECTRICIANS	KE10H	Indust/Site Srvs Steelworkers	Linear	2.30	Hours
<i>Factors</i> 2.59 h								
						0.88934	[SYS 061400]	.88934200 - Svsystem
751	OVERTIME BASE & PRE.	C070	PAINTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	2.30	Hours
<i>Factors</i> 2.59 h								
						0.88934	[SYS 061400]	.88934200 - Svsystem
751	OVERTIME BASE & PRE.	C080	PLUMBERS AND PIPEFITTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	2.30	Hours
<i>Factors</i> 2.59 h								
						0.88934	[SYS 061400]	.88934200 - Svsystem
751	OVERTIME BASE & PRE.	C090	STRUCTURAL AND METAL WORKE	KE10H	Indust/Site Srvs Steelworkers	Linear	2.30	Hours
<i>Factors</i> 2.59 h								
						0.88934	[SYS 061400]	.88934200 - Svsystem
A5C	SUPPLIES	0000	NONE	C220S	Utility Operations	Linear	4,059.14	Dollars
<i>Factors</i> 4496.76 d 1.015 -- FY00 Escalation --								
						0.88934	[SYS 061400]	.88934200 - Svsystem
A5T	TAXES	0000	NONE	C220S	Utility Operations	Linear	146.23	Dollars
<i>Factors</i> 162 dollars 1.015 -- FY00 Escalation --								
						0.88934	[SYS 061400]	.88934200 - Svsystem

Line Item SYS - Contingency And Escalation

BOE

Resources

Cost Element	Skill	Department	Curve	Quantity	Units
CON CONTINGENCY	0000 NONE	ZDEPT No Department	Linear	658.21	Dollars
<i>Factors</i> 658.211 Dollars					
ESC ESCALATION	0000 NONE	ZDEPT No Department	Linear	1,351.24	Dollars
<i>Factors</i> 1351.24 Dollars					

Activity ID: 1EBB414200 Description: Water Plant/Dist Sys Prev Mtce FY00

Cost Risk 2 Schedule Risk 1

Line Item	Description	Quantity	Units	BOE Type	Labor Hours/Unit	Labor Hours Total	Labor Cost Total	Materials/ Sub Cost	Contingency & Escalation	Total Prime Cost	Burden Cost	Total Cost
100	Preventive Maintenance	1.00	each	HC	90	90	2,018	0	0	2,018	985	3,002
Total for Activity 1EBB414200:						90	2,018	0	0	2,018	985	3,002

Line Item 100 - Preventive Maintenance

BOE

Historical Data Source -Initial estimate is taken from FY 98Basis Of Estimate Tool(BEST) as modified by the RFCSS proposal.
 Item Desc -Preventive maintenance.
 Breakdown of Historical Data:
 Item - This activity addresses basic preventive maintenance needs at a level necessary and sufficient to maintain safe and compliant operation.
 Unit Cost - 473 hrs. \$0 Materials/SubCosts
 Unit Cost Adjustment factor - FY 99 budget is used as the base year. FY00 thru 05 are adjusted based on the D&D schedule.
 Revised Unit Cost - same as FY00

WBS No: 1EBB040104
 Activity ID: 1EBB414200

Rockv Flats Closure Project
Baseline Cost and Basis of Estimate

Project Baseline Devl
 WBS Filter 1EBB
 Activity Filter *

Starts In FY *

Basis for adjustment -None
 The Engineering, Planning, Health & Safety and Environmental support functions for maintenance efforts are contained in WAD 025.
 This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

Resources	Cost Element	Skill	Department	Curve	Quantity	Units
	750 STRAIGHT TIME BASE	C080 PLUMBERS AND PIPEFITTERS	KE10H Indust/Site Srvs Steelworkers	Linear	66.60	Hours
Factors	350 hrs.	0.36164 May 2000 Earned Value Factor				
					0.52618 [SYS 061300]	0.526183 - Target
	750 STRAIGHT TIME BASE	C080 PLUMBERS AND PIPEFITTERS	KE10H Indust/Site Srvs Steelworkers	Linear	19.01	Hours
Factors	99.9 hr	0.36164 May 2000 Earned Value Factor				
					0.52618 [SYS 061300]	0.526183 - Target
	751 OVERTIME BASE & PRE.	C080 PLUMBERS AND PIPEFITTERS	KE10H Indust/Site Srvs Steelworkers	Linear	3.35	Hours
Factors	17.63 h	0.36164 May 2000 Earned Value Factor				
					0.52618 [SYS 061300]	0.526183 - Target
	751 OVERTIME BASE & PRE.	C080 PLUMBERS AND PIPEFITTERS	KE10H Indust/Site Srvs Steelworkers	Linear	0.99	Hours
Factors	5.18 h	0.36164 May 2000 Earned Value Factor				
					0.52618 [SYS 061300]	0.526183 - Target

Activity ID: 1EBB414210 Description: Water Plant/Dist Sys Prev Mtce FY03

Cost Risk 1 Schedule Risk 1

Line Item	Description	Quantity	Units	BOE Type	Labor Hours/Unit	Labor Hours Total	Labor Cost Total	Materials/ Sub Cost	Contingency & Escalation	Total Prime Cost	Burden Cost	Total Cost
100	Preventive Maintenance	1.00	each	HC	420	420	9,430	0	0	9,430	3,263	12,693
SYS	Contingency And Escalation	1.00	lea	EE	0	0	0	0	3,482	3,482	0	3,482
Total for Activity 1EBB414210:						420	9,430	0	3,482	12,912	3,263	16,175

Line Item 100 - Preventive Maintenance

BOE
 Historical Data Source -Initial estimate is taken from FY 98Basis Of Estimate Tool(BEST) as modified by the RFCSS proposal.
 Item Desc -Preventive maintenance.
 Breakdown of Historical Data:
 Item - This activity addresses basic preventive maintenance needs at a level necessary and sufficient to maintain safe and compliant operation.
 Unit Cost - 473 hrs. \$0 Materials/SubCosts
 Unit Cost Adjustment factor - FY 99 budget is used as the base year. FY00 thru 05 are adjusted based on the D&D schedule.
 Revised Unit Cost - same as FY00
 Basis for adjustment -None
 The Engineering, Planning, Health & Safety and Environmental support functions for maintenance efforts are contained in WAD 025.
 This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

Resources	Cost Element	Skill	Department	Curve	Quantity	Units
	750 STRAIGHT TIME BASE	C080 PLUMBERS AND PIPEFITTERS	KE10H Indust/Site Srvs Steelworkers	Linear	311.27	Hours
Factors	350 hrs.	0.88934 [SYS 061400]				
					0.88934 [SYS 061400]	.88934200 - System
	750 STRAIGHT TIME BASE	C080 PLUMBERS AND PIPEFITTERS	KE10H Indust/Site Srvs Steelworkers	Linear	88.85	Hours
Factors	99.9 hr	0.88934 [SYS 061400]				
					0.88934 [SYS 061400]	.88934200 - System
	751 OVERTIME BASE & PRE.	C080 PLUMBERS AND PIPEFITTERS	KE10H Indust/Site Srvs Steelworkers	Linear	15.68	Hours
Factors	17.63 h	0.88934 [SYS 061400]				
					0.88934 [SYS 061400]	.88934200 - System
	751 OVERTIME BASE & PRE.	C080 PLUMBERS AND PIPEFITTERS	KE10H Indust/Site Srvs Steelworkers	Linear	4.61	Hours
Factors	5.18 h	0.88934 [SYS 061400]				
					0.88934 [SYS 061400]	.88934200 - System

Line Item SYS - Contingency And Escalation

BOE

Resources	Cost Element	Skill	Department	Curve	Quantity	Units
	CON CONTINGENCY	0000 NONE	ZDEPT No Department	Linear	2,508.28	Dollars
Factors	2508.28 Dollars					

WBS No: 1EBB040104
 Activity ID: 1EBB414210

Rockv Flats Closure Project
Baseline Cost and Basis of Estimate

Project: Baseline Devl
 WBS Filter: 1EBB
 Activity Filter: *

Starts In FY: *

ESC	ESCALATION	0000	NONE	ZDEPT	No Department	Linear	973.36	Dollars
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Factors 973.357 Dollars

Activity ID: 1EBB414220 Description: Water Plant/Dist Sys Prev Mtce FY01

Cost Risk 2 Schedule Risk 1

Line Item	Description	Quantity	Units	BOE Type	Labor Hours/Unit	Labor Hours Total	Labor Cost Total	Materials/ Sub Cost	Contingency & Escalation	Total Prime Cost	Burden Cost	Total Cost
100	Preventive Maintenance	1.00	each	HC	420	420	9,430	0	0	9,430	4,498	13,928
SYS	Contingency And Escalation	1.00	ea	EE	0	0	0	0	738	738	0	738
Total for Activity 1EBB414220:						420	9,430	0	738	10,168	4,498	14,667

Line Item 100 - Preventive Maintenance

BOE
 Historical Data Source -Initial estimate is taken from FY 98Basis Of Estimate Tool(BEST) as modified by the RFCSS proposal.
 Item Desc -Preventive maintenance.
 Breakdown of Historical Data:
 Item - This activity addresses basic preventive maintenance needs at a level necessary and sufficient to maintain safe and compliant operation.
 Unit Cost - 473 hrs. \$0 Materials/SubCosts
 Unit Cost Adjustment factor - FY 99 budget is used as the base year. FY00 thru 05 are adjusted based on the D&D schedule.
 Revised Unit Cost - same as FY00
 Basis for adjustment -None
 The Engineering, Planning, Health & Safety and Environmental support functions for maintenance efforts are contained in WAD 025.
 This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

Resources

Cost Element	Skill	Department	Curve	Quantity	Units
750 STRAIGHT TIME BASE	C080 PLUMBERS AND PIPEFITTERS	KE10H Indust/Site Svcs Steelworkers	Linear	311.27	Hours
Factors 350 hrs.					
750 STRAIGHT TIME BASE	C080 PLUMBERS AND PIPEFITTERS	KE10H Indust/Site Svcs Steelworkers	Linear	88.85	Hours
Factors 99.9 hr					
751 OVERTIME BASE & PRE.	C080 PLUMBERS AND PIPEFITTERS	KE10H Indust/Site Svcs Steelworkers	Linear	15.68	Hours
Factors 17.63 h					
751 OVERTIME BASE & PRE.	C080 PLUMBERS AND PIPEFITTERS	KE10H Indust/Site Svcs Steelworkers	Linear	4.61	Hours
Factors 5.18 h					

0.88934 [SYS 061400] .88934200 - Svsstem
 0.88934 [SYS 061400] .88934200 - Svsstem
 0.88934 [SYS 061400] .88934200 - Svsstem

Line Item SYS - Contingency And Escalation

BOE

Resources

Cost Element	Skill	Department	Curve	Quantity	Units
CON CONTINGENCY	0000 NONE	ZDEPT No Department	Linear	445.54	Dollars
Factors 445.535 Dollars					
ESC ESCALATION	0000 NONE	ZDEPT No Department	Linear	292.88	Dollars
Factors 292.879 Dollars					

Activity ID: 1EBB414230 Description: Water Plant/Dist Sys Prev Mtce FY02

Cost Risk 2 Schedule Risk 1

Line Item	Description	Quantity	Units	BOE Type	Labor Hours/Unit	Labor Hours Total	Labor Cost Total	Materials/ Sub Cost	Contingency & Escalation	Total Prime Cost	Burden Cost	Total Cost
100	Preventive Maintenance	1.00	each	HC	420	420	9,430	0	0	9,430	3,329	12,759
SYS	Contingency And Escalation	1.00	ea	EE	0	0	0	0	1,907	1,907	0	1,907
Total for Activity 1EBB414230:						420	9,430	0	1,907	11,337	3,329	14,666

Line Item 100 - Preventive Maintenance

BOE
 Historical Data Source -Initial estimate is taken from FY 98Basis Of Estimate Tool(BEST) as modified by the RFCSS proposal.
 Item Desc -Preventive maintenance.
 Breakdown of Historical Data:
 Item - This activity addresses basic preventive maintenance needs at a level necessary and sufficient to maintain safe and compliant operation.
 Unit Cost - 473 hrs. \$0 Materials/SubCosts
 Unit Cost Adjustment factor - FY 99 budget is used as the base year. FY00 thru 05 are adjusted based on the D&D schedule.
 Revised Unit Cost - same as FY00

WBS No: 1EBB040104
 Activity ID: 1EBB414230

Rockv Flats Closure Project
Baseline Cost and Basis of Estimate

Project Baseline Devl
 WBS Filter 1EBB
 Activity Filter *

Starts In FY *

Basis for adjustment -None
 The Engineering, Planning, Health & Safety and Environmental support functions for maintenance efforts are contained in WAD 025.
 This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

Resources	Cost Element	Skill	Department	Curve	Quantity	Units
	750 STRAIGHT TIME BASE	C080 PLUMBERS AND PIPEFITTERS	KE10H Indust/Site Srvs Steelworkers	Linear	311.27	Hours
Factors	350 hrs.					
	750 STRAIGHT TIME BASE	C080 PLUMBERS AND PIPEFITTERS	KE10H Indust/Site Srvs Steelworkers	Linear	88.85	Hours
Factors	99.9 hr					
	751 OVERTIME BASE & PRE.	C080 PLUMBERS AND PIPEFITTERS	KE10H Indust/Site Srvs Steelworkers	Linear	15.68	Hours
Factors	17.63 h					
	751 OVERTIME BASE & PRE.	C080 PLUMBERS AND PIPEFITTERS	KE10H Indust/Site Srvs Steelworkers	Linear	4.61	Hours
Factors	5.18 h					

0.88934 [SYS 061400] .88934200 - Svsstem

Line Item SYS - Contingency And Escalation
 BOE

Resources	Cost Element	Skill	Department	Curve	Quantity	Units
	CON CONTINGENCY	0000 NONE	ZDEPT No Department	Linear	1,310.74	Dollars
Factors	1310.75 Dollars					
	ESC ESCALATION	0000 NONE	ZDEPT No Department	Linear	596.24	Dollars
Factors	596.242 Dollars					

Activity ID: 1EBB414240 Description: Water Plant/Dist Sys Prev Mtce FY04

Cost Risk 2 Schedule Risk 1

Line Item	Description	Quantity	Units	BOE Type	Labor Hours/Unit	Labor Hours Total	Labor Cost Total	Materials/ Sub Cost	Contingency & Escalation	Total Prime Cost	Burden Cost	Total Cost
100	Preventive Maintenance	1.00	each	HC	420	420	9,430	0	0	9,430	2,659	12,089
SYS	Contingency And Escalation	1.00	lea	EE	0	0	0	0	1,726	1,726	0	1,726
Total for Activity 1EBB414240:						420	9,430	0	1,726	11,156	2,659	13,816

Line Item 100 - Preventive Maintenance
 BOE

Historical Data Source -Initial estimate is taken from FY 98Basis Of Estimate Tool(BEST) as modified by the RFCSS proposal.
 Item Desc -Preventive maintenance.
 Breakdown of Historical Data:
 Item - This activity addresses basic preventive maintenance needs at a level necessary and sufficient to maintain safe and compliant operation.
 Unit Cost - 473 hrs. \$0 Materials/SubCosts
 Unit Cost Adjustment factor - FY 99 budget is used as the base year. FY00 thru 05 are adjusted bsd on the D&D schedule.
 Revised Unit Cost - same as FY00
 Basis for adjustment -None
 The Engineering, Planning, Health & Safety and Environmental support functions for maintenance efforts are contained in WAD 025.
 This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

Resources	Cost Element	Skill	Department	Curve	Quantity	Units
	750 STRAIGHT TIME BASE	C080 PLUMBERS AND PIPEFITTERS	KE10H Indust/Site Srvs Steelworkers	Linear	311.27	Hours
Factors	350 hrs.					
	750 STRAIGHT TIME BASE	C080 PLUMBERS AND PIPEFITTERS	KE10H Indust/Site Srvs Steelworkers	Linear	88.85	Hours
Factors	99.9 hr					
	751 OVERTIME BASE & PRE.	C080 PLUMBERS AND PIPEFITTERS	KE10H Indust/Site Srvs Steelworkers	Linear	15.68	Hours
Factors	17.63 h					

0.88934 [SYS 061400] .88934200 - Svsstem

WBS No: 1EBB040104
 Activity ID: 1EBB414240

Rockv Flats Closure Project
Baseline Cost and Basis of Estimate

Project: Baseline Devl
 WBS Filter: 1EBB
 Activity Filter: *

Starts In FY: *

751	OVERTIME BASE & PRE.	C080	PLUMBERS AND PIPEFITTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	4.61	Hours
<i>Factors</i> 5.18 h								

0.88934 [SYS 061400] .88934200 - Svsstem

Line Item SYS - Contingency And Escalation

BOE

Resources

Cost Element	Skill	Department	Curve	Quantity	Units
CON CONTINGENCY	0000 NONE	ZDEPT No Department	Linear	565.432	Dollars
<i>Factors</i> 565.432 Dollars					
ESC ESCALATION	0000 NONE	ZDEPT No Department	Linear	1,160.78	Dollars
<i>Factors</i> 1160.78 Dollars					

Activity ID: 1EBB414300 Description: Water Plant/Dist Sys Rout Mtce FY00

Cost Risk 2 Schedule Risk 1

Line Item	Description	Quantity	Units	BOE Type	Labor Hours/Unit	Labor Hours Total	Labor Cost Total	Materials/ Sub Cost	Contingency & Escalation	Total Prime Cost	Burden Cost	Total Cost
100	Routine Maintenance	1.00	each	HC	43	43	909	92	0	1,001	444	1,444
Total for Activity 1EBB414300:						43	909	92	0	1,001	444	1,444

Line Item 100 - Routine Maintenance

BOE

Historical Data Source - Initial estimate is taken from FY 98Basis Of Estimate Tool(BEST) as modified by the RFCSS proposal.
 Item Desc -Routine maintenance.
 Breakdown of Historical Data:
 Item - This activity addresses basic routine maintenance needs at a level necessary and sufficient to maintain safe and compliant operation.
 Unit Cost - 228 hrs. \$459 Materials/ Sub Cost
 Unit Cost Adjustment factor - FY 99 budget is used as the base year. FY00 thru 05 are adjusted based on the D&D schedule.
 The Engineering, Planning, Health & Safety and Environmental support functions for maintenance efforts are contained in WAD 025.
 Revised Unit Cost -same as FY00
 Basis for adjustment -None
 This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

Resources

Cost Element	Skill	Department	Curve	Quantity	Units
750 STRAIGHT TIME BASE	C010 CARPENTERS	KE10H Indust/Site Srvs Steelworkers	Linear	9.13	Hours
<i>Factors</i> 48 h		0.36164 May 2000 Earned Value Factor			
0.52618 [SYS 061300] 0.526183 - Target					
750 STRAIGHT TIME BASE	C020 ELECTRICIANS	KE10H Indust/Site Srvs Steelworkers	Linear	11.42	Hours
<i>Factors</i> 60 h		0.36164 May 2000 Earned Value Factor			
0.52618 [SYS 061300] 0.526183 - Target					
750 STRAIGHT TIME BASE	C020 ELECTRICIANS	KE10H Indust/Site Srvs Steelworkers	Linear	5.71	Hours
<i>Factors</i> 30 h		0.36164 May 2000 Earned Value Factor			
0.52618 [SYS 061300] 0.526183 - Target					
750 STRAIGHT TIME BASE	C070 PAINTERS	KE10H Indust/Site Srvs Steelworkers	Linear	5.71	Hours
<i>Factors</i> 30 h		0.36164 May 2000 Earned Value Factor			
0.52618 [SYS 061300] 0.526183 - Target					
750 STRAIGHT TIME BASE	C080 PLUMBERS AND PIPEFITTERS	KE10H Indust/Site Srvs Steelworkers	Linear	5.71	Hours
<i>Factors</i> 30 h		0.36164 May 2000 Earned Value Factor			
0.52618 [SYS 061300] 0.526183 - Target					
750 STRAIGHT TIME BASE	C090 STRUCTURAL AND METAL WORKE	KE10H Indust/Site Srvs Steelworkers	Linear	5.71	Hours
<i>Factors</i> 30 h		0.36164 May 2000 Earned Value Factor			
0.52618 [SYS 061300] 0.526183 - Target					
A5C SUPPLIES	0000 NONE	C220S Utility Operations	Linear	88.62	Dollars
<i>Factors</i> 458.8 d		1.015 -- FY00 Escalation -- 0.36164 May 2000 Earned Value Factor			
0.52618 [SYS 061300] 0.526183 - Target					
A5T TAXES	0000 NONE	C220S Utility Operations	Linear	3.09	Dollars
<i>Factors</i> 16 dollars		1.015 -- FY00 Escalation -- 0.36164 May 2000 Earned Value Factor			

Activity ID: 1EBB414310 Description: Water Plant/Dist Sys Rout Mtce FY01

Cost Risk 2 Schedule Risk 1

WBS No: 1EBB040104
 Activity ID: 1EBB414310

Rockv Flats Closure Project
Baseline Cost and Basis of Estimate

Project Baseline Devl
 WBS Filter 1EBB
 Activity Filter * Starts In FY *

Line Item	Description	Quantity	Units	BOE Type	Labor Hours/Unit	Labor Hours Total	Labor Cost Total	Materials/ Sub Cost	Contingency & Escalation	Total Prime Cost	Burden Cost	Total Cost
100	Routine Maintenance	1.00	each	HC	203	203	4,249	429	0	4,677	2,027	6,704
SYS	Contingency And Escalation	1.00	ea	EE	0	0	0	0	355	355	0	355
Total for Activity 1EBB414310:						203	4,249	429	355	5,033	2,027	7,059

Line Item 100 - Routine Maintenance

BOE
 Historical Data Source - Initial estimate is taken from FY 98 Basis Of Estimate Tool (BEST) as modified by the RFCSS proposal.
 Item Desc - Routine maintenance.
 Breakdown of Historical Data:
 Item - This activity addresses basic routine maintenance needs at a level necessary and sufficient to maintain safe and compliant operation.
 Unit Cost - 228 hrs. \$459 Materials/ Sub Cost
 Unit Cost Adjustment factor - FY 99 budget is used as the base year. FY00 thru 05 are adjusted based on the D&D schedule.
 Revised Unit Cost - same as FY00
 Basis for adjustment - None
 The Engineering, Planning, Health & Safety and Environmental support functions for maintenance efforts are contained in WAD 025.
 This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

Resources

Cost Element	Skill	Department	Curve	Quantity	Units
750 STRAIGHT TIME BASE	C010 CARPENTERS	KE10H Indust/Site Svcs Steelworkers	Linear	42.69	Hours
Factors 48 h			0.88934 [SYS 061400] .88934200 - Svsstem		
750 STRAIGHT TIME BASE	C020 ELECTRICIANS	KE10H Indust/Site Svcs Steelworkers	Linear	26.68	Hours
Factors 30 h			0.88934 [SYS 061400] .88934200 - Svsstem		
750 STRAIGHT TIME BASE	C020 ELECTRICIANS	KE10H Indust/Site Svcs Steelworkers	Linear	53.36	Hours
Factors 60 h			0.88934 [SYS 061400] .88934200 - Svsstem		
750 STRAIGHT TIME BASE	C070 PAINTERS	KE10H Indust/Site Svcs Steelworkers	Linear	26.68	Hours
Factors 30 h			0.88934 [SYS 061400] .88934200 - Svsstem		
750 STRAIGHT TIME BASE	C080 PLUMBERS AND PIPEFITTERS	KE10H Indust/Site Svcs Steelworkers	Linear	26.68	Hours
Factors 30 h			0.88934 [SYS 061400] .88934200 - Svsstem		
750 STRAIGHT TIME BASE	C090 STRUCTURAL AND METAL WORKE	KE10H Indust/Site Svcs Steelworkers	Linear	26.68	Hours
Factors 30 h			0.88934 [SYS 061400] .88934200 - Svsstem		
A5C SUPPLIES	0000 NONE	C220S Utility Operations	Linear	414.15	Dollars
Factors 458.8 d	1.015 -- FY00 Escalation --		0.88934 [SYS 061400] .88934200 - Svsstem		
A5T TAXES	0000 NONE	C220S Utility Operations	Linear	14.44	Dollars
Factors 16 dollars	1.015 -- FY00 Escalation --		0.88934 [SYS 061400] .88934200 - Svsstem		

Line Item SYS - Contingency And Escalation

BOE

Cost Element	Skill	Department	Curve	Quantity	Units
CON CONTINGENCY	0000 NONE	ZDEPT No Department	Linear	214.44	Dollars
Factors 214.443 Dollars					
ESC ESCALATION	0000 NONE	ZDEPT No Department	Linear	140.97	Dollars
Factors 140.968 Dollars					

Activity ID: 1EBB414320 Description: Water Plant/Dist Sys Rout Mtce FY02

Cost Risk 2 Schedule Risk 1

Line Item	Description	Quantity	Units	BOE Type	Labor Hours/Unit	Labor Hours Total	Labor Cost Total	Materials/ Sub Cost	Contingency & Escalation	Total Prime Cost	Burden Cost	Total Cost
100	Routine Maintenance	1.00	each	HC	203	203	4,249	429	0	4,677	1,500	6,177
SYS	Contingency And Escalation	1.00	ea	EE	0	0	0	0	923	923	0	923

WBS No: 1EBB040104
 Activity ID: 1EBB414320

Rockv Flats Closure Project
Baseline Cost and Basis of Estimate

Project Baseline Devl
 WBS Filter 1EBB
 Activity Filter *

Starts In FY *

Total for Activity 1EBB414320:	203	4,249	429	923	5,601	1,500	7,100
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Line Item 100 - Routine Maintenance

BOE
 Historical Data Source - Initial estimate is taken from FY 98Basis Of Estimate Tool(BEST) as modified by the RFCSS proposal.
 Item Desc -Routine maintenance.
 Breakdown of Historical Data:
 Item - This activity addresses basic routine maintenance needs at a level necessary and sufficient to maintain safe and compliant operation.
 Unit Cost - 228 hrs. \$459 Materials/ Sub Cost
 Unit Cost Adjustment factor - FY 99 budget is used as the base year. FY00 thru 05 are adjusted based on the D&D schedule.
 Revised Unit Cost -same as FY00
 Basis for adjustment -None
 The Engineering, Planning, Health & Safety and Environmental support functions for maintenance efforts are contained in WAD 025.
 This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

Resources	Cost Element	Skill	Department	Curve	Quantity	Units
750	STRAIGHT TIME BASE	C010 CARPENTERS	KE10H Indust/Site Srvs Steelworkers	Linear	42.69	Hours
<i>Factors</i> 48 h						
0.88934 [SYS 061400] .88934200 - Svsstem						
750	STRAIGHT TIME BASE	C020 ELECTRICIANS	KE10H Indust/Site Srvs Steelworkers	Linear	53.36	Hours
<i>Factors</i> 60 h						
0.88934 [SYS 061400] .88934200 - Svsstem						
750	STRAIGHT TIME BASE	C020 ELECTRICIANS	KE10H Indust/Site Srvs Steelworkers	Linear	26.68	Hours
<i>Factors</i> 30 h						
0.88934 [SYS 061400] .88934200 - Svsstem						
750	STRAIGHT TIME BASE	C070 PAINTERS	KE10H Indust/Site Srvs Steelworkers	Linear	26.68	Hours
<i>Factors</i> 30 h						
0.88934 [SYS 061400] .88934200 - Svsstem						
750	STRAIGHT TIME BASE	C080 PLUMBERS AND PIPEFITTERS	KE10H Indust/Site Srvs Steelworkers	Linear	26.68	Hours
<i>Factors</i> 30 h						
0.88934 [SYS 061400] .88934200 - Svsstem						
750	STRAIGHT TIME BASE	C090 STRUCTURAL AND METAL WORKE	KE10H Indust/Site Srvs Steelworkers	Linear	26.68	Hours
<i>Factors</i> 30 h						
0.88934 [SYS 061400] .88934200 - Svsstem						
A5C	SUPPLIES	0000 NONE	C220S Utility Operations	Linear	414.15	Dollars
<i>Factors</i> 458.8 d 1.015 -- FY00 Escalation --						
0.88934 [SYS 061400] .88934200 - Svsstem						
A5T	TAXES	0000 NONE	C220S Utility Operations	Linear	14.44	Dollars
<i>Factors</i> 16 dollars 1.015 -- FY00 Escalation --						
0.88934 [SYS 061400] .88934200 - Svsstem						

Line Item SYS - Contingency And Escalation

BOE

Resources	Cost Element	Skill	Department	Curve	Quantity	Units
CON	CONTINGENCY	0000 NONE	ZDEPT No Department	Linear	634.58	Dollars
<i>Factors</i> 634.579 Dollars						
ESC	ESCALATION	0000 NONE	ZDEPT No Department	Linear	288.66	Dollars
<i>Factors</i> 288.662 Dollars						

Activity ID: 1EBB414330 Description: Water Plant/Dist Sys Rout Mtce FY03

Cost Risk 2 Schedule Risk 1

Line Item	Description	Quantity	Units	BOE Type	Labor Hours/Unit	Labor Hours Total	Labor Cost Total	Materials/ Sub Cost	Contingency & Escalation	Total Prime Cost	Burden Cost	Total Cost
100	Routine Maintenance	1.00	each	HC	203	203	4,249	429	0	4,677	1,470	6,147
SYS	Contingency And Escalation	1.00	lea	EE	0	0	0	0	1,704	1,704	0	1,704
Total for Activity 1EBB414330:						203	4,249	429	1,704	6,382	1,470	7,852

Line Item 100 - Routine Maintenance

BOE
 Historical Data Source - Initial estimate is taken from FY 98Basis Of Estimate Tool(BEST) as modified by the RFCSS proposal.
 Item Desc -Routine maintenance.

WBS No: 1EBB040104
 Activity ID: 1EBB414330

Rockv Flats Closure Project
Baseline Cost and Basis of Estimate

Project: Baseline Devl
 WBS Filter: 1EBB
 Activity Filter: *

Starts In FY *

Breakdown of Historical Data:
 Item - This activity addresses basic routine maintenance needs at a level necessary and sufficient to maintain safe and compliant operation.
 Unit Cost - 228 hrs. \$459 Materials/ Sub Cost
 Unit Cost Adjustment factor - FY 99 budget is used as the base year. FY00 thru 05 are adjusted based on the D&D schedule.
 Revised Unit Cost -same as FY00
 Basis for adjustment -None
 The Engineering, Planning, Health & Safety and Environmental support functions for maintenance efforts are contained in WAD 025.
 This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

Resources

Cost Element	Skill	Department	Curve	Quantity	Units
750 STRAIGHT TIME BASE	C010 CARPENTERS	KE10H Indust/Site Srvs Steelworkers	Linear	42.69	Hours
Factors 48 h					
0.88934 [SYS 061400] .88934200 - System					
750 STRAIGHT TIME BASE	C020 ELECTRICIANS	KE10H Indust/Site Srvs Steelworkers	Linear	53.36	Hours
Factors 60 h					
0.88934 [SYS 061400] .88934200 - System					
750 STRAIGHT TIME BASE	C020 ELECTRICIANS	KE10H Indust/Site Srvs Steelworkers	Linear	26.68	Hours
Factors 30 h					
0.88934 [SYS 061400] .88934200 - System					
750 STRAIGHT TIME BASE	C070 PAINTERS	KE10H Indust/Site Srvs Steelworkers	Linear	26.68	Hours
Factors 30 h					
0.88934 [SYS 061400] .88934200 - System					
750 STRAIGHT TIME BASE	C080 PLUMBERS AND PIPEFITTERS	KE10H Indust/Site Srvs Steelworkers	Linear	26.68	Hours
Factors 30 h					
0.88934 [SYS 061400] .88934200 - System					
750 STRAIGHT TIME BASE	C090 STRUCTURAL AND METAL WORKE	KE10H Indust/Site Srvs Steelworkers	Linear	26.68	Hours
Factors 30 h					
0.88934 [SYS 061400] .88934200 - System					
A5C SUPPLIES	0000 NONE	C220S Utility Operations	Linear	414.15	Dollars
Factors 458.8 d 1.015 -- FY00 Escalation --					
0.88934 [SYS 061400] .88934200 - System					
A5T TAXES	0000 NONE	C220S Utility Operations	Linear	14.44	Dollars
Factors 16 dollars 1.015 -- FY00 Escalation --					
0.88934 [SYS 061400] .88934200 - System					

Line Item SYS - Contingency And Escalation

BOE

Resources

Cost Element	Skill	Department	Curve	Quantity	Units
CON CONTINGENCY	0000 NONE	ZDEPT No Department	Linear	1,232.91	Dollars
Factors 1232.91 Dollars					
ESC ESCALATION	0000 NONE	ZDEPT No Department	Linear	471.41	Dollars
Factors 471.408 Dollars					

Activity ID: 1EBB414340 Description: Water Plant/Dist Sys Rout Mtce FY04

Cost Risk 2 Schedule Risk 1

Line Item	Description	Quantity	Units	BOE Type	Labor Hours/Unit	Labor Hours Total	Labor Cost Total	Materials/Sub Cost	Contingency & Escalation	Total Prime Cost	Burden Cost	Total Cost
100	Routine Maintenance	1.00	each	HC	203	203	4,249	429	0	4,677	1,198	5,875
SYS	Contingency And Escalation	1.00	ea	EE	0	0	0	0	839	839	0	839
Total for Activity 1EBB414340:						203	4,249	429	839	5,516	1,198	6,714

Line Item 100 - Routine Maintenance

BOE

Historical Data Source - Initial estimate is taken from FY 98Basis Of Estimate Tool(BEST) as modified by the RFCSS proposal.
 Item Desc -Routine maintenance.
 Breakdown of Historical Data:
 Item - This activity addresses basic routine maintenance needs at a level necessary and sufficient to maintain safe and compliant operation.
 Unit Cost - 228 hrs. \$459 Materials/ Sub Cost
 Unit Cost Adjustment factor - FY 99 budget is used as the base year. FY00 thru 05 are adjusted based on the D&D schedule.

WBS No: 1EBB040104
 Activity ID: 1EBB414340

Rockv Flats Closure Project
Baseline Cost and Basis of Estimate

Project Baseline Devl
 WBS Filter 1EBB
 Activity Filter *

Starts In FY *

Revised Unit Cost -same as FY00
 Basis for adjustment -None
 The Engineering, Planning, Health & Safety and Environmental support functions for maintenance efforts are contained in WAD 025.
 This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

Resources

Cost Element		Skill		Department		Curve	Quantity	Units
750	STRAIGHT TIME BASE	C010	CARPENTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	42.69	Hours
<i>Factors</i> 48 h							0.88934 [SYS 061400] .88934200 - Svsstem	
750	STRAIGHT TIME BASE	C020	ELECTRICIANS	KE10H	Indust/Site Srvs Steelworkers	Linear	26.68	Hours
<i>Factors</i> 30 h							0.88934 [SYS 061400] .88934200 - Svsstem	
750	STRAIGHT TIME BASE	C020	ELECTRICIANS	KE10H	Indust/Site Srvs Steelworkers	Linear	53.36	Hours
<i>Factors</i> 60 h							0.88934 [SYS 061400] .88934200 - Svsstem	
750	STRAIGHT TIME BASE	C070	PAINTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	26.68	Hours
<i>Factors</i> 30 h							0.88934 [SYS 061400] .88934200 - Svsstem	
750	STRAIGHT TIME BASE	C080	PLUMBERS AND PIPEFITTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	26.68	Hours
<i>Factors</i> 30 h							0.88934 [SYS 061400] .88934200 - Svsstem	
750	STRAIGHT TIME BASE	C090	STRUCTURAL AND METAL WORKE	KE10H	Indust/Site Srvs Steelworkers	Linear	26.68	Hours
<i>Factors</i> 30 h							0.88934 [SYS 061400] .88934200 - Svsstem	
A5C	SUPPLIES	0000	NONE	C220S	Utility Operations	Linear	414.15	Dollars
<i>Factors</i> 458.8 d		1.015 -- FY00 Escalation --					0.88934 [SYS 061400] .88934200 - Svsstem	
A5T	TAXES	0000	NONE	C220S	Utility Operations	Linear	14.44	Dollars
<i>Factors</i> 16 Dollars		1.015 -- FY00 Escalation --					0.88934 [SYS 061400] .88934200 - Svsstem	

Line Item SYS - Contingency And Escalation

BOE

Resources

Cost Element		Skill		Department		Curve	Quantity	Units
CON	CONTINGENCY	0000	NONE	ZDEPT	No Department	Linear	274.80	Dollars
<i>Factors</i> 274.798 Dollars								
ESC	ESCALATION	0000	NONE	ZDEPT	No Department	Linear	564.13	Dollars
<i>Factors</i> 564.133 Dollars								

Activity ID: 1EBB414410

Description: Water Utility Projects FY01

Cost Risk 2 Schedule Risk 1

Line Item	Description	Quantity	Units	BOE Type	Labor Hours/Unit	Labor Hours Total	Labor Cost Total	Materials/ Sub Cost	Contingency & Escalation	Total Prime Cost	Burden Cost	Total Cost
100	Evaluate Condition of Potable WaterTanks	1.00	each	HC	0	0	0	7.277	0	7.277	0	7.277
SYS	Contingency And Escalation	1.00	ea	EE	0	0	0	0	386	386	0	386
Total for Activity 1EBB414410:						0	0	7.277	386	7.663	0	7.663

Line Item 100 - Evaluate Condition of Potable WaterTanks

BOE

This line item provides for an evaluation of the condition of the ground and elevated potable water storage tanks at the Water Plant. Evaluation will determine if repairs are required prior to FY05 closure date. The estimate is based on a similar FY97 requirement.
 This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

Resources

Cost Element		Skill		Department		Curve	Quantity	Units
A53	E-2	0000	NONE	C200S	Engineering Services	Linear	7.277.17	Dollars
<i>Factors</i> 8000 Dollars		1.02283 -- FY00 Escalation --					0.88934 [SYS 061400] .88934200 - Svsstem	

WBS No: 1EBB040104
 Activity ID: 1EBB414410

Rockv Flats Closure Project
Baseline Cost and Basis of Estimate

Project: Baseline Devl
 WBS Filter: 1EBB
 Activity Filter: *

Starts In FY *

Line Item SYS - Contingency And Escalation

BOE

Resources		Cost Element	Skill	Department	Curve	Quantity	Units
CON	CONTINGENCY	0000	NONE	ZDEPT	No Department	Linear	232.78 Dollars
Factors 232.781 Dollars							
ESC	ESCALATION	0000	NONE	ZDEPT	No Department	Linear	153.02 Dollars
Factors 153.023 Dollars							

Activity ID: 1EXXX41404 Description: Operate Water Utility FY05

Cost Risk 2 Schedule Risk 1

Line Item	Description	Quantity	Units	BOE Type	Labor Hours/Unit	Labor Hours Total	Labor Cost Total	Materials/ Sub Cost	Contingency & Escalation	Total Prime Cost	Burden Cost	Total Cost
100	Water Plant Operations	1.00	each	HC	3.541	3.526	77.044	80.201	0	157.245	29.072	186.317
200	Transition Plan	1.00	each	EE	0	0	0	4.057	0	4.057	0	4.057
SYS	Contingency And Escalation	1.00	ea	EE	0	0	0	0	101.837	101.837	0	101.837
Total for Activity 1EXXX41404:						3.526	77.044	84.259	101.837	263.139	29.072	292.211

Line Item 100 - Water Plant Operations

BOE

Historical Data Source - Initial estimate is taken from FY98 Basis Of Estimate Tool(BEST) as modified by the RFCSS proposal.
 Item Desc -This activity provides for the operation and surveillance of the Sites Water treatment plant and ancillary water distribution system up to the external feed into the facilities.
 Breakdown of Historical Data:
 Item - Water plant operation.
 Units - 1 Lot
 Unit Cost - 4,108 hrs. - \$76,421 Materials/Sub Cost - \$3,600 Lease
 Unit Cost Adjustment factor - FY 99 budget is used as the base year. FY00 thru 05 are adjusted based on the D&D schedule.
 Revised Unit Cost - same as FY00
 Basis for adjustment -none
 This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

Resources		Cost Element	Skill	Department	Curve	Quantity	Units
750	STRAIGHT TIME BASE	R070	WASTE TREATMENT OPERATOR A	KE10H	Indust/Site Svcs Steelworkers	Linear	3,219.42 Hours
Factors 3620 hours							
751	OVERTIME BASE & PRE.	R070	WASTE TREATMENT OPERATOR A	KE10H	Indust/Site Svcs Steelworkers	Linear	321.94 Hours
Factors 362 hrs.							
754	OTHER PREMIUMS	0000	NONE	C222S	Water System Operations	Linear	6,523.69 Dollars
Factors 7335.41 d							
A5C	SUPPLIES	0000	NONE	C220S	Utility Operations	Linear	55,443.64 Dollars
Factors 61421 dollars 1.015 -- FY00 Escalation --							
A5L	RENTALS	0000	NONE	C106S	Business Management Office	Linear	3,249.66 Dollars
Factors 3600 dollars 1.015 -- FY00 Escalation --							
A5M	TRAVEL/TRAIN/RELOCAT	0000	NONE	C220S	Utility Operations	Linear	13,340.13 Dollars
Factors 15000 d							
A5T	TAXES	0000	NONE	C220S	Utility Operations	Linear	1,995.83 Dollars
Factors 2211 dollars 1.015 -- FY00 Escalation --							

Line Item 200 - Transition Plan

BOE

Develop a formal system Transition Plan. This plan will address cold shutdown requirements, hazards assessment and mitigation, equipment utility isolations, records disposition, equipment fluid draining, securing the process, etc. Estimate was developed using the K-H Facility Transition Cost Estimate Worksheet.

WBS No: 1EBB040104
 Activity ID: 1EXXX41404

Rockv Flats Closure Project
Baseline Cost and Basis of Estimate

Project Baseline Devl
 WBS Filter 1EBB
 Activity Filter *

Starts In FY *

This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

Resources	Cost Element	Quantity	Skill	Department	Curve	Quantity	Units
	A5H SUBCONTRACTED SRVS	0000	NONE	C220S Utility Operations	Linear	4.075.21	Dollars
Factors 4480 dollars 1.02283 -- FY00 Escalation -- 0.88934 [SYS 061400] .88934200 - Svsstem							

Line Item SYS - Contingency And Escalation

Resources	Cost Element	Quantity	Skill	Department	Curve	Quantity	Units
	CON CONTINGENCY	0000	NONE	ZDEPT No Department	Linear	72.344.63	Dollars
Factors 72344.6 Dollars ESC ESCALATION 0000 NONE ZDEPT No Department Linear 29.491.92 Dollars Factors 29491.9 Dollars							

Activity ID: 1EXXX41414 Description: Water Plant/Dist Sys Corr Mtce FY05

Cost Risk 2 Schedule Risk 1

Line Item	Description	Quantity	Units	BOE Type	Labor Hours/Unit	Labor Hours Total	Labor Cost Total	Materials/ Sub Cost	Contingency & Escalation	Total Prime Cost	Burden Cost	Total Cost
100	Corrective Maintenance	1.00	each	HC	357	356	7.663	4.187	0	11.850	2.667	14.517
SYS	Contingency And Escalation	1.00	lea	EE	0	0	0	0	7.766	7.766	0	7.766
Total for Activity 1EXXX41414:						356	7.663	4.187	7.766	19.616	2.667	22.283

Line Item 100 - Corrective Maintenance

BOE
 Historical Data Source - Initial estimate is taken from FY98 Basis Of Estimate Tool(BEST) as modified by the RFCSS proposal.
 Item Desc -Correctve maintenance.
 Breakdown of Historical Data:
 Item - This activity addresses basic corrective maintenance needs at a level necessary and sufficient to maintain safe and compliant operation.
 Unit Cost - 401 hrs. \$4,497 Materials / Sub Cost
 Unit Cost Adjustment factor - FY 99 budget is used as the base year. FY00 thru 05 are adjusted bsd on the D&D schedule.
 Revised Unit Cost - same as FY00
 Basis for adjustment -none
 The Engineering, Planning, Health & Safety and Environmental support functions for maintenance efforts are contained in WAD 025.
 This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

Resources	Cost Element	Quantity	Skill	Department	Curve	Quantity	Units
	750 STRAIGHT TIME BASE	C010	CARPENTERS	KE10H Indust/Site Srvs Steelworkers	Linear	73.71	Hours
Factors 82.88 h 0.88934 [SYS 061400] .88934200 - Svsstem							
	750 STRAIGHT TIME BASE	C020	ELECTRICIANS	KE10H Indust/Site Srvs Steelworkers	Linear	44.42	Hours
Factors 49.95 h 0.88934 [SYS 061400] .88934200 - Svsstem							
	750 STRAIGHT TIME BASE	C020	ELECTRICIANS	KE10H Indust/Site Srvs Steelworkers	Linear	88.22	Hours
Factors 99.2 hrs. 0.88934 [SYS 061400] .88934200 - Svsstem							
	750 STRAIGHT TIME BASE	C070	PAINTERS	KE10H Indust/Site Srvs Steelworkers	Linear	44.42	Hours
Factors 49.95 hrs 0.88934 [SYS 061400] .88934200 - Svsstem							
	750 STRAIGHT TIME BASE	C080	PLUMBERS AND PIPEFITTERS	KE10H Indust/Site Srvs Steelworkers	Linear	44.42	Hours
Factors 49.95 hrs 0.88934 [SYS 061400] .88934200 - Svsstem							
	750 STRAIGHT TIME BASE	C090	STRUCTURAL AND METAL WORKE	KE10H Indust/Site Srvs Steelworkers	Linear	44.42	Hours
Factors 49.95 h 0.88934 [SYS 061400] .88934200 - Svsstem							
	751 OVERTIME BASE & PRE.	C010	CARPENTERS	KE10H Indust/Site Srvs Steelworkers	Linear	3.62	Hours
Factors 4.07 h 0.88934 [SYS 061400] .88934200 - Svsstem							

WBS No: 1EBB040104
 Activity ID: 1EXXX41414

Rockv Flats Closure Project
Baseline Cost and Basis of Estimate

Project: Baseline Devl
 WBS Filter: 1EBB
 Activity Filter: *

Starts In FY *

751	OVERTIME BASE & PRE.	C020	ELECTRICIANS	KE10H	Indust/Site Srvs Steelworkers	Linear	4.61	Hours
							0.88934	[SYS 061400] .88934200 - Svsystem
<i>Factors</i> 5.18 h								
751	OVERTIME BASE & PRE.	C020	ELECTRICIANS	KE10H	Indust/Site Srvs Steelworkers	Linear	2.30	Hours
							0.88934	[SYS 061400] .88934200 - Svsystem
<i>Factors</i> 2.59 h								
751	OVERTIME BASE & PRE.	C070	PAINTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	2.30	Hours
							0.88934	[SYS 061400] .88934200 - Svsystem
<i>Factors</i> 2.59 h								
751	OVERTIME BASE & PRE.	C080	PLUMBERS AND PIPEFITTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	2.30	Hours
							0.88934	[SYS 061400] .88934200 - Svsystem
<i>Factors</i> 2.59 h								
751	OVERTIME BASE & PRE.	C090	STRUCTURAL AND METAL WORKE	KE10H	Indust/Site Srvs Steelworkers	Linear	2.30	Hours
							0.88934	[SYS 061400] .88934200 - Svsystem
<i>Factors</i> 2.59 h								
A5C	SUPPLIES	0000	NONE	C220S	Utility Operations	Linear	4.059.14	Dollars
							0.88934	[SYS 061400] .88934200 - Svsystem
<i>Factors</i> 4496.76 d 1.015 -- FY00 Escalation --								
A5T	TAXES	0000	NONE	C220S	Utility Operations	Linear	146.23	Dollars
							0.88934	[SYS 061400] .88934200 - Svsystem
<i>Factors</i> 162 dollars 1.015 -- FY00 Escalation --								
							0.88934	[SYS 061400] .88934200 - Svsystem

Line Item SYS - Contingency And Escalation

BOE

Resources

Cost Element	Skill	Department	Curve	Quantity	Units
CON CONTINGENCY	0000 NONE	ZDEPT No Department	Linear	5.516.79	Dollars
<i>Factors</i> 5516.79 Dollars					
ESC ESCALATION	0000 NONE	ZDEPT No Department	Linear	2.248.97	Dollars
<i>Factors</i> 2248.97 Dollars					

Activity ID: 1EXXX41424 Description: Water Plant/Dist Sys Prev Mtce FY04

Cost Risk 2 Schedule Risk 1

Line Item	Description	Quantity	Units	BOE Type	Labor Hours/Unit	Labor Hours Total	Labor Cost Total	Materials/ Sub Cost	Contingency & Escalation	Total Prime Cost	Burden Cost	Total Cost
100	Preventive Maintenance	1.00	each	HC	420	419	9,389	0	0	9,389	3,267	12,656
SYS	Contingency And Escalation	1.00	ea	EE	0	0	0	0	6,770	6,770	0	6,770
Total for Activity 1EXXX41424:						419	9,389	0	6,770	16,159	3,267	19,426

Line Item 100 - Preventive Maintenance

BOE

Historical Data Source -Initial estimate is taken from FY 98Basis Of Estimate Tool(BEST) as modified by the RFCSS proposal.
 Item Desc -Preventive maintenance.
 Breakdown of Historical Data:
 Item - This activity addresses basic preventive maintenance needs at a level necessary and sufficient to maintain safe and compliant operation.
 Unit Cost - 473 hrs. \$0 Materials/SubCosts
 Unit Cost Adjustment factor - FY 99 budget is used as the base year. FY00 thru 05 are adjusted based on the D&D schedule.
 Revised Unit Cost - same as FY00
 Basis for adjustment -None
 The Engineering, Planning, Health & Safety and Environmental support functions for maintenance efforts are contained in WAD 025.
 This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

Resources

Cost Element	Skill	Department	Curve	Quantity	Units			
750 STRAIGHT TIME BASE	C080 PLUMBERS AND PIPEFITTERS	KE10H Indust/Site Srvs Steelworkers	Linear	311.27	Hours			
<i>Factors</i> 350 hrs.								
							0.88934	[SYS 061400] .88934200 - Svsystem
750 STRAIGHT TIME BASE	C080 PLUMBERS AND PIPEFITTERS	KE10H Indust/Site Srvs Steelworkers	Linear	88.85	Hours			
<i>Factors</i> 99.9 hr								
							0.88934	[SYS 061400] .88934200 - System

WBS No: 1EBB040104
 Activity ID: 1EXXX41424

Rockv Flats Closure Project
Baseline Cost and Basis of Estimate

Project: Baseline Devl
 WBS Filter: 1EBB
 Activity Filter: *

Starts In FY *

751	OVERTIME BASE & PRE.	C080	PLUMBERS AND PIPEFITTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	15.68	Hours
							0.88934	[SYS 061400] .88934200 - Svstem
							4.61	Hours
							0.88934	[SYS 061400] .88934200 - Svstem

Line Item SYS - Contingency And Escalation

BOE

Resources

Cost Element	Skill	Department	Curve	Quantity	Units
CON CONTINGENCY	0000 NONE	ZDEPT No Department	Linear	4.809.53	Dollars
Factors 4809.53 Dollars					
ESC ESCALATION	0000 NONE	ZDEPT No Department	Linear	1.960.65	Dollars
Factors 1960.65 Dollars					

Activity ID: 1EXXX41434 Description: Water Plant/Dist Sys Rout Mtce FY04

Cost Risk 2 Schedule Risk 1

Line Item	Description	Quantity	Units	BOE Type	Labor Hours/Unit	Labor Hours Total	Labor Cost Total	Materials/ Sub Cost	Contingency & Escalation	Total Prime Cost	Burden Cost	Total Cost
100	Routine Maintenance	1.00	each	HC	203	202	4.230	427	0	4.657	1.472	6.129
SYS	Contingency And Escalation	1.00	lea	EE	0	0	0	0	3.279	3.279	0	3.279
Total for Activity 1EXXX41434:						202	4.230	427	3.279	7.935	1.472	9.407

Line Item 100 - Routine Maintenance

BOE

Historical Data Source - Initial estimate is taken from FY 98Basis Of Estimate Tool(BEST) as modified by the RFCSS proposal.
 Item Desc -Routine maintenance.
 Breakdown of Historical Data:
 Item - This activity addresses basic routine maintenance needs at a level necessary and sufficient to maintain safe and compliant operation.
 Unit Cost - 228 hrs. \$459 Materials/ Sub Cost
 Unit Cost Adjustment factor - FY 99 budget is used as the base year. FY00 thru 05 are adjusted based on the D&D schedule.
 Revised Unit Cost -same as FY00
 Basis for adjustment -None
 The Engineering, Planning, Health & Safety and Environmental support functions for maintenance efforts are contained in WAD 025.
 This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

Resources

Cost Element	Skill	Department	Curve	Quantity	Units	
750 STRAIGHT TIME BASE	C010 CARPENTERS	KE10H Indust/Site Srvs Steelworkers	Linear	42.69	Hours	
Factors 48 h						
0.88934 [SYS 061400] .88934200 - Svstem						
750 STRAIGHT TIME BASE	C020 ELECTRICIANS	KE10H Indust/Site Srvs Steelworkers	Linear	26.68	Hours	
Factors 30 h						
0.88934 [SYS 061400] .88934200 - Svstem						
750 STRAIGHT TIME BASE	C020 ELECTRICIANS	KE10H Indust/Site Srvs Steelworkers	Linear	53.36	Hours	
Factors 60 h						
0.88934 [SYS 061400] .88934200 - Svstem						
750 STRAIGHT TIME BASE	C070 PAINTERS	KE10H Indust/Site Srvs Steelworkers	Linear	26.68	Hours	
Factors 30 h						
0.88934 [SYS 061400] .88934200 - Svstem						
750 STRAIGHT TIME BASE	C080 PLUMBERS AND PIPEFITTERS	KE10H Indust/Site Srvs Steelworkers	Linear	26.68	Hours	
Factors 30 h						
0.88934 [SYS 061400] .88934200 - Svstem						
750 STRAIGHT TIME BASE	C090 STRUCTURAL AND METAL WORKE	KE10H Indust/Site Srvs Steelworkers	Linear	26.68	Hours	
Factors 30 h						
0.88934 [SYS 061400] .88934200 - Svstem						
A5C SUPPLIES	0000 NONE	C220S Utility Operations	Linear	414.15	Dollars	
Factors 458.8 d 1.015 -- FY00 Escalation --						
0.88934 [SYS 061400] .88934200 - Svstem						

WBS No: 1EBB040104
 Activity ID: 1EXXX41434

Rockv Flats Closure Project
Baseline Cost and Basis of Estimate

Project Baseline Devl
 WBS Filter 1EBB
 Activity Filter *

Starts In FY *

A5T	TAXES	0000	NONE	C220S	Utility Operations	Linear	14.44	Dollars
Factors		16	Dollars	1.015	-- FY00 Escalation --			

0.88934 [SYS 061400] .88934200 - System

Line Item SYS - Contingency And Escalation

BOE

Resources

Cost Element	Skill	Department	Curve	Quantity	Units
CON CONTINGENCY	0000 NONE	ZDEPT No Department	Linear	2,329.07	Dollars
Factors 2329.07 Dollars					
ESC ESCALATION	0000 NONE	ZDEPT No Department	Linear	949.46	Dollars
Factors 949.465 Dollars					

WBS No: 1EBB040105 Title: ER Decon Facilities

Activity ID: 1EBB415100 Description: Conduct Decon Ops FY00

Cost Risk 1 Schedule Risk 2

Line Item	Description	Quantity	Units	BOE Type	Labor Hours/Unit	Labor Hours Total	Labor Cost Total	Materials/ Sub Cost	Contingency & Escalation	Total Prime Cost	Burden Cost	Total Cost
10	Conduct Decon	1.00	each	EE	145	145	3,906	21,340	0	25,246	1,906	27,152
Total for Activity 1EBB415100:						145	3,906	21,340	0	25,246	1,906	27,152

Line Item 10 - Conduct Decon

BOE

Historical Data Source:
 Detailed Wadlet Spending Variance Report

Item Desc:
 Project management, coordination, and oversight of decontamination activities. Labor for the decontamination of remediation activity equipment and for the maintenance of the decontamination facility. Support for the development of PREs and waste characterization activities. Support for minor maintenance of electrical systems. Support for RCRA and other forms of environmental compliance requirements. Compliance memorandums and modifications to compliance documents may be required. Engineering support for minor changes in system configuration or maintenance repairs. Support for the maintenance, calibration, and control of radiological instrumentation. Support for Radiological screening of materials for release or storage. HSS support is frequently utilized for this activity. However, some tasks require that qualified RCTs perform surveys.

Breakdown of Historical Data:
 Item:
 1) Annual labor for .22 FTE Water Mgmt & Treatment Environmental Engineer Units: 408 hours Unit Cost:
 2) Annual subcontract cost for 1 Lot decontamination facility \$110,514
 3) Annual labor for .059 FTE Radiological Engineer Units: 108 hours Unit Cost:
 4) Annual labor for .022 FTE Leased Labor Maintenance/SOE's Electrician Units: 40 hours Unit Cost:
 5) Annual subcontract cost for 1 Lot compliance services \$3,132
 6) Annual subcontract cost for 1 Lot Engineering services \$2,000
 7) Annual labor for .006 FTE Water Mgmt & Treatment A5H (Health Physics Instrumentation) Units: 12 hours Unit Cost:
 8) Annual labor for .022 FTE Leased Labor RCT's Units: 40 hours Unit Cost:
 9) Annual labor for .017 FTE Safety Units: 32 hours Unit Cost:
 10) Annual Subcontract cost Units: 404 dollars Unit Cost:
 11) Annual subcontract cost Quality Units: 558 dollars Unit Cost:
 12) Annual labor for .07 FTE records management (R211S) Units: 124.5 Hours Unit Cost:
 RFCSS Program Compliance

Unit Cost Adjustment Factor:

WBS No: 1EBB040105
 Activity ID: 1EBB415100

Rockv Flats Closure Project
Baseline Cost and Basis of Estimate

Project: Baseline Devl
 WBS Filter: 1EBB
 Activity Filter: *

Starts In FY *

1)NA
 2)NA
 3)NA
 4)NA
 5)NA
 6)NA
 7)NA
 8)NA
 9)NA
 10)NA
 11)NA
 12)NA

Basis for adjustment:
 1)The April status report shows that 246 hours were charged over 7 months. Estimate for FY99: 34 hours per month x 12 months = 408 hours
 2)The April budget report indicates A5H costs of \$268,000. However, the report incorrectly reflects the actual costs of operations at the decontamination facility. Actual charges are approximately \$100,000 for 7 months of operations. However, funds were spent in a front loaded manner.

Estimate: Funding is front loaded due to the lack of projects in the beginning of the fiscal year to bill projectized funding. Funding for last fiscal year will similar to the need for funding for this fiscal year. Also, health and safety specialist support is required on an as needed basis.

3)NA
 4)No hours were spent for this function in FY98. However, funding is required due to the general need for support in the electrical troubleshooting area.
 5)Minimal support is required for the completion of document modifications, document reviews and technical memos. 9 hours/quarter x \$87/hr X 4 quarters = \$3132
 6)Minimal charges were incurred in FY98. \$375 were spent through 7 months in FY98.
 7)Historically, only minimal support is required for this function. 6 instruments x 2 hours per year = 12 hours
 8)NA
 9)NA
 10)NA
 11)NA
 12)NA

This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

Resources

Cost Element	Skill	Department	Curve	Quantity	Units
750 STRAIGHT TIME BASE	C020 ELECTRICIANS	KE10H Indust/Site Svcs Steelworkers	Linear	7.60	Hours
Factors 40 hours	0.36123 May 2000 Earned Value Factor		0.52618 [SYS 061300]	0.526183 - Target	
750 STRAIGHT TIME BASE	C120 D&D SKILLED TRADES	KE10H Indust/Site Svcs Steelworkers	Linear	20.53	Hours
Factors 108 9 hrs/month	0.36123 May 2000 Earned Value Factor		0.52618 [SYS 061300]	0.526183 - Target	
750 STRAIGHT TIME BASE	E050 ENVIRONMENTAL ENGINEERS	C222S Water System Operations	Linear	77.55	Hours
Factors 408 34 hours/month	0.36123 May 2000 Earned Value Factor		0.52618 [SYS 061300]	0.526183 - Target	
750 STRAIGHT TIME BASE	E120 SAFETY ENGINEERS	C222S Water System Operations	Linear	6.08	Hours
Factors 32 hours	0.36123 May 2000 Earned Value Factor		0.52618 [SYS 061300]	0.526183 - Target	
750 STRAIGHT TIME BASE	P050 COMPLIANCE INSPECTORS	C222S Water System Operations	Linear	23.66	Hours
Factors 124.5 Hours	0.36123 May 2000 Earned Value Factor		0.52618 [SYS 061300]	0.526183 - Target	
750 STRAIGHT TIME BASE	T050 RADIATION CONTROL TECHNOLOGI	KE10H Indust/Site Svcs Steelworkers	Linear	7.60	Hours
Factors 40 hours	0.36123 May 2000 Earned Value Factor		0.52618 [SYS 061300]	0.526183 - Target	
750 STRAIGHT TIME BASE	T070 MAINT TECHS (INSTRUMENT TEC	KE10H Indust/Site Svcs Steelworkers	Linear	2.28	Hours
Factors 12 hours	0.36123 May 2000 Earned Value Factor		0.52618 [SYS 061300]	0.526183 - Target	
A5H SUBCONTRACTED SRVS	0000 NONE	C222S Water System Operations	Linear	608.91	Dollars
Factors 1.02283 -- FY00 Escalation --	3132 DOLLARS	0.36123 May 2000 Earned Value Factor		0.52618 [SYS 061300]	0.526183 - Target

WBS No: 1EBB040105
 Activity ID: 1EBB415100

Rockv Flats Closure Project
Baseline Cost and Basis of Estimate

Project: Baseline Devl
 WBS Filter: 1EBB
 Activity Filter: *
 Starts In FY: *

A5H	SUBCONTRACTED SRVS	0000	NONE	C222S	Water System Operations	Linear	388.83	Dollars
<i>Factors</i>		2000	dollars	1.02283	-- FY00 Escalation --	0.36123	May 2000	Earned Value Factor
							0.52618	[SYS 061300] 0.526183 - Target
A5H	SUBCONTRACTED SRVS	C120	D&D SKILLED TRADES	KE10H	Indust/Site Srvs Steelworkers	Linear	20.154.94	Dollars
<i>Factors</i>		103670	Decon Tech 2000hrs @ \$50/hr:H&S	1.02283	-- FY00 Escalation --	0.36123	May 2000	Earned Value Factor
							0.52618	[SYS 061300] 0.526183 - Target
A5H	SUBCONTRACTED SRVS	E110	QUALITY CONTROL ENGINEERS	C222S	Water System Operations	Linear	78.54	Dollars
<i>Factors</i>		1.02283	-- FY00 Escalation --	404	dollars	0.36123	May 2000	Earned Value Factor
							0.52618	[SYS 061300] 0.526183 - Target
A5H	SUBCONTRACTED SRVS	G010	ADMINISTRATIVE ASSISTANTS	C222S	Water System Operations	Linear	108.48	Dollars
<i>Factors</i>		1.02283	-- FY00 Escalation --	558	dollars	0.36123	May 2000	Earned Value Factor
							0.52618	[SYS 061300] 0.526183 - Target

Activity ID: 1EBB415200 Description: Conduct Decon Ops FY01

Cost Risk 1 Schedule Risk 2

Line Item	Description	Quantity	Units	BOE Type	Labor Hours/Unit	Labor Hours Total	Labor Cost Total	Materials/ Sub Cost	Contingency & Escalation	Total Prime Cost	Burden Cost	Total Cost
SYS	Contingency And Escalation	1.00	ea	EE	0	0	0	0	6.070	6.070	0	6.070
WMEB080200 - 1	Conduct Decon	1.00	each	EE	0	0	0	28.893	0	28.893	0	28.893
WMEB080205 - 1	Conduct Decon	1.00	each	EE	0	0	0	28.892	0	28.892	0	28.892
WMEB080210 - 1	Conduct Decon	1.00	each	EE	0	0	0	28.892	0	28.892	0	28.892
WMEB080215 - 1	Conduct Decon	1.00	each	EE	0	0	0	28.892	0	28.892	0	28.892
Total for Activity 1EBB415200:						0	0	115.570	6.070	121.640	0	121.640

Line Item SYS - Contingency And Escalation

BOE

Resources

Cost Element	Skill	Department	Curve	Quantity	Units
CON CONTINGENCY	0000 NONE	ZDEPT No Department	Linear	3.640.10	Dollars
<i>Factors</i>		3640.1	Dollars		
ESC ESCALATION	0000 NONE	ZDEPT No Department	Linear	2.430.17	Dollars
<i>Factors</i>		2430.17	Dollars		

Line Item WMEB080200 - 10 - Conduct Decon

BOE

The resources required for Conduct Decon Ops are the following:

- 1) RFCSS Manager (1)- Responsible for the operation, including safety issues, budget, coordination with projects, and decisions on procedure. (480 hours)
- 2) RTG Site Manager (1)- Responsible for oversight of activities, coordination between RTG employees and RFCSS, and substituting for employees who are absent. (120 hours)
- 3) Health and Safety Specialists (2)- Responsible for all health and safety issues for both rad and non-rad including safety procedure preparation, document maintenance, maintenance of training requirements and records, and monitoring and oversight of activities. (480 hours)
- 4) Integrated Work Control Planning Coordinator (1)- Responsible for all procedure writing and coordination both between companies and companies and the union. (180 hours)
- 5) Chemist/Sampler (1)- Collects and sends off for analysis both rad and non rad samples taken as required per procedure. (60 hours)
- 6) Decontamination Technicians (2)- Perform all decontamination activities including maintenance of decontamination areas and equipment. (480 hours)
- 7) Other Direct Costs - Equipment maintenance and replacement. \$5,000.00 per quarter

This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

WBS No: 1EBB040105
 Activity ID: 1EBB415200

Rockv Flats Closure Project
Baseline Cost and Basis of Estimate

Project: Baseline Devl
 WBS Filter: 1EBB
 Activity Filter: *

Starts In FY *

Resources	Cost Element	Skill	Department	Curve	Quantity	Units
	A5H SUBCONTRACTED SRVS	P080 HEALTH PHYSICISTS	C222S Water System Operations	Linear	18.112.87	Dollars
<i>Factors</i> 19912 DOLLARS 1.02283 -- FY00 Escalation --						
	A5H SUBCONTRACTED SRVS	S030 GEOLOGISTS	C222S Water System Operations	Linear	10.780.21	Dollars
<i>Factors</i> 11851 dollars 1.02283 -- FY00 Escalation --						
					0.88934	[SYS 061400] .88934200 - System
					0.88934	[SYS 061400] .88934200 - System

Line Item WMEB080205 - 10 - Conduct Decon

BOE
 The resources required for Conduct Decon Ops are the following:

- 1) RMRS Manager (1)- Responsible for the operation, including safety issues, budget, coordination with projects, and decisions on procedure.
One full time (480 hours)
- 2) RTG Site Manager (1)- Responsible for oversight of activities, coordination between RTG employees and RMRS, and substituting for employees who are absent.
One quarter time (120 hours)
- 3) Health and Safety Specialists (2)- Responsible for all health and safety issues for both rad and non-rad including safety procedure preparation, document maintenance, maintenance of training requirements and records, and monitoring and oversight of activities.
Two half time (480 hours)
- 4) Integrated Work Control Planning Coordinator (1)- Responsible for all procedure writing and coordination both between companies and companies and the union.
Three eighths time (180 hours)
- 5) Chemist/Sampler (1)- Collects and sends off for analysis both rad and non rad samples taken as required per procedure.
One eighth time (60 hours)
- 6) Decontamination Technicians (2)- Perform all decontamination activities including maintenance of decontamination areas and equipment.
Two half time (480 hours)
- 7) Other Direct Costs - Equipment maintenance and replacement.
\$5,000.00 per quarter

This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

Resources	Cost Element	Skill	Department	Curve	Quantity	Units
	A5H SUBCONTRACTED SRVS	P080 HEALTH PHYSICISTS	C222S Water System Operations	Linear	18.112.87	Dollars
<i>Factors</i> 19912 DOLLARS 1.02283 -- FY00 Escalation --						
	A5H SUBCONTRACTED SRVS	S030 GEOLOGISTS	C222S Water System Operations	Linear	10.779.30	Dollars
<i>Factors</i> 11850 DOLLARS 1.02283 -- FY00 Escalation --						
					0.88934	[SYS 061400] .88934200 - System
					0.88934	[SYS 061400] .88934200 - System

Line Item WMEB080210 - 10 - Conduct Decon

BOE
 The resources required for Conduct Decon Ops are the following:

- 1) RMRS Manager (1)- Responsible for the operation, including safety issues, budget, coordination with projects, and decisions on procedure.
One full time (480 hours)
- 2) RTG Site Manager (1)- Responsible for oversight of activities, coordination between RTG employees and RMRS, and substituting for employees who are absent.
One quarter time (120 hours)
- 3) Health and Safety Specialists (2)- Responsible for all health and safety issues for both rad and non-rad including safety procedure preparation, document maintenance, maintenance of training requirements and records, and monitoring and oversight of activities.
Two half time (480 hours)
- 4) Integrated Work Control Planning Coordinator (1)- Responsible for all procedure writing and coordination both between companies and companies and the union.
Three eighths time (180 hours)
- 5) Chemist/Sampler (1)- Collects and sends off for analysis both rad and non rad samples taken as required per procedure.
One eighth time (60 hours)

WBS No: 1EBB040105
 Activity ID: 1EBB415200

Rockv Flats Closure Project
Baseline Cost and Basis of Estimate

Project: Baseline Devl
 WBS Filter: 1EBB
 Activity Filter: *

Starts In FY *

6) Decontamination Technicians (2)- Perform all decontamination activities including maintenance of decontamination areas and equipment.
 Two half time (480 hours)
 7) Other Direct Costs - Equipment maintenance and replacement.
 \$5,000.00 per quarter
 This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

Resources		Cost Element	Skill	Department	Curve	Quantity	Units
A5H	SUBCONTRACTED SRVS	P080	HEALTH PHYSICISTS	C222S	Water System Operations	Linear	18.112.87 Dollars
Factors		19912 DOLLARS	1.02283 -- FY00 Escalation --		0.88934 [SYS 061400]	.88934200 - System	
A5H	SUBCONTRACTED SRVS	S030	GEOLOGISTS	C222S	Water System Operations	Linear	10.779.30 Dollars
Factors		11850 dollars	1.02283 -- FY00 Escalation --		0.88934 [SYS 061400]	.88934200 - System	

Line Item WMEB080215 - 10 - Conduct Decon

BOE
 The resources required for Conduct Decon Ops are the following:
 1) RMRS Manager (1)- Responsible for the operation, including safety issues, budget, coordination with projects, and decisions on procedure.
 One full time (480 hours)
 2) RTG Site Manager (1)- Responsible for oversight of activities, coordination between RTG employees and RMRS, and substituting for employees who are absent.
 One quarter time (120 hours)
 3) Health and Safety Specialists (2)- Responsible for all health and safety issues for both rad and non-rad including safety procedure preparation, document maintenance, maintenance of training requirements and records, and monitoring and oversight of activities.
 Two half time (480 hours)
 4) Integrated Work Control Planning Coordinator (1)- Responsible for all procedure writing and coordination both between companies and companies and the union.
 Three eighths time (180 hours)
 5) Chemist/Sampler (1)- Collects and sends off for analysis both rad and non rad samples taken as required per procedure.
 One eighth time (60 hours)
 6) Decontamination Technicians (2)- Perform all decontamination activities including maintenance of decontamination areas and equipment.
 Two half time (480 hours)
 7) Other Direct Costs - Equipment maintenance and replacement.
 \$5,000.00 per quarter
 This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

Resources		Cost Element	Skill	Department	Curve	Quantity	Units
A5H	SUBCONTRACTED SRVS	P080	HEALTH PHYSICISTS	C222S	Water System Operations	Linear	18.112.87 Dollars
Factors		19912 DOLLARS	1.02283 -- FY00 Escalation --		0.88934 [SYS 061400]	.88934200 - System	
A5H	SUBCONTRACTED SRVS	S030	GEOLOGISTS	C222S	Water System Operations	Linear	10.779.30 Dollars
Factors		11850 dollars	1.02283 -- FY00 Escalation --		0.88934 [SYS 061400]	.88934200 - System	

Activity ID: 1EBB415300 Description: Conduct Decon Ops FY02

Cost Risk 1 Schedule Risk 2

Line Item	Description	Quantity	Units	BOE Type	Labor Hours/Unit	Labor Hours Total	Labor Cost Total	Materials/ Sub Cost	Contingency & Escalation	Total Prime Cost	Burden Cost	Total Cost
SYS	Contingency And Escalation	1.00	ea	EE	0	0	0	0	17.084	17.084	0	17.084
WMEB080200 - 1	Conduct Decon	1.00	each	EE	0	0	0	28.893	0	28.893	0	28.893
WMEB080205 - 1	Conduct Decon	1.00	each	EE	0	0	0	28.892	0	28.892	0	28.892
WMEB080210 - 1	Conduct Decon	1.00	each	EE	0	0	0	28.892	0	28.892	0	28.892
WMEB080215 - 1	Conduct Decon	1.00	each	EE	0	0	0	28.892	0	28.892	0	28.892

WBS No: 1EBB040105
 Activity ID: 1EBB415300

Rockv Flats Closure Project
Baseline Cost and Basis of Estimate

Project Baseline Devl
 WBS Filter 1EBB
 Activity Filter *

Starts In FY *

Total for Activity 1EBB415300:

0	0	115.570	17.084	132.654	0	132.654
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Line Item SYS - Contingency And Escalation

BOE

Resources	Cost Element	Skill	Department	Curve	Quantity	Units
CON	CONTINGENCY	0000 NONE	ZDEPT No Department	Linear	11.683.60	Dollars
<i>Factors</i> 11683.6 Dollars						
ESC	ESCALATION	0000 NONE	ZDEPT No Department	Linear	5.400.73	Dollars
<i>Factors</i> 5400.73 Dollars						

Line Item WMEB080200 - 10 - Conduct Decon

BOE

The resources required for Conduct Decon Ops are the following:

- 1) RFCSS Manager (1)- Responsible for the operation, including safety issues, budget, coordination with projects, and decisions on procedure.
(480 hours)
- 2) RTG Site Manager (1)- Responsible for oversight of activities, coordination between RTG employees and RFCSS, and substituting for employees who are absent.
(120 hours)
- 3) Health and Safety Specialists (2)- Responsible for all health and safety issues for both rad and non-rad including safety procedure preparation, document maintenance, maintenance of training requirements and records,and monitoring and oversight of activities.
(480 hours)
- 4) Integrated Work Control Planning Coordinator (1)- Responsible for all procedure writing and coordination both between companies and companies and the union.
(180 hours)
- 5) Chemist/Sampler (1)- Collects and sends off for analysis both rad and non rad samples taken as required per procedure.
(60 hours)
- 6) Decontamination Technicians (2)- Perform all decontamination activities including maintenance of decontamination areas and equipment.
(480 hours)
- 7) Other Direct Costs - Equipment maintenance and replacement.
\$5,000.00 per quarter

This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

Resources

Resources	Cost Element	Skill	Department	Curve	Quantity	Units
A5H	SUBCONTRACTED SRVS	P080 HEALTH PHYSICISTS	C222S Water System Operations	Linear	18.112.87	Dollars
<i>Factors</i> 19912 DOLLARS 1.02283 -- FY00 Escalation --						
				0.88934	[SYS 061400]	.88934200 - System
A5H	SUBCONTRACTED SRVS	S030 GEOLOGISTS	C222S Water System Operations	Linear	10.780.21	Dollars
<i>Factors</i> 11851 dollars 1.02283 -- FY00 Escalation --						
				0.88934	[SYS 061400]	.88934200 - System

Line Item WMEB080205 - 10 - Conduct Decon

BOE

The resources required for Conduct Decon Ops are the following:

- 1) Manager (1)- Responsible for the operation, including safety issues, budget, coordination with projects, and decisions on procedure.
One full time (480 hours)
- 2) RTG Site Manager (1)- Responsible for oversight of activities, coordination between RTG employees and RFCSS, and substituting for employees who are absent.
One quarter time (120 hours)
- 3) Health and Safety Specialists (2)- Responsible for all health and safety issues for both rad and non-rad including safety procedure preparation, document maintenance, maintenance of training requirements and records,and monitoring and oversight of activities.
Two half time (480 hours)
- 4) Integrated Work Control Planning Coordinator (1)- Responsible for all procedure writing and coordination both between companies and companies and the union.

WBS No: 1EBB040105
 Activity ID: 1EBB415300

Rockv Flats Closure Project
Baseline Cost and Basis of Estimate

Project Baseline Devl
 WBS Filter 1EBB
 Activity Filter *

Starts In FY *

Three eighths time (180 hours)
 5) Chemist/Sampler (1)- Collects and sends off for analysis both rad and non rad samples taken as required per procedure.
 One eighth time (60 hours)
 6) Decontamination Technicians (2)- Perform all decontamination activities including maintenance of decontamination areas and equipment.
 Two half time (480 hours)
 7) Other Direct Costs - Equipment maintenance and replacement.
 \$5,000.00 per quarter
 This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

Resources

Cost Element	Skill	Department	Curve	Quantity	Units
A5H SUBCONTRACTED SRVS	P080 HEALTH PHYSICISTS	C222S Water Svstem Operations	Linear	18.112.87	Dollars
Factors 19912 DOLLARS 1.02283 -- FY00 Escalation --					
0.88934 [SYS 061400] .88934200 - Svstem					
A5H SUBCONTRACTED SRVS	S030 GEOLOGISTS	C222S Water Svstem Operations	Linear	10.779.30	Dollars
Factors 11850 dollars 1.02283 -- FY00 Escalation --					
0.88934 [SYS 061400] .88934200 - Svstem					

Line Item WMEB080210 - 10 - Conduct Decon

BOE

The resources required for Conduct Decon Ops are the following:
 1) Manager (1)- Responsible for the operation, including safety issues, budget, coordination with projects, and decisions on procedure.
 One full time (480 hours)
 2) RTG Site Manager (1)- Responsible for oversight of activities, coordination between RTG employees and RFCSS, and substituting for employees who are absent.
 One quarter time (120 hours)
 3) Health and Safety Specialists (2)- Responsible for all health and safety issues for both rad and non-rad including safety procedure preparation, document maintenance, maintenance of training requirements and records, and monitoring and oversight of activities.
 Two half time (480 hours)
 4) Integrated Work Control Planning Coordinator (1)- Responsible for all procedure writing and coordination both between companies and companies and the union.
 Three eighths time (180 hours)
 5) Chemist/Sampler (1)- Collects and sends off for analysis both rad and non rad samples taken as required per procedure.
 One eighth time (60 hours)
 6) Decontamination Technicians (2)- Perform all decontamination activities including maintenance of decontamination areas and equipment.
 Two half time (480 hours)
 7) Other Direct Costs - Equipment maintenance and replacement.
 \$5,000.00 per quarter
 This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

Resources

Cost Element	Skill	Department	Curve	Quantity	Units
A5H SUBCONTRACTED SRVS	P080 HEALTH PHYSICISTS	C222S Water Svstem Operations	Linear	18.112.87	Dollars
Factors 19912 DOLLARS 1.02283 -- FY00 Escalation --					
0.88934 [SYS 061400] .88934200 - Svstem					
A5H SUBCONTRACTED SRVS	S030 GEOLOGISTS	C222S Water Svstem Operations	Linear	10.779.30	Dollars
Factors 11850 dollars 1.02283 -- FY00 Escalation --					
0.88934 [SYS 061400] .88934200 - Svstem					

Line Item WMEB080215 - 10 - Conduct Decon

BOE

The resources required for Conduct Decon Ops are the following:
 1) Manager (1)- Responsible for the operation, including safety issues, budget, coordination with projects, and decisions on procedure.
 One full time (480 hours)

WBS No: 1EBB040105
 Activity ID: 1EBB415300

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Project Baseline Devl
 WBS Filter 1EBB
 Activity Filter *

Starts In FY *

2) RTG Site Manager (1)- Responsible for oversight of activities, coordination between RTG employees and RFCSS, and substituting for employees who are absent.
 One quarter time (120 hours)

3) Health and Safety Specialists (2)- Responsible for all health and safety issues for both rad and non-rad including safety procedure preparation, document maintenance, maintenance of training requirements and records, and monitoring and oversight of activities.
 Two half time (480 hours)

4) Integrated Work Control Planning Coordinator (1)- Responsible for all procedure writing and coordination both between companies and companies and the union.
 Three eighths time (180 hours)

5) Chemist/Sampler (1)- Collects and sends off for analysis both rad and non rad samples taken as required per procedure.
 One eighth time (60 hours)

6) Decontamination Technicians (2)- Perform all decontamination activities including maintenance of decontamination areas and equipment.
 Two half time (480 hours)

7) Other Direct Costs - Equipment maintenance and replacement.
 \$5,000.00 per quarter

This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

Resources		Cost Element	Skill	Department	Curve	Quantity	Units
A5H	SUBCONTRACTED SRVS	P080	HEALTH PHYSICISTS	C222S	Water System Operations	Linear	18.112.87 Dollars
Factors		19912 DOLLARS	1.02283 -- FY00 Escalation --				
A5H	SUBCONTRACTED SRVS	S030	GEOLOGISTS	C222S	Water System Operations	Linear	10.779.30 Dollars
Factors		11850 dollars	1.02283 -- FY00 Escalation --				

0.88934 [SYS 061400] .88934200 - System

Activity ID: 1EBB415400 Description: Conduct Decon Ops FY03

Cost Risk 1 Schedule Risk 2

Line Item	Description	Quantity	Units	BOE Type	Labor Hours/Unit	Labor Hours Total	Labor Cost Total	Materials/ Sub Cost	Contingency & Escalation	Total Prime Cost	Burden Cost	Total Cost
SYS	Contingency And Escalation	1.00	ea	EE	0	0	0	0	31.701	31.701	0	31.701
WMEB080200 - 1	Conduct Decon	1.00	each	EE	0	0	0	28.893	0	28.893	0	28.893
WMEB080205 - 1	Conduct Decon	1.00	each	EE	0	0	0	28.892	0	28.892	0	28.892
WMEB080210 - 1	Conduct Decon	1.00	each	EE	0	0	0	28.892	0	28.892	0	28.892
WMEB080215 - 1	Conduct Decon	1.00	each	EE	0	0	0	28.892	0	28.892	0	28.892
Total for Activity 1EBB415400:						0	0	115.570	31.701	147.270	0	147.270

Line Item SYS - Contingency And Escalation

BOE

Resources		Cost Element	Skill	Department	Curve	Quantity	Units
CON	CONTINGENCY	0000	NONE	ZDEPT	No Department	Linear	22.838.06 Dollars
Factors		22838.1 Dollars					
ESC	ESCALATION	0000	NONE	ZDEPT	No Department	Linear	8.862.48 Dollars
Factors		8862.48 Dollars					

Line Item WMEB080200 - 10 - Conduct Decon

BOE

The resources required for Conduct Decon Ops are the following:

1) RFCSS Manager (1)- Responsible for the operation, including safety issues, budget, coordination with projects, and decisions on procedure.
 (480 hours)

2) RTG Site Manager (1)- Responsible for oversight of activities, coordination between RTG employees and RFCSS, and substituting for employees who are absent.
 (120 hours)

3) Health and Safety Specialists (2)- Responsible for all health and safety issues for both rad and non-rad including safety procedure preparation, document

WBS No: 1EBB040105
 Activity ID: 1EBB415400

Rockv Flats Closure Project
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Project: Baseline Devl
 WBS Filter: 1EBB
 Activity Filter: *

Starts In FY *

maintenance, maintenance of training requirements and records,and monitoring and oversight of activities.
 (480 hours)

4) Integrated Work Control Planning Coordinator (1)- Responsible for all procedure writing and coordination both between companies and companies and the union.
 (180 hours)

5) Chemist/Sampler (1)- Collects and sends off for analysis both rad and non rad samples taken as required per procedure.
 (60 hours)

6) Decontamination Technicians (2)- Perform all decontamination activities including maintenance of decontamination areas and equipment.
 (480 hours)

7) Other Direct Costs - Equipment maintenance and replacement.
 \$5,000.00 per quarter

This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

Resources

Cost Element		Skill		Department		Curve	Quantity	Units
A5H	SUBCONTRACTED SRVS	P080	HEALTH PHYSICISTS	C222S	Water System Operations	Linear	18.112.87	Dollars
<i>Factors</i> 19912 DOLLARS		1.02283 -- FY00 Escalation --						
						0.88934	[SYS 061400]	.88934200 - System
A5H	SUBCONTRACTED SRVS	S030	GEOLOGISTS	C222S	Water System Operations	Linear	10.780.21	Dollars
<i>Factors</i> 11851 dollars		1.02283 -- FY00 Escalation --						
						0.88934	[SYS 061400]	.88934200 - System

Line Item WMEB080205 - 10 - Conduct Decon

BOE

The resources required for Conduct Decon Ops are the following:

1) Manager (1)- Responsible for the operation, including safety issues, budget, coordination with projects, and decisions on procedure.
 One full time (480 hours)

2) RTG Site Manager (1)- Responsible for oversight of activities, coordination between RTG employees and RFCSS, and substituting for employees who are absent.
 One quarter time (120 hours)

3) Health and Safety Specialists (2)- Responsible for all health and safety issues for both rad and non-rad including safety procedure preparation, document maintenance, maintenance of training requirements and records,and monitoring and oversight of activities.
 Two half time (480 hours)

4) Integrated Work Control Planning Coordinator (1)- Responsible for all procedure writing and coordination both between companies and companies and the union.
 Three eighths time (180 hours)

5) Chemist/Sampler (1)- Collects and sends off for analysis both rad and non rad samples taken as required per procedure.
 One eighth time (60 hours)

6) Decontamination Technicians (2)- Perform all decontamination activities including maintenance of decontamination areas and equipment.
 Two half time (480 hours)

7) Other Direct Costs - Equipment maintenance and replacement.
 \$5,000.00 per quarter

This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

Resources

Cost Element		Skill		Department		Curve	Quantity	Units
A5H	SUBCONTRACTED SRVS	P080	HEALTH PHYSICISTS	C222S	Water System Operations	Linear	18.112.87	Dollars
<i>Factors</i> 19912 DOLLARS		1.02283 -- FY00 Escalation --						
						0.88934	[SYS 061400]	.88934200 - System
A5H	SUBCONTRACTED SRVS	S030	GEOLOGISTS	C222S	Water System Operations	Linear	10.779.30	Dollars
<i>Factors</i> 11850 dollars		1.02283 -- FY00 Escalation --						
						0.88934	[SYS 061400]	.88934200 - System

WBS No: 1EBB040105
 Activity ID: 1EBB415400

Rockv Flats Closure Project
Baseline Cost and Basis of Estimate

Project Baseline Devl
 WBS Filter 1EBB
 Activity Filter *

Starts In FY *

Line Item WMEB080210 - 10 - Conduct Decon

BOE The resources required for Conduct Decon Ops are the following:

- 1) Manager (1)- Responsible for the operation, including safety issues, budget, coordination with projects, and decisions on procedure.
One full time (480 hours)
- 2) RTG Site Manager (1)- Responsible for oversight of activities, coordination between RTG employees and RFCSS, and substituting for employees who are absent.
One quarter time (120 hours)
- 3) Health and Safety Specialists (2)- Responsible for all health and safety issues for both rad and non-rad including safety procedure preparation, document maintenance, maintenance of training requirements and records,and monitoring and oversight of activities.
Two half time (480 hours)
- 4) Integrated Work Control Planning Coordinator (1)- Responsible for all procedure writing and coordination both between companies and companies and the union.
Three eighths time (180 hours)
- 5) Chemist/Sampler (1)- Collects and sends off for analysis both rad and non rad samples taken as required per procedure.
One eighth time (60 hours)
- 6) Decontamination Technicians (2)- Perform all decontamination activities including maintenance of decontamination areas and equipment.
Two half time (480 hours)
- 7) Other Direct Costs - Equipment maintenance and replacement.
\$5,000.00 per quarter

This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

Resources		Cost Element	Skill	Department	Curve	Quantity	Units
A5H	SUBCONTRACTED SRVS	P080	HEALTH PHYSICISTS	C222S	Water Svstem Operations	Linear	18.112.87 Dollars
<i>Factors</i>		19912 DOLLARS	1.02283 -- FY00 Escalation --			0.88934 ISYS 0614001.88934200 - Svsstem	
A5H	SUBCONTRACTED SRVS	S030	GEOLOGISTS	C222S	Water Svstem Operations	Linear	10.779.30 Dollars
<i>Factors</i>		11850 dollars	1.02283 -- FY00 Escalation --			0.88934 ISYS 0614001.88934200 - Svsstem	

Line Item WMEB080215 - 10 - Conduct Decon

BOE The resources required for Conduct Decon Ops are the following:

- 1) Manager (1)- Responsible for the operation, including safety issues, budget, coordination with projects, and decisions on procedure.
One full time (480 hours)
- 2) RTG Site Manager (1)- Responsible for oversight of activities, coordination between RTG employees and RFCSS, and substituting for employees who are absent.
One quarter time (120 hours)
- 3) Health and Safety Specialists (2)- Responsible for all health and safety issues for both rad and non-rad including safety procedure preparation, document maintenance, maintenance of training requirements and records,and monitoring and oversight of activities.
Two half time (480 hours)
- 4) Integrated Work Control Planning Coordinator (1)- Responsible for all procedure writing and coordination both between companies and companies and the union.
Three eighths time (180 hours)
- 5) Chemist/Sampler (1)- Collects and sends off for analysis both rad and non rad samples taken as required per procedure.
One eighth time (60 hours)
- 6) Decontamination Technicians (2)- Perform all decontamination activities including maintenance of decontamination areas and equipment.
Two half time (480 hours)
- 7) Other Direct Costs - Equipment maintenance and replacement.
\$5,000.00 per quarter

WBS No: 1EBB040105
 Activity ID: 1EBB415400

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Project: Baseline Devl
 WBS Filter: 1EBB
 Activity Filter: *

Starts In FY *

This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

Resources	Cost Element	Skill	Department	Curve	Quantity	Units
	A5H SUBCONTRACTED SRVS	P080 HEALTH PHYSICISTS	C222S Water System Operations	Linear	18.112.87	Dollars
Factors 19912 DOLLARS 1.02283 -- FY00 Escalation --						
	A5H SUBCONTRACTED SRVS	S030 GEOLOGISTS	C222S Water System Operations	Linear	10.779.30	Dollars
Factors 11850 dollars 1.02283 -- FY00 Escalation --						

0.88934 [SYS 061400] .88934200 - System
 0.88934 [SYS 061400] .88934200 - System
 1 Schedule Risk 2

Activity ID: 1EBB415500 Description: Conduct Decon Ops FY04

Line Item	Description	Quantity	Units	BOE Type	Labor Hours/Unit	Labor Hours Total	Labor Cost Total	Materials/ Sub Cost	Contingency & Escalation	Total Prime Cost	Burden Cost	Total Cost
SYS	Contingency And Escalation	1.00	ea	EE	0	0	0	0	16.368	16.368	0	16.368
WMEB080200 - 1	Conduct Decon	1.00	each	EE	0	0	0	28.893	0	28.893	0	28.893
WMEB080205 - 1	Conduct Decon	1.00	each	EE	0	0	0	28.892	0	28.892	0	28.892
WMEB080210 - 1	Conduct Decon	1.00	each	EE	0	0	0	28.892	0	28.892	0	28.892
WMEB080215 - 1	Conduct Decon	1.00	each	EE	0	0	0	28.892	0	28.892	0	28.892
Total for Activity 1EBB415500:						0	0	115.570	16.368	131.937	0	131.937

Line Item SYS - Contingency And Escalation

BOE

Resources	Cost Element	Skill	Department	Curve	Quantity	Units
	CON CONTINGENCY	0000 NONE	ZDEPT No Department	Linear	5.271.29	Dollars
Factors 5271.29 Dollars						
	ESC ESCALATION	0000 NONE	ZDEPT No Department	Linear	11.096.56	Dollars
Factors 11096.6 Dollars						

Line Item WMEB080200 - 10 - Conduct Decon

BOE

The resources required for Conduct Decon Ops are the following:

- 1) Manager (1)- Responsible for the operation, including safety issues, budget, coordination with projects, and decisions on procedure.
One full time (480 hours)
- 2) RTG Site Manager (1)- Responsible for oversight of activities, coordination between RTG employees and RFCSS, and substituting for employees who are absent.
One quarter time (120 hours)
- 3) Health and Safety Specialists (2)- Responsible for all health and safety issues for both rad and non-rad including safety procedure preparation, document maintenance, maintenance of training requirements and records, and monitoring and oversight of activities.
Two half time (480 hours)
- 4) Integrated Work Control Planning Coordinator (1)- Responsible for all procedure writing and coordination both between companies and companies and the union.
Three eighths time (180 hours)
- 5) Chemist/Sampler (1)- Collects and sends off for analysis both rad and non rad samples taken as required per procedure.
One eighth time (60 hours)
- 6) Decontamination Technicians (2)- Perform all decontamination activities including maintenance of decontamination areas and equipment.
Two half time (480 hours)
- 7) Other Direct Costs - Equipment maintenance and replacement.
\$5,000.00 per quarter

This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

Resources	Cost Element	Skill	Department	Curve	Quantity	Units
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WBS No: 1EBB040105
 Activity ID: 1EBB415500

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 WBS Filter 1EBB
 Activity Filter *

Starts In FY *

A5H	SUBCONTRACTED SRVS	P080	HEALTH PHYSICISTS	C222S	Water System Operations	Linear	18.112.87	Dollars
<i>Factors</i>		19912 DOLLARS	1.02283 -- FY00 Escalation --					

0.88934 [SYS 061400] .88934200 - System

A5H	SUBCONTRACTED SRVS	S030	GEOLOGISTS	C222S	Water System Operations	Linear	10.780.21	Dollars
<i>Factors</i>		11851 dollars	1.02283 -- FY00 Escalation --					

0.88934 [SYS 061400] .88934200 - System

Line Item WMEB080205 - 10 - Conduct Decon

BOE
 The resources required for Conduct Decon Ops are the following:

- 1) Manager (1)- Responsible for the operation, including safety issues, budget, coordination with projects, and decisions on procedure.
One full time (480 hours)
- 2) RTG Site Manager (1)- Responsible for oversight of activities, coordination between RTG employees and RFCSS, and substituting for employees who are absent.
One quarter time (120 hours)
- 3) Health and Safety Specialists (2)- Responsible for all health and safety issues for both rad and non-rad including safety procedure preparation, document maintenance, maintenance of training requirements and records, and monitoring and oversight of activities.
Two half time (480 hours)
- 4) Integrated Work Control Planning Coordinator (1)- Responsible for all procedure writing and coordination both between companies and companies and the union.
Three eighths time (180 hours)
- 5) Chemist/Sampler (1)- Collects and sends off for analysis both rad and non rad samples taken as required per procedure.
One eighth time (60 hours)
- 6) Decontamination Technicians (2)- Perform all decontamination activities including maintenance of decontamination areas and equipment.
Two half time (480 hours)
- 7) Other Direct Costs - Equipment maintenance and replacement.
\$5,000.00 per quarter

This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

Resources

<i>Cost Element</i>		<i>Skill</i>		<i>Department</i>		<i>Curve</i>	<i>Quantity</i>	<i>Units</i>
A5H	SUBCONTRACTED SRVS	P080	HEALTH PHYSICISTS	C222S	Water System Operations	Linear	18.112.87	Dollars
<i>Factors</i>		19912 DOLLARS	1.02283 -- FY00 Escalation --					

0.88934 [SYS 061400] .88934200 - System

A5H	SUBCONTRACTED SRVS	S030	GEOLOGISTS	C222S	Water System Operations	Linear	10.779.30	Dollars
<i>Factors</i>		11850 dollars	1.02283 -- FY00 Escalation --					

0.88934 [SYS 061400] .88934200 - System

Line Item WMEB080210 - 10 - Conduct Decon

BOE
 The resources required for Conduct Decon Ops are the following:

- 1) Manager (1)- Responsible for the operation, including safety issues, budget, coordination with projects, and decisions on procedure.
One full time (480 hours)
- 2) RTG Site Manager (1)- Responsible for oversight of activities, coordination between RTG employees and RFCSS, and substituting for employees who are absent.
One quarter time (120 hours)
- 3) Health and Safety Specialists (2)- Responsible for all health and safety issues for both rad and non-rad including safety procedure preparation, document maintenance, maintenance of training requirements and records, and monitoring and oversight of activities.
Two half time (480 hours)
- 4) Integrated Work Control Planning Coordinator (1)- Responsible for all procedure writing and coordination both between companies and companies and the union.
Three eighths time (180 hours)
- 5) Chemist/Sampler (1)- Collects and sends off for analysis both rad and non rad samples taken as required per procedure.

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 Activity ID: 1EBB415500

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One eighth time (60 hours)
 6) Decontamination Technicians (2)- Perform all decontamination activities including maintenance of decontamination areas and equipment.
 Two half time (480 hours)
 7) Other Direct Costs - Equipment maintenance and replacement.
 \$5,000.00 per quarter
 This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

Resources		Cost Element	Skill	Department	Curve	Quantity	Units
A5H	SUBCONTRACTED SRVS	P080	HEALTH PHYSICISTS	C222S	Water System Operations	Linear	18.112.87 Dollars
Factors		19912 DOLLARS	1.02283 -- FY00 Escalation --				
						0.88934 [SYS 061400] .88934200 - System	
A5H	SUBCONTRACTED SRVS	S030	GEOLOGISTS	C222S	Water System Operations	Linear	10.779.30 Dollars
Factors		11850 dollars	1.02283 -- FY00 Escalation --				
						0.88934 [SYS 061400] .88934200 - System	

Line Item WMEB080215 - 10 - Conduct Decon

BOE
 The resources required for Conduct Decon Ops are the following:
 1) Manager (1)- Responsible for the operation, including safety issues, budget, coordination with projects, and decisions on procedure.
 One full time (480 hours)
 2) RTG Site Manager (1)- Responsible for oversight of activities, coordination between RTG employees and RFCSS, and substituting for employees who are absent.
 One quarter time (120 hours)
 3) Health and Safety Specialists (2)- Responsible for all health and safety issues for both rad and non-rad including safety procedure preparation, document maintenance, maintenance of training requirements and records, and monitoring and oversight of activities.
 Two half time (480 hours)
 4) Integrated Work Control Planning Coordinator (1)- Responsible for all procedure writing and coordination both between companies and companies and the union.
 Three eighths time (180 hours)
 5) Chemist/Sampler (1)- Collects and sends off for analysis both rad and non rad samples taken as required per procedure.
 One eighth time (60 hours)
 6) Decontamination Technicians (2)- Perform all decontamination activities including maintenance of decontamination areas and equipment.
 Two half time (480 hours)
 7) Other Direct Costs - Equipment maintenance and replacement.
 \$5,000.00 per quarter
 This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

Resources		Cost Element	Skill	Department	Curve	Quantity	Units
A5H	SUBCONTRACTED SRVS	P080	HEALTH PHYSICISTS	C222S	Water System Operations	Linear	18.112.87 Dollars
Factors		19912 DOLLARS	1.02283 -- FY00 Escalation --				
						0.88934 [SYS 061400] .88934200 - System	
A5H	SUBCONTRACTED SRVS	S030	GEOLOGISTS	C222S	Water System Operations	Linear	10.779.30 Dollars
Factors		11850 dollars	1.02283 -- FY00 Escalation --				
						0.88934 [SYS 061400] .88934200 - System	

Activity ID: 1EBB415600 Description: Conduct Decon Ops FY05

Cost Risk 1 Schedule Risk 2

Line Item	Description	Quantity	Units	BOE Type	Labor Hours/Unit	Labor Hours Total	Labor Cost Total	Materials/ Sub Cost	Contingency & Escalation	Total Prime Cost	Burden Cost	Total Cost
SYS	Contingency And Escalation	1.00	ea	EE	0	0	0	0	72.740	72.740	0	72.740
WMEB080200 - 1	Conduct Decon	1.00	each	EE	0	0	0	21.670	0	21.670	0	21.670
WMEB080205 - 1	Conduct Decon	1.00	each	EE	0	0	0	21.669	0	21.669	0	21.669
WMEB080210 - 1	Conduct Decon	1.00	each	EE	0	0	0	21.669	0	21.669	0	21.669

WBS No: 1EBB040105
 Activity ID: 1EBB415600

Rockv Flats Closure Project
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Project Baseline Devl
 WBS Filter 1EBB
 Activity Filter *

Starts In FY *

WMEB080215 - 1	Conduct Decon	1.00	each	EE	0	0	0	21,669	0	21,669	0	21,669
Total for Activity 1EBB415600:					0	0	86,677	72,740	159,417	0	159,417	

Line Item SYS - Contingency And Escalation

BOE

Resources

Cost Element	Skill	Department	Curve	Quantity	Units
CON CONTINGENCY	0000 NONE	ZDEPT No Department	Linear	53,406.23	Dollars
<i>Factors</i> 53406.2 Dollars					
ESC ESCALATION	0000 NONE	ZDEPT No Department	Linear	19,333.36	Dollars
<i>Factors</i> 19333.4 Dollars					

Line Item WMEB080200 - 10 - Conduct Decon

BOE

The resources required for Conduct Decon Ops are the following:

- 1) RFCSS Manager (1)- Responsible for the operation, including safety issues, budget, coordination with projects, and decisions on procedure. (480 hours)
- 2) RTG Site Manager (1)- Responsible for oversight of activities, coordination between RTG employees and RFCSS, and substituting for employees who are absent. (120 hours)
- 3) Health and Safety Specialists (2)- Responsible for all health and safety issues for both rad and non-rad including safety procedure preparation, document maintenance, maintenance of training requirements and records, and monitoring and oversight of activities. (480 hours)
- 4) Integrated Work Control Planning Coordinator (1)- Responsible for all procedure writing and coordination both between companies and companies and the union. (180 hours)
- 5) Chemist/Sampler (1)- Collects and sends off for analysis both rad and non rad samples taken as required per procedure. (60 hours)
- 6) Decontamination Technicians (2)- Perform all decontamination activities including maintenance of decontamination areas and equipment. (480 hours)
- 7) Other Direct Costs - Equipment maintenance and replacement. \$5,000.00 per quarter

This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

Resources

Cost Element	Skill	Department	Curve	Quantity	Units
A5H SUBCONTRACTED SRVS	P080 HEALTH PHYSICISTS	C222S Water System Operations	Linear	13,584.65	Dollars
<i>Factors</i> 19912 DOLLARS 1.02283 -- FY00 Escalation -- 0.75 Partial year factor 0.88934 [SYS 061400] .88934200 - System					
A5H SUBCONTRACTED SRVS	S030 GEOLOGISTS	C222S Water System Operations	Linear	8,085.16	Dollars
<i>Factors</i> 11851 dollars 1.02283 -- FY00 Escalation -- 0.75 Partial year factor 0.88934 [SYS 061400] .88934200 - System					

Line Item WMEB080205 - 10 - Conduct Decon

BOE

The resources required for Conduct Decon Ops are the following:

- 1) Manager (1)- Responsible for the operation, including safety issues, budget, coordination with projects, and decisions on procedure. One full time (480 hours)
- 2) RTG Site Manager (1)- Responsible for oversight of activities, coordination between RTG employees and RFCSS, and substituting for employees who are absent. One quarter time (120 hours)
- 3) Health and Safety Specialists (2)- Responsible for all health and safety issues for both rad and non-rad including safety procedure preparation, document maintenance, maintenance of training requirements and records, and monitoring and oversight of activities. Two half time (480 hours)
- 4) Integrated Work Control Planning Coordinator (1)- Responsible for all procedure writing and coordination both between companies and companies and the

WBS No: 1EBB040105
 Activity ID: 1EBB415600

Rockv Flats Closure Project
Baseline Cost and Basis of Estimate

Project: Baseline Devl
 WBS Filter: 1EBB
 Activity Filter: *

Starts In FY *

union.
 Three eighths time (180 hours)

5) Chemist/Sampler (1)- Collects and sends off for analysis both rad and non rad samples taken as required per procedure.
 One eighth time (60 hours)

6) Decontamination Technicians (2)- Perform all decontamination activities including maintenance of decontamination areas and equipment.
 Two half time (480 hours)

7) Other Direct Costs - Equipment maintenance and replacement.
 \$5,000.00 per quarter

This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

Resources		Cost Element	Skill	Department	Curve	Quantity	Units
A5H	SUBCONTRACTED SRVS	P080	HEALTH PHYSICISTS	C222S	Water System Operations	Linear	13,584.65 Dollars
Factors		19912 DOLLARS	1.02283 -- FY00 Escalation --	0.75	Partial year factor		
						0.88934	ISYS 0614001.88934200 - System
A5H	SUBCONTRACTED SRVS	S030	GEOLOGISTS	C222S	Water System Operations	Linear	8,084.48 Dollars
Factors		11850 dollars	1.02283 -- FY00 Escalation --	0.75	Partial year factor		
						0.88934	ISYS 0614001.88934200 - System

Line Item WMEB080210 - 10 - Conduct Decon

BOE
 The resources required for Conduct Decon Ops are the following:

1) Manager (1)- Responsible for the operation, including safety issues, budget, coordination with projects, and decisions on procedure.
 One full time (480 hours)

2) RTG Site Manager (1)- Responsible for oversight of activities, coordination between RTG employees and RFCSS, and substituting for employees who are absent.
 One quarter time (120 hours)

3) Health and Safety Specialists (2)- Responsible for all health and safety issues for both rad and non-rad including safety procedure preparation, document maintenance, maintenance of training requirements and records, and monitoring and oversight of activities.
 Two half time (480 hours)

4) Integrated Work Control Planning Coordinator (1)- Responsible for all procedure writing and coordination both between companies and companies and the union.
 Three eighths time (180 hours)

5) Chemist/Sampler (1)- Collects and sends off for analysis both rad and non rad samples taken as required per procedure.
 One eighth time (60 hours)

6) Decontamination Technicians (2)- Perform all decontamination activities including maintenance of decontamination areas and equipment.
 Two half time (480 hours)

7) Other Direct Costs - Equipment maintenance and replacement.
 \$5,000.00 per quarter

This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

Resources		Cost Element	Skill	Department	Curve	Quantity	Units
A5H	SUBCONTRACTED SRVS	P080	HEALTH PHYSICISTS	C222S	Water System Operations	Linear	13,584.65 Dollars
Factors		19912 DOLLARS	1.02283 -- FY00 Escalation --	0.75	Partial year factor		
						0.88934	ISYS 0614001.88934200 - System
A5H	SUBCONTRACTED SRVS	S030	GEOLOGISTS	C222S	Water System Operations	Linear	8,084.48 Dollars
Factors		11850 dollars	1.02283 -- FY00 Escalation --	0.75	Partial year factor		
						0.88934	ISYS 0614001.88934200 - System

Line Item WMEB080215 - 10 - Conduct Decon

BOE
 The resources required for Conduct Decon Ops are the following:

1) Manager (1)- Responsible for the operation, including safety issues, budget, coordination with projects, and decisions on procedure.

WBS No: 1EBB040105
 Activity ID: 1EBB415600

Rockv Flats Closure Project
Baseline Cost and Basis of Estimate

Project Baseline Devl
 WBS Filter 1EBB
 Activity Filter *

Starts In FY *

One full time (480 hours)

2) RTG Site Manager (1)- Responsible for oversight of activities, coordination between RTG employees and RFCSS, and substituting for employees who are absent.
 One quarter time (120 hours)

3) Health and Safety Specialists (2)- Responsible for all health and safety issues for both rad and non-rad including safety procedure preparation, document maintenance, maintenance of training requirements and records, and monitoring and oversight of activities.
 Two half time (480 hours)

4) Integrated Work Control Planning Coordinator (1)- Responsible for all procedure writing and coordination both between companies and companies and the union.
 Three eighths time (180 hours)

5) Chemist/Sampler (1)- Collects and sends off for analysis both rad and non rad samples taken as required per procedure.
 One eighth time (60 hours)

6) Decontamination Technicians (2)- Perform all decontamination activities including maintenance of decontamination areas and equipment.
 Two half time (480 hours)

7) Other Direct Costs - Equipment maintenance and replacement.
 \$5,000.00 per quarter

This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

Resources

Cost Element		Skill		Department		Curve	Quantity	Units
A5H	SUBCONTRACTED SRVS	P080	HEALTH PHYSICISTS	C222S	Water Svstem Operations	Linear	13.584.65	Dollars
<i>Factors</i> 19912 DOLLARS		1.02283 -- FY00 Escalation --		0.75 Partial year factor		0.88934 [SYS 061400] .88934200 - Svstem		
A5H	SUBCONTRACTED SRVS	S030	GEOLOGISTS	C222S	Water Svstem Operations	Linear	8.084.48	Dollars
<i>Factors</i> 11850 dollars		1.02283 -- FY00 Escalation --		0.75 Partial year factor		0.88934 [SYS 061400] .88934200 - Svstem		

Activity ID: 1EXXX41550

Description: Conduct Decon Ops FY05

Cost Risk 1 Schedule Risk 2

Line Item	Description	Quantity	Units	BOE Type	Labor Hours/Unit	Labor Hours Total	Labor Cost Total	Materials/ Sub Cost	Contingency & Escalation	Total Prime Cost	Burden Cost	Total Cost
SYS	Contingency And Escalation	1.00	ea	EE	0	0	0	0	60.897	60.897	0	60.897
WMEB080200 - 1	Conduct Decon	1.00	each	EE	0	0	0	28.767	0	28.767	0	28.767
WMEB080205 - 1	Conduct Decon	1.00	each	EE	0	0	0	28.766	0	28.766	0	28.766
WMEB080210 - 1	Conduct Decon	1.00	each	EE	0	0	0	28.766	0	28.766	0	28.766
WMEB080215 - 1	Conduct Decon	1.00	each	EE	0	0	0	28.766	0	28.766	0	28.766
Total for Activity 1EXXX41550:						0	0	115.065	60.897	175.961	0	175.961

Line Item SYS - Contingency And Escalation

BOE

Resources

Cost Element		Skill		Department		Curve	Quantity	Units
CON	CONTINGENCY	0000	NONE	ZDEPT	No Department	Linear	43.071.20	Dollars
<i>Factors</i> 43071.2 Dollars								
ESC	ESCALATION	0000	NONE	ZDEPT	No Department	Linear	17.825.33	Dollars
<i>Factors</i> 17825.3 Dollars								

Line Item WMEB080200 - 10 - Conduct Decon

BOE

The resources required for Conduct Decon Ops are the following:

1) Manager (1)- Responsible for the operation, including safety issues, budget, coordination with projects, and decisions on procedure.
 One full time (480 hours)

2) RTG Site Manager (1)- Responsible for oversight of activities, coordination between RTG employees and RFCSS, and substituting for employees who are absent.
 One quarter time (120 hours)

WBS No: 1EBB040105
 Activity ID: 1EXXX41550

Rockv Flats Closure Project
Baseline Cost and Basis of Estimate

Project Baseline Devl
 WBS Filter 1EBB
 Activity Filter *

Starts In FY *

3) Health and Safety Specialists (2)- Responsible for all health and safety issues for both rad and non-rad including safety procedure preparation, document maintenance, maintenance of training requirements and records,and monitoring and oversight of activities.
 Two half time (480 hours)

4) Integrated Work Control Planning Coordinator (1)- Responsible for all procedure writing and coordination both between companies and companies and the union.
 Three eighths time (180 hours)

5) Chemist/Sampler (1)- Collects and sends off for analysis both rad and non rad samples taken as required per procedure.
 One eighth time (60 hours)

6) Decontamination Technicians (2)- Perform all decontamination activities including maintenance of decontamination areas and equipment.
 Two half time (480 hours)

7) Other Direct Costs - Equipment maintenance and replacement.
 \$5,000.00 per quarter

This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

Resources

Cost Element			Skill		Department		Curve	Quantity	Units
A5H	SUBCONTRACTED SRVS	P080	HEALTH PHYSICISTS	C222S	Water Svstem Operations	Linear	18.112.87	Dollars	
Factors 19912 DOLLARS			1.02283 -- FY00 Escalation --						
							0.88934	[SYS 061400]	88934200 - Svstem
A5H	SUBCONTRACTED SRVS	S030	GEOLOGISTS	C222S	Water Svstem Operations	Linear	10.780.21	Dollars	
Factors 11851 dollars			1.02283 -- FY00 Escalation --						
							0.88934	[SYS 061400]	88934200 - Svstem

Line Item WMEB080205 - 10 - Conduct Decon

BOE

The resources required for Conduct Decon Ops are the following:

1) Manager (1)- Responsible for the operation, including safety issues, budget, coordination with projects, and decisions on procedure.
 One full time (480 hours)

2) RTG Site Manager (1)- Responsible for oversight of activities, coordination between RTG employees and RFCSS, and substituting for employees who are absent.
 One quarter time (120 hours)

3) Health and Safety Specialists (2)- Responsible for all health and safety issues for both rad and non-rad including safety procedure preparation, document maintenance, maintenance of training requirements and records,and monitoring and oversight of activities.
 Two half time (480 hours)

4) Integrated Work Control Planning Coordinator (1)- Responsible for all procedure writing and coordination both between companies and companies and the union.
 Three eighths time (180 hours)

5) Chemist/Sampler (1)- Collects and sends off for analysis both rad and non rad samples taken as required per procedure.
 One eighth time (60 hours)

6) Decontamination Technicians (2)- Perform all decontamination activities including maintenance of decontamination areas and equipment.
 Two half time (480 hours)

7) Other Direct Costs - Equipment maintenance and replacement.
 \$5,000.00 per quarter

This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

Resources

Cost Element			Skill		Department		Curve	Quantity	Units
A5H	SUBCONTRACTED SRVS	P080	HEALTH PHYSICISTS	C222S	Water Svstem Operations	Linear	18.112.87	Dollars	
Factors 19912 DOLLARS			1.02283 -- FY00 Escalation --						
							0.88934	[SYS 061400]	88934200 - Svstem
A5H	SUBCONTRACTED SRVS	S030	GEOLOGISTS	C222S	Water Svstem Operations	Linear	10.779.30	Dollars	
Factors 11850 dollars			1.02283 -- FY00 Escalation --						
							0.88934	[SYS 061400]	88934200 - Svstem

WBS No: 1EBB040105
 Activity ID: 1EXXX41550

Rockv Flats Closure Project
Baseline Cost and Basis of Estimate

Project: Baseline Devl
 WBS Filter: 1EBB
 Activity Filter: *

Starts In FY *

Line Item WMEB080210 - 10 - Conduct Decon

BOE
 The resources required for Conduct Decon Ops are the following:

- 1) Manager (1)- Responsible for the operation, including safety issues, budget, coordination with projects, and decisions on procedure.
One full time (480 hours)
- 2) RTG Site Manager (1)- Responsible for oversight of activities, coordination between RTG employees and RFCSS, and substituting for employees who are absent.
One quarter time (120 hours)
- 3) Health and Safety Specialists (2)- Responsible for all health and safety issues for both rad and non-rad including safety procedure preparation, document maintenance, maintenance of training requirements and records, and monitoring and oversight of activities.
Two half time (480 hours)
- 4) Integrated Work Control Planning Coordinator (1)- Responsible for all procedure writing and coordination both between companies and companies and the union.
Three eighths time (180 hours)
- 5) Chemist/Sampler (1)- Collects and sends off for analysis both rad and non rad samples taken as required per procedure.
One eighth time (60 hours)
- 6) Decontamination Technicians (2)- Perform all decontamination activities including maintenance of decontamination areas and equipment.
Two half time (480 hours)
- 7) Other Direct Costs - Equipment maintenance and replacement.
\$5,000.00 per quarter

This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

Resources		Cost Element	Skill	Department	Curve	Quantity	Units
A5H	SUBCONTRACTED SRVS	P080	HEALTH PHYSICISTS	C222S	Water Svstem Operations	Linear	18.112.87 Dollars
<i>Factors</i>		19912 DOLLARS	1.02283 -- FY00 Escalation --			0.88934 ISYS 0614001.88934200 - Svsstem	
A5H	SUBCONTRACTED SRVS	S030	GEOLOGISTS	C222S	Water Svstem Operations	Linear	10.779.30 Dollars
<i>Factors</i>		11850 dollars	1.02283 -- FY00 Escalation --			0.88934 ISYS 0614001.88934200 - Svsstem	

Line Item WMEB080215 - 10 - Conduct Decon

BOE
 The resources required for Conduct Decon Ops are the following:

- 1) Manager (1)- Responsible for the operation, including safety issues, budget, coordination with projects, and decisions on procedure.
One full time (480 hours)
- 2) RTG Site Manager (1)- Responsible for oversight of activities, coordination between RTG employees and RFCSS, and substituting for employees who are absent.
One quarter time (120 hours)
- 3) Health and Safety Specialists (2)- Responsible for all health and safety issues for both rad and non-rad including safety procedure preparation, document maintenance, maintenance of training requirements and records, and monitoring and oversight of activities.
Two half time (480 hours)
- 4) Integrated Work Control Planning Coordinator (1)- Responsible for all procedure writing and coordination both between companies and companies and the union.
Three eighths time (180 hours)
- 5) Chemist/Sampler (1)- Collects and sends off for analysis both rad and non rad samples taken as required per procedure.
One eighth time (60 hours)
- 6) Decontamination Technicians (2)- Perform all decontamination activities including maintenance of decontamination areas and equipment.
Two half time (480 hours)
- 7) Other Direct Costs - Equipment maintenance and replacement.
\$5,000.00 per quarter

WBS No: 1EBB040105
 Activity ID: 1EXXX41550

Rockv Flats Closure Project
Baseline Cost and Basis of Estimate

Project Baseline Devl
 WBS Filter 1EBB
 Activity Filter *

Starts In FY *

This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

Resources	Cost Element	Skill	Department	Curve	Quantity	Units
	A5H SUBCONTRACTED SRVS	P080 HEALTH PHYSICISTS	C222S Water System Operations	Linear	18.112.87	Dollars
Factors	19912 DOLLARS	1.02283 -- FY00 Escalation --				
	A5H SUBCONTRACTED SRVS	S030 GEOLOGISTS	C222S Water System Operations	Linear	10.779.30	Dollars
Factors	11850 dollars	1.02283 -- FY00 Escalation --				

0.88934 [SYS 061400] .88934200 - System
 0.88934 [SYS 061400] .88934200 - System

WBS No: 1EBB0402 Title: Surface Water Operation
 Activity ID: 1EBB420000 Description: Dams/Watershed Mgmt & Maintenance FY00 Cost Risk 1 Schedule Risk 1

Line Item	Description	Quantity	Units	BOE Type	Labor Hours/Unit	Labor Hours Total	Labor Cost Total	Materials/ Sub Cost	Contingency & Escalation	Total Prime Cost	Burden Cost	Total Cost
IBCGER0205	Dam/Watershed Proj Mgt	1.00	ea	EE	248	248	9.623	3.912	0	13.535	4.696	18.231
IBCGER0210	Dam Safety Inspections	1.00	ea	EE	36	36	1.218	925	0	2.143	594	2.737
IBCGER0220	Dam Safety Inspections-FERC	1.00	each	EE	28	28	983	698	0	1.681	480	2.160
IBCGER0225	Dam and Waterwav Maintenance	1.00	ls	EE	68	68	2.514	15.520	0	18.035	1.227	19.262
IBCGER0235	Watershed Repairs	1.00	ls	EE	115	115	3.912	4.403	0	8.315	1.909	10.225
Total for Activity 1EBB420000:						495	18.251	25.458	0	43.709	8.906	52.615

Line Item IBCGER0205 - Dam/Watershed Proj Mgt

BOE DAM/WATERSHED PROJ MGT

Estimators Experience - The estimator has served as the WADlet manager overseeing the Dams and Watershed Management and Maintenance activities for the past 4 fiscal years. The has post-graduate instruction in project management and experience in construction cost estimating. The estimator is also a Professional Engineer Licensed in the State of Colorado.

Experience Item Desc - Project management and oversight of the Dams and Watershed Management and Maintenance WADlet and activities contained therein.

Breakdown of Cost Data:

Item - Mech Eng hours for project management
 Units - hours
 Unit Cost - 17.76 hours/week
 Unit Cost Adjustment factor - 52 weeks
 Revised Unit Cost - 923.55 hours
 Basis for adjustment - 52 weeks/year

Item - Gen Mgr hours for project management
 Units - hours
 Unit Cost - 7.33 hours/week
 Unit Cost Adjustment factor - 52 weeks
 Revised Unit Cost - 381.16 hours
 Basis for adjustment - 52 weeks/year

Item - Admin Assist hours for project management
 Units - Dollars
 Unit Cost - 0.21 hours/week X \$45/Hr.
 Unit Cost Adjustment factor - 52 weeks
 Revised Unit Cost - \$501.75
 Basis for adjustment - 52 weeks/year

Item - Civil Eng hours for project management
 Units - Dollars
 Unit Cost - 8.58 hours X \$45/Hr.
 Unit Cost Adjustment factor - 52 weeks
 Revised Unit Cost - \$20,077.2
 Basis for adjustment - 52 weeks/year

This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

WBS No: 1EBB0402
 Activity ID: 1EBB420000

Rockv Flats Closure Project
Baseline Cost and Basis of Estimate

Project Baseline Devl
 WBS Filter 1EBB
 Activity Filter *

Resources	Cost Element	Skill	Department	Curve	Quantity	Units
	750 STRAIGHT TIME BASE	E070 MECHANICAL ENGINEERS	C222S Water System Operations	Linear	175.54	Hours
Factors 923.55 Hours 0.36123 May 2000 Earned Value Factor						
					0.52618	ISYS 061300|0.526183 - Target
	750 STRAIGHT TIME BASE	M020 MANAGERS (GRADE 69 - 72)	C222S Water System Operations	Linear	72.42	Hours
Factors 381.01 Hours 0.36123 May 2000 Earned Value Factor						
					0.52618	ISYS 061300|0.526183 - Target
	A5H SUBCONTRACTED SRVS	E020 CIVIL ENGINEERS	C222S Water System Operations	Linear	3.816.17	Dollars
Factors 20077.2 \$ 0.36123 May 2000 Earned Value Factor						
					0.52618	ISYS 061300|0.526183 - Target
	A5H SUBCONTRACTED SRVS	G010 ADMINISTRATIVE ASSISTANTS	C222S Water System Operations	Linear	95.37	Dollars
Factors 501.75 \$ 0.36123 May 2000 Earned Value Factor						
					0.52618	ISYS 061300|0.526183 - Target

Line Item IBCGER0210 - Dam Safety Inspections

BOE	<p>DAM SAFETY INSPECTIONS</p> <p>Estimators Experience - The estimator has served as the WADlet manager overseeing the Dams and Watershed Management and Maintenance activities for the past 4 fiscal years. The estimator has directed and/or participated in the inspection of the dams for the past 6 years. The estimator is also a Professional Engineer Licensed in the State of Colorado.</p> <p>Experience Item Desc - annual visual/physical inspections of dam structures; collection, compilation and interpretation of dam monitoring instrumentation data; and reporting of results to appropriate authorities. Also, developing recommendations for dam upgrades/improvement to correct deficiencies detected during the inspections.</p> <p>Breakdown of Cost Data:</p> <p>Item - Mech Eng hours for dam safety inspections Units - hours Unit Cost - 10.47 hours/dam Unit Cost Adjustment factor - 12 dams Revised Unit Cost - 125.61 hours Basis for adjustment - 12 dams inspected</p> <p>Item - Mech Eng hours for reporting of dam safety inspections results Units - hours Unit Cost - 52 hours/reporting process Unit Cost Adjustment factor - N/A Revised Unit Cost - N/A Basis for adjustment - N/A</p> <p>Item - Gen Mgr hours for safety inspections Units - hours Unit Cost - 10.97 hours/inspection process Unit Cost Adjustment factor - N/A Revised Unit Cost - N/A Basis for adjustment - N/A</p> <p>Item - Admin Assist hours for dam safety inspections Units - \$ Unit Cost -5.14 hours x \$45/Hr./inspection process Unit Cost Adjustment factor - N/A Revised Unit Cost - \$231.30 Basis for adjustment - N/A</p> <p>Item - Civil Eng hours for dam safety inspections Units - \$ Unit Cost - 6.86 hours x \$45/Hr./dam Unit Cost Adjustment factor - 12 dams Revised Unit Cost - \$3,704.40 Basis for adjustment - 12 dams inspected</p>
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WBS No: 1EBB0402
 Activity ID: 1EBB420000

Rockv Flats Closure Project
Baseline Cost and Basis of Estimate

Project: Baseline Devl
 WBS Filter: 1EBB
 Activity Filter: *

Starts In FY *

Item - Civil Eng hours for compilation of data for dam safety inspections
 Units - \$
 Unit Cost - 1.72 hours x \$45/Hr./dam
 Unit Cost Adjustment factor - 12 dams
 Revised Unit Cost - \$928.80
 Basis for adjustment - 12 dams inspected

This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

Resources

Cost Element		Skill		Department		Curve	Quantity	Units
750	STRAIGHT TIME BASE	E070	MECHANICAL ENGINEERS	C222S	Water System Operations	Linear	33.76	Hours
<i>Factors</i> 177.61 Hours		0.36123 May 2000 Earned Value Factor				0.52618 [SYS 061300]	0.526183 - Target	
750	STRAIGHT TIME BASE	M020	MANAGERS (GRADE 69 - 72)	C222S	Water System Operations	Linear	2.09	Hours
<i>Factors</i> 10.97 Hours		0.36123 May 2000 Earned Value Factor				0.52618 [SYS 061300]	0.526183 - Target	
A5H	SUBCONTRACTED SRVS	E020	CIVIL ENGINEERS	C222S	Water System Operations	Linear	881.05	Dollars
<i>Factors</i> 4635.26 \$		0.36123 May 2000 Earned Value Factor				0.52618 [SYS 061300]	0.526183 - Target	
A5H	SUBCONTRACTED SRVS	G010	ADMINISTRATIVE ASSISTANTS	C222S	Water System Operations	Linear	43.96	Dollars
<i>Factors</i> 231.3 \$		0.36123 May 2000 Earned Value Factor				0.52618 [SYS 061300]	0.526183 - Target	

Line Item IBCGER0220 - Dam Safety Inspections-FERC

BOE

DAM SAFETY INSPECTIONS-FERC

Estimators Experience - The estimator has served as the WADlet manager overseeing the Dams and Watershed Management and Maintenance activities for the past 4 fiscal years. The estimator has directed and/or participated in the inspection of the dams for the past 6 years. The estimator is also a Professional Engineer Licensed in the State of Colorado.

Experience Item Desc - annual visual/physical inspections of dam structures conducted with Federal Energy Regulatory Commission dam inspector, and presentation of compiled monitoring data.

Breakdown of Cost Data:

Item - annual FERC dam inspections
 Units - hours
 Unit Cost - Mech Eng - 2 hours/inspection
 Civil Eng 3.55 hours/inspection
 Unit Cost Adjustment factor - 4 inspections
 Revised Unit Cost - Mech Eng - 14.21 hours
 Civil Eng 6.88 hours x \$45/Hr.
 Basis for adjustment - 4 dams inspected

Item - preparation for FERC dam inspections
 Units - hours
 Unit Cost - Mech Eng - 71.2 hours
 Civil Eng 43 hours X \$45/Hr.
 Unit Cost Adjustment factor - N/A
 Revised Unit Cost - N/A
 Basis for adjustment - N/A

Item - response to annual FERC dam inspections report
 Units - hours
 Unit Cost - Mech Eng - 42.72 hours
 Civil Eng - 27.46 hours X \$45/Hr.
 Unit Cost Adjustment factor - N/A
 Revised Unit Cost - N/A
 Basis for adjustment - N/A

WBS No: 1EBB0402
 Activity ID: 1EBB420000

Rockv Flats Closure Project
Baseline Cost and Basis of Estimate

Project Baseline Devl
 WBS Filter 1EBB
 Activity Filter *

Starts In FY *

Item - Gen Mgr hours for FERC dam inspection
 Units - hours
 Unit Cost - 18.32 hours/inspection process
 Unit Cost Adjustment factor - N/A
 Revised Unit Cost - N/A
 Basis for adjustment - N/A

Item - Admin Assist hours for FERC dam inspection
 Units - hours
 Unit Cost - 4.29 hours X \$45/Hr./inspection process
 Unit Cost Adjustment factor - N/A
 Revised Unit Cost - N/A
 Basis for adjustment - N/A

This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

Resources

Cost Element		Skill		Department		Curve	Quantity	Units
750	STRAIGHT TIME BASE	E070	MECHANICAL ENGINEERS	C222S	Water System Operations	Linear	24.31	Hours
<i>Factors</i> 127.88 HR		0.36123 Mav Earned Value Factor				0.52618 [SYS 061300]	0.526183 - Target	
750	STRAIGHT TIME BASE	M020	MANAGERS (GRADE 69 - 72)	C222S	Water Svstem Operations	Linear	3.48	Hours
<i>Factors</i> 18.32 HR		0.36123 Mav Earned Value Factor				0.52618 [SYS 061300]	0.526183 - Target	
A5H	SUBCONTRACTED SRVS	E020	CIVIL ENGINEERS	C222S	Water Svstem Operations	Linear	661.52	Dollars
<i>Factors</i> 3480.3 \$		0.36123 Mav Earned Value Factor				0.52618 [SYS 061300]	0.526183 - Target	
A5H	SUBCONTRACTED SRVS	G010	ADMINISTRATIVE ASSISTANTS	C222S	Water System Operations	Linear	36.69	Dollars
<i>Factors</i> 193.05 \$		0.36123 Mav Earned Value Factor				0.52618 [SYS 061300]	0.526183 - Target	

Line Item IBCGER0225 - Dam and Waterway Maintenance

BOE

DAM AND WATERWAY MAINTENANCE

Estimators Experience - The estimator has served as the WADlet manager overseeing the Dams and Watershed Management and Maintenance activities for the past 4 fiscal years. The has post-graduate instruction in project management and experience in construction cost estimating. The estimator is also a Professional Engineer Licensed in the State of Colorado.

Experience Item Desc - Routine dam and waterway maintenance activity typically conducted during 2nd qtr

Breakdown of Cost Data:

Item - Subcontracted labor cost for typical maintenance activities
 Units - dollars
 Unit Cost - \$70,000
 Unit Cost Adjustment factor - 0.86
 Revised Unit Cost - \$60,202.55
 Basis for adjustment - adjustment necessary to meet fiscal constraints

Item - Industrial Hygienist labor hours
 Units - hours
 Unit Cost - 17.16 Hr./project (typical for project of this scope)
 Unit Cost Adjustment factor - N/A
 Revised Unit Cost - N/A
 Basis for adjustment - N/A

Item - pre-construction labor hours
 Units - hours
 Unit Cost - Mech Eng 35.52 hours/week
 Admin Assist 2 hours/week
 Gen Mgr 9.16 hours/week
 Civil Eng 41.18 Hr./week \$45/Hr.
 Unit Cost Adjustment factor - 5 weeks

WBS No: 1EBB0402
 Activity ID: 1EBB420000

Rockv Flats Closure Project
Baseline Cost and Basis of Estimate

Project: Baseline Devl
 WBS Filter: 1EBB
 Activity Filter: *

Starts In FY *

Revised Unit Cost - Mech Eng 177.61 hours
 Admin Assist 10 hours
 Gen Mgr. 45.79 hours
 Civil Eng \$9,266.40
 Basis for adjustment - period of preconstruction effort

Item - construction labor hours
 Units - hours
 Unit Cost - Mech Eng 35.52 hours/week
 Gen Mgr 9.16 hours/week
 Civil Eng 68.64 hours/week X \$45/Hr.
 Unit Cost Adjustment factor - 3 weeks
 Revised Unit Cost - Mech Eng 106.56 hours
 Gen Mgr 27.48 hours
 Civil Eng \$9,266.40
 Basis for adjustment - period of construction effort

This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

Resources

Cost Element	Skill	Department	Curve	Quantity	Units
750 STRAIGHT TIME BASE	E070 MECHANICAL ENGINEERS	C222S Water Svstem Operations	Linear	54.01	Hours
Factors 284.17 HR 0.36123 May 2000 Earned Value Factor					
0.52618 [SYS 061300] 0.526183 - Target					
750 STRAIGHT TIME BASE	M020 MANAGERS (GRADE 69 - 72)	C222S Water Svstem Operations	Linear	13.93	Hours
Factors 73.27 HR 0.36123 May 2000 Earned Value Factor					
0.52618 [SYS 061300] 0.526183 - Target					
A5H SUBCONTRACTED SRVS	0000 NONE	C222S Water Svstem Operations	Linear	11,704.24	Dollars
Factors 60202.6 \$ 1.02283 -- FY00 Escalation -- 0.36123 May 2000 Earned Value Factor					
0.52618 [SYS 061300] 0.526183 - Target					
A5H SUBCONTRACTED SRVS	E020 CIVIL ENGINEERS	C222S Water Svstem Operations	Linear	3,522.62	Dollars
Factors 18532.8 \$ 0.36123 May 2000 Earned Value Factor					
0.52618 [SYS 061300] 0.526183 - Target					
A5H SUBCONTRACTED SRVS	G010 ADMINISTRATIVE ASSISTANTS	C222S Water Svstem Operations	Linear	146.78	Dollars
Factors 772.2 \$ 0.36123 May 2000 Earned Value Factor					
0.52618 [SYS 061300] 0.526183 - Target					
A5H SUBCONTRACTED SRVS	P090 INDUSTRIAL HYGIENISTS	C222S Water Svstem Operations	Linear	146.78	Dollars
Factors 772.2 \$ 0.36123 May 2000 Earned Value Factor					
0.52618 [SYS 061300] 0.526183 - Target					

Line Item IBCGER0235 - Watershed Repairs

BOE
 WATERSHED REPAIRS

Estimators Experience - The estimator has served as the WADlet manager overseeing the Dams and Watershed Management and Maintenance activities for the past 4 fiscal years. The has post-graduate instruction in project management and experience in construction cost estimating. The estimator is also a Professional Engineer Licensed in the State of Colorado.

Experience Item Desc - Routine watershed repair activity typically conducted during the 3rd & 4th qtrs

Breakdown of Cost Data:

Item - Subcontracted labor cost for typical maintenance activity
 Units - dollars
 Unit Cost - \$20,000
 Unit Cost Adjustment factor - N/A
 Revised Unit Cost - N/A
 Basis for adjustment - N/A

Item - Industrial Hygienist labor hours
 Units - hours & \$
 Unit Cost - 8.58 Hr. X \$45/Hr./project (typical for project of this scope)
 Unit Cost Adjustment factor - N/A

WBS No: 1EBB0402
 Activity ID: 1EBB420000

Rockv Flats Closure Project
Baseline Cost and Basis of Estimate

Project: Baseline Devl
 WBS Filter: 1EBB
 Activity Filter: *

Starts In FY *

Revised Unit Cost - N/A
 Basis for adjustment - N/A

Item - pre-construction labor hours
 Units - hours
 Unit Cost - Mech Eng 56.83 hours/week
 Admin Assist .86 Hr./week X \$45/Hr.
 Gen Mgr 3.66 hours/week
 Civil Eng 6.86 Hr./week X \$45/Hr.
 Unit Cost Adjustment factor - 5 weeks
 Revised Unit Cost - Mech Eng 284.17 hours
 Admin Assist \$193.05
 Gen Mgr 18.32 hours
 Civil Eng \$1,544.40
 Basis for adjustment - period of preconstruction effort

Item - construction labor hours
 Units - hours
 Unit Cost - Mech Eng 56.83 hours/week
 Gen Mgr 3.66 hours/week
 Civil Eng 13.73 Hr./week X \$45/Hr.
 Unit Cost Adjustment factor - 5 weeks
 Revised Unit Cost - Mech Eng 284.17 hours
 Gen Mgr 18.32hours
 Civil Eng \$3,088.80
 Basis for adjustment - period of construction effort

This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

Resources

Cost Element	Skill	Department	Curve	Quantity	Units
750 STRAIGHT TIME BASE	E070 MECHANICAL ENGINEERS	C222S Water Svstem Operations	Linear	108.03	Hours
Factors 568.34 HR 0.36123 May 2000 Earned Value Factor					
0.52618 [SYS 061300] 0.526183 - Target					
750 STRAIGHT TIME BASE	M020 MANAGERS (GRADE 69 - 72)	C222S Water Svstem Operations	Linear	6.96	Hours
Factors 36.64 HR 0.36123 May 2000 Earned Value Factor					
0.52618 [SYS 061300] 0.526183 - Target					
A5H SUBCONTRACTED SRVS	0000 NONE	C222S Water Svstem Operations	Linear	3,412.31	Dollars
Factors 17551.8 DOLLARS 1.02283 -- FY00 Escalation -- 0.36123					
0.52618 [SYS 061300] 0.526183 - Target					
A5H SUBCONTRACTED SRVS	E020 CIVIL ENGINEERS	C222S Water Svstem Operations	Linear	880.66	Dollars
Factors 4633.2 \$ 0.36123 May 2000 Earned Value Factor					
0.52618 [SYS 061300] 0.526183 - Target					
A5H SUBCONTRACTED SRVS	G010 ADMINISTRATIVE ASSISTANTS	C222S Water Svstem Operations	Linear	36.69	Dollars
Factors 193.05 \$ 0.36123 May 2000 Earned Value Factor					
0.52618 [SYS 061300] 0.526183 - Target					
A5H SUBCONTRACTED SRVS	P090 INDUSTRIAL HYGIENISTS	C222S Water Svstem Operations	Linear	73.39	Dollars
Factors 386.1 \$ 0.36123 May 2000 Earned Value Factor					

0.52618 [SYS 061300] 0.526183 - Target

Activity ID: 1EBB420010 Description: Dams/Watershed Mamt & Maintenance FY01

Cost Risk 1 Schedule Risk 1

Line Item	Description	Quantity	Units	BOE Type	Labor Hours/Unit	Labor Hours Total	Labor Cost Total	Materials/ Sub Cost	Contingency & Escalation	Total Prime Cost	Burden Cost	Total Cost
IBCGER0205	Dam/Watershed Proi Mat	1.00	ea	EE	1.160	1.160	45.027	18.302	0	63.329	21.478	84.807
IBCGER0210	Dam Safetv Inspections	1.00	ea	EE	168	168	5.698	4.328	0	10.026	2.718	12.744
IBCGER0220	Dam Safetv Inspections-FERC	1.00	each	EE	130	130	4.598	3.267	0	7.865	2.193	10.058
IBCGER0225	Dam and Waterwav Maintenance	1.00	ls	EE	318	318	11.765	72.618	0	84.383	5.612	89.995
IBCGER0235	Watershed Repairs	1.00	ls	EE	538	538	18.305	20.601	0	38.907	8.732	47.638
SYS	Contingency And Escalation	1.00	ea	EE	0	0	0	0	12.881	12.881	0	12.881
Total for Activity 1EBB420010:						2,314	85,393	119,117	12,881	217,390	40,732	258,123

WBS No: 1EBB0402
 Activity ID: 1EBB420010

Rockv Flats Closure Project
Baseline Cost and Basis of Estimate

Project Baseline Devl
 WBS Filter 1EBB
 Activity Filter *

Starts In FY *

Line Item IBCGER0205 - Dam/Watershed Proj Mgt

BOE DAM/WATERSHED PROJ MGT

Estimators Experience - The estimator has served as the WADlet manager overseeing the Dams and Watershed Management and Maintenance activities for the past 4 fiscal years. The has post-graduate instruction in project management and experience in construction cost estimating. The estimator is also a Professional Engineer Licensed in the State of Colorado.

Experience Item Desc - Project management and oversight of the Dams and Watershed Management and Maintenance WADlet and activities contained therein.

Breakdown of Cost Data:

Item - Mech Eng hours for project management
 Units - hours
 Unit Cost - 17.76 hours/week
 Unit Cost Adjustment factor - 52 weeks
 Revised Unit Cost - 923.55 hours
 Basis for adjustment - 52 weeks/year

Item - Gen Mgr hours for project management
 Units - hours
 Unit Cost - 7.33 hours/week
 Unit Cost Adjustment factor - 52 weeks
 Revised Unit Cost - 381.16 hours
 Basis for adjustment - 52 weeks/year

Item - Admin Assist hours for project management
 Units - Dollars
 Unit Cost - 0.21 hours/week X \$45/Hr.
 Unit Cost Adjustment factor - 52 weeks
 Revised Unit Cost - \$501.75
 Basis for adjustment - 52 weeks/year

Item - Civil Eng hours for project management
 Units - Dollars
 Unit Cost - 8.58 hours X \$45/Hr.
 Unit Cost Adjustment factor - 52 weeks
 Revised Unit Cost - \$20,077.2
 Basis for adjustment - 52 weeks/year

This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

Resources	Cost Element	Skill	Department	Curve	Quantity	Units
	750 STRAIGHT TIME BASE	E070 MECHANICAL ENGINEERS	C222S Water Svstem Operations	Linear	821.35	Hours
Factors						923.55 Hours
						0.88934 [SYS 061400] .88934200 - System
	750 STRAIGHT TIME BASE	M020 MANAGERS (GRADE 69 - 72)	C222S Water Svstem Operations	Linear	338.85	Hours
Factors						381.01 Hours
						0.88934 [SYS 061400] .88934200 - System
	A5H SUBCONTRACTED SRVS	E020 CIVIL ENGINEERS	C222S Water Svstem Operations	Linear	17,855.50	Dollars
Factors						20077.2 \$
						0.88934 [SYS 061400] .88934200 - System
	A5H SUBCONTRACTED SRVS	G010 ADMINISTRATIVE ASSISTANTS	C222S Water Svstem Operations	Linear	446.23	Dollars
Factors						501.75 \$
						0.88934 [SYS 061400] .88934200 - System

Line Item IBCGER0210 - Dam Safety Inspections

BOE DAM SAFETY INSPECTIONS

Estimators Experience - The estimator has served as the WADlet manager overseeing the Dams and Watershed Management and Maintenance activities for the past 4 fiscal years. The estimator has directed and/or participated in the inspection of the dams for the past 6 years. The estimator is also a Professional Engineer Licensed in the State of Colorado.

WBS No: 1EBB0402
 Activity ID: 1EBB420010

Rockv Flats Closure Project
Baseline Cost and Basis of Estimate

Project: Baseline Devl
 WBS Filter: 1EBB
 Activity Filter: *

Starts In FY *

Experience Item Desc - annual visual/physical inspections of dam structures; collection, compilation and interpretation of dam monitoring instrumentation data; and reporting of results to appropriate authorities. Also, developing recommendations for dam upgrades/improvement to correct deficiencies detected during the inspections.

Breakdown of Cost Data:

Item - Mech Eng hours for dam safety inspections
 Units - hours
 Unit Cost - 10.47 hours/dam
 Unit Cost Adjustment factor - 12 dams
 Revised Unit Cost - 125.61 hours
 Basis for adjustment - 12 dams inspected

Item - Mech Eng hours for reporting of dam safety inspections results
 Units - hours
 Unit Cost - 52 hours/reporting process
 Unit Cost Adjustment factor - N/A
 Revised Unit Cost - N/A
 Basis for adjustment - N/A

Item - Gen Mgr hours for safety inspections
 Units - hours
 Unit Cost - 10.97 hours/inspection process
 Unit Cost Adjustment factor - N/A
 Revised Unit Cost - N/A
 Basis for adjustment - N/A

Item - Admin Assist hours for dam safety inspections
 Units - \$
 Unit Cost -5.14 hours x \$45/Hr./inspection process
 Unit Cost Adjustment factor - N/A
 Revised Unit Cost - \$231.30
 Basis for adjustment - N/A

Item - Civil Eng hours for dam safety inspections
 Units - \$
 Unit Cost - 6.86 hours x \$45/Hr./dam
 Unit Cost Adjustment factor - 12 dams
 Revised Unit Cost - \$3,704.40
 Basis for adjustment - 12 dams inspected

Item - Civil Eng hours for compilation of data for dam safety inspections
 Units - \$
 Unit Cost - 1.72 hours x \$45/Hr./dam
 Unit Cost Adjustment factor - 12 dams
 Revised Unit Cost - \$928.80
 Basis for adjustment - 12 dams inspected

This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

Resources

Cost Element	Skill	Department	Curve	Quantity	Units
750 STRAIGHT TIME BASE	E070 MECHANICAL ENGINEERS	C222S Water System Operations	Linear	157.96	Hours
<i>Factors</i> 177.61 Hours					
750 STRAIGHT TIME BASE	M020 MANAGERS (GRADE 69 - 72)	C222S Water System Operations	Linear	9.76	Hours
<i>Factors</i> 10.97 Hours					
A5H SUBCONTRACTED SRVS	E020 CIVIL ENGINEERS	C222S Water System Operations	Linear	4.122.33	Dollars
<i>Factors</i> 4635.26 \$					
0.88934 ISYS 0614001 .88934200 - System					

WBS No: 1EBB0402
 Activity ID: 1EBB420010

Rockv Flats Closure Project
Baseline Cost and Basis of Estimate

Project: Baseline Devl
 WBS Filter: 1EBB
 Activity Filter: *

Starts In FY: *

A5H	SUBCONTRACTED SRVS	G010	ADMINISTRATIVE ASSISTANTS	C222S	Water Svstem Operations	Linear	205.70	Dollars
<i>Factors</i>		231.3	\$					

0.88934 [SYS 061400] .88934200 - System

Line Item IBCGER0220 - Dam Safety Inspections-FERC

BOE	<p>DAM SAFETY INSPECTIONS-FERC</p> <p>Estimators Experience - The estimator has served as the WADlet manager overseeing the Dams and Watershed Management and Maintenance activities for the past 4 fiscal years. The estimator has directed and/or participated in the inspection of the dams for the past 6 years. The estimator is also a Professional Engineer Licensed in the State of Colorado.</p> <p>Experience Item Desc - annual visual/physical inspections of dam structures conducted with Federal Energy Regulatory Commission dam inspector, and presentation of compiled monitoring data.</p> <p>Breakdown of Cost Data:</p> <p>Item - annual FERC dam inspections Units - hours Unit Cost - Mech Eng - 2 hours/inspection Civil Eng 3.55 hours/inspection Unit Cost Adjustment factor - 4 inspections Revised Unit Cost - Mech Eng - 14.21 hours Civil Eng 6.88 hours X \$45/Hr. Basis for adjustment - 4 dams inspected</p> <p>Item - preparation for FERC dam inspections Units - hours Unit Cost - Mech Eng - 71.2 hours Civil Eng 43 hours X \$45/Hr. Unit Cost Adjustment factor - N/A Revised Unit Cost - N/A Basis for adjustment - N/A</p> <p>Item - response to annual FERC dam inspections report Units - hours Unit Cost - Mech Eng - 42.72 hours Civil Eng - 27.46 hours X \$45/Hr. Unit Cost Adjustment factor - N/A Revised Unit Cost - N/A Basis for adjustment - N/A</p> <p>Item - Gen Mgr hours for FERC dam inspection Units - hours Unit Cost - 18.32 hours/inspection process Unit Cost Adjustment factor - N/A Revised Unit Cost - N/A Basis for adjustment - N/A</p> <p>Item - Admin Assist hours for FERC dam inspection Units - hours Unit Cost - 4.29 hours X \$45/Hr./inspection process Unit Cost Adjustment factor - N/A Revised Unit Cost - N/A Basis for adjustment - N/A</p> <p>This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.</p>
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Resources		<i>Cost Element</i>	<i>Skill</i>	<i>Department</i>	<i>Curve</i>	<i>Quantity</i>	<i>Units</i>
750	STRAIGHT TIME BASE	E070	MECHANICAL ENGINEERS	C222S	Water Svstem Operations	Linear	113.73 Hours
<i>Factors</i>		127.88	HR				

0.88934 [SYS 061400] .88934200 - System

WBS No: 1EBB0402
 Activity ID: 1EBB420010

Rockv Flats Closure Project
Baseline Cost and Basis of Estimate

Project Baseline Devl
 WBS Filter 1EBB
 Activity Filter *

Starts In FY *

750	STRAIGHT TIME BASE	M020	MANAGERS (GRADE 69 - 72)	C222S	Water Svstem Operations	Linear	16.29	Hours
<i>Factors</i> 18.32 HR							0.88934	[SYS 061400] .88934200 - Svstem
A5H	SUBCONTRACTED SRVS	E020	CIVIL ENGINEERS	C222S	Water Svstem Operations	Linear	3.095.18	Dollars
<i>Factors</i> 3480.3 \$							0.88934	[SYS 061400] .88934200 - Svstem
A5H	SUBCONTRACTED SRVS	G010	ADMINISTRATIVE ASSISTANTS	C222S	Water Svstem Operations	Linear	171.69	Dollars
<i>Factors</i> 193.05 \$							0.88934	[SYS 061400] .88934200 - Svstem

Line Item IBCGER0225 - Dam and Waterway Maintenance

BOE

DAM AND WATERWAY MAINTENANCE

Estimators Experience - The estimator has served as the WADlet manager overseeing the Dams and Watershed Management and Maintenance activities for the past 4 fiscal years. The has post-graduate instruction in project management and experience in construction cost estimating. The estimator is also a Professional Engineer Licensed in the State of Colorado.

Experience Item Desc - Routine dam and waterway maintenance activity typically conducted during 2nd qtr

Breakdown of Cost Data:

Item - Subcontracted labor cost for typical maintenance activities
 Units - dollars
 Unit Cost - \$70,000
 Unit Cost Adjustment factor - 0.86
 Revised Unit Cost - \$60,202.55
 Basis for adjustment - adjustment necessary to meet fiscal constraints

Item - Industrial Hygienist labor hours
 Units - hours
 Unit Cost - 17.16 Hr./project (typical for project of this scope)
 Unit Cost Adjustment factor - N/A
 Revised Unit Cost - N/A
 Basis for adjustment - N/A

Item - pre-construction labor hours
 Units - hours
 Unit Cost - Mech Eng 35.52 hours/week
 Admin Assist 2 hours/week
 Gen Mgr 9.16 hours/week
 Civil Eng 41.18 Hr./week \$45/Hr.
 Unit Cost Adjustment factor - 5 weeks
 Revised Unit Cost - Mech Eng 177.61 hours
 Admin Assist 10 hours
 Gen Mgr. 45.79 hours
 Civil Eng \$9,266.40
 Basis for adjustment - period of preconstruction effort

Item - construction labor hours
 Units - hours
 Unit Cost - Mech Eng 35.52 hours/week
 Gen Mgr 9.16 hours/week
 Civil Eng 68.64 hours/week X \$45/Hr.
 Unit Cost Adjustment factor - 3 weeks
 Revised Unit Cost - Mech Eng 106.56 hours
 Gen Mgr 27.48 hours
 Civil Eng \$9,266.40
 Basis for adjustment - period of construction effort

This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

Resources	Cost Element	Skill	Department	Curve	Quantity	Units
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WBS No: 1EBB0402
 Activity ID: 1EBB420010

Rockv Flats Closure Project
Baseline Cost and Basis of Estimate

Project Baseline Devl
 WBS Filter 1EBB
 Activity Filter *

Starts In FY *

750	STRAIGHT TIME BASE	E070	MECHANICAL ENGINEERS	C222S	Water Svstem Operations	Linear	252.72	Hours
<i>Factors</i> 284.17 HR							0.88934	[SYS 061400] .88934200 - Svstem
750	STRAIGHT TIME BASE	M020	MANAGERS (GRADE 69 - 72)	C222S	Water Svstem Operations	Linear	65.16	Hours
<i>Factors</i> 73.27 HR							0.88934	[SYS 061400] .88934200 - Svstem
A5H	SUBCONTRACTED SRVS	0000	NONE	C222S	Water Svstem Operations	Linear	54.762.99	Dollars
<i>Factors</i> 60202.6 \$ 1.02283 -- FY00 Escalation --							0.88934	[SYS 061400] .88934200 - Svstem
A5H	SUBCONTRACTED SRVS	E020	CIVIL ENGINEERS	C222S	Water Svstem Operations	Linear	16.482.00	Dollars
<i>Factors</i> 18532.8 \$							0.88934	[SYS 061400] .88934200 - Svstem
A5H	SUBCONTRACTED SRVS	G010	ADMINISTRATIVE ASSISTANTS	C222S	Water Svstem Operations	Linear	686.75	Dollars
<i>Factors</i> 772.2 \$							0.88934	[SYS 061400] .88934200 - Svstem
A5H	SUBCONTRACTED SRVS	P090	INDUSTRIAL HYGIENISTS	C222S	Water Svstem Operations	Linear	686.75	Dollars
<i>Factors</i> 772.2 \$							0.88934	[SYS 061400] .88934200 - Svstem

Line Item IBCGER0235 - Watershed Repairs

BOE

WATERSHED REPAIRS

Estimators Experience - The estimator has served as the WADlet manager overseeing the Dams and Watershed Management and Maintenance activities for the past 4 fiscal years. The has post-graduate instruction in project management and experience in construction cost estimating. The estimator is also a Professional Engineer Licensed in the State of Colorado.

Experience Item Desc - Routine watershed repair activity typically conducted during the 3rd & 4th qtrs

Breakdown of Cost Data:

Item - Subcontracted labor cost for typical maintenance activity
 Units - dollars
 Unit Cost - \$20,000
 Unit Cost Adjustment factor - N/A
 Revised Unit Cost - N/A
 Basis for adjustment - N/A

Item - Industrial Hygienist labor hours
 Units - hours & \$
 Unit Cost - 8.58 Hr. X \$45/Hr./project (typical for project of this scope)
 Unit Cost Adjustment factor - N/A
 Revised Unit Cost - N/A
 Basis for adjustment - N/A

Item - pre-construction labor hours
 Units - hours
 Unit Cost - Mech Eng 56.83 hours/week
 Admin Assist .86 Hr./week X \$45/Hr.
 Gen Mgr 3.66 hours/week
 Civil Eng 6.86 Hr./week X \$45/Hr.
 Unit Cost Adjustment factor - 5 weeks
 Revised Unit Cost - Mech Eng 284.17 hours
 Admin Assist \$193.05
 Gen Mgr 18.32 hours
 Civil Eng \$1,544.40
 Basis for adjustment - period of preconstruction effort

Item - construction labor hours
 Units - hours
 Unit Cost - Mech Eng 56.83 hours/week
 Gen Mgr 3.66 hours/week

WBS No: 1EBB0402
 Activity ID: 1EBB420010

Rockv Flats Closure Project
Baseline Cost and Basis of Estimate

Project Baseline Devl
 WBS Filter 1EBB
 Activity Filter *

Starts In FY *

Civil Eng 13.73 Hr./week X \$45/Hr.
 Unit Cost Adjustment factor - 5 weeks
 Revised Unit Cost - Mech Eng 284.17 hours
 Gen Mgr 18.32hours
 Civil Eng \$3,088.80
 Basis for adjustment - period of construction effort

This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

Resources	Cost Element	Skill	Department	Curve	Quantity	Units
	750 STRAIGHT TIME BASE	E070 MECHANICAL ENGINEERS	C222S Water Svstem Operations	Linear	505.45	Hours
Factors	568.34 HR					
	750 STRAIGHT TIME BASE	M020 MANAGERS (GRADE 69 - 72)	C222S Water Svstem Operations	Linear	32.59	Hours
Factors	36.64 HR					
	A5H SUBCONTRACTED SRVS	0000 NONE	C222S Water Svstem Operations	Linear	15,965.88	Dollars
Factors	17551.8 DOLLARS	1.02283 -- FY00 Escalation --				
	A5H SUBCONTRACTED SRVS	E020 CIVIL ENGINEERS	C222S Water Svstem Operations	Linear	4,120.50	Dollars
Factors	4633.2 \$					
	A5H SUBCONTRACTED SRVS	G010 ADMINISTRATIVE ASSISTANTS	C222S Water Svstem Operations	Linear	171.69	Dollars
Factors	193.05 \$					
	A5H SUBCONTRACTED SRVS	P090 INDUSTRIAL HYGIENISTS	C222S Water Svstem Operations	Linear	343.37	Dollars
Factors	386.1 \$					

Line Item SYS - Contingency And Escalation

Resources	Cost Element	Skill	Department	Curve	Quantity	Units
	CON CONTINGENCY	0000 NONE	ZDEPT No Department	Linear	7,724.37	Dollars
Factors	7724.37 Dollars					
	ESC ESCALATION	0000 NONE	ZDEPT No Department	Linear	5,156.88	Dollars
Factors	5156.88 Dollars					

Activity ID: 1EBB420020 Description: Dams/Watershed Mamt & Maintenance FY02 Cost Risk 1 Schedule Risk 1

Line Item	Description	Quantity	Units	BOE Type	Labor Hours/Unit	Labor Hours Total	Labor Cost Total	Materials/ Sub Cost	Contingency & Escalation	Total Prime Cost	Burden Cost	Total Cost
IBCGER0205	Dam/Watershed Proj Mat	1.00	ea	EE	1.160	1.160	45,027	18,302	0	63,329	15,895	79,223
IBCGER0210	Dam Safetv Inspections	1.00	ea	EE	168	168	5,698	4,328	0	10,026	2,011	12,037
IBCGER0220	Dam Safetv Inspections-FERC	1.00	each	EE	130	130	4,598	3,267	0	7,865	1,623	9,488
IBCGER0225	Dam and Waterway Maintenance	1.00	ls	EE	318	318	11,765	72,618	0	84,383	4,153	88,536
IBCGER0235	Watershed Repairs	1.00	ls	EE	538	538	18,305	20,601	0	38,907	6,462	45,368
SYS	Contingency And Escalation	1.00	ea	EE	0	0	0	0	34,688	34,688	0	34,688
Total for Activity 1EBB420020:						2,314	85,393	119,117	34,688	239,197	30,144	269,341

Line Item IBCGER0205 - Dam/Watershed Proj Mgt

BOE
 DAM/WATERSHED PROJ MGT

Estimators Experience - The estimator has served as the WADlet manager overseeing the Dams and Watershed Management and Maintenance activities for the past 4 fiscal years. The has post-graduate instruction in project management and experience in construction cost estimating. The estimator is also a Professional Engineer Licensed in the State of Colorado.

Experience Item Desc - Project management and oversight of the Dams and Watershed Management and Maintenance WADlet and activities contained therein.

Breakdown of Cost Data:

WBS No: 1EBB0402
 Activity ID: 1EBB420020

Rockv Flats Closure Project
Baseline Cost and Basis of Estimate

Project Baseline Devl
 WBS Filter 1EBB
 Activity Filter *

Starts In FY *

Item - Mech Eng hours for project management
 Units - hours
 Unit Cost - 17.76 hours/week
 Unit Cost Adjustment factor - 52 weeks
 Revised Unit Cost - 923.55 hours
 Basis for adjustment - 52 weeks/year

Item - Gen Mgr hours for project management
 Units - hours
 Unit Cost - 7.33 hours/week
 Unit Cost Adjustment factor - 52 weeks
 Revised Unit Cost - 381.16 hours
 Basis for adjustment - 52 weeks/year

Item - Admin Assist hours for project management
 Units - Dollars
 Unit Cost - 0.21 hours/week X \$45/Hr.
 Unit Cost Adjustment factor - 52 weeks
 Revised Unit Cost - \$501.75
 Basis for adjustment - 52 weeks/year

Item - Civil Eng hours for project management
 Units - Dollars
 Unit Cost - 8.58 hours X \$45/Hr.
 Unit Cost Adjustment factor - 52 weeks
 Revised Unit Cost - \$20,077.2
 Basis for adjustment - 52 weeks/year

This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

Resources

Cost Element	Skill	Department	Curve	Quantity	Units
750 STRAIGHT TIME BASE	E070 MECHANICAL ENGINEERS	C222S Water System Operations	Linear	821.35	Hours
<i>Factors</i> 923.55 Hours					
750 STRAIGHT TIME BASE	M020 MANAGERS (GRADE 69 - 72)	C222S Water System Operations	Linear	338.85	Hours
<i>Factors</i> 381.01 Hours					
A5H SUBCONTRACTED SRVS	E020 CIVIL ENGINEERS	C222S Water System Operations	Linear	17,855.50	Dollars
<i>Factors</i> 20077.2 \$					
A5H SUBCONTRACTED SRVS	G010 ADMINISTRATIVE ASSISTANTS	C222S Water System Operations	Linear	446.23	Dollars
<i>Factors</i> 501.75 \$					
0.88934 [SYS 061400] .88934200 - System					

Line Item IBCGER0210 - Dam Safety Inspections

BOE

DAM SAFETY INSPECTIONS

Estimators Experience - The estimator has served as the WADlet manager overseeing the Dams and Watershed Management and Maintenance activities for the past 4 fiscal years. The estimator has directed and/or participated in the inspection of the dams for the past 6 years. The estimator is also a Professional Engineer Licensed in the State of Colorado.

Experience Item Desc - annual visual/physical inspections of dam structures; collection, compilation and interpretation of dam monitoring instrumentation data; and reporting of results to appropriate authorities. Also, developing recommendations for dam upgrades/improvement to correct deficiencies detected during the inspections.

Breakdown of Cost Data:

Item - Mech Eng hours for dam safety inspections
 Units - hours
 Unit Cost - 10.47 hours/dam
 Unit Cost Adjustment factor - 12 dams

WBS No: 1EBB0402
 Activity ID: 1EBB420020

Rockv Flats Closure Project
Baseline Cost and Basis of Estimate

Project Baseline Devl
 WBS Filter 1EBB
 Activity Filter *

Starts In FY *

Revised Unit Cost - 125.61 hours
 Basis for adjustment - 12 dams inspected

Item - Mech Eng hours for reporting of dam safety inspections results
 Units - hours
 Unit Cost - 52 hours/reporting process
 Unit Cost Adjustment factor - N/A
 Revised Unit Cost - N/A
 Basis for adjustment - N/A

Item - Gen Mgr hours for safety inspections
 Units - hours
 Unit Cost - 10.97 hours/inspection process
 Unit Cost Adjustment factor - N/A
 Revised Unit Cost - N/A
 Basis for adjustment - N/A

Item - Admin Assist hours for dam safety inspections
 Units - \$
 Unit Cost -5.14 hours x \$45/Hr./inspection process
 Unit Cost Adjustment factor - N/A
 Revised Unit Cost - \$231.30
 Basis for adjustment - N/A

Item - Civil Eng hours for dam safety inspections
 Units - \$
 Unit Cost - 6.86 hours x \$45/Hr./dam
 Unit Cost Adjustment factor - 12 dams
 Revised Unit Cost - \$3,704.40
 Basis for adjustment - 12 dams inspected

Item - Civil Eng hours for compilation of data for dam safety inspections
 Units - \$
 Unit Cost - 1.72 hours x \$45/Hr./dam
 Unit Cost Adjustment factor - 12 dams
 Revised Unit Cost - \$928.80
 Basis for adjustment - 12 dams inspected

This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

Resources	Cost Element	Skill	Department	Curve	Quantity	Units
	750 STRAIGHT TIME BASE	E070 MECHANICAL ENGINEERS	C222S Water Svstem Operations	Linear	157.96	Hours
Factors	177.61 Hours					
	750 STRAIGHT TIME BASE	M020 MANAGERS (GRADE 69 - 72)	C222S Water Svstem Operations	Linear	9.76	Hours
Factors	10.97 Hours					
	A5H SUBCONTRACTED SRVS	E020 CIVIL ENGINEERS	C222S Water Svstem Operations	Linear	4.122.33	Dollars
Factors	4635.26 \$					
	A5H SUBCONTRACTED SRVS	G010 ADMINISTRATIVE ASSISTANTS	C222S Water Svstem Operations	Linear	205.70	Dollars
Factors	231.3 \$					

Line Item IBCGER0220 - Dam Safety Inspections-FERC

BOE	DAM SAFETY INSPECTIONS-FERC
	Estimators Experience - The estimator has served as the WADlet manager overseeing the Dams and Watershed Management and Maintenance activities for the past 4 fiscal years. The estimator has directed and/or participated in the inspection of the dams for the past 6 years. The estimator is also a Professional Engineer Licensed in the State of Colorado.
	Experience Item Desc - annual visual/physical inspections of dam structures conducted with Federal Energy Regulatory Commission dam inspector, and

WBS No: 1EBB0402
 Activity ID: 1EBB420020

Rockv Flats Closure Project
Baseline Cost and Basis of Estimate

Project: Baseline Devl
 WBS Filter: 1EBB
 Activity Filter: *

Starts In FY *

presentation of compiled monitoring data.

Breakdown of Cost Data:

Item - annual FERC dam inspections
 Units - hours
 Unit Cost - Mech Eng - 2 hours/inspection
 Civil Eng 3.55 hours/inspection
 Unit Cost Adjustment factor - 4 inspections
 Revised Unit Cost - Mech Eng - 14.21 hours
 Civil Eng 6.88 hours X \$45/Hr.
 Basis for adjustment - 4 dams inspected

Item - preparation for FERC dam inspections
 Units - hours
 Unit Cost - Mech Eng - 71.2 hours
 Civil Eng 43 hours X \$45/Hr.
 Unit Cost Adjustment factor - N/A
 Revised Unit Cost - N/A
 Basis for adjustment - N/A

Item - response to annual FERC dam inspections report
 Units - hours
 Unit Cost - Mech Eng - 42.72 hours
 Civil Eng - 27.46 hours X \$45/Hr.
 Unit Cost Adjustment factor - N/A
 Revised Unit Cost - N/A
 Basis for adjustment - N/A

Item - Gen Mgr hours for FERC dam inspection
 Units - hours
 Unit Cost - 18.32 hours/inspection process
 Unit Cost Adjustment factor - N/A
 Revised Unit Cost - N/A
 Basis for adjustment - N/A

Item - Admin Assist hours for FERC dam inspection
 Units - hours
 Unit Cost - 4.29 hours X \$45/Hr./inspection process
 Unit Cost Adjustment factor - N/A
 Revised Unit Cost - N/A
 Basis for adjustment - N/A

This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

Resources

Cost Element	Skill	Department	Curve	Quantity	Units
750 STRAIGHT TIME BASE	E070 MECHANICAL ENGINEERS	C222S Water Svstem Operations	Linear	113.73	Hours
<i>Factors</i> 127.88 HR					
750 STRAIGHT TIME BASE	M020 MANAGERS (GRADE 69 - 72)	C222S Water Svstem Operations	Linear	16.29	Hours
<i>Factors</i> 18.32 HR					
A5H SUBCONTRACTED SRVS	E020 CIVIL ENGINEERS	C222S Water Svstem Operations	Linear	3.09518	Dollars
<i>Factors</i> 3480.3 \$					
A5H SUBCONTRACTED SRVS	G010 ADMINISTRATIVE ASSISTANTS	C222S Water Svstem Operations	Linear	171.69	Dollars
<i>Factors</i> 193.05 \$					
0.88934 [SYS 061400] .88934200 - Svstem					

Line Item IBCGER0225 - Dam and Waterway Maintenance

BOE DAM AND WATERWAY MAINTENANCE

WBS No: 1EBB0402
 Activity ID: 1EBB420020

Rockv Flats Closure Project
Baseline Cost and Basis of Estimate

Project Baseline Devl
 WBS Filter 1EBB
 Activity Filter *

Starts In FY *

Estimators Experience - The estimator has served as the WADlet manager overseeing the Dams and Watershed Management and Maintenance activities for the past 4 fiscal years. The has post-graduate instruction in project management and experience in construction cost estimating. The estimator is also a Professional Engineer Licensed in the State of Colorado.

Experience Item Desc - Routine dam and waterway maintenance activity typically conducted during 2nd qtr

Breakdown of Cost Data:

Item - Subcontracted labor cost for typical maintenance activities
 Units - dollars
 Unit Cost - \$70,000
 Unit Cost Adjustment factor - 0.86
 Revised Unit Cost - \$60,202.55
 Basis for adjustment - adjustment necessary to meet fiscal constraints

Item - Industrial Hygienist labor hours
 Units - hours
 Unit Cost - 17.16 Hr./project (typical for project of this scope)
 Unit Cost Adjustment factor - N/A
 Revised Unit Cost - N/A
 Basis for adjustment - N/A

Item - pre-construction labor hours
 Units - hours
 Unit Cost - Mech Eng 35.52 hours/week
 Admin Assist 2 hours/week
 Gen Mgr 9.16 hours/week
 Civil Eng 41.18 Hr./week \$45/Hr.
 Unit Cost Adjustment factor - 5 weeks
 Revised Unit Cost - Mech Eng 177.61 hours
 Admin Assist 10 hours
 Gen Mgr. 45.79 hours
 Civil Eng \$9,266.40
 Basis for adjustment - period of preconstruction effort

Item - construction labor hours
 Units - hours
 Unit Cost - Mech Eng 35.52 hours/week
 Gen Mgr 9.16 hours/week
 Civil Eng 68.64 hours/week X \$45/Hr.
 Unit Cost Adjustment factor - 3 weeks
 Revised Unit Cost - Mech Eng 106.56 hours
 Gen Mgr 27.48 hours
 Civil Eng \$9,266.40
 Basis for adjustment - period of construction effort

This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

Resources

Cost Element	Skill	Department	Curve	Quantity	Units
750 STRAIGHT TIME BASE	E070 MECHANICAL ENGINEERS	C222S Water System Operations	Linear	252.72	Hours
<i>Factors</i> 284.17 HR					
0.88934 ISYS 0614001 .88934200 - System					
750 STRAIGHT TIME BASE	M020 MANAGERS (GRADE 69 - 72)	C222S Water System Operations	Linear	65.16	Hours
<i>Factors</i> 73.27 HR					
0.88934 ISYS 0614001 .88934200 - System					
A5H SUBCONTRACTED SRVS	0000 NONE	C222S Water System Operations	Linear	54.762.99	Dollars
<i>Factors</i> 60202.6 \$ 1.02283 -- FY00 Escalation --					
0.88934 ISYS 0614001 .88934200 - System					
A5H SUBCONTRACTED SRVS	E020 CIVIL ENGINEERS	C222S Water System Operations	Linear	16.482.00	Dollars
<i>Factors</i> 18532.8 \$					
0.88934 ISYS 0614001 .88934200 - System					

WBS No: 1EBB0402
 Activity ID: 1EBB420020

Rockv Flats Closure Project
Baseline Cost and Basis of Estimate

Project Baseline Devl
 WBS Filter 1EBB
 Activity Filter *

Starts In FY *

A5H	SUBCONTRACTED SRVS	G010	ADMINISTRATIVE ASSISTANTS	C222S	Water Svstem Operations	Linear	686.75	Dollars
Factors		772.2 \$						

0.88934 [SYS 061400] .88934200 - Svstem

A5H	SUBCONTRACTED SRVS	P090	INDUSTRIAL HYGIENISTS	C222S	Water Svstem Operations	Linear	686.75	Dollars
Factors		772.2 \$						

0.88934 [SYS 061400] .88934200 - Svstem

Line Item IBCGER0235 - Watershed Repairs

BOE

WATERSHED REPAIRS

Estimators Experience - The estimator has served as the WADlet manager overseeing the Dams and Watershed Management and Maintenance activities for the past 4 fiscal years. The has post-graduate instruction in project management and experience in construction cost estimating. The estimator is also a Professional Engineer Licensed in the State of Colorado.

Experience Item Desc - Routine watershed repair activity typically conducted during the 3rd & 4th qtrs

Breakdown of Cost Data:

Item - Subcontracted labor cost for typical maintenance activity
 Units - dollars
 Unit Cost - \$20,000
 Unit Cost Adjustment factor - N/A
 Revised Unit Cost - N/A
 Basis for adjustment - N/A

Item - Industrial Hygienist labor hours
 Units - hours & \$
 Unit Cost - 8.58 Hr. X \$45/Hr./project (typical for project of this scope)
 Unit Cost Adjustment factor - N/A
 Revised Unit Cost - N/A
 Basis for adjustment - N/A

Item - pre-construction labor hours
 Units - hours
 Unit Cost - Mech Eng 56.83 hours/week
 Admin Assist .86 Hr./week X \$45/Hr.
 Gen Mgr 3.66 hours/week
 Civil Eng 6.86 Hr./week X \$45/Hr.
 Unit Cost Adjustment factor - 5 weeks
 Revised Unit Cost - Mech Eng 284.17 hours
 Admin Assist \$193.05
 Gen Mgr 18.32 hours
 Civil Eng \$1,544.40
 Basis for adjustment - period of preconstruction effort

Item - construction labor hours
 Units - hours
 Unit Cost - Mech Eng 56.83 hours/week
 Gen Mgr 3.66 hours/week
 Civil Eng 13.73 Hr./week X \$45/Hr.
 Unit Cost Adjustment factor - 5 weeks
 Revised Unit Cost - Mech Eng 284.17 hours
 Gen Mgr 18.32hours
 Civil Eng \$3,088.80
 Basis for adjustment - period of construction effort

This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

Resources

Cost Element		Skill		Department		Curve	Quantity	Units
750	STRAIGHT TIME BASE	E070	MECHANICAL ENGINEERS	C222S	Water Svstem Operations	Linear	505.45	Hours
Factors		568.34 HR						

0.88934 [SYS 061400] .88934200 - Svstem

WBS No: 1EBB0402
 Activity ID: 1EBB420020

Rockv Flats Closure Project
Baseline Cost and Basis of Estimate

Project Baseline Devl
 WBS Filter 1EBB
 Activity Filter * Starts In FY *

750	STRAIGHT TIME BASE	M020	MANAGERS (GRADE 69 - 72)	C222S	Water Svstem Operations	Linear	32.59	Hours
<i>Factors</i> 36.64 HR							0.88934 [SYS 061400] .88934200 - Svstem	
A5H	SUBCONTRACTED SRVS	0000	NONE	C222S	Water Svstem Operations	Linear	15.965	Dollars
<i>Factors</i> 17551.8 DOLLARS 1.02283 -- FY00 Escalation --							0.88934 [SYS 061400] .88934200 - Svstem	
A5H	SUBCONTRACTED SRVS	E020	CIVIL ENGINEERS	C222S	Water Svstem Operations	Linear	4.120	Dollars
<i>Factors</i> 4633.2 \$							0.88934 [SYS 061400] .88934200 - Svstem	
A5H	SUBCONTRACTED SRVS	G010	ADMINISTRATIVE ASSISTANTS	C222S	Water Svstem Operations	Linear	171.69	Dollars
<i>Factors</i> 193.05 \$							0.88934 [SYS 061400] .88934200 - Svstem	
A5H	SUBCONTRACTED SRVS	P090	INDUSTRIAL HYGIENISTS	C222S	Water Svstem Operations	Linear	343.37	Dollars
<i>Factors</i> 386.1 \$							0.88934 [SYS 061400] .88934200 - Svstem	

Line Item SYS - Contingency And Escalation

BOE

Resources

CON	Cost Element	0000	Skill	ZDEPT	Department	Curve	Quantity	Units
	CONTINGENCY	0000	NONE	ZDEPT	No Department	Linear	23.722	Dollars
<i>Factors</i> 23722.4 Dollars							10.96566 Dollars	
ESC	ESCALATION	0000	NONE	ZDEPT	No Department	Linear	10.965	Dollars
<i>Factors</i> 10965.7 Dollars								

Activity ID: 1EBB420030 Description: Dams/Watershed Mgmt & Maintenance FY03

Cost Risk 1 Schedule Risk 1

Line Item	Description	Quantity	Units	BOE Type	Labor Hours/Unit	Labor Hours Total	Labor Cost Total	Materials/ Sub Cost	Contingency & Escalation	Total Prime Cost	Burden Cost	Total Cost
IBCGER0205	Dam/Watershed Proj Mgt	1.00	ea	EE	1.160	1.160	45.027	18.302	0	63.329	15.579	78.908
IBCGER0210	Dam Safetv Inspections	1.00	ea	EE	168	168	5.698	4.328	0	10.026	1.971	11.997
IBCGER0220	Dam Safetv Inspections-FERC	1.00	each	EE	130	130	4.598	3.267	0	7.865	1.591	9.455
IBCGER0225	Dam and Waterwav Maintenance	1.00	ls	EE	318	318	11.765	72.618	0	84.383	4.071	88.454
IBCGER0235	Watershed Repairs	1.00	ls	EE	538	538	18.305	20.601	0	38.907	6.334	45.240
SYS	Contingency And Escalation	1.00	ea	EE	0	0	0	0	64.201	64.201	0	64.201
Total for Activity 1EBB420030:						2.314	85.393	119.117	64.201	268.710	29.546	298.256

Line Item IBCGER0205 - Dam/Watershed Proj Mgt

BOE

DAM/WATERSHED PROJ MGT
Estimators Experience - The estimator has served as the WADlet manager overseeing the Dams and Watershed Management and Maintenance activities for the past 4 fiscal years. The has post-graduate instruction in project management and experience in construction cost estimating. The estimator is also a Professional Engineer Licensed in the State of Colorado.
Experience Item Desc - Project management and oversight of the Dams and Watershed Management and Maintenance WADlet and activities contained therein.
Breakdown of Cost Data:
Item - Mech Eng hours for project management Units - hours Unit Cost - 17.76 hours/week Unit Cost Adjustment factor - 52 weeks Revised Unit Cost - 923.55 hours Basis for adjustment - 52 weeks/year
Item - Gen Mgr hours for project management Units - hours Unit Cost - 7.33 hours/week Unit Cost Adjustment factor - 52 weeks Revised Unit Cost - 381.16 hours Basis for adjustment - 52 weeks/year

WBS No: 1EBB0402
 Activity ID: 1EBB420030

Rockv Flats Closure Project
Baseline Cost and Basis of Estimate

Project Baseline Devl
 WBS Filter 1EBB
 Activity Filter *

Starts In FY *

Item - Admin Assist hours for project management
 Units - Dollars
 Unit Cost - 0.21 hours/week X \$45/Hr.
 Unit Cost Adjustment factor - 52 weeks
 Revised Unit Cost - \$501.75
 Basis for adjustment - 52 weeks/year

Item - Civil Eng hours for project management
 Units - Dollars
 Unit Cost - 8.58 hours X \$45/Hr.
 Unit Cost Adjustment factor - 52 weeks
 Revised Unit Cost - \$20,077.2
 Basis for adjustment - 52 weeks/year

This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

Resources

Cost Element	Skill	Department	Curve	Quantity	Units
750 STRAIGHT TIME BASE	E070 MECHANICAL ENGINEERS	C222S Water Svstem Operations	Linear	821.35	Hours
<i>Factors</i> 923.55 Hours					
750 STRAIGHT TIME BASE	M020 MANAGERS (GRADE 69 - 72)	C222S Water Svstem Operations	Linear	338.85	Hours
<i>Factors</i> 381.01 Hours					
A5H SUBCONTRACTED SRVS	E020 CIVIL ENGINEERS	C222S Water Svstem Operations	Linear	17,855.50	Dollars
<i>Factors</i> 20077.2 \$					
A5H SUBCONTRACTED SRVS	G010 ADMINISTRATIVE ASSISTANTS	C222S Water Svstem Operations	Linear	446.23	Dollars
<i>Factors</i> 501.75 \$					

0.88934 [SYS 061400] .88934200 - Svstem
 0.88934 [SYS 061400] .88934200 - Svstem
 0.88934 [SYS 061400] .88934200 - Svstem
 0.88934 [SYS 061400] .88934200 - Svstem

Line Item IBCGER0210 - Dam Safety Inspections

BOE

DAM SAFETY INSPECTIONS

Estimators Experience - The estimator has served as the WADlet manager overseeing the Dams and Watershed Management and Maintenance activities for the past 4 fiscal years. The estimator has directed and/or participated in the inspection of the dams for the past 6 years. The estimator is also a Professional Engineer Licensed in the State of Colorado.

Experience Item Desc - annual visual/physical inspections of dam structures; collection, compilation and interpretation of dam monitoring instrumentation data; and reporting of results to appropriate authorities. Also, developing recommendations for dam upgrades/improvement to correct deficiencies detected during the inspections.

Breakdown of Cost Data:

Item - Mech Eng hours for dam safety inspections
 Units - hours
 Unit Cost - 10.47 hours/dam
 Unit Cost Adjustment factor - 12 dams
 Revised Unit Cost - 125.61 hours
 Basis for adjustment - 12 dams inspected

Item - Mech Eng hours for reporting of dam safety inspections results
 Units - hours
 Unit Cost - 52 hours/reporting process
 Unit Cost Adjustment factor - N/A
 Revised Unit Cost - N/A
 Basis for adjustment - N/A

Item - Gen Mgr hours for safety inspections
 Units - hours
 Unit Cost - 10.97 hours/inspection process

WBS No: 1EBB0402
 Activity ID: 1EBB420030

Rockv Flats Closure Project
Baseline Cost and Basis of Estimate

Project Baseline Devl
 WBS Filter 1EBB
 Activity Filter *

Starts In FY *

Unit Cost Adjustment factor - N/A
 Revised Unit Cost - N/A
 Basis for adjustment - N/A

Item - Admin Assist hours for dam safety inspections
 Units - \$
 Unit Cost -5.14 hours x \$45/Hr./inspection process
 Unit Cost Adjustment factor - N/A
 Revised Unit Cost - \$231.30
 Basis for adjustment - N/A

Item - Civil Eng hours for dam safety inspections
 Units - \$
 Unit Cost - 6.86 hours x \$45/Hr./dam
 Unit Cost Adjustment factor - 12 dams
 Revised Unit Cost - \$3,704.40
 Basis for adjustment - 12 dams inspected

Item - Civil Eng hours for compilation of data for dam safety inspections
 Units - \$
 Unit Cost - 1.72 hours x \$45/Hr./dam
 Unit Cost Adjustment factor - 12 dams
 Revised Unit Cost - \$928.80
 Basis for adjustment - 12 dams inspected

This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

Resources

Cost Element		Skill		Department		Curve	Quantity	Units
750	STRAIGHT TIME BASE	E070	MECHANICAL ENGINEERS	C222S	Water Svstem Operations	Linear	157.96	Hours
<i>Factors</i> 177.61 Hours						0.88934	ISYS 0614001.88934200 - System	
750	STRAIGHT TIME BASE	M020	MANAGERS (GRADE 69 - 72)	C222S	Water Svstem Operations	Linear	9.76	Hours
<i>Factors</i> 10.97 Hours						0.88934	ISYS 0614001.88934200 - System	
A5H	SUBCONTRACTED SRVS	E020	CIVIL ENGINEERS	C222S	Water Svstem Operations	Linear	4.122.33	Dollars
<i>Factors</i> 4635.26 \$						0.88934	ISYS 0614001.88934200 - System	
A5H	SUBCONTRACTED SRVS	G010	ADMINISTRATIVE ASSISTANTS	C222S	Water Svstem Operations	Linear	205.70	Dollars
<i>Factors</i> 231.3 \$						0.88934	ISYS 0614001.88934200 - System	

Line Item IBCGER0220 - Dam Safety Inspections-FERC

BOE DAM SAFETY INSPECTIONS-FERC

Estimators Experience - The estimator has served as the WADlet manager overseeing the Dams and Watershed Management and Maintenance activities for the past 4 fiscal years. The estimator has directed and/or participated in the inspection of the dams for the past 6 years. The estimator is also a Professional Engineer Licensed in the State of Colorado.

Experience Item Desc - annual visual/physical inspections of dam structures conducted with Federal Energy Regulatory Commission dam inspector, and presentation of compiled monitoring data.

Breakdown of Cost Data:

Item - annual FERC dam inspections
 Units - hours
 Unit Cost - Mech Eng - 2 hours/inspection
 Civil Eng 3.55 hours/inspection
 Unit Cost Adjustment factor - 4 inspections
 Revised Unit Cost - Mech Eng - 14.21 hours
 Civil Eng 6.88 hours X \$45/Hr.
 Basis for adjustment - 4 dams inspected

WBS No: 1EBB0402
 Activity ID: 1EBB420030

Rockv Flats Closure Project
Baseline Cost and Basis of Estimate

Project: Baseline Devl
 WBS Filter: 1EBB
 Activity Filter: *

Starts In FY *

Item - preparation for FERC dam inspections
 Units - hours
 Unit Cost - Mech Eng - 71.2 hours
 Civil Eng 43 hours X \$45/Hr.
 Unit Cost Adjustment factor - N/A
 Revised Unit Cost - N/A
 Basis for adjustment - N/A

Item - response to annual FERC dam inspections report
 Units - hours
 Unit Cost - Mech Eng - 42.72 hours
 Civil Eng - 27.46 hours X \$45/Hr.
 Unit Cost Adjustment factor - N/A
 Revised Unit Cost - N/A
 Basis for adjustment - N/A

Item - Gen Mgr hours for FERC dam inspection
 Units - hours
 Unit Cost - 18.32 hours/inspection process
 Unit Cost Adjustment factor - N/A
 Revised Unit Cost - N/A
 Basis for adjustment - N/A

Item - Admin Assist hours for FERC dam inspection
 Units - hours
 Unit Cost - 4.29 hours X \$45/Hr./inspection process
 Unit Cost Adjustment factor - N/A
 Revised Unit Cost - N/A
 Basis for adjustment - N/A

This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

Resources

Cost Element	Skill	Department	Curve	Quantity	Units
750 STRAIGHT TIME BASE	E070 MECHANICAL ENGINEERS	C222S Water Svstem Operations	Linear	113.73	Hours
<i>Factors</i> 127.88 HR					
750 STRAIGHT TIME BASE	M020 MANAGERS (GRADE 69 - 72)	C222S Water Svstem Operations	Linear	16.29	Hours
<i>Factors</i> 18.32 HR					
A5H SUBCONTRACTED SRVS	E020 CIVIL ENGINEERS	C222S Water Svstem Operations	Linear	3,095.18	Dollars
<i>Factors</i> 3480.3 \$					
A5H SUBCONTRACTED SRVS	G010 ADMINISTRATIVE ASSISTANTS	C222S Water Svstem Operations	Linear	171.69	Dollars
<i>Factors</i> 193.05 \$					
0.88934 [SYS 061400] .88934200 - Svstem					

Line Item IBCGER0225 - Dam and Waterway Maintenance

BOE

DAM AND WATERWAY MAINTENANCE

Estimators Experience - The estimator has served as the WADlet manager overseeing the Dams and Watershed Management and Maintenance activities for the past 4 fiscal years. The has post-graduate instruction in project management and experience in construction cost estimating. The estimator is also a Professional Engineer Licensed in the State of Colorado.

Experience Item Desc - Routine dam and waterway maintenance activity typically conducted during 2nd qtr

Breakdown of Cost Data:

Item - Subcontracted labor cost for typical maintenance activities
 Units - dollars
 Unit Cost - \$70,000
 Unit Cost Adjustment factor - 0.86

WBS No: 1EBB0402
 Activity ID: 1EBB420030

Rockv Flats Closure Project
Baseline Cost and Basis of Estimate

Project: Baseline Devl
 WBS Filter: 1EBB
 Activity Filter: *

Starts In FY *

Revised Unit Cost - \$60,202.55
 Basis for adjustment - adjustment necessary to meet fiscal constraints

Item - Industrial Hygienist labor hours
 Units - hours
 Unit Cost - 17.16 Hr./project (typical for project of this scope)
 Unit Cost Adjustment factor - N/A
 Revised Unit Cost - N/A
 Basis for adjustment - N/A

Item - pre-construction labor hours
 Units - hours
 Unit Cost - Mech Eng 35.52 hours/week
 Admin Assist 2 hours/week
 Gen Mgr 9.16 hours/week
 Civil Eng 41.18 Hr./week \$45/Hr.
 Unit Cost Adjustment factor - 5 weeks
 Revised Unit Cost - Mech Eng 177.61 hours
 Admin Assist 10 hours
 Gen Mgr. 45.79 hours
 Civil Eng \$9,266.40
 Basis for adjustment - period of preconstruction effort

Item - construction labor hours
 Units - hours
 Unit Cost - Mech Eng 35.52 hours/week
 Gen Mgr 9.16 hours/week
 Civil Eng 68.64 hours/week X \$45/Hr.
 Unit Cost Adjustment factor - 3 weeks
 Revised Unit Cost - Mech Eng 106.56 hours
 Gen Mgr 27.48 hours
 Civil Eng \$9,266.40
 Basis for adjustment - period of construction effort

This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

Resources

Cost Element		Skill		Department		Curve	Quantity	Units
750	STRAIGHT TIME BASE	E070	MECHANICAL ENGINEERS	C222S	Water Svstem Operations	Linear	252.72	Hours
<i>Factors</i> 284.17 HR						0.88934 [SYS 061400] .88934200 - Svstem		
750	STRAIGHT TIME BASE	M020	MANAGERS (GRADE 69 - 72)	C222S	Water Svstem Operations	Linear	65.16	Hours
<i>Factors</i> 73.27 HR						0.88934 [SYS 061400] .88934200 - Svstem		
A5H	SUBCONTRACTED SRVS	0000	NONE	C222S	Water Svstem Operations	Linear	54.762.99	Dollars
<i>Factors</i> 60202.6 \$		1.02283 -- FY00 Escalation --				0.88934 [SYS 061400] .88934200 - Svstem		
A5H	SUBCONTRACTED SRVS	E020	CIVIL ENGINEERS	C222S	Water Svstem Operations	Linear	16.482.00	Dollars
<i>Factors</i> 18532.8 \$						0.88934 [SYS 061400] .88934200 - Svstem		
A5H	SUBCONTRACTED SRVS	G010	ADMINISTRATIVE ASSISTANTS	C222S	Water Svstem Operations	Linear	686.75	Dollars
<i>Factors</i> 772.2 \$						0.88934 [SYS 061400] .88934200 - Svstem		
A5H	SUBCONTRACTED SRVS	P090	INDUSTRIAL HYGIENISTS	C222S	Water Svstem Operations	Linear	686.75	Dollars
<i>Factors</i> 772.2 \$						0.88934 [SYS 061400] .88934200 - Svstem		

Line Item IBCGER0235 - Watershed Repairs

BOE WATERSHED REPAIRS

Estimators Experience - The estimator has served as the WADlet manager overseeing the Dams and Watershed Management and Maintenance activities for the past 4 fiscal years. The has post-graduate instruction in project management and experience in construction cost estimating. The estimator is also a Professional

WBS No: 1EBB0402
 Activity ID: 1EBB420030

Rockv Flats Closure Project
Baseline Cost and Basis of Estimate

Project: Baseline Devl
 WBS Filter: 1EBB
 Activity Filter: *

Starts In FY *

Engineer Licensed in the State of Colorado.

Experience Item Desc - Routine watershed repair activity typically conducted during the 3rd & 4th qtrs

Breakdown of Cost Data:

Item - Subcontracted labor cost for typical maintenance activity
 Units - dollars
 Unit Cost - \$20,000
 Unit Cost Adjustment factor - N/A
 Revised Unit Cost - N/A
 Basis for adjustment - N/A

Item - Industrial Hygienist labor hours
 Units - hours & \$
 Unit Cost - 8.58 Hr. X \$45/Hr./project (typical for project of this scope)
 Unit Cost Adjustment factor - N/A
 Revised Unit Cost - N/A
 Basis for adjustment - N/A

Item - pre-construction labor hours
 Units - hours
 Unit Cost - Mech Eng 56.83 hours/week
 Admin Assist .86 Hr./week X \$45/Hr.
 Gen Mgr 3.66 hours/week
 Civil Eng 6.86 Hr./week X \$45/Hr.
 Unit Cost Adjustment factor - 5 weeks
 Revised Unit Cost - Mech Eng 284.17 hours
 Admin Assist \$193.05
 Gen Mgr 18.32 hours
 Civil Eng \$1,544.40
 Basis for adjustment - period of preconstruction effort

Item - construction labor hours
 Units - hours
 Unit Cost - Mech Eng 56.83 hours/week
 Gen Mgr 3.66 hours/week
 Civil Eng 13.73 Hr./week X \$45/Hr.
 Unit Cost Adjustment factor - 5 weeks
 Revised Unit Cost - Mech Eng 284.17 hours
 Gen Mgr 18.32hours
 Civil Eng \$3,088.80
 Basis for adjustment - period of construction effort

This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

Resources	Cost Element	Skill	Department	Curve	Quantity	Units
750	STRAIGHT TIME BASE	E070	MECHANICAL ENGINEERS	C222S	Water Svstem Operations	Linear 505.45 Hours
Factors 568.34 HR						0.88934 [SYS 061400] .88934200 - Svstem
750	STRAIGHT TIME BASE	M020	MANAGERS (GRADE 69 - 72)	C222S	Water Svstem Operations	Linear 32.59 Hours
Factors 36.64 HR						0.88934 [SYS 061400] .88934200 - Svstem
A5H	SUBCONTRACTED SRVS	0000	NONE	C222S	Water Svstem Operations	Linear 15.965.88 Dollars
Factors 17551.8 DOLLARS 1.02283 -- FY00 Escalation --						0.88934 [SYS 061400] .88934200 - Svstem
A5H	SUBCONTRACTED SRVS	E020	CIVIL ENGINEERS	C222S	Water Svstem Operations	Linear 4.120.50 Dollars
Factors 4633.2 \$						0.88934 [SYS 061400] .88934200 - Svstem

WBS No: 1EBB0402
 Activity ID: 1EBB420030

Rockv Flats Closure Project
Baseline Cost and Basis of Estimate

Project Baseline Devl
 WBS Filter 1EBB
 Activity Filter * Starts In FY *

A5H	SUBCONTRACTED SRVS	G010	ADMINISTRATIVE ASSISTANTS	C222S	Water Svstem Operations	Linear	171.69	Dollars
<i>Factors</i> 193.05 \$								

0.88934 [SYS 061400] .88934200 - Svstem

A5H	SUBCONTRACTED SRVS	P090	INDUSTRIAL HYGIENISTS	C222S	Water Svstem Operations	Linear	343.37	Dollars
<i>Factors</i> 386.1 \$								

0.88934 [SYS 061400] .88934200 - Svstem

Line Item SYS - Contingency And Escalation

BOE

Resources

Cost Element		Skill		Department		Curve	Quantity	Units
CON	CONTINGENCY	0000	NONE	ZDEPT	No Department	Linear	46.252.30	Dollars
<i>Factors</i> 46252.3 Dollars								
ESC	ESCALATION	0000	NONE	ZDEPT	No Department	Linear	17.948.56	Dollars
<i>Factors</i> 17948.6 Dollars								

Activity ID: 1EBB420040 Description: Dams/Watershed Mgmt & Maintenance FY04

Cost Risk 1 Schedule Risk 1

Line Item	Description	Quantity	Units	BOE Type	Labor Hours/Unit	Labor Hours Total	Labor Cost Total	Materials/ Sub Cost	Contingency & Escalation	Total Prime Cost	Burden Cost	Total Cost
IBCGER0205	Dam/Watershed Proj Mgt	1.00	ea	EE	1.160	1.160	45.027	18.302	0	63.329	12.698	76.027
IBCGER0210	Dam Safety Inspections	1.00	ea	EE	168	168	5.698	4.328	0	10.026	1.607	11.632
IBCGER0220	Dam Safety Inspections-FERC	1.00	each	EE	130	130	4.598	3.267	0	7.865	1.297	9.161
IBCGER0225	Dam and Waterway Maintenance	1.00	ls	EE	318	318	11.765	72.618	0	84.383	3.318	87.701
IBCGER0235	Watershed Repairs	1.00	ls	EE	538	538	18.305	20.601	0	38.907	5.162	44.069
SYS	Contingency And Escalation	1.00	ea	EE	0	0	0	0	32.375	32.375	0	32.375
Total for Activity 1EBB420040:						2,314	85,393	119,117	32,375	236,884	24,081	260,964

Line Item IBCGER0205 - Dam/Watershed Proj Mgt

BOE

DAM/WATERSHED PROJ MGT	<p>Estimators Experience - The estimator has served as the WADlet manager overseeing the Dams and Watershed Management and Maintenance activities for the past 4 fiscal years. The has post-graduate instruction in project management and experience in construction cost estimating. The estimator is also a Professional Engineer Licensed in the State of Colorado.</p> <p>Experience Item Desc - Project management and oversight of the Dams and Watershed Management and Maintenance WADlet and activities contained therein.</p> <p>Breakdown of Cost Data:</p> <p>Item - Mech Eng hours for project management Units - hours Unit Cost - 17.76 hours/week Unit Cost Adjustment factor - 52 weeks Revised Unit Cost - 923.55 hours Basis for adjustment - 52 weeks/year</p> <p>Item - Gen Mgr hours for project management Units - hours Unit Cost - 7.33 hours/week Unit Cost Adjustment factor - 52 weeks Revised Unit Cost - 381.16 hours Basis for adjustment - 52 weeks/year</p> <p>Item - Admin Assist hours for project management Units - Dollars Unit Cost - 0.21 hours/week X \$45/Hr. Unit Cost Adjustment factor - 52 weeks Revised Unit Cost - \$501.75 Basis for adjustment - 52 weeks/year</p> <p>Item - Civil Eng hours for project management Units - Dollars Unit Cost - 8.58 hours X \$45/Hr.</p>
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WBS No: 1EBB0402
 Activity ID: 1EBB420040

Rockv Flats Closure Project
Baseline Cost and Basis of Estimate

Project: Baseline Devl
 WBS Filter: 1EBB
 Activity Filter: *

Starts In FY *

Unit Cost Adjustment factor - 52 weeks
 Revised Unit Cost - \$20,077.2
 Basis for adjustment - 52 weeks/year

This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

Resources

Cost Element	Skill	Department	Curve	Quantity	Units
750 STRAIGHT TIME BASE	E070 MECHANICAL ENGINEERS	C222S Water Svstem Operations	Linear	821.35	Hours
<i>Factors</i> 923.55 Hours					
750 STRAIGHT TIME BASE	M020 MANAGERS (GRADE 69 - 72)	C222S Water Svstem Operations	Linear	338.85	Hours
<i>Factors</i> 381.01 Hours					
A5H SUBCONTRACTED SRVS	E020 CIVIL ENGINEERS	C222S Water Svstem Operations	Linear	17.855.50	Dollars
<i>Factors</i> 20077.2 \$					
A5H SUBCONTRACTED SRVS	G010 ADMINISTRATIVE ASSISTANTS	C222S Water Svstem Operations	Linear	446.23	Dollars
<i>Factors</i> 501.75 \$					

0.88934 [SYS 061400] .88934200 - Svstem
 0.88934 [SYS 061400] .88934200 - Svstem
 0.88934 [SYS 061400] .88934200 - Svstem

Line Item IBCGER0210 - Dam Safety Inspections

BOE

DAM SAFETY INSPECTIONS

Estimators Experience - The estimator has served as the WADlet manager overseeing the Dams and Watershed Management and Maintenance activities for the past 4 fiscal years. The estimator has directed and/or participated in the inspection of the dams for the past 6 years. The estimator is also a Professional Engineer Licensed in the State of Colorado.

Experience Item Desc - annual visual/physical inspections of dam structures; collection, compilation and interpretation of dam monitoring instrumentation data; and reporting of results to appropriate authorities. Also, developing recommendations for dam upgrades/improvement to correct deficiencies detected during the inspections.

Breakdown of Cost Data:

Item - Mech Eng hours for dam safety inspections
 Units - hours
 Unit Cost - 10.47 hours/dam
 Unit Cost Adjustment factor - 12 dams
 Revised Unit Cost - 125.61 hours
 Basis for adjustment - 12 dams inspected

Item - Mech Eng hours for reporting of dam safety inspections results
 Units - hours
 Unit Cost - 52 hours/reporting process
 Unit Cost Adjustment factor - N/A
 Revised Unit Cost - N/A
 Basis for adjustment - N/A

Item - Gen Mgr hours for safety inspections
 Units - hours
 Unit Cost - 10.97 hours/inspection process
 Unit Cost Adjustment factor - N/A
 Revised Unit Cost - N/A
 Basis for adjustment - N/A

Item - Admin Assist hours for dam safety inspections
 Units - \$
 Unit Cost -5.14 hours x \$45/Hr./inspection process
 Unit Cost Adjustment factor - N/A
 Revised Unit Cost - \$231.30
 Basis for adjustment - N/A

WBS No: 1EBB0402
 Activity ID: 1EBB420040

Rockv Flats Closure Project
Baseline Cost and Basis of Estimate

Project Baseline Devl
 WBS Filter 1EBB
 Activity Filter *

Starts In FY *

Item - Civil Eng hours for dam safety inspections
 Units - \$
 Unit Cost - 6.86 hours x \$45/Hr./dam
 Unit Cost Adjustment factor - 12 dams
 Revised Unit Cost - \$3,704.40
 Basis for adjustment - 12 dams inspected

Item - Civil Eng hours for compilation of data for dam safety inspections
 Units - \$
 Unit Cost - 1.72 hours x \$45/Hr./dam
 Unit Cost Adjustment factor - 12 dams
 Revised Unit Cost - \$928.80
 Basis for adjustment - 12 dams inspected

This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

Resources

Cost Element	Skill	Department	Curve	Quantity	Units
750 STRAIGHT TIME BASE	E070 MECHANICAL ENGINEERS	C222S Water System Operations	Linear	157.96	Hours
<i>Factors</i> 177.61 Hours					
750 STRAIGHT TIME BASE	M020 MANAGERS (GRADE 69 - 72)	C222S Water System Operations	Linear	9.76	Hours
<i>Factors</i> 10.97 Hours					
A5H SUBCONTRACTED SRVS	E020 CIVIL ENGINEERS	C222S Water System Operations	Linear	4,122.33	Dollars
<i>Factors</i> 4635.26 \$					
A5H SUBCONTRACTED SRVS	G010 ADMINISTRATIVE ASSISTANTS	C222S Water System Operations	Linear	205.70	Dollars
<i>Factors</i> 231.3 \$					

0.88934 [SYS 061400] .88934200 - System

Line Item IBCGER0220 - Dam Safety Inspections-FERC

BOE

DAM SAFETY INSPECTIONS-FERC

Estimators Experience - The estimator has served as the WADlet manager overseeing the Dams and Watershed Management and Maintenance activities for the past 4 fiscal years. The estimator has directed and/or participated in the inspection of the dams for the past 6 years. The estimator is also a Professional Engineer Licensed in the State of Colorado.

Experience Item Desc - annual visual/physical inspections of dam structures conducted with Federal Energy Regulatory Commission dam inspector, and presentation of compiled monitoring data.

Breakdown of Cost Data:

Item - annual FERC dam inspections
 Units - hours
 Unit Cost - Mech Eng - 2 hours/inspection
 Civil Eng 3.55 hours/inspection
 Unit Cost Adjustment factor - 4 inspections
 Revised Unit Cost - Mech Eng - 14.21 hours
 Civil Eng 6.88 hours X \$45/Hr.
 Basis for adjustment - 4 dams inspected

Item - preparation for FERC dam inspections
 Units - hours
 Unit Cost - Mech Eng - 71.2 hours
 Civil Eng 43 hours X \$45/Hr.
 Unit Cost Adjustment factor - N/A
 Revised Unit Cost - N/A
 Basis for adjustment - N/A

Item - response to annual FERC dam inspections report
 Units - hours

WBS No: 1EBB0402
 Activity ID: 1EBB420040

Rockv Flats Closure Project
Baseline Cost and Basis of Estimate

Project: Baseline Devl
 WBS Filter: 1EBB
 Activity Filter: *

Starts In FY *

Unit Cost - Mech Eng - 42.72 hours
 Civil Eng - 27.46 hours X \$45/Hr.
 Unit Cost Adjustment factor - N/A
 Revised Unit Cost - N/A
 Basis for adjustment - N/A

Item - Gen Mgr hours for FERC dam inspection
 Units - hours
 Unit Cost - 18.32 hours/inspection process
 Unit Cost Adjustment factor - N/A
 Revised Unit Cost - N/A
 Basis for adjustment - N/A

Item - Admin Assist hours for FERC dam inspection
 Units - hours
 Unit Cost - 4.29 hours X \$45/Hr./inspection process
 Unit Cost Adjustment factor - N/A
 Revised Unit Cost - N/A
 Basis for adjustment - N/A

This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

Resources

Cost Element	Skill	Department	Curve	Quantity	Units
750 STRAIGHT TIME BASE	E070 MECHANICAL ENGINEERS	C222S Water System Operations	Linear	113.73	Hours
<i>Factors</i> 127.88 HR					
750 STRAIGHT TIME BASE	M020 MANAGERS (GRADE 69 - 72)	C222S Water System Operations	Linear	16.29	Hours
<i>Factors</i> 18.32 HR					
A5H SUBCONTRACTED SRVS	E020 CIVIL ENGINEERS	C222S Water System Operations	Linear	3.09518	Dollars
<i>Factors</i> 3480.3 \$					
A5H SUBCONTRACTED SRVS	G010 ADMINISTRATIVE ASSISTANTS	C222S Water System Operations	Linear	171.69	Dollars
<i>Factors</i> 193.05 \$					

0.88934 [SYS 061400] .88934200 - System
 0.88934 [SYS 061400] .88934200 - System
 0.88934 [SYS 061400] .88934200 - System

Line Item IBCGER0225 - Dam and Waterway Maintenance

BOE

DAM AND WATERWAY MAINTENANCE

Estimators Experience - The estimator has served as the WADlet manager overseeing the Dams and Watershed Management and Maintenance activities for the past 4 fiscal years. The has post-graduate instruction in project management and experience in construction cost estimating. The estimator is also a Professional Engineer Licensed in the State of Colorado.

Experience Item Desc - Routine dam and waterway maintenance activity typically conducted during 2nd qtr

Breakdown of Cost Data:

Item - Subcontracted labor cost for typical maintenance activities
 Units - dollars
 Unit Cost - \$70,000
 Unit Cost Adjustment factor - 0.86
 Revised Unit Cost - \$60,202.55
 Basis for adjustment - adjustment necessary to meet fiscal constraints

Item - Industrial Hygienist labor hours
 Units - hours
 Unit Cost - 17.16 Hr./project (typical for project of this scope)
 Unit Cost Adjustment factor - N/A
 Revised Unit Cost - N/A
 Basis for adjustment - N/A

Item - pre-construction labor hours

WBS No: 1EBB0402
 Activity ID: 1EBB420040

Rockv Flats Closure Project
Baseline Cost and Basis of Estimate

Project Baseline Devl
 WBS Filter 1EBB
 Activity Filter *

Starts In FY *

Units - hours
 Unit Cost - Mech Eng 35.52 hours/week
 Admin Assist 2 hours/week
 Gen Mgr 9.16 hours/week
 Civil Eng 41.18 Hr./week \$45/Hr.
 Unit Cost Adjustment factor - 5 weeks
 Revised Unit Cost - Mech Eng 177.61 hours
 Admin Assist 10 hours
 Gen Mgr. 45.79 hours
 Civil Eng \$9,266.40
 Basis for adjustment - period of preconstruction effort

Item - construction labor hours
 Units - hours
 Unit Cost - Mech Eng 35.52 hours/week
 Gen Mgr 9.16 hours/week
 Civil Eng 68.64 hours/week X \$45/Hr.
 Unit Cost Adjustment factor - 3 weeks
 Revised Unit Cost - Mech Eng 106.56 hours
 Gen Mgr 27.48 hours
 Civil Eng \$9,266.40
 Basis for adjustment - period of construction effort

This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

Resources

Cost Element		Skill		Department		Curve	Quantity	Units
750	STRAIGHT TIME BASE	E070	MECHANICAL ENGINEERS	C222S	Water Svstem Operations	Linear	252.72	Hours
<i>Factors</i> 284.17 HR								
0.88934 ISYS 0614001.88934200 - Svstem								
750	STRAIGHT TIME BASE	M020	MANAGERS (GRADE 69 - 72)	C222S	Water Svstem Operations	Linear	65.16	Hours
<i>Factors</i> 73.27 HR								
0.88934 ISYS 0614001.88934200 - Svstem								
A5H	SUBCONTRACTED SRVS	0000	NONE	C222S	Water Svstem Operations	Linear	54.762.99	Dollars
<i>Factors</i> 60202.6 \$		1.02283 -- FY00 Escalation --						
0.88934 ISYS 0614001.88934200 - Svstem								
A5H	SUBCONTRACTED SRVS	E020	CIVIL ENGINEERS	C222S	Water Svstem Operations	Linear	16.482.00	Dollars
<i>Factors</i> 18532.8 \$								
0.88934 ISYS 0614001.88934200 - Svstem								
A5H	SUBCONTRACTED SRVS	G010	ADMINISTRATIVE ASSISTANTS	C222S	Water Svstem Operations	Linear	686.75	Dollars
<i>Factors</i> 772.2 \$								
0.88934 ISYS 0614001.88934200 - Svstem								
A5H	SUBCONTRACTED SRVS	P090	INDUSTRIAL HYGIENISTS	C222S	Water Svstem Operations	Linear	686.75	Dollars
<i>Factors</i> 772.2 \$								
0.88934 ISYS 0614001.88934200 - Svstem								

Line Item IBCGER0235 - Watershed Repairs

BOE

WATERSHED REPAIRS

Estimators Experience - The estimator has served as the WADlet manager overseeing the Dams and Watershed Management and Maintenance activities for the past 4 fiscal years. The has post-graduate instruction in project management and experience in construction cost estimating. The estimator is also a Professional Engineer Licensed in the State of Colorado.

Experience Item Desc - Routine watershed repair activity typically conducted during the 3rd & 4th qtrs

Breakdown of Cost Data:

Item - Subcontracted labor cost for typical maintenance activity
 Units - dollars
 Unit Cost - \$20,000
 Unit Cost Adjustment factor - N/A
 Revised Unit Cost - N/A

WBS No: 1EBB0402
 Activity ID: 1EBB420040

Rockv Flats Closure Project
Baseline Cost and Basis of Estimate

Project: Baseline Devl
 WBS Filter: 1EBB
 Activity Filter: *

Starts In FY *

Basis for adjustment - N/A

Item - Industrial Hygienist labor hours
 Units - hours & \$
 Unit Cost - 8.58 Hr. X \$45/Hr./project (typical for project of this scope)
 Unit Cost Adjustment factor - N/A
 Revised Unit Cost - N/A
 Basis for adjustment - N/A

Item - pre-construction labor hours
 Units - hours
 Unit Cost - Mech Eng 56.83 hours/week
 Admin Assist .86 Hr./week X \$45/Hr.
 Gen Mgr 3.66 hours/week
 Civil Eng 6.86 Hr./week X \$45/Hr.
 Unit Cost Adjustment factor - 5 weeks
 Revised Unit Cost - Mech Eng 284.17 hours
 Admin Assist \$193.05
 Gen Mgr 18.32 hours
 Civil Eng \$1,544.40
 Basis for adjustment - period of preconstruction effort

Item - construction labor hours
 Units - hours
 Unit Cost - Mech Eng 56.83 hours/week
 Gen Mgr 3.66 hours/week
 Civil Eng 13.73 Hr./week X \$45/Hr.
 Unit Cost Adjustment factor - 5 weeks
 Revised Unit Cost - Mech Eng 284.17 hours
 Gen Mgr 18.32hours
 Civil Eng \$3,088.80
 Basis for adjustment - period of construction effort

This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

Resources

Cost Element	Skill	Department	Curve	Quantity	Units
750 STRAIGHT TIME BASE	E070 MECHANICAL ENGINEERS	C222S Water Svstem Operations	Linear	505.45	Hours
<i>Factors</i> 568.34 HR					
750 STRAIGHT TIME BASE	M020 MANAGERS (GRADE 69 - 72)	C222S Water System Operations	Linear	32.59	Hours
<i>Factors</i> 36.64 HR					
A5H SUBCONTRACTED SRVS	0000 NONE	C222S Water System Operations	Linear	15,965.88	Dollars
<i>Factors</i> 17551.8 DOLLARS 1.02283 -- FY00 Escalation --					
A5H SUBCONTRACTED SRVS	E020 CIVIL ENGINEERS	C222S Water System Operations	Linear	4,120.50	Dollars
<i>Factors</i> 4633.2 \$					
A5H SUBCONTRACTED SRVS	G010 ADMINISTRATIVE ASSISTANTS	C222S Water Svstem Operations	Linear	171.69	Dollars
<i>Factors</i> 193.05 \$					
A5H SUBCONTRACTED SRVS	P090 INDUSTRIAL HYGIENISTS	C222S Water Svstem Operations	Linear	343.37	Dollars
<i>Factors</i> 386.1 \$					
0.88934 [SYS 061400] .88934200 - Svstem					

Line Item SYS - Contingency And Escalation

BOE

Resources

Cost Element	Skill	Department	Curve	Quantity	Units
CON CONTINGENCY	0000 NONE	ZDEPT No Department	Linear	10,426.30	Dollars
<i>Factors</i> 10426.3 Dollars					

WBS No: 1EBB0402
 Activity ID: 1EBB420040

Rockv Flats Closure Project
Baseline Cost and Basis of Estimate

Project: Baseline Devl
 WBS Filter: 1EBB
 Activity Filter: *

Starts In FY: *

ESC	ESCALATION	0000	NONE	ZDEPT	No Department	Linear	21,948.34	Dollars
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Factors: 21948.3 Dollars

Activity ID: 1EBB420050 Description: Dams/Watershed Mgmt & Maintenance FY05

Cost Risk: 1 Schedule Risk: 1

Line Item	Description	Quantity	Units	BOE Type	Labor Hours/Unit	Labor Hours Total	Labor Cost Total	Materials/ Sub Cost	Contingency & Escalation	Total Prime Cost	Burden Cost	Total Cost
IBCGER0205	Dam/Watershed Proj Mgt	1.00	ea	EE	1.160	1.160	45,027	18,302	0	63,329	15,669	78,998
IBCGER0210	Dam Safetv Inspections	1.00	ea	EE	168	168	5,698	4,328	0	10,026	1,983	12,009
IBCGER0220	Dam Safetv Inspections-FERC	1.00	each	EE	130	130	4,598	3,267	0	7,865	1,600	9,465
IBCGER0225	Dam and Waterwav Maintenance	1.00	ls	EE	318	318	11,765	72,618	0	84,383	4,094	88,477
IBCGER0235	Watershed Repairs	1.00	ls	EE	538	538	18,305	20,601	0	38,907	6,370	45,277
SYS	Contingency And Escalation	1.00	ea	EE	0	0	0	0	123,961	123,961	0	123,961
Total for Activity 1EBB420050:						2,314	85,393	119,117	123,961	328,470	29,717	358,186

Line Item IBCGER0205 - Dam/Watershed Proj Mgt

BOE	<p>DAM/WATERSHED PROJ MGT</p> <p>Estimators Experience - The estimator has served as the WADlet manager overseeing the Dams and Watershed Management and Maintenance activities for the past 4 fiscal years. The has post-graduate instruction in project management and experience in construction cost estimating. The estimator is also a Professional Engineer Licensed in the State of Colorado.</p> <p>Experience Item Desc - Project management and oversight of the Dams and Watershed Management and Maintenance WADlet and activities contained therein.</p> <p>Breakdown of Cost Data:</p> <p>Item - Mech Eng hours for project management Units - hours Unit Cost - 17.76 hours/week Unit Cost Adjustment factor - 52 weeks Revised Unit Cost - 923.55 hours Basis for adjustment - 52 weeks/year</p> <p>Item - Gen Mgr hours for project management Units - hours Unit Cost - 7.33 hours/week Unit Cost Adjustment factor - 52 weeks Revised Unit Cost - 381.16 hours Basis for adjustment - 52 weeks/year</p> <p>Item - Admin Assist hours for project management Units - Dollars Unit Cost - 0.21 hours/week X \$45/Hr. Unit Cost Adjustment factor - 52 weeks Revised Unit Cost - \$501.75 Basis for adjustment - 52 weeks/year</p> <p>Item - Civil Eng hours for project management Units - Dollars Unit Cost - 8.58 hours X \$45/Hr. Unit Cost Adjustment factor - 52 weeks Revised Unit Cost - \$20,077.2 Basis for adjustment - 52 weeks/year</p> <p>This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.</p>
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Resources	Cost Element	Skill	Department	Curve	Quantity	Units
	750 STRAIGHT TIME BASE	E070 MECHANICAL ENGINEERS	C222S Water System Operations	Linear	821.35	Hours
Factors	923.55 Hours					
	750 STRAIGHT TIME BASE	M020 MANAGERS (GRADE 69 - 72)	C222S Water System Operations	Linear	338.85	Hours
Factors	381.01 Hours					

0.88934 [SYS 061400] 88934200 - System

WBS No: 1EBB0402
 Activity ID: 1EBB420050

Rockv Flats Closure Project
Baseline Cost and Basis of Estimate

Project Baseline Devl
 WBS Filter 1EBB
 Activity Filter *

Starts In FY *

A5H	SUBCONTRACTED SRVS	E020	CIVIL ENGINEERS	C222S	Water Svstem Operations	Linear	17,855.50	Dollars
<i>Factors</i> 20077.2 \$							0.88934	[SYS 061400] .88934200 - Svstem

A5H	SUBCONTRACTED SRVS	G010	ADMINISTRATIVE ASSISTANTS	C222S	Water Svstem Operations	Linear	446.23	Dollars
<i>Factors</i> 501.75 \$							0.88934	[SYS 061400] .88934200 - Svstem

Line Item IBCGER0210 - Dam Safety Inspections

BOE	<p>DAM SAFETY INSPECTIONS</p> <p>Estimators Experience - The estimator has served as the WADlet manager overseeing the Dams and Watershed Management and Maintenance activities for the past 4 fiscal years. The estimator has directed and/or participated in the inspection of the dams for the past 6 years. The estimator is also a Professional Engineer Licensed in the State of Colorado.</p> <p>Experience Item Desc - annual visual/physical inspections of dam structures; collection, compilation and interpretation of dam monitoring instrumentation data; and reporting of results to appropriate authorities. Also, developing recommendations for dam upgrades/improvement to correct deficiencies detected during the inspections.</p> <p>Breakdown of Cost Data:</p> <p>Item - Mech Eng hours for dam safety inspections Units - hours Unit Cost - 10.47 hours/dam Unit Cost Adjustment factor - 12 dams Revised Unit Cost - 125.61 hours Basis for adjustment - 12 dams inspected</p> <p>Item - Mech Eng hours for reporting of dam safety inspections results Units - hours Unit Cost - 52 hours/reporting process Unit Cost Adjustment factor - N/A Revised Unit Cost - N/A Basis for adjustment - N/A</p> <p>Item - Gen Mgr hours for safety inspections Units - hours Unit Cost - 10.97 hours/inspection process Unit Cost Adjustment factor - N/A Revised Unit Cost - N/A Basis for adjustment - N/A</p> <p>Item - Admin Assist hours for dam safety inspections Units - \$ Unit Cost -5.14 hours x \$45/Hr./inspection process Unit Cost Adjustment factor - N/A Revised Unit Cost - \$231.30 Basis for adjustment - N/A</p> <p>Item - Civil Eng hours for dam safety inspections Units - \$ Unit Cost - 6.86 hours x \$45/Hr./dam Unit Cost Adjustment factor - 12 dams Revised Unit Cost - \$3,704.40 Basis for adjustment - 12 dams inspected</p> <p>Item - Civil Eng hours for compilation of data for dam safety inspections Units - \$ Unit Cost - 1.72 hours x \$45/Hr./dam Unit Cost Adjustment factor - 12 dams Revised Unit Cost - \$928.80 Basis for adjustment - 12 dams inspected</p>
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WBS No: 1EBB0402
 Activity ID: 1EBB420050

Rockv Flats Closure Project
Baseline Cost and Basis of Estimate

Project Baseline Devl
 WBS Filter 1EBB
 Activity Filter *

Starts In FY *

This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

Resources

Cost Element	Skill	Department	Curve	Quantity	Units
750 STRAIGHT TIME BASE	E070 MECHANICAL ENGINEERS	C222S Water Svstem Operations	Linear	157.96	Hours
<i>Factors</i> 177.61 Hours					
0.88934 ISYS 0614001.88934200 - Svstem					
750 STRAIGHT TIME BASE	M020 MANAGERS (GRADE 69 - 72)	C222S Water Svstem Operations	Linear	9.76	Hours
<i>Factors</i> 10.97 Hours					
0.88934 ISYS 0614001.88934200 - Svstem					
A5H SUBCONTRACTED SRVS	E020 CIVIL ENGINEERS	C222S Water Svstem Operations	Linear	4,122.33	Dollars
<i>Factors</i> 4635.26 \$					
0.88934 ISYS 0614001.88934200 - Svstem					
A5H SUBCONTRACTED SRVS	G010 ADMINISTRATIVE ASSISTANTS	C222S Water Svstem Operations	Linear	205.70	Dollars
<i>Factors</i> 231.3 \$					
0.88934 ISYS 0614001.88934200 - Svstem					

Line Item IBCGER0220 - Dam Safety Inspections-FERC

BOE	<p>DAM SAFETY INSPECTIONS-FERC</p> <p>Estimators Experience - The estimator has served as the WADlet manager overseeing the Dams and Watershed Management and Maintenance activities for the past 4 fiscal years. The estimator has directed and/or participated in the inspection of the dams for the past 6 years. The estimator is also a Professional Engineer Licensed in the State of Colorado.</p> <p>Experience Item Desc - annual visual/physical inspections of dam structures conducted with Federal Energy Regulatory Commission dam inspector, and presentation of compiled monitoring data.</p> <p>Breakdown of Cost Data:</p> <p>Item - annual FERC dam inspections Units - hours Unit Cost - Mech Eng - 2 hours/inspection Civil Eng 3.55 hours/inspection Unit Cost Adjustment factor - 4 inspections Revised Unit Cost - Mech Eng - 14.21 hours Civil Eng 6.88 hours X \$45/Hr. Basis for adjustment - 4 dams inspected</p> <p>Item - preparation for FERC dam inspections Units - hours Unit Cost - Mech Eng - 71.2 hours Civil Eng 43 hours X \$45/Hr. Unit Cost Adjustment factor - N/A Revised Unit Cost - N/A Basis for adjustment - N/A</p> <p>Item - response to annual FERC dam inspections report Units - hours Unit Cost - Mech Eng - 42.72 hours Civil Eng - 27.46 hours X \$45/Hr. Unit Cost Adjustment factor - N/A Revised Unit Cost - N/A Basis for adjustment - N/A</p> <p>Item - Gen Mgr hours for FERC dam inspection Units - hours Unit Cost - 18.32 hours/inspection process Unit Cost Adjustment factor - N/A Revised Unit Cost - N/A Basis for adjustment - N/A</p> <p>Item - Admin Assist hours for FERC dam inspection</p>
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WBS No: 1EBB0402
 Activity ID: 1EBB420050

Rockv Flats Closure Project
Baseline Cost and Basis of Estimate

Project: Baseline Devl
 WBS Filter: 1EBB
 Activity Filter: *

Starts In FY *

Units - hours
 Unit Cost - 4.29 hours X \$45/Hr./inspection process
 Unit Cost Adjustment factor - N/A
 Revised Unit Cost - N/A
 Basis for adjustment - N/A

This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

Resources

Cost Element	Skill	Department	Curve	Quantity	Units
750 STRAIGHT TIME BASE	E070 MECHANICAL ENGINEERS	C222S Water Svstem Operations	Linear	113.73	Hours
<i>Factors</i> 127.88 HR					
750 STRAIGHT TIME BASE	M020 MANAGERS (GRADE 69 - 72)	C222S Water Svstem Operations	Linear	16.29	Hours
<i>Factors</i> 18.32 HR					
A5H SUBCONTRACTED SRVS	E020 CIVIL ENGINEERS	C222S Water Svstem Operations	Linear	3.095.18	Dollars
<i>Factors</i> 3480.3 \$					
A5H SUBCONTRACTED SRVS	G010 ADMINISTRATIVE ASSISTANTS	C222S Water Svstem Operations	Linear	171.69	Dollars
<i>Factors</i> 193.05 \$					

Line Item IBCGER0225 - Dam and Waterway Maintenance

BOE

DAM AND WATERWAY MAINTENANCE

Estimators Experience - The estimator has served as the WADlet manager overseeing the Dams and Watershed Management and Maintenance activities for the past 4 fiscal years. The has post-graduate instruction in project management and experience in construction cost estimating. The estimator is also a Professional Engineer Licensed in the State of Colorado.

Experience Item Desc - Routine dam and waterway maintenance activity typically conducted during 2nd qtr

Breakdown of Cost Data:

Item - Subcontracted labor cost for typical maintenance activities
 Units - dollars
 Unit Cost - \$70,000
 Unit Cost Adjustment factor - 0.86
 Revised Unit Cost - \$60,202.55
 Basis for adjustment - adjustment necessary to meet fiscal constraints

Item - Industrial Hygienist labor hours
 Units - hours
 Unit Cost - 17.16 Hr./project (typical for project of this scope)
 Unit Cost Adjustment factor - N/A
 Revised Unit Cost - N/A
 Basis for adjustment - N/A

Item - pre-construction labor hours
 Units - hours
 Unit Cost - Mech Eng 35.52 hours/week
 Admin Assist 2 hours/week
 Gen Mgr 9.16 hours/week
 Civil Eng 41.18 Hr./week \$45/Hr.
 Unit Cost Adjustment factor - 5 weeks
 Revised Unit Cost - Mech Eng 177.61 hours
 Admin Assist 10 hours
 Gen Mgr. 45.79 hours
 Civil Eng \$9,266.40
 Basis for adjustment - period of preconstruction effort

Item - construction labor hours
 Units - hours

WBS No: 1EBB0402
 Activity ID: 1EBB420050

Rockv Flats Closure Project
Baseline Cost and Basis of Estimate

Project: Baseline Devl
 WBS Filter: 1EBB
 Activity Filter: *

Starts In FY *

Unit Cost - Mech Eng 35.52 hours/week
 Gen Mgr 9.16 hours/week
 Civil Eng 68.64 hours/week X \$45/Hr.
 Unit Cost Adjustment factor - 3 weeks
 Revised Unit Cost - Mech Eng 106.56 hours
 Gen Mgr 27.48 hours
 Civil Eng \$9,266.40
 Basis for adjustment - period of construction effort

This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

Resources

Cost Element	Skill	Department	Curve	Quantity	Units
750 STRAIGHT TIME BASE	E070 MECHANICAL ENGINEERS	C222S Water Svstem Operations	Linear	252.72	Hours
<i>Factors</i> 284.17 HR					
0.88934 [SYS 061400] .88934200 - Svstem					
750 STRAIGHT TIME BASE	M020 MANAGERS (GRADE 69 - 72)	C222S Water Svstem Operations	Linear	65.16	Hours
<i>Factors</i> 73.27 HR					
0.88934 [SYS 061400] .88934200 - Svstem					
A5H SUBCONTRACTED SRVS	0000 NONE	C222S Water Svstem Operations	Linear	54.762.99	Dollars
<i>Factors</i> 60202.6 \$ 1.02283 -- FY00 Escalation --					
0.88934 [SYS 061400] .88934200 - Svstem					
A5H SUBCONTRACTED SRVS	E020 CIVIL ENGINEERS	C222S Water Svstem Operations	Linear	16.482.00	Dollars
<i>Factors</i> 18532.8 \$					
0.88934 [SYS 061400] .88934200 - Svstem					
A5H SUBCONTRACTED SRVS	G010 ADMINISTRATIVE ASSISTANTS	C222S Water Svstem Operations	Linear	686.75	Dollars
<i>Factors</i> 772.2 \$					
0.88934 [SYS 061400] .88934200 - Svstem					
A5H SUBCONTRACTED SRVS	P090 INDUSTRIAL HYGIENISTS	C222S Water Svstem Operations	Linear	686.75	Dollars
<i>Factors</i> 772.2 \$					
0.88934 [SYS 061400] .88934200 - Svstem					

Line Item IBCGER0235 - Watershed Repairs

BOE WATERSHED REPAIRS

Estimators Experience - The estimator has served as the WADlet manager overseeing the Dams and Watershed Management and Maintenance activities for the past 4 fiscal years. The has post-graduate instruction in project management and experience in construction cost estimating. The estimator is also a Professional Engineer Licensed in the State of Colorado.

Experience Item Desc - Routine watershed repair activity typically conducted during the 3rd & 4th qtrs

Breakdown of Cost Data:

Item - Subcontracted labor cost for typical maintenance activity
 Units - dollars
 Unit Cost - \$20,000
 Unit Cost Adjustment factor - N/A
 Revised Unit Cost - N/A
 Basis for adjustment - N/A

Item - Industrial Hygienist labor hours
 Units - hours & \$
 Unit Cost - 8.58 Hr. X \$45/Hr./project (typical for project of this scope)
 Unit Cost Adjustment factor - N/A
 Revised Unit Cost - N/A
 Basis for adjustment - N/A

Item - pre-construction labor hours
 Units - hours
 Unit Cost - Mech Eng 56.83 hours/week
 Admin Assist .86 Hr./week X \$45/Hr.
 Gen Mgr 3.66 hours/week

WBS No: 1EBB0402
 Activity ID: 1EBB420050

Rockv Flats Closure Project
Baseline Cost and Basis of Estimate

Project: Baseline Devl
 WBS Filter: 1EBB
 Activity Filter: *

Starts In FY *

Civil Eng 6.86 Hr./week X \$45/Hr.
 Unit Cost Adjustment factor - 5 weeks
 Revised Unit Cost - Mech Eng 284.17 hours
 Admin Assist \$193.05
 Gen Mgr 18.32 hours
 Civil Eng \$1,544.40
 Basis for adjustment - period of preconstruction effort

Item - construction labor hours
 Units - hours
 Unit Cost - Mech Eng 56.83 hours/week
 Gen Mgr 3.66 hours/week
 Civil Eng 13.73 Hr./week X \$45/Hr.
 Unit Cost Adjustment factor - 5 weeks
 Revised Unit Cost - Mech Eng 284.17 hours
 Gen Mgr 18.32hours
 Civil Eng \$3,088.80
 Basis for adjustment - period of construction effort

This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

Resources

Cost Element	Skill	Department	Curve	Quantity	Units
750 STRAIGHT TIME BASE	E070 MECHANICAL ENGINEERS	C222S Water Svstem Operations	Linear	505.45	Hours
Factors 568.34 HR					
750 STRAIGHT TIME BASE	M020 MANAGERS (GRADE 69 - 72)	C222S Water Svstem Operations	Linear	32.59	Hours
Factors 36.64 HR					
A5H SUBCONTRACTED SRVS	0000 NONE	C222S Water Svstem Operations	Linear	15.965.88	Dollars
Factors 17551.8 DOLLARS 1.02283 -- FY00 Escalation --					
A5H SUBCONTRACTED SRVS	E020 CIVIL ENGINEERS	C222S Water Svstem Operations	Linear	4.120.50	Dollars
Factors 4633.2 \$					
A5H SUBCONTRACTED SRVS	G010 ADMINISTRATIVE ASSISTANTS	C222S Water Svstem Operations	Linear	171.69	Dollars
Factors 193.05 \$					
A5H SUBCONTRACTED SRVS	P090 INDUSTRIAL HYGIENISTS	C222S Water Svstem Operations	Linear	343.37	Dollars
Factors 386.1 \$					

Line Item SYS - Contingency And Escalation

BOE

Resources

Cost Element	Skill	Department	Curve	Quantity	Units
CON CONTINGENCY	0000 NONE	ZDEPT No Department	Linear	87.675.55	Dollars
Factors 87675.6 Dollars					
ESC ESCALATION	0000 NONE	ZDEPT No Department	Linear	36.285.18	Dollars
Factors 36285.2 Dollars					

Activity ID: 1EBB420060

Description: Dams/Watershed Mamt & Maintenance FY07

Cost Risk 1 Schedule Risk 1

Line Item	Description	Quantity	Units	BOE Type	Labor Hours/Unit	Labor Hours Total	Labor Cost Total	Materials/ Sub Cost	Contingency & Escalation	Total Prime Cost	Burden Cost	Total Cost
IBCGER0205	Dam/Watershed Proi Mat	1.00	ea	EE	1.723	1.723	54.533	0	0	54.533	67.895	122.428
IBCGER0210	Dam Safetv Inspections-Q1	1.00	ea	EE	93	93	2.687	0	0	2.687	3.345	6.032
IBCGER0215	Dam Safetv Inspections-Q3	1.00	ea	EE	93	93	2.687	0	0	2.687	3.345	6.032
IBCGER0220	Dam Safetv Inspections-FERC	1.00	each	EE	76	76	1.994	53	0	2.047	2.482	4.530
IBCGER0225	Dam and Waterwav Maintenance	1.00	ls	EE	391	391	11.375	4.548	0	15.923	14.162	30.085
IBCGER0230	Dam and Waterwav Maintenance	1.00	ls	EE	391	391	11.375	5.094	0	16.469	14.162	30.631

WBS No: 1EBB0402
 Activity ID: 1EBB420060

Rockv Flats Closure Project
Baseline Cost and Basis of Estimate

Project Baseline Devl
 WBS Filter 1EBB
 Activity Filter *

Starts In FY *

IBCGER0235	Watershed Repairs	1.00	ls	EE	200	200	5,838	18,193	0	24,031	7,268	31,299	
SYS	Contingency And Escalation	1.00	ea	EE	0	0	0	0	90,813	90,813	0	90,813	
Total for Activity 1EBB420060:							2,969	90,488	27,889	90,813	209,190	112,660	321,850

Line Item IBCGER0205 - Dam/Watershed Proj Mgt

BOE	DAM/WATERSHED PROJ MGT											
	Estimators Experience - The estimator has served as the WADlet manager overseeing the Dams and Watershed Management and Maintenance activities for the past 4 fiscal years. The has post-graduate instruction in project management and experience in construction cost estimating. The estimator is also a Professional Engineer Licensed in the State of Colorado.											
	Experience Item Desc - Project management and oversight of the Dams and Watershed Management and Maintenance WADlet and activities contained therein.											
	Breakdown of Cost Data:											
	Item - Mech Eng hours for project management											
	Units - hours											
	Unit Cost - 25.038 hours/week											
	Unit Cost Adjustment factor - 52 weeks											
	Revised Unit Cost - 1302 hours											
	Basis for adjustment - 52 weeks/year											
	Item - Gen Mgr hours for project management											
	Units - hours											
	Unit Cost - 2 hours/week											
	Unit Cost Adjustment factor - 52 weeks											
	Revised Unit Cost - 104 hours											
	Basis for adjustment - 52 weeks/year											
	Item - Admin Assist hours for project management											
	Units - hours											
	Unit Cost - 0.25 hours/week											
	Unit Cost Adjustment factor - 52 weeks											
	Revised Unit Cost - 13 hours											
	Basis for adjustment - 52 weeks/year											
	Item - Civil Eng hours for project management											
	Units - hours											
	Unit Cost - 10 hours/week											
	Unit Cost Adjustment factor - 52 weeks											
	Revised Unit Cost - 520 hours											
	Basis for adjustment - 52 weeks/year											
	This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.											

Resources		Cost Element	Skill	Department	Curve	Quantity	Units
750	STRAIGHT TIME BASE	E020	CIVIL ENGINEERS	C222S	Water System Operations	Linear	462.46 Hours
Factors		520	hr				
							0.88934 [SYS 061400] .88934200 - System
750	STRAIGHT TIME BASE	E070	MECHANICAL ENGINEERS	C222S	Water System Operations	Linear	1,156.14 Hours
Factors		1300	Hours				
							0.88934 [SYS 061400] .88934200 - System
750	STRAIGHT TIME BASE	G010	ADMINISTRATIVE ASSISTANTS	C222S	Water System Operations	Linear	11.56 Hours
Factors		13	Hours				
							0.88934 [SYS 061400] .88934200 - System
750	STRAIGHT TIME BASE	M020	MANAGERS (GRADE 69 - 72)	C222S	Water System Operations	Linear	92.49 Hours
Factors		104	Hours				
							0.88934 [SYS 061400] .88934200 - System

Line Item IBCGER0210 - Dam Safety Inspections-Q1

BOE	DAM SAFETY INSPECTIONS-Q1											
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WBS No: 1EBB0402
 Activity ID: 1EBB420060

Rockv Flats Closure Project
Baseline Cost and Basis of Estimate

Project: Baseline Devl
 WBS Filter: 1EBB
 Activity Filter: *

Starts In FY *

Estimators Experience - The estimator has served as the WADlet manager overseeing the Dams and Watershed Management and Maintenance activities for the past 4 fiscal years. The estimator has directed and/or participated in the inspection of the dams for the past 6 years. The estimator is also a Professional Engineer Licensed in the State of Colorado.

Experience Item Desc - bi-annual visual/physical inspections of dam structures; collection, compilation and interpretation of dam monitoring instrumentation data. Also, developing recommendations for dam upgrades/improvement to correct deficiencies detected during the inspections.

Breakdown of Cost Data:

Item - Mech Eng hours for 1st qtr dam safety inspections
 Units - hours
 Unit Cost - 4 hours/dam
 Unit Cost Adjustment factor - 11 dams
 Revised Unit Cost - 44 hours
 Basis for adjustment - 12 dams inspected

Item - Gen Mgr hours for 1st qtr dam safety inspections
 Units - hours
 Unit Cost - 3 hours/inspection process
 Unit Cost Adjustment factor - N/A
 Revised Unit Cost - N/A
 Basis for adjustment - N/A

Item - Admin Assist hours for 1st qtr dam safety inspections
 Units - hours
 Unit Cost - 3 hours/inspection process
 Unit Cost Adjustment factor - N/A
 Revised Unit Cost - N/A
 Basis for adjustment - N/A

Item - Civil Eng hours for 1st qtr dam safety inspections
 Units - hours
 Unit Cost - 4 hours/dam
 Unit Cost Adjustment factor - 11 dams
 Revised Unit Cost - 44 hours
 Basis for adjustment - 11 dams inspected

Item - Civil Eng hours for compilation of data for 1st qtr dam safety inspections
 Units - hours
 Unit Cost - 1 hours/dam
 Unit Cost Adjustment factor - 11 dams
 Revised Unit Cost - 11 hours
 Basis for adjustment - 11 dams inspected

This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

Resources

Cost Element	Skill	Department	Curve	Quantity	Units
750 STRAIGHT TIME BASE <i>Factors</i> 55 Hours	E020 CIVIL ENGINEERS	C222S Water System Operations	Linear	48.91	Hours
			0.88934 [SYS 061400]	.88934200	- System
750 STRAIGHT TIME BASE <i>Factors</i> 44 Hours	E070 MECHANICAL ENGINEERS	C222S Water System Operations	Linear	39.13	Hours
			0.88934 [SYS 061400]	.88934200	- System
750 STRAIGHT TIME BASE <i>Factors</i> 3 Hours	G010 ADMINISTRATIVE ASSISTANTS	C222S Water System Operations	Linear	2.67	Hours
			0.88934 [SYS 061400]	.88934200	- System
750 STRAIGHT TIME BASE <i>Factors</i> 3 Hours	M020 MANAGERS (GRADE 69 - 72)	C222S Water System Operations	Linear	2.67	Hours
			0.88934 [SYS 061400]	.88934200	- System

Line Item IBCGER0215 - Dam Safety Inspections-Q3

BOF

WBS No: 1EBB0402
 Activity ID: 1EBB420060

Rockv Flats Closure Project
Baseline Cost and Basis of Estimate

Project Baseline Devl
 WBS Filter 1EBB
 Activity Filter *

Starts In FY *

DAM SAFETY INSPECTIONS-Q3

Estimators Experience - The estimator has served as the WADlet manager overseeing the Dams and Watershed Management and Maintenance activities for the past 4 fiscal years. The estimator has directed and/or participated in the inspection of the dams for the past 6 years. The estimator is also a Professional Engineer Licensed in the State of Colorado.

Experience Item Desc - bi-annul visual/physical inspections of dam structures; collection, compilation and interpretation of dam monitoring instrumentation data. Also, developing recommendations for dam upgrades/improvement to correct deficiencies detected during the inspections.

Breakdown of Cost Data:

Item - Mech Eng hours for 1st qtr dam safety inspections
 Units - hours
 Unit Cost - 4 hours/dam
 Unit Cost Adjustment factor - 11 dams
 Revised Unit Cost - 44 hours
 Basis for adjustment - 11 dams inspected

Item - Gen Mgr hours for 1st qtr dam safety inspections
 Units - hours
 Unit Cost - 3 hours/inspection process
 Unit Cost Adjustment factor - N/A
 Revised Unit Cost - N/A
 Basis for adjustment - N/A

Item - Admin Assist hours for 1st qtr dam safety inspections
 Units - hours
 Unit Cost - 3 hours/inspection process
 Unit Cost Adjustment factor - N/A
 Revised Unit Cost - N/A
 Basis for adjustment - N/A

Item - Civil Eng hours for 1st qtr dam safety inspections
 Units - hours
 Unit Cost - 4 hours/dam
 Unit Cost Adjustment factor - 11 dams
 Revised Unit Cost - 44 hours
 Basis for adjustment - 11 dams inspected

Item - Civil Eng hours for compilation of data for 1st qtr dam safety inspections
 Units - hours
 Unit Cost - 1 hours/dam
 Unit Cost Adjustment factor - 11 dams
 Revised Unit Cost - 11 hours
 Basis for adjustment - 11 dams inspected

This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

Resources

Cost Element	Skill	Department	Curve	Quantity	Units
750 STRAIGHT TIME BASE	E020 CIVIL ENGINEERS	C222S Water System Operations	Linear	48.91	Hours
Factors 55 Hours					
			0.88934 ISYS 0614001 .88934200 - System		
750 STRAIGHT TIME BASE	E070 MECHANICAL ENGINEERS	C222S Water System Operations	Linear	39.13	Hours
Factors 44 Hours					
			0.88934 ISYS 0614001 .88934200 - System		
750 STRAIGHT TIME BASE	G010 ADMINISTRATIVE ASSISTANTS	C222S Water System Operations	Linear	2.67	Hours
Factors 3 Hours					
			0.88934 ISYS 0614001 .88934200 - System		
750 STRAIGHT TIME BASE	M020 MANAGERS (GRADE 69 - 72)	C222S Water System Operations	Linear	2.67	Hours
Factors 3 Hours					
			0.88934 ISYS 0614001 .88934200 - System		

WBS No: 1EBB0402
 Activity ID: 1EBB420060

Rockv Flats Closure Project
Baseline Cost and Basis of Estimate

Project: Baseline Devl
 WBS Filter: 1EBB
 Activity Filter: *

Starts In FY *

Line Item IBCGER0220 - Dam Safety Inspections-FERC

BOE

DAM SAFETY INSPECTIONS-FERC

Estimators Experience - The estimator has served as the WADlet manager overseeing the Dams and Watershed Management and Maintenance activities for the past 4 fiscal years. The estimator has directed and/or participated in the inspection of the dams for the past 6 years. The estimator is also a Professional Engineer Licensed in the State of Colorado.

Experience Item Desc - annual visual/physical inspections of dam structures conducted with Federal Energy Regulatory Commission dam inspector, and presentation of compiled monitoring data.

Breakdown of Cost Data:

Item - annual FERC dam inspections
 Units - hours
 Unit Cost - Mech Eng - 2 hours/inspection
 Civil Eng 2 hours/inspection
 Unit Cost Adjustment factor - 4 inspections
 Revised Unit Cost - Mech Eng - 8 hours
 Civil Eng 8 hours X \$45
 Basis for adjustment - 4 dams inspected

Item - preparation for FERC dam inspections
 Units - hours
 Unit Cost - Mech Eng - 28 hours
 Civil Eng 36 hours X \$45
 Unit Cost Adjustment factor - N/A
 Revised Unit Cost - N/A
 Basis for adjustment - N/A

Item - response to annual FERC dam inspections report
 Units - hours
 Unit Cost - Mech Eng - 24 hours
 Civil Eng - 32 hours X \$45
 Unit Cost Adjustment factor - N/A
 Revised Unit Cost - N/A
 Basis for adjustment - N/A

Item - Gen Mgr hours for FERC dam inspection
 Units - hours
 Unit Cost - 5 hours/inspection process
 Unit Cost Adjustment factor - N/A
 Revised Unit Cost - N/A
 Basis for adjustment - N/A

Item - Admin Assist hours for FERC dam inspection
 Units - hours
 Unit Cost - 5 hours/inspection process
 Unit Cost Adjustment factor - N/A
 Revised Unit Cost - N/A
 Basis for adjustment - N/A

This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

Resources	Cost Element	Skill	Department	Curve	Quantity	Units
	750 STRAIGHT TIME BASE	E020 CIVIL ENGINEERS	C222S Water Svstem Operations	Linear	67.59	Hours
Factors	76 HOURS					
	750 STRAIGHT TIME BASE	G010 ADMINISTRATIVE ASSISTANTS	C222S Water Svstem Operations	Linear	4.45	Hours
Factors	5 HR					

0.88934 [SYS 061400] .88934200 - System
 0.88934 [SYS 061400] .88934200 - System

WBS No: 1EBB0402
 Activity ID: 1EBB420060

Rockv Flats Closure Project
Baseline Cost and Basis of Estimate

Project Baseline Devl
 WBS Filter 1EBB
 Activity Filter *

Starts In FY *

750	STRAIGHT TIME BASE	M020	MANAGERS (GRADE 69 - 72)	C222S	Water System Operations	Linear	4.45	Hours
<i>Factors</i>		5	HR					

0.88934 [SYS 061400] .88934200 - System

A5H	SUBCONTRACTED SRVS	E070	MECHANICAL ENGINEERS	C222S	Water System Operations	Linear	53.36	Dollars
<i>Factors</i>		60	HR					

0.88934 [SYS 061400] .88934200 - System

Line Item IBCGER0225 - Dam and Waterway Maintenance

BOE

DAM AND WATERWAY MAINTENANCE - Q2

Estimators Experience - The estimator has served as the WADlet manager overseeing the Dams and Watershed Management and Maintenance activities for the past 4 fiscal years. The has post-graduate instruction in project management and experience in construction cost estimating. The estimator is also a Professional Engineer Licensed in the State of Colorado.

Experience Item Desc - Routine dam and waterway maintenance activity typically conducted during 2nd qtr

Breakdown of Cost Data:

Item - Subcontracted labor cost for typical maintenance activity
 Units - dollars
 Unit Cost - \$35,000
 Unit Cost Adjustment factor - 0.143
 Revised Unit Cost - \$5,000
 Basis for adjustment - adjustment necessary to meet fiscal constraints

Item - Industrial Hygienist labor hours
 Units - hours
 Unit Cost - 10/project (typical for project of this scope)
 Unit Cost Adjustment factor - N/A
 Revised Unit Cost - N/A
 Basis for adjustment - N/A

Item - pre-construction labor hours
 Units - hours
 Unit Cost - Mech Eng 20 hours/week
 Admin Assist 2 hours/week
 Gen Mgr 2.5 hours/week
 Civil Eng 24 hours/week
 Unit Cost Adjustment factor - 5 weeks
 Revised Unit Cost - Mech Eng 100 hours
 Admin Assist 10 hours
 Gen Mgr 12.5 hours
 Civil Eng 120 hours
 Basis for adjustment - period of preconstruction effort

Item - construction labor hours
 Units - hours
 Unit Cost - Mech Eng 20 hours/week
 Gen Mgr 2.5 hours/week
 Civil Eng 40 hours/week
 Unit Cost Adjustment factor - 3 weeks
 Revised Unit Cost - Mech Eng 60 hours
 Gen Mgr 7.5 hours
 Civil Eng 120 hours
 Basis for adjustment - period of construction effort

This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

Resources

<i>Cost Element</i>		<i>Skill</i>		<i>Department</i>		<i>Curve</i>	<i>Quantity</i>	<i>Units</i>
750	STRAIGHT TIME BASE	E020	CIVIL ENGINEERS	C222S	Water System Operations	Linear	213.44	Hours
<i>Factors</i>		240	HR					

0.88934 [SYS 061400] .88934200 - System

WBS No: 1EBB0402
 Activity ID: 1EBB420060

Rockv Flats Closure Project
Baseline Cost and Basis of Estimate

Project Baseline Devl
 WBS Filter 1EBB
 Activity Filter * Starts In FY *

750	STRAIGHT TIME BASE	E070	MECHANICAL ENGINEERS	C222S	Water Svstem Operations	Linear	142.29	Hours
							0.88934	[SYS 061400] .88934200 - Svstem
<i>Factors</i> 160 HR								
750	STRAIGHT TIME BASE	G010	ADMINISTRATIVE ASSISTANTS	C222S	Water Svstem Operations	Linear	8.89	Hours
							0.88934	[SYS 061400] .88934200 - Svstem
<i>Factors</i> 10 HR								
750	STRAIGHT TIME BASE	M020	MANAGERS (GRADE 69 - 72)	C222S	Water Svstem Operations	Linear	17.79	Hours
							0.88934	[SYS 061400] .88934200 - Svstem
<i>Factors</i> 20 HR								
750	STRAIGHT TIME BASE	P090	INDUSTRIAL HYGIENISTS	C222S	Water Svstem Operations	Linear	8.89	Hours
							0.88934	[SYS 061400] .88934200 - Svstem
<i>Factors</i> 10 HR								
A5H	SUBCONTRACTED SRVS	0000	NONE	C222S	Water Svstem Operations	Linear	4,548.23	Dollars
							0.88934	[SYS 061400] .88934200 - Svstem
<i>Factors</i> 5000 dollars 1.02283 -- FY00 Escalation --								

Line Item IBCGER0230 - Dam and Waterway Maintenance

BOE

DAM AND WATERWAY MAINTENANCE - Q4

Estimators Experience - The estimator has served as the WADlet manager overseeing the Dams and Watershed Management and Maintenance activities for the past 4 fiscal years. The has post-graduate instruction in project management and experience in construction cost estimating. The estimator is also a Professional Engineer Licensed in the State of Colorado.

Experience Item Desc - Routine dam and waterway maintenance activity typically conducted during 4th qtr

Breakdown of Cost Data:

Item - Subcontracted labor cost for typical maintenance activity
 Units - dollars
 Unit Cost - \$35,000
 Unit Cost Adjustment factor - 0.16
 Revised Unit Cost - \$5,600
 Basis for adjustment - adjustment necessary to meet fiscal constraints

Item - Industrial Hygienist labor hours
 Units - hours
 Unit Cost - 10/project (typical for project of this scope)
 Unit Cost Adjustment factor - N/A
 Revised Unit Cost - N/A
 Basis for adjustment - N/A

Item - pre-construction labor hours
 Units - hours
 Unit Cost - Mech Eng 20 hours/week
 Admin Assist 2 hours/week
 Gen Mgr 2.5 hours/week
 Civil Eng 24 hours/week
 Unit Cost Adjustment factor - 5 weeks
 Revised Unit Cost - Mech Eng 100 hours
 Admin Assist 10 hours
 Gen Mgr 12.5 hours
 Civil Eng 120 hours
 Basis for adjustment - period of preconstruction effort

Item - construction labor hours
 Units - hours
 Unit Cost - Mech Eng 20 hours/week
 Gen Mgr 2.5 hours/week
 Civil Eng 40 hours/week
 Unit Cost Adjustment factor - 3 weeks
 Revised Unit Cost - Mech Eng 60 hours
 Gen Mgr 7.5 hours

WBS No: 1EBB0402
 Activity ID: 1EBB420060

Rockv Flats Closure Project
Baseline Cost and Basis of Estimate

Project Baseline Devl
 WBS Filter 1EBB
 Activity Filter *

Starts In FY *

Civil Eng 120 hours
 Basis for adjustment - period of construction effort
 This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

Resources

Cost Element	Skill	Department	Curve	Quantity	Units
750 STRAIGHT TIME BASE <i>Factors</i> 240 HR	E020 CIVIL ENGINEERS	C222S Water Svstem Operations	Linear	213.44	Hours
			0.88934 [SYS 061400] .88934200 - System		
750 STRAIGHT TIME BASE <i>Factors</i> 160 HR	E070 MECHANICAL ENGINEERS	C222S Water Svstem Operations	Linear	142.29	Hours
			0.88934 [SYS 061400] .88934200 - System		
750 STRAIGHT TIME BASE <i>Factors</i> 10 HR	G010 ADMINISTRATIVE ASSISTANTS	C222S Water Svstem Operations	Linear	8.89	Hours
			0.88934 [SYS 061400] .88934200 - System		
750 STRAIGHT TIME BASE <i>Factors</i> 20 HR	M020 MANAGERS (GRADE 69 - 72)	C222S Water Svstem Operations	Linear	17.79	Hours
			0.88934 [SYS 061400] .88934200 - System		
750 STRAIGHT TIME BASE <i>Factors</i> 10 HR	P090 INDUSTRIAL HYGIENISTS	C222S Water Svstem Operations	Linear	8.89	Hours
			0.88934 [SYS 061400] .88934200 - System		
A5H SUBCONTRACTED SRVS <i>Factors</i> 5600 DOLLARS	0000 NONE	C222S Water Svstem Operations	Linear	5.094.02	Dollars
			1.02283 -- FY00 Escalation --		
			0.88934 [SYS 061400] .88934200 - System		

Line Item IBCGER0235 - Watershed Repairs

BOE
 WATERSHED REPAIRS
 Estimators Experience - The estimator has served as the WADlet manager overseeing the Dams and Watershed Management and Maintenance activities for the past 4 fiscal years. The has post-graduate instruction in project management and experience in construction cost estimating. The estimator is also a Professional Engineer Licensed in the State of Colorado.
 Experience Item Desc - Routine watershed repair activity typically conducted during the 3rd & 4th qtrs
 Breakdown of Cost Data:
 Item - Subcontracted labor cost for typical maintenance activity
 Units - dollars
 Unit Cost - \$20,000
 Unit Cost Adjustment factor - N/A
 Revised Unit Cost - N/A
 Basis for adjustment - N/A
 Item - Industrial Hygienist labor hours
 Units - hours
 Unit Cost - 10/project (typical for project of this scope)
 Unit Cost Adjustment factor - N/A
 Revised Unit Cost - N/A
 Basis for adjustment - N/A
 Item - pre-construction labor hours
 Units - hours
 Unit Cost - Mech Eng 6 hours/week
 Admin Assist 1 hours/week
 Gen Mgr 1 hours/week
 Civil Eng 8 hours/week
 Unit Cost Adjustment factor - 5 weeks
 Revised Unit Cost - Mech Eng 30 hours
 Admin Assist 5 hours
 Gen Mgr 5 hours
 Civil Eng 40 hours

WBS No: 1EBB0402
 Activity ID: 1EBB420060

Rockv Flats Closure Project
Baseline Cost and Basis of Estimate

Project: Baseline Devl
 WBS Filter: 1EBB
 Activity Filter: *

Starts In FY *

Basis for adjustment - period of preconstruction effort

Item - construction labor hours
 Units - hours
 Unit Cost - Mech Eng 10 hours/week
 Gen Mgr 1 hours/week
 Civil Eng 16 hours/week
 Unit Cost Adjustment factor - 5 weeks
 Revised Unit Cost - Mech Eng 50 hours
 Gen Mgr 5 hours
 Civil Eng 80 hours

Basis for adjustment - period of construction effort

This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

Resources		Cost Element	Skill	Department	Curve	Quantity	Units
750	STRAIGHT TIME BASE	E020	CIVIL ENGINEERS	C222S	Water Svstem Operations	Linear	106.72 Hours
<i>Factors</i>		120	HR				
							0.88934 [SYS 061400] .88934200 - Svstem
750	STRAIGHT TIME BASE	E070	MECHANICAL ENGINEERS	C222S	Water Svstem Operations	Linear	71.15 Hours
<i>Factors</i>		80	HR				
							0.88934 [SYS 061400] .88934200 - Svstem
750	STRAIGHT TIME BASE	G010	ADMINISTRATIVE ASSISTANTS	C222S	Water Svstem Operations	Linear	4.45 Hours
<i>Factors</i>		5	HR				
							0.88934 [SYS 061400] .88934200 - Svstem
750	STRAIGHT TIME BASE	M020	MANAGERS (GRADE 69 - 72)	C222S	Water Svstem Operations	Linear	8.89 Hours
<i>Factors</i>		10	HR				
							0.88934 [SYS 061400] .88934200 - Svstem
750	STRAIGHT TIME BASE	P090	INDUSTRIAL HYGIENISTS	C222S	Water Svstem Operations	Linear	8.89 Hours
<i>Factors</i>		10	HR				
							0.88934 [SYS 061400] .88934200 - Svstem
A5H	SUBCONTRACTED SRVS	0000	NONE	C222S	Water Svstem Operations	Linear	18.192.91 Dollars
<i>Factors</i>		20000	DOLLARS	1.02283 -- FY00 Escalation --			
							0.88934 [SYS 061400] .88934200 - Svstem

Line Item SYS - Contingency And Escalation

BOE

Resources		Cost Element	Skill	Department	Curve	Quantity	Units
CON	CONTINGENCY	0000	NONE	ZDEPT	No Department	Linear	47.650.92 Dollars
<i>Factors</i>		47650.9	Dollars				
ESC	ESCALATION	0000	NONE	ZDEPT	No Department	Linear	43.161.98 Dollars
<i>Factors</i>		43162	Dollars				

Activity ID: 1EBB421000 Description: Surface Pond Water Mamt/Ops FY00

Cost Risk 1 Schedule Risk 1

Line Item	Description	Quantity	Units	BOE Type	Labor Hours/Unit	Labor Hours Total	Labor Cost Total	Materials/ Sub Cost	Contingency & Escalation	Total Prime Cost	Burden Cost	Total Cost	
20	Terminal Pond Operations	0.36	lot	HC	0	0	0	51.773	0	51.773	0	51.773	
25	Interior Pond Pumping Operations	0.36	ea	HC	95	34	695	0	0	695	339	1,034	
30	Equipment Replacement	0.36	ea	HC	0	0	0	4,630	0	4,630	0	4,630	
35	Pond Staff Gage Surveys	0.36	ea	HC	105	38	946	0	0	946	462	1,408	
40	RFCSS Pond Operations Mgt/Reporting	0.36	ea	HC	1,313	474	12,877	0	0	12,877	6,284	19,161	
45	Ecological Reviews	0.36	lot	HC	0	0	0	1,050	0	1,050	0	1,050	
50	Surface Water Program Management	0.36	ea	HC	246	89	4,754	0	0	4,754	2,320	7,074	
55	Health and Safetv Inspections	0.36	ea	HC	63	23	598	0	0	598	292	890	
60	Pond Operations Support Services	0.36	ea	HC	158	57	1,407	1,773	0	3,180	686	3,866	
						Total for Activity 1EBB421000:	715	21,277	59,225	0	80,502	10,383	90,886

WBS No: 1EBB0402
 Activity ID: 1EBB421000

Rockv Flats Closure Project
Baseline Cost and Basis of Estimate

Project Baseline Devl
 WBS Filter 1EBB
 Activity Filter *

Starts In FY *

Line Item 20 - Terminal Pond Operations

BOE Historical Data Source - September FY98 WBS Spending Variance Report for WBS element 1.1.03.06.01.02, Activity BZCG100200, dated 10/7/98
 Item Desc - Subcontracted Labor for Terminal Pond Operations
 Breakdown of Historical Data:
 Item - Subcontracted Labor & GSA Lease for Terminal Pond Operations
 Units - Dollars
 Unit Cost - \$219,751 for FY98
 Unit Cost Adjustment factor - \$46,798
 Revised Unit Cost - \$266,549
 Basis for adjustment - Revised unit cost reflects one pumped-discharge of Pond C-2 to Woman Creek reservoir. Also includes increased subcontractor effort to reduce footprint of Pond Operations in the Buffer Zone during non-pumping periods.
 This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

Resources		Cost Element	Skill	Department	Curve	Quantity	Units
A5H	SUBCONTRACTED SRVS	0000	NONE	C222S	Water System Operations	Linear	138.073.60 Dollars
Factors		256549 \$	1.02283 -- FY00 Escalation --				
A5L	RENTALS	0000	NONE	C106S	Business Management Office	Linear	5.261.83 Dollars
Factors		10000 \$					

0.52618 [SYS 061300] 0.526183 - Target

Line Item 25 - Interior Pond Pumping Operations

BOE Historical Data Source - September FY98 WBS Spending Variance Report for WBS element 1.1.03.06.01.02, Activity BZCG100200, dated 10/7/98
 Item Desc - Interior Pond Pumping Operations
 Breakdown of Historical Data:
 Item - Interior Pond Pumping Operations
 Units - Site Labor Hours
 Unit Cost - 248 hours for Site Process Specialists during FY98
 Unit Cost Adjustment factor - (-68)
 Revised Unit Cost - 180 hours
 Basis for adjustment - The Process Specialists are required to verify correct flow three times per day (once per shift) during each Pond A-3 discharge event. Approximately ten Pond A-3 discharge events occur each year.
 This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

Resources		Cost Element	Skill	Department	Curve	Quantity	Units
750	STRAIGHT TIME BASE	R010	CHEMICAL SYSTEMS OPERATOR (	KE10H	Indust/Site Svcs Steelworkers	Back Loaded	94.71 Hours
Factors		180 hrs					

0.52618 [SYS 061300] 0.526183 - Target

Line Item 30 - Equipment Replacement

BOE Historical Data Source - September FY98 WBS Spending Variance Report for WBS element 1.1.03.06.01.02, Activity BZCG100200, dated 10/7/98
 Item Desc - Pond Operations Equipment Replacement and Maintenance
 Breakdown of Historical Data:
 Item - Pond Operations Equipment Replacement and Maintenance
 Units - Dollars (Supplies-A5C)
 Unit Cost - \$11,195 during FY98
 Unit Cost Adjustment factor - \$12,805
 Revised Unit Cost - \$24,000
 Basis for adjustment - The existing equipment is used to ensure detention pond dam safety. This equipment is at the end of its effective service life and could fail at any time. This funding provides for maintenance and/or replacement of this equipment.
 This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

Resources		Cost Element	Skill	Department	Curve	Quantity	Units
A5C	SUPPLIES	0000	NONE	C222S	Water System Operations	Back Loaded	12.817.82 Dollars
Factors		24000 \$	1.015 -- FY00 Escalation --				

0.52618 [SYS 061300] 0.526183 - Target

Line Item 35 - Pond Staff Gage Surveys

BOE Historical Data Source - September FY98 WBS Spending Variance Report for WBS element 1.1.03.06.01.02, Activity BZCG100200, dated 10/7/98
 Item Desc - Pond Staff Gage Surveys

WBS No: 1EBB0402
 Activity ID: 1EBB421000

Rockv Flats Closure Project
Baseline Cost and Basis of Estimate

Project Baseline Devl
 WBS Filter 1EBB
 Activity Filter *

Starts In FY *

Breakdown of Historical Data:
 Item - Pond Staff Gage Surveys
 Units - Site Labor hours
 Unit Cost - 96 hours for a civil engineer during FY98
 Unit Cost Adjustment factor - 104
 Revised Unit Cost - 200 hours
 Basis for adjustment - Additional staff gage surveys necessary to provide reference values for radio-telemetry network, which will be made available to off-Site Stakeholders via the Site Intranet. Staff gages are subject to movement by ice, large storm water events, and high wind wave action and must be resurveyed into position.
 This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

Resources	Cost Element	Skill	Department	Curve	Quantity	Units
	750 STRAIGHT TIME BASE	E020 CIVIL ENGINEERS	C222S Water System Operations	Back Loaded	105.24	Hours
Factors	200	hrs				

0.52618 [SYS 061300] 0.526183 - Target

Line Item 40 - RFCSS Pond Operations Mgt/Reporting

BOE
 Historical Data Source - September FY98 WBS Spending Variance Report for WBS element 1.1.03.06.01.02, Activity BZCG100200, dated 10/7/98
 Item Desc - Pond Operations Daily Management, Dam Inspections, WADlet Management, Reporting Functions.
 Breakdown of Historical Data:
 Item - Pond Operations Daily Management, Dam Inspections, WADlet Management, Reporting Functions
 Units - Site Labor hours
 Unit Cost - 1,955 hours for an Environmental Engineer during FY98
 Unit Cost Adjustment factor - 541
 Revised Unit Cost - 2,496 hours
 Basis for adjustment - Additional hours reflect increased WADlet management activities and outyear planning.
 This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

Resources	Cost Element	Skill	Department	Curve	Quantity	Units
	750 STRAIGHT TIME BASE	E050 ENVIRONMENTAL ENGINEERS	C222S Water System Operations	Linear	360.96	Hours
Factors	686	hrs				

0.52618 [SYS 061300] 0.526183 - Target

	750 STRAIGHT TIME BASE	P170 OTHER ADMINISTRATIVE & PROFE	C222S Water System Operations	Linear	952.39	Hours
Factors	1810	hrs				

0.52618 [SYS 061300] 0.526183 - Target

Line Item 45 - Ecological Reviews

BOE
 Historical Data Source - September FY98 WBS Spending Variance Report for WBS element 1.1.03.06.01.02, Activity BZCG100200, dated 10/7/98
 Item Desc - Ecological Reviews for Pond Operations
 Breakdown of Historical Data:
 Item - Ecological Reviews for Pond Operations
 Units - Dollars
 Unit Cost - \$2,850 for a subcontracted Ecologist during FY98
 Unit Cost Adjustment factor - \$2,550
 Revised Unit Cost - \$5,400
 Basis for adjustment - Increase due to elevated status of the Preble's Meadow Jumping Mouse to a threatened species. Any outdoor construction, remediation, and monitoring activities (and especially any activities within a 100 feet near streams and ponds) must be reviewed by Kaiser-Hill Ecology Group to ensure that required protection measures of the mouse are in place.
 This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

Resources	Cost Element	Skill	Department	Curve	Quantity	Units
	A5H SUBCONTRACTED SRVS	0000 NONE	C222S Water System Operations	Linear	2.90626	Dollars
Factors	5400	\$	1.02283 -- FY00 Escalation --			

0.52618 [SYS 061300] 0.526183 - Target

Line Item 50 - Surface Water Program Management

BOE
 Historical Data Source - September FY98 WBS Spending Variance Report for WBS element 1.1.03.06.01.02, Activity BZCG100200, dated 10/7/98
 Item Desc - Surface Water Program Management for Pond Operations
 Breakdown of Historical Data:
 Item - Surface Water Program Manager
 Units - Site Labor Hours

WBS No: 1EBB0402
 Activity ID: 1EBB421000

Rockv Flats Closure Project
Baseline Cost and Basis of Estimate

Project: Baseline Devl
 WBS Filter: 1EBB
 Activity Filter: *

Starts In FY *

Unit Cost - 69 hours during FY98
 Unit Cost Adjustment factor - 399
 Revised Unit Cost - 468 hours
 Basis for adjustment - Increased hours are required for Surface Water participation in the Stakeholder Water Working Groups. The Water Working Groups meet once every two weeks.
 This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

Resources	Cost Element	Skill	Department	Curve	Quantity	Units
	750 STRAIGHT TIME BASE	M020 MANAGERS (GRADE 69 - 72)	C222S Water System Operations	Linear	246.25	Hours
Factors 468 hrs						

0.52618 [SYS 061300] 0.526183 - Target

Line Item 55 - Health and Safety Inspections

BOE Historical Data Source - September FY98 WBS Spending Variance Report for WBS element 1.1.03.06.01.02, Activity BZCG100200, dated 10/7/98
 Item Desc - Health and Safety Inspections
 Breakdown of Historical Data:
 Item - Health and Safety Inspections
 Units - Site Labor Hours
 Unit Cost - 84 hours for Health and Safety Professionals during FY98
 Unit Cost Adjustment factor - 36
 Revised Unit Cost - 120 hours
 Basis for adjustment - Additional hours are necessary due to implementation of the Activity Screening Process, Integrated Safety Management system, and additional safety reviews for the updated Integrated Work Control Process.
 This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

Resources	Cost Element	Skill	Department	Curve	Quantity	Units
	750 STRAIGHT TIME BASE	P170 OTHER ADMINISTRATIVE & PROFE	C222S Water System Operations	Linear	63.14	Hours
Factors 120 hrs						

0.52618 [SYS 061300] 0.526183 - Target

Line Item 60 - Pond Operations Support Services

BOE Historical Data Source - September FY98 WBS Spending Variance Report for WBS element 1.1.03.06.01.02, Activity BZCG100200, dated 10/7/98
 Item Desc - Pond Operations Quality Assurance Support
 Breakdown of Historical Data:
 Item - Pond Operations Quality Assurance Support
 Units - Dollars (Subcontract Labor Hours)
 Unit Cost - 270 hours for Quality Assurance Specialists during FY98
 Unit Cost Adjustment factor - (-190)
 Revised Unit Cost - \$3,820 (80 hours X \$47.75/Hr.)
 Basis for adjustment - QA personnel will perform fewer management assessments of Pond Operations during this year.
 Item - Pond Operations Planning-Budget Integration
 Units - Dollars (Subcontracted Labor Hours)
 Unit Cost - \$9,526 (217 hours for Cost Estimators/Planners during FY98)
 Unit Cost Adjustment factor - (-\$4,226) (-97 hours)
 Revised Unit Cost - \$5,300 (120 hoursX \$44.17/Hr.)
 Basis for adjustment - Subcontracted services provides oversight of Surface Water WADlet budgeting and reporting activities. Decrease in funding due to paperless reporting and analysis capabilities. This has streamlined the PB&I review process.
 Item - K-H Radiation Control Technologist Support
 Units - Site Labor Hours
 Unit Cost - 0 hours for Radiation Control Technologists during FY98
 Unit Cost Adjustment factor - 40
 Revised Unit Cost - 40 hours
 Basis for adjustment - Dispositioning of excess PondOps field equipment requires radiological screening or evaluation prior to acceptance by Site PU&D.
 Item - Program Compliance Activities for Pond Operations
 Units - Site Labor Hours
 Unit Cost - 86 hours for Program Compliance Activities during FY98
 Unit Cost Adjustment factor - 14
 Revised Unit Cost - 100 hours
 Basis for adjustment - Program Compliance requirements are increased in FY02 because Surface Water personnel will attend more required training.

WBS No: 1EBB0402
 Activity ID: 1EBB421000

Rockv Flats Closure Project
Baseline Cost and Basis of Estimate

Project Baseline Devl
 WBS Filter 1EBB
 Activity Filter *

Starts In FY *

Item - Trucking and Transportation for Pond Operations
 Units - Site Labor Hours
 Unit Cost - 119 hours for Trucking and Transportation during FY98
 Unit Cost Adjustment factor - (-19)
 Revised Unit Cost - 100 hours
 Basis for adjustment - Dispositioning of excess PondOps field equipment requires transportation to Site PU&D.

Item - Secretarial Support for Pond Operations
 Units - Site Labor Hours
 Unit Cost - 40 hours for Secretary during FY98
 Unit Cost Adjustment factor - none
 Revised Unit Cost - 40 hours
 Basis for adjustment - none

Item - Radiological Engineers for Pond Operations
 Units - Site Labor Hours
 Unit Cost - 5 hours for Rad Engineers during FY98
 Unit Cost Adjustment factor -15
 Revised Unit Cost - 20 hours
 Basis for adjustment - Dispositioning of excess PondOps field equipment requires radiological screening or evaluation prior to acceptance by Site PU&D.

This activity factored by .3612 to rebaseline for June to September.

This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

Resources

Cost Element	Skill	Department	Curve	Quantity	Units
750 STRAIGHT TIME BASE	G010 ADMINISTRATIVE ASSISTANTS	C222S Water Svstem Operations	Linear	21.05	Hours
<i>Factors</i> 40 hrs					
0.52618 [SYS 061300] 0.526183 - Target					
750 STRAIGHT TIME BASE	P080 HEALTH PHYSICISTS	C222S Water Svstem Operations	Linear	10.52	Hours
<i>Factors</i> 20 hrs					
0.52618 [SYS 061300] 0.526183 - Target					
750 STRAIGHT TIME BASE	P170 OTHER ADMINISTRATIVE & PROFE	C222S Water Svstem Operations	Linear	52.62	Hours
<i>Factors</i> 100 Hours					
0.52618 [SYS 061300] 0.526183 - Target					
750 STRAIGHT TIME BASE	P170 OTHER ADMINISTRATIVE & PROFE	C242S Transportation	Linear	52.62	Hours
<i>Factors</i> 100 hrs					
0.52618 [SYS 061300] 0.526183 - Target					
750 STRAIGHT TIME BASE	T050 RADIATION CONTROL TECHNOLOGI	KE10H Indust/Site Svcs Steelworkers	Linear	21.05	Hours
<i>Factors</i> 40 hrs					
0.52618 [SYS 061300] 0.526183 - Target					
A5H SUBCONTRACTED SRVS	0000 NONE	C222S Water Svstem Operations	Linear	2,852.44	Dollars
<i>Factors</i> 5300 Dollars 1.02283 -- FY00 Escalation --					
0.52618 [SYS 061300] 0.526183 - Target					
A5H SUBCONTRACTED SRVS	S020 ENVIRONMENTAL SCIENTISTS	C222S Water Svstem Operations	Linear	2,055.91	Dollars
<i>Factors</i> 3820 dollars 1.02283 -- FY00 Escalation --					
0.52618 [SYS 061300] 0.526183 - Target					

Activity ID: 1EBB421010 Description: Surface Pond Water Mqmt/Ops FY01

Cost Risk 1 Schedule Risk 1

Line Item	Description	Quantity	Units	BOE Type	Labor Hours/Unit	Labor Hours Total	Labor Cost Total	Materials/ Sub Cost	Contingency & Escalation	Total Prime Cost	Burden Cost	Total Cost
20	Terminal Pond Operations	1.00	lot	HC	0	0	0	242,262	0	242,262	0	242,262
25	Interior Pond Pumping Operations	1.00	ea	HC	160	160	3,251	0	0	3,251	1,551	4,802
30	Equipment Replacement	1.00	ea	HC	0	0	0	21,664	0	21,664	0	21,664
35	Pond Staff Gage Surveys	1.00	ea	HC	178	178	4,427	0	0	4,427	2,112	6,539
40	RFCSS Pond Operations Mat/Reporting	1.00	ea	HC	2,220	2,220	60,257	0	0	60,257	28,743	88,999
45	Ecological Reviews	1.00	lot	HC	0	0	0	4,912	0	4,912	0	4,912
50	Surface Water Program Management	1.00	ea	HC	416	416	22,247	0	0	22,247	10,612	32,858

WBS No: 1EBB0402
 Activity ID: 1EBB421010

Rockv Flats Closure Project
Baseline Cost and Basis of Estimate

Project Baseline Devl
 WBS Filter 1EBB
 Activity Filter *

Starts In FY *

55	Health and Safety Inspections	1.00	ea	HC	107	107	2,799	0	0	2,799	1,335	4,135	
60	Pond Operations Support Services	1.00	ea	HC	267	267	6,582	8,296	0	14,878	3,140	18,018	
SYS	Contingency And Escalation	1.00	ea	EE	0	0	0	0	22,280	22,280	0	22,280	
Total for Activity 1EBB421010:							3,347	99,563	277,135	22,280	398,978	47,492	446,470

Line Item 20 - Terminal Pond Operations

BOE
 Historical Data Source - September FY98 WBS Spending Variance Report for WBS element 1.1.03.06.01.02, Activity BZCG100200, dated 10/7/98
 Item Desc - Subcontracted Labor for Terminal Pond Operations
 Breakdown of Historical Data:
 Item - Subcontracted Labor & GSA Lease for Terminal Pond Operations
 Units - Dollars
 Unit Cost - \$219,751 for FY98
 Unit Cost Adjustment factor - \$46,798
 Revised Unit Cost - \$266,549
 Basis for adjustment - Revised unit cost reflects one pumped-discharge of Pond C-2 to Woman Creek reservoir. Also includes increased subcontractor effort to reduce footprint of Pond Operations in the Buffer Zone during non-pumping periods.
 This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

Resources

Cost Element	Skill	Department	Curve	Quantity	Units
A5H SUBCONTRACTED SRVS	0000 NONE	C222S Water System Operations	Linear	233,368.70	Dollars
Factors 256549 \$ 1.02283 -- FY00 Escalation --					
A5L RENTALS	0000 NONE	C106S Business Management Office	Linear	8,893.42	Dollars
Factors 10000 \$					

0.88934 [SYS 061400] .88934200 - System

0.88934 [SYS 061400] .88934200 - System

Line Item 25 - Interior Pond Pumping Operations

BOE
 Historical Data Source - September FY98 WBS Spending Variance Report for WBS element 1.1.03.06.01.02, Activity BZCG100200, dated 10/7/98
 Item Desc - Interior Pond Pumping Operations
 Breakdown of Historical Data:
 Item - Interior Pond Pumping Operations
 Units - Site Labor Hours
 Unit Cost - 248 hours for Site Process Specialists during FY98
 Unit Cost Adjustment factor - (-68)
 Revised Unit Cost - 180 hours
 Basis for adjustment - The Process Specialists are required to verify correct flow three times per day (once per shift) during each Pond A-3 discharge event. Approximately ten Pond A-3 discharge events occur each year.
 This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

Resources

Cost Element	Skill	Department	Curve	Quantity	Units
750 STRAIGHT TIME BASE	R010 CHEMICAL SYSTEMS OPERATOR (	KE10H Indust/Site Srvs Steelworkers	Back Loaded	160.08	Hours
Factors 180 hrs					

0.88934 [SYS 061400] .88934200 - System

Line Item 30 - Equipment Replacement

BOE
 Historical Data Source - September FY98 WBS Spending Variance Report for WBS element 1.1.03.06.01.02, Activity BZCG100200, dated 10/7/98
 Item Desc - Pond Operations Equipment Replacement and Maintenance
 Breakdown of Historical Data:
 Item - Pond Operations Equipment Replacement and Maintenance
 Units - Dollars (Supplies-A5C)
 Unit Cost - \$11,195 during FY98
 Unit Cost Adjustment factor - \$12,805
 Revised Unit Cost - \$24,000
 Basis for adjustment - The existing equipment is used to ensure detention pond dam safety. This equipment is at the end of its effective service life and could fail at any time. This funding provides for maintenance and/or replacement of this equipment.
 This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

Resources

Cost Element	Skill	Department	Curve	Quantity	Units
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WBS No: 1EBB0402
 Activity ID: 1EBB421010

Rockv Flats Closure Project
Baseline Cost and Basis of Estimate

Project: Baseline Devl
 WBS Filter: 1EBB
 Activity Filter: *

Starts In FY *

A5C	SUPPLIES	0000	NONE	C222S	Water System Operations	Back Loaded	21,664.37	Dollars
<i>Factors</i>		24000	\$	1.015	-- FY00 Escalation --			

0.88934 [SYS 061400] .88934200 - System

Line Item 35 - Pond Staff Gage Surveys

BOE
 Historical Data Source - September FY98 WBS Spending Variance Report for WBS element 1.1.03.06.01.02, Activity BZCG100200, dated 10/7/98
 Item Desc - Pond Staff Gage Surveys
 Breakdown of Historical Data:
 Item - Pond Staff Gage Surveys
 Units - Site Labor hours
 Unit Cost - 96 hours for a civil engineer during FY98
 Unit Cost Adjustment factor - 104
 Revised Unit Cost - 200 hours
 Basis for adjustment - Additional staff gage surveys necessary to provide reference values for radio-telemetry network, which will be made available to off-Site Stakeholders via the Site Intranet. Staff gages are subject to movement by ice, large storm water events, and high wind wave action and must be resurveyed into position.
 This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

<i>Cost Element</i>		<i>Skill</i>		<i>Department</i>		<i>Curve</i>	<i>Quantity</i>	<i>Units</i>
750	STRAIGHT TIME BASE	E020	CIVIL ENGINEERS	C222S	Water System Operations	Back Loaded	177.87	Hours
<i>Factors</i>		200	hrs					

0.88934 [SYS 061400] .88934200 - System

Line Item 40 - RFCSS Pond Operations Mgt/Reporting

BOE
 Historical Data Source - September FY98 WBS Spending Variance Report for WBS element 1.1.03.06.01.02, Activity BZCG100200, dated 10/7/98
 Item Desc - Pond Operations Daily Management, Dam Inspections, WADlet Management, Reporting Functions.
 Breakdown of Historical Data:
 Item - Pond Operations Daily Management, Dam Inspections, WADlet Management, Reporting Functions
 Units - Site Labor hours
 Unit Cost - 1,955 hours for an Environmental Engineer during FY98
 Unit Cost Adjustment factor - 541
 Revised Unit Cost - 2,496 hours
 Basis for adjustment - Additional hours reflect increased WADlet management activities and outyear planning.
 This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

<i>Cost Element</i>		<i>Skill</i>		<i>Department</i>		<i>Curve</i>	<i>Quantity</i>	<i>Units</i>
750	STRAIGHT TIME BASE	E050	ENVIRONMENTAL ENGINEERS	C222S	Water System Operations	Linear	610.09	Hours
<i>Factors</i>		686	hrs					

0.88934 [SYS 061400] .88934200 - System

750	STRAIGHT TIME BASE	P170	OTHER ADMINISTRATIVE & PROFE	C222S	Water System Operations	Linear	1,609.71	Hours
<i>Factors</i>		1810	hrs					

0.88934 [SYS 061400] .88934200 - System

Line Item 45 - Ecological Reviews

BOE
 Historical Data Source - September FY98 WBS Spending Variance Report for WBS element 1.1.03.06.01.02, Activity BZCG100200, dated 10/7/98
 Item Desc - Ecological Reviews for Pond Operations
 Breakdown of Historical Data:
 Item - Ecological Reviews for Pond Operations
 Units - Dollars
 Unit Cost - \$2,850 for a subcontracted Ecologist during FY98
 Unit Cost Adjustment factor - \$2,550
 Revised Unit Cost - \$5,400
 Basis for adjustment - Increase due to elevated status of the Preble's Meadow Jumping Mouse to a threatened species. Any outdoor construction, remediation, and monitoring activities (and especially any activities within a 100 feet near streams and ponds) must be reviewed by Kaiser-Hill Ecology Group to ensure that required protection measures of the mouse are in place.
 This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

<i>Cost Element</i>		<i>Skill</i>		<i>Department</i>		<i>Curve</i>	<i>Quantity</i>	<i>Units</i>
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WBS No: 1EBB0402
 Activity ID: 1EBB421010

Rockv Flats Closure Project
Baseline Cost and Basis of Estimate

Project Baseline Devl
 WBS Filter 1EBB
 Activity Filter * Starts In FY *

A5H	SUBCONTRACTED SRVS	0000	NONE	C222S	Water System Operations	Linear	4,912.09	Dollars
<i>Factors</i>		5400	\$	1.02283 -- FY00 Escalation --				

0.88934 [SYS 061400] .88934200 - System

Line Item 50 - Surface Water Program Management

BOE Historical Data Source - September FY98 WBS Spending Variance Report for WBS element 1.1.03.06.01.02, Activity BZCG100200, dated 10/7/98
 Item Desc - Surface Water Program Management for Pond Operations
 Breakdown of Historical Data:
 Item - Surface Water Program Manager
 Units - Site Labor Hours
 Unit Cost - 69 hours during FY98
 Unit Cost Adjustment factor - 399
 Revised Unit Cost - 468 hours
 Basis for adjustment - Increased hours are required for Surface Water participation in the Stakeholder Water Working Groups. The Water Working Groups meet once every two weeks.
 This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

<i>Cost Element</i>		<i>Skill</i>		<i>Department</i>		<i>Curve</i>	<i>Quantity</i>	<i>Units</i>
750	STRAIGHT TIME BASE	M020	MANAGERS (GRADE 69 - 72)	C222S	Water System Operations	Linear	416.21	Hours
<i>Factors</i>		468	hrs					

0.88934 [SYS 061400] .88934200 - System

Line Item 55 - Health and Safety Inspections

BOE Historical Data Source - September FY98 WBS Spending Variance Report for WBS element 1.1.03.06.01.02, Activity BZCG100200, dated 10/7/98
 Item Desc - Health and Safety Inspections
 Breakdown of Historical Data:
 Item - Health and Safety Inspections
 Units - Site Labor Hours
 Unit Cost - 84 hours for Health and Safety Professionals during FY98
 Unit Cost Adjustment factor - 36
 Revised Unit Cost - 120 hours
 Basis for adjustment - Additional hours are necessary due to implementation of the Activity Screening Process, Integrated Safety Management system, and additional safety reviews for the updated Integrated Work Control Process.
 This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

<i>Cost Element</i>		<i>Skill</i>		<i>Department</i>		<i>Curve</i>	<i>Quantity</i>	<i>Units</i>
750	STRAIGHT TIME BASE	P170	OTHER ADMINISTRATIVE & PROFE	C222S	Water System Operations	Linear	106.72	Hours
<i>Factors</i>		120	hrs					

0.88934 [SYS 061400] .88934200 - System

Line Item 60 - Pond Operations Support Services

BOE Historical Data Source - September FY98 WBS Spending Variance Report for WBS element 1.1.03.06.01.02, Activity BZCG100200, dated 10/7/98
 Item Desc - Pond Operations Quality Assurance Support
 Breakdown of Historical Data:
 Item - Pond Operations Quality Assurance Support
 Units - Dollars (Subcontract Labor Hours)
 Unit Cost - 270 hours for Quality Assurance Specialists during FY98
 Unit Cost Adjustment factor - (-190)
 Revised Unit Cost - \$3,820 (80 hours X \$47.75/Hr.)
 Basis for adjustment - QA personnel will perform fewer management assessments of Pond Operations during this year.
 Item - Pond Operations Planning-Budget Integration
 Units - Dollars (Subcontracted Labor Hours)
 Unit Cost - \$9,526 (217 hours for Cost Estimators/Planners during FY98)
 Unit Cost Adjustment factor - (-\$4,226) (-97 hours)
 Revised Unit Cost - \$5,300 (120 hoursX \$44.17/Hr.)
 Basis for adjustment - Subcontracted services provides oversight of Surface Water WADlet budgeting and reporting activities. Decrease in funding due to paperless reporting and analysis capabilities. This has streamlined the PB&I review process.
 Item - K-H Radiation Control Technologist Support
 Units - Site Labor Hours
 Unit Cost - 0 hours for Radiation Control Technologists during FY98
 Unit Cost Adjustment factor - 40

WBS No: 1EBB0402
 Activity ID: 1EBB421010

Rockv Flats Closure Project
Baseline Cost and Basis of Estimate

Project: Baseline Devl
 WBS Filter: 1EBB
 Activity Filter: *

Starts In FY *

Revised Unit Cost - 40 hours
 Basis for adjustment - Dispositioning of excess PondOps field equipment requires radiological screening or evaluation prior to acceptance by Site PU&D.

Item - Program Compliance Activities for Pond Operations
 Units - Site Labor Hours
 Unit Cost - 86 hours for Program Compliance Activities during FY98
 Unit Cost Adjustment factor - 14
 Revised Unit Cost - 100 hours
 Basis for adjustment - Program Compliance requirements are increased in FY02 because Surface Water personnel will attend more required training.

Item - Trucking and Transportation for Pond Operations
 Units - Site Labor Hours
 Unit Cost - 119 hours for Trucking and Transportation during FY98
 Unit Cost Adjustment factor - (-19)
 Revised Unit Cost - 100 hours
 Basis for adjustment - Dispositioning of excess PondOps field equipment requires transportation to Site PU&D.

Item - Secretarial Support for Pond Operations
 Units - Site Labor Hours
 Unit Cost - 40 hours for Secretary during FY98
 Unit Cost Adjustment factor - none
 Revised Unit Cost - 40 hours
 Basis for adjustment - none

Item - Radiological Engineers for Pond Operations
 Units - Site Labor Hours
 Unit Cost - 5 hours for Rad Engineers during FY98
 Unit Cost Adjustment factor -15
 Revised Unit Cost - 20 hours
 Basis for adjustment - Dispositioning of excess PondOps field equipment requires radiological screening or evaluation prior to acceptance by Site PU&D.

This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

Resources

Cost Element		Skill		Department		Curve	Quantity	Units
750	STRAIGHT TIME BASE	G010	ADMINISTRATIVE ASSISTANTS	C222S	Water System Operations	Linear	35.57	Hours
<i>Factors</i> 40 hrs						0.88934 [SYS 061400] .88934200 - System		
750	STRAIGHT TIME BASE	P080	HEALTH PHYSICISTS	C222S	Water System Operations	Linear	17.79	Hours
<i>Factors</i> 20 hrs						0.88934 [SYS 061400] .88934200 - System		
750	STRAIGHT TIME BASE	P170	OTHER ADMINISTRATIVE & PROFE	C222S	Water System Operations	Linear	88.93	Hours
<i>Factors</i> 100 Hours						0.88934 [SYS 061400] .88934200 - System		
750	STRAIGHT TIME BASE	P170	OTHER ADMINISTRATIVE & PROFE	C242S	Transportation	Linear	88.93	Hours
<i>Factors</i> 100 hrs						0.88934 [SYS 061400] .88934200 - System		
750	STRAIGHT TIME BASE	T050	RADIATION CONTROL TECHNOLOGI	KE10H	Indust/Site Srvs Steelworkers	Linear	35.57	Hours
<i>Factors</i> 40 hrs						0.88934 [SYS 061400] .88934200 - System		
A5H	SUBCONTRACTED SRVS	0000	NONE	C222S	Water System Operations	Linear	4,821.12	Dollars
<i>Factors</i> 5300 Dollars		1.02283 -- FY00 Escalation --				0.88934 [SYS 061400] .88934200 - System		
A5H	SUBCONTRACTED SRVS	S020	ENVIRONMENTAL SCIENTISTS	C222S	Water System Operations	Linear	3,474.85	Dollars
<i>Factors</i> 3820 dollars		1.02283 -- FY00 Escalation --				0.88934 [SYS 061400] .88934200 - System		

Line Item SYS - Contingency And Escalation

BOE

Cost Element		Skill		Department		Curve	Quantity	Units
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WBS No: 1EBB0402
 Activity ID: 1EBB421010

Rockv Flats Closure Project
Baseline Cost and Basis of Estimate

Project Baseline Devl
 WBS Filter 1EBB
 Activity Filter *

Starts In FY *

CON	CONTINGENCY	0000	NONE	ZDEPT	No Department	Linear	13,360.71	Dollars
<i>Factors</i> 13360.7 Dollars								
ESC	ESCALATION	0000	NONE	ZDEPT	No Department	Linear	8,919.76	Dollars
<i>Factors</i> 8919.76 Dollars								

Activity ID: 1EBB421020 Description: Surface Pond Water Mamt/Ops FY02

Cost Risk 1 Schedule Risk 1

Line Item	Description	Quantity	Units	BOE Type	Labor Hours/Unit	Labor Hours Total	Labor Cost Total	Materials/ Sub Cost	Contingency & Escalation	Total Prime Cost	Burden Cost	Total Cost
20	Terminal Pond Operations	1.00	lot	HC	0	0	0	242,262	0	242,262	0	242,262
25	Interior Pond Pumping Operations	1.00	ea	HC	160	160	3,251	0	0	3,251	1,148	4,399
30	Equipment Replacement	1.00	ea	HC	0	0	0	21,664	0	21,664	0	21,664
35	Pond Staff Gage Surveys	1.00	ea	HC	178	178	4,427	0	0	4,427	1,563	5,990
40	RFCSS Pond Operations Mat/Reporting	1.00	ea	HC	2,220	2,220	60,257	0	0	60,257	21,271	81,528
45	Ecological Reviews	1.00	lot	HC	0	0	0	4,912	0	4,912	0	4,912
50	Surface Water Program Management	1.00	ea	HC	416	416	22,247	0	0	22,247	7,853	30,100
55	Health and Safety Inspections	1.00	ea	HC	107	107	2,799	0	0	2,799	988	3,787
60	Pond Operations Support Services	1.00	ea	HC	267	267	6,582	8,433	0	15,016	2,324	17,339
SYS	Contingency And Escalation	1.00	ea	EE	0	0	0	0	60,902	60,902	0	60,902
Total for Activity 1EBB421020:						3,347	99,563	277,272	60,902	437,737	35,146	472,883

Line Item 20 - Terminal Pond Operations

BOE Historical Data Source - September FY98 WBS Spending Variance Report for WBS element 1.1.03.06.01.02, Activity BZCG100200, dated 10/7/98
 Item Desc - Subcontracted Labor for Terminal Pond Operations
 Breakdown of Historical Data:
 Item - Subcontracted Labor & GSA Lease for Terminal Pond Operations
 Units - Dollars
 Unit Cost - \$219,751 for FY98
 Unit Cost Adjustment factor - \$46,798
 Revised unit cost - \$266,549
 Basis for adjustment - Revised unit cost reflects one pumped-discharge of Pond C-2 to Woman Creek reservoir. Also includes increased subcontractor effort to reduce footprint of Pond Operations in the Buffer Zone during non-pumping periods.
 This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

Resources

Cost Element	Skill	Department	Curve	Quantity	Units
A5H SUBCONTRACTED SRVS	0000 NONE	C222S Water System Operations	Linear	233,368.70	Dollars
<i>Factors</i> 256549 \$ 1.02283 -- FY00 Escalation --					
A5L RENTALS	0000 NONE	C106S Business Management Office	Linear	8,893.42	Dollars
<i>Factors</i> 10000 \$					

0.88934 [SYS 061400] .88934200 - System

Line Item 25 - Interior Pond Pumping Operations

BOE Historical Data Source - September FY98 WBS Spending Variance Report for WBS element 1.1.03.06.01.02, Activity BZCG100200, dated 10/7/98
 Item Desc - Interior Pond Pumping Operations
 Breakdown of Historical Data:
 Item - Interior Pond Pumping Operations
 Units - Site Labor Hours
 Unit Cost - 248 hours for Site Process Specialists during FY98
 Unit Cost Adjustment factor - (-68)
 Revised Unit Cost - 180 hours
 Basis for adjustment - The Process Specialists are required to verify correct flow three times per day (once per shift) during each Pond A-3 discharge event. Approximately ten Pond A-3 discharge events occur each year.
 This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

Resources

Cost Element	Skill	Department	Curve	Quantity	Units
750 STRAIGHT TIME BASE	R010 CHEMICAL SYSTEMS OPERATOR (	KE10H Indust/Site Srvs Steelworkers	Back Loaded	160.08	Hours
<i>Factors</i> 180 hrs					

0.88934 [SYS 061400] .88934200 - System

WBS No: 1EBB0402
 Activity ID: 1EBB421020

Rockv Flats Closure Project
Baseline Cost and Basis of Estimate

Project Baseline Devl
 WBS Filter 1EBB
 Activity Filter *

Starts In FY *

Line Item 30 - Equipment Replacement

BOE Historical Data Source - September FY98 WBS Spending Variance Report for WBS element 1.1.03.06.01.02, Activity BZCG100200, dated 10/7/98
 Item Desc - Pond Operations Equipment Replacement and Maintenance
 Breakdown of Historical Data:
 Item - Pond Operations Equipment Replacement and Maintenance
 Units - Dollars (Supplies-A5C)
 Unit Cost - \$11,195 during FY98
 Unit Cost Adjustment factor - \$12,805
 Revised Unit Cost - \$24,000
 Basis for adjustment - The existing equipment is used to ensure detention pond dam safety. This equipment is at the end of its effective service life and could fail at any time. This funding provides for maintenance and/or replacement of this equipment.
 This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

Cost Element		Skill		Department		Curve	Quantity	Units
A5C	SUPPLIES	0000	NONE	C222S	Water System Operations	Back Loaded	21.664.37	Dollars
<i>Factors</i> 24000 \$		1.015 -- FY00 Escalation --						

0.88934 [SYS 061400] .88934200 - Svsstem

Line Item 35 - Pond Staff Gage Surveys

BOE Historical Data Source - September FY98 WBS Spending Variance Report for WBS element 1.1.03.06.01.02, Activity BZCG100200, dated 10/7/98
 Item Desc - Pond Staff Gage Surveys
 Breakdown of Historical Data:
 Item - Pond Staff Gage Surveys
 Units - Site Labor hours
 Unit Cost - 96 hours for a civil engineer during FY98
 Unit Cost Adjustment factor - 104
 Revised Unit Cost - 200 hours
 Basis for adjustment - Additional staff gage surveys necessary to provide reference values for radio-telemetry network, which will be made available to off-Site Stakeholders via the Site Intranet. Staff gages are subject to movement by ice, large storm water events, and high wind wave action and must be resurveyed into position.
 This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

Cost Element		Skill		Department		Curve	Quantity	Units
750	STRAIGHT TIME BASE	E020	CIVIL ENGINEERS	C222S	Water System Operations	Back Loaded	177.87	Hours
<i>Factors</i> 200 hrs								

0.88934 [SYS 061400] .88934200 - Svsstem

Line Item 40 - RFCSS Pond Operations Mgt/Reporting

BOE Historical Data Source - September FY98 WBS Spending Variance Report for WBS element 1.1.03.06.01.02, Activity BZCG100200, dated 10/7/98
 Item Desc - Pond Operations Daily Management, Dam Inspections, WADlet Management, Reporting Functions.
 Breakdown of Historical Data:
 Item - Pond Operations Daily Management, Dam Inspections, WADlet Management, Reporting Functions
 Units - Site Labor hours
 Unit Cost - 1,955 hours for an Environmental Engineer during FY98
 Unit Cost Adjustment factor - 541
 Revised Unit Cost - 2,496 hours
 Basis for adjustment - Additional hours reflect increased WADlet management activities for outyear planning.
 This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

Cost Element		Skill		Department		Curve	Quantity	Units
750	STRAIGHT TIME BASE	E050	ENVIRONMENTAL ENGINEERS	C222S	Water System Operations	Linear	610.09	Hours
<i>Factors</i> 686 hrs								

0.88934 [SYS 061400] .88934200 - Svsstem

750	STRAIGHT TIME BASE	P170	OTHER ADMINISTRATIVE & PROFE	C222S	Water System Operations	Linear	1.609.71	Hours
<i>Factors</i> 1810 hrs								

0.88934 [SYS 061400] .88934200 - Svsstem

Line Item 45 - Ecological Reviews

BOE Historical Data Source - September FY98 WBS Spending Variance Report for WBS element 1.1.03.06.01.02, Activity BZCG100200, dated 10/7/98
 Item Desc - Ecological Reviews for Pond Operations

WBS No: 1EBB0402
 Activity ID: 1EBB421020

Rockv Flats Closure Project
Baseline Cost and Basis of Estimate

Project Baseline Devl
 WBS Filter 1EBB
 Activity Filter * Starts In FY *

Breakdown of Historical Data:
 Item - Ecological Reviews for Pond Operations
 Units - Dollars
 Unit Cost - \$2,850 for a subcontracted Ecologist during FY98
 Unit Cost Adjustment factor - \$2,550
 Revised Unit Cost - \$5,400
 Basis for adjustment - Increase due to elevated status of the Preble's Meadow Jumping Mouse to a threatened species. Any outdoor construction, remediation, and monitoring activities (and especially any activities within a 100 feet near streams and ponds) must be reviewed by Kaiser-Hill Ecology Group to ensure that required protection measures of the mouse are in place.
 This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

Resources		Cost Element	Skill	Department	Curve	Quantity	Units
A5H	SUBCONTRACTED SRVS	0000	NONE	C222S	Water System Operations	Linear	4,912.09 Dollars
Factors		5400 \$	1.02283 -- FY00 Escalation --				

0.88934 [SYS 061400] .88934200 - System

Line Item 50 - Surface Water Program Management

BOE
 Historical Data Source - September FY98 WBS Spending Variance Report for WBS element 1.1.03.06.01.02, Activity BZCG100200, dated 10/7/98
 Item Desc - Surface Water Program Management for Pond Operations
 Breakdown of Historical Data:
 Item - Surface Water Program Manager
 Units - Site Labor Hours
 Unit Cost - 69 hours during FY98
 Unit Cost Adjustment factor - 399
 Revised Unit Cost - 468 hours
 Basis for adjustment - Increased hours are required for Surface Water participation in the Stakeholder Water Working Groups. The Water Working Groups meet once every two weeks.
 This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

Resources		Cost Element	Skill	Department	Curve	Quantity	Units
750	STRAIGHT TIME BASE	M020	MANAGERS (GRADE 69 - 72)	C222S	Water System Operations	Linear	416.21 Hours
Factors		468 hrs					

0.88934 [SYS 061400] .88934200 - System

Line Item 55 - Health and Safety Inspections

BOE
 Historical Data Source - September FY98 WBS Spending Variance Report for WBS element 1.1.03.06.01.02, Activity BZCG100200, dated 10/7/98
 Item Desc - Health and Safety Inspections
 Breakdown of Historical Data:
 Item - Health and Safety Inspections
 Units - Site Labor Hours
 Unit Cost - 84 hours for Health and Safety Professionals during FY98
 Unit Cost Adjustment factor - 36
 Revised Unit Cost - 120 hours
 Basis for adjustment - Additional hours are necessary due to implementation of the Activity Screening Process, Integrated Safety Management system, and additional safety reviews for the updated Integrated Work Control Process.
 This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

Resources		Cost Element	Skill	Department	Curve	Quantity	Units
750	STRAIGHT TIME BASE	P170	OTHER ADMINISTRATIVE & PROFE	C222S	Water System Operations	Linear	106.72 Hours
Factors		120 hrs					

0.88934 [SYS 061400] .88934200 - System

Line Item 60 - Pond Operations Support Services

BOE
 Historical Data Source - September FY98 WBS Spending Variance Report for WBS element 1.1.03.06.01.02, Activity BZCG100200, dated 10/7/98
 Item Desc - Pond Operations Quality Assurance Support
 Breakdown of Historical Data:
 Item - Pond Operations Quality Assurance Support
 Units - Dollars (Subcontract Labor Hours)
 Unit Cost - 270 hours for Quality Assurance Specialists during FY98
 Unit Cost Adjustment factor - (-190)
 Revised Unit Cost - 80 hours X \$49.64 = \$3971

WBS No: 1EBB0402
 Activity ID: 1EBB421020

Rockv Flats Closure Project
Baseline Cost and Basis of Estimate

Project Baseline Devl
 WBS Filter 1EBB
 Activity Filter *

Starts In FY *

Basis for adjustment - QA personnel will perform fewer management assessments of Pond Operations during this year.

Item - Pond Operations Planning-Budget Integration
 Units - Dollars (Subcontracted Labor Hours)
 Unit Cost - \$9,526 (217 hours for Cost Estimators/Planners during FY98)
 Unit Cost Adjustment factor - (-\$4,226) (-97 hours)
 Revised Unit Cost - \$5,300 (120 hours X \$44.17/Hr.)
 Basis for adjustment - Subcontracted services provides oversight of Surface Water WADlet budgeting and reporting activities. Decrease in funding due to paperless reporting and analysis capabilities. This has streamlined the PB&I review process.

Item - K-H Radiation Control Technologist Support
 Units - Site Labor Hours
 Unit Cost - 0 hours for Radiation Control Technologists during FY98
 Unit Cost Adjustment factor - 40
 Revised Unit Cost - 40 hours
 Basis for adjustment - Dispositioning of excess PondOps field equipment requires radiological screening or evaluation prior to acceptance by Site PU&D.

Item - Program Compliance Activities for Pond Operations
 Units - Site Labor Hours
 Unit Cost - 86 hours for Program Compliance Activities during FY98
 Unit Cost Adjustment factor - 14
 Revised Unit Cost - 100 hours
 Basis for adjustment - Program Compliance requirements are increased in FY03 because Surface Water personnel will attend more required training.

Item - Trucking and Transportation for Pond Operations
 Units - Site Labor Hours
 Unit Cost - 119 hours for Trucking and Transportation during FY98
 Unit Cost Adjustment factor - (-19)
 Revised Unit Cost - 100 hours
 Basis for adjustment - Dispositioning of excess PondOps field equipment requires transportation to Site PU&D.

Item - Secretarial Support for Pond Operations
 Units - Site Labor Hours
 Unit Cost - 40 hours for Secretary during FY98
 Unit Cost Adjustment factor - none
 Revised Unit Cost - 40 hours
 Basis for adjustment - none

Item - Radiological Engineers for Pond Operations
 Units - Site Labor Hours
 Unit Cost - 5 hours for Rad Engineers during FY98
 Unit Cost Adjustment factor -15
 Revised Unit Cost - 20 hours
 Basis for adjustment - Dispositioning of excess PondOps field equipment requires radiological screening or evaluation prior to acceptance by Site PU&D.

This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

Resources

Cost Element	Skill	Department	Curve	Quantity	Units
750 STRAIGHT TIME BASE	G010 ADMINISTRATIVE ASSISTANTS	C222S Water System Operations	Linear	35.57	Hours
Factors 40 hrs					
			0.88934 [SYS 061400]	.88934200 - System	
750 STRAIGHT TIME BASE	P080 HEALTH PHYSICISTS	C222S Water System Operations	Linear	17.79	Hours
Factors 20 hrs					
			0.88934 [SYS 061400]	.88934200 - System	
750 STRAIGHT TIME BASE	P170 OTHER ADMINISTRATIVE & PROFE	C222S Water System Operations	Linear	88.93	Hours
Factors 100 Hours					
			0.88934 [SYS 061400]	.88934200 - System	
750 STRAIGHT TIME BASE	P170 OTHER ADMINISTRATIVE & PROFE	C242S Transportation	Linear	88.93	Hours
Factors 100 hrs					
			0.88934 [SYS 061400]	.88934200 - System	

WBS No: 1EBB0402
 Activity ID: 1EBB421020

Rockv Flats Closure Project
Baseline Cost and Basis of Estimate

Project: Baseline Devl
 WBS Filter: 1EBB
 Activity Filter: *

Starts In FY: *

750	STRAIGHT TIME BASE	T050	RADIATION CONTROL TECHNOLIGI	KE10H	Indust/Site Svcs Steelworkers	Linear	35.57	Hours
<i>Factors</i> 40 hrs								
							0.88934	[SYS 061400] .88934200 - Svsstem
A5H	SUBCONTRACTED SRVS	0000	NONE	C222S	Water Svstem Operations	Linear	4.821.12	Dollars
<i>Factors</i> 5300 Dollars		1.02283 -- FY00 Escalation --						
							0.88934	[SYS 061400] .88934200 - Svsstem
A5H	SUBCONTRACTED SRVS	S020	ENVIRONMENTAL SCIENTISTS	C222S	Water Svstem Operations	Linear	3.612.20	Dollars
<i>Factors</i> 3971 Dollars		1.02283 -- FY00 Escalation --						
							0.88934	[SYS 061400] .88934200 - Svsstem

Line Item SYS - Contingency And Escalation

BOE

Resources	<i>Cost Element</i>	<i>Skill</i>	<i>Department</i>	<i>Curve</i>	<i>Quantity</i>	<i>Units</i>		
CON	CONTINGENCY	0000	NONE	ZDEPT	No Department	Linear	41.649.55	Dollars
<i>Factors</i> 41649.6 Dollars								
ESC	ESCALATION	0000	NONE	ZDEPT	No Department	Linear	19.252.47	Dollars
<i>Factors</i> 19252.5 Dollars								

Activity ID: 1EBB421030 Description: Surface Pond Water Mqmt/Ops FY03

Cost Risk 1 Schedule Risk 1

Line Item	Description	Quantity	Units	BOE Type	Labor Hours/Unit	Labor Hours Total	Labor Cost Total	Materials/ Sub Cost	Contingency & Escalation	Total Prime Cost	Burden Cost	Total Cost
20	Terminal Pond Operations	1.00	lot	HC	0	0	0	242.262	0	242.262	0	242.262
25	Interior Pond Pumping Operations	1.00	ea	HC	160	160	3.251	0	0	3.251	1.125	4.376
30	Equioment Replacement	1.00	ea	HC	0	0	0	21.664	0	21.664	0	21.664
35	Pond Staff Gage Surveys	1.00	ea	HC	178	178	4.427	0	0	4.427	1.532	5.959
40	RFCSS Pond Operations Mat/Reporting	1.00	ea	HC	2.220	2.220	60.257	0	0	60.257	20.849	81.106
45	Ecological Reviews	1.00	lot	HC	0	0	0	4.912	0	4.912	0	4.912
50	Surface Water Program Management	1.00	ea	HC	416	416	22.247	0	0	22.247	7.697	29.944
55	Health and Safetv Inspections	1.00	ea	HC	107	107	2.799	0	0	2.799	969	3.768
60	Pond Operations Support Services	1.00	ea	HC	267	267	6.582	9.175	0	15.757	2.277	18.034
SYS	Contingency And Escalation	1.00	ea	EE	0	0	0	0	113.018	113.018	0	113.018
Total for Activity 1EBB421030:						3.347	99.563	278.013	113.018	490.594	34.449	525.043

Line Item 20 - Terminal Pond Operations

BOE
 Historical Data Source - September FY98 WBS Spending Variance Report for WBS element 1.1.03.06.01.02, Activity BZCG100200, dated 10/7/98
 Item Desc - Subcontracted Labor & GSA Vehicle for Terminal Pond Operations
 Breakdown of Historical Data:
 Item - Subcontracted Labor for Terminal Pond Operations
 Units - Dollars
 Unit Cost - \$219,751 for FY98
 Unit Cost Adjustment factor - \$46,798
 Revised Unit Cost - \$266,549
 Basis for adjustment - Revised unit cost reflects one pumped-discharge of Pond C-2 to Woman Creek reservoir. Also includes increased subcontractor effort to reduce footprint of Pond Operations in the Buffer Zone during non-pumping periods.

 This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

Resources	<i>Cost Element</i>	<i>Skill</i>	<i>Department</i>	<i>Curve</i>	<i>Quantity</i>	<i>Units</i>		
A5H	SUBCONTRACTED SRVS	0000	NONE	C222S	Water Svstem Operations	Linear	233.368.70	Dollars
<i>Factors</i> 256549 \$		1.02283 -- FY00 Escalation --						
							0.88934	[SYS 061400] .88934200 - Svsstem
A5L	RENTALS	0000	NONE	C106S	Business Management Office	Linear	8.893.42	Dollars
<i>Factors</i> 10000 \$								
							0.88934	[SYS 061400] .88934200 - Svsstem

Line Item 25 - Interior Pond Pumping Operations

BOE
 Historical Data Source - September FY98 WBS Spending Variance Report for WBS element 1.1.03.06.01.02, Activity BZCG100200, dated 10/7/98
 Item Desc - Interior Pond Pumping Operations
 Breakdown of Historical Data:

WBS No: 1EBB0402
 Activity ID: 1EBB421030

Rockv Flats Closure Project
Baseline Cost and Basis of Estimate

Project: Baseline Devl
 WBS Filter: 1EBB
 Activity Filter: *

Starts In FY *

Item - Interior Pond Pumping Operations
 Units - Site Labor Hours
 Unit Cost - 248 hours for Site Process Specialists during FY98
 Unit Cost Adjustment factor - (-68)
 Revised Unit Cost - 180 hours
 Basis for adjustment - The Process Specialists are required to verify correct flow three times per day (once per shift) during each Pond A-3 discharge event. Approximately ten Pond A-3 discharge events occur each year.
 This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

Resources	Cost Element	Skill	Department	Curve	Quantity	Units
	750 STRAIGHT TIME BASE	R010 CHEMICAL SYSTEMS OPERATOR (	KE10H Indust/Site Srvs Steelworkers	Back Loaded	160.08	Hours
Factors 180 hrs						

0.88934 [SYS 061400] .88934200 - System

Line Item 30 - Equipment Replacement

BOE
 Historical Data Source - September FY98 WBS Spending Variance Report for WBS element 1.1.03.06.01.02, Activity BZCG100200, dated 10/7/98
 Item Desc - Pond Operations Equipment Replacement and Maintenance
 Breakdown of Historical Data:
 Item - Pond Operations Equipment Replacement and Maintenance
 Units - Dollars (Supplies-A5C)
 Unit Cost - \$11,195 during FY98
 Unit Cost Adjustment factor - \$12,805
 Revised Unit Cost - \$24,000
 Basis for adjustment - The existing equipment is used to ensure detention pond dam safety. This equipment is at the end of its effective service life and could fail at any time. This funding provides for maintenance and/or replacement of this equipment.
 This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

Resources	Cost Element	Skill	Department	Curve	Quantity	Units
	A5C SUPPLIES	0000 NONE	C222S Water System Operations	Back Loaded	21.664.37	Dollars
Factors 24000 \$ 1.015 -- FY00 Escalation --						

0.88934 [SYS 061400] .88934200 - System

Line Item 35 - Pond Staff Gage Surveys

BOE
 Historical Data Source - September FY98 WBS Spending Variance Report for WBS element 1.1.03.06.01.02, Activity BZCG100200, dated 10/7/98
 Item Desc - Pond Staff Gage Surveys
 Breakdown of Historical Data:
 Item - Pond Staff Gage Surveys
 Units - Site Labor hours
 Unit Cost - 96 hours for a civil engineer during FY98
 Unit Cost Adjustment factor - 104
 Revised Unit Cost - 200 hours
 Basis for adjustment - Additional staff gage surveys necessary to provide reference values for radio-telemetry network, which will be made available to off-Site Stakeholders via the Site Intranet. Staff gages are subject to movement by ice, large storm water events, and high wind wave action and must be resurveyed into position.
 This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

Resources	Cost Element	Skill	Department	Curve	Quantity	Units
	750 STRAIGHT TIME BASE	E020 CIVIL ENGINEERS	C222S Water System Operations	Back Loaded	177.87	Hours
Factors 200 hrs						

0.88934 [SYS 061400] .88934200 - System

Line Item 40 - RFCSS Pond Operations Mgt/Reporting

BOE
 Historical Data Source - September FY98 WBS Spending Variance Report for WBS element 1.1.03.06.01.02, Activity BZCG100200, dated 10/7/98
 Item Desc - Pond Operations Daily Management, Dam Inspections, WADlet Management, Reporting Functions.
 Breakdown of Historical Data:
 Item - Pond Operations Daily Management, Dam Inspections, WADlet Management, Reporting Functions
 Units - Site Labor hours
 Unit Cost - 1,955 hours during FY98
 Unit Cost Adjustment factor - 541
 Revised Unit Cost - 2,496 hours
 Basis for adjustment - Additional hours reflect increased WADlet management activities for outyear planning.

WBS No: 1EBB0402
 Activity ID: 1EBB421030

Rockv Flats Closure Project
Baseline Cost and Basis of Estimate

Project Baseline Devl
 WBS Filter 1EBB
 Activity Filter *

Starts In FY *

This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

Resources	Cost Element	Skill	Department	Curve	Quantity	Units
	750 STRAIGHT TIME BASE	E050 ENVIRONMENTAL ENGINEERS	C222S Water System Operations	Linear	610.09	Hours
Factors 686 hrs						
	750 STRAIGHT TIME BASE	P170 OTHER ADMINISTRATIVE & PROFE	C222S Water System Operations	Linear	1,609.71	Hours
Factors 1810 hrs						
0.88934 [SYS 061400] .88934200 - System						
0.88934 [SYS 061400] .88934200 - System						

Line Item 45 - Ecological Reviews

BOE Historical Data Source - September FY98 WBS Spending Variance Report for WBS element 1.1.03.06.01.02, Activity BZCG100200, dated 10/7/98
 Item Desc - Ecological Reviews for Pond Operations
 Breakdown of Historical Data:
 Item - Ecological Reviews for Pond Operations
 Units - Dollars
 Unit Cost - \$2,850 for a subcontracted Ecologist during FY98
 Unit Cost Adjustment factor - \$2,550
 Revised Unit Cost - \$5,400
 Basis for adjustment - Increase due to elevated status of the Preble's Meadow Jumping Mouse to a threatened species. Any outdoor construction, remediation, and monitoring activities (and especially any activities within a 100 feet near streams and ponds) must be reviewed by Kaiser-Hill Ecology Group to ensure that required protection measures of the mouse are in place.

This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

Resources	Cost Element	Skill	Department	Curve	Quantity	Units
	A5H SUBCONTRACTED SRVS	0000 NONE	C222S Water System Operations	Linear	4,912.09	Dollars
Factors 5400 \$		1.02283 -- FY00 Escalation --				
0.88934 [SYS 061400] .88934200 - System						

Line Item 50 - Surface Water Program Management

BOE Historical Data Source - September FY98 WBS Spending Variance Report for WBS element 1.1.03.06.01.02, Activity BZCG100200, dated 10/7/98
 Item Desc - Surface Water Program Management for Pond Operations
 Breakdown of Historical Data:
 Item - Surface Water Program Manager
 Units - Site Labor Hours
 Unit Cost - 69 hours during FY98
 Unit Cost Adjustment factor - 399
 Revised Unit Cost - 468 hours
 Basis for adjustment - Increased hours are required for Surface Water participation in the Stakeholder Water Working Groups. The Water Working Groups meet once every two weeks.

This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

Resources	Cost Element	Skill	Department	Curve	Quantity	Units
	750 STRAIGHT TIME BASE	M020 MANAGERS (GRADE 69 - 72)	C222S Water System Operations	Linear	416.21	Hours
Factors 468 hrs						
0.88934 [SYS 061400] .88934200 - System						

Line Item 55 - Health and Safety Inspections

BOE Historical Data Source - September FY98 WBS Spending Variance Report for WBS element 1.1.03.06.01.02, Activity BZCG100200, dated 10/7/98
 Item Desc - Health and Safety Inspections
 Breakdown of Historical Data:
 Item - Health and Safety Inspections
 Units - Site Labor Hours
 Unit Cost - 84 hours for Health and Safety Professionals during FY98
 Unit Cost Adjustment factor - 36
 Revised Unit Cost - 120 hours
 Basis for adjustment - Additional hours are necessary due to implementation of the Activity Screening Process, Integrated Safety Management system, and additional safety reviews for the updated Integrated Work Control Process.

This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

WBS No: 1EBB0402
 Activity ID: 1EBB421030

Rockv Flats Closure Project
Baseline Cost and Basis of Estimate

Project Baseline Devl
 WBS Filter 1EBB
 Activity Filter *

Resources	Cost Element	Skill	Department	Curve	Quantity	Units
	750 STRAIGHT TIME BASE	P170 OTHER ADMINISTRATIVE & PROFE	C2225 Water System Operations	Linear	106.72	Hours

Factors 120 hrs

0.88934 [SYS 0614001.88934200 - System

Line Item 60 - Pond Operations Support Services

BOE
 Historical Data Source - September FY98 WBS Spending Variance Report for WBS element 1.1.03.06.01.02, Activity BZCG100200, dated 10/7/98
 Item Desc - Pond Operations Quality Assurance Support
 Breakdown of Historical Data:
 Item - Pond Operations Quality Assurance Support
 Units - Dollars (Subcontract Labor Hours)
 Unit Cost - 270 hours for Quality Assurance Specialists during FY98
 Unit Cost Adjustment factor - (-190)
 Revised Unit Cost - 80 hours X \$59.83/Hr.
 Basis for adjustment - QA personnel will perform fewer management assessments of Pond Operations during this year.

Item - Pond Operations Planning-Budget Integration
 Units - Dollars (Subcontracted Labor Hours)
 Unit Cost - \$9,526 (217 hours for Cost Estimators/Planners during FY98)
 Unit Cost Adjustment factor - (-\$4,226) (-97 hours)
 Revised Unit Cost - \$5,300 (120 hours)
 Basis for adjustment - Subcontracted services provides oversight of Surface Water WADlet budgeting and reporting activities. Decrease in funding due to paperless reporting and analysis capabilities. This has streamlined the PB&I review process.

Item - K-H Radiation Control Technologist Support
 Units - Site Labor Hours
 Unit Cost - 0 hours for Radiation Control Technologists during FY98
 Unit Cost Adjustment factor - 40
 Revised Unit Cost - 40 hours
 Basis for adjustment - Dispositioning of excess PondOps field equipment requires radiological screening or evaluation prior to acceptance by Site PU&D.

Item - Program Compliance Activities for Pond Operations
 Units - Site Labor Hours
 Unit Cost - 86 hours for Program Compliance Activities during FY98
 Unit Cost Adjustment factor - 14
 Revised Unit Cost - 100 hours
 Basis for adjustment - Program Compliance requirements are increased in FY05 because Surface Water personnel will attend more required training.

Item - Trucking and Transportation for Pond Operations
 Units - Site Labor Hours
 Unit Cost - 119 hours for Trucking and Transportation during FY98
 Unit Cost Adjustment factor - (-19)
 Revised Unit Cost - 100 hours
 Basis for adjustment - Dispositioning of excess PondOps field equipment requires transportation to Site PU&D.

Item - Secretarial Support for Pond Operations
 Units - Site Labor Hours
 Unit Cost - 40 hours for Secretary during FY98
 Unit Cost Adjustment factor - none
 Revised Unit Cost - 40 hours
 Basis for adjustment - none

Item - Radiological Engineers for Pond Operations
 Units - Site Labor Hours
 Unit Cost - 5 hours for Rad Engineers during FY98
 Unit Cost Adjustment factor -15
 Revised Unit Cost - 20 hours
 Basis for adjustment - Dispositioning of excess PondOps field equipment requires radiological screening or evaluation prior to acceptance by Site PU&D.

This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

Resources	Cost Element	Skill	Department	Curve	Quantity	Units
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WBS No: 1EBB0402
 Activity ID: 1EBB421030

Rockv Flats Closure Project
Baseline Cost and Basis of Estimate

Project: Baseline Devl
 WBS Filter: 1EBB
 Activity Filter: *

Starts In FY: *

750	STRAIGHT TIME BASE	G010	ADMINISTRATIVE ASSISTANTS	C222S	Water Svstem Operations	Linear	35.57	Hours
							0.88934	[SYS 061400] .88934200 - Svstem
<i>Factors</i> 40 hrs								
750	STRAIGHT TIME BASE	P080	HEALTH PHYSICISTS	C222S	Water Svstem Operations	Linear	17.79	Hours
							0.88934	[SYS 061400] .88934200 - Svstem
<i>Factors</i> 20 hrs								
750	STRAIGHT TIME BASE	P170	OTHER ADMINISTRATIVE & PROFE	C222S	Water Svstem Operations	Linear	88.93	Hours
							0.88934	[SYS 061400] .88934200 - Svstem
<i>Factors</i> 100 Hours								
750	STRAIGHT TIME BASE	P170	OTHER ADMINISTRATIVE & PROFE	C242S	Transportation	Linear	88.93	Hours
							0.88934	[SYS 061400] .88934200 - Svstem
<i>Factors</i> 100 hrs								
750	STRAIGHT TIME BASE	T050	RADIATION CONTROL TECHNOLIGI	KE10H	Indust/Site Svrs Steelworkers	Linear	35.57	Hours
							0.88934	[SYS 061400] .88934200 - Svstem
<i>Factors</i> 40 hrs								
A5H	SUBCONTRACTED SRVS	0000	NONE	C222S	Water Svstem Operations	Linear	4.821.12	Dollars
							0.88934	[SYS 061400] .88934200 - Svstem
<i>Factors</i> 5300 Dollars 1.02283 -- FY00 Escalation --								
A5H	SUBCONTRACTED SRVS	S020	ENVIRONMENTAL SCIENTISTS	C222S	Water Svstem Operations	Linear	4.353.56	Dollars
							0.88934	[SYS 061400] .88934200 - Svstem
<i>Factors</i> 4786 dollars 1.02283 -- FY00 Escalation --								
							0.88934	[SYS 061400] .88934200 - Svstem

Line Item SYS - Contingency And Escalation

BOE

Resources

Cost Element		Skill		Department		Curve	Quantity	Units
CON	CONTINGENCY	0000	NONE	ZDEPT	No Department	Linear	81.421.62	Dollars
<i>Factors</i> 81421.6 Dollars								
ESC	ESCALATION	0000	NONE	ZDEPT	No Department	Linear	31.596.28	Dollars
<i>Factors</i> 31596.3 Dollars								

Activity ID: 1EBB421040 Description: Surface Pond Water Mgmt/Ops FY04

Cost Risk 1 Schedule Risk 1

Line Item	Description	Quantity	Units	BOE Type	Labor Hours/Unit	Labor Hours Total	Labor Cost Total	Materials/ Sub Cost	Contingency & Escalation	Total Prime Cost	Burden Cost	Total Cost
20	Terminal Pond Operations	1.00	lot	HC	0	0	0	251.359	0	251.359	0	251.359
25	Interior Pond Pumping Operations	1.00	ea	HC	160	160	3.251	0	0	3.251	917	4.168
30	Equipment Replacement	1.00	ea	HC	0	0	0	21.664	0	21.664	0	21.664
35	Pond Staff Gage Surveys	1.00	ea	HC	178	178	4.427	0	0	4.427	1.248	5.676
40	RFCSS Pond Operations Mat/Reporting	1.00	ea	HC	2.220	2.220	60.257	0	0	60.257	16.992	77.249
45	Ecological Reviews	1.00	lot	HC	0	0	0	4.912	0	4.912	0	4.912
50	Surface Water Program Management	1.00	ea	HC	416	416	22.247	0	0	22.247	6.274	28.520
55	Health and Safetv Inspections	1.00	ea	HC	107	107	2.799	0	0	2.799	789	3.589
60	Pond Operations Support Services	1.00	ea	HC	267	267	6.582	9.175	0	15.757	1.856	17.613
SYS	Contingency And Escalation	1.00	ea	EE	0	0	0	0	58.740	58.740	0	58.740
Total for Activity 1EBB421040:						3.347	99.563	287.110	58.740	445.413	28.077	473.490

Line Item 20 - Terminal Pond Operations

BOE

Historical Data Source - September FY98 WBS Spending Variance Report for WBS element 1.1.03.06.01.02, Activity BZCG100200, dated 10/7/98
 Item Desc - Subcontracted Labor for Terminal Pond Operations
 Breakdown of Historical Data:
 Item - Subcontracted Labor & GSA Vehicle for Terminal Pond Operations
 Units - Dollars
 Unit Cost - \$219,751 for FY98
 Unit Cost Adjustment factor - \$46,798
 Revised Unit Cost - \$266,549
 Basis for adjustment - Revised unit cost reflects one pumped-discharge of Pond C-2 to Woman Creek reservoir. Also includes increased subcontractor effort to reduce footprint of Pond Operations in the Buffer Zone during non-pumping periods.

WBS No: 1EBB0402
 Activity ID: 1EBB421040

Rockv Flats Closure Project
Baseline Cost and Basis of Estimate

Project: Baseline Devl
 WBS Filter: 1EBB
 Activity Filter: *

Starts In FY *

This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

Resources	Cost Element	Quantity	Skill	Department	Curve	Quantity	Units
	A5H SUBCONTRACTED SRVS	0000	NONE	C222S Water System Operations	Linear	242.465.10	Dollars
Factors 266549 \$		1.02283 -- FY00 Escalation --					
						0.88934 [SYS 061400] .88934200 - System	
	A5L RENTALS	0000	NONE	C106S Business Management Office	Linear	8.893.42	Dollars
Factors 10000 Dollars							
						0.88934 [SYS 061400] .88934200 - System	

Line Item 25 - Interior Pond Pumping Operations

BOE
 Historical Data Source - September FY98 WBS Spending Variance Report for WBS element 1.1.03.06.01.02, Activity BZCG100200, dated 10/7/98
 Item Desc - Interior Pond Pumping Operations
 Breakdown of Historical Data:
 Item - Interior Pond Pumping Operations
 Units - Site Labor Hours
 Unit Cost - 248 hours for Site Process Specialists during FY98
 Unit Cost Adjustment factor - (-68)
 Revised Unit Cost - 180 hours
 Basis for adjustment - The Process Specialists are required to verify correct flow three times per day (once per shift) during each Pond A-3 discharge event. Approximately ten Pond A-3 discharge events occur each year.
 This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

Resources	Cost Element	Quantity	Skill	Department	Curve	Quantity	Units
	750 STRAIGHT TIME BASE	R010	CHEMICAL SYSTEMS OPERATOR (	KE10H Indust/Site Srvs Steelworkers	Back Loaded	160.08	Hours
Factors 180 hrs							
						0.88934 [SYS 061400] .88934200 - System	

Line Item 30 - Equipment Replacement

BOE
 Historical Data Source - September FY98 WBS Spending Variance Report for WBS element 1.1.03.06.01.02, Activity BZCG100200, dated 10/7/98
 Item Desc - Pond Operations Equipment Replacement and Maintenance
 Breakdown of Historical Data:
 Item - Pond Operations Equipment Replacement and Maintenance
 Units - Dollars (Supplies-A5C)
 Unit Cost - \$11,195 during FY98
 Unit Cost Adjustment factor - \$12,805
 Revised Unit Cost - \$24,000
 Basis for adjustment - The existing equipment is used to ensure detention pond dam safety. This equipment is at the end of its effective service life and could fail at any time. This funding provides for maintenance and/or replacement of this equipment.
 This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

Resources	Cost Element	Quantity	Skill	Department	Curve	Quantity	Units
	A5C SUPPLIES	0000	NONE	C222S Water System Operations	Back Loaded	21.664.37	Dollars
Factors 24000 \$		1.015 -- FY00 Escalation --					
						0.88934 [SYS 061400] .88934200 - System	

Line Item 35 - Pond Staff Gage Surveys

BOE
 Historical Data Source - September FY98 WBS Spending Variance Report for WBS element 1.1.03.06.01.02, Activity BZCG100200, dated 10/7/98
 Item Desc - Pond Staff Gage Surveys
 Breakdown of Historical Data:
 Item - Pond Staff Gage Surveys
 Units - Site Labor hours
 Unit Cost - 96 hours for a civil engineer during FY98
 Unit Cost Adjustment factor - 104
 Revised Unit Cost - 200 hours
 Basis for adjustment - Additional staff gage surveys necessary to provide reference values for radio-telemetry network, which will be made available to off-Site Stakeholders via the Site Intranet.
 This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

Resources	Cost Element	Quantity	Skill	Department	Curve	Quantity	Units

WBS No: 1EBB0402
 Activity ID: 1EBB421040

Rockv Flats Closure Project
Baseline Cost and Basis of Estimate

Project: Baseline Devl
 WBS Filter: 1EBB
 Activity Filter: *

Starts In FY *

750	STRAIGHT TIME BASE	E020	CIVIL ENGINEERS	C222S	Water Svstem Operations	Back Loaded	177.87	Hours
<i>Factors</i>		200	hrs					

0.88934 [SYS 061400] .88934200 - System

Line Item 40 - RFCSS Pond Operations Mgt/Reporting

BOE
 Historical Data Source - September FY98 WBS Spending Variance Report for WBS element 1.1.03.06.01.02, Activity BZCG100200, dated 10/7/98
 Item Desc - Pond Operations Daily Management, Dam Inspections, WADlet Management, Reporting Functions.
 Breakdown of Historical Data:
 Item - Pond Operations Daily Management, Dam Inspections, WADlet Management, Reporting Functions
 Units - Site Labor hours
 Unit Cost - 1,955 hours during FY98
 Unit Cost Adjustment factor - 541
 Revised Unit Cost - 2,496 hours
 Basis for adjustment - Additional hours reflect that the Controls and Mitigating Measures at Walnut Creek and Indiana Street are operational and requiring surveillance support. Additional hours reflect increased WADlet management activities for outyear planning.
 This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

<i>Cost Element</i>		<i>Skill</i>		<i>Department</i>		<i>Curve</i>	<i>Quantity</i>	<i>Units</i>
750	STRAIGHT TIME BASE	E050	ENVIRONMENTAL ENGINEERS	C222S	Water Svstem Operations	Linear	610.09	Hours
<i>Factors</i>		686	hrs					

0.88934 [SYS 061400] .88934200 - System

750	STRAIGHT TIME BASE	P170	OTHER ADMINISTRATIVE & PROFE	C222S	Water Svstem Operations	Linear	1,609.71	Hours
<i>Factors</i>		1810	hrs					

0.88934 [SYS 061400] .88934200 - System

Line Item 45 - Ecological Reviews

BOE
 Historical Data Source - September FY98 WBS Spending Variance Report for WBS element 1.1.03.06.01.02, Activity BZCG100200, dated 10/7/98
 Item Desc - Ecological Reviews for Pond Operations
 Breakdown of Historical Data:
 Item - Ecological Reviews for Pond Operations
 Units - Dollars
 Unit Cost - \$2,850 for a subcontracted Ecologist during FY98
 Unit Cost Adjustment factor - \$2,550
 Revised Unit Cost - \$5,400
 Basis for adjustment - Preble's Mouse surveys must be increased due to listing as a threatened species.
 This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

<i>Cost Element</i>		<i>Skill</i>		<i>Department</i>		<i>Curve</i>	<i>Quantity</i>	<i>Units</i>
A5H	SUBCONTRACTED SRVS	0000	NONE	C222S	Water Svstem Operations	Linear	4,912.09	Dollars
<i>Factors</i>		5400	\$	1.02283	-- FY00 Escalation --			

0.88934 [SYS 061400] .88934200 - System

Line Item 50 - Surface Water Program Management

BOE
 Historical Data Source - September FY98 WBS Spending Variance Report for WBS element 1.1.03.06.01.02, Activity BZCG100200, dated 10/7/98
 Item Desc - Surface Water Program Management for Pond Operations
 Breakdown of Historical Data:
 Item - Surface Water Program Manager
 Units - Site Labor Hours
 Unit Cost - 69 hours during FY98
 Unit Cost Adjustment factor - 399
 Revised Unit Cost - 468 hours
 Basis for adjustment - Increased hours are required for Surface Water participation in the Stakeholder Water Working Groups.
 This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

<i>Cost Element</i>		<i>Skill</i>		<i>Department</i>		<i>Curve</i>	<i>Quantity</i>	<i>Units</i>
750	STRAIGHT TIME BASE	M020	MANAGERS (GRADE 69 - 72)	C222S	Water Svstem Operations	Linear	416.21	Hours
<i>Factors</i>		468	hrs					

0.88934 [SYS 061400] .88934200 - System

Line Item 55 - Health and Safety Inspections

BOE
 Historical Data Source - September FY98 WBS Spending Variance Report for WBS element 1.1.03.06.01.02, Activity BZCG100200, dated 10/7/98

WBS No: 1EBB0402
 Activity ID: 1EBB421040

Rockv Flats Closure Project
Baseline Cost and Basis of Estimate

Project Baseline Devl
 WBS Filter 1EBB
 Activity Filter *

Starts In FY *

Item Desc - Health and Safety Inspections
 Breakdown of Historical Data:
 Item - Health and Safety Inspections
 Units - Site Labor Hours
 Unit Cost - 84 hours for Health and Safety Professionals during FY98
 Unit Cost Adjustment factor - 36
 Revised Unit Cost - 120 hours
 Basis for adjustment - Additional hours are necessary due to implementation of the Activity Screening Process, Integrated Safety Management system, and additional safety reviews for the updated Integrated Work Control Process.
 This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

Resources

Cost Element	Skill	Department	Curve	Quantity	Units
750 STRAIGHT TIME BASE	P170 OTHER ADMINISTRATIVE & PROFE	C222S Water System Operations	Linear	106.72	Hours

Factors 120 hrs

0.88934 [SYS 061400].88934200 - System

Line Item 60 - Pond Operations Support Services

BOE

Historical Data Source - September FY98 WBS Spending Variance Report for WBS element 1.1.03.06.01.02, Activity BZCG100200, dated 10/7/98
 Item Desc - Pond Operations Quality Assurance Support
 Breakdown of Historical Data:
 Item - Pond Operations Quality Assurance Support
 Units - Dollars (Subcontract Labor Hours)
 Unit Cost - 270 hours for Quality Assurance Specialists during FY98
 Unit Cost Adjustment factor - (-190)
 Revised Unit Cost - 80 hours X \$59.83/Hr.
 Basis for adjustment - QA personnel will perform fewer management assessments of Pond Operations during this year.

Item - Pond Operations Planning-Budget Integration
 Units - Dollars (Subcontracted Labor Hours)
 Unit Cost - \$9,526 (217 hours for Cost Estimators/Planners during FY98)
 Unit Cost Adjustment factor - (-\$4,226) (-97 hours)
 Revised Unit Cost - \$5,300 (120 hours)
 Basis for adjustment - RMRS Management Directive

Item - K-H Radiation Control Technologist Support
 Units - Site Labor Hours
 Unit Cost - 0 hours for Radiation Control Technologists during FY98
 Unit Cost Adjustment factor - 40
 Revised Unit Cost - 40 hours
 Basis for adjustment - Dispositioning of excess PondOps field equipment requires radiological screening or evaluation prior to acceptance by Site PU&D.

Item - Program Compliance Activities for Pond Operations
 Units - Site Labor Hours
 Unit Cost - 86 hours for Program Compliance Activities during FY98
 Unit Cost Adjustment factor - 14
 Revised Unit Cost - 100 hours
 Basis for adjustment - Program Compliance requirements are increased in FY06 because Surface Water personnel will attend more required training.

Item - Trucking and Transportation for Pond Operations
 Units - Site Labor Hours
 Unit Cost - 119 hours for Trucking and Transportation during FY98
 Unit Cost Adjustment factor - (-19)
 Revised Unit Cost - 100 hours
 Basis for adjustment - Dispositioning of excess PondOps field equipment requires transportation to Site PU&D.

Item - Secretarial Support for Pond Operations
 Units - Site Labor Hours
 Unit Cost - 40 hours for Secretary during FY98
 Unit Cost Adjustment factor - none
 Revised Unit Cost - 40 hours
 Basis for adjustment - none

Item - Radiological Engineers for Pond Operations

WBS No: 1EBB0402
 Activity ID: 1EBB421040

Rockv Flats Closure Project
Baseline Cost and Basis of Estimate

Project: Baseline Devl
 WBS Filter: 1EBB
 Activity Filter: *

Starts In FY *

Units - Site Labor Hours
 Unit Cost - 5 hours for Rad Engineers during FY98
 Unit Cost Adjustment factor -15
 Revised Unit Cost - 20 hours
 Basis for adjustment - Dispositioning of excess PondOps field equipment requires radiological screening or evaluation prior to acceptance by Site PU&D.
 This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

Resources

Cost Element	Skill	Department	Curve	Quantity	Units
750 STRAIGHT TIME BASE	G010 ADMINISTRATIVE ASSISTANTS	C222S Water System Operations	Linear	35.57	Hours
<i>Factors</i> 40 hrs					
0.88934 [SYS 061400] .88934200 - System					
750 STRAIGHT TIME BASE	P080 HEALTH PHYSICISTS	C222S Water System Operations	Linear	17.79	Hours
<i>Factors</i> 20 hrs					
0.88934 [SYS 061400] .88934200 - System					
750 STRAIGHT TIME BASE	P170 OTHER ADMINISTRATIVE & PROFE	C222S Water System Operations	Linear	88.93	Hours
<i>Factors</i> 100 Hours					
0.88934 [SYS 061400] .88934200 - System					
750 STRAIGHT TIME BASE	P170 OTHER ADMINISTRATIVE & PROFE	C242S Transportation	Linear	88.93	Hours
<i>Factors</i> 100 hrs					
0.88934 [SYS 061400] .88934200 - System					
750 STRAIGHT TIME BASE	T050 RADIATION CONTROL TECHNOLOGI	KE10H Indust/Site Svcs Steelworkers	Linear	35.57	Hours
<i>Factors</i> 40 hrs					
0.88934 [SYS 061400] .88934200 - System					
A5H SUBCONTRACTED SRVS	0000 NONE	C222S Water System Operations	Linear	4,821.12	Dollars
<i>Factors</i> 5300 Dollars 1.02283 -- FY00 Escalation --					
0.88934 [SYS 061400] .88934200 - System					
A5H SUBCONTRACTED SRVS	S020 ENVIRONMENTAL SCIENTISTS	C222S Water System Operations	Linear	4,353.56	Dollars
<i>Factors</i> 4786 dollars 1.02283 -- FY00 Escalation --					
0.88934 [SYS 061400] .88934200 - System					

Line Item SYS - Contingency And Escalation

BOE

Resources

Cost Element	Skill	Department	Curve	Quantity	Units
CON CONTINGENCY	0000 NONE	ZDEPT No Department	Linear	18,917.33	Dollars
<i>Factors</i> 18917.3 Dollars					
ESC ESCALATION	0000 NONE	ZDEPT No Department	Linear	39,822.74	Dollars
<i>Factors</i> 39822.7 Dollars					

Activity ID: 1EBB421050

Description: Surface Pond Water Mgmt/Ops FY05

Cost Risk 1 Schedule Risk 1

Line Item	Description	Quantity	Units	BOE Type	Labor Hours/Unit	Labor Hours Total	Labor Cost Total	Materials/ Sub Cost	Contingency & Escalation	Total Prime Cost	Burden Cost	Total Cost
20	Terminal Pond Operations	1.00	lot	HC	0	0	0	251,359	0	251,359	0	251,359
25	Interior Pond Pumping Operations	1.00	ea	HC	160	160	3,251	0	0	3,251	1,131	4,383
30	Equipment Replacement	1.00	ea	HC	0	0	0	7,221	0	7,221	0	7,221
35	Pond Staff Gate Surveys	1.00	ea	HC	178	178	4,427	0	0	4,427	1,541	5,968
40	RFCSS Pond Operations Mat/Reporting	1.00	ea	HC	2,220	2,220	60,257	0	0	60,257	20,969	81,226
45	Ecological Reviews	1.00	lot	HC	0	0	0	4,912	0	4,912	0	4,912
50	Surface Water Program Management	1.00	ea	HC	416	416	22,247	0	0	22,247	7,742	29,989
55	Health and Safety Inspections	1.00	ea	HC	107	107	2,799	0	0	2,799	974	3,773
60	Pond Operations Support Services	1.00	ea	HC	267	267	6,582	8,529	0	15,111	2,291	17,402
SYS	Contingency And Escalation	1.00	ea	EE	0	0	0	0	214,993	214,993	0	214,993
Total for Activity 1EBB421050:						3.347	99,563	272,021	214,993	586,577	34,648	621,225

Line Item 20 - Terminal Pond Operations

BOE

Historical Data Source - September FY98 WBS Spending Variance Report for WBS element 1.1.03.06.01.02, Activity BZCG100200, dated 10/7/98
 Item Desc - Subcontracted Labor for Terminal Pond Operations

WBS No: 1EBB0402
 Activity ID: 1EBB421050

Rockv Flats Closure Project
Baseline Cost and Basis of Estimate

Project Baseline Devl
 WBS Filter 1EBB
 Activity Filter *

Starts In FY *

Breakdown of Historical Data:
 Item - Subcontracted Labor & GSA Vehicle for Terminal Pond Operations
 Units - Dollars
 Unit Cost - \$219,751 for FY98
 Unit Cost Adjustment factor - \$46,798
 Revised Unit Cost - \$266,549
 Basis for adjustment - This estimate is for only the 1st Quarter of FY2007. Revised unit cost reflects one pumped-discharge of Pond C-2 to Woman Creek reservoir.
 This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

Resources	Cost Element	0000	Skill	Department	Curve	Quantity	Units
A5H	SUBCONTRACTED SRVS	0000	NONE	C222S Water System Operations	Linear	242.465.10	Dollars
Factors 266549 \$ 1.02283 -- FY00 Escalation --							
A5L	RENTALS	0000	NONE	C106S Business Management Office	Linear	8.893.42	Dollars
Factors 10000 Dollars							
0.88934 [SYS 061400] .88934200 - System							
0.88934 [SYS 061400] .88934200 - System							

Line Item 25 - Interior Pond Pumping Operations

BOE Historical Data Source - September FY98 WBS Spending Variance Report for WBS element 1.1.03.06.01.02, Activity BZCG100200, dated 10/7/98
 Item Desc - Interior Pond Pumping Operations
 Breakdown of Historical Data:
 Item - Interior Pond Pumping Operations
 Units - Site Labor Hours
 Unit Cost - 248 hours for Site Process Specialists during FY98
 Unit Cost Adjustment factor - (-68)
 Revised Unit Cost - 180 hours
 Basis for adjustment - This estimate is for only the 1st Quarter of FY2007.
 This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

Resources	Cost Element	0000	Skill	Department	Curve	Quantity	Units
750	STRAIGHT TIME BASE	R010	CHEMICAL SYSTEMS OPERATOR (	KE10H Indust/Site Srvs Steelworkers	Back Loaded	160.08	Hours
Factors 180 hrs							
0.88934 [SYS 061400] .88934200 - System							

Line Item 30 - Equipment Replacement

BOE Historical Data Source - September FY98 WBS Spending Variance Report for WBS element 1.1.03.06.01.02, Activity BZCG100200, dated 10/7/98
 Item Desc - Pond Operations Equipment Replacement and Maintenance
 Breakdown of Historical Data:
 Item - Pond Operations Equipment Replacement and Maintenance
 Units - Dollars (Supplies-A5C)
 Unit Cost - \$11,195 during FY98
 Unit Cost Adjustment factor - (-\$3,195)
 Revised Unit Cost - \$8,000
 Basis for adjustment - The existing equipment is used to ensure detention pond dam safety. This equipment is at the end of its effective service life and could fail at any time. This funding provides for maintenance and/or replacement of this equipment.
 This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

Resources	Cost Element	0000	Skill	Department	Curve	Quantity	Units
A5C	SUPPLIES	0000	NONE	C222S Water System Operations	Back Loaded	7.221.46	Dollars
Factors 8000 \$ 1.015 -- FY00 Escalation --							
0.88934 [SYS 061400] .88934200 - System							

Line Item 35 - Pond Staff Gage Surveys

BOE Historical Data Source - September FY98 WBS Spending Variance Report for WBS element 1.1.03.06.01.02, Activity BZCG100200, dated 10/7/98
 Item Desc - Pond Staff Gage Surveys
 Breakdown of Historical Data:
 Item - Pond Staff Gage Surveys
 Units - Site Labor hours
 Unit Cost - 96 hours for a civil engineer during FY98
 Unit Cost Adjustment factor - 104

WBS No: 1EBB0402
 Activity ID: 1EBB421050

Rockv Flats Closure Project
Baseline Cost and Basis of Estimate

Project Baseline Devl
 WBS Filter 1EBB
 Activity Filter *

Starts In FY *

Revised Unit Cost - 200 hours
 Basis for adjustment - This estimate is for only the 1st Quarter of FY2007.
 This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

Resources	Cost Element	Skill	Department	Curve	Quantity	Units
	750 STRAIGHT TIME BASE	E020 CIVIL ENGINEERS	C222S Water System Operations	Back Loaded	177.87	Hours
Factors 200 hrs						

0.88934 [SYS 061400] .88934200 - System

Line Item 40 - RFCSS Pond Operations Mgt/Reporting

BOE
 Historical Data Source - September FY98 WBS Spending Variance Report for WBS element 1.1.03.06.01.02, Activity BZCG100200, dated 10/7/98
 Item Desc - Pond Operations Daily Management, Dam Inspections, WADlet Management, Reporting Functions.
 Breakdown of Historical Data:
 Item - Pond Operations Daily Management, Dam Inspections, WADlet Management, Reporting Functions
 Units - Site Labor hours
 Unit Cost - 1,955 hours for an Environmental Engineer during FY98
 Unit Cost Adjustment factor - 994
 Revised Unit Cost - 2,949 hours
 Basis for adjustment - This estimate is only for the 1st Quarter of FY2006.
 This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

Resources	Cost Element	Skill	Department	Curve	Quantity	Units
	750 STRAIGHT TIME BASE	E050 ENVIRONMENTAL ENGINEERS	C222S Water System Operations	Linear	610.09	Hours
Factors 686 hrs						

0.88934 [SYS 061400] .88934200 - System

	750 STRAIGHT TIME BASE	P170 OTHER ADMINISTRATIVE & PROFE	C222S Water System Operations	Linear	1.609.71	Hours
Factors 1810 hrs						

0.88934 [SYS 061400] .88934200 - System

Line Item 45 - Ecological Reviews

BOE
 Historical Data Source - September FY98 WBS Spending Variance Report for WBS element 1.1.03.06.01.02, Activity BZCG100200, dated 10/7/98
 Item Desc - Ecological Reviews for Pond Operations
 Breakdown of Historical Data:
 Item - Ecological Reviews for Pond Operations
 Units - Dollars
 Unit Cost - \$2,850 for a subcontracted Ecologist during FY98
 Unit Cost Adjustment factor - \$2,550
 Revised Unit Cost - \$5,400
 Basis for adjustment - Preble's Mouse surveys must be increased due to listing as a threatened species.
 This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

Resources	Cost Element	Skill	Department	Curve	Quantity	Units
	A5H SUBCONTRACTED SRVS	0000 NONE	C222S Water System Operations	Linear	4.912.09	Dollars
Factors 5400 \$ 1.02283 -- FY00 Escalation --						

0.88934 [SYS 061400] .88934200 - System

Line Item 50 - Surface Water Program Management

BOE
 Historical Data Source - September FY98 WBS Spending Variance Report for WBS element 1.1.03.06.01.02, Activity BZCG100200, dated 10/7/98
 Item Desc - Surface Water Program Management for Pond Operations
 Breakdown of Historical Data:
 Item - Surface Water Program Manager
 Units - Site Labor Hours
 Unit Cost - 69 hours during FY98
 Unit Cost Adjustment factor - 399 hours
 Revised Unit Cost - 468 hours
 Basis for adjustment - Increased hours are required for Surface Water participation in the Stakeholder Water Working Groups.
 This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

Resources	Cost Element	Skill	Department	Curve	Quantity	Units
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WBS No: 1EBB0402
 Activity ID: 1EBB421050

Rockv Flats Closure Project
Baseline Cost and Basis of Estimate

Project Baseline Devl
 WBS Filter 1EBB
 Activity Filter *

Starts In FY *

750	STRAIGHT TIME BASE	M020	MANAGERS (GRADE 69 - 72)	C222S	Water Svstem Operations	Linear	416.21	Hours
<i>Factors</i>		468 hrs						

0.88934 [SYS 061400].88934200 - System

Line Item 55 - Health and Safety Inspections

BOE
 Historical Data Source - September FY98 WBS Spending Variance Report for WBS element 1.1.03.06.01.02, Activity BZCG100200, dated 10/7/98
 Item Desc - Health and Safety Inspections
 Breakdown of Historical Data:
 Item - Health and Safety Inspections
 Units - Site Labor Hours
 Unit Cost - 84 hours for Health and Safety Professionals during FY98
 Unit Cost Adjustment factor - 36
 Revised Unit Cost - 120 hours
 Basis for adjustment - Additional hours are necessary due to implementation of the Activity screening Process, Integrated Safety Management system, and additional safety reviews for the updated Integrated work control process.
 This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

<i>Cost Element</i>		<i>Skill</i>		<i>Department</i>		<i>Curve</i>	<i>Quantity</i>	<i>Units</i>
750	STRAIGHT TIME BASE	P170	OTHER ADMINISTRATIVE & PROFE	C222S	Water Svstem Operations	Linear	106.72	Hours
<i>Factors</i>		120 hrs						

0.88934 [SYS 061400].88934200 - System

Line Item 60 - Pond Operations Support Services

BOE
 Historical Data Source - September FY98 WBS Spending Variance Report for WBS element 1.1.03.06.01.02, Activity BZCG100200, dated 10/7/98
 Item Desc - Pond Operations Quality Assurance Support
 Breakdown of Historical Data:
 Item - Pond Operations Quality Assurance Support
 Units - Dollars (Subcontract Labor Hours)
 Unit Cost - 270 hours for Quality Assurance Specialists during FY98
 Unit Cost Adjustment factor - (-190)
 Revised Unit Cost - \$4,076 (80 hours X \$50.95/Hr.)
 Basis for adjustment - QA personnel will perform fewer management assessments of Pond Operations during the year.
 Item - Pond Operations Planning-Budget Integration
 Units - Dollars (Subcontracted Labor Hours)
 Unit Cost - \$9,526 (217 hours for Cost Estimators/Planners during FY98)
 Unit Cost Adjustment factor - (-\$4,226)(-97 hours)
 Revised Unit Cost - \$5,300 (120 hours X \$44.17/Hr.)
 Basis for adjustment - Management Directive
 Item - K-H Radiation Control Technologist Support
 Units - Site Labor Hours
 Unit Cost - 0 hours for Radiation Control Technologists during FY98
 Unit Cost Adjustment factor - 40
 Revised Unit Cost - 40 hours
 Basis for adjustment - Dispositioning of excess PondOps field equipment requires radiological screening or evaluation prior to acceptance by Site PU&D.
 Item - Program Compliance Activities for Pond Operations
 Units - Site Labor Hours
 Unit Cost - 86 hours for Program Compliance Activities during FY98
 Unit Cost Adjustment factor - 14
 Revised Unit Cost - 100 hours
 Basis for adjustment - Program compliance requirements are increased in FY05 because Surface Water Ops personnel will attend more required training.
 Item - Trucking and Transportation for Pond Operations
 Units - Site Labor Hours
 Unit Cost - 119 hours for Trucking and Transportation during FY98
 Unit Cost Adjustment factor - (-19)
 Revised Unit Cost - 100 hours
 Basis for adjustment - Dispositioning of excess PondOps field equipment requires transportation to Site PU&D.
 Item - Secretarial Support for Pond Operations
 Units - Site Labor Hours

WBS No: 1EBB0402
 Activity ID: 1EBB421050

Rockv Flats Closure Project
Baseline Cost and Basis of Estimate

Project: Baseline Devl
 WBS Filter: 1EBB
 Activity Filter: *

Starts In FY *

Unit Cost - 40 hours for Secretary during FY98
 Unit Cost Adjustment factor - none
 Revised Unit Cost - 40 hours
 Basis for adjustment - none

Item - Radiological Engineers for Pond Operations
 Units - Site Labor Hours
 Unit Cost - 5 hours for Rad Engineers during FY98
 Unit Cost Adjustment factor -15
 Revised Unit Cost - 20 hours
 Basis for adjustment - Dispositioning of excess PondOps field equipment requires radiological screening or evaluation prior to acceptance by Site PU&D.

This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

Resources

Cost Element	Skill	Department	Curve	Quantity	Units
750 STRAIGHT TIME BASE	G010 ADMINISTRATIVE ASSISTANTS	C222S Water Svstem Operations	Linear	35.57	Hours
Factors 40 hrs					
0.88934 [SYS 061400] .88934200 - Svstem					
750 STRAIGHT TIME BASE	P080 HEALTH PHYSICISTS	C222S Water Svstem Operations	Linear	17.79	Hours
Factors 20 hrs					
0.88934 [SYS 061400] .88934200 - Svstem					
750 STRAIGHT TIME BASE	P170 OTHER ADMINISTRATIVE & PROFE	C222S Water Svstem Operations	Linear	88.93	Hours
Factors 100 Hours					
0.88934 [SYS 061400] .88934200 - Svstem					
750 STRAIGHT TIME BASE	P170 OTHER ADMINISTRATIVE & PROFE	C242S Transportation	Linear	88.93	Hours
Factors 100 hrs					
0.88934 [SYS 061400] .88934200 - Svstem					
750 STRAIGHT TIME BASE	T050 RADIATION CONTROL TECHNOLOGI	KE10H Indust/Site Svcs Steelworkers	Linear	35.57	Hours
Factors 40 hrs					
0.88934 [SYS 061400] .88934200 - Svstem					
A5H SUBCONTRACTED SRVS	0000 NONE	C222S Water Svstem Operations	Linear	3.707.72	Dollars
Factors 4076 dollars 1.02283 -- FY00 Escalation --					
0.88934 [SYS 061400] .88934200 - Svstem					
A5H SUBCONTRACTED SRVS	S020 ENVIRONMENTAL SCIENTISTS	C222S Water Svstem Operations	Linear	4.821.12	Dollars
Factors 5300 dollars 1.02283 -- FY00 Escalation --					
0.88934 [SYS 061400] .88934200 - Svstem					

Line Item SYS - Contingency And Escalation

BOE

Resources

Cost Element	Skill	Department	Curve	Quantity	Units
CON CONTINGENCY	0000 NONE	ZDEPT No Department	Linear	152.061.20	Dollars
Factors 152061 Dollars					
ESC ESCALATION	0000 NONE	ZDEPT No Department	Linear	62.931.67	Dollars
Factors 62931.7 Dollars					

Activity ID: 1EBB421060

Description: Surface Pond Water Mgmt/Ops FY07

Cost Risk 1 Schedule Risk 1

Line Item	Description	Quantity	Units	BOE Type	Labor Hours/Unit	Labor Hours Total	Labor Cost Total	Materials/ Sub Cost	Contingency & Escalation	Total Prime Cost	Burden Cost	Total Cost
20	Terminal Pond Operations	1.00	lot	HC	0	0	0	60.616	0	60.616	0	60.616
25	Interior Pond Pumping Operations	1.00	ea	HC	40	40	777	0	0	777	1.004	1.781
35	Pond Staff Gage Surveys	1.00	ea	HC	44	44	1,107	0	0	1,107	1,430	2,537
40	RFCSS Pond Operations Mgt/Reporting	1.00	ea	HC	655	655	17,894	0	0	17,894	22,279	40,173
45	Ecological Reviews	1.00	lot	HC	0	0	0	1,228	0	1,228	0	1,228
50	Surface Water Program Management	1.00	ea	HC	82	82	4,373	0	0	4,373	5,445	9,818
55	Health and Safety Inspections	1.00	ea	HC	27	27	700	0	0	700	871	1,571
60	Pond Operations Support Services	1.00	ea	HC	67	67	1,646	3,060	0	4,706	2,049	6,754

WBS No: 1EBB0402
 Activity ID: 1EBB421060

Rockv Flats Closure Project
Baseline Cost and Basis of Estimate

Project Baseline Devl
 WBS Filter 1EBB
 Activity Filter * Starts In FY *

SYS	Contingency And Escalation	1.00	ea	EE	0	0	0	0	50.181	50.181	0	50.181	
					Total for Activity 1EBB421060:		915	26.496	64.904	50.181	141.582	33.077	174.659

Line Item 20 - Terminal Pond Operations

BOE Historical Data Source - September FY98 WBS Spending Variance Report for WBS element 1.1.03.06.01.02, Activity BZCG100200, dated 10/7/98
 Item Desc - Subcontracted Labor for Terminal Pond Operations
 Breakdown of Historical Data:
 Item - Subcontracted Labor for Terminal Pond Operations
 Units - Dollars
 Unit Cost - \$219,751 for FY98
 Unit Cost Adjustment factor - \$153,114
 Revised Unit Cost - \$66,637
 Basis for adjustment - This estimate is for only the 1st Quarter of FY2006. Revised unit cost reflects one pumped-discharge of Pond C-2 to Woman Creek reservoir.
 This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

Resources		Cost Element	Skill	Department	Curve	Quantity	Units
A5H	SUBCONTRACTED SRVS	0000	NONE	C222S	Water System Operations	Linear	60.616.06 Dollars
<i>Factors</i>		66637 \$	1.02283 -- FY00 Escalation --			0.88934 [SYS 061400].88934200 - System	

Line Item 25 - Interior Pond Pumping Operations

BOE Historical Data Source - September FY98 WBS Spending Variance Report for WBS element 1.1.03.06.01.02, Activity BZCG100200, dated 10/7/98
 Item Desc - Interior Pond Pumping Operations
 Breakdown of Historical Data:
 Item - Interior Pond Pumping Operations
 Units - Site Labor Hours
 Unit Cost - 248 hours for Site Process Specialists during FY98
 Unit Cost Adjustment factor - (-203)
 Revised Unit Cost - 45 hours
 Basis for adjustment - This estimate is for only the 1st Quarter of FY2006.
 This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

Resources		Cost Element	Skill	Department	Curve	Quantity	Units
750	STRAIGHT TIME BASE	L070	MISSION SUP SPEC.III	KE10H	Indust/Site Srvs Steelworkers	Back Loaded	40.02 Hours
<i>Factors</i>		45 hrs				0.88934 [SYS 061400].88934200 - System	

Line Item 35 - Pond Staff Gage Surveys

BOE Historical Data Source - September FY98 WBS Spending Variance Report for WBS element 1.1.03.06.01.02, Activity BZCG100200, dated 10/7/98
 Item Desc - Pond Staff Gage Surveys
 Breakdown of Historical Data:
 Item - Pond Staff Gage Surveys
 Units - Site Labor hours
 Unit Cost - 96 hours for a civil engineer during FY98
 Unit Cost Adjustment factor - (-46)
 Revised Unit Cost - 50 hours
 Basis for adjustment - This estimate is for only the 1st Quarter of FY2006.
 This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

Resources		Cost Element	Skill	Department	Curve	Quantity	Units
750	STRAIGHT TIME BASE	E020	CIVIL ENGINEERS	C222S	Water System Operations	Back Loaded	44.47 Hours
<i>Factors</i>		50 hrs				0.88934 [SYS 061400].88934200 - System	

Line Item 40 - RFCSS Pond Operations Mgt/Reporting

BOE Historical Data Source - September FY98 WBS Spending Variance Report for WBS element 1.1.03.06.01.02, Activity BZCG100200, dated 10/7/98
 Item Desc - Pond Operations Daily Management, Dam Inspections, WADlet Management, Reporting Functions.
 Breakdown of Historical Data:
 Item - Pond Operations Daily Management, Dam Inspections, WADlet Management, Reporting Functions
 Units - Site Labor hours
 Unit Cost - 1,955 hours for an Environmental Engineer during FY98

WBS No: 1EBB0402
 Activity ID: 1EBB421060

Rockv Flats Closure Project
Baseline Cost and Basis of Estimate

Project Baseline Devl
 WBS Filter 1EBB
 Activity Filter *

Starts In FY *

Unit Cost Adjustment factor - (1,218)
 Revised Unit Cost - 737 hours
 Basis for adjustment - This estimate is only for the 1st Quarter of FY2006.
 This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

Resources	Cost Element	Skill	Department	Curve	Quantity	Units
	750 STRAIGHT TIME BASE	E050 ENVIRONMENTAL ENGINEERS	C222S Water Svstem Operations	Linear	210.77	Hours

Factors 237 hrs

	750 STRAIGHT TIME BASE	P170 OTHER ADMINISTRATIVE & PROFE	C222S Water Svstem Operations	Linear	444.67	Hours
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Factors 500 hrs

0.88934 [SYS 061400] .88934200 - Svstem

0.88934 [SYS 061400] .88934200 - Svstem

Line Item 45 - Ecological Reviews

BOE Historical Data Source - September FY98 WBS Spending Variance Report for WBS element 1.1.03.06.01.02, Activity BZCG100200, dated 10/7/98
 Item Desc - Ecological Reviews for Pond Operations
 Breakdown of Historical Data:
 Item - Ecological Reviews for Pond Operations
 Units - Dollars
 Unit Cost - \$2,850 for a subcontracted Ecologist during FY98
 Unit Cost Adjustment factor - (-\$1,500)
 Revised Unit Cost - \$1,350
 Basis for adjustment - This estimate is only for 1st Quarter of FY2006. Preble's Mouse surveys must be increased due to listing as a threatened species.
 This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

Resources	Cost Element	Skill	Department	Curve	Quantity	Units
	A5H SUBCONTRACTED SRVS	0000 NONE	C222S Water Svstem Operations	Linear	1,228.02	Dollars

Factors 1350 \$ 1.02283 -- FY00 Escalation --

0.88934 [SYS 061400] .88934200 - Svstem

Line Item 50 - Surface Water Program Management

BOE Historical Data Source - September FY98 WBS Spending Variance Report for WBS element 1.1.03.06.01.02, Activity BZCG100200, dated 10/7/98
 Item Desc - Surface Water Program Management for Pond Operations
 Breakdown of Historical Data:
 Item - Surface Water Program Manager
 Units - Site Labor Hours
 Unit Cost - 69 hours during FY98
 Unit Cost Adjustment factor - 23
 Revised Unit Cost - 92 hours
 Basis for adjustment - This estimate is for the 1st Quarter of FY2006. Increased hours are required for Surface Water participation in the Stakeholder Water Working Groups.
 This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

Resources	Cost Element	Skill	Department	Curve	Quantity	Units
	750 STRAIGHT TIME BASE	M020 MANAGERS (GRADE 69 - 72)	C222S Water Svstem Operations	Linear	81.82	Hours

Factors 92 hrs

0.88934 [SYS 061400] .88934200 - Svstem

Line Item 55 - Health and Safety Inspections

BOE Historical Data Source - September FY98 WBS Spending Variance Report for WBS element 1.1.03.06.01.02, Activity BZCG100200, dated 10/7/98
 Item Desc - Health and Safety Inspections
 Breakdown of Historical Data:
 Item - Health and Safety Inspections
 Units - Site Labor Hours
 Unit Cost - 84 hours for Health and Safety Professionals during FY98
 Unit Cost Adjustment factor - 54
 Revised Unit Cost - 30 hours
 Basis for adjustment - This estimate is for only the 1st Quarter of FY2006.
 This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

WBS No: 1EBB0402
 Activity ID: 1EBB421060

Rockv Flats Closure Project
Baseline Cost and Basis of Estimate

Project Baseline Devl
 WBS Filter 1EBB
 Activity Filter *

Resources	Cost Element	Skill	Department	Curve	Starts In FY	Quantity	Units
	750 STRAIGHT TIME BASE	P170 OTHER ADMINISTRATIVE & PROFE	C222S Water System Operations	Linear		26.68	Hours
	Factors 30 hrs						

0.88934 [SYS 061400] .88934200 - System

Line Item 60 - Pond Operations Support Services

BOE	Description
	<p>Historical Data Source - September FY98 WBS Spending Variance Report for WBS element 1.1.03.06.01.02, Activity BZCG100200, dated 10/7/98</p> <p>Item Desc - Pond Operations Quality Assurance Support</p> <p>Breakdown of Historical Data:</p> <p>Item - Pond Operations Quality Assurance Support</p> <p>Units - Site Labor Hours</p> <p>Unit Cost - 270 hours for Quality Assurance Specialists during FY98</p> <p>Unit Cost Adjustment factor - (-250)</p> <p>Revised Unit Cost - 20 hours</p> <p>Basis for adjustment - This estimate is for the 1st Quarter of FY2006</p> <p>Item - Pond Operations Planning-Budget Integration</p> <p>Units - Dollaars (Subcontracted Labor Hours)</p> <p>Unit Cost - \$9,526 (217 hours for Cost Estimators/Planners during FY98)</p> <p>Unit Cost Adjustment factor - (-\$8,201)</p> <p>Revised Unit Cost - \$1,325 (40 hours)</p> <p>Basis for adjustment - Management Directive</p> <p>Item - K-H Radiation Control Technologist Support</p> <p>Units - Site Labor Hours</p> <p>Unit Cost - 0 hours for Radiation Control Technologists during FY98</p> <p>Unit Cost Adjustment factor - 10</p> <p>Revised Unit Cost - 10 hours</p> <p>Basis for adjustment - This estimate is for the 1st Quarter of FY2006.</p> <p>Dispositioning of excess Pond Ops field equipment requires radiological screening or evaluation prior to acceptance by Site PU&D.</p> <p>Item - Program Compliance Activities for Pond Operations</p> <p>Units - Site Labor Hours</p> <p>Unit Cost - 86 hours for Program Compliance Activities during FY98</p> <p>Unit Cost Adjustment factor - (-61)</p> <p>Revised Unit Cost - 25 hours</p> <p>Basis for adjustment - This estimate is for the 1st Quarter of FY2006.</p> <p>Item - Trucking and Transportation for Pond Operations</p> <p>Units - Site Labor Hours</p> <p>Unit Cost - 119 hours for Trucking and Transportation during FY98</p> <p>Unit Cost Adjustment factor - (-94)</p> <p>Revised Unit Cost - 25 hours</p> <p>Basis for adjustment - This estimate is for the 1st Quarter of FY2006.</p> <p>Dispositioning of excess PondOps field equipment requires transportation to Site PU&D.</p> <p>Item - Secretarial Support for Pond Operations</p> <p>Units - Site Labor Hours</p> <p>Unit Cost - 40 hours for Secretary during FY98</p> <p>Unit Cost Adjustment factor - (-30)</p> <p>Revised Unit Cost - 10 hours</p> <p>Basis for adjustment - This estimate is for the 1st Quarter of FY2006.</p> <p>Item - Radiological Engineers for Pond Operations</p> <p>Units - Site Labor Hours</p> <p>Unit Cost - 5 hours for Rad Engineers during FY98</p> <p>Unit Cost Adjustment factor - none</p> <p>Revised Unit Cost - 5 hours</p> <p>Basis for adjustment - This estimate is for the 1st Quarter of FY2006.</p> <p>Dispositioning of excess PondOps field equipment requires radiological screening or evaluation prior to acceptance by Site PU&D.</p> <p>This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.</p>

WBS No: 1EBB0402
 Activity ID: 1EBB421060

Rockv Flats Closure Project
Baseline Cost and Basis of Estimate

Project: Baseline Devl
 WBS Filter: 1EBB
 Activity Filter: *

Starts In FY *

Resources	Cost Element	Skill	Department	Curve	Quantity	Units
	750 STRAIGHT TIME BASE	G010 ADMINISTRATIVE ASSISTANTS	C222S Water Svstem Operations	Linear	8.89	Hours
Factors	10 hrs					
	750 STRAIGHT TIME BASE	P080 HEALTH PHYSICISTS	C222S Water Svstem Operations	Linear	4.45	Hours
Factors	5 hrs					
	750 STRAIGHT TIME BASE	P170 OTHER ADMINISTRATIVE & PROFE	C222S Water Svstem Operations	Linear	22.23	Hours
Factors	25 Hours					
	750 STRAIGHT TIME BASE	P170 OTHER ADMINISTRATIVE & PROFE	C242S Transportation	Linear	22.23	Hours
Factors	25 hrs					
	750 STRAIGHT TIME BASE	T050 RADIATION CONTROL TECHNOLOGI	KE10H Indust/Site Svrs Steelworkers	Linear	8.89	Hours
Factors	10 hrs					
	A5H SUBCONTRACTED SRVS	0000 NONE	C222S Water Svstem Operations	Linear	1,853.86	Dollars
Factors	2038 dollars	1.02283 -- FY00 Escalation --				
	A5H SUBCONTRACTED SRVS	S020 ENVIRONMENTAL SCIENTISTS	C222S Water Svstem Operations	Linear	1,206.19	Dollars
Factors	1326 dollars	1.02283 -- FY00 Escalation --				

Line Item SYS - Contingency And Escalation

Resources	Cost Element	Skill	Department	Curve	Quantity	Units
	CON CONTINGENCY	0000 NONE	ZDEPT No Department	Linear	26,812.35	Dollars
Factors	26812.4 Dollars					
	ESC ESCALATION	0000 NONE	ZDEPT No Department	Linear	23,368.97	Dollars
Factors	23369 Dollars					

Activity ID: 1EBB422000 Description: Pollutant Source Control FY00

Cost Risk 1 Schedule Risk 1

Line Item	Description	Quantity	Units	BOE Type	Labor Hours/Unit	Labor Hours Total	Labor Cost Total	Materials/ Sub Cost	Contingency & Escalation	Total Prime Cost	Burden Cost	Total Cost
IBCGER0305	Watershed Pollutant Source Control Projects	5.00	ea	HC	42	210	6,264	13,253	0	19,518	3,057	22,574
IBCGER0310	Pollutant Source Reponses/Investigations	1.00	ls	HC	30	30	963	4,088	0	5,051	470	5,521
IBCGER0315	Incidental Waters	12.00	ea	HC	3	36	1,299	10,633	0	11,933	634	12,567
IBCGER0320	Internal Waste Streams	12.00	ea	HC	2	27	793	8,470	0	9,264	387	9,651
IBCGER0325	Tank Management Program Inspections	16.00	ea	HC	7	106	2,455	842	0	3,297	1,198	4,495
IBCGER0330	Master Tank Database/DIS Query Support	1.00	ls	HC	57	57	1,799	0	0	1,799	878	2,677
Total for Activity 1EBB422000:						467	13,575	37,287	0	50,862	6,624	57,486

Line Item IBCGER0305 - Watershed Pollutant Source Control Projects

BOE	<p>HISTORICAL DATA SOURCE: Historic cost data from FY96 for similar projects - on file in Bldg. T130D Room 71.</p> <p>ITEM DESCRIPTION: Erosion control project to enhance quality of Site stormwater runoff - includes application of SoilGuard and/or TopSeal erosion control products to 5,000 square yards.</p> <p>BREAKDOWN OF HISTORICAL DATA: The BOE was developed using activity based cost estimating. Estimate based on historic costs from FY96. Item - Erosion control project - 5,000 square yards Units - 1 Lot (5 projects in FY00) Unit Cost - 400 hours; \$37,093 Unit Cost Adjustment factor - N/A Revised Unit Cost - N/A Basis for adjustment - N/A</p>
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WBS No: 1EBB0402
 Activity ID: 1EBB422000

Rockv Flats Closure Project
Baseline Cost and Basis of Estimate

Project: Baseline Devl
 WBS Filter: 1EBB
 Activity Filter: *

Starts In FY *

This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

Resources	Cost Element	Skill	Department	Curve	Quantity	Units
750	STRAIGHT TIME BASE	E050 ENVIRONMENTAL ENGINEERS	C222S Water Svstem Operations	Linear	30.64	Hours
Factors 137 Hours 0.425 May 2000 Earned Value Factor						
					0.52618 [SYS 061300]	0.526183 - Target
750	STRAIGHT TIME BASE	E120 SAFETY ENGINEERS	C221S Steam Plant Operations	Linear	2.01	Hours
Factors 9 Hours 0.425 May 2000 Earned Value Factor						
					0.52618 [SYS 061300]	0.526183 - Target
750	STRAIGHT TIME BASE	M020 MANAGERS (GRADE 69 - 72)	C222S Water Svstem Operations	Linear	1.34	Hours
Factors 6 Hours 0.425 May 2000 Earned Value Factor						
					0.52618 [SYS 061300]	0.526183 - Target
750	STRAIGHT TIME BASE	P140 SAFEGUARDS AND OTHER SECURI	W203S Operation Services	Linear	8.05	Hours
Factors 36 Hours 0.425 May 2000 Earned Value Factor						
					0.52618 [SYS 061300]	0.526183 - Target
A5H	SUBCONTRACTED SRVS	0000 NONE	C222S Water Svstem Operations	Linear	2,650.67	Dollars
Factors 1.02283 -- FY00 Escalation -- 11588.5 Dollars 0.425 May 2000 Earned Value Factor						
					0.52618 [SYS 061300]	0.526183 - Target

Line Item IBCGER0310 - Pollutant Source Reponses/Investigations

BOE	HISTORICAL DATA SOURCE: FY99 WBS Spending Variance Reports for WBS Element 1.1.03.06.01.04, Activity BZCG100620. ITEM DESCRIPTION: Respond to Site spills that may impact surface water quality; perform inspections to prevent release of surface water pollutant sources. BREAKDOWN OF HISTORICAL DATA: The BOE was developed using activity based cost estimating. Estimate based on historic costs from FY99. Item - Pollutant Source Responses/Investigations Units - 1 Lot IN FY00 Unit Cost - 136 K-H team hours; \$9,821 subcontracted Unit Cost Adjustment factor - N/A Revised Unit Cost - N/A Basis for adjustment - N/A This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.					
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Resources	Cost Element	Skill	Department	Curve	Quantity	Units
750	STRAIGHT TIME BASE	E050 ENVIRONMENTAL ENGINEERS	C222S Water Svstem Operations	Linear	27.73	Hours
Factors 124 Hours 0.425 May 2000 Earned Value Factor						
					0.52618 [SYS 061300]	0.526183 - Target
750	STRAIGHT TIME BASE	M020 MANAGERS (GRADE 69 - 72)	C222S Water Svstem Operations	Linear	2.68	Hours
Factors 12 Hours 0.425 May 2000 Earned Value Factor						
					0.52618 [SYS 061300]	0.526183 - Target
A5H	SUBCONTRACTED SRVS	S010 CHEMISTS	C222S Water Svstem Operations	Linear	2,246.39	Dollars
Factors 1.02283 -- FY00 Escalation -- 9821 dollars 0.425 May 2000 Earned Value Factor						
					0.52618 [SYS 061300]	0.526183 - Target
A5M	TRAVEL/TRAIN/RELOCAT	0000 NONE	C222S Water Svstem Operations	Linear	1,841.64	Dollars
Factors 3500 \$						
					0.52618 [SYS 061300]	0.526183 - Target

Line Item IBCGER0315 - Incidental Waters

BOE	HISTORICAL DATA SOURCE: FY99 WBS Spending Variance Reports for WBS Element 1.1.03.06.01.04, Activity BZCG100620. ITEM DESCRIPTION: Coordinate characterization and disposition of incidental waters with building personnel, utilities and environmental coordinators; maintain and upgrade incidental waters database, and prepare monthly summary report.					
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WBS No: 1EBB0402
 Activity ID: 1EBB422000

Rockv Flats Closure Project
Baseline Cost and Basis of Estimate

Project: Baseline Devl
 WBS Filter: 1EBB
 Activity Filter: *

Starts In FY *

BREAKDOWN OF HISTORICAL DATA:
 The BOE was developed using activity based cost estimating. Estimate based on historic costs from FY99.
 Item - Incidental Waters Program
 Units - Monthly report (12 Reports in a Year)
 Unit Cost - 10 K-H team hours; \$3,874 subcontracted
 Unit Cost Adjustment factor - N/A
 Revised Unit Cost - N/A
 Basis for adjustment - N/A

This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

Resources	Cost Element	Skill	Department	Curve	Quantity	Units
	750 STRAIGHT TIME BASE	E050 ENVIRONMENTAL ENGINEERS	C222S Water System Operations	Linear	2.24	Hours
Factors	10 Hours	0.425	May 2000 Earned Value Factor			
				0.52618 [SYS 061300]	0.526183 - Target	
	750 STRAIGHT TIME BASE	M020 MANAGERS (GRADE 69 - 72)	C222S Water Svstem Operations	Linear	0.79	Hours
Factors	1.5 Hours					
				0.52618 [SYS 061300]	0.526183 - Target	
	A5H SUBCONTRACTED SRVS	S010 CHEMISTS	C222S Water System Operations	Linear	886.11	Dollars
Factors	1.02283 -- FY00 Escalation --	3874 dollars	0.425	May 2000 Earned Value Factor		
				0.52618 [SYS 061300]	0.526183 - Target	

Line Item IBCGER0320 - Internal Waste Streams

BOE
 HISTORICAL DATA SOURCE:
 FY99 WBS Spending Variance Reports for WBS Element 1.1.03.06.01.04, Activity BZCG100620.

ITEM DESCRIPTION:
 Coordinate characterization and disposition of internal waste streams with Waste Water Treatment Plant (WWTP) manager, maintain and upgrade internal waste streams database, and prepare monthly reports.

BREAKDOWN OF HISTORICAL DATA:
 The BOE was developed using activity based cost estimating. Estimate based on historic costs from FY99.
 Item - Incidental Waters Program
 Units - Monthly report
 Unit Cost - 10 K-H team hours; \$3,086 subcontracted
 Unit Cost Adjustment factor - N/A
 Revised Unit Cost - N/A
 Basis for adjustment - N/A

This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

Resources	Cost Element	Skill	Department	Curve	Quantity	Units
	750 STRAIGHT TIME BASE	E050 ENVIRONMENTAL ENGINEERS	C222S Water System Operations	Linear	2.24	Hours
Factors	10 Hours	0.425	May 2000 Earned Value Factor			
				0.52618 [SYS 061300]	0.526183 - Target	
	A5H SUBCONTRACTED SRVS	S010 CHEMISTS	C222S Water Svstem Operations	Linear	705.87	Dollars
Factors	1.02283 -- FY00 Escalation --	3086 dollars	0.425	May 2000 Earned Value Factor		
				0.52618 [SYS 061300]	0.526183 - Target	

Line Item IBCGER0325 - Tank Management Program Inspections

BOE
 HISTORICAL DATA SOURCE:
 FY99 WBS Spending Variance Reports for WBS Element 1.1.03.06.01.06, Activity BZCG1010.

ITEM DESCRIPTION:
 Coordinate and perform tank inspections per the NPDES/FFCA. Includes all work/planning associated with inspection and non-destructive testing of highest risk tanks.

BREAKDOWN OF HISTORICAL DATA:
 The BOE was developed using activity based cost estimating. Estimate based on historic costs from FY98.
 Item - Tank inspection
 Units - each
 Unit Cost - 30 K-H team hours; \$230 subcontracted

WBS No: 1EBB0402
 Activity ID: 1EBB422000

Rockv Flats Closure Project
Baseline Cost and Basis of Estimate

Project: Baseline Devl
 WBS Filter: 1EBB
 Activity Filter: *

Starts In FY *

Unit Cost Adjustment factor - N/A
 Revised Unit Cost - N/A
 Basis for adjustment - N/A
 This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

Resources

Cost Element	Skill	Department	Curve	Quantity	Units
750 STRAIGHT TIME BASE	E050 ENVIRONMENTAL ENGINEERS	C222S Water System Operations	Linear	0.22	Hours
<i>Factors</i> 1 Hours/ea 0.425 May 2000 Earned Value Factor					
				0.52618	ISYS 0613001 0.526183 - Target
750 STRAIGHT TIME BASE	M020 MANAGERS (GRADE 69 - 72)	C222S Water System Operations	Linear	0.11	Hours
<i>Factors</i> 0.5 Hours/ea 0.425 May 2000 Earned Value Factor					
				0.52618	ISYS 0613001 0.526183 - Target
750 STRAIGHT TIME BASE	P170 OTHER ADMINISTRATIVE & PROFE	C222S Water System Operations	Linear	0.45	Hours
<i>Factors</i> 2 Hours/ea 0.425 May 2000 Earned Value Factor					
				0.52618	ISYS 0613001 0.526183 - Target
750 STRAIGHT TIME BASE	T070 MAINT. TECHS. (INSTRUMENT TEC	KE10H Indust/Site Srvs Steelworkers	Linear	5.81	Hours
<i>Factors</i> 26 Hours/ea 0.425 May 2000 Earned Value Factor					
				0.52618	ISYS 0613001 0.526183 - Target
A5H SUBCONTRACTED SRVS	0000 NONE	C222S Water System Operations	Linear	6.86	Dollars
<i>Factors</i> 1.02283 -- FY00 Escalation -- 30 DOLLARS 0.425 May 2000 Earned Value Factor					
				0.52618	ISYS 0613001 0.526183 - Target
A5H SUBCONTRACTED SRVS	M020 MANAGERS (GRADE 69 - 72)	C222S Water System Operations	Linear	45.75	Dollars
<i>Factors</i> 1.02283 -- FY00 Escalation -- 200 Dollars/ea 0.425 May 2000 Earned Value Factor					
				0.52618	ISYS 0613001 0.526183 - Target

Line Item IBCGER0330 - Master Tank Database/DIS Query Support

BOE

HISTORICAL DATA SOURCE:
 FY99 WBS Spending Variance Reports for WBS Element 1.1.03.06.01.06, Activity BZCG1010.

ITEM DESCRIPTION:
 Support queries and data entry in the Master Tank Database (MTDB) and support Drain Identification Study (DIS) file control/information requests.

BREAKDOWN OF HISTORICAL DATA:
 The BOE was developed using activity based cost estimating. Estimate based on historic costs from FY98.
 Item - Master Tank Database/DIS query annual support
 Units - lot
 Unit Cost - 256 K-H team hours
 Unit Cost Adjustment factor - N/A
 Revised Unit Cost - N/A
 Basis for adjustment - N/A

This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

Resources

Cost Element	Skill	Department	Curve	Quantity	Units
750 STRAIGHT TIME BASE	E050 ENVIRONMENTAL ENGINEERS	C222S Water System Operations	Linear	16.10	Hours
<i>Factors</i> 72 hr 0.425 May 2000 Earned Value Factor					
				0.52618	ISYS 0613001 0.526183 - Target
750 STRAIGHT TIME BASE	M020 MANAGERS (GRADE 69 - 72)	C222S Water System Operations	Linear	10.73	Hours
<i>Factors</i> 48 Hours/ls 0.425 May 2000 Earned Value Factor					
				0.52618	ISYS 0613001 0.526183 - Target
750 STRAIGHT TIME BASE	P060 COMPUTER SYSTEMS ANALYSTS	C270S Property Management	Linear	23.26	Hours
<i>Factors</i> 104 Hours 0.425 May 2000 Earned Value Factor					
				0.52618	ISYS 0613001 0.526183 - Target
750 STRAIGHT TIME BASE	T070 MAINT. TECHS. (INSTRUMENT TEC	KE10H Indust/Site Srvs Steelworkers	Linear	7.16	Hours
<i>Factors</i> 32 hrs 0.425 May 2000 Earned Value Factor					
				0.52618	ISYS 0613001 0.526183 - Target

Activity ID: 1EBB422010 Description: Pollutant Source Control FY01

Cost Risk 1 Schedule Risk 1

WBS No: 1EBB0402
 Activity ID: 1EBB422010

Rockv Flats Closure Project
Baseline Cost and Basis of Estimate

Project: Baseline Devl
 WBS Filter: 1EBB
 Activity Filter: *

Starts In FY *

Line Item	Description	Quantity	Units	BOE Type	Labor Hours/Unit	Labor Hours Total	Labor Cost Total	Materials/ Sub Cost	Contingency & Escalation	Total Prime Cost	Burden Cost	Total Cost
IBCGER0305	Watershed Pollutant Source Control Projects	5.00	ea	HC	188	938	30,803	56,853	0	87,656	14,693	102,350
IBCGER0310	Pollutant Source Reponses/Investigations	1.00	ls	HC	212	212	7,277	3,184	0	10,460	3,471	13,931
IBCGER0315	Incidental Waters	12.00	ea	HC	61	736	25,337	0	0	25,337	12,086	37,422
IBCGER0320	Internal Waste Streams	12.00	ea	HC	41	491	18,081	0	0	18,081	8,625	26,705
IBCGER0330	Master Tank Database/DIS Query Support	1.00	ls	HC	228	228	7,156	0	0	7,156	3,413	10,569
SYS	Contingency And Escalation	1.00	ea	EE	0	0	0	0	10,031	10,031	0	10,031
Total for Activity 1EBB422010:						2,605	88,653	60,037	10,031	158,721	42,288	201,009

Line Item IBCGER0305 - Watershed Pollutant Source Control Projects

BOE
 HISTORICAL DATA SOURCE:
 Historic cost data for similar projects - on file in Bldg. T130D, Room 71.

ITEM DESCRIPTION:
 Erosion control project to enhance quality of Site stormwater runoff - includes application of SoilGuard and/or TopSeal erosion control products to 3,000 square yards.(5 Projects/Year)

BREAKDOWN OF HISTORICAL DATA:
 The BOE was developed using activity based cost estimating. Estimate based on historic costs from FY96.
 Item - Erosion control project - 3,000 square yards
 Units -1 LOT
 Unit Cost - 1,055 Hours & \$63,927
 Unit Cost Adjustment factor - N/A
 Revised Unit Cost - N/A
 Basis for adjustment - N/A

This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

Resources

Cost Element	Skill	Department	Curve	Quantity	Units
750 STRAIGHT TIME BASE	E050 ENVIRONMENTAL ENGINEERS	C222S Water Svstem Operations	Linear	118.28	Hours
Factors 133 Hours					
0.88934 ISYS 0614001.88934200 - Svstem					
750 STRAIGHT TIME BASE	E120 SAFETY ENGINEERS	C222S Water Svstem Operations	Linear	8.00	Hours
Factors 9 Hours					
0.88934 ISYS 0614001.88934200 - Svstem					
750 STRAIGHT TIME BASE	M020 MANAGERS (GRADE 69 - 72)	C222S Water Svstem Operations	Linear	29.35	Hours
Factors 33 Hours					
0.88934 ISYS 0614001.88934200 - Svstem					
750 STRAIGHT TIME BASE	P140 SAFEGUARDS AND OTHER SECURI	W101S Operations Support	Linear	32.02	Hours
Factors 36 Hours					
0.88934 ISYS 0614001.88934200 - Svstem					
A5H SUBCONTRACTED SRVS	0000 NONE	C222S Water Svstem Operations	Linear	11,370.57	Dollars
Factors 12500 Dollars					
1.02283 -- FY00 Escalation --					
0.88934 ISYS 0614001.88934200 - Svstem					

Line Item IBCGER0310 - Pollutant Source Reponses/Investigations

BOE
 HISTORICAL DATA SOURCE:
 FY99 WBS Spending Variance Reports for WBS Element 1.1.03.06.01.04, Activity BZCG100620.

ITEM DESCRIPTION:
 Respond to Site spills that may impact surface water quality; perform inspections to prevent release of surface water pollutant sources.

BREAKDOWN OF HISTORICAL DATA:
 The BOE was developed using activity based cost estimating. Estimate based on historic costs from FY99.
 Item - Pollutant Source Responses/Investigations
 Units - 1 Lot
 Unit Cost - 238 Hours & \$3,580
 Unit Cost Adjustment factor - N/A
 Revised Unit Cost - N/A

WBS No: 1EBB0402
 Activity ID: 1EBB422010

Rockv Flats Closure Project
Baseline Cost and Basis of Estimate

Project Baseline Devl
 WBS Filter 1EBB
 Activity Filter *

Starts In FY *

Basis for adjustment - N/A
 This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

Resources	Cost Element	Skill	Department	Curve	Quantity	Units
	750 STRAIGHT TIME BASE	E050 ENVIRONMENTAL ENGINEERS	C222S Water Svstem Operations	Linear	168.97	Hours
Factors	190 Hours					
	750 STRAIGHT TIME BASE	M020 MANAGERS (GRADE 69 - 72)	C222S Water Svstem Operations	Linear	42.69	Hours
Factors	48 Hours					
	A5R MISC EXPENSES	0000 NONE	C222S Water Svstem Operations	Linear	3,183.76	Dollars
Factors	3500 \$ Education Reimbursement	1.02283 -- FY00 Escalation --				
					0.88934 [SYS 061400] .88934200 - Svstem	
					0.88934 [SYS 061400] .88934200 - Svstem	

Line Item IBCGER0315 - Incidental Waters

BOE
 HISTORICAL DATA SOURCE:
 FY99 WBS Spending Variance Reports for WBS Element 1.1.03.06.01.04, Activity BZCG100620.
 ITEM DESCRIPTION:
 Coordinate characterization and disposition of incidental waters with building personnel, utilities and environmental coordinators; maintain and upgrade incidental waters database, and prepare monthly summary report. Monthly report (12/Year)
 BREAKDOWN OF HISTORICAL DATA:
 The BOE was developed using activity based cost estimating. Estimate based on historic costs from FY99.
 Item - Incidental Waters Program
 Units -HOURS
 Unit Cost - 828 Hours
 Unit Cost Adjustment factor - N/A
 Revised Unit Cost - N/A
 Basis for adjustment - N/A
 This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

Resources	Cost Element	Skill	Department	Curve	Quantity	Units
	750 STRAIGHT TIME BASE	E050 ENVIRONMENTAL ENGINEERS	C222S Water Svstem Operations	Linear	48.91	Hours
Factors	55 Hours					
	750 STRAIGHT TIME BASE	M020 MANAGERS (GRADE 69 - 72)	C222S Water Svstem Operations	Linear	12.45	Hours
Factors	14 Hours					
					0.88934 [SYS 061400] .88934200 - Svstem	
					0.88934 [SYS 061400] .88934200 - Svstem	

Line Item IBCGER0320 - Internal Waste Streams

BOE
 DHISTORICAL DATA SOURCE:
 FY99 WBS Spending Variance Reports for WBS Element 1.1.03.06.01.04, Activity BZCG100620.
 ITEM DESCRIPTION:
 Coordinate characterization and disposition of internal waste streams with Waste Water Treatment Plant (WWTP) manager, maintain and upgrade internal waste streams database, and prepare monthly reports.Monthly report (12/Year)
 BREAKDOWN OF HISTORICAL DATA:
 The BOE was developed using activity based cost estimating. Estimate based on historic costs from FY99.
 Item - Incidental Waters Program
 Units - HOURS
 Unit Cost - 552 Hours
 Unit Cost Adjustment factor - N/A
 Revised Unit Cost - N/A
 Basis for adjustment - N/A
 This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

Resources	Cost Element	Skill	Department	Curve	Quantity	Units
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WBS No: 1EBB0402
 Activity ID: 1EBB422010

Rockv Flats Closure Project
Baseline Cost and Basis of Estimate

Project Baseline Devl
 WBS Filter 1EBB
 Activity Filter *

Starts In FY *

750	STRAIGHT TIME BASE	E050	ENVIRONMENTAL ENGINEERS	C222S	Water Svstem Operations	Linear	28.46	Hours
							0.88934	[SYS 061400] .88934200 - Svstem
<i>Factors</i> 32 Hours								
750	STRAIGHT TIME BASE	M020	MANAGERS (GRADE 69 - 72)	C222S	Water Svstem Operations	Linear	12.45	Hours
							0.88934	[SYS 061400] .88934200 - Svstem
<i>Factors</i> 14 Hours								

Line Item IBCGER0330 - Master Tank Database/DIS Query Support

BOE
 HISTORICAL DATA SOURCE:
 FY99 WBS Spending Variance Reports for WBS Element 1.1.03.06.01.06, Activity BZCG1010.

ITEM DESCRIPTION:
 Support queries and data entry in the Master Tank Database (MTDB)and support Drain Identification Study (DIS) file control/information requests.

BREAKDOWN OF HISTORICAL DATA:
 The BOE was developed using activity based cost estimating. Estimate based on historic costs from FY98.
 Item - Master Tank Database/DIS query annual support
 Units - HOURS
 Unit Cost - 256 hours
 Unit Cost Adjustment factor - N/A
 Revised Unit Cost - N/A
 Basis for adjustment - N/A

This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

Resources

Cost Element	Skill	Department	Curve	Quantity	Units
750 STRAIGHT TIME BASE	E050 ENVIRONMENTAL ENGINEERS	C222S Water Svstem Operations	Linear	64.03	Hours
<i>Factors</i> 72 hr					
0.88934 [SYS 061400] .88934200 - Svstem					
750 STRAIGHT TIME BASE	M020 MANAGERS (GRADE 69 - 72)	C222S Water Svstem Operations	Linear	42.69	Hours
<i>Factors</i> 48 Hours/ls					
0.88934 [SYS 061400] .88934200 - Svstem					
750 STRAIGHT TIME BASE	P060 COMPUTER SYSTEMS ANALYSTS	C222S Water Svstem Operations	Linear	92.49	Hours
<i>Factors</i> 104 Hours					
0.88934 [SYS 061400] .88934200 - Svstem					
750 STRAIGHT TIME BASE	T070 MAINT. TECHS. (INSTRUMENT TEC	KE10H Indust/Site Svcs Steelworkers	Linear	28.46	Hours
<i>Factors</i> 32 hrs					
0.88934 [SYS 061400] .88934200 - Svstem					

Line Item SYS - Contingency And Escalation

BOE

Resources

Cost Element	Skill	Department	Curve	Quantity	Units
CON CONTINGENCY	0000 NONE	ZDEPT No Department	Linear	6.015.23	Dollars
<i>Factors</i> 6015.23 Dollars					
ESC ESCALATION	0000 NONE	ZDEPT No Department	Linear	4.015.84	Dollars
<i>Factors</i> 4015.84 Dollars					

Activity ID: 1EBB422020 Description: Pollutant Source Control FY02

Cost Risk 1 Schedule Risk 1

Line Item	Description	Quantity	Units	BOE Type	Labor Hours/Unit	Labor Hours Total	Labor Cost Total	Materials/ Sub Cost	Contingency & Escalation	Total Prime Cost	Burden Cost	Total Cost
IBCGER0305	Watershed Pollutant Source Control Projects	5.00	ea	HC	188	938	30,803	56,853	0	87,656	10,874	98,530
IBCGER0310	Pollutant Source Reponses/Investigations	1.00	ls	HC	212	212	7,277	3,184	0	10,460	2,569	13,029
IBCGER0315	Incidental Waters	12.00	ea	HC	61	736	25,337	0	0	25,337	8,944	34,280
IBCGER0320	Internal Waste Streams	12.00	ea	HC	41	491	18,081	0	0	18,081	6,383	24,463
IBCGER0330	Master Tank Database/DIS Query Support	1.00	ls	HC	228	228	7,156	0	0	7,156	2,526	9,682
SYS	Contingency And Escalation	1.00	ea	EE	0	0	0	0	26,607	26,607	0	26,607
Total for Activity 1EBB422020:						2,605	88,653	60,037	26,607	175,297	31,295	206,591

WBS No: 1EBB0402
 Activity ID: 1EBB422020

Rockv Flats Closure Project
Baseline Cost and Basis of Estimate

Project: Baseline Devl
 WBS Filter: 1EBB
 Activity Filter: *

Starts In FY *

Line Item IBCGER0305 - Watershed Pollutant Source Control Projects

BOE
 HISTORICAL DATA SOURCE:
 Historic cost data for similar projects - on file in Bldg. T130D,Room 71.

ITEM DESCRIPTION:
 Erosion control project to enhance quality of Site stormwater runoff - includes application of SoilGuard and/or TopSeal erosion control products to 3,000 square yards.(5 Projects/Year)

BREAKDOWN OF HISTORICAL DATA:
 The BOE was developed using activity based cost estimating. Estimate based on historic costs from FY96.
 Item - Erosion control project - 3,000 square yards
 Units -1 LOT
 Unit Cost - 1,055 Hours & \$63,927
 Unit Cost Adjustment factor - N/A
 Revised Unit Cost - N/A
 Basis for adjustment - N/A

This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

Resources	Cost Element	Skill	Department	Curve	Quantity	Units
	750 STRAIGHT TIME BASE	E050 ENVIRONMENTAL ENGINEERS	C222S Water Svstem Operations	Linear	118.28	Hours
Factors	133 Hours					
	750 STRAIGHT TIME BASE	E120 SAFETY ENGINEERS	C222S Water Svstem Operations	Linear	8.00	Hours
Factors	9 Hours					
	750 STRAIGHT TIME BASE	M020 MANAGERS (GRADE 69 - 72)	C222S Water Svstem Operations	Linear	29.35	Hours
Factors	33 Hours					
	750 STRAIGHT TIME BASE	P140 SAFEGUARDS AND OTHER SECURI	W101S Operations Support	Linear	32.02	Hours
Factors	36 Hours					
	A5H SUBCONTRACTED SRVS	0000 NONE	C222S Water Svstem Operations	Linear	11.370.57	Dollars
Factors	12500 Dollars	1.02283 -- FY00 Escalation --				
				0.88934 [SYS 061400] .88934200 - Svstem		

Line Item IBCGER0310 - Pollutant Source Reponses/Investigations

BOE
 HISTORICAL DATA SOURCE:
 FY99 WBS Spending Variance Reports for WBS Element 1.1.03.06.01.04, Activity BZCG100620.

ITEM DESCRIPTION:
 Respond to Site spills that may impact surface water quality; perform inspections to prevent release of surface water pollutant sources.

BREAKDOWN OF HISTORICAL DATA:
 The BOE was developed using activity based cost estimating. Estimate based on historic costs from FY99.
 Item - Pollutant Source Responses/Investigations
 Units - 1 Lot
 Unit Cost - 238 Hours & \$3,580
 Unit Cost Adjustment factor - N/A
 Revised Unit Cost - N/A
 Basis for adjustment - N/A

This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

Resources	Cost Element	Skill	Department	Curve	Quantity	Units
	750 STRAIGHT TIME BASE	E050 ENVIRONMENTAL ENGINEERS	C222S Water Svstem Operations	Linear	168.97	Hours
Factors	190 Hours					
				0.88934 [SYS 061400] .88934200 - Svstem		

WBS No: 1EBB0402
 Activity ID: 1EBB422020

Rockv Flats Closure Project
Baseline Cost and Basis of Estimate

Project Baseline Devl
 WBS Filter 1EBB
 Activity Filter *

Starts In FY *

750	STRAIGHT TIME BASE	M020	MANAGERS (GRADE 69 - 72)	C222S	Water Svstem Operations	Linear	42.69	Hours
							0.88934	[SYS 061400] .88934200 - Svstem
A5R	MISC EXPENSES	0000	NONE	C222S	Water Svstem Operations	Linear	3.183.76	Dollars
							0.88934	[SYS 061400] .88934200 - Svstem

Line Item IBCGER0315 - Incidental Waters

BOE
 HISTORICAL DATA SOURCE:
 FY99 WBS Spending Variance Reports for WBS Element 1.1.03.06.01.04, Activity BZCG100620.

ITEM DESCRIPTION:
 Coordinate characterization and disposition of incidental waters with building personnel, utilities and environmental coordinators; maintain and upgrade incidental waters database, and prepare monthly summary report. Monthly report (12/Year)

BREAKDOWN OF HISTORICAL DATA:
 The BOE was developed using activity based cost estimating. Estimate based on historic costs from FY99.
 Item - Incidental Waters Program
 Units -HOURS
 Unit Cost - 828 Hours
 Unit Cost Adjustment factor - N/A
 Revised Unit Cost - N/A
 Basis for adjustment - N/A

This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

Resources

Cost Element	Skill	Department	Curve	Quantity	Units
750	STRAIGHT TIME BASE	E050 ENVIRONMENTAL ENGINEERS	C222S Water Svstem Operations	Linear	48.91 Hours
Factors 55 Hours					
750	STRAIGHT TIME BASE	M020 MANAGERS (GRADE 69 - 72)	C222S Water Svstem Operations	Linear	12.45 Hours
Factors 14 Hours					
0.88934 [SYS 061400] .88934200 - Svstem					

Line Item IBCGER0320 - Internal Waste Streams

BOE
 HISTORICAL DATA SOURCE:
 FY99 WBS Spending Variance Reports for WBS Element 1.1.03.06.01.04, Activity BZCG100620.

ITEM DESCRIPTION:
 Coordinate characterization and disposition of internal waste streams with Waste Water Treatment Plant (WWTP) manager, maintain and upgrade internal waste streams database, and prepare monthly reports. Monthly report (12/Year)

BREAKDOWN OF HISTORICAL DATA:
 The BOE was developed using activity based cost estimating. Estimate based on historic costs from FY99.
 Item - Incidental Waters Program
 Units - HOURS
 Unit Cost - 552 Hours
 Unit Cost Adjustment factor - N/A
 Revised Unit Cost - N/A
 Basis for adjustment - N/A

This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

Resources

Cost Element	Skill	Department	Curve	Quantity	Units
750	STRAIGHT TIME BASE	E050 ENVIRONMENTAL ENGINEERS	C222S Water Svstem Operations	Linear	28.46 Hours
Factors 32 Hours					
750	STRAIGHT TIME BASE	M020 MANAGERS (GRADE 69 - 72)	C222S Water Svstem Operations	Linear	12.45 Hours
Factors 14 Hours					
0.88934 [SYS 061400] .88934200 - Svstem					

Line Item IBCGER0330 - Master Tank Database/DIS Query Support

BOE

WBS No: 1EBB0402
 Activity ID: 1EBB422020

Rockv Flats Closure Project
Baseline Cost and Basis of Estimate

Project Baseline Devl
 WBS Filter 1EBB
 Activity Filter *

Starts In FY *

HISTORICAL DATA SOURCE:
 FY99 WBS Spending Variance Reports for WBS Element 1.1.03.06.01.06, Activity BZCG1010.

ITEM DESCRIPTION:
 Support queries and data entry in the Master Tank Database (MTDB) and support Drain Identification Study (DIS) file control/information requests.

BREAKDOWN OF HISTORICAL DATA:
 The BOE was developed using activity based cost estimating. Estimate based on historic costs from FY98.
 Item - Master Tank Database/DIS query annual support
 Units - HOURS
 Unit Cost - 256 hours
 Unit Cost Adjustment factor - N/A
 Revised Unit Cost - N/A
 Basis for adjustment - N/A

This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

Resources	Cost Element	Skill	Department	Curve	Quantity	Units
	750 STRAIGHT TIME BASE	E050 ENVIRONMENTAL ENGINEERS	C222S Water Svstem Operations	Linear	64.03	Hours
Factors	72 hr					
	750 STRAIGHT TIME BASE	M020 MANAGERS (GRADE 69 - 72)	C222S Water Svstem Operations	Linear	42.69	Hours
Factors	48 Hours/ls					
	750 STRAIGHT TIME BASE	P060 COMPUTER SYSTEMS ANALYSTS	C222S Water Svstem Operations	Linear	92.49	Hours
Factors	104 Hours					
	750 STRAIGHT TIME BASE	T070 MAINT. TECHS. (INSTRUMENT TEC	KE10H Indust/Site Svcs Steelworkers	Linear	28.46	Hours
Factors	32 hrs					

Line Item SYS - Contingency And Escalation

Resources	Cost Element	Skill	Department	Curve	Quantity	Units
	CON CONTINGENCY	0000 NONE	ZDEPT No Department	Linear	18,195.70	Dollars
Factors	18195.7 Dollars					
	ESC ESCALATION	0000 NONE	ZDEPT No Department	Linear	8,410.95	Dollars
Factors	8410.95 Dollars					

Activity ID: 1EBB422030 Description: Pollutant Source Control FY03

Cost Risk 1 Schedule Risk 1

Line Item	Description	Quantity	Units	BOE Type	Labor Hours/Unit	Labor Hours Total	Labor Cost Total	Materials/ Sub Cost	Contingency & Escalation	Total Prime Cost	Burden Cost	Total Cost
IBCGER0305	Watershed Pollutant Source Control Projects	5.00	ea	HC	188	938	30,803	56,853	0	87,656	10,658	98,314
IBCGER0310	Pollutant Source Reponses/Investigations	1.00	ls	HC	212	212	7,277	3,184	0	10,460	2,518	12,978
IBCGER0315	Incidental Waters	12.00	ea	HC	61	736	25,337	0	0	25,337	8,766	34,103
IBCGER0320	Internal Waste Streams	12.00	ea	HC	41	491	18,081	0	0	18,081	6,256	24,337
IBCGER0330	Master Tank Database/DIS Query Support	1.00	ls	HC	228	228	7,156	0	0	7,156	2,476	9,632
SYS	Contingency And Escalation	1.00	ea	EE	0	0	0	0	49,199	49,199	0	49,199
Total for Activity 1EBB422030:						2,605	88,653	60,037	49,199	197,889	30,674	228,563

Line Item IBCGER0305 - Watershed Pollutant Source Control Projects

BOE
 HISTORICAL DATA SOURCE:
 Historic cost data for similar projects - on file in Bldg. T130D, Room 71.

ITEM DESCRIPTION:
 Erosion control project to enhance quality of Site stormwater runoff - includes application of SoilGuard and/or TopSeal erosion control products to 3,000 square yards.(5 Projects/Year)

BREAKDOWN OF HISTORICAL DATA:
 The BOE was developed using activity based cost estimating. Estimate based on historic costs from FY96.

WBS No: 1EBB0402
 Activity ID: 1EBB422030

Rockv Flats Closure Project
Baseline Cost and Basis of Estimate

Project: Baseline Devl
 WBS Filter: 1EBB
 Activity Filter: *

Starts In FY *

Item - Erosion control project - 3,000 square yards
 Units -1 LOT
 Unit Cost - 1,055 Hours & \$63,927
 Unit Cost Adjustment factor - N/A
 Revised Unit Cost - N/A
 Basis for adjustment - N/A

This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

Resources	Cost Element	Skill	Department	Curve	Quantity	Units
	750 STRAIGHT TIME BASE	E050 ENVIRONMENTAL ENGINEERS	C222S Water Svstem Operations	Linear	118.28	Hours
Factors	133 Hours					
	750 STRAIGHT TIME BASE	E120 SAFETY ENGINEERS	C222S Water Svstem Operations	Linear	8.00	Hours
Factors	9 Hours					
	750 STRAIGHT TIME BASE	M020 MANAGERS (GRADE 69 - 72)	C222S Water Svstem Operations	Linear	29.35	Hours
Factors	33 Hours					
	750 STRAIGHT TIME BASE	P140 SAFEGUARDS AND OTHER SECURI	W101S Operations Support	Linear	32.02	Hours
Factors	36 Hours					
	A5H SUBCONTRACTED SRVS	0000 NONE	C222S Water Svstem Operations	Linear	11.370.57	Dollars
Factors	12500 Dollars	1.02283 -- FY00 Escalation --				

Line Item IBCGER0310 - Pollutant Source Reponses/Investigations

BOE

HISTORICAL DATA SOURCE:
 FY99 WBS Spending Variance Reports for WBS Element 1.1.03.06.01.04, Activity BZCG100620.

ITEM DESCRIPTION:
 Respond to Site spills that may impact surface water quality; perform inspections to prevent release of surface water pollutant sources.

BREAKDOWN OF HISTORICAL DATA:
 The BOE was developed using activity based cost estimating. Estimate based on historic costs from FY99.
 Item - Pollutant Source Responses/Investigations
 Units - 1 Lot
 Unit Cost - 238 Hours & \$3,580
 Unit Cost Adjustment factor - N/A
 Revised Unit Cost - N/A
 Basis for adjustment - N/A

This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

Resources	Cost Element	Skill	Department	Curve	Quantity	Units
	750 STRAIGHT TIME BASE	E050 ENVIRONMENTAL ENGINEERS	C222S Water Svstem Operations	Linear	168.97	Hours
Factors	190 Hours					
	750 STRAIGHT TIME BASE	M020 MANAGERS (GRADE 69 - 72)	C222S Water Svstem Operations	Linear	42.69	Hours
Factors	48 Hours					
	A5R MISC EXPENSES	0000 NONE	C222S Water Svstem Operations	Linear	3.183.76	Dollars
Factors	3500 \$ Education Reimbursement	1.02283 -- FY00 Escalation --				

Line Item IBCGER0315 - Incidental Waters

BOE

HISTORICAL DATA SOURCE:
 FY99 WBS Spending Variance Reports for WBS Element 1.1.03.06.01.04, Activity BZCG100620.

ITEM DESCRIPTION:
 Coordinate characterization and disposition of incidental waters with building personnel, utilities and environmental coordinators; maintain and upgrade

WBS No: 1EBB0402
 Activity ID: 1EBB422030

Rockv Flats Closure Project
Baseline Cost and Basis of Estimate

Project: Baseline Devl
 WBS Filter: 1EBB
 Activity Filter: *

Starts In FY *

incidental waters database, and prepare monthly summary report. Monthly report (12/Year)

BREAKDOWN OF HISTORICAL DATA:
 The BOE was developed using activity based cost estimating. Estimate based on historic costs from FY99.
 Item - Incidental Waters Program
 Units -HOURS
 Unit Cost - 828 Hours
 Unit Cost Adjustment factor - N/A
 Revised Unit Cost - N/A
 Basis for adjustment - N/A

This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

Resources		Cost Element	Skill	Department	Curve	Quantity	Units
750	STRAIGHT TIME BASE	E050	ENVIRONMENTAL ENGINEERS	C222S	Water Svstem Operations	Linear	48.91 Hours
Factors		55	Hours				
						0.88934 [SYS 061400]	.88934200 - Svstem
750	STRAIGHT TIME BASE	M020	MANAGERS (GRADE 69 - 72)	C222S	Water Svstem Operations	Linear	12.45 Hours
Factors		14	Hours				

0.88934 [SYS 061400].88934200 - Svstem

Line Item IBCGER0320 - Internal Waste Streams

BOE

HISTORICAL DATA SOURCE:
 FY99 WBS Spending Variance Reports for WBS Element 1.1.03.06.01.04, Activity BZCG100620.

ITEM DESCRIPTION:
 Coordinate characterization and disposition of internal waste streams with Waste Water Treatment Plant (WWTP) manager, maintain and upgrade internal waste streams database, and prepare monthly reports.Monthly report (12/Year)

BREAKDOWN OF HISTORICAL DATA:
 The BOE was developed using activity based cost estimating. Estimate based on historic costs from FY99.
 Item - Incidental Waters Program
 Units - HOURS
 Unit Cost - 552 Hours
 Unit Cost Adjustment factor - N/A
 Revised Unit Cost - N/A
 Basis for adjustment - N/A

This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

Resources		Cost Element	Skill	Department	Curve	Quantity	Units
750	STRAIGHT TIME BASE	E050	ENVIRONMENTAL ENGINEERS	C222S	Water Svstem Operations	Linear	28.46 Hours
Factors		32	Hours				
						0.88934 [SYS 061400]	.88934200 - Svstem
750	STRAIGHT TIME BASE	M020	MANAGERS (GRADE 69 - 72)	C222S	Water Svstem Operations	Linear	12.45 Hours
Factors		14	Hours				

0.88934 [SYS 061400].88934200 - Svstem

Line Item IBCGER0330 - Master Tank Database/DIS Query Support

BOE

HISTORICAL DATA SOURCE:
 FY99 WBS Spending Variance Reports for WBS Element 1.1.03.06.01.06, Activity BZCG1010.

ITEM DESCRIPTION:
 Support queries and data entry in the Master Tank Database (MTDB)and support Drain Identification Study (DIS) file control/information requests.

BREAKDOWN OF HISTORICAL DATA:
 The BOE was developed using activity based cost estimating. Estimate based on historic costs from FY98.
 Item - Master Tank Database/DIS query annual support
 Units - HOURS
 Unit Cost - 256 hours
 Unit Cost Adjustment factor - N/A
 Revised Unit Cost - N/A
 Basis for adjustment - N/A

WBS No: 1EBB0402
 Activity ID: 1EBB422030

Rockv Flats Closure Project
Baseline Cost and Basis of Estimate

Project: Baseline Devl
 WBS Filter: 1EBB
 Activity Filter: *

Starts In FY *

This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

Resources	Cost Element	Skill	Department	Curve	Quantity	Units
	750 STRAIGHT TIME BASE	E050 ENVIRONMENTAL ENGINEERS	C222S Water System Operations	Linear	64.03	Hours
Factors	72 hr					
	750 STRAIGHT TIME BASE	M020 MANAGERS (GRADE 69 - 72)	C222S Water System Operations	Linear	42.69	Hours
Factors	48 Hours/ls					
	750 STRAIGHT TIME BASE	P060 COMPUTER SYSTEMS ANALYSTS	C222S Water System Operations	Linear	92.49	Hours
Factors	104 Hours					
	750 STRAIGHT TIME BASE	T070 MAINT. TECHS. (INSTRUMENT TEC	KE10H Indust/Site Srvs Steelworkers	Linear	28.46	Hours
Factors	32 hrs					

0.88934 [SYS 061400] .88934200 - System
 0.88934 [SYS 061400] .88934200 - System
 0.88934 [SYS 061400] .88934200 - System
 0.88934 [SYS 061400] .88934200 - System

Line Item SYS - Contingency And Escalation

BOE

Resources	Cost Element	Skill	Department	Curve	Quantity	Units
	CON CONTINGENCY	0000 NONE	ZDEPT No Department	Linear	35,444.70	Dollars
Factors	35444.7 Dollars					
	ESC ESCALATION	0000 NONE	ZDEPT No Department	Linear	13,754.59	Dollars
Factors	13754.6 Dollars					

Activity ID: 1EBB422040 Description: Pollutant Source Control FY04

Cost Risk 1 Schedule Risk 1

Line Item	Description	Quantity	Units	BOE Type	Labor Hours/Unit	Labor Hours Total	Labor Cost Total	Materials/ Sub Cost	Contingency & Escalation	Total Prime Cost	Burden Cost	Total Cost
IBCGER0305	Watershed Pollutant Source Control Projects	5.00	ea	HC	188	938	30,803	56,853	0	87,656	8,687	96,343
IBCGER0310	Pollutant Source Responses/Investigations	1.00	ls	HC	212	212	7,277	3,184	0	10,460	2,052	12,512
IBCGER0315	Incidental Waters	12.00	ea	HC	61	736	25,337	0	0	25,337	7,145	32,482
IBCGER0320	Internal Waste Streams	12.00	ea	HC	41	491	18,081	0	0	18,081	5,099	23,180
IBCGER0330	Master Tank Database/DIS Query Support	1.00	ls	HC	228	228	7,156	0	0	7,156	2,018	9,174
SYS	Contingency And Escalation	1.00	ea	EE	0	0	0	0	24,599	24,599	0	24,599
Total for Activity 1EBB422040:						2,605	88,653	60,037	24,599	173,289	25,000	198,290

Line Item IBCGER0305 - Watershed Pollutant Source Control Projects

BOE

HISTORICAL DATA SOURCE:
 Historic cost data for similar projects - on file in Bldg. T130D, room 71.

ITEM DESCRIPTION:
 Erosion control project to enhance quality of Site stormwater runoff - includes application of SoilGuard and/or TopSeal erosion control products to 3,000 square yards.(5 Projects/Year)

BREAKDOWN OF HISTORICAL DATA:
 The BOE was developed using activity based cost estimating. Estimate based on historic costs from FY96.
 Item - Erosion control project - 3,000 square yards
 Units -1 LOT
 Unit Cost - 1,055 Hours & \$63,927
 Unit Cost Adjustment factor - N/A
 Revised Unit Cost - N/A
 Basis for adjustment - N/A

This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

Resources	Cost Element	Skill	Department	Curve	Quantity	Units
	750 STRAIGHT TIME BASE	E050 ENVIRONMENTAL ENGINEERS	C222S Water System Operations	Linear	118.28	Hours
Factors	133 Hours					

0.88934 [SYS 061400] .88934200 - System

WBS No: 1EBB0402
 Activity ID: 1EBB422040

Rockv Flats Closure Project
Baseline Cost and Basis of Estimate

Project Baseline Devl
 WBS Filter 1EBB
 Activity Filter *

Starts In FY *

750	STRAIGHT TIME BASE	E120	SAFETY ENGINEERS	C222S	Water Svstem Operations	Linear	8.00	Hours
<i>Factors</i> 9 Hours								
						0.88934	[SYS 061400]	.88934200 - Svstem
750	STRAIGHT TIME BASE	M020	MANAGERS (GRADE 69 - 72)	C222S	Water Svstem Operations	Linear	29.35	Hours
<i>Factors</i> 33 Hours								
						0.88934	[SYS 061400]	.88934200 - Svstem
750	STRAIGHT TIME BASE	P140	SAFEGUARDS AND OTHER SECURI	W101S	Operations Support	Linear	32.02	Hours
<i>Factors</i> 36 Hours								
						0.88934	[SYS 061400]	.88934200 - Svstem
A5H	SUBCONTRACTED SRVS	0000	NONE	C222S	Water Svstem Operations	Linear	11,370.57	Dollars
<i>Factors</i> 12500 Dollars 1.02283 -- FY00 Escalation --								
						0.88934	[SYS 061400]	.88934200 - Svstem

Line Item IBCGER0310 - Pollutant Source Reponses/Investigations

BOE	HISTORICAL DATA SOURCE: FY99 WBS Spending Variance Reports for WBS Element 1.1.03.06.01.04, Activity BZCG100620. ITEM DESCRIPTION: Respond to Site spills that may impact surface water quality; perform inspections to prevent release of surface water pollutant sources. BREAKDOWN OF HISTORICAL DATA: The BOE was developed using activity based cost estimating. Estimate based on historic costs from FY99. Item - Pollutant Source Responses/Investigations Units - 1 Lot Unit Cost - 238 Hours & \$3,580 Unit Cost Adjustment factor - N/A Revised Unit Cost - N/A Basis for adjustment - N/A This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.							
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Resources	<i>Cost Element</i>		<i>Skill</i>		<i>Department</i>		<i>Curve</i>	<i>Quantity</i>	<i>Units</i>
	750	STRAIGHT TIME BASE	E050	ENVIRONMENTAL ENGINEERS	C222S	Water Svstem Operations	Linear	168.97	Hours
<i>Factors</i> 190 Hours									
						0.88934	[SYS 061400]	.88934200 - Svstem	
	750	STRAIGHT TIME BASE	M020	MANAGERS (GRADE 69 - 72)	C222S	Water Svstem Operations	Linear	42.69	Hours
<i>Factors</i> 48 Hours									
						0.88934	[SYS 061400]	.88934200 - Svstem	
	A5R	MISC EXPENSES	0000	NONE	C222S	Water Svstem Operations	Linear	3,183.76	Dollars
<i>Factors</i> 3500 \$ Education Reimbursement 1.02283 -- FY00 Escalation --									
						0.88934	[SYS 061400]	.88934200 - Svstem	

Line Item IBCGER0315 - Incidental Waters

BOE	HISTORICAL DATA SOURCE: FY99 WBS Spending Variance Reports for WBS Element 1.1.03.06.01.04, Activity BZCG100620. ITEM DESCRIPTION: Coordinate characterization and disposition of incidental waters with building personnel, utilities and environmental coordinators; maintain and upgrade incidental waters database, and prepare monthly summary report. Monthly report (12/Year) BREAKDOWN OF HISTORICAL DATA: The BOE was developed using activity based cost estimating. Estimate based on historic costs from FY99. Item - Incidental Waters Program Units -HOURS Unit Cost - 828 Hours Unit Cost Adjustment factor - N/A Revised Unit Cost - N/A Basis for adjustment - N/A This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.							
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WBS No: 1EBB0402
 Activity ID: 1EBB422040

Rockv Flats Closure Project
Baseline Cost and Basis of Estimate

Project Baseline Devl
 WBS Filter 1EBB
 Activity Filter *

Resources	Cost Element	Skill	Department	Curve	Quantity	Units
	750 STRAIGHT TIME BASE	E050 ENVIRONMENTAL ENGINEERS	C222S Water Svstem Operations	Linear	48.91	Hours
Factors	55 Hours					
	750 STRAIGHT TIME BASE	M020 MANAGERS (GRADE 69 - 72)	C222S Water Svstem Operations	Linear	12.45	Hours
Factors	14 Hours					
0.88934 [SYS 061400] .88934200 - Svstem						
0.88934 [SYS 061400] .88934200 - Svstem						

Line Item IBCGER0320 - Internal Waste Streams

BOE
 HISTORICAL DATA SOURCE:
 FY99 WBS Spending Variance Reports for WBS Element 1.1.03.06.01.04, Activity BZCG100620.

ITEM DESCRIPTION:
 Coordinate characterization and disposition of internal waste streams with Waste Water Treatment Plant (WWTP) manager, maintain and upgrade internal waste streams database, and prepare monthly reports. Monthly report (12/Year)

BREAKDOWN OF HISTORICAL DATA:
 The BOE was developed using activity based cost estimating. Estimate based on historic costs from FY99.
 Item - Incidental Waters Program
 Units - HOURS
 Unit Cost - 552 Hours
 Unit Cost Adjustment factor - N/A
 Revised Unit Cost - N/A
 Basis for adjustment - N/A

This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

Resources	Cost Element	Skill	Department	Curve	Quantity	Units
	750 STRAIGHT TIME BASE	E050 ENVIRONMENTAL ENGINEERS	C222S Water Svstem Operations	Linear	28.46	Hours
Factors	32 Hours					
	750 STRAIGHT TIME BASE	M020 MANAGERS (GRADE 69 - 72)	C222S Water Svstem Operations	Linear	12.45	Hours
Factors	14 Hours					
0.88934 [SYS 061400] .88934200 - Svstem						
0.88934 [SYS 061400] .88934200 - Svstem						

Line Item IBCGER0330 - Master Tank Database/DIS Query Support

BOE
 HISTORICAL DATA SOURCE:
 FY99 WBS Spending Variance Reports for WBS Element 1.1.03.06.01.06, Activity BZCG1010.

ITEM DESCRIPTION:
 Support queries and data entry in the Master Tank Database (MTDB) and support Drain Identification Study (DIS) file control/information requests.

BREAKDOWN OF HISTORICAL DATA:
 The BOE was developed using activity based cost estimating. Estimate based on historic costs from FY98.
 Item - Master Tank Database/DIS query annual support
 Units - HOURS
 Unit Cost - 256 hours
 Unit Cost Adjustment factor - N/A
 Revised Unit Cost - N/A
 Basis for adjustment - N/A

This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

Resources	Cost Element	Skill	Department	Curve	Quantity	Units
	750 STRAIGHT TIME BASE	E050 ENVIRONMENTAL ENGINEERS	C222S Water Svstem Operations	Linear	64.03	Hours
Factors	72 hr					
	750 STRAIGHT TIME BASE	M020 MANAGERS (GRADE 69 - 72)	C222S Water Svstem Operations	Linear	42.69	Hours
Factors	48 Hours/ls					
0.88934 [SYS 061400] .88934200 - Svstem						
0.88934 [SYS 061400] .88934200 - Svstem						

WBS No: 1EBB0402
 Activity ID: 1EBB422040

Rockv Flats Closure Project
Baseline Cost and Basis of Estimate

Project: Baseline Devl
 WBS Filter: 1EBB
 Activity Filter: *

Starts In FY: *

750	STRAIGHT TIME BASE	P060	COMPUTER SYSTEMS ANALYSTS	C222S	Water Svstem Operations	Linear	92.49	Hours
<i>Factors</i> 104 Hours								

0.88934 [SYS 061400] .88934200 - Svstem

750	STRAIGHT TIME BASE	T070	MAINT. TECHS. (INSTRUMENT TEC	KE10H	Indust/Site Svrs Steelworkers	Linear	28.46	Hours
<i>Factors</i> 32 hrs								

0.88934 [SYS 061400] .88934200 - Svstem

Line Item SYS - Contingency And Escalation

BOE

Resources

Cost Element		Skill		Department		Curve	Quantity	Units
CON	CONTINGENCY	0000	NONE	ZDEPT	No Department	Linear	7,922.26	Dollars
<i>Factors</i> 7922.26 Dollars								
ESC	ESCALATION	0000	NONE	ZDEPT	No Department	Linear	16,677.10	Dollars
<i>Factors</i> 16677.1 Dollars								

Activity ID: 1EBB422050 Description: Pollutant Source Control FY05

Cost Risk 1 Schedule Risk 1

Line Item	Description	Quantity	Units	BOE Type	Labor Hours/Unit	Labor Hours Total	Labor Cost Total	Materials/ Sub Cost	Contingency & Escalation	Total Prime Cost	Burden Cost	Total Cost
IBCGER0305	Watershed Pollutant Source Control Projects	5.00	ea	HC	188	938	30,803	56,853	0	87,656	10,720	98,376
IBCGER0310	Pollutant Source Reponses/Investigations	1.00	ls	HC	212	212	7,277	3,184	0	10,460	2,532	12,993
IBCGER0315	Incidental Waters	12.00	ea	HC	61	736	25,337	0	0	25,337	8,817	34,154
IBCGER0320	Internal Waste Streams	12.00	ea	HC	41	491	18,081	0	0	18,081	6,292	24,373
IBCGER0330	Master Tank Database/DIS Query Support	1.00	ls	HC	228	228	7,156	0	0	7,156	2,490	9,646
SYS	Contingency And Escalation	1.00	ea	EE	0	0	0	0	95,020	95,020	0	95,020
Total for Activity 1EBB422050:						2,605	88,653	60,037	95,020	243,710	30,851	274,561

Line Item IBCGER0305 - Watershed Pollutant Source Control Projects

BOE

HISTORICAL DATA SOURCE:
 Historic cost data for similar projects - on file in Bldg. T130D, Room 71.

ITEM DESCRIPTION:
 Erosion control project to enhance quality of Site stormwater runoff - includes application of SoilGuard and/or TopSeal erosion control products to 3,000 square yards.(5 Projects/Year)

BREAKDOWN OF HISTORICAL DATA:
 The BOE was developed using activity based cost estimating. Estimate based on historic costs from FY96.
 Item - Erosion control project - 3,000 square yards
 Units -1 LOT
 Unit Cost - 1,055 Hours & \$63,927
 Unit Cost Adjustment factor - N/A
 Revised Unit Cost - N/A
 Basis for adjustment - N/A

This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

Resources

Cost Element		Skill		Department		Curve	Quantity	Units
750	STRAIGHT TIME BASE	E050	ENVIRONMENTAL ENGINEERS	C222S	Water Svstem Operations	Linear	118.28	Hours

Factors 133 Hours

0.88934 [SYS 061400] .88934200 - Svstem

750	STRAIGHT TIME BASE	E120	SAFETY ENGINEERS	C222S	Water Svstem Operations	Linear	8.00	Hours
<i>Factors</i> 9 Hours								

0.88934 [SYS 061400] .88934200 - Svstem

750	STRAIGHT TIME BASE	M020	MANAGERS (GRADE 69 - 72)	C222S	Water Svstem Operations	Linear	29.35	Hours
<i>Factors</i> 33 Hours								

0.88934 [SYS 061400] .88934200 - Svstem

750	STRAIGHT TIME BASE	P140	SAFEGUARDS AND OTHER SECURI	W101S	Operations Support	Linear	32.02	Hours
<i>Factors</i> 36 Hours								

0.88934 [SYS 061400] .88934200 - Svstem

WBS No: 1EBB0402
 Activity ID: 1EBB422050

Rockv Flats Closure Project
Baseline Cost and Basis of Estimate

Project Baseline Devl
 WBS Filter 1EBB
 Activity Filter *

Starts In FY *

A5H	SUBCONTRACTED SRVS	0000	NONE	C222S	Water System Operations	Linear	11,370.57	Dollars
<i>Factors</i>		12500	Dollars	1.02283 -- FY00 Escalation --				

0.88934 [SYS 061400] .88934200 - System

Line Item IBCGER0310 - Pollutant Source Reponses/Investigations

BOE	HISTORICAL DATA SOURCE: FY99 WBS Spending Variance Reports for WBS Element 1.1.03.06.01.04, Activity BZCG100620. ITEM DESCRIPTION: Respond to Site spills that may impact surface water quality; perform inspections to prevent release of surface water pollutant sources. BREAKDOWN OF HISTORICAL DATA: The BOE was developed using activity based cost estimating. Estimate based on historic costs from FY99. Item - Pollutant Source Responses/Investigations Units - 1 Lot Unit Cost - 238 Hours & \$3,580 Unit Cost Adjustment factor - N/A Revised Unit Cost - N/A Basis for adjustment - N/A This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.							
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<i>Cost Element</i>		<i>Skill</i>		<i>Department</i>		<i>Curve</i>	<i>Quantity</i>	<i>Units</i>
750	STRAIGHT TIME BASE	E050	ENVIRONMENTAL ENGINEERS	C222S	Water System Operations	Linear	168.97	Hours
<i>Factors</i>		190	Hours					
							0.88934	[SYS 061400] .88934200 - System
750	STRAIGHT TIME BASE	M020	MANAGERS (GRADE 69 - 72)	C222S	Water System Operations	Linear	42.69	Hours
<i>Factors</i>		48	Hours					
							0.88934	[SYS 061400] .88934200 - System
A5R	MISC EXPENSES	0000	NONE	C222S	Water System Operations	Linear	3,183.76	Dollars
<i>Factors</i>		3500	\$ Education Reimbursement	1.02283 -- FY00 Escalation --				
							0.88934	[SYS 061400] .88934200 - System

Line Item IBCGER0315 - Incidental Waters

BOE	HISTORICAL DATA SOURCE: FY99 WBS Spending Variance Reports for WBS Element 1.1.03.06.01.04, Activity BZCG100620. ITEM DESCRIPTION: Coordinate characterization and disposition of incidental waters with building personnel, utilities and environmental coordinators; maintain and upgrade incidental waters database, and prepare monthly summary report. Monthly report (12/Year) BREAKDOWN OF HISTORICAL DATA: The BOE was developed using activity based cost estimating. Estimate based on historic costs from FY99. Item - Incidental Waters Program Units -HOURS Unit Cost - 828 Hours Unit Cost Adjustment factor - N/A Revised Unit Cost - N/A Basis for adjustment - N/A This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.							
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<i>Cost Element</i>		<i>Skill</i>		<i>Department</i>		<i>Curve</i>	<i>Quantity</i>	<i>Units</i>
750	STRAIGHT TIME BASE	E050	ENVIRONMENTAL ENGINEERS	C222S	Water System Operations	Linear	48.91	Hours
<i>Factors</i>		55	Hours					
							0.88934	[SYS 061400] .88934200 - System
750	STRAIGHT TIME BASE	M020	MANAGERS (GRADE 69 - 72)	C222S	Water System Operations	Linear	12.45	Hours
<i>Factors</i>		14	Hours					
							0.88934	[SYS 061400] .88934200 - System

Line Item IBCGER0320 - Internal Waste Streams

BOE	HISTORICAL DATA SOURCE:							
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WBS No: 1EBB0402
 Activity ID: 1EBB422050

Rockv Flats Closure Project
Baseline Cost and Basis of Estimate

Project: Baseline Devl
 WBS Filter: 1EBB
 Activity Filter: *

Starts In FY *

FY99 WBS Spending Variance Reports for WBS Element 1.1.03.06.01.04, Activity BZCG100620.

ITEM DESCRIPTION:
 Coordinate characterization and disposition of internal waste streams with Waste Water Treatment Plant (WWTP) manager, maintain and upgrade internal waste streams database, and prepare monthly reports. Monthly report (12/Year)

BREAKDOWN OF HISTORICAL DATA:
 The BOE was developed using activity based cost estimating. Estimate based on historic costs from FY99.
 Item - Incidental Waters Program
 Units - HOURS
 Unit Cost - 552 Hours
 Unit Cost Adjustment factor - N/A
 Revised Unit Cost - N/A
 Basis for adjustment - N/A

This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

Resources		Cost Element	Skill	Department	Curve	Quantity	Units
750	STRAIGHT TIME BASE	E050	ENVIRONMENTAL ENGINEERS	C222S	Water Svstem Operations	Linear	28.46 Hours
Factors		32	Hours				
						0.88934	[SYS 061400] .88934200 - Svstem
750	STRAIGHT TIME BASE	M020	MANAGERS (GRADE 69 - 72)	C222S	Water Svstem Operations	Linear	12.45 Hours
Factors		14	Hours				
						0.88934	[SYS 061400] .88934200 - Svstem

Line Item IBCGER0330 - Master Tank Database/DIS Query Support

BOE

HISTORICAL DATA SOURCE:
 FY99 WBS Spending Variance Reports for WBS Element 1.1.03.06.01.06, Activity BZCG1010.

ITEM DESCRIPTION:
 Support queries and data entry in the Master Tank Database (MTDB) and support Drain Identification Study (DIS) file control/information requests.

BREAKDOWN OF HISTORICAL DATA:
 The BOE was developed using activity based cost estimating. Estimate based on historic costs from FY98.
 Item - Master Tank Database/DIS query annual support
 Units - HOURS
 Unit Cost - 256 hours
 Unit Cost Adjustment factor - N/A
 Revised Unit Cost - N/A
 Basis for adjustment - N/A

This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

Resources		Cost Element	Skill	Department	Curve	Quantity	Units
750	STRAIGHT TIME BASE	E050	ENVIRONMENTAL ENGINEERS	C222S	Water Svstem Operations	Linear	64.03 Hours
Factors		72	hr				
						0.88934	[SYS 061400] .88934200 - Svstem
750	STRAIGHT TIME BASE	M020	MANAGERS (GRADE 69 - 72)	C222S	Water Svstem Operations	Linear	42.69 Hours
Factors		48	Hours/ls				
						0.88934	[SYS 061400] .88934200 - Svstem
750	STRAIGHT TIME BASE	P060	COMPUTER SYSTEMS ANALYSTS	C222S	Water Svstem Operations	Linear	92.49 Hours
Factors		104	Hours				
						0.88934	[SYS 061400] .88934200 - Svstem
750	STRAIGHT TIME BASE	T070	MAINT. TECHS. (INSTRUMENT TEC	KE10H	Indust/Site Svrs Steelworkers	Linear	28.46 Hours
Factors		32	hrs				
						0.88934	[SYS 061400] .88934200 - Svstem

Line Item SYS - Contingency And Escalation

BOE

Resources		Cost Element	Skill	Department	Curve	Quantity	Units
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WBS No: 1EBB0402
 Activity ID: 1EBB422050

Rockv Flats Closure Project
Baseline Cost and Basis of Estimate

Project Baseline Devl
 WBS Filter 1EBB
 Activity Filter *

Starts In FY *

CON	CONTINGENCY	0000	NONE	ZDEPT	No Department	Linear	67,206.13	Dollars
Factors 67206.1 Dollars								
ESC	ESCALATION	0000	NONE	ZDEPT	No Department	Linear	27,813.75	Dollars
Factors 27813.8 Dollars								

Activity ID: 1EBB422060 Description: Pollutant Source Control FY07

Cost Risk 1 Schedule Risk 1

Line Item	Description	Quantity	Units	BOE Type	Labor Hours/Unit	Labor Hours Total	Labor Cost Total	Materials/ Sub Cost	Contingency & Escalation	Total Prime Cost	Burden Cost	Total Cost
IBCGER0305	Watershed Pollutant Source Control Projects	2.00	ea	HC	164	327	11,225	22,741	0	33,967	13,976	47,943
SYS	Contingency And Escalation	1.00	ea	EE	0	0	0	0	19,289	19,289	0	19,289
Total for Activity 1EBB422060:						327	11,225	22,741	19,289	53,255	13,976	67,231

Line Item IBCGER0305 - Watershed Pollutant Source Control Projects

BOE
 HISTORICAL DATA SOURCE:
 Historic cost data from FY96 for similar projects - on file in Bldg. T130D Room 71.

ITEM DESCRIPTION:
 Erosion control project to enhance quality of Site stormwater runoff - includes application of SoilGuard and/or TopSeal erosion control products to 5,000 square yards.

BREAKDOWN OF HISTORICAL DATA:
 The BOE was developed using activity based cost estimating. Estimate based on historic costs from FY96.
 Item - Erosion control project - 10,000 square yards
 Units - 2 project
 Unit Cost - 150 K-H team hours; \$25,000 subcontracted
 Unit Cost Adjustment factor - N/A
 Revised Unit Cost - N/A
 Basis for adjustment - N/A

This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

Resources

Cost Element	Skill	Department	Curve	Quantity	Units
750 STRAIGHT TIME BASE	E050 ENVIRONMENTAL ENGINEERS	C103S Environmental Compliance	Linear	118.28	Hours
Factors 133 Hours					
0.88934 [SYS 061400] .88934200 - Ssystem					
750 STRAIGHT TIME BASE	E130 OTHER ENGINEERS	C105S Work Control Center	Linear	16.01	Hours
Factors 18 Hours					
0.88934 [SYS 061400] .88934200 - Ssystem					
750 STRAIGHT TIME BASE	M020 MANAGERS (GRADE 69 - 72)	C222S Water Svstem Operations	Linear	29.35	Hours
Factors 33 Hours					
0.88934 [SYS 061400] .88934200 - Ssystem					
A5H SUBCONTRACTED SRVS	0000 NONE	C222S Water Svstem Operations	Linear	11,370.57	Dollars
Factors 12500 Dollars 1.02283 -- FY00 Escalation --					
0.88934 [SYS 061400] .88934200 - Ssystem					

Line Item SYS - Contingency And Escalation

BOE

Resources

Cost Element	Skill	Department	Curve	Quantity	Units
CON CONTINGENCY	0000 NONE	ZDEPT No Department	Linear	10,291.73	Dollars
Factors 10291.7 Dollars					
ESC ESCALATION	0000 NONE	ZDEPT No Department	Linear	8,997.03	Dollars
Factors 8997.03 Dollars					

Activity ID: 1EBB423000 Description: Remove GAC from existing GAC Tanks

Cost Risk 2 Schedule Risk 2

Line Item	Description	Quantity	Units	BOE Type	Labor Hours/Unit	Labor Hours Total	Labor Cost Total	Materials/ Sub Cost	Contingency & Escalation	Total Prime Cost	Burden Cost	Total Cost
10	Remove GAC from SW Tanks	1.00	ea	EE	966	966	25,235	558,146	0	583,381	8,908	592,289
SYS	Contingency And Escalation	1.00	ea	EE	0	0	0	0	88,525	88,525	0	88,525
Total for Activity 1EBB423000:						966	25,235	558,146	88,525	671,906	8,908	680,814

WBS No: 1EBB0402
Activity ID: 1EBB423000

Rockv Flats Closure Project
Baseline Cost and Basis of Estimate

Project Baseline Devl
WBS Filter 1EBB
Activity Filter *

Starts In FY *

Line Item 10 - Remove GAC from SW Tanks

BOE

Estimator Experience - Estimator is familiar with the tank systems employed and the treatment operations that were performed at the Site.

Item Desc - Removal of Granulated Activated Carbon (GAC) from tanks at Pond A-4 (Tanks 2811, 2812, 2813, 2814) and two GAC tanks at Pond C-2 (Tanks 2976 and 2977).

Breakdown of Estimator Cost Data:
Item - Removal Operations Daily Management, WADlet Management, Reporting Functions
Units - Site Labor hours
Unit Cost - 0 hours
Unit Cost Adjustment factor - 453
Revised Unit Cost - 453 hours
Basis for adjustment - Hours reflect daily magement of a subcontractor to perform GAC removal operations, performance of CTR duties, WADlet management activities, and integration of support organization activities necessary for project completion.

Item - Field Construction Supervisor
Units - Site Labor hours
Unit Cost - 0 hours
Unit Cost Adjustment factor - 453
Revised Unit Cost - 453 hours
Basis for adjustment - Hours reflect Field Construction Supervision of the subcontractors, required daily management activities to ensure compliance with Engineering Drawings and Orders, performance of daily Pre-evolution Briefings, and Site completion testing to ensure that all work meets Site work requirements.

Item - GAC Removal Quality Assurance Support
Units - Dollars (Subcontract Labor Hours)
Unit Cost - 0 hours
Unit Cost Adjustment factor - 40
Revised Unit Cost - 40 hours X \$50.00/Hr.
Basis for adjustment - QA personnel will ensure that developed Engineered Drawings, Health and Safety Plans, and Field Log Books meet applicable Site QA requirements.

Item - GAC Removal Planning-Budget Integration
Units - Dollars (Subcontracted Labor Hours)
Unit Cost - \$0
Unit Cost Adjustment factor - 1600
Revised Unit Cost - \$1,600
Basis for adjustment - PB&I provides WADlet Kits and provides technical assistance with preparing PPRs, BCPs, and accounting issue resolution.

Item - Radiation Control Technologist Support
Units - Site Labor Hours
Unit Cost - 0 hours
Unit Cost Adjustment factor - 20
Revised Unit Cost - 20 hours
Basis for adjustment - Dispositioning of GAC requires radiological screening and/or evaluation prior to removal.

Item - Program Compliance Activities for Pond Operations
Units - Site Labor Hours
Unit Cost - 0
Unit Cost Adjustment factor - 40
Revised Unit Cost - 40 hours
Basis for adjustment - Program Compliance hours are for training verification and for contractor personnel to attend Site-required training.

Item - Radiological Engineers for Pond Operations
Units - Site Labor Hours
Unit Cost - 0
Unit Cost Adjustment factor -80
Revised Unit Cost - 80 hours
Basis for adjustment - Dispositioning of removed GAC material requires demonstrating no radioactivity added to the GAC materials inside the tanks from Site operations.

Breakdown of Historical Data:
Item - GAC Removal Industrial Safety Support

WBS No: 1EBB0402
 Activity ID: 1EBB423000

Rockv Flats Closure Project
Baseline Cost and Basis of Estimate

Project Baseline Devl
 WBS Filter 1EBB
 Activity Filter *

Starts In FY *

Units - Site Labor Hours
 Unit Cost - 0 hours
 Unit Cost Adjustment factor - 40
 Revised Unit Cost - 40 hours
 Basis for adjustment - Industrial Safety support is required to ensure that GAC removal operations adhere to OSHA standards and Site Industrial Hygiene and Safety requirements.

Item - Subcontracted Labor to Remove GAC from 6 Site Tanks
 Units - Dollars
 Unit Cost - 0
 Unit Cost Adjustment factor - \$600,000
 Revised Unit Cost - \$600,000
 Basis for adjustment - A subcontractor is required to mobilize, develop a project Health and Safety Plan, attend Site-required training, assist in development in a project IWCP, introduce a surfactant into the aged GAC, perform GAC material break-up, and slurry GAC materials into a tanker truck for off-Site dispositioning.

Item - Procurement Support to Remove GAC from 6 Site Tanks
 Units - Dollars
 Unit Cost - 0
 Unit Cost Adjustment factor - \$10,000
 Revised Unit Cost - \$10,000
 Basis for Adjustment - This activity involves the project bid phase to subcontract removal of the GAC from the 6 Site tanks. This activity includes issuing the Bidding Requirements, Contract Forms, Conditions of the Contract, and Specifications for the removal of the GAC from the tanks. Also included are issuance of Contract Drawings.
 In addition this activity includes providing construction requirements interpretation, received bid cost review, providing numerous copies of Contract Bid Packages, conducting prospective bidders conference, review and approval of Contract Award, and performance of contract addenda and revisions.

This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

Resources

Cost Element		Skill		Department		Curve	Quantity	Units
750	STRAIGHT TIME BASE	E020	CIVIL ENGINEERS	C222S	Water Svstem Operations	Linear	402.87	Hours
<i>Factors</i> 453 hrs								
							0.88934	[SYS 061400] 88934200 - Svstem
750	STRAIGHT TIME BASE	P080	HEALTH PHYSICISTS	C222S	Water Svstem Operations	Linear	71.15	Hours
<i>Factors</i> 80 hrs								
							0.88934	[SYS 061400] 88934200 - Svstem
750	STRAIGHT TIME BASE	P150	TRAINERS	C222S	Water Svstem Operations	Linear	35.57	Hours
<i>Factors</i> 40 hrs								
							0.88934	[SYS 061400] 88934200 - Svstem
750	STRAIGHT TIME BASE	P170	OTHER ADMINISTRATIVE & PROFE	C222S	Water Svstem Operations	Linear	402.87	Hours
<i>Factors</i> 453 hrs								
							0.88934	[SYS 061400] 88934200 - Svstem
750	STRAIGHT TIME BASE	P170	OTHER ADMINISTRATIVE & PROFE	C222S	Water Svstem Operations	Linear	17.79	Hours
<i>Factors</i> 20 hrs								
							0.88934	[SYS 061400] 88934200 - Svstem
750	STRAIGHT TIME BASE	P170	OTHER ADMINISTRATIVE & PROFE	C222S	Water Svstem Operations	Linear	35.57	Hours
<i>Factors</i> 40 hrs								
							0.88934	[SYS 061400] 88934200 - Svstem
A5H	SUBCONTRACTED SRVS	0000	NONE	C222S	Water Svstem Operations	Linear	1.455.43	Dollars
<i>Factors</i> 1600 \$		1.02283 -- FY00 Escalation --						
							0.88934	[SYS 061400] 88934200 - Svstem
A5H	SUBCONTRACTED SRVS	0000	NONE	C222S	Water Svstem Operations	Linear	9.096.46	Dollars
<i>Factors</i> 10000 \$		1.02283 -- FY00 Escalation --						
							0.88934	[SYS 061400] 88934200 - Svstem
A5H	SUBCONTRACTED SRVS	0000	NONE	C222S	Water Svstem Operations	Linear	545.787.40	Dollars
<i>Factors</i> 600000 \$		1.02283 -- FY00 Escalation --						
							0.88934	[SYS 061400] 88934200 - Svstem

WBS No: 1EBB0402
 Activity ID: 1EBB423000

Rockv Flats Closure Project
Baseline Cost and Basis of Estimate

Project: Baseline Devl
 WBS Filter: 1EBB
 Activity Filter: *

Starts In FY: *

A5H	SUBCONTRACTED SRVS	S020	ENVIRONMENTAL SCIENTISTS	C222S	Water Svstem Operations	Linear	1,806.56	Dollars
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Factors: 1986 dollars

1.02283 -- FY00 Escalation --

0.88934 [SYS 061400] .88934200 - System

Line Item SYS - Contingency And Escalation

BOE

Resources

Cost Element	Skill	Department	Curve	Quantity	Units
CON CONTINGENCY	0000 NONE	ZDEPT No Department	Linear	60,846.89	Dollars

Factors: 60846.9 Dollars

ESC ESCALATION	0000 NONE	ZDEPT No Department	Linear	27,678.50	Dollars
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Factors: 27678.5 Dollars

Activity ID: 1EBB423010 Description: Remove Pond C-2 to B-5 Transfer Pipeline

Cost Risk 2 Schedule Risk 2

Line Item	Description	Quantity	Units	BOE Type	Labor Hours/Unit	Labor Hours Total	Labor Cost Total	Materials/ Sub Cost	Contingency & Escalation	Total Prime Cost	Burden Cost	Total Cost
0010	Remove Pond C-2 to B-5 Pipeline	1.00	ea	HC	374	374	10,070	87,306	0	97,376	3,484	100,860
SYS	Contingency And Escalation	1.00	ea	EE	0	0	0	0	27,963	27,963	0	27,963
Total for Activity 1EBB423010:						374	10,070	87,306	27,963	125,339	3,484	128,823

Line Item 0010 - Remove Pond C-2 to B-5 Pipeline

BOE

Source of Historical Data -

Breakdown of Historical Cost Data:

Item - Removal Operations Daily Management, WADlet Management, Reporting Functions

Units - Site Labor hours

Unit Cost - 0 hours

Unit Cost Adjustment factor - 160

Revised Unit Cost - 160 hours

Basis for adjustment - Hours reflect daily mangement of a subcontractor to perform GAC removal operations, performance of CTR duties, WADlet management activities, and integration of support organization activities necessary for project completion.

Item - Field Construction Supervisor

Units - Site Labor hours

Unit Cost - 0 hours

Unit Cost Adjustment factor - 40

Revised Unit Cost - 40 hours

Basis for adjustment - Hours reflect Field Construction Supervision of the subcontractors, required management activities to ensure compliance with Engineering Drawings and Orders.

Item - Pipeline Removal Quality Assurance Support

Units - Dollars (Subcontract Labor Hours)

Unit Cost - 0 hours

Unit Cost Adjustment factor - 10

Revised Unit Cost - 10 hours X \$60/Hr.

Basis for adjustment - QA personnel will ensure that developed Engineered Drawings, Health and Safety Plans, and Field Log Books meet applicable Site QA requirements.

Item - Pipeline Removal Planning-Budget Integration

Units - Dollars (Subcontracted Labor Hours)

Unit Cost - \$0

Unit Cost Adjustment factor - \$800

Revised Unit Cost - \$800

Basis for adjustment - PB&I provides WADlet Kits and provides technical assistance with preparing PPRs, BCPs, and accounting issue resolution.

Item - Radiation Control Technologist Support

Units - Site Labor Hours

Unit Cost - 0 hours

Unit Cost Adjustment factor - 60

Revised Unit Cost - 60 hours

Basis for adjustment - Dispositioning of pipeline requires radiological screening and/or evaluation prior to removal.

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Baseline Cost and Basis of Estimate

Project Baseline Devl
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Starts In FY *

Item - Program Compliance Activities for Pond Operations
 Units - Site Labor Hours
 Unit Cost - 0
 Unit Cost Adjustment factor - 40
 Revised Unit Cost - 40 hours
 Basis for adjustment - Program Compliance hours are for training verification and for contractor personnel to attend Site-required training.

Item - Radiological Engineers for Pond Operations
 Units - Site Labor Hours
 Unit Cost - 0
 Unit Cost Adjustment factor - 10
 Revised Unit Cost - 10 hours
 Basis for adjustment - Dispositioning of removed pipeline material requires demonstrating no radioactivity added to the inside of the pipeline from Site operations.

Item - Industrial Safety Support
 Units - Site Labor Hours
 Unit Cost - 0 hours
 Unit Cost Adjustment factor - 20
 Revised Unit Cost - 20 hours
 Basis for adjustment - Industrial Safety support is required to ensure that pipeline removal operations adhere to OSHA standards and Site Industrial Hygiene and Safety requirements.

Item - Subcontracted Labor to Remove Pond C-2 to Pond B-5 Pipeline
 Units - Dollars
 Unit Cost - 0
 Unit Cost Adjustment factor - \$89,580
 Revised Unit Cost - \$89,580
 Basis for adjustment - A subcontractor is required to mobilize, develop a project Health and Safety Plan, attend Site-required training, assist in development in a project IWCP, remove pipeline from an ecologically sensitive area (slope wetlands), cut pipeline into manageable sections, package and stack for transport to PU&D for recycle.

Item - Procurement Support to Pond C-2 to Pond B-5 Pipeline
 Units - Dollars
 Unit Cost - 0
 Unit Cost Adjustment factor - \$5,000
 Revised Unit Cost - \$5,000
 Basis for Adjustment - This activity involves the project bid phase to subcontract removal of the pipeline. This activity includes issuing the Bidding Requirements, Contract Forms, Conditions of the Contract, and Specifications for the removal of the pipeline. Also included are issuance of Contract Drawings.

In addition this activity includes providing construction requirements interpretation, received bid cost review, providing numerous copies of Contract Bid Packages, conducting prospective bidders conference, review and approval of Contract Award, and performance of contract addenda and revisions.

Item - Transportation and Trucking Support
 Units - Site Labor Hours
 Unit Cost - 0 hours
 Unit Cost Adjustment factor - 80
 Revised Unit Cost - 80 hours
 Basis for adjustment - Trucking support is required to transport radiologically screened and packaged pipe sections to PU&D for recycling.

This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

Resources

Cost Element		Skill		Department		Curve	Quantity	Units
750	STRAIGHT TIME BASE	E020	CIVIL ENGINEERS	C222S	Water Svstem Operations	Linear	35.57	Hours
Factors 40 hrs						0.88934	[SYS 061400]	.88934200 - System
750	STRAIGHT TIME BASE	P080	HEALTH PHYSICISTS	C222S	Water Svstem Operations	Linear	53.36	Hours
Factors 60 hrs						0.88934	[SYS 061400]	.88934200 - System

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750	STRAIGHT TIME BASE	P150	TRAINERS	C222S	Water Svstem Operations	Linear	35.57	Hours
<i>Factors</i>		40	hrs					
							0.88934	[SYS 061400] .88934200 - Svstem
750	STRAIGHT TIME BASE	P170	OTHER ADMINISTRATIVE & PROFE	C222S	Water Svstem Operations	Linear	142.29	Hours
<i>Factors</i>		160	hrs					
							0.88934	[SYS 061400] .88934200 - Svstem
750	STRAIGHT TIME BASE	P170	OTHER ADMINISTRATIVE & PROFE	C222S	Water Svstem Operations	Linear	17.79	Hours
<i>Factors</i>		20	hrs					
							0.88934	[SYS 061400] .88934200 - Svstem
750	STRAIGHT TIME BASE	P170	OTHER ADMINISTRATIVE & PROFE	C222S	Water Svstem Operations	Linear	17.79	Hours
<i>Factors</i>		20	hrs					
							0.88934	[SYS 061400] .88934200 - Svstem
750	STRAIGHT TIME BASE	P170	OTHER ADMINISTRATIVE & PROFE	C242S	Transportation	Linear	71.15	Hours
<i>Factors</i>		80	hrs					
							0.88934	[SYS 061400] .88934200 - Svstem
A5H	SUBCONTRACTED SRVS	0000	NONE	C222S	Water Svstem Operations	Linear	727.72	Dollars
<i>Factors</i>		800	\$	1.02283	-- FY00 Escalation --			
							0.88934	[SYS 061400] .88934200 - Svstem
A5H	SUBCONTRACTED SRVS	0000	NONE	C222S	Water Svstem Operations	Linear	4,548.23	Dollars
<i>Factors</i>		5000	\$	1.02283	-- FY00 Escalation --			
							0.88934	[SYS 061400] .88934200 - Svstem
A5H	SUBCONTRACTED SRVS	0000	NONE	C222S	Water Svstem Operations	Linear	81,486.06	Dollars
<i>Factors</i>		89580	\$	1.02283	-- FY00 Escalation --			
							0.88934	[SYS 061400] .88934200 - Svstem
A5H	SUBCONTRACTED SRVS	S020	ENVIRONMENTAL SCIENTISTS	C222S	Water Svstem Operations	Linear	543.97	Dollars
<i>Factors</i>		598	dollars	1.02283	-- FY00 Escalation --			
							0.88934	[SYS 061400] .88934200 - System

Line Item SYS - Contingency And Escalation

BOE

Resources

Cost Element	Skill	Department	Curve	Quantity	Units
CON CONTINGENCY	0000 NONE	ZDEPT No Department	Linear	20,228.63	Dollars
<i>Factors</i>		20228.6	Dollars		
ESC ESCALATION	0000 NONE	ZDEPT No Department	Linear	7,734.47	Dollars
<i>Factors</i>		7734.48	Dollars		

Activity ID: 1EBB423020

Description: Remove STP to Pond B-4 Underground Pipeline

Cost Risk 2 Schedule Risk 2

Line Item	Description	Quantity	Units	BOE Type	Labor Hours/Unit	Labor Hours Total	Labor Cost Total	Materials/ Sub Cost	Contingency & Escalation	Total Prime Cost	Burden Cost	Total Cost
0010	STP Pipe Removal Project Mat	1.00	each	HC	498	498	13,063	0	0	13,063	3,684	16,747
0020	STP Pipe Removal Geotechnical Evaluation	1.00	each	HC	285	285	7,465	54,579	0	62,044	2,105	64,149
0030	STP Pipe Removal Surface Soil Sampling	1.00	each	HC	107	107	2,799	27,289	0	30,089	789	30,878
0040	STP Pipe Removal NEPA	1.00	each	HC	213	213	5,599	36,386	0	41,984	1,579	43,563
0050	STP Pipe Removal Regulatory Approvals	1.00	each	HC	142	142	3,732	18,193	0	21,925	1,053	22,978
0060	STP Pipe Removal Conceptual Design	1.00	each	HC	213	213	5,408	9,096	0	14,504	1,525	16,029
0070	STP Pipe Removal Titles I and II Design	1.00	each	HC	278	278	7,000	9,096	0	16,096	1,974	18,070
0080	STP Pipe Removal Procurement (Bidding Process)	1.00	each	HC	545	545	13,760	22,741	0	36,501	3,880	40,381
0090	STP Pipe Removal IWCP/Readiness Assessment	1.00	each	HC	534	534	13,639	18,193	0	31,832	3,846	35,678
0100	STP Pipe Removal Field Preparation	1.00	each	HC	105	105	2,725	11,825	0	14,551	768	15,319
0105	STP Pipe Removal Foam Injection	1.00	each	HC	338	338	9,462	37,150	0	46,612	2,668	49,280
0110	STP Pipe Removal Excavation	1.00	each	HC	1,220	1,220	32,122	197,514	0	229,636	9,058	238,694
0120	STP Pipe Removal Non-Haz Waste Handling	1.00	each	HC	107	107	3,155	4,548	0	7,703	890	8,593
0130	STP Pipe Removal RAD Waste Handling	1.00	each	HC	569	569	15,899	27,289	0	43,188	4,483	47,671
0140	STP Pipe Removal Site Restoration	1.00	each	HC	178	178	4,570	21,297	0	25,867	1,289	27,156

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0150	STP Pipe Removal Project Closeout	1.00	each	HC	178	178	5,021	4,548	0	9,569	1,416	10,985
SYS	Contingency And Escalation	1.00	ea	EE	0	0	0	0	97,977	97,977	0	97,977
Total for Activity 1EBB423020:						5,510	145,418	499,746	97,977	743,141	41,008	784,149

Line Item 0010 - STP Pipe Removal Project Mgt

BOE The following basis of estimate provides a description of hours/dollars necessary to perform budget preparation and management for the entire WADlet activity. Hours and dollars budgeted for this ongoing activity item are based on actual values needed to perform same activities during FY98 and FY99.

WADlet Management
 - budget/schedule tracking - 20 hours/month X 3 months/quarter X 4 QTRs = 240 hours
 - BCP preparation - typically 1 per qtr. X (20 hours BCP prep + 2 hours proj. mgmt. oversight) X 4 QTRs = 88 hours
 - PPR preparation - 3 PPRs/qtr X 8 hours prep time/PPR X 4 QTRs = 96 hours

PB&I Support
 - PPR preparation - 3 PPRs/qtr X 2 hours review time/PPR X 4 QTRs = 24 hours
 - BCP preparation - typically 1 per qtr. X 4 hours review time/BCP X 4 QTRs = 16 hours
 - Budget tracking - 8 hours/month X 3 months/quarter X 4 QTRs = 96 hours

This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

Resources

Cost Element	Skill	Department	Curve	Quantity	Units
750 STRAIGHT TIME BASE	P170 OTHER ADMINISTRATIVE & PROFE	C106S Business Management Office	Linear	120.95	Hours
Factors 136 Hrs.					
750 STRAIGHT TIME BASE	P170 OTHER ADMINISTRATIVE & PROFE	C222S Water System Operations	Linear	377.08	Hours
Factors 424 hrs					

0.88934 ISYS 0614001.88934200 - Svstem
 0.88934 ISYS 0614001.88934200 - Svstem

Line Item 0020 - STP Pipe Removal Geotechnical Evaluation

BOE The purpose of this investigation is to provide specific geotechnical information necessary for characterization of soil contaminants prior to excavation of the STP Pipeline. These investigative activities include:

1. Site reconnaissance.
2. Field characterization of surface and subsurface conditions, including groundwater levels, soil descriptions, and engineering properties.
3. Collection of soil and geologic samples for the purpose of laboratory testing.
4. Reduction, interpretation, and presentation of laboratory test data.
5. Preparation of a Geotechnical Data Report to summarize the work performed and present the laboratory test results.

320 Hours for R440S (Surface Water) for task integration and oversight, issue resolution, and data result interpretation.

\$60,000 for contractor to develop the Geotechnical Data Report, which addresses the activities described above. This includes issuing a draft report to on-Site groups for review, comment resolution, and issuance of a Final Geotechnical Data Report.

This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

Resources

Cost Element	Skill	Department	Curve	Quantity	Units
750 STRAIGHT TIME BASE	P170 OTHER ADMINISTRATIVE & PROFE	C222S Water System Operations	Linear	284.59	Hours
Factors 320 hrs					
A5H SUBCONTRACTED SRVS	0000 NONE	C222S Water System Operations	Linear	54,578.74	Dollars
Factors 60000 \$ 1.02283 -- FY00 Escalation --					

0.88934 ISYS 0614001.88934200 - Svstem
 0.88934 ISYS 0614001.88934200 - Svstem

Line Item 0030 - STP Pipe Removal Surface Soil Sampling

BOE Pre-remediation sampling implements the site surface characterization activities to remove the soils without any containment structure. Water spraying will be utilized for dust suppression. The excavation crew will be in Level C personal protective equipment, due to the possibility of excavating localized

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hotspots.
 It is assumed that extensive surface soil characterization will be employed in order to minimize the soils that have to be removed and dispositioned as waste. Soil sampling will be used to demonstrate that soil excavation can be performed safely without a containment structure.
 This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

Resources	Cost Element	Skill	Department	Curve	Quantity	Units
	750 STRAIGHT TIME BASE	P170 OTHER ADMINISTRATIVE & PROFE	C222S Water System Operations	Linear	106.72	Hours
Factors	120 hrs					
	A5H SUBCONTRACTED SRVS	0000 NONE	C222S Water System Operations	Linear	27.289.37	Dollars
Factors	30000 \$	1.02283 -- FY00 Escalation --				
					0.88934 [SYS 061400] .88934200 - System	

Line Item 0040 - STP Pipe Removal NEPA

BOE
 An Environmental Assessment (EA) is expected to fulfill the provisions of the National Environmental Policy Act. The EA will evaluate the potential environmental impacts of a No Action Alternative, the Proposed Alternative, and any Alternative scenarios identified during the EA scoping process. The EA will also identify any proposed mitigation measures necessary due to impacts to existing wetlands and/or Preble's Meadow Jumping Mouse habitat.
 240 Hours for C222S (Surface Water) for task integration and oversight, issue resolution, and data result interpretation.
 \$40,000 for contractor to develop the Environmental Assessment, which includes impact assessments to human health and ecological resources. This includes issuing a draft Environmental Assessment to on-Site groups for review, comment resolution, and issuance of a Final Environmental Assessment.
 This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

Resources	Cost Element	Skill	Department	Curve	Quantity	Units
	750 STRAIGHT TIME BASE	P170 OTHER ADMINISTRATIVE & PROFE	C222S Water System Operations	Linear	213.44	Hours
Factors	240 hrs					
	A5H SUBCONTRACTED SRVS	0000 NONE	C222S Water System Operations	Linear	36.385.83	Dollars
Factors	40000 \$	1.02283 -- FY00 Escalation --				
					0.88934 [SYS 061400] .88934200 - System	

Line Item 0050 - STP Pipe Removal Regulatory Approvals

BOE
 Upon completion of the Environmental Assessment, it will be necessary to obtain appropriate Permits from the regulatory agencies such as the U.S. Fish and Wildlife Service, the U.S. Army Corps of Engineers, and the U.S. Environmental Protection Agency.
 Wetland protection compliance under the Clean Water Act is achieved through procurement of a Department of the Army (404) Permit from the U.S. Army Corps of Engineers. Wetland protection is required by Executive Order 11990, Wetland Protection. The policy and procedures for compliance with this Executive Order are established in the wetland environmental review requirements of 10 CFR 1022. Impacts to wetland habitats also require review and/or consultation under certain provisions of the Endangered Species Act, the Fish and Wildlife Coordination Act, and the Migratory Bird Treaty Act.
 The Site will need to obtain a Fugitive Particulate Emission Control Construction Permit, which includes a Fugitive Dust Control Plan, from the Colorado Department of Public Health and Environment, Air Pollution Control Division.
 This task addresses the work planning and activities necessary to achieve regulatory permits to construct the Controls and Mitigating Measures reservoir and dam.
 160 Hours for C222S (Surface Water) for task integration and oversight, issue resolution, and regulatory agency interface.
 \$20,000 for contractor to pursue necessary regulatory permits from appropriate regulatory agencies. This includes interfacing with appropriate regulatory agencies, identifying and implementing necessary requirements, and evaluating potential ecological and sensitive habitat impacts.
 This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

Resources	Cost Element	Skill	Department	Curve	Quantity	Units
	750 STRAIGHT TIME BASE	P170 OTHER ADMINISTRATIVE & PROFE	C222S Water System Operations	Linear	142.29	Hours
Factors	160 hrs					
					0.88934 [SYS 061400] .88934200 - System	

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A5H	SUBCONTRACTED SRVS	0000	NONE	C222S	Water System Operations	Linear	18,192.91	Dollars
<i>Factors</i>		20000	\$	1.02283 -- FY00 Escalation --				

0.88934 [SYS 061400] .88934200 - System

Line Item 0060 - STP Pipe Removal Conceptual Design

BOE
 The purposes of the Conceptual Engineering Design are to develop detailed information in support of the final design of the STP Pipeline removal. This includes foam injection of the existing pipeline to encapsulate any radioactive materials within the pipeline. This allows the Site to cut and remove the pipeline without a large containment structure. Actual cutting the pipeline into manageable pieces may involve small localized containment for the pipe cutting operations.

The Conceptual Engineering Design includes:

1. Engineering Study
2. Functional Design Criteria
3. Conceptual Design of the STP Pipeline removal

The Conceptual Engineering Design addresses technology options and Site-specific considerations, along with development of schematic designs.

80 Hours for C222S (Surface Water) for task integration and oversight, issue resolution, and data result interpretation.

160 Hours for C222S (Engineering) for Conceptual Engineering Design development, review, and oversight.

\$10,000 for contractor to develop the Conceptual Engineering Design, which addresses the activities described above. This includes issuing a draft report to on-Site groups for review, comment resolution, and issuance of a Final Conceptual Engineering Design report.

This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

Resources

<i>Cost Element</i>		<i>Skill</i>		<i>Department</i>		<i>Curve</i>	<i>Quantity</i>	<i>Units</i>
750	STRAIGHT TIME BASE	E020	CIVIL ENGINEERS	C222S	Water System Operations	Linear	142.29	Hours
<i>Factors</i>		160	hrs					
							0.88934	[SYS 061400] .88934200 - System
750	STRAIGHT TIME BASE	P170	OTHER ADMINISTRATIVE & PROFE	C222S	Water System Operations	Linear	71.15	Hours
<i>Factors</i>		80	hrs					
							0.88934	[SYS 061400] .88934200 - System
A5H	SUBCONTRACTED SRVS	0000	NONE	C222S	Water System Operations	Linear	9,096.46	Dollars
<i>Factors</i>		10000	\$	1.02283 -- FY00 Escalation --				
							0.88934	[SYS 061400] .88934200 - System

Line Item 0070 - STP Pipe Removal Titles I and II Design

BOE
 The purposes of the Engineering Title I and II Design activities are to develop detailed information in support of the removal of the STP Pipeline. This includes trenching and shoring, pipeline support during excavation, pipeline cutting to facilitate removal, soil stockpiling and stabilization, refilling the trench, and recontouring the site during restoration.

60 Hours for C222S (Surface Water) for task integration and oversight, issue resolution, and data result interpretation.

253 Hours for C222S (Engineering) for Title III Design review and oversight.

\$10,000 for a contractor to develop the Title I and II design, which addresses the activities described above. This includes issuing a draft report to on-Site groups for review, comment resolution, and issuance of a Final Title I and II Design.

This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

Resources

<i>Cost Element</i>		<i>Skill</i>		<i>Department</i>		<i>Curve</i>	<i>Quantity</i>	<i>Units</i>
750	STRAIGHT TIME BASE	E020	CIVIL ENGINEERS	C222S	Water System Operations	Linear	225.00	Hours
<i>Factors</i>		253	hrs					
							0.88934	[SYS 061400] .88934200 - System
750	STRAIGHT TIME BASE	P170	OTHER ADMINISTRATIVE & PROFE	C222S	Water System Operations	Linear	53.36	Hours
<i>Factors</i>		60	hrs					
							0.88934	[SYS 061400] .88934200 - System

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A5H	SUBCONTRACTED SRVS	0000	NONE	C222S	Water Svstem Operations	Linear	9.096.46	Dollars
<i>Factors</i>		10000	\$	1.02283 -- FY00 Escalation --				

0.88934 [SYS 061400] .88934200 - Svstem

Line Item 0080 - STP Pipe Removal Procurement (Bidding Process)

BOE This activity involves the project bid phase to subcontract removal of the existing STP Pipeline, which runs along the B-Series ponds to Pond B-4. This activity includes issuing the Bidding Requirements, Contract Forms, Conditions of the Contract, and Specifications for the removal of the STP Pipeline. Also included are issuance of Contract Drawings.

160 Hours for C222S (Surface Water) for task integration and oversight, issue resolution, received bid technical review, construction requirements interpretation, conducting Site walkdown for prospective bidders, and integrating Health and Safety requirements into the Bid Package.

453 Hours for C222S (Engineering) construction requirements interpretation, received bid technical review, identification of construction specification requirements, providing numerous copies of Contract Drawings, and review/approval of Design drawings.

\$25,000 for C106S (RFCSS Procurement) to issue bid notices, provide construction requirements interpretation, received bid cost review, providing numerous copies of Contract Bid Packages, conducting prospective bidders conference, review and approval of Contract Award, and performance of contract addenda and revisions.

This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

Resources

<i>Cost Element</i>		<i>Skill</i>		<i>Department</i>		<i>Curve</i>	<i>Quantity</i>	<i>Units</i>
750	STRAIGHT TIME BASE	E020	CIVIL ENGINEERS	C222S	Water Svstem Operations	Linear	402.87	Hours

Factors 453 hrs

0.88934 [SYS 061400] .88934200 - Svstem

750	STRAIGHT TIME BASE	P170	OTHER ADMINISTRATIVE & PROFF	C222S	Water Svstem Operations	Linear	142.29	Hours
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Factors 160 h

0.88934 [SYS 061400] .88934200 - Svstem

A5H	SUBCONTRACTED SRVS	0000	NONE	C106S	Business Management Office	Linear	22.741.14	Dollars
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Factors 25000 \$ 1.02283 -- FY00 Escalation --

0.88934 [SYS 061400] .88934200 - Svstem

Line Item 0090 - STP Pipe Removal IWCP/Readiness Assessment

BOE This task involves developing an Integrated Work Control Package for the field activities, and ensuring that the work activities conform to the Site's Conduct of Operations Manual.

300 Hours for C222S (Surface Water) for task integration and oversight, documentation development, and issue resolution.

300 Hours for C222S (Engineering) for IWCP development, review comment resolution, and issue resolution.

\$20,000 for contractor to assist in developing the IWCP, perform pre-job evolutions, make notifications per IWCP and Conduct of Operations Manual, and develop a job-specific Health and Safety Plan.

This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

Resources

<i>Cost Element</i>		<i>Skill</i>		<i>Department</i>		<i>Curve</i>	<i>Quantity</i>	<i>Units</i>
750	STRAIGHT TIME BASE	E020	CIVIL ENGINEERS	C222S	Water Svstem Operations	Linear	266.80	Hours

Factors 300 hrs

0.88934 [SYS 061400] .88934200 - Svstem

750	STRAIGHT TIME BASE	P170	OTHER ADMINISTRATIVE & PROFF	C222S	Water Svstem Operations	Linear	266.80	Hours
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Factors 300 hrs

0.88934 [SYS 061400] .88934200 - Svstem

A5H	SUBCONTRACTED SRVS	0000	NONE	C222S	Water Svstem Operations	Linear	18.192.91	Dollars
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Factors 20000 \$ 1.02283 -- FY00 Escalation --

0.88934 [SYS 061400] .88934200 - Svstem

Line Item 0100 - STP Pipe Removal Field Preparation

BOE Field Preparation involves the below key activities:

- 1) Utility Clearance and Permitting
- 2) Ecological Surveys

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- 3) IWCP Preparation/Review and Revision
- 4) Contractor Mobilization
- 5) Project Site Preparation

This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

Resources

Cost Element	Skill	Department	Curve	Quantity	Units
750 STRAIGHT TIME BASE	P080 HEALTH PHYSICISTS	C222S Water Svstem Operations	Linear	7.11	Hours
<i>Factors</i> 8 hrs					
0.88934 [SYS 061400] .88934200 - Svstem					
750 STRAIGHT TIME BASE	P150 TRAINERS	C222S Water Svstem Operations	Linear	62.25	Hours
<i>Factors</i> 70 hrs					
0.88934 [SYS 061400] .88934200 - Svstem					
750 STRAIGHT TIME BASE	P170 OTHER ADMINISTRATIVE & PROFE	C222S Water Svstem Operations	Linear	26.68	Hours
<i>Factors</i> 30 hrs					
0.88934 [SYS 061400] .88934200 - Svstem					
750 STRAIGHT TIME BASE	P170 OTHER ADMINISTRATIVE & PROFE	C222S Water Svstem Operations	Linear	8.89	Hours
<i>Factors</i> 10 hrs					
0.88934 [SYS 061400] .88934200 - Svstem					
A5H SUBCONTRACTED SRVS	0000 NONE	C222S Water Svstem Operations	Linear	2,728.94	Dollars
<i>Factors</i> 3000 \$ 1.02283 -- FY00 Escalation --					
0.88934 [SYS 061400] .88934200 - Svstem					
A5H SUBCONTRACTED SRVS	0000 NONE	C222S Water Svstem Operations	Linear	9,096.46	Dollars
<i>Factors</i> 10000 \$ 1.02283 -- FY00 Escalation --					
0.88934 [SYS 061400] .88934200 - Svstem					

Line Item 0105 - STP Pipe Removal Foam Injection

BOE

Foam injection will be employed to encapsulate and demobilize expected internal radioactive material adhering to the interior surfaces of the STP Pipeline. This will allow the pipeline to be cut into manageable sections without utilizing a large containment structure. Only localized containment may be necessary while performing the individual cuts (the pipeline will be cut into approximately 10-foot sections).

It is estimated that the STP Pipeline is 1300 linear feet long with a diameter of 12-inches. The internal volume associated with the pipeline is 2,042 cubic feet. The concrete valve structures and ancillary equipment will not be foam injected.

Typically a two part catalyst/resin polyurethane foam is employed in this operation. A subcontractor will be utilized to perform the foam injection. It is estimated that the finished cost will be \$20/cubic feet. This results in a cost of \$40,840 for the foam injection.

Additional Site resources are needed to support this operation.

This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

Resources

Cost Element	Skill	Department	Curve	Quantity	Units
750 STRAIGHT TIME BASE	E050 ENVIRONMENTAL ENGINEERS	C222S Water Svstem Operations	Linear	106.72	Hours
<i>Factors</i> 120 hrs					
0.88934 [SYS 061400] .88934200 - Svstem					
750 STRAIGHT TIME BASE	P080 HEALTH PHYSICISTS	C222S Water Svstem Operations	Linear	35.57	Hours
<i>Factors</i> 40 hrs					
0.88934 [SYS 061400] .88934200 - Svstem					
750 STRAIGHT TIME BASE	P170 OTHER ADMINISTRATIVE & PROFE	C222S Water Svstem Operations	Linear	71.15	Hours
<i>Factors</i> 80 hrs					
0.88934 [SYS 061400] .88934200 - Svstem					
750 STRAIGHT TIME BASE	P170 OTHER ADMINISTRATIVE & PROFE	C222S Water Svstem Operations	Linear	53.36	Hours
<i>Factors</i> 60 hrs					
0.88934 [SYS 061400] .88934200 - Svstem					
750 STRAIGHT TIME BASE	P170 OTHER ADMINISTRATIVE & PROFE	C222S Water Svstem Operations	Linear	71.15	Hours
<i>Factors</i> 80 hrs					
0.88934 [SYS 061400] .88934200 - Svstem					

WBS No: 1EBB0402
 Activity ID: 1EBB423020

Rockv Flats Closure Project
Baseline Cost and Basis of Estimate

Project: Baseline Devl
 WBS Filter: 1EBB
 Activity Filter: *

Starts In FY: *

A5H	SUBCONTRACTED SRVS	0000	NONE	C222S	Water Svstem Operations	Linear	37,149.93	Dollars
<i>Factors</i>		40840	\$	1.02283 -- FY00 Escalation --				

0.88934 [SYS 061400] .88934200 - Svstem

Line Item 0110 - STP Pipe Removal Excavation

BOE

Excavation includes the below key activities:

- 1) Infrastructure removal (concrete, steel gate valves, and ductile iron pipe)
- 2) Soil excavation
- 3) Minor debris screening
- 4) Transport of soil to an on-Site stockpile
- 5) Confirmation sampling of soils that are exposed
- 6) Analytical services for soil analyses
- 7) Construction field supervision

Costs for excavating a 4 foot wide trench, which needs to be approximately 5-feet deep is estimated using the 1998 RS Means Environmental Remediation Cost Data (4th Annual Edition). For the rough trenching and shoring, a 4 cubic yard track-mounted hydraulic excavator was employed while utilizing a Safety Level D (hard had and leather work gloves). This estimate is for \$90,700. For the more delicate earth removal immediately adjacent to the pipe, a 1 cubic yard track-mounted hydraulic excavator was employed while utilizing a Safety Level D. This estimate is for \$25,000.

Pipe demolition involves cutting the pipeline into 10-foot manageable sections. The pipeline is approximately 1300 linear feet long and is 12-inches in diameter. The pipe demolition is estimated using the 1998 RS Means Environmental Remediation Cost Data (4th Annual Edition). Utilizing a Safety Level D (hard had and leather work gloves, the estimate is \$18,300 which includes backfilling the empty trench.

Loading and hauling the excavated material to a soil stockpile was estimated using the 1998 RS Means Environmental Remediation Cost Data (4th Annual Edition). Utilizing a Safety Level D (hard had and leather work gloves, the estimate is \$48,133 which employs a 30 cubic yard dumptruck and 15 dump truck loads per day. This activity is difficult due to the hillside slope, lack of a transport road along the excavation site, and the nearness of wetlands along the excavation site.

This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

Resources

	<i>Cost Element</i>		<i>Skill</i>		<i>Department</i>	<i>Curve</i>	<i>Quantity</i>	<i>Units</i>
750	STRAIGHT TIME BASE	E020	CIVIL ENGINEERS	C222S	Water Svstem Operations	Linear	455.34	Hours
<i>Factors</i>		512	hrs					
							0.88934	[SYS 061400] .88934200 - Svstem
750	STRAIGHT TIME BASE	P080	HEALTH PHYSICISTS	C222S	Water Svstem Operations	Linear	106.72	Hours
<i>Factors</i>		120	hrs					
							0.88934	[SYS 061400] .88934200 - Svstem
750	STRAIGHT TIME BASE	P170	OTHER ADMINISTRATIVE & PROFE	C222S	Water Svstem Operations	Linear	106.72	Hours
<i>Factors</i>		120	hrs					
							0.88934	[SYS 061400] .88934200 - Svstem
750	STRAIGHT TIME BASE	P170	OTHER ADMINISTRATIVE & PROFE	C222S	Water Svstem Operations	Linear	284.59	Hours
<i>Factors</i>		320	hrs					
							0.88934	[SYS 061400] .88934200 - Svstem
750	STRAIGHT TIME BASE	P170	OTHER ADMINISTRATIVE & PROFE	C222S	Water Svstem Operations	Linear	266.80	Hours
<i>Factors</i>		300	hrs					
							0.88934	[SYS 061400] .88934200 - Svstem
A5H	SUBCONTRACTED SRVS	0000	NONE	C220S	Utility Operations	Linear	165,676.50	Dollars
<i>Factors</i>		182133	\$	1.02283 -- FY00 Escalation --				
							0.88934	[SYS 061400] .88934200 - Svstem
A5H	SUBCONTRACTED SRVS	0000	NONE	C222S	Water Svstem Operations	Linear	31,837.60	Dollars
<i>Factors</i>		35000	\$	1.02283 -- FY00 Escalation --				
							0.88934	[SYS 061400] .88934200 - Svstem

Line Item 0120 - STP Pipe Removal Non-Haz Waste Handling

BOE

Waste Handling involves the below key activities:

- 1) Preparing Waste Acceptance Forms
- 2) Performing Waste Acceptance Sampling
- 3) Inspection of stored wastes until shipment

WBS No: 1EBB0402
 Activity ID: 1EBB423020

Rockv Flats Closure Project
Baseline Cost and Basis of Estimate

Project: Baseline Devl
 WBS Filter: 1EBB
 Activity Filter: *

Starts In FY *

This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

Resources	Cost Element	Skill	Department	Curve	Quantity	Units
	750 STRAIGHT TIME BASE	E050 ENVIRONMENTAL ENGINEERS	C222S Water System Operations	Linear	106.72	Hours
<i>Factors</i> 120 hrs						
	A5H SUBCONTRACTED SRVS	0000 NONE	C222S Water System Operations	Linear	4.548,23	Dollars
<i>Factors</i> 5000 \$ 1.02283 -- FY00 Escalation --						
0.88934 [SYS 061400] .88934200 - System						

Line Item 0130 - STP Pipe Removal RAD Waste Handling

BOE Radioactive Waste Handling involves the below key activities:
 1) Bagging the Pipe sections for transport to a storage facility
 2) Preparing Waste Acceptance Forms
 3) Performing Waste Acceptance Sampling
 4) Inspection of stored wastes until shipment
 This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

Resources	Cost Element	Skill	Department	Curve	Quantity	Units
	750 STRAIGHT TIME BASE	P080 HEALTH PHYSICISTS	C222S Water System Operations	Linear	142.29	Hours
<i>Factors</i> 160 hrs						
	750 STRAIGHT TIME BASE	P170 OTHER ADMINISTRATIVE & PROFE	C222S Water System Operations	Linear	106.72	Hours
<i>Factors</i> 120 hrs						
	750 STRAIGHT TIME BASE	P170 OTHER ADMINISTRATIVE & PROFE	C222S Water System Operations	Linear	284.59	Hours
<i>Factors</i> 320 hrs						
	750 STRAIGHT TIME BASE	P170 OTHER ADMINISTRATIVE & PROFE	C222S Water System Operations	Linear	35.57	Hours
<i>Factors</i> 40 hrs						
	A5H SUBCONTRACTED SRVS	0000 NONE	C222S Water System Operations	Linear	27.289,37	Dollars
<i>Factors</i> 30000 \$ 1.02283 -- FY00 Escalation --						
0.88934 [SYS 061400] .88934200 - System						

Line Item 0140 - STP Pipe Removal Site Restoration

BOE Site Restoration involves the below key activities:
 1) Contractor demobilization.
 2) Regrading and Revegetation of the 1300 linear feet that was excavated.
 3) Site Closure Report.
 This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

Resources	Cost Element	Skill	Department	Curve	Quantity	Units
	750 STRAIGHT TIME BASE	E020 CIVIL ENGINEERS	C222S Water System Operations	Linear	71.15	Hours
<i>Factors</i> 80 hrs						
	750 STRAIGHT TIME BASE	P170 OTHER ADMINISTRATIVE & PROFE	C222S Water System Operations	Linear	35.57	Hours
<i>Factors</i> 40 hrs						
	750 STRAIGHT TIME BASE	P170 OTHER ADMINISTRATIVE & PROFE	C222S Water System Operations	Linear	71.15	Hours
<i>Factors</i> 80 hrs						
0.88934 [SYS 061400] .88934200 - System						

WBS No: 1EBB0402
 Activity ID: 1EBB423020

Rockv Flats Closure Project
Baseline Cost and Basis of Estimate

Project: Baseline Devl
 WBS Filter: 1EBB
 Activity Filter: *

Starts In FY: *

A5H	SUBCONTRACTED SRVS	0000	NONE	C222S	Water Svstem Operations	Linear	18,192.91	Dollars
<i>Factors</i>		20000	\$	1.02283 -- FY00 Escalation --				
							0.88934	[SYS 061400] .88934200 - Svstem
A5H	SUBCONTRACTED SRVS	S020	ENVIRONMENTAL SCIENTISTS	C222S	Water Svstem Operations	Linear	3,103.71	Dollars
<i>Factors</i>		3412	dollars	1.02283 -- FY00 Escalation --				
							0.88934	[SYS 061400] .88934200 - Svstem

Line Item 0150 - STP Pipe Removal Project Closeout

BOE
 This task involves inspecting and ensuring that the excavation site and regrading have been performed as specified in the Title I and II approved plans and specifications. This closeout task also ensures that the quality of materials and workmanship meet Site requirements.

80 Hours for C222S (Surface Water) for task integration and oversight, issue resolution, and regulatory agency interface.

80 Hours for C222S (Engineering) for field inspections and recontouring measurements.

\$5,000 for contractor to perform minor repairs.

This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

Resources

Cost Element	Skill	Department	Curve	Quantity	Units			
750	STRAIGHT TIME BASE	E050	ENVIRONMENTAL ENGINEERS	C222S	Water Svstem Operations	Linear	106.72	Hours
<i>Factors</i>		120	hrs					
							0.88934	[SYS 061400] .88934200 - Svstem
750	STRAIGHT TIME BASE	P170	OTHER ADMINISTRATIVE & PROFE	C222S	Water Svstem Operations	Linear	71.15	Hours
<i>Factors</i>		80	hrs					
							0.88934	[SYS 061400] .88934200 - Svstem
A5H	SUBCONTRACTED SRVS	0000	NONE	C222S	Water Svstem Operations	Linear	4,548.23	Dollars
<i>Factors</i>		5000	\$	1.02283 -- FY00 Escalation --				
							0.88934	[SYS 061400] .88934200 - Svstem

Line Item SYS - Contingency And Escalation

BOE

Resources

Cost Element	Skill	Department	Curve	Quantity	Units			
CON	CONTINGENCY	0000	NONE	ZDEPT	No Department	Linear	32,092.99	Dollars
<i>Factors</i>		32093	Dollars					
ESC	ESCALATION	0000	NONE	ZDEPT	No Department	Linear	65,883.70	Dollars
<i>Factors</i>		65883.7	Dollars					

Activity ID: 1EBB424000 Description: NPDES Sampling, Analysis, & Rptg FY00

Cost Risk 1 Schedule Risk 1

Line Item	Description	Quantity	Units	BOE Type	Labor Hours/Unit	Labor Hours Total	Labor Cost Total	Materials/ Sub Cost	Contingency & Escalation	Total Prime Cost	Burden Cost	Total Cost	
OPNCIN5101	Sampling and Analysis for SW Programs	1.00	each	HC	91	91	2,944	78,429	0	81,373	1,437	82,810	
OPNCIN5102	Analytical Data Verification	0.00	each	HC	#Num!	0	0	0	0	0	0	0	
						Total for Activity 1EBB424000:	91	2,944	78,429	0	81,373	1,437	82,810

Line Item OPNCIN5101 - Sampling and Analysis for SW Programs

BOE
 Historical Data Source -
 RFETS FY98 and FY99 actuals for sample analysis - on file in Bldg. T030D.

Item Desc -
 Major sampling subcontract for Surface Water Monitoring programs. Includes sample collection, preparation, and shipment.

NPDES required sampling was estimated using requirements from the new draft permit as the NPDES regulating document for the entire Fiscal Year. Sample locations, parameters and frequencies are dictated in the terms of the draft permit. It is expected that the new permit will be issued and implemented at the latter part of FY99.

Incidental Waters sample needs for FY00 were estimated using the actuals from FY98 and FY99 to date, as well as the currently available D&D schedules.

Ad hoc samples were included in the overall estimate, as well as analytical support for contaminant tracking near the ITS and for monitoring after close-out of selected IM/IRA locations.

WBS No: 1EBB0402
 Activity ID: 1EBB424000

Rockv Flats Closure Project
Baseline Cost and Basis of Estimate

Project: Baseline Devl
 WBS Filter: 1EBB
 Activity Filter: *

Starts In FY *

All programs were estimated using the FY99 price list. The list provided specific charges for currently contracted labs and the average price for an individual analyte type and turnaround time were used.

Total number of samples estimated for FY00 is 1,686.

It is estimated that 173 hours of a Surface Water environmental engineer are necessary for sample tracking and analytical problem resolution. This estimate is based upon the following monthly time estimate.

- 5 hrs per month for Project Performance Report preparation for the cognizant WADlet Manager including reconciliation of samples charged to WAD 001 versus actual samples collected. This includes reviewing other WADs to assure analytical services are not mis-charged.
- 5 hrs per month for preparation of requests to Analytical Services Division staff for completed analytical data for NPDES/RFCAs programs.
- 12 hrs per month to verify that all requested data was delivered by due date, data review for reasonableness, usability, historical significance and data distribution.
- 5 hrs per month to re-request missing data.
- 5 hrs per month to provide to status of analytical data for specific programs to RFCSS and K-H Team.
- 8 hrs per month to request resolution of questions/concerns/problems with analytical data for NPDES/RFCAs programs.

Breakdown of Historical Data:

Item - Analytical Services
 Units - lot
 Unit Cost - 173 hours and \$149,052 Non-Labor Dollars
 Unit Cost Adjustment factor - NA
 Revised Unit Cost - NA

This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

Resources

Cost Element	Skill	Department	Curve	Quantity	Units
750 STRAIGHT TIME BASE	S020 ENVIRONMENTAL SCIENTISTS	C103S Environmental Compliance	Linear	91.24	Hours
Factors 480 hrs 0.36123 May 2000 Earned Value Factor			0.52618 [SYS 061300]	0.526183 - Target	
A58 ASI	0000 NONE	C222S Water System Operations	Linear	19.42756	Dollars
Factors 102210 dollars 0.36123 May 2000 Earned Value Factor			0.52618 [SYS 061300]	0.526183 - Target	
A5H SUBCONTRACTED SRVS	0000 NONE	C222S Water System Operations	Linear	59.00108	Dollars
Factors 1.02283 -- FY00 Escalation -- 303481 dollars 0.36123 May 2000 Earned Value Factor			0.52618 [SYS 061300]	0.526183 - Target	

Line Item OPNCIN5102 - Analytical Data Verification

BOE

Historical Data Source -
 RFETS FY98 and FY99 actuals for sample analysis - on file in Bldg. T893A, Cube 35.

Item Desc -

Estimate based on requirements determined by the Analytical Services Division, all analytical data packages produced by subcontracted laboratories will be 100% verified by ASD subcontracted staff. All verification will be complete (not partial) and will be charged back to the individual programs. Kaiser-Hill estimates indicate that the funding provided is sufficient provided that there is a minimum of 6 samples in each RIN. However, it is not possible to always plan sampling events such that a specified number of samples is included in each RIN, therefore the total number of samples (4469) for FY00 was subdivided into two categories. The first category assumes that there are 6 samples in each RIN. The second category assumes that only 2 samples are available for each RIN. The following estimates were developed using price sheets provided by ASD for subcontracted verification services.

1st Category

Number of samples collected = 1517 samples
 Average cost per RIN for routine, 30-day turn-around time = \$108/RIN
 (cost based on 6-10 samples per RIN and for complete verification)
 Total Cost for complete verification = 670 RINs x \$108/RIN = \$72,360

WBS No: 1EBB0402
 Activity ID: 1EBB424000

Rockv Flats Closure Project
Baseline Cost and Basis of Estimate

Project: Baseline Devl
 WBS Filter: 1EBB
 Activity Filter: *

Starts In FY *

2nd Category

Number of samples collected = 168 samples
 Average cost per RIN for routine, 30-day turn-around time = \$95/RIN
 (cost based upon 1-5 samples per RIN and for complete verification)
 Total Cost for complete verification = 225 RINS x \$95/RIN = \$21,375

Breakdown of Historical Data:
 Item - Analytical Data Valification
 Units - lot
 Unit Cost - 93.7K nonlabor dollars
 Unit Cost Adjustment factor - NA
 Revised Unit Cost - NA

This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

Resources	Cost Element	Skill	Department	Curve	Quantity	Units
	A5H SUBCONTRACTED SRVS	0000 NONE	C222S Water System Operations	Linear	18,223.43	Dollars
Factors	93735 \$	1.02283 -- FY00 Escalation --	0.36123 May 2000 Earned Value Factor			

0.52618 [SYS 061300] 0.526183 - Target

Activity ID: 1EBB424010 Description: NPDES Sampling, Analysis, & Rpta FY01

Cost Risk 1 Schedule Risk 1

Line Item	Description	Quantity	Units	BOE Type	Labor Hours/Unit	Labor Hours Total	Labor Cost Total	Materials/ Sub Cost	Contingency & Escalation	Total Prime Cost	Burden Cost	Total Cost
OPNCIN5101	Analysis Support for SW Projects	1.00	each	HC	427	427	13,776	315,647	0	329,423	6,571	335,994
OPNCIN5102	Analytical Data Verification	1.00	each	HC	0	0	0	85,266	0	85,266	0	85,266
SYS	Contingency And Escalation	1.00	ea	EE	0	0	0	0	22,127	22,127	0	22,127
Total for Activity 1EBB424010:						427	13,776	400,913	22,127	436,815	6,571	443,386

Line Item OPNCIN5101 - Analysis Support for SW Projects

BOE

Historical Data Source -
 RFETS FY98 and FY99 actuals for sample analysis - on file in Bldg. T030D.

Item Desc -
 Major sampling subcontract for Surface Water Monitoring programs. Includes sample collection, preparation, and shipment.

NPDES required sampling was estimated using requirements from the new draft permit as the NPDES regulating document for the entire Fiscal Year. Sample locations, parameters and frequencies are dictated in the terms of the draft permit. It is expected that the new permit will be issued and implemented at the latter part of FY99.

Incidental Waters sample needs for FY00 were estimated using the actuals from FY98 and FY99 to date, as well as the currently available D&D schedules.

Ad hoc samples were included in the overall estimate, as well as analytical support for contaminant tracking near the ITS and for monitoring after close-out of selected IM/IRA locations.

All programs were estimated using the FY99 price list. The list provided specific charges for currently contracted labs and the average price for an individual analyte type and turnaround time were used.

Total number of samples estimated for FY00 is 1,686.

It is estimated that 173 hours of a Surface Water environmental engineer are necessary for sample tracking and analytical problem resolution. This estimate is based upon the following monthly time estimate.

- 5 hrs per month for Project Performance Report preparation for the cognizant WADlet Manager including reconciliation of samples charged to WAD 001 versus actual samples collected. This includes reviewing other WADs to assure analytical services are not mis-charged.
- 5 hrs per month for preparation of requests to Analytical Services Division staff for completed analytical data for NPDES/RFCA programs.
- 12 hrs per month to verify that all requested data was delivered by due date, data review for reasonableness, usability, historical significance and data distribution.
- 5 hrs per month to re-request missing data.

WBS No: 1EBB0402
 Activity ID: 1EBB424010

Rockv Flats Closure Project
Baseline Cost and Basis of Estimate

Project: Baseline Devl
 WBS Filter: 1EBB
 Activity Filter: *

Starts In FY *

- 5 hrs per month to provide to status of analytical data for specific programs to RFCSS and K-H Team.
 - 8 hrs per month to request resolution of questions/concerns/problems with analytical data for NPDES/RPCA programs.

Breakdown of Historical Data:
 Item - Analytical Services
 Units - lot
 Unit Cost - 173 hours and \$354,922 Non-Labor Dollars
 Unit Cost Adjustment factor - NA
 Revised Unit Cost - NA

This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

Resources	Cost Element	Skill	Department	Curve	Quantity	Units
	750 STRAIGHT TIME BASE	S020 ENVIRONMENTAL SCIENTISTS	C103S Environmental Compliance	Linear	426.88	Hours

Factors 480 hrs

	A5H SUBCONTRACTED SRVS	0000 NONE	C222S Water System Operations	Linear	315.647.10	Dollars
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Factors 347000 \$ 1.02283 -- FY00 Escalation --

0.88934 [SYS 061400] .88934200 - System

Line Item OPNCIN5102 - Analytical Data Verification

BOE
 Historical Data Source -
 RFETS FY98 and FY99 actuals for sample analysis - on file in Bldg. T893A, Cube 35.

Item Desc -
 Estimate based on requirements determined by the Analytical Services Division, all analytical data packages produced by subcontracted laboratories will be 100% verified by ASD subcontracted staff. All verification will be complete (not partial) and will be charged back to the individual programs. Kaiser-Hill estimates indicate that the funding provided is sufficient provided that there is a minimum of 6 samples in each RIN. However, it is not possible to always plan sampling events such that a specified number of samples is included in each RIN, therefore the total number of samples (4469) for FY00 was subdivided into two categories. The first category assumes that there are 6 samples in each RIN. The second category assumes that only 2 samples are available for each RIN. The following estimates were developed using price sheets provided by ASD for subcontracted verification services.

1st Category
 Number of samples collected = 1517 samples
 Average cost per RIN for routine, 30-day turn-around time = \$108/RIN (cost based on 6-10 samples per RIN and for complete verification)
 Total Cost for complete verification = 670 RINS x \$108/RIN = \$72,360

2nd Category
 Number of samples collected = 168 samples
 Average cost per RIN for routine, 30-day turn-around time = \$95/RIN (cost based upon 1-5 samples per RIN and for complete verification)
 Total Cost for complete verification = 225 RINS x \$95/RIN = \$21,375

Breakdown of Historical Data:
 Item - Analytical Data Valification
 Units - lot
 Unit Cost - 93.7K nonlabor dollars
 Unit Cost Adjustment factor - NA
 Revised Unit Cost - NA

This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

Resources	Cost Element	Skill	Department	Curve	Quantity	Units
	A5H SUBCONTRACTED SRVS	0000 NONE	C222S Water System Operations	Linear	85.265.64	Dollars

Factors 93735 \$ 1.02283 -- FY00 Escalation --

0.88934 [SYS 061400] .88934200 - System

Line Item SYS - Contingency And Escalation

BOE

WBS No: 1EBB0402
 Activity ID: 1EBB424010

Rockv Flats Closure Project
Baseline Cost and Basis of Estimate

Project: Baseline Devl
 WBS Filter: 1EBB
 Activity Filter: *

Starts In FY *

Resources	Cost Element	Quantity	Skill	Department	Curve	Quantity	Units
	CON CONTINGENCY	0000	NONE	ZDEPT No Department	Linear	13.268.41	Dollars
Factors 13268.4 Dollars							
	ESC ESCALATION	0000	NONE	ZDEPT No Department	Linear	8.858.14	Dollars
Factors 8858.14 Dollars							

Activity ID: 1EBB424020 Description: NPDES Sampling, Analysis, & Rptg FY02

Cost Risk 1 Schedule Risk 1

Line Item	Description	Quantity	Units	BOE Type	Labor Hours/Unit	Labor Hours Total	Labor Cost Total	Materials/ Sub Cost	Contingency & Escalation	Total Prime Cost	Burden Cost	Total Cost
OPNCIN5101	Analysis Support for SW Projects	1.00	each	HC	427	427	13.776	304.660	0	318.436	4.863	323.299
OPNCIN5102	Analytical Data Verification	1.00	each	HC	0	0	0	85.266	0	85.266	0	85.266
SYS	Contingency And Escalation	1.00	lea	EE	0	0	0	0	60.397	60.397	0	60.397
Total for Activity 1EBB424020:						427	13.776	389.926	60.397	464.098	4.863	468.961

Line Item OPNCIN5101 - Analysis Support for SW Projects

BOE
 Historical Data Source - RFETS FY98 and FY99 actuals for sample analysis - on file in Bldg. T030D.

Item Desc - Major sampling subcontract for Surface Water Monitoring programs. Includes sample collection, preparation, and shipment.

NPDES required sampling was estimated using requirements from the new draft permit as the NPDES regulating document for the entire Fiscal Year. Sample locations, parameters and frequencies are dictated in the terms of the draft permit. It is expected that the new permit will be issued and implemented at the latter part of FY99.

Incidental Waters sample needs for FY00 were estimated using the actuals from FY98 and FY99 to date, as well as the currently available D&D schedules.

Ad hoc samples were included in the overall estimate, as well as analytical support for contaminant tracking near the ITS and for monitoring after close-out of selected IM/IRA locations.

All programs were estimated using the FY99 price list. The list provided specific charges for currently contracted labs and the average price for an individual analyte type and turnaround time were used.

Total number of samples estimated for FY00 is 1,686.

It is estimated that 173 hours of a Surface Water environmental engineer are necessary for sample tracking and analytical problem resolution. This estimate is based upon the following monthly time estimate.

- 5 hrs per month for Project Performance Report preparation for the cognizant WADlet Manager including reconciliation of samples charged to WAD 001 versus actual samples collected. This includes reviewing other WADs to assure analytical services are not mis-charged.
- 5 hrs per month for preparation of requests to Analytical Services Division staff for completed analytical data for NPDES/RFCA programs.
- 12 hrs per month to verify that all requested data was delivered by due date, data review for reasonableness, usability, historical significance and data distribution.
- 5 hrs per month to re-request missing data.
- 5 hrs per month to provide to status of analytical data for specific programs to RFCSS and K-H Team.
- 8 hrs per month to request resolution of questions/concerns/problems with analytical data for NPDES/RFCA programs.

Breakdown of Historical Data:
 Item - Analytical Services
 Units - lot
 Unit Cost - 173 hours and \$342,568 Non-Labor Dollars
 Unit Cost Adjustment factor - NA
 Revised Unit Cost - NA

This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

Resources	Cost Element	Quantity	Skill	Department	Curve	Quantity	Units
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WBS No: 1EBB0402
 Activity ID: 1EBB424020

Rockv Flats Closure Project
Baseline Cost and Basis of Estimate

Project Baseline Devl
 WBS Filter 1EBB
 Activity Filter *

750	STRAIGHT TIME BASE	S020	ENVIRONMENTAL SCIENTISTS	C103S	Environmental Compliance	Linear	426.88	Hours
							0.88934	[SYS 061400] .88934200 - System
A5H	SUBCONTRACTED SRVS	0000	NONE	C222S	Water System Operations	Linear	304.660.30	Dollars
							0.88934	[SYS 061400] .88934200 - System

Line Item OPNCIN5102 - Analytical Data Verification

BOE
 Historical Data Source -
 RFETS FY98 and FY99 actuals for sample analysis - on file in Bldg. T893A, Cube 35.

Item Desc -
 Estimate based on requirements determined by the Analytical Services Division, all analytical data packages produced by subcontracted laboratories will be 100% verified by ASD subcontracted staff. All verification will be complete (not partial) and will be charged back to the individual programs. Kaiser-Hill estimates indicate that the funding provided is sufficient provided that there is a minimum of 6 samples in each RIN. However, it is not possible to always plan sampling events such that a specified number of samples is included in each RIN, therefore the total number of samples (4469) for FY00 was subdivided into two categories. The first category assumes that there are 6 samples in each RIN. The second category assumes that only 2 samples are available for each RIN. The following estimates were developed using price sheets provided by ASD for subcontracted verification services.

1st Category
 Number of samples collected = 1517 samples
 Average cost per RIN for routine, 30-day turn-around time = \$108/RIN
 (cost based on 6-10 samples per RIN and for complete verification)
 Total Cost for complete verification = 670 RINS x \$108/RIN = \$72,360

2nd Category
 Number of samples collected = 168 samples
 Average cost per RIN for routine, 30-day turn-around time = \$95/RIN
 (cost based upon 1-5 samples per RIN and for complete verification)
 Total Cost for complete verification = 225 RINS x \$95/RIN = \$21,375

Breakdown of Historical Data:
 Item - Analytical Data Valification
 Units - lot
 Unit Cost - 93.7K nonlabor dollars
 Unit Cost Adjustment factor - NA
 Revised Unit Cost - NA

This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

Resources		<i>Cost Element</i>	<i>Skill</i>	<i>Department</i>	<i>Curve</i>	<i>Quantity</i>	<i>Units</i>
A5H	SUBCONTRACTED SRVS	0000	NONE	C222S	Water System Operations	Linear	85.265.64
							0.88934 [SYS 061400] .88934200 - System

Line Item SYS - Contingency And Escalation

Resources		<i>Cost Element</i>	<i>Skill</i>	<i>Department</i>	<i>Curve</i>	<i>Quantity</i>	<i>Units</i>
CON	CONTINGENCY	0000	NONE	ZDEPT	No Department	Linear	41.304.14
							41304.1 Dollars
ESC	ESCALATION	0000	NONE	ZDEPT	No Department	Linear	19.092.80
							19092.8 Dollars

Activity ID: 1EBB424030 Description: NPDES Sampling, Analysis, & Rptg FY03

Cost Risk 1 Schedule Risk 1

Line Item	Description	Quantity	Units	BOE Type	Labor Hours/Unit	Labor Hours Total	Labor Cost Total	Materials/ Sub Cost	Contingency & Escalation	Total Prime Cost	Burden Cost	Total Cost
OPNCIN5101	Analysis Support for SW Projects	1.00	each	HC	427	427	13.776	311.616	0	325.391	4.766	330.157
OPNCIN5102	Analytical Data Verification	1.00	each	HC	0	0	0	85.266	0	85.266	0	85.266
SYS	Contingency And Escalation	1.00	lea	EE	0	0	0	0	113.950	113.950	0	113.950

WBS No: 1EBB0402
 Activity ID: 1EBB424030

Rockv Flats Closure Project
Baseline Cost and Basis of Estimate

Project Baseline Devl
 WBS Filter 1EBB
 Activity Filter * Starts In FY *

Total for Activity 1EBB424030:	427	13.776	396.881	113.950	524.607	4.766	529.373
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Line Item OPNCIN5101 - Analysis Support for SW Projects

BOE
 Historical Data Source -
 RFETS FY98 and FY99 actuals for sample analysis - on file in Bldg. T030D.

Item Desc -
 Major sampling subcontract for Surface Water Monitoring programs. Includes sample collection, preparation, and shipment.

NPDES required sampling was estimated using requirements from the new draft permit as the NPDES regulating document for the entire Fiscal Year. Sample locations, parameters and frequencies are dictated in the terms of the draft permit. It is expected that the new permit will be issued and implemented at the latter part of FY99.

Incidental Waters sample needs for FY00 were estimated using the actuals from FY98 and FY99 to date, as well as the currently available D&D schedules.

Ad hoc samples were included in the overall estimate, as well as analytical support for contaminant tracking near the ITS and for monitoring after close-out of selected IM/IRA locations.

All programs were estimated using the FY99 price list. The list provided specific charges for currently contracted labs and the average price for an individual analyte type and turnaround time were used.

Total number of samples estimated for FY00 is 1,686.

It is estimated that 173 hours of a Surface Water environmental engineer are necessary for sample tracking and analytical problem resolution. This estimate is based upon the following monthly time estimate.

- 5 hrs per month for Project Performance Report preparation for the cognizant WADlet Manager including reconciliation of samples charged to WAD 001 versus actual samples collected. This includes reviewing other WADs to assure analytical services are not mis-charged.
- 5 hrs per month for preparation of requests to Analytical Services Division staff for completed analytical data for NPDES/RPCA programs.
- 12 hrs per month to verify that all requested data was delivered by due date, data review for reasonableness, usability, historical significance and data distribution.
- 5 hrs per month to re-request missing data.
- 5 hrs per month to provide to status of analytical data for specific programs to RFCSS and K-H Team.
- 8 hrs per month to request resolution of questions/concerns/problems with analytical data for NPDES/RPCA programs.

Breakdown of Historical Data:
 Item - Analytical Services
 Units - lot
 Unit Cost - 173 hours and \$350,388 Non-Labor Dollars
 Unit Cost Adjustment factor - NA
 Revised Unit Cost - NA

This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

Resources	Cost Element	Skill	Department	Curve	Quantity	Units
	750 STRAIGHT TIME BASE	S020 ENVIRONMENTAL SCIENTISTS	C103S Environmental Compliance	Linear	426.88	Hours
Factors	480 hrs					
	A5H SUBCONTRACTED SRVS	0000 NONE	C222S Water System Operations	Linear	311.615	Dollars
Factors	342568 \$	1.02283 -- FY00 Escalation --				
				0.88934	ISYS 0614001.88934200 - System	
				0.88934	ISYS 0614001.88934200 - System	

Line Item OPNCIN5102 - Analytical Data Verification

BOE
 Historical Data Source -
 RFETS FY98 and FY99 actuals for sample analysis - on file in Bldg. T893A, Cube 35.

Item Desc -
 Estimate based on requirements determined by the Analytical Services Division, all analytical data packages produced by subcontracted laboratories will be

WBS No: 1EBB0402
 Activity ID: 1EBB424030

Rockv Flats Closure Project
Baseline Cost and Basis of Estimate

Project: Baseline Devl
 WBS Filter: 1EBB
 Activity Filter: *

Starts In FY *

100% verified by ASD subcontracted staff. All verification will be complete (not partial) and will be charged back to the individual programs. Kaiser-Hill estimates indicate that the funding provided is sufficient provided that there is a minimum of 6 samples in each RIN. However, it is not possible to always plan sampling events such that a specified number of samples is included in each RIN, therefore the total number of samples (4469) for FY00 was subdivided into two categories. The first category assumes that there are 6 samples in each RIN. The second category assumes that only 2 samples are available for each RIN. The following estimates were developed using price sheets provided by ASD for subcontracted verification services.

1st Category

Number of samples collected = 1517 samples
 Average cost per RIN for routine, 30-day turn-around time = \$108/RIN
 (cost based on 6-10 samples per RIN and for complete verification)
 Total Cost for complete verification = 670 RINS x \$108/RIN = \$72,360

2nd Category

Number of samples collected = 168 samples
 Average cost per RIN for routine, 30-day turn-around time = \$95/RIN
 (cost based upon 1-5 samples per RIN and for complete verification)
 Total Cost for complete verification = 225 RINS x \$95/RIN = \$21,375

Breakdown of Historical Data:

Item - Analytical Data Valification
 Units - lot
 Unit Cost - 93.7K nonlabor dollars
 Unit Cost Adjustment factor - NA
 Revised Unit Cost - NA

This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

Resources		Cost Element	Skill	Department	Curve	Quantity	Units
A5H	SUBCONTRACTED SRVS	0000	NONE	C222S | Water Svstem Operations	Linear	85.265.64	Dollars
Factors		93735 hrs	1.02283 -- FY00 Escalation --				
						0.88934 [SYS 061400] .88934200 - Svstem	

Line Item SYS - Contingency And Escalation

Resources		Cost Element	Skill	Department	Curve	Quantity	Units
CON	CONTINGENCY	0000	NONE	ZDEPT | No Department	Linear	82.093.02	Dollars
Factors		82093.0 Dollars					
ESC	ESCALATION	0000	NONE	ZDEPT | No Department	Linear	31.856.83	Dollars
Factors		31856.8 Dollars					

Activity ID: 1EBB424040 Description: NPDES Sampling, Analysis, & Rptg FY04

Cost Risk 1 Schedule Risk 1

Line Item	Description	Quantity	Units	BOE Type	Labor Hours/Unit	Labor Hours Total	Labor Cost Total	Materials/ Sub Cost	Contingency & Escalation	Total Prime Cost	Burden Cost	Total Cost
OPNCIN5101	Analysis Support for SW Projects	1.00	each	HC	427	427	13.776	302.356	0	316.132	3.885	320.016
OPNCIN5102	Analytical Data Verification	1.00	each	HC	0	0	0	85.266	0	85.266	0	85.266
SYS	Contingency And Escalation	1.00	lea	EE	0	0	0	0	57.399	57.399	0	57.399
Total for Activity 1EBB424040:						427	13.776	387.622	57.399	458.797	3.885	462.681

Line Item OPNCIN5101 - Analysis Support for SW Projects

BOE	
Historical Data Source - RFETS FY98 and FY99 actuals for sample analysis - on file in Bldg. T030D.	
Item Desc - Major sampling subcontract for Surface Water Monitoring programs. Includes sample collection, preparation, and shipment.	
NPDES required sampling was estimated using requirements from the new draft permit as the NPDES regulating document for the entire Fiscal Year. Sample locations, parameters and frequencies are dictated in the terms of the draft permit. It is expected that the new permit will be issued and implemented at the latter part of FY99.	
Incidental Waters sample needs for FY00 were estimated using the actuals from FY98 and FY99 to date, as well as the currently available D&D schedules.	

WBS No: 1EBB0402
 Activity ID: 1EBB424040

Rockv Flats Closure Project
Baseline Cost and Basis of Estimate

Project: Baseline Devl
 WBS Filter: 1EBB
 Activity Filter: *

Starts In FY *

Ad hoc samples were included in the overall estimate, as well as analytical support for contaminant tracking near the ITS and for monitoring after close-out of selected IM/IRA locations.

All programs were estimated using the FY99 price list. The list provided specific charges for currently contracted labs and the average price for an individual analyte type and turnaround time were used.

Total number of samples estimated for FY00 is 1,686.

It is estimated that 173 hours of a Surface Water environmental engineer are necessary for sample tracking and analytical problem resolution. This estimate is based upon the following monthly time estimate.

- 5 hrs per month for Project Performance Report preparation for the cognizant WADlet Manager including reconciliation of samples charged to WAD 001 versus actual samples collected. This includes reviewing other WADs to assure analytical services are not mis-charged.
- 5 hrs per month for preparation of requests to Analytical Services Division staff for completed analytical data for NPDES/RPCA programs.
- 12 hrs per month to verify that all requested data was delivered by due date, data review for reasonableness, usability, historical significance and data distribution.
- 5 hrs per month to re-request missing data.
- 5 hrs per month to provide to status of analytical data for specific programs to RFCSS and K-H Team.
- 8 hrs per month to request resolution of questions/concerns/problems with analytical data for NPDES/RPCA programs.

Breakdown of Historical Data:
 Item - Analytical Services
 Units - lot
 Unit Cost - 173 hours and \$339,977 Non-Labor Dollars
 Unit Cost Adjustment factor - NA
 Revised Unit Cost - NA

This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

Resources	Cost Element	Skill	Department	Curve	Quantity	Units
	750 STRAIGHT TIME BASE	S020 ENVIRONMENTAL SCIENTISTS	C103S Environmental Compliance	Linear	426.88	Hours
	Factors 480 hrs					
	A5H SUBCONTRACTED SRVS	0000 NONE	C222S Water Svstem Operations	Linear	302.356.20	Dollars
	Factors 332389 \$	1.02283 -- FY00 Escalation --				
				0.88934 [SYS 061400]	.88934200	- Svstem
				0.88934 [SYS 061400]	.88934200	- Svstem

Line Item OPNCIN5102 - Analytical Data Verification

BOE Historical Data Source -
 RFETS FY98 and FY99 actuals for sample analysis - on file in Bldg. T893A, Cube 35.

Item Desc -
 Estimate based on requirements determined by the Analytical Services Division, all analytical data packages produced by subcontracted laboratories will be 100% verified by ASD subcontracted staff. All verification will be complete (not partial) and will be charged back to the individual programs. Kaiser-Hill estimates indicate that the funding provided is sufficient provided that there is a minimum of 6 samples in each RIN. However, it is not possible to always plan sampling events such that a specified number of samples is included in each RIN, therefore the total number of samples (4469) for FY00 was subdivided into two categories. The first category assumes that there are 6 samples in each RIN. The second category assumes that only 2 samples are available for each RIN. The following estimates were developed using price sheets provided by ASD for subcontracted verification services.

1st Category

Number of samples collected = 1517 samples
 Average cost per RIN for routine, 30-day turn-around time = \$108/RIN
 (cost based on 6-10 samples per RIN and for complete verification)
 Total Cost for complete verification = 670 RINS x \$108/RIN = \$72,360

2nd Category

WBS No: 1EBB0402
 Activity ID: 1EBB424040

Rockv Flats Closure Project
Baseline Cost and Basis of Estimate

Project: Baseline Devl
 WBS Filter: 1EBB
 Activity Filter: *

Starts In FY *

Number of samples collected = 168 samples
 Average cost per RIN for routine, 30-day turn-around time = \$95/RIN
 (cost based upon 1-5 samples per RIN and for complete verification)
 Total Cost for complete verification = 225 RINS x \$95/RIN = \$21,375

Breakdown of Historical Data:
 Item - Analytical Data Valification
 Units - lot
 Unit Cost - 93.7K nonlabor dollars
 Unit Cost Adjustment factor - NA
 Revised Unit Cost - NA

This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

Resources		Cost Element	Skill	Department	Curve	Quantity	Units
A5H	SUBCONTRACTED SRVS	0000	NONE	C222S	Water System Operations	Linear	85.265.64 Dollars

Factors 93735 dollars 1.02283 -- FY00 Escalation --

0.88934 [SYS 061400].88934200 - Svsstem

Line Item SYS - Contingency And Escalation

BOE

Resources		Cost Element	Skill	Department	Curve	Quantity	Units
CON	CONTINGENCY	0000	NONE	ZDEPT	No Department	Linear	18.485.49 Dollars
ESC	ESCALATION	0000	NONE	ZDEPT	No Department	Linear	38.913.68 Dollars

Factors 18485.5 Dollars
 Factors 38913.7 Dollars

Activity ID: 1EBB424050 Description: NPDES Sampling, Analysis, & Rptg FY05

Cost Risk 1 Schedule Risk 1

Line Item	Description	Quantity	Units	BOE Type	Labor Hours/Unit	Labor Hours Total	Labor Cost Total	Materials/ Sub Cost	Contingency & Escalation	Total Prime Cost	Burden Cost	Total Cost
OPNCIN5101	Analysis Support for SW Projects	1.00	each	HC	427	427	13.776	318.729	0	332.504	4.794	337.298
OPNCIN5102	Analytical Data Verification	1.00	each	HC	0	0	0	85.266	0	85.266	0	85.266
SYS	Contingency And Escalation	1.00	ea	EE	0	0	0	0	223.636	223.636	0	223.636
Total for Activity 1EBB424050:						427	13.776	403.995	223.636	641.406	4.794	646.200

Line Item OPNCIN5101 - Analysis Support for SW Projects

BOE

Historical Data Source -
 RFETS FY98 and FY99 actuals for sample analysis - on file in Bldg. T030D.

Item Desc -
 Major sampling subcontract for Surface Water Monitoring programs. Includes sample collection, preparation, and shipment.

NPDES required sampling was estimated using requirements from the new draft permit as the NPDES regulating document for the entire Fiscal Year. Sample locations, parameters and frequencies are dictated in the terms of the draft permit. It is expected that the new permit will be issued and implemented at the latter part of FY99.

Incidental Waters sample needs for FY00 were estimated using the actuals from FY98 and FY99 to date, as well as the currently available D&D schedules.

Ad hoc samples were included in the overall estimate, as well as analytical support for contaminant tracking near the ITS and for monitoring after close-out of selected IM/IRA locations.

All programs were estimated using the FY99 price list. The list provided specific charges for currently contracted labs and the average price for an individual analyte type and turnaround time were used.

Total number of samples estimated for FY00 is 1,686.

It is estimated that 173 hours of a Surface Water environmental engineer are necessary for sample tracking and analytical problem resolution. This estimate is based upon the following monthly time estimate.

- 5 hrs per month for Project Performance Report preparation for the cognizant WADlet Manager including reconciliation of samples charged to WAD 001 versus

WBS No: 1EBB0402
 Activity ID: 1EBB424050

Rockv Flats Closure Project
Baseline Cost and Basis of Estimate

Project Baseline Devl
 WBS Filter 1EBB
 Activity Filter *

Starts In FY *

actual samples collected. This includes reviewing other WADs to assure analytical services are not mis-charged.

- 5 hrs per month for preparation of requests to Analytical Services Division staff for completed analytical data for NPDES/RFCAs programs.
- 12 hrs per month to verify that all requested data was delivered by due date, data review for reasonableness, usability, historical significance and data distribution.
- 5 hrs per month to re-request missing data.
- 5 hrs per month to provide to status of analytical data for specific programs to RFCSS and K-H Team.
- 8 hrs per month to request resolution of questions/concerns/problems with analytical data for NPDES/RFCAs programs.

Breakdown of Historical Data:
 Item - Analytical Services
 Units - lot
 Unit Cost - 480 hours and \$350,388 Non-Labor Dollars
 Unit Cost Adjustment factor - NA
 Revised Unit Cost - NA

This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

Resources	Cost Element	Skill	Department	Curve	Quantity	Units
	750 STRAIGHT TIME BASE	S020 ENVIRONMENTAL SCIENTISTS	C103S Environmental Compliance	Linear	426.88	Hours
Factors 480 hrs						
					0.88934 [SYS 061400]	.88934200 - System
	A5H SUBCONTRACTED SRVS	0000 NONE	C222S Water System Operations	Linear	318,728.90	Dollars
Factors 350388 \$ 1.02283 -- FY00 Escalation --						
					0.88934 [SYS 061400]	.88934200 - System

Line Item OPNCIN5102 - Analytical Data Verification

BOE
 Historical Data Source -
 RFETS FY98 and FY99 actuals for sample analysis - on file in Bldg. T893A, Cube 35.

Item Desc -
 Estimate based on requirements determined by the Analytical Services Division, all analytical data packages produced by subcontracted laboratories will be 100% verified by ASD subcontracted staff. All verification will be complete (not partial) and will be charged back to the individual programs. Kaiser-Hill estimates indicate that the funding provided is sufficient provided that there is a minimum of 6 samples in each RIN. However, it is not possible to always plan sampling events such that a specified number of samples is included in each RIN, therefore the total number of samples (4469) for FY00 was subdivided into two categories. The first category assumes that there are 6 samples in each RIN. The second category assumes that only 2 samples are available for each RIN. The following estimates were developed using price sheets provided by ASD for subcontracted verification services.

1st Category

Number of samples collected = 1517 samples
 Average cost per RIN for routine, 30-day turn-around time = \$108/RIN
 (cost based on 6-10 samples per RIN and for complete verification)
 Total Cost for complete verification = 670 RINS x \$108/RIN = \$72,360

2nd Category

Number of samples collected = 168 samples
 Average cost per RIN for routine, 30-day turn-around time = \$95/RIN
 (cost based upon 1-5 samples per RIN and for complete verification)
 Total Cost for complete verification = 225 RINS x \$95/RIN = \$21,375

Breakdown of Historical Data:
 Item - Analytical Data Valification
 Units - lot
 Unit Cost - 93,735 nonlabor dollars
 Unit Cost Adjustment factor - NA
 Revised Unit Cost - NA

This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

WBS No: 1EBB0402
 Activity ID: 1EBB424050

Rockv Flats Closure Project
Baseline Cost and Basis of Estimate

Project: Baseline Devl
 WBS Filter: 1EBB
 Activity Filter: *

Starts In FY *

Resources	Cost Element	Quantity	Units	Skill	Department	Curve	Quantity	Units
	A5H SUBCONTRACTED SRVS	0000	NONE		C222S Water System Operations	Linear	85,265.64	Dollars
<i>Factors</i>		93735	hrs	1.02283 -- FY00 Escalation --				

0.88934 [SYS 061400] .88934200 - System

Line Item SYS - Contingency And Escalation

Resources	Cost Element	Quantity	Units	Skill	Department	Curve	Quantity	Units
	CON CONTINGENCY	0000	NONE		ZDEPT No Department	Linear	158,174.60	Dollars
<i>Factors</i>		158175	Dollars					
	ESC ESCALATION	0000	NONE		ZDEPT No Department	Linear	65,461.71	Dollars
<i>Factors</i>		65461.7	Dollars					

Activity ID: 1EBB424060 Description: NPDES Sampling, Analysis, & Rpta FY07

Cost Risk 1 Schedule Risk 1

Line Item	Description	Quantity	Units	BOE Type	Labor Hours/Unit	Labor Hours Total	Labor Cost Total	Materials/ Sub Cost	Contingency & Escalation	Total Prime Cost	Burden Cost	Total Cost
OPNCIN5101	Analysis Support for SW Projects	0.00	each	HC	#Num!	0	0	0	0	0	0	0
OPNCIN5102	Analytical Data Verification	1.00	each	HC	0	0	0	85,266	0	85,266	0	85,266
SYS	Contingency And Escalation	1.00	lea	EE	0	0	0	0	35,479	35,479	0	35,479
Total for Activity 1EBB424060:						0	0	85,266	35,479	120,745	0	120,745

Line Item OPNCIN5101 - Analysis Support for SW Projects

BOE

Historical Data Source -
 RFETS FY98 and FY99 actuals for sample analysis - on file in Bldg. T893A, Cube 35.

Item Desc -
 NPDES required sampling was estimated using requirements from the new draft permit as the NPDES regulating document for the entire Fiscal Year. Sample locations, parameters and frequencies are dictated in the terms of the draft permit. It is assumed that the new NPDES Permit was issued and implemented on October 1, 1999.

RFCA sampling was estimated using FY98 and FY99 actuals and ideal numbers of samples based on Integrated Monitoring Plans (IMP) requirements. Included in this estimate are surface water samples supporting the scheduled (as of 3/2/99) D&D efforts for FY06.

Hydrologic monitoring estimates were based on a fixed number of locations and parameters previously agreed upon with the Department of Energy.

Incidental Waters sample needs for FY06 were estimated using the actuals from FY98 and FY99 to date, as well as the currently available (as of 3/2/99) D&D schedules.

Ad hoc samples were included in the overall estimate, as well as analytical support for contaminant tracking near the ITS and for monitoring after close-out of selected IM/IRA locations.

Item Desc -
 All programs were estimated using the FY99 price list. The list provided specific charges for currently contracted labs and the average price for an individual analyte type and turnaround time were used.

Total number of samples estimated for FY06 is 5,216.

It is estimated that 480 hours of a Surface Water environmental engineer (R440S) are necessary for sample tracking and analytical problem resolution. This estimate is based upon the following monthly time estimate.

- 5 hrs per month for Project Performance Report preparation for the cognizant WADlet Manager including reconciliation of samples charged to WAD 001 versus actual samples collected. This includes reviewing other WADs to assure analytical services are not mis-charged.
- 5 hrs per month for preparation of requests to Analytical Services Division staff for completed analytical data for NPDES/RFCA programs.
- 12 hrs per month to verify that all requested data was delivered by due date, data review for reasonableness, usability, historical significance and data distribution.
- 5 hrs per month to re-request missing data.
- 5 hrs per month to provide to status of analytical data for specific programs to RMRS and K-H Team.

WBS No: 1EBB0402
 Activity ID: 1EBB424060

Rockv Flats Closure Project
Baseline Cost and Basis of Estimate

Project: Baseline Devl
 WBS Filter: 1EBB
 Activity Filter: *

Starts In FY *

- 8 hrs per month to request resolution of questions/concerns/problems with analytical data for NPDES/RFCAs programs.

Breakdown of Historical Data:
 Item - Analytical Services
 Units - lot
 Unit Cost - 480 hours and \$112,511 nonlabor dollars
 Unit Cost Adjustment factor - NA
 Revised Unit Cost - NA

This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

Resources	Cost Element	Skill	Department	Curve	Quantity	Units
	750 STRAIGHT TIME BASE	S020 ENVIRONMENTAL SCIENTISTS	C103S Environmental Compliance	Linear	426.88	Hours
Factors	480 hrs					
	A5H SUBCONTRACTED SRVS	0000 NONE	C222S Water System Operations	Linear	100.061.00	Dollars
Factors	110000 \$	1.02283 -- FY00 Escalation --				
					0.88934 [SYS 061400] .88934200 - System	
						0.88934 [SYS 061400] .88934200 - System

Line Item OPNCIN5102 - Analytical Data Verification

BOE

Historical Data Source -
 RFETS FY98 and FY99 actuals for sample analysis - on file in Bldg. T893A, Cube 35.

Item Desc -
 Estimate based on requirements determined by the Analytical Services Division, all analytical data packages produced by subcontracted laboratories will be 100% verified by ASD subcontracted staff. All verification will be complete (not partial) and will be charged back to the individual programs. Kaiser-Hill estimates indicate that the funding provided is sufficient provided that there is a minimum of 6 samples in each RIN. However, it is not possible to always plan sampling events such that a specified number of samples is included in each RIN, therefore the total number of samples (4469) for FY00 was subdivided into two categories. The first category assumes that there are 6 samples in each RIN. The second category assumes that only 2 samples are available for each RIN. The following estimates were developed using price sheets provided by ASD for subcontracted verification services.

1st Category

Number of samples collected = 1517 samples
 Average cost per RIN for routine, 30-day turn-around time = \$108/RIN
 (cost based on 6-10 samples per RIN and for complete verification)
 Total Cost for complete verification = 670 RINS x \$108/RIN = \$72,360

2nd Category

Number of samples collected = 168 samples
 Average cost per RIN for routine, 30-day turn-around time = \$95/RIN
 (cost based upon 1-5 samples per RIN and for complete verification)
 Total Cost for complete verification = 225 RINS x \$95/RIN = \$21,375

Breakdown of Historical Data:
 Item - Analytical Data Valification
 Units - lot
 Unit Cost - 93,735 nonlabor dollars
 Unit Cost Adjustment factor - NA
 Revised Unit Cost - NA

This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

Resources	Cost Element	Skill	Department	Curve	Quantity	Units
	A5H SUBCONTRACTED SRVS	0000 NONE	C222S Water System Operations	Linear	85.265.64	Dollars
Factors	93735 hrs	1.02283 -- FY00 Escalation --				
					0.88934 [SYS 061400] .88934200 - System	

Line Item SYS - Contingency And Escalation

Resources	Cost Element	Skill	Department	Curve	Quantity	Units

WBS No: 1EBB0402
 Activity ID: 1EBB424060

Rockv Flats Closure Project
Baseline Cost and Basis of Estimate

Project: Baseline Devl
 WBS Filter: 1EBB
 Activity Filter: *

Starts In FY: *

CON	CONTINGENCY	0000	NONE	ZDEPT	No Department	Linear	19,370.95	Dollars
Factors 19371 Dollars								
ESC	ESCALATION	0000	NONE	ZDEPT	No Department	Linear	16,108.16	Dollars
Factors 16108.2 Dollars								

Activity ID: 1EBB425000 Description: Stormwater Control System FY00

Cost Risk 1 Schedule Risk 1

Line Item	Description	Quantity	Units	BOE Type	Labor Hours/Unit	Labor Hours Total	Labor Cost Total	Materials/ Sub Cost	Contingency & Escalation	Total Prime Cost	Burden Cost	Total Cost
IBCGER0001	SW Monitoring Program Mgmt.	0.00	lot	HC	#Num!	0	0	0	0	0	0	0
IBCGER0002	Sample & Field Data Collection	0.10	lot	HC	179	18	526	9,176	0	9,702	257	9,959
IBCGER0003	Monitoring Data Assessment	0.10	lot	HC	232	23	698	1,322	0	2,020	341	2,360
IBCGER0004	Automated SW Monitoring	0.00	lot	HC	#Num!	0	0	0	0	0	0	0
IBCGER0005	Compliance & Stakeholder Reporting	0.00	lot	HC	#Num!	0	0	0	0	0	0	0
IBCGER0006	SW Monitoring AD Hoc Projects	0.00	lot	HC	#Num!	0	0	0	0	0	0	0
Total for Activity 1EBB425000:						41	1,224	10,498	0	11,722	597	12,319

Line Item IBCGER0001 - SW Monitoring Program Mgmt.

BOE

SOURCE OF HISTORICAL DATA
 RFETS FY98 Surface Water Monitoring WADlet (WBS # 1.1.03.06.01.01) Cost Performance Report dated 10/7/98 and WADlet manager tracking files - on file in Bldg. T893A, Cube 46.

DESCRIPTION OF ITEMS ESTIMATED
 Surface Water Monitoring Program Management. Items estimated include of management guidance and assessments; program planning; budget management; data quality assurance and management; radiological and safety engineering; and occurrence reporting.

BREAKDOWN OF HISTORICAL COST DATA:
 The FY01 BOE was developed using activity based cost estimating. Estimate based on annualized historical program costs for FY99 program.
 Item - SW Monitoring Program Management
 Units - lot
 Unit Cost - 2,930 hours and 34K nonlabor dollars
 Unit Cost Adjustment factor - NA
 Revised Unit Cost - NA
 Basis for Adjustment - NA

This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

Resources	Cost Element	Skill	Department	Curve	Quantity	Units
750	STRAIGHT TIME BASE	E050 ENVIRONMENTAL ENGINEERS	C222S Water System Operations	Linear	31.57	Hours
Factors 60 hours						
					0.52618	[SYS 061300] 0.526183 - Target
750	STRAIGHT TIME BASE	G010 ADMINISTRATIVE ASSISTANTS	C222S Water System Operations	Linear	136.81	Hours
Factors 260 hours						
					0.52618	[SYS 061300] 0.526183 - Target
750	STRAIGHT TIME BASE	M020 MANAGERS (GRADE 69 - 72)	C222S Water System Operations	Linear	389.38	Hours
Factors 740 hours						
					0.52618	[SYS 061300] 0.526183 - Target
750	STRAIGHT TIME BASE	P050 COMPLIANCE INSPECTORS	C222S Water System Operations	Linear	15.79	Hours
Factors 30 hours						
					0.52618	[SYS 061300] 0.526183 - Target
750	STRAIGHT TIME BASE	P060 COMPUTER SYSTEMS ANALYSTS	C222S Water System Operations	Linear	252.57	Hours
Factors 480 hours						
					0.52618	[SYS 061300] 0.526183 - Target
750	STRAIGHT TIME BASE	P090 INDUSTRIAL HYGIENISTS	C222S Water System Operations	Linear	63.14	Hours
Factors 120 hours						
					0.52618	[SYS 061300] 0.526183 - Target
750	STRAIGHT TIME BASE	S020 ENVIRONMENTAL SCIENTISTS	C222S Water System Operations	Linear	31.57	Hours
Factors 60 hours						
					0.52618	[SYS 061300] 0.526183 - Target

WBS No: 1EBB0402
 Activity ID: 1EBB425000

Rockv Flats Closure Project
Baseline Cost and Basis of Estimate

Project: Baseline Devl
 WBS Filter: 1EBB
 Activity Filter: *

Starts In FY: *

750	STRAIGHT TIME BASE	S020	ENVIRONMENTAL SCIENTISTS	C222S	Water Svstem Operations	Linear	620.90	Hours
<i>Factors</i> 1180 hours							0.52618	[SYS 061300] 0.526183 - Target
A5C	SUPPLIES	0000	NONE	C222S	Water Svstem Operations	Linear	6.408.91	Dollars
<i>Factors</i> 12000 dollars 1.015 -- FY00 Escalation --							0.52618	[SYS 061300] 0.526183 - Target
A5H	SUBCONTRACTED SRVS	0000	NONE	C222S	Water Svstem Operations	Linear	5.381.96	Dollars
<i>Factors</i> 10000 dollars 1.02283 -- FY00 Escalation --							0.52618	[SYS 061300] 0.526183 - Target
A5H	SUBCONTRACTED SRVS	0000	NONE	C222S	Water Svstem Operations	Linear	430.56	Dollars
<i>Factors</i> 800 dollars 1.02283 -- FY00 Escalation --							0.52618	[SYS 061300] 0.526183 - Target
A5H	SUBCONTRACTED SRVS	S020	ENVIRONMENTAL SCIENTISTS	C222S	Water Svstem Operations	Linear	5.263.02	Dollars
<i>Factors</i> 9779 d 1.02283 -- FY00 Escalation --							0.52618	[SYS 061300] 0.526183 - Target
A5M	TRAVEL/TRAIN/RELOCAT	0000	NONE	C222S	Water Svstem Operations	Linear	631.42	Dollars
<i>Factors</i> 1200 dollars							0.52618	[SYS 061300] 0.526183 - Target

Line Item IBCGER0002 - Sample & Field Data Collection

BOE
 SOURCE OF HISTORICAL DATA
 RFETS FY98 Surface Water Monitoring WADlet (WBS # 1.1.03.06.01.01) Cost Performance Report dated 10/7/98 and WADlet manager tracking files - on file in Bldg. T893A, Cube 46.

DESCRIPTION OF ITEMS ESTIMATED
 Sample & Field Data Collection. Items estimated include labor and subcontract support for sampling and analysis and major subcontract for Surface Water Sampling Program for the Site.

BREAKDOWN OF HISTORICAL COST DATA
 The FY01 BOE was developed using activity based cost estimating. Estimate based on annualized historical program costs for FY99 program.

Item - SW Sample & Field Data Collection
 Units - lot
 Unit Cost - 940 hours and 472K nonlabor dollars
 Unit Cost Adjustment factor - NA
 Revised Unit Cost - NA
 Basis for Adjustment - NA

This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

Resources

	<i>Cost Element</i>		<i>Skill</i>		<i>Department</i>	<i>Curve</i>	<i>Quantity</i>	<i>Units</i>
750	STRAIGHT TIME BASE	E050	ENVIRONMENTAL ENGINEERS	C222S	Water Svstem Operations	Linear	72.23	Hours
<i>Factors</i> 380 hours							0.36123	Mav earned value
							0.52618	[SYS 061300] 0.526183 - Target
750	STRAIGHT TIME BASE	P050	COMPLIANCE INSPECTORS	C222S	Water Svstem Operations	Linear	45.62	Hours
<i>Factors</i> 240 hours							0.36123	Mav earned value
							0.52618	[SYS 061300] 0.526183 - Target
750	STRAIGHT TIME BASE	S020	ENVIRONMENTAL SCIENTISTS	C222S	Water Svstem Operations	Linear	60.82	Hours
<i>Factors</i> 320 hours							0.36123	Mav earned value
							0.52618	[SYS 061300] 0.526183 - Target
A58	ASI	0000	NONE	C222S	Water Svstem Operations	Linear	89.430.59	Dollars
<i>Factors</i> 460000 dollars 1.02283 -- FY00 Escalation --							0.36123	Mav earned value
							0.52618	[SYS 061300] 0.526183 - Target
A5H	SUBCONTRACTED SRVS	0000	NONE	C222S	Water Svstem Operations	Linear	2.332.97	Dollars
<i>Factors</i> 12000 dollars 1.02283 -- FY00 Escalation --							0.36123	Mav earned value
							0.52618	[SYS 061300] 0.526183 - Target

Line Item IBCGER0003 - Monitoring Data Assessment

BOE
 SOURCE OF HISTORICAL DATA

WBS No: 1EBB0402
 Activity ID: 1EBB425000

Rockv Flats Closure Project
Baseline Cost and Basis of Estimate

Project: Baseline Devl
 WBS Filter: 1EBB
 Activity Filter: *

Starts In FY *

RFETS FY98 Surface Water Monitoring WADlet (WBS # 1.1.03.06.01.01) Cost Performance Report dated 10/7/98 and WADlet manager tracking files - on file in Bldg. T893A, Cube 46.

DESCRIPTION OF ITEMS ESTIMATED
 Monitoring Data Assessment. Items estimated include analytical data package and field data assessment; and monitoring data compilation, statistical analysis, and assessment.

BREAKDOWN OF HISTORICAL COST DATA
 The FY01 BOE was developed using activity based cost estimating. Estimate based on annualized historical program costs for FY99 program.

Item - Monitoring Data Assessment
 Units - lot
 Unit Cost - 1,220 hours and 68K nonlabor dollars
 Unit Cost Adjustment factor - NA
 Revised Unit Cost - NA
 Basis for Adjustment - NA

This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

Resources		Cost Element	Skill	Department	Curve	Quantity	Units
750	STRAIGHT TIME BASE	E050	ENVIRONMENTAL ENGINEERS	C222S	Water Svstem Operations	Linear	72.23 Hours
Factors		380 hours		0.36123	Mav earned value		
						0.52618	[SYS 061300] 0.526183 - Target
750	STRAIGHT TIME BASE	P050	COMPLIANCE INSPECTORS	C222S	Water Svstem Operations	Linear	45.62 Hours
Factors		240 hours		0.36123	Mav earned value		
						0.52618	[SYS 061300] 0.526183 - Target
750	STRAIGHT TIME BASE	S020	ENVIRONMENTAL SCIENTISTS	C222S	Water Svstem Operations	Linear	114.04 Hours
Factors		600 hours		0.36123	Mav earned value		
						0.52618	[SYS 061300] 0.526183 - Target
A5H	SUBCONTRACTED SRVS	0000	NONE	C222S	Water Svstem Operations	Linear	13.220.17 Dollars
Factors		68000 dollars	1.02283 -- FY00 Escalation --	0.36123	Mav earned value		
						0.52618	[SYS 061300] 0.526183 - Target

Line Item IBCGER0004 - Automated SW Monitoring

BOE

SOURCE OF HISTORICAL DATA
 RFETS FY98 Surface Water Monitoring WADlet (WBS # 1.1.03.06.01.01) Cost Performance Report dated 10/7/98 and WADlet manager tracking files - on file in Bldg. T893A, Cube 46.

DESCRIPTION OF ITEMS ESTIMATED
 Automated surface water monitoring program implementation (per IMP requirements). Items estimated include installation, operation, and maintenance of automated flow monitoring and sampling equipment; water quality probe operation; telemetry system operation and management; and hydrologic monitoring program implementation and management.

BREAKDOWN OF HISTORICAL COST DATA
 The FY01 BOE was developed using activity based cost estimating. Estimate based on annualized historical program costs for FY99 program.

Item - Automated Surface Water Monitoring Program Implementation and Management
 Units - lot
 Unit Cost - 2,010 hours and 79K nonlabor dollars
 Unit Cost Adjustment factor - NA
 Revised Unit Cost - NA
 Basis for Adjustment - NA

This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

Resources		Cost Element	Skill	Department	Curve	Quantity	Units
750	STRAIGHT TIME BASE	E050	ENVIRONMENTAL ENGINEERS	C222S	Water Svstem Operations	Linear	199.95 Hours
Factors		380 hours					
						0.52618	[SYS 061300] 0.526183 - Target

WBS No: 1EBB0402
 Activity ID: 1EBB425000

Rockv Flats Closure Project
Baseline Cost and Basis of Estimate

Project: Baseline Devl
 WBS Filter: 1EBB
 Activity Filter: *

Starts In FY *

750	STRAIGHT TIME BASE	P050	COMPLIANCE INSPECTORS	C222S	Water Svstem Operations	Linear	657.73	Hours
<i>Factors</i> 1250 hours							0.52618 [SYS 061300] 0.526183 - Target	
750	STRAIGHT TIME BASE	S020	ENVIRONMENTAL SCIENTISTS	C222S	Water Svstem Operations	Linear	199.95	Hours
<i>Factors</i> 380 hours							0.52618 [SYS 061300] 0.526183 - Target	
A5C	SUPPLIES	0000	NONE	C222S	Water Svstem Operations	Back Loaded	12,817.82	Dollars
<i>Factors</i> 24000 dollars 1.015 -- FY00 Escalation --							0.52618 [SYS 061300] 0.526183 - Target	
A5H	SUBCONTRACTED SRVS	0000	NONE	C222S	Water Svstem Operations	Linear	24,757.01	Dollars
<i>Factors</i> 46000 dollars 1.02283 -- FY00 Escalation --							0.52618 [SYS 061300] 0.526183 - Target	
A5L	RENTALS	0000	NONE	C106S	Business Management Office	Linear	3,204.45	Dollars
<i>Factors</i> 6000 dollars 1.015 -- FY00 Escalation --							0.52618 [SYS 061300] 0.526183 - Target	
A5M	TRAVEL/TRAIN/RELOCAT	0000	NONE	C222S	Water Svstem Operations	Max Backload	1,262.84	Dollars
<i>Factors</i> 2400 dollars							0.52618 [SYS 061300] 0.526183 - Target	

Line Item IBCGER0005 - Compliance & Stakeholder Reporting

BOE
 SOURCE OF HISTORICAL DATA
 RFETS FY98 Surface Water Monitoring WADlet (WBS # 1.1.03.06.01.01) Cost Performance Report dated 10/7/98 and WADlet manager tracking files - on file in Bldg. T893A, Cube 46.

DESCRIPTION OF ITEMS ESTIMATED
 Surface Water monitoring program reporting. Items estimated include NPDES monthly and annual Discharge Monitoring Report (DMR) preparation and delivery; RFCA quarterly & off-normal reporting including source evaluation planning; EPA annual sewage sludge reporting; monitoring program status and special report; GIS support including map preparation and database maintenance; and special request reports for stakeholders.

BREAKDOWN OF HISTORICAL COST DATA
 The FY01 BOE was developed using activity based cost estimating. Estimate based on annualized historical program costs for FY99 program.

Item - Compliance & Stakeholder Reporting
 Units - lot
 Unit Cost - 1,320 hours and 12K dollars
 Unit Cost Adjustment factor - NA
 Revised Unit Cost - NA
 Basis for Adjustment - NA

This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

Resources

	Cost Element		Skill		Department	Curve	Quantity	Units
750	STRAIGHT TIME BASE	E050	ENVIRONMENTAL ENGINEERS	C222S	Water Svstem Operations	Linear	63.14	Hours
<i>Factors</i> 120 hours							0.52618 [SYS 061300] 0.526183 - Target	
750	STRAIGHT TIME BASE	G010	ADMINISTRATIVE ASSISTANTS	C222S	Water Svstem Operations	Linear	21.05	Hours
<i>Factors</i> 40 hours							0.52618 [SYS 061300] 0.526183 - Target	
750	STRAIGHT TIME BASE	M020	MANAGERS (GRADE 69 - 72)	C222S	Water Svstem Operations	Linear	94.71	Hours
<i>Factors</i> 180 hours							0.52618 [SYS 061300] 0.526183 - Target	
750	STRAIGHT TIME BASE	P050	COMPLIANCE INSPECTORS	C222S	Water Svstem Operations	Linear	31.57	Hours
<i>Factors</i> 60 hours							0.52618 [SYS 061300] 0.526183 - Target	
750	STRAIGHT TIME BASE	P060	COMPUTER SYSTEMS ANALYSTS	C222S	Water Svstem Operations	Linear	168.38	Hours
<i>Factors</i> 320 hours							0.52618 [SYS 061300] 0.526183 - Target	

WBS No: 1EBB0402
 Activity ID: 1EBB425000

Rockv Flats Closure Project
Baseline Cost and Basis of Estimate

Project Baseline Devl
 WBS Filter 1EBB
 Activity Filter * Starts In FY *

750	STRAIGHT TIME BASE	S020	ENVIRONMENTAL SCIENTISTS	C222S	Water Svstem Operations	Linear	315.71	Hours
							0.52618	[SYS 061300] 0.526183 - Target
<i>Factors</i> 600 hours								
A5H	SUBCONTRACTED SRVS	0000	NONE	C222S	Water Svstem Operations	Linear	6.458.35	Dollars
<i>Factors</i> 12000 dollars 1.02283 -- FY00 Escalation --								
							0.52618	[SYS 061300] 0.526183 - Target

Line Item IBCGER0006 - SW Monitoring AD Hoc Projects

BOE
 SOURCE OF HISTORICAL DATA
 RFETS FY98 Surface Water Monitoring WADlet (WBS # 1.1.03.06.01.01) Cost Performance Report dated 10/7/98 and WADlet manager tracking files - on file in Bldg. T893A, Cube 46.
 DESCRIPTION OF ITEM ESTIMATED
 Site involvement in Colorado Water Quality Control Commission Hearing (CWQCC) hearings to ensure that appropriate and achievable water quality standards are established for Site surface water to facilitate movement toward Site closure.
 BREAKDOWN OF HISTORICAL DATA
 The FY01 BOE was developed using activity based cost estimating. Estimate based on annualized historical program costs for FY99 program.
 Item - Colorado Water Quality Control Commission Hearing(s) support
 Units - lot
 Unit Cost - 870 hours
 Unit Cost Adjustment factor - NA
 Revised Unit Cost - NA
 Basis for Adjustment - NA
 This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

Resources

<i>Cost Element</i>		<i>Skill</i>		<i>Department</i>		<i>Curve</i>	<i>Quantity</i>	<i>Units</i>
750	STRAIGHT TIME BASE	G010	ADMINISTRATIVE ASSISTANTS	C222S	Water Svstem Operations	Back Loaded	15.79	Hours
							0.52618	[SYS 061300] 0.526183 - Target
<i>Factors</i> 30 hours								
750	STRAIGHT TIME BASE	M020	MANAGERS (GRADE 69 - 72)	C222S	Water Svstem Operations	Back Loaded	63.14	Hours
							0.52618	[SYS 061300] 0.526183 - Target
<i>Factors</i> 120 hours								
750	STRAIGHT TIME BASE	S020	ENVIRONMENTAL SCIENTISTS	C222S	Water Svstem Operations	Linear	336.76	Hours
							0.52618	[SYS 061300] 0.526183 - Target
<i>Factors</i> 640 hours								
750	STRAIGHT TIME BASE	S020	ENVIRONMENTAL SCIENTISTS	C222S	Water Svstem Operations	Back Loaded	42.09	Hours
							0.52618	[SYS 061300] 0.526183 - Target
<i>Factors</i> 80 hours								

Activity ID: 1EBB425010 Description: Stormwater Control System FY01

Cost Risk 1 Schedule Risk 1

Line Item	Description	Quantity	Units	BOE Type	Labor Hours/Unit	Labor Hours Total	Labor Cost Total	Materials/ Sub Cost	Contingency & Escalation	Total Prime Cost	Burden Cost	Total Cost
IBCGER0001	SW Monitoring Program Mgmt.	0.00	lot	HC	#Num!	0	0	0	0	0	0	0
IBCGER0002	Sample & Field Data Collection	0.10	lot	HC	836	84	2.461	42.935	0	45.396	1.174	46.570
IBCGER0003	Monitoring Data Assessment	0.10	lot	HC	1.085	108	3.265	6.186	0	9.450	1.557	11.008
IBCGER0004	Automated SW Monitoring	0.00	lot	HC	#Num!	0	0	0	0	0	0	0
IBCGER0005	Compliance & Stakeholder Reporting	0.00	lot	HC	#Num!	0	0	0	0	0	0	0
IBCGER0006	SW Monitoring AD Hoc Projects	0.00	lot	HC	#Num!	0	0	0	0	0	0	0
SYS	Contingency And Escalation	1.00	lea	EE	0	0	0	0	3.024	3.024	0	3.024
Total for Activity 1EBB425010:						192	5.726	49.121	3.024	57.871	2.731	60.602

Line Item IBCGER0001 - SW Monitoring Program Mgmt.

BOE
 SOURCE OF HISTORICAL DATA
 RFETS FY98 Surface Water Monitoring WADlet (WBS # 1.1.03.06.01.01) Cost Performance Report dated 10/7/98 and WADlet manager tracking files - on file in Bldg. T893A, Cube 46.
 DESCRIPTION OF ITEMS ESTIMATED

WBS No: 1EBB0402
 Activity ID: 1EBB425010

Rockv Flats Closure Project
Baseline Cost and Basis of Estimate

Project: Baseline Devl
 WBS Filter: 1EBB
 Activity Filter: *

Starts In FY: *

Surface Water Monitoring Program Management. Items estimated include of management guidance and assessments; program planning; budget management; data quality assurance and management; radiological and safety engineering; and occurrence reporting.

BREAKDOWN OF HISTORICAL COST DATA:

The FY01 BOE was developed using activity based cost estimating. Estimate based on annualized historical program costs for FY99 program.
 Item - SW Monitoring Program Management
 Units - lot
 Unit Cost - 2,930 hours and 34K nonlabor dollars
 Unit Cost Adjustment factor - NA
 Revised Unit Cost - NA
 Basis for Adjustment - NA

This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

Resources

Cost Element	Skill	Department	Curve	Quantity	Units
750 STRAIGHT TIME BASE	E050 ENVIRONMENTAL ENGINEERS	C222S Water Svstem Operations	Linear	53.36	Hours
<i>Factors</i> 60 hours					
0.88934 ISYS 0614001.88934200 - Svstem					
750 STRAIGHT TIME BASE	G010 ADMINISTRATIVE ASSISTANTS	C222S Water Svstem Operations	Linear	231.23	Hours
<i>Factors</i> 260 hours					
0.88934 ISYS 0614001.88934200 - Svstem					
750 STRAIGHT TIME BASE	M020 MANAGERS (GRADE 69 - 72)	C222S Water Svstem Operations	Linear	658.11	Hours
<i>Factors</i> 740 hours					
0.88934 ISYS 0614001.88934200 - Svstem					
750 STRAIGHT TIME BASE	P050 COMPLIANCE INSPECTORS	C222S Water Svstem Operations	Linear	26.68	Hours
<i>Factors</i> 30 hours					
0.88934 ISYS 0614001.88934200 - Svstem					
750 STRAIGHT TIME BASE	P060 COMPUTER SYSTEMS ANALYSTS	C222S Water Svstem Operations	Linear	426.88	Hours
<i>Factors</i> 480 hours					
0.88934 ISYS 0614001.88934200 - Svstem					
750 STRAIGHT TIME BASE	P090 INDUSTRIAL HYGIENISTS	C222S Water Svstem Operations	Linear	106.72	Hours
<i>Factors</i> 120 hours					
0.88934 ISYS 0614001.88934200 - Svstem					
750 STRAIGHT TIME BASE	S020 ENVIRONMENTAL SCIENTISTS	C222S Water Svstem Operations	Linear	53.36	Hours
<i>Factors</i> 60 hours					
0.88934 ISYS 0614001.88934200 - Svstem					
750 STRAIGHT TIME BASE	S020 ENVIRONMENTAL SCIENTISTS	C222S Water Svstem Operations	Linear	1,049.42	Hours
<i>Factors</i> 1180 hours					
0.88934 ISYS 0614001.88934200 - Svstem					
A5C SUPPLIES	0000 NONE	C222S Water Svstem Operations	Linear	10,832.19	Dollars
<i>Factors</i> 12000 dollars 1.015 -- FY00 Escalation --					
0.88934 ISYS 0614001.88934200 - Svstem					
A5H SUBCONTRACTED SRVS	0000 NONE	C222S Water Svstem Operations	Linear	9,096.46	Dollars
<i>Factors</i> 10000 dollars 1.02283 -- FY00 Escalation --					
0.88934 ISYS 0614001.88934200 - Svstem					
A5H SUBCONTRACTED SRVS	0000 NONE	C222S Water Svstem Operations	Linear	727.72	Dollars
<i>Factors</i> 800 dollars 1.02283 -- FY00 Escalation --					
0.88934 ISYS 0614001.88934200 - Svstem					
A5H SUBCONTRACTED SRVS	S020 ENVIRONMENTAL SCIENTISTS	C222S Water Svstem Operations	Linear	8,895.42	Dollars
<i>Factors</i> 9779 d 1.02283 -- FY00 Escalation --					
0.88934 ISYS 0614001.88934200 - Svstem					
A5M TRAVEL/TRAIN/RELOCAT	0000 NONE	C222S Water Svstem Operations	Linear	1,067.21	Dollars
<i>Factors</i> 1200 dollars					
0.88934 ISYS 0614001.88934200 - Svstem					

Line Item IBCGER0002 - Sample & Field Data Collection

BOE SOURCE OF HISTORICAL DATA

WBS No: 1EBB0402
 Activity ID: 1EBB425010

Rockv Flats Closure Project
Baseline Cost and Basis of Estimate

Project: Baseline Devl
 WBS Filter: 1EBB
 Activity Filter: *

Starts In FY *

RFETS FY98 Surface Water Monitoring WADlet (WBS # 1.1.03.06.01.01) Cost Performance Report dated 10/7/98 and WADlet manager tracking files - on file in Bldg. T893A, Cube 46.

DESCRIPTION OF ITEMS ESTIMATED
 Sample & Field Data Collection. Items estimated include labor and subcontract support for sampling and analysis and major subcontract for Surface Water Sampling Program for the Site.

BREAKDOWN OF HISTORICAL COST DATA
 The FY01 BOE was developed using activity based cost estimating. Estimate based on annualized historical program costs for FY99 program.

Item - SW Sample & Field Data Collection
 Units - lot
 Unit Cost - 940 hours and 472K nonlabor dollars
 Unit Cost Adjustment factor - NA
 Revised Unit Cost - NA
 Basis for Adjustment - NA

This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

Resources

Cost Element	Skill	Department	Curve	Quantity	Units
750 STRAIGHT TIME BASE	E050 ENVIRONMENTAL ENGINEERS	C222S Water Svstem Operations	Linear	337.95	Hours
Factors 380 hours					
0.88934 [SYS 061400] .88934200 - Svstem					
750 STRAIGHT TIME BASE	P050 COMPLIANCE INSPECTORS	C222S Water Svstem Operations	Linear	213.44	Hours
Factors 240 hours					
0.88934 [SYS 061400] .88934200 - Svstem					
750 STRAIGHT TIME BASE	S020 ENVIRONMENTAL SCIENTISTS	C222S Water Svstem Operations	Linear	284.59	Hours
Factors 320 hours					
0.88934 [SYS 061400] .88934200 - Svstem					
A58 ASI	0000 NONE	K267S Analytical Laboratory Services	Linear	418.437.00	Dollars
Factors 460000 dollars 1.02283 -- FY00 Escalation --					
0.88934 [SYS 061400] .88934200 - Svstem					
A5H SUBCONTRACTED SRVS	0000 NONE	C222S Water Svstem Operations	Linear	10.915.75	Dollars
Factors 12000 dollars 1.02283 -- FY00 Escalation --					
0.88934 [SYS 061400] .88934200 - Svstem					

Line Item IBCGER0003 - Monitoring Data Assessment

BOE

SOURCE OF HISTORICAL DATA
 RFETS FY98 Surface Water Monitoring WADlet (WBS # 1.1.03.06.01.01) Cost Performance Report dated 10/7/98 and WADlet manager tracking files - on file in Bldg. T893A, Cube 46.

DESCRIPTION OF ITEMS ESTIMATED
 Monitoring Data Assessment. Items estimated include analytical data package and field data assessment; and monitoring data compilation, statistical analysis, and assessment.

BREAKDOWN OF HISTORICAL COST DATA
 The FY01 BOE was developed using activity based cost estimating. Estimate based on annualized historical program costs for FY99 program.

Item - Monitoring Data Assessment
 Units - lot
 Unit Cost - 1,220 hours and 68K nonlabor dollars
 Unit Cost Adjustment factor - NA
 Revised Unit Cost - NA
 Basis for Adjustment - NA

This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

Resources

Cost Element	Skill	Department	Curve	Quantity	Units
750 STRAIGHT TIME BASE	E050 ENVIRONMENTAL ENGINEERS	C222S Water Svstem Operations	Linear	337.95	Hours
Factors 380 hours					
0.88934 [SYS 061400] .88934200 - Svstem					

WBS No: 1EBB0402
 Activity ID: 1EBB425010

Rockv Flats Closure Project
Baseline Cost and Basis of Estimate

Project: Baseline Devl
 WBS Filter: 1EBB
 Activity Filter: *

Starts In FY *

750	STRAIGHT TIME BASE	P050	COMPLIANCE INSPECTORS	C222S	Water Svstem Operations	Linear	213.44	Hours
<i>Factors</i> 240 hours							0.88934	[SYS 061400].88934200 - Svstem
750	STRAIGHT TIME BASE	S020	ENVIRONMENTAL SCIENTISTS	C222S	Water Svstem Operations	Linear	533.61	Hours
<i>Factors</i> 600 hours							0.88934	[SYS 061400].88934200 - Svstem
A5H	SUBCONTRACTED SRVS	0000	NONE	C222S	Water Svstem Operations	Linear	61.855.91	Dollars
<i>Factors</i> 68000 dollars 1.02283 -- FY00 Escalation --							0.88934	[SYS 061400].88934200 - Svstem

Line Item IBCGER0004 - Automated SW Monitoring

BOE
 SOURCE OF HISTORICAL DATA
 RFETS FY98 Surface Water Monitoring WADlet (WBS # 1.1.03.06.01.01) Cost Performance Report dated 10/7/98 and WADlet manager tracking files - on file in Bldg. T893A, Cube 46.

DESCRIPTION OF ITEMS ESTIMATED
 Automated surface water monitoring program implementation (per IMP requirements). Items estimated include installation, operation, and maintenance of automated flow monitoring and sampling equipment; water quality probe operation; telemetry system operation and management; and hydrologic monitoring program implementation and management.

BREAKDOWN OF HISTORICAL COST DATA
 The FY01 BOE was developed using activity based cost estimating. Estimate based on annualized historical program costs for FY99 program.

Item - Automated Surface Water Monitoring Program Implementation and Management
 Units - lot
 Unit Cost - 2,010 hours and 79K nonlabor dollars
 Unit Cost Adjustment factor - NA
 Revised Unit Cost - NA
 Basis for Adjustment - NA

This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

Resources

	<i>Cost Element</i>		<i>Skill</i>		<i>Department</i>	<i>Curve</i>	<i>Quantity</i>	<i>Units</i>
750	STRAIGHT TIME BASE	E050	ENVIRONMENTAL ENGINEERS	C222S	Water System Operations	Linear	337.95	Hours
<i>Factors</i> 380 hours							0.88934	[SYS 061400].88934200 - Svstem
750	STRAIGHT TIME BASE	P050	COMPLIANCE INSPECTORS	C222S	Water Svstem Operations	Linear	1,111.68	Hours
<i>Factors</i> 1250 hours							0.88934	[SYS 061400].88934200 - Svstem
750	STRAIGHT TIME BASE	S020	ENVIRONMENTAL SCIENTISTS	C222S	Water Svstem Operations	Linear	337.95	Hours
<i>Factors</i> 380 hours							0.88934	[SYS 061400].88934200 - Svstem
A5C	SUPPLIES	0000	NONE	C222S	Water Svstem Operations	Back Loaded	21,664.37	Dollars
<i>Factors</i> 24000 dollars 1.015 -- FY00 Escalation --							0.88934	[SYS 061400].88934200 - Svstem
A5H	SUBCONTRACTED SRVS	0000	NONE	C222S	Water Svstem Operations	Linear	41,843.70	Dollars
<i>Factors</i> 46000 dollars 1.02283 -- FY00 Escalation --							0.88934	[SYS 061400].88934200 - Svstem
A5L	RENTALS	0000	NONE	C106S	Business Management Office	Linear	5,416.09	Dollars
<i>Factors</i> 6000 dollars 1.015 -- FY00 Escalation --							0.88934	[SYS 061400].88934200 - Svstem
A5M	TRAVEL/TRAIN/RELOCAT	0000	NONE	C222S	Water Svstem Operations	Max Backload	2,134.42	Dollars
<i>Factors</i> 2400 dollars							0.88934	[SYS 061400].88934200 - Svstem

Line Item IBCGER0005 - Compliance & Stakeholder Reporting

BOE
 SOURCE OF HISTORICAL DATA
 RFETS FY98 Surface Water Monitoring WADlet (WBS # 1.1.03.06.01.01) Cost Performance Report dated 10/7/98 and WADlet manager tracking files - on file in Bldg. T893A, Cube 46.

WBS No: 1EBB0402
 Activity ID: 1EBB425010

Rockv Flats Closure Project
Baseline Cost and Basis of Estimate

Project: Baseline Devl
 WBS Filter: 1EBB
 Activity Filter: *

Starts In FY *

DESCRIPTION OF ITEMS ESTIMATED
 Surface Water monitoring program reporting. Items estimated include NPDES monthly and annual Discharge Monitoring Report (DMR) preparation and delivery; RFCA quarterly & off-normal reporting including source evaluation planning; EPA annual sewage sludge reporting; monitoring program status and special report; GIS support including map preparation and database maintenance; and special request reports for stakeholders.

BREAKDOWN OF HISTORICAL COST DATA
 The FY01 BOE was developed using activity based cost estimating. Estimate based on annualized historical program costs for FY99 program.

Item - Compliance & Stakeholder Reporting
 Units - lot
 Unit Cost - 1,320 hours and 12K dollars
 Unit Cost Adjustment factor - NA
 Revised Unit Cost - NA
 Basis for Adjustment - NA

This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

Resources

Cost Element	Skill	Department	Curve	Quantity	Units
750 STRAIGHT TIME BASE	E050 ENVIRONMENTAL ENGINEERS	C222S Water System Operations	Linear	106.72	Hours
Factors 120 hours					
0.88934 ISYS 0614001.88934200 - System					
750 STRAIGHT TIME BASE	G010 ADMINISTRATIVE ASSISTANTS	C222S Water System Operations	Linear	35.57	Hours
Factors 40 hours					
0.88934 ISYS 0614001.88934200 - System					
750 STRAIGHT TIME BASE	M020 MANAGERS (GRADE 69 - 72)	C222S Water System Operations	Linear	160.08	Hours
Factors 180 hours					
0.88934 ISYS 0614001.88934200 - System					
750 STRAIGHT TIME BASE	P050 COMPLIANCE INSPECTORS	C222S Water System Operations	Linear	53.36	Hours
Factors 60 hours					
0.88934 ISYS 0614001.88934200 - System					
750 STRAIGHT TIME BASE	P060 COMPUTER SYSTEMS ANALYSTS	C222S Water System Operations	Linear	284.59	Hours
Factors 320 hours					
0.88934 ISYS 0614001.88934200 - System					
750 STRAIGHT TIME BASE	S020 ENVIRONMENTAL SCIENTISTS	C222S Water System Operations	Linear	533.61	Hours
Factors 600 hours					
0.88934 ISYS 0614001.88934200 - System					
A5H SUBCONTRACTED SRVS	0000 NONE	C222S Water System Operations	Linear	10.915.75	Dollars
Factors 12000 dollars 1.02283 -- FY00 Escalation --					
0.88934 ISYS 0614001.88934200 - System					

Line Item IBCGER0006 - SW Monitoring AD Hoc Projects

BOE

SOURCE OF HISTORICAL DATA
 RFETS FY98 Surface Water Monitoring WADlet (WBS # 1.1.03.06.01.01) Cost Performance Report dated 10/7/98 and WADlet manager tracking files - on file in Bldg. T893A, Cube 46.

DESCRIPTION OF ITEM ESTIMATED
 Site involvement in Colorado Water Quality Control Commission Hearing (CWQCC) hearings to ensure that appropriate and achievable water quality standards are established for Site surface water to facilitate movement toward Site closure.

BREAKDOWN OF HISTORICAL DATA
 The FY01 BOE was developed using activity based cost estimating. Estimate based on annualized historical program costs for FY99 program.

Item - Colorado Water Quality Control Commission Hearing(s) support
 Units - lot
 Unit Cost - 870 hours
 Unit Cost Adjustment factor - NA
 Revised Unit Cost - NA
 Basis for Adjustment - NA

WBS No: 1EBB0402
 Activity ID: 1EBB425010

Rockv Flats Closure Project
Baseline Cost and Basis of Estimate

Project: Baseline Devl
 WBS Filter: 1EBB
 Activity Filter: *

Starts In FY *

This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

Resources	Cost Element	Skill	Department	Curve	Quantity	Units
	750 STRAIGHT TIME BASE	G010 ADMINISTRATIVE ASSISTANTS	C222S Water Svstem Operations	Back Loaded	26.68	Hours
Factors	30 hours					
	750 STRAIGHT TIME BASE	M020 MANAGERS (GRADE 69 - 72)	C222S Water Svstem Operations	Back Loaded	106.72	Hours
Factors	120 hours					
	750 STRAIGHT TIME BASE	S020 ENVIRONMENTAL SCIENTISTS	C222S Water Svstem Operations	Linear	569.18	Hours
Factors	640 hours					
	750 STRAIGHT TIME BASE	S020 ENVIRONMENTAL SCIENTISTS	C222S Water Svstem Operations	Back Loaded	71.15	Hours
Factors	80 hours					

0.88934 [SYS 061400] .88934200 - Svstem

Line Item SYS - Contingency And Escalation

Resources	Cost Element	Skill	Department	Curve	Quantity	Units
	CON CONTINGENCY	0000 NONE	ZDEPT No Department	Linear	1.813.54	Dollars
Factors	1813.54 Dollars					
	ESC ESCALATION	0000 NONE	ZDEPT No Department	Linear	1.210.74	Dollars
Factors	1210.74 Dollars					

Activity ID: 1EBB425020 Description: Stormwater Control System FY02

Cost Risk 1 Schedule Risk 1

Line Item	Description	Quantity	Units	BOE Type	Labor Hours/Unit	Labor Hours Total	Labor Cost Total	Materials/ Sub Cost	Contingency & Escalation	Total Prime Cost	Burden Cost	Total Cost
IBCGER0001	SW Monitoring Program Mgmt.	0.00	lot	HC	#Num!	0	0	0	0	0	0	0
IBCGER0002	Sample & Field Data Collection	0.12	lot	HC	836	100	2.953	51.522	0	54.476	1.043	55.518
IBCGER0003	Monitoring Data Assessment	0.12	lot	HC	1.085	130	3.918	7.423	0	11.340	1.383	12.723
IBCGER0004	Automated SW Monitoring	0.00	lot	HC	#Num!	0	0	0	0	0	0	0
IBCGER0005	Compliance & Stakeholder Reporting	0.00	lot	HC	#Num!	0	0	0	0	0	0	0
IBCGER0006	SW Monitoring AD Hoc Projects	0.00	lot	HC	#Num!	0	0	0	0	0	0	0
SYS	Contingency And Escalation	1.00	lea	EE	0	0	0	0	10.088	10.088	0	10.088
Total for Activity 1EBB425020:						231	6.871	58.945	10.088	75.904	2.426	78.330

Line Item IBCGER0001 - SW Monitoring Program Mgmt.

BOE	Description
	SOURCE OF HISTORICAL DATA RFETS FY98 Surface Water Monitoring WADlet (WBS # 1.1.03.06.01.01) Cost Performance Report dated 10/7/98 and WADlet manager tracking files - on file in Bldg. T893A, Cube 46.
	DESCRIPTION OF ITEMS ESTIMATED Surface Water Monitoring Program Management. Items estimated include of management guidance and assessments; program planning; budget management; data quality assurance and management; radiological and safety engineering; and occurrence reporting.
	BREAKDOWN OF HISTORICAL COST DATA: The FY01 BOE was developed using activity based cost estimating. Estimate based on annualized historical program costs for FY99 program. Item - SW Monitoring Program Management Units - lot Unit Cost - 2,930 hours and 34K nonlabor dollars Unit Cost Adjustment factor - NA Revised Unit Cost - NA Basis for Adjustment - NA
	This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

Resources	Cost Element	Skill	Department	Curve	Quantity	Units
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WBS No: 1EBB0402
 Activity ID: 1EBB425020

Rockv Flats Closure Project
Baseline Cost and Basis of Estimate

Project Baseline Devl
 WBS Filter 1EBB
 Activity Filter *

Starts In FY *

750	STRAIGHT TIME BASE	E050	ENVIRONMENTAL ENGINEERS	C222S	Water Svstem Operations	Linear	53.36	Hours
Factors 60 hours								
						0.88934	[SYS 061400]	.88934200 - Svstem
750	STRAIGHT TIME BASE	G010	ADMINISTRATIVE ASSISTANTS	C222S	Water Svstem Operations	Linear	231.23	Hours
Factors 260 hours								
						0.88934	[SYS 061400]	.88934200 - Svstem
750	STRAIGHT TIME BASE	M020	MANAGERS (GRADE 69 - 72)	C222S	Water Svstem Operations	Linear	658.11	Hours
Factors 740 hours								
						0.88934	[SYS 061400]	.88934200 - Svstem
750	STRAIGHT TIME BASE	P050	COMPLIANCE INSPECTORS	C222S	Water Svstem Operations	Linear	26.68	Hours
Factors 30 hours								
						0.88934	[SYS 061400]	.88934200 - Svstem
750	STRAIGHT TIME BASE	P060	COMPUTER SYSTEMS ANALYSTS	C222S	Water Svstem Operations	Linear	426.88	Hours
Factors 480 hours								
						0.88934	[SYS 061400]	.88934200 - Svstem
750	STRAIGHT TIME BASE	P090	INDUSTRIAL HYGIENISTS	C222S	Water Svstem Operations	Linear	106.72	Hours
Factors 120 hours								
						0.88934	[SYS 061400]	.88934200 - Svstem
750	STRAIGHT TIME BASE	S020	ENVIRONMENTAL SCIENTISTS	C222S	Water Svstem Operations	Linear	53.36	Hours
Factors 60 hours								
						0.88934	[SYS 061400]	.88934200 - Svstem
750	STRAIGHT TIME BASE	S020	ENVIRONMENTAL SCIENTISTS	C222S	Water Svstem Operations	Linear	1,049.42	Hours
Factors 1180 hours								
						0.88934	[SYS 061400]	.88934200 - Svstem
A5C	SUPPLIES	0000	NONE	C222S	Water Svstem Operations	Linear	10,832.19	Dollars
Factors 12000 dollars 1.015 -- FY00 Escalation --								
						0.88934	[SYS 061400]	.88934200 - Svstem
A5H	SUBCONTRACTED SRVS	0000	NONE	C222S	Water Svstem Operations	Linear	9,096.46	Dollars
Factors 10000 dollars 1.02283 -- FY00 Escalation --								
						0.88934	[SYS 061400]	.88934200 - Svstem
A5H	SUBCONTRACTED SRVS	0000	NONE	C222S	Water Svstem Operations	Linear	727.72	Dollars
Factors 800 dollars 1.02283 -- FY00 Escalation --								
						0.88934	[SYS 061400]	.88934200 - Svstem
A5H	SUBCONTRACTED SRVS	S020	ENVIRONMENTAL SCIENTISTS	C222S	Water Svstem Operations	Linear	8,895.42	Dollars
Factors 9779 d 1.02283 -- FY00 Escalation --								
						0.88934	[SYS 061400]	.88934200 - Svstem
A5M	TRAVEL/TRAIN/RELOCAT	0000	NONE	C222S	Water Svstem Operations	Linear	1,067.21	Dollars
Factors 1200 dollars								
						0.88934	[SYS 061400]	.88934200 - Svstem

Line Item IBCGER0002 - Sample & Field Data Collection

BOE

SOURCE OF HISTORICAL DATA
 RFETS FY98 Surface Water Monitoring WADlet (WBS # 1.1.03.06.01.01) Cost Performance Report dated 10/7/98 and WADlet manager tracking files - on file in Bldg. T893A, Cube 46.

DESCRIPTION OF ITEMS ESTIMATED
 Sample & Field Data Collection. Items estimated include labor and subcontract support for sampling and analysis and major subcontract for Surface Water Sampling Program for the Site.

BREAKDOWN OF HISTORICAL COST DATA
 The FY01 BOE was developed using activity based cost estimating. Estimate based on annualized historical program costs for FY99 program.

Item - SW Sample & Field Data Collection
 Units - lot
 Unit Cost - 940 hours and 472K nonlabor dollars
 Unit Cost Adjustment factor - NA
 Revised Unit Cost - NA

WBS No: 1EBB0402
 Activity ID: 1EBB425020

Rockv Flats Closure Project
Baseline Cost and Basis of Estimate

Project: Baseline Devl
 WBS Filter: 1EBB
 Activity Filter: *

Starts In FY *

Basis for Adjustment - NA
 This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

Resources

Cost Element	Skill	Department	Curve	Quantity	Units
750 STRAIGHT TIME BASE	E050 ENVIRONMENTAL ENGINEERS	C222S Water Svstem Operations	Linear	337.95	Hours
<i>Factors</i> 380 hours					
0.88934 [SYS 061400] .88934200 - Svstem					
750 STRAIGHT TIME BASE	P050 COMPLIANCE INSPECTORS	C222S Water Svstem Operations	Linear	213.44	Hours
<i>Factors</i> 240 hours					
0.88934 [SYS 061400] .88934200 - Svstem					
750 STRAIGHT TIME BASE	S020 ENVIRONMENTAL SCIENTISTS	C222S Water Svstem Operations	Linear	284.59	Hours
<i>Factors</i> 320 hours					
0.88934 [SYS 061400] .88934200 - Svstem					
A58 ASI	0000 NONE	K267S Analytical Laboratory Services	Linear	418.437	Dollars
<i>Factors</i> 460000 dollars 1.02283 -- FY00 Escalation --					
0.88934 [SYS 061400] .88934200 - Svstem					
A5H SUBCONTRACTED SRVS	0000 NONE	C222S Water Svstem Operations	Linear	10.91575	Dollars
<i>Factors</i> 12000 dollars 1.02283 -- FY00 Escalation --					
0.88934 [SYS 061400] .88934200 - Svstem					

Line Item IBCGER0003 - Monitoring Data Assessment

BOE
 SOURCE OF HISTORICAL DATA
 RFETS FY98 Surface Water Monitoring WADlet (WBS # 1.1.03.06.01.01) Cost Performance Report dated 10/7/98 and WADlet manager tracking files - on file in Bldg. T893A, Cube 46.
 DESCRIPTION OF ITEMS ESTIMATED
 Monitoring Data Assessment. Items estimated include analytical data package and field data assessment; and monitoring data compilation, statistical analysis, and assessment.
 BREAKDOWN OF HISTORICAL COST DATA
 The FY01 BOE was developed using activity based cost estimating. Estimate based on annualized historical program costs for FY99 program.
 Item - Monitoring Data Assessment
 Units - lot
 Unit Cost - 1,220 hours and 68K nonlabor dollars
 Unit Cost Adjustment factor - NA
 Revised Unit Cost - NA
 Basis for Adjustment - NA
 This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

Resources

Cost Element	Skill	Department	Curve	Quantity	Units
750 STRAIGHT TIME BASE	E050 ENVIRONMENTAL ENGINEERS	C222S Water Svstem Operations	Linear	337.95	Hours
<i>Factors</i> 380 hours					
0.88934 [SYS 061400] .88934200 - Svstem					
750 STRAIGHT TIME BASE	P050 COMPLIANCE INSPECTORS	C222S Water Svstem Operations	Linear	213.44	Hours
<i>Factors</i> 240 hours					
0.88934 [SYS 061400] .88934200 - Svstem					
750 STRAIGHT TIME BASE	S020 ENVIRONMENTAL SCIENTISTS	C222S Water Svstem Operations	Linear	533.61	Hours
<i>Factors</i> 600 hours					
0.88934 [SYS 061400] .88934200 - Svstem					
A5H SUBCONTRACTED SRVS	0000 NONE	C222S Water Svstem Operations	Linear	61.85591	Dollars
<i>Factors</i> 68000 dollars 1.02283 -- FY00 Escalation --					
0.88934 [SYS 061400] .88934200 - Svstem					

Line Item IBCGER0004 - Automated SW Monitoring

BOE
 SOURCE OF HISTORICAL DATA
 RFETS FY98 Surface Water Monitoring WADlet (WBS # 1.1.03.06.01.01) Cost Performance Report dated 10/7/98 and WADlet manager tracking files - on file in Bldg. T893A, Cube 46.

WBS No: 1EBB0402
 Activity ID: 1EBB425020

Rockv Flats Closure Project
Baseline Cost and Basis of Estimate

Project: Baseline Devl
 WBS Filter: 1EBB
 Activity Filter: *

Starts In FY *

DESCRIPTION OF ITEMS ESTIMATED
 Automated surface water monitoring program implementation (per IMP requirements). Items estimated include installation, operation, and maintenance of automated flow monitoring and sampling equipment; water quality probe operation; telemetry system operation and management; and hydrologic monitoring program implementation and management.

BREAKDOWN OF HISTORICAL COST DATA
 The FY01 BOE was developed using activity based cost estimating. Estimate based on annualized historical program costs for FY99 program.

Item - Automated Surface Water Monitoring Program Implementation and Management
 Units - lot
 Unit Cost - 2,010 hours and 79K nonlabor dollars
 Unit Cost Adjustment factor - NA
 Revised Unit Cost - NA
 Basis for Adjustment - NA

This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

Resources

Cost Element	Skill	Department	Curve	Quantity	Units
750 STRAIGHT TIME BASE	E050 ENVIRONMENTAL ENGINEERS	C222S Water System Operations	Linear	337.95	Hours
Factors 380 hours					
0.88934 ISYS 0614001.88934200 - System					
750 STRAIGHT TIME BASE	P050 COMPLIANCE INSPECTORS	C222S Water System Operations	Linear	1,111.68	Hours
Factors 1250 hours					
0.88934 ISYS 0614001.88934200 - System					
750 STRAIGHT TIME BASE	S020 ENVIRONMENTAL SCIENTISTS	C222S Water System Operations	Linear	337.95	Hours
Factors 380 hours					
0.88934 ISYS 0614001.88934200 - System					
A5C SUPPLIES	0000 NONE	C222S Water System Operations	Back Loaded	21,664.37	Dollars
Factors 24000 dollars 1.015 -- FY00 Escalation --					
0.88934 ISYS 0614001.88934200 - System					
A5H SUBCONTRACTED SRVS	0000 NONE	C222S Water System Operations	Linear	41,843.70	Dollars
Factors 46000 dollars 1.02283 -- FY00 Escalation --					
0.88934 ISYS 0614001.88934200 - System					
A5L RENTALS	0000 NONE	C106S Business Management Office	Linear	5,416.09	Dollars
Factors 6000 dollars 1.015 -- FY00 Escalation --					
0.88934 ISYS 0614001.88934200 - System					
A5M TRAVEL/TRAIN/RELOCAT	0000 NONE	C222S Water System Operations	Max Backload	2,134.42	Dollars
Factors 2400 dollars					
0.88934 ISYS 0614001.88934200 - System					

Line Item IBCGER0005 - Compliance & Stakeholder Reporting

BOE

SOURCE OF HISTORICAL DATA
 RFETS FY98 Surface Water Monitoring WADlet (WBS # 1.1.03.06.01.01) Cost Performance Report dated 10/7/98 and WADlet manager tracking files - on file in Bldg. T893A, Cube 46.

DESCRIPTION OF ITEMS ESTIMATED
 Surface Water monitoring program reporting. Items estimated include NPDES monthly and annual Discharge Monitoring Report (DMR) preparation and delivery; RFCA quarterly & off-normal reporting including source evaluation planning; EPA annual sewage sludge reporting; monitoring program status and special report; GIS support including map preparation and database maintenance; and special request reports for stakeholders.

BREAKDOWN OF HISTORICAL COST DATA
 The FY01 BOE was developed using activity based cost estimating. Estimate based on annualized historical program costs for FY99 program.

Item - Compliance & Stakeholder Reporting
 Units - lot
 Unit Cost - 1,320 hours and 12K dollars
 Unit Cost Adjustment factor - NA
 Revised Unit Cost - NA
 Basis for Adjustment - NA

WBS No: 1EBB0402
 Activity ID: 1EBB425020

Rockv Flats Closure Project
Baseline Cost and Basis of Estimate

Project Baseline Devl
 WBS Filter 1EBB
 Activity Filter *

Starts In FY *

This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

Resources	Cost Element	Skill	Department	Curve	Quantity	Units
	750 STRAIGHT TIME BASE	E050 ENVIRONMENTAL ENGINEERS	C222S Water System Operations	Linear	106.72	Hours
Factors	120 hours					
	750 STRAIGHT TIME BASE	G010 ADMINISTRATIVE ASSISTANTS	C222S Water System Operations	Linear	35.57	Hours
Factors	40 hours					
	750 STRAIGHT TIME BASE	M020 MANAGERS (GRADE 69 - 72)	C222S Water System Operations	Linear	160.08	Hours
Factors	180 hours					
	750 STRAIGHT TIME BASE	P050 COMPLIANCE INSPECTORS	C222S Water System Operations	Linear	53.36	Hours
Factors	60 hours					
	750 STRAIGHT TIME BASE	P060 COMPUTER SYSTEMS ANALYSTS	C222S Water System Operations	Linear	284.59	Hours
Factors	320 hours					
	750 STRAIGHT TIME BASE	S020 ENVIRONMENTAL SCIENTISTS	C222S Water System Operations	Linear	533.61	Hours
Factors	600 hours					
	A5H SUBCONTRACTED SRVS	0000 NONE	C222S Water System Operations	Linear	10.915.75	Dollars
Factors	12000 dollars	1.02283 -- FY00 Escalation --				

Line Item IBCGER0006 - SW Monitoring AD Hoc Projects

BOE	DESCRIPTION OF ITEM ESTIMATED
	SOURCE OF HISTORICAL DATA RFETS FY98 Surface Water Monitoring WADlet (WBS # 1.1.03.06.01.01) Cost Performance Report dated 10/7/98 and WADlet manager tracking files - on file in Bldg. T893A, Cube 46.
	DESCRIPTION OF ITEM ESTIMATED Site involvement in Colorado Water Quality Control Commission Hearing (CWQCC) hearings to ensure that appropriate and achievable water quality standards are established for Site surface water to facilitate movement toward Site closure.
	BREAKDOWN OF HISTORICAL DATA The FY01 BOE was developed using activity based cost estimating. Estimate based on annualized historical program costs for FY99 program.
	Item - Colorado Water Quality Control Commission Hearing(s) support Units - lot Unit Cost - 870 hours Unit Cost Adjustment factor - NA Revised Unit Cost - NA Basis for Adjustment - NA
	This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

Resources	Cost Element	Skill	Department	Curve	Quantity	Units
	750 STRAIGHT TIME BASE	G010 ADMINISTRATIVE ASSISTANTS	C222S Water System Operations	Back Loaded	26.68	Hours
Factors	30 hours					
	750 STRAIGHT TIME BASE	M020 MANAGERS (GRADE 69 - 72)	C222S Water System Operations	Back Loaded	106.72	Hours
Factors	120 hours					
	750 STRAIGHT TIME BASE	S020 ENVIRONMENTAL SCIENTISTS	C222S Water System Operations	Linear	569.18	Hours
Factors	640 hours					

WBS No: 1EBB0402
 Activity ID: 1EBB425020

Rockv Flats Closure Project
Baseline Cost and Basis of Estimate

Project: Baseline Devl
 WBS Filter: 1EBB
 Activity Filter: *

Starts In FY *

750	STRAIGHT TIME BASE	S020	ENVIRONMENTAL SCIENTISTS	C222S	Water Svstem Operations	Back Loaded	71.15	Hours
<i>Factors</i>		80	hours					

0.88934 [SYS 061400] .88934200 - Svstem

Line Item SYS - Contingency And Escalation

BOE

Resources

Cost Element	Skill	Department	Curve	Quantity	Units
CON CONTINGENCY	0000 NONE	ZDEPT No Department	Linear	6.898.95	Dollars
<i>Factors</i>		6898.95 Dollars			
ESC ESCALATION	0000 NONE	ZDEPT No Department	Linear	3.189.03	Dollars
<i>Factors</i>		3189.03 Dollars			

Activity ID: 1EBB425030

Description: Stormwater Control Svstem FY03

Cost Risk 1 Schedule Risk 1

Line Item	Description	Quantity	Units	BOE Type	Labor Hours/Unit	Labor Hours Total	Labor Cost Total	Materials/ Sub Cost	Contingency & Escalation	Total Prime Cost	Burden Cost	Total Cost
IBCGER0001	SW Monitoring Program Mgmt.	0.00	lot	HC	#Num!	0	0	0	0	0	0	0
IBCGER0002	Sample & Field Data Collection	0.14	lot	HC	836	117	3.446	60.109	0	63.555	1.192	64.747
IBCGER0003	Monitoring Data Assessment	0.14	lot	HC	1.085	152	4.571	8.660	0	13.231	1.581	14.812
IBCGER0004	Automated SW Monitoring	0.00	lot	HC	#Num!	0	0	0	0	0	0	0
IBCGER0005	Compliance & Stakeholder Reporting	0.00	lot	HC	#Num!	0	0	0	0	0	0	0
IBCGER0006	SW Monitoring AD Hoc Projects	0.00	lot	HC	#Num!	0	0	0	0	0	0	0
SYS	Contingency And Escalation	1.00	lea	EE	0	0	0	0	21.823	21.823	0	21.823
Total for Activity 1EBB425030:						269	8.016	68.769	21.823	98.609	2.774	101.382

Line Item IBCGER0001 - SW Monitoring Program Mgmt.

BOE

SOURCE OF HISTORICAL DATA
 RFETS FY98 Surface Water Monitoring WADlet (WBS # 1.1.03.06.01.01) Cost Performance Report dated 10/7/98 and WADlet manager tracking files - on file in Bldg. T893A, Cube 46.

DESCRIPTION OF ITEMS ESTIMATED
 Surface Water Monitoring Program Management. Items estimated include of management guidance and assessments; program planning; budget management; data quality assurance and management; radiological and safety engineering; and occurrence reporting.

BREAKDOWN OF HISTORICAL COST DATA:
 The FY01 BOE was developed using activity based cost estimating. Estimate based on annualized historical program costs for FY99 program.
 Item - SW Monitoring Program Management
 Units - lot
 Unit Cost - 2,930 hours and 34K nonlabor dollars
 Unit Cost Adjustment factor - NA
 Revised Unit Cost - NA
 Basis for Adjustment - NA

This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

Resources

Cost Element	Skill	Department	Curve	Quantity	Units
750 STRAIGHT TIME BASE	E050 ENVIRONMENTAL ENGINEERS	C222S Water Svstem Operations	Linear	53.36	Hours
<i>Factors</i>		60	hours		
0.88934 [SYS 061400] .88934200 - Svstem					
750 STRAIGHT TIME BASE	G010 ADMINISTRATIVE ASSISTANTS	C222S Water Svstem Operations	Linear	231.23	Hours
<i>Factors</i>		260	hours		
0.88934 [SYS 061400] .88934200 - Svstem					
750 STRAIGHT TIME BASE	M020 MANAGERS (GRADE 69 - 72)	C222S Water Svstem Operations	Linear	658.11	Hours
<i>Factors</i>		740	hours		
0.88934 [SYS 061400] .88934200 - Svstem					
750 STRAIGHT TIME BASE	P050 COMPLIANCE INSPECTORS	C222S Water Svstem Operations	Linear	26.68	Hours
<i>Factors</i>		30	hours		
0.88934 [SYS 061400] .88934200 - Svstem					

WBS No: 1EBB0402
 Activity ID: 1EBB425030

Rockv Flats Closure Project
Baseline Cost and Basis of Estimate

Project Baseline Devl
 WBS Filter 1EBB
 Activity Filter *

Starts In FY *

750	STRAIGHT TIME BASE	P060	COMPUTER SYSTEMS ANALYSTS	C222S	Water Svstem Operations	Linear	426.88	Hours
<i>Factors</i> 480 hours								
						0.88934	[SYS 061400]	.88934200 - Svstem
750	STRAIGHT TIME BASE	P090	INDUSTRIAL HYGIENISTS	C222S	Water Svstem Operations	Linear	106.72	Hours
<i>Factors</i> 120 hours								
						0.88934	[SYS 061400]	.88934200 - Svstem
750	STRAIGHT TIME BASE	S020	ENVIRONMENTAL SCIENTISTS	C222S	Water Svstem Operations	Linear	53.36	Hours
<i>Factors</i> 60 hours								
						0.88934	[SYS 061400]	.88934200 - Svstem
750	STRAIGHT TIME BASE	S020	ENVIRONMENTAL SCIENTISTS	C222S	Water Svstem Operations	Linear	1,049.42	Hours
<i>Factors</i> 1180 hours								
						0.88934	[SYS 061400]	.88934200 - Svstem
A5C	SUPPLIES	0000	NONE	C222S	Water Svstem Operations	Linear	10,832.19	Dollars
<i>Factors</i> 12000 dollars 1.015 -- FY00 Escalation --								
						0.88934	[SYS 061400]	.88934200 - Svstem
A5H	SUBCONTRACTED SRVS	0000	NONE	C222S	Water Svstem Operations	Linear	9,096.46	Dollars
<i>Factors</i> 10000 dollars 1.02283 -- FY00 Escalation --								
						0.88934	[SYS 061400]	.88934200 - Svstem
A5H	SUBCONTRACTED SRVS	0000	NONE	C222S	Water Svstem Operations	Linear	727.72	Dollars
<i>Factors</i> 800 dollars 1.02283 -- FY00 Escalation --								
						0.88934	[SYS 061400]	.88934200 - Svstem
A5H	SUBCONTRACTED SRVS	S020	ENVIRONMENTAL SCIENTISTS	C222S	Water Svstem Operations	Linear	8,895.42	Dollars
<i>Factors</i> 9779 d 1.02283 -- FY00 Escalation --								
						0.88934	[SYS 061400]	.88934200 - Svstem
A5M	TRAVEL/TRAIN/RELOCAT	0000	NONE	C222S	Water Svstem Operations	Linear	1,067.21	Dollars
<i>Factors</i> 1200 dollars								
						0.88934	[SYS 061400]	.88934200 - System

Line Item IBCGER0002 - Sample & Field Data Collection

BOE

SOURCE OF HISTORICAL DATA
 RFETS FY98 Surface Water Monitoring WADlet (WBS # 1.1.03.06.01.01) Cost Performance Report dated 10/7/98 and WADlet manager tracking files - on file in Bldg. T893A, Cube 46.

DESCRIPTION OF ITEMS ESTIMATED
 Sample & Field Data Collection. Items estimated include labor and subcontract support for sampling and analysis and major subcontract for Surface Water Sampling Program for the Site.

BREAKDOWN OF HISTORICAL COST DATA
 The FY01 BOE was developed using activity based cost estimating. Estimate based on annualized historical program costs for FY99 program.

Item - SW Sample & Field Data Collection
 Units - lot
 Unit Cost - 940 hours and 472K nonlabor dollars
 Unit Cost Adjustment factor - NA
 Revised Unit Cost - NA
 Basis for Adjustment - NA

This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

Resources

	<i>Cost Element</i>		<i>Skill</i>		<i>Department</i>	<i>Curve</i>	<i>Quantity</i>	<i>Units</i>
750	STRAIGHT TIME BASE	E050	ENVIRONMENTAL ENGINEERS	C222S	Water Svstem Operations	Linear	337.95	Hours
<i>Factors</i> 380 hours								
						0.88934	[SYS 061400]	.88934200 - Svstem
750	STRAIGHT TIME BASE	P050	COMPLIANCE INSPECTORS	C222S	Water Svstem Operations	Linear	213.44	Hours
<i>Factors</i> 240 hours								
						0.88934	[SYS 061400]	.88934200 - Svstem

WBS No: 1EBB0402
 Activity ID: 1EBB425030

Rockv Flats Closure Project
Baseline Cost and Basis of Estimate

Project: Baseline Devl
 WBS Filter: 1EBB
 Activity Filter: *

Starts In FY: *

750	STRAIGHT TIME BASE	S020	ENVIRONMENTAL SCIENTISTS	C222S	Water Svstem Operations	Linear	284.59	Hours
<i>Factors</i> 320 hours							0.88934	[SYS 061400] .88934200 - Svstem
A58	ASI	0000	NONE	K267S	Analytical Laboratory Services	Linear	418.437.00	Dollars
<i>Factors</i> 460000 dollars 1.02283 -- FY00 Escalation --							0.88934	[SYS 061400] .88934200 - Svstem
A5H	SUBCONTRACTED SRVS	0000	NONE	C222S	Water Svstem Operations	Linear	10.915.75	Dollars
<i>Factors</i> 12000 dollars 1.02283 -- FY00 Escalation --							0.88934	[SYS 061400] .88934200 - Svstem

Line Item IBCGER0003 - Monitoring Data Assessment

BOE
 SOURCE OF HISTORICAL DATA
 RFETS FY98 Surface Water Monitoring WADlet (WBS # 1.1.03.06.01.01) Cost Performance Report dated 10/7/98 and WADlet manager tracking files - on file in Bldg. T893A, Cube 46.

DESCRIPTION OF ITEMS ESTIMATED
 Monitoring Data Assessment. Items estimated include analytical data package and field data assessment; and monitoring data compilation, statistical analysis, and assessment.

BREAKDOWN OF HISTORICAL COST DATA
 The FY01 BOE was developed using activity based cost estimating. Estimate based on annualized historical program costs for FY99 program.

Item - Monitoring Data Assessment
 Units - lot
 Unit Cost - 1,220 hours and 68K nonlabor dollars
 Unit Cost Adjustment factor - NA
 Revised Unit Cost - NA
 Basis for Adjustment - NA

This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

Resources

	<i>Cost Element</i>		<i>Skill</i>		<i>Department</i>	<i>Curve</i>	<i>Quantity</i>	<i>Units</i>
750	STRAIGHT TIME BASE	E050	ENVIRONMENTAL ENGINEERS	C222S	Water Svstem Operations	Linear	337.95	Hours
<i>Factors</i> 380 hours							0.88934	[SYS 061400] .88934200 - Svstem
750	STRAIGHT TIME BASE	P050	COMPLIANCE INSPECTORS	C222S	Water Svstem Operations	Linear	213.44	Hours
<i>Factors</i> 240 hours							0.88934	[SYS 061400] .88934200 - Svstem
750	STRAIGHT TIME BASE	S020	ENVIRONMENTAL SCIENTISTS	C222S	Water Svstem Operations	Linear	533.61	Hours
<i>Factors</i> 600 hours							0.88934	[SYS 061400] .88934200 - Svstem
A5H	SUBCONTRACTED SRVS	0000	NONE	C222S	Water Svstem Operations	Linear	61.855.91	Dollars
<i>Factors</i> 68000 dollars 1.02283 -- FY00 Escalation --							0.88934	[SYS 061400] .88934200 - Svstem

Line Item IBCGER0004 - Automated SW Monitoring

BOE
 SOURCE OF HISTORICAL DATA
 RFETS FY98 Surface Water Monitoring WADlet (WBS # 1.1.03.06.01.01) Cost Performance Report dated 10/7/98 and WADlet manager tracking files - on file in Bldg. T893A, Cube 46.

DESCRIPTION OF ITEMS ESTIMATED
 Automated surface water monitoring program implementation (per IMP requirements). Items estimated include installation, operation, and maintenance of automated flow monitoring and sampling equipment; water quality probe operation; telemetry system operation and management; and hydrologic monitoring program implementation and management.

BREAKDOWN OF HISTORICAL COST DATA
 The FY01 BOE was developed using activity based cost estimating. Estimate based on annualized historical program costs for FY99 program.

Item - Automated Surface Water Monitoring Program Implementation and Management
 Units - lot
 Unit Cost - 2,010 hours and 79K nonlabor dollars

WBS No: 1EBB0402
 Activity ID: 1EBB425030

Rockv Flats Closure Project
Baseline Cost and Basis of Estimate

Project: Baseline Devl
 WBS Filter: 1EBB
 Activity Filter: *

Starts In FY *

Unit Cost Adjustment factor - NA
 Revised Unit Cost - NA
 Basis for Adjustment - NA
 This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

Resources	Cost Element	Skill	Department	Curve	Quantity	Units
	750 STRAIGHT TIME BASE	E050 ENVIRONMENTAL ENGINEERS	C222S Water Svstem Operations	Linear	337.95	Hours
Factors	380 hours					
	750 STRAIGHT TIME BASE	P050 COMPLIANCE INSPECTORS	C222S Water Svstem Operations	Linear	1,111.68	Hours
Factors	1250 hours					
	750 STRAIGHT TIME BASE	S020 ENVIRONMENTAL SCIENTISTS	C222S Water Svstem Operations	Linear	337.95	Hours
Factors	380 hours					
	A5C SUPPLIES	0000 NONE	C222S Water Svstem Operations	Back Loaded	21,664.37	Dollars
Factors	24000 dollars	1.015 -- FY00 Escalation --				
	A5H SUBCONTRACTED SRVS	0000 NONE	C222S Water Svstem Operations	Linear	41,843.70	Dollars
Factors	46000 dollars	1.02283 -- FY00 Escalation --				
	A5L RENTALS	0000 NONE	C106S Business Management Office	Linear	5,416.09	Dollars
Factors	6000 dollars	1.015 -- FY00 Escalation --				
	A5M TRAVEL/TRAIN/RELOCAT	0000 NONE	C222S Water Svstem Operations	Max Backload	2,134.42	Dollars
Factors	2400 dollars					
					0.88934 [SYS 061400] .88934200 - Svstem	

Line Item IBCGER0005 - Compliance & Stakeholder Reporting

BOE
 SOURCE OF HISTORICAL DATA
 RFETS FY98 Surface Water Monitoring WADlet (WBS # 1.1.03.06.01.01) Cost Performance Report dated 10/7/98 and WADlet manager tracking files - on file in Bldg. T893A, Cube 46.
 DESCRIPTION OF ITEMS ESTIMATED
 Surface Water monitoring program reporting. Items estimated include NPDES monthly and annual Discharge Monitoring Report (DMR) preparation and delivery; RFCA quarterly & off-normal reporting including source evaluation planning; EPA annual sewage sludge reporting; monitoring program status and special report; GIS support including map preparation and database maintenance; and special request reports for stakeholders.
 BREAKDOWN OF HISTORICAL COST DATA
 The FY01 BOE was developed using activity based cost estimating. Estimate based on annualized historical program costs for FY99 program.
 Item - Compliance & Stakeholder Reporting
 Units - lot
 Unit Cost - 1,320 hours and 12K dollars
 Unit Cost Adjustment factor - NA
 Revised Unit Cost - NA
 Basis for Adjustment - NA
 This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

Resources	Cost Element	Skill	Department	Curve	Quantity	Units
	750 STRAIGHT TIME BASE	E050 ENVIRONMENTAL ENGINEERS	C222S Water Svstem Operations	Linear	106.72	Hours
Factors	120 hours					
	750 STRAIGHT TIME BASE	G010 ADMINISTRATIVE ASSISTANTS	C222S Water Svstem Operations	Linear	35.57	Hours
Factors	40 hours					
					0.88934 [SYS 061400] .88934200 - Svstem	

WBS No: 1EBB0402
 Activity ID: 1EBB425030

Rockv Flats Closure Project
Baseline Cost and Basis of Estimate

Project: Baseline Devl
 WBS Filter: 1EBB
 Activity Filter: *

Starts In FY: *

750	STRAIGHT TIME BASE	M020	MANAGERS (GRADE 69 - 72)	C222S	Water Svstem Operations	Linear	160.08	Hours
<i>Factors</i>		180 hours				0.88934 [SYS 061400] .88934200 - Svstem		
750	STRAIGHT TIME BASE	P050	COMPLIANCE INSPECTORS	C222S	Water Svstem Operations	Linear	53.36	Hours
<i>Factors</i>		60 hours				0.88934 [SYS 061400] .88934200 - Svstem		
750	STRAIGHT TIME BASE	P060	COMPUTER SYSTEMS ANALYSTS	C222S	Water Svstem Operations	Linear	284.59	Hours
<i>Factors</i>		320 hours				0.88934 [SYS 061400] .88934200 - Svstem		
750	STRAIGHT TIME BASE	S020	ENVIRONMENTAL SCIENTISTS	C222S	Water Svstem Operations	Linear	533.61	Hours
<i>Factors</i>		600 hours				0.88934 [SYS 061400] .88934200 - Svstem		
A5H	SUBCONTRACTED SRVS	0000	NONE	C222S	Water Svstem Operations	Linear	10.915.75	Dollars
<i>Factors</i>		12000 dollars		1.02283 -- FY00 Escalation --		0.88934 [SYS 061400] .88934200 - Svstem		

Line Item IBCGER0006 - SW Monitoring AD Hoc Projects

BOE

SOURCE OF HISTORICAL DATA
 RFETS FY98 Surface Water Monitoring WADlet (WBS # 1.1.03.06.01.01) Cost Performance Report dated 10/7/98 and WADlet manager tracking files - on file in Bldg. T893A, Cube 46.

DESCRIPTION OF ITEM ESTIMATED
 Site involvement in Colorado Water Quality Control Commission Hearing (CWQCC) hearings to ensure that appropriate and achievable water quality standards are established for Site surface water to facilitate movement toward Site closure.

BREAKDOWN OF HISTORICAL DATA
 The FY01 BOE was developed using activity based cost estimating. Estimate based on annualized historical program costs for FY99 program.

Item - Colorado Water Quality Control Commission Hearing(s) support
 Units - lot
 Unit Cost - 870 hours
 Unit Cost Adjustment factor - NA
 Revised Unit Cost - NA
 Basis for Adjustment - NA

This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

Resources

<i>Cost Element</i>		<i>Skill</i>		<i>Department</i>		<i>Curve</i>	<i>Quantity</i>	<i>Units</i>
750	STRAIGHT TIME BASE	G010	ADMINISTRATIVE ASSISTANTS	C222S	Water Svstem Operations	Back Loaded	26.68	Hours
<i>Factors</i>		30 hours				0.88934 [SYS 061400] .88934200 - Svstem		
750	STRAIGHT TIME BASE	M020	MANAGERS (GRADE 69 - 72)	C222S	Water Svstem Operations	Back Loaded	106.72	Hours
<i>Factors</i>		120 hours				0.88934 [SYS 061400] .88934200 - Svstem		
750	STRAIGHT TIME BASE	S020	ENVIRONMENTAL SCIENTISTS	C222S	Water Svstem Operations	Linear	569.18	Hours
<i>Factors</i>		640 hours				0.88934 [SYS 061400] .88934200 - Svstem		
750	STRAIGHT TIME BASE	S020	ENVIRONMENTAL SCIENTISTS	C222S	Water Svstem Operations	Back Loaded	71.15	Hours
<i>Factors</i>		80 hours				0.88934 [SYS 061400] .88934200 - Svstem		

Line Item SYS - Contingency And Escalation

BOE

Resources

<i>Cost Element</i>		<i>Skill</i>		<i>Department</i>		<i>Curve</i>	<i>Quantity</i>	<i>Units</i>
CON	CONTINGENCY	0000	NONE	ZDEPT	No Department	Linear	15.721.95	Dollars
<i>Factors</i>		15722 Dollars						
ESC	ESCALATION	0000	NONE	ZDEPT	No Department	Linear	6.101.02	Dollars
<i>Factors</i>		6101.02 Dollars						

WBS No: 1EBB0402
 Activity ID: 1EBB425040

Rockv Flats Closure Project
Baseline Cost and Basis of Estimate

Project: Baseline Devl
 WBS Filter: 1EBB
 Activity Filter: *
 Cost Risk: 1 Schedule Risk: 1
 Starts In FY: *

Activity ID: 1EBB425040 Description: Stormwater Control System FY04

Line Item	Description	Quantity	Units	BOE Type	Labor Hours/Unit	Labor Hours Total	Labor Cost Total	Materials/ Sub Cost	Contingency & Escalation	Total Prime Cost	Burden Cost	Total Cost
IBCGER0001	SW Monitoring Program Mgmt.	0.00	lot	HC	#Num!	0	0	0	0	0	0	0
IBCGER0002	Sample & Field Data Collection	0.16	lot	HC	836	134	3,938	68,696	0	72,634	1,110	73,745
IBCGER0003	Monitoring Data Assessment	0.16	lot	HC	1,085	174	5,224	9,897	0	15,121	1,473	16,594
IBCGER0004	Automated SW Monitoring	0.00	lot	HC	#Num!	0	0	0	0	0	0	0
IBCGER0005	Compliance & Stakeholder Reporting	0.00	lot	HC	#Num!	0	0	0	0	0	0	0
IBCGER0006	SW Monitoring AD Hoc Projects	0.00	lot	HC	#Num!	0	0	0	0	0	0	0
SYS	Contingency And Escalation	1.00	ea	EE	0	0	0	0	12,794	12,794	0	12,794
Total for Activity 1EBB425040:						307	9,162	78,593	12,794	100,549	2,584	103,133

Line Item IBCGER0001 - SW Monitoring Program Mgmt.

BOE
 SOURCE OF HISTORICAL DATA
 RFETS FY98 Surface Water Monitoring WADlet (WBS # 1.1.03.06.01.01) Cost Performance Report dated 10/7/98 and WADlet manager tracking files - on file in Bldg. T893A, Cube 46.

DESCRIPTION OF ITEMS ESTIMATED
 Surface Water Monitoring Program Management. Items estimated include of management guidance and assessments; program planning; budget management; data quality assurance and management; radiological and safety engineering; and occurrence reporting.

BREAKDOWN OF HISTORICAL COST DATA:
 The FY01 BOE was developed using activity based cost estimating. Estimate based on annualized historical program costs for FY99 program.
 Item - SW Monitoring Program Management
 Units - lot
 Unit Cost - 2,930 hours and 34K nonlabor dollars
 Unit Cost Adjustment factor - NA
 Revised Unit Cost - NA
 Basis for Adjustment - NA

This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

Resources	Cost Element	Skill	Department	Curve	Quantity	Units
750	STRAIGHT TIME BASE	E050 ENVIRONMENTAL ENGINEERS	C222S Water System Operations	Linear	53.36	Hours
Factors 60 hours						
0.88934 [SYS 061400] .88934200 - System						
750	STRAIGHT TIME BASE	G010 ADMINISTRATIVE ASSISTANTS	C222S Water System Operations	Linear	231.23	Hours
Factors 260 hours						
0.88934 [SYS 061400] .88934200 - System						
750	STRAIGHT TIME BASE	M020 MANAGERS (GRADE 69 - 72)	C222S Water System Operations	Linear	658.11	Hours
Factors 740 hours						
0.88934 [SYS 061400] .88934200 - System						
750	STRAIGHT TIME BASE	P050 COMPLIANCE INSPECTORS	C222S Water System Operations	Linear	26.68	Hours
Factors 30 hours						
0.88934 [SYS 061400] .88934200 - System						
750	STRAIGHT TIME BASE	P060 COMPUTER SYSTEMS ANALYSTS	C222S Water System Operations	Linear	426.88	Hours
Factors 480 hours						
0.88934 [SYS 061400] .88934200 - System						
750	STRAIGHT TIME BASE	P090 INDUSTRIAL HYGIENISTS	C222S Water System Operations	Linear	106.72	Hours
Factors 120 hours						
0.88934 [SYS 061400] .88934200 - System						
750	STRAIGHT TIME BASE	S020 ENVIRONMENTAL SCIENTISTS	C222S Water System Operations	Linear	53.36	Hours
Factors 60 hours						
0.88934 [SYS 061400] .88934200 - System						
750	STRAIGHT TIME BASE	S020 ENVIRONMENTAL SCIENTISTS	C222S Water System Operations	Linear	1,049.42	Hours
Factors 1180 hours						
0.88934 [SYS 061400] .88934200 - System						

WBS No: 1EBB0402
 Activity ID: 1EBB425040

Rockv Flats Closure Project
Baseline Cost and Basis of Estimate

Project: Baseline Devl
 WBS Filter: 1EBB
 Activity Filter: *

Starts In FY: *

A5C	SUPPLIES	0000	NONE	C222S	Water Svstem Operations	Linear	10.832.19	Dollars
<i>Factors</i> 12000 dollars 1.015 -- FY00 Escalation --								
						0.88934	[SYS 061400]	88934200 - Svstem
A5H	SUBCONTRACTED SRVS	0000	NONE	C222S	Water Svstem Operations	Linear	9.096.46	Dollars
<i>Factors</i> 10000 dollars 1.02283 -- FY00 Escalation --								
						0.88934	[SYS 061400]	88934200 - Svstem
A5H	SUBCONTRACTED SRVS	0000	NONE	C222S	Water Svstem Operations	Linear	727.72	Dollars
<i>Factors</i> 800 dollars 1.02283 -- FY00 Escalation --								
						0.88934	[SYS 061400]	88934200 - Svstem
A5H	SUBCONTRACTED SRVS	S020	ENVIRONMENTAL SCIENTISTS	C222S	Water Svstem Operations	Linear	8.895.42	Dollars
<i>Factors</i> 9779 d 1.02283 -- FY00 Escalation --								
						0.88934	[SYS 061400]	88934200 - Svstem
A5M	TRAVEL/TRAIN/RELOCAT	0000	NONE	C222S	Water Svstem Operations	Linear	1.067.21	Dollars
<i>Factors</i> 1200 dollars								
						0.88934	[SYS 061400]	88934200 - Svstem

Line Item IBCGER0002 - Sample & Field Data Collection

BOE

SOURCE OF HISTORICAL DATA
 RFETS FY98 Surface Water Monitoring WADlet (WBS # 1.1.03.06.01.01) Cost Performance Report dated 10/7/98 and WADlet manager tracking files - on file in Bldg. T893A, Cube 46.

DESCRIPTION OF ITEMS ESTIMATED
 Sample & Field Data Collection. Items estimated include labor and subcontract support for sampling and analysis and major subcontract for Surface Water Sampling Program for the Site.

BREAKDOWN OF HISTORICAL COST DATA
 The FY01 BOE was developed using activity based cost estimating. Estimate based on annualized historical program costs for FY99 program.

Item - SW Sample & Field Data Collection
 Units - lot
 Unit Cost - 940 hours and 472K nonlabor dollars
 Unit Cost Adjustment factor - NA
 Revised Unit Cost - NA
 Basis for Adjustment - NA

This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

Resources

	Cost Element		Skill		Department	Curve	Quantity	Units
750	STRAIGHT TIME BASE	E050	ENVIRONMENTAL ENGINEERS	C222S	Water Svstem Operations	Linear	337.95	Hours
<i>Factors</i> 380 hours								
						0.88934	[SYS 061400]	88934200 - Svstem
750	STRAIGHT TIME BASE	P050	COMPLIANCE INSPECTORS	C222S	Water Svstem Operations	Linear	213.44	Hours
<i>Factors</i> 240 hours								
						0.88934	[SYS 061400]	88934200 - Svstem
750	STRAIGHT TIME BASE	S020	ENVIRONMENTAL SCIENTISTS	C222S	Water Svstem Operations	Linear	284.59	Hours
<i>Factors</i> 320 hours								
						0.88934	[SYS 061400]	88934200 - Svstem
A58	ASI	0000	NONE	K267S	Analvtical Laboratory Services	Linear	418.437.00	Dollars
<i>Factors</i> 460000 dollars 1.02283 -- FY00 Escalation --								
						0.88934	[SYS 061400]	88934200 - Svstem
A5H	SUBCONTRACTED SRVS	0000	NONE	C222S	Water Svstem Operations	Linear	10.915.75	Dollars
<i>Factors</i> 12000 dollars 1.02283 -- FY00 Escalation --								
						0.88934	[SYS 061400]	88934200 - Svstem

Line Item IBCGER0003 - Monitoring Data Assessment

BOE

SOURCE OF HISTORICAL DATA
 RFETS FY98 Surface Water Monitoring WADlet (WBS # 1.1.03.06.01.01) Cost Performance Report dated 10/7/98 and WADlet manager tracking files - on file in Bldg. T893A, Cube 46.

WBS No: 1EBB0402
 Activity ID: 1EBB425040

Rockv Flats Closure Project
Baseline Cost and Basis of Estimate

Project: Baseline Devl
 WBS Filter: 1EBB
 Activity Filter: *

Starts In FY *

DESCRIPTION OF ITEMS ESTIMATED
 Monitoring Data Assessment. Items estimated include analytical data package and field data assessment; and monitoring data compilation, statistical analysis, and assessment.

BREAKDOWN OF HISTORICAL COST DATA
 The FY01 BOE was developed using activity based cost estimating. Estimate based on annualized historical program costs for FY99 program.

Item - Monitoring Data Assessment
 Units - lot
 Unit Cost - 1,220 hours and 68K nonlabor dollars
 Unit Cost Adjustment factor - NA
 Revised Unit Cost - NA
 Basis for Adjustment - NA

This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

Resources

Cost Element	Skill	Department	Curve	Quantity	Units
750 STRAIGHT TIME BASE	E050 ENVIRONMENTAL ENGINEERS	C222S Water System Operations	Linear	337.95	Hours
<i>Factors</i> 380 hours					
0.88934 [SYS 061400] .88934200 - System					
750 STRAIGHT TIME BASE	P050 COMPLIANCE INSPECTORS	C222S Water System Operations	Linear	213.44	Hours
<i>Factors</i> 240 hours					
0.88934 [SYS 061400] .88934200 - System					
750 STRAIGHT TIME BASE	S020 ENVIRONMENTAL SCIENTISTS	C222S Water System Operations	Linear	533.61	Hours
<i>Factors</i> 600 hours					
0.88934 [SYS 061400] .88934200 - System					
A5H SUBCONTRACTED SRVS	0000 NONE	C222S Water System Operations	Linear	61,855.91	Dollars
<i>Factors</i> 68000 dollars 1.02283 -- FY00 Escalation --					
0.88934 [SYS 061400] .88934200 - System					

Line Item IBCGER0004 - Automated SW Monitoring

BOE

SOURCE OF HISTORICAL DATA
 RFETS FY98 Surface Water Monitoring WADlet (WBS # 1.1.03.06.01.01) Cost Performance Report dated 10/7/98 and WADlet manager tracking files - on file in Bldg. T893A, Cube 46.

DESCRIPTION OF ITEMS ESTIMATED
 Automated surface water monitoring program implementation (per IMP requirements). Items estimated include installation, operation, and maintenance of automated flow monitoring and sampling equipment; water quality probe operation; telemetry system operation and management; and hydrologic monitoring program implementation and management.

BREAKDOWN OF HISTORICAL COST DATA
 The FY01 BOE was developed using activity based cost estimating. Estimate based on annualized historical program costs for FY99 program.

Item - Automated Surface Water Monitoring Program Implementation and Management
 Units - lot
 Unit Cost - 2,010 hours and 79K nonlabor dollars
 Unit Cost Adjustment factor - NA
 Revised Unit Cost - NA
 Basis for Adjustment - NA

This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

Resources

Cost Element	Skill	Department	Curve	Quantity	Units
750 STRAIGHT TIME BASE	E050 ENVIRONMENTAL ENGINEERS	C222S Water System Operations	Linear	337.95	Hours
<i>Factors</i> 380 hours					
0.88934 [SYS 061400] .88934200 - System					
750 STRAIGHT TIME BASE	P050 COMPLIANCE INSPECTORS	C222S Water System Operations	Linear	1,111.68	Hours
<i>Factors</i> 1250 hours					
0.88934 [SYS 061400] .88934200 - System					

WBS No: 1EBB0402
 Activity ID: 1EBB425040

Rockv Flats Closure Project
Baseline Cost and Basis of Estimate

Project: Baseline Devl
 WBS Filter: 1EBB
 Activity Filter: *

Starts In FY *

750	STRAIGHT TIME BASE	S020	ENVIRONMENTAL SCIENTISTS	C222S	Water Svstem Operations	Linear	337.95	Hours
							0.88934	[SYS 061400].88934200 - Svstem
<i>Factors</i> 380 hours								
A5C	SUPPLIES	0000	NONE	C222S	Water Svstem Operations	Back Loaded	21.664	Dollars
							0.88934	[SYS 061400].88934200 - Svstem
<i>Factors</i> 24000 dollars 1.015 -- FY00 Escalation --								
A5H	SUBCONTRACTED SRVS	0000	NONE	C222S	Water Svstem Operations	Linear	41.843	Dollars
							0.88934	[SYS 061400].88934200 - Svstem
<i>Factors</i> 46000 dollars 1.02283 -- FY00 Escalation --								
A5L	RENTALS	0000	NONE	C106S	Business Management Office	Linear	5.416	Dollars
							0.88934	[SYS 061400].88934200 - Svstem
<i>Factors</i> 6000 dollars 1.015 -- FY00 Escalation --								
A5M	TRAVEL/TRAIN/RELOCAT	0000	NONE	C222S	Water Svstem Operations	Max Backload	2.134	Dollars
							0.88934	[SYS 061400].88934200 - Svstem
<i>Factors</i> 2400 dollars								

Line Item IBCGER0005 - Compliance & Stakeholder Reporting

BOE

SOURCE OF HISTORICAL DATA
 RFETS FY98 Surface Water Monitoring WADlet (WBS # 1.1.03.06.01.01) Cost Performance Report dated 10/7/98 and WADlet manager tracking files - on file in Bldg. T893A, Cube 46.

DESCRIPTION OF ITEMS ESTIMATED
 Surface Water monitoring program reporting. Items estimated include NPDES monthly and annual Discharge Monitoring Report (DMR) preparation and delivery; RFCA quarterly & off-normal reporting including source evaluation planning; EPA annual sewage sludge reporting; monitoring program status and special report; GIS support including map preparation and database maintenance; and special request reports for stakeholders.

BREAKDOWN OF HISTORICAL COST DATA
 The FY01 BOE was developed using activity based cost estimating. Estimate based on annualized historical program costs for FY99 program.

Item - Compliance & Stakeholder Reporting
 Units - lot
 Unit Cost - 1,320 hours and 12K dollars
 Unit Cost Adjustment factor - NA
 Revised Unit Cost - NA
 Basis for Adjustment - NA

This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

Resources

Cost Element	Skill	Department	Curve	Quantity	Units
750 STRAIGHT TIME BASE	E050 ENVIRONMENTAL ENGINEERS	C222S Water Svstem Operations	Linear	106.72	Hours
<i>Factors</i> 120 hours					
0.88934 [SYS 061400].88934200 - Svstem					
750 STRAIGHT TIME BASE	G010 ADMINISTRATIVE ASSISTANTS	C222S Water Svstem Operations	Linear	35.57	Hours
<i>Factors</i> 40 hours					
0.88934 [SYS 061400].88934200 - Svstem					
750 STRAIGHT TIME BASE	M020 MANAGERS (GRADE 69 - 72)	C222S Water Svstem Operations	Linear	160.08	Hours
<i>Factors</i> 180 hours					
0.88934 [SYS 061400].88934200 - Svstem					
750 STRAIGHT TIME BASE	P050 COMPLIANCE INSPECTORS	C222S Water Svstem Operations	Linear	53.36	Hours
<i>Factors</i> 60 hours					
0.88934 [SYS 061400].88934200 - Svstem					
750 STRAIGHT TIME BASE	P060 COMPUTER SYSTEMS ANALYSTS	C222S Water Svstem Operations	Linear	284.59	Hours
<i>Factors</i> 320 hours					
0.88934 [SYS 061400].88934200 - Svstem					
750 STRAIGHT TIME BASE	S020 ENVIRONMENTAL SCIENTISTS	C222S Water Svstem Operations	Linear	533.61	Hours
<i>Factors</i> 600 hours					
0.88934 [SYS 061400].88934200 - Svstem					

WBS No: 1EBB0402
 Activity ID: 1EBB425040

Rockv Flats Closure Project
Baseline Cost and Basis of Estimate

Project Baseline Devl
 WBS Filter 1EBB
 Activity Filter *

Starts In FY *

A5H	SUBCONTRACTED SRVS	0000	NONE	C222S	Water Svstem Operations	Linear	10,915.75	Dollars
<i>Factors</i> 12000 dollars		1.02283 -- FY00 Escalation --						

0.88934 [SYS 061400] .88934200 - Svstem

Line Item IBCGER0006 - SW Monitoring AD Hoc Projects

BOE
 SOURCE OF HISTORICAL DATA
 RFETS FY98 Surface Water Monitoring WADlet (WBS # 1.1.03.06.01.01) Cost Performance Report dated 10/7/98 and WADlet manager tracking files - on file in Bldg. T893A, Cube 46.
 DESCRIPTION OF ITEM ESTIMATED
 Site involvement in Colorado Water Quality Control Commission Hearing (CWQCC) hearings to ensure that appropriate and achievable water quality standards are established for Site surface water to facilitate movement toward Site closure.
 BREAKDOWN OF HISTORICAL DATA
 The FY01 BOE was developed using activity based cost estimating. Estimate based on annualized historical program costs for FY99 program.
 Item - Colorado Water Quality Control Commission Hearing(s) support
 Units - lot
 Unit Cost - 870 hours
 Unit Cost Adjustment factor - NA
 Revised Unit Cost - NA
 Basis for Adjustment - NA
 This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

Resources

Cost Element	Skill	Department	Curve	Quantity	Units
750 STRAIGHT TIME BASE	G010 ADMINISTRATIVE ASSISTANTS	C222S Water Svstem Operations	Back Loaded	26.68	Hours
<i>Factors</i> 30 hours					
750 STRAIGHT TIME BASE	M020 MANAGERS (GRADE 69 - 72)	C222S Water Svstem Operations	Back Loaded	106.72	Hours
<i>Factors</i> 120 hours					
750 STRAIGHT TIME BASE	S020 ENVIRONMENTAL SCIENTISTS	C222S Water Svstem Operations	Linear	569.18	Hours
<i>Factors</i> 640 hours					
750 STRAIGHT TIME BASE	S020 ENVIRONMENTAL SCIENTISTS	C222S Water Svstem Operations	Back Loaded	71.15	Hours
<i>Factors</i> 80 hours					

0.88934 [SYS 061400] .88934200 - Svstem
 0.88934 [SYS 061400] .88934200 - Svstem
 0.88934 [SYS 061400] .88934200 - Svstem
 0.88934 [SYS 061400] .88934200 - Svstem

Line Item SYS - Contingency And Escalation

BOE

Resources

Cost Element	Skill	Department	Curve	Quantity	Units
CON CONTINGENCY	0000 NONE	ZDEPT No Department	Linear	4,120.47	Dollars
<i>Factors</i> 4120.47 Dollars					
ESC ESCALATION	0000 NONE	ZDEPT No Department	Linear	8,673.97	Dollars
<i>Factors</i> 8673.97 Dollars					

Activity ID: 1EBB425050 Description: Stormwater Control System FY05

Cost Risk 1 Schedule Risk 1

Line Item	Description	Quantity	Units	BOE Type	Labor Hours/Unit	Labor Hours Total	Labor Cost Total	Materials/ Sub Cost	Contingency & Escalation	Total Prime Cost	Burden Cost	Total Cost
IBCGER0001	SW Monitoring Program Mamt.	0.00	lot	HC	#Num!	0	0	0	0	0	0	0
IBCGER0002	Sample & Field Data Collection	0.18	lot	HC	836	150	4,430	77,284	0	81,714	1,542	83,256
IBCGER0003	Monitoring Data Assessment	0.18	lot	HC	1,085	195	5,877	11,134	0	17,011	2,045	19,056
IBCGER0004	Automated SW Monitoring	0.00	lot	HC	#Num!	0	0	0	0	0	0	0
IBCGER0005	Compliance & Stakeholder Reporting	0.00	lot	HC	#Num!	0	0	0	0	0	0	0
IBCGER0006	SW Monitoring AD Hoc Projects	0.00	lot	HC	#Num!	0	0	0	0	0	0	0
SYS	Contingency And Escalation	1.00	ea	EE	0	0	0	0	54,147	54,147	0	54,147
Total for Activity 1EBB425050:						346	10,307	88,418	54,147	152,871	3,587	156,458

WBS No: 1EBB0402
 Activity ID: 1EBB425050

Rockv Flats Closure Project
Baseline Cost and Basis of Estimate

Project: Baseline Devl
 WBS Filter: 1EBB
 Activity Filter: *

Starts In FY *

Line Item IBCGER0001 - SW Monitoring Program Mgmt.

BOE

SOURCE OF HISTORICAL DATA
 RFETS FY98 Surface Water Monitoring WADlet (WBS # 1.1.03.06.01.01) Cost Performance Report dated 10/7/98 and WADlet manager tracking files - on file in Bldg. T893A, Cube 46.

DESCRIPTION OF ITEMS ESTIMATED
 Surface Water Monitoring Program Management. Items estimated include of management guidance and assessments; program planning; budget management; data quality assurance and management; radiological and safety engineering; and occurrence reporting.

BREAKDOWN OF HISTORICAL COST DATA:
 The FY01 BOE was developed using activity based cost estimating. Estimate based on annualized historical program costs for FY99 program.
 Item - SW Monitoring Program Management
 Units - lot
 Unit Cost - 2,930 hours and 34K nonlabor dollars
 Unit Cost Adjustment factor - NA
 Revised Unit Cost - NA
 Basis for Adjustment - NA

This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

Resources		Cost Element	Skill	Department	Curve	Quantity	Units
750	STRAIGHT TIME BASE	E050	ENVIRONMENTAL ENGINEERS	C222S	Water System Operations	Linear	53.36 Hours
Factors		60	hours			0.88934	ISYS 061400| .88934200 - System
750	STRAIGHT TIME BASE	G010	ADMINISTRATIVE ASSISTANTS	C222S	Water System Operations	Linear	231.23 Hours
Factors		260	hours			0.88934	ISYS 061400| .88934200 - System
750	STRAIGHT TIME BASE	M020	MANAGERS (GRADE 69 - 72)	C222S	Water System Operations	Linear	658.11 Hours
Factors		740	hours			0.88934	ISYS 061400| .88934200 - System
750	STRAIGHT TIME BASE	P050	COMPLIANCE INSPECTORS	C222S	Water System Operations	Linear	26.68 Hours
Factors		30	hours			0.88934	ISYS 061400| .88934200 - System
750	STRAIGHT TIME BASE	P060	COMPUTER SYSTEMS ANALYSTS	C222S	Water System Operations	Linear	426.88 Hours
Factors		480	hours			0.88934	ISYS 061400| .88934200 - System
750	STRAIGHT TIME BASE	P090	INDUSTRIAL HYGIENISTS	C222S	Water System Operations	Linear	106.72 Hours
Factors		120	hours			0.88934	ISYS 061400| .88934200 - System
750	STRAIGHT TIME BASE	S020	ENVIRONMENTAL SCIENTISTS	C222S	Water System Operations	Linear	53.36 Hours
Factors		60	hours			0.88934	ISYS 061400| .88934200 - System
750	STRAIGHT TIME BASE	S020	ENVIRONMENTAL SCIENTISTS	C222S	Water System Operations	Linear	1,049.42 Hours
Factors		1180	hours			0.88934	ISYS 061400| .88934200 - System
A5C	SUPPLIES	0000	NONE	C222S	Water System Operations	Linear	10,832.19 Dollars
Factors		12000	dollars	1.015	-- FY00 Escalation --	0.88934	ISYS 061400| .88934200 - System
A5H	SUBCONTRACTED SRVS	0000	NONE	C222S	Water System Operations	Linear	9,096.46 Dollars
Factors		10000	dollars	1.02283	-- FY00 Escalation --	0.88934	ISYS 061400| .88934200 - System
A5H	SUBCONTRACTED SRVS	0000	NONE	C222S	Water System Operations	Linear	727.72 Dollars
Factors		800	dollars	1.02283	-- FY00 Escalation --	0.88934	ISYS 061400| .88934200 - System
A5H	SUBCONTRACTED SRVS	S020	ENVIRONMENTAL SCIENTISTS	C222S	Water System Operations	Linear	8,895.42 Dollars
Factors		9779	d	1.02283	-- FY00 Escalation --	0.88934	ISYS 061400| .88934200 - System

WBS No: 1EBB0402
 Activity ID: 1EBB425050

Rockv Flats Closure Project
Baseline Cost and Basis of Estimate

Project Baseline Devl
 WBS Filter 1EBB
 Activity Filter *

Starts In FY *

A5M	TRAVEL/TRAIN/RELOCAT	0000	NONE	C222S	Water Svstem Operations	Linear	1,067.21	Dollars
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Factors 1200 dollars

0.88934 [SYS 061400] .88934200 - Svstem

Line Item IBCGER0002 - Sample & Field Data Collection

BOE	<p>SOURCE OF HISTORICAL DATA RFETS FY98 Surface Water Monitoring WADlet (WBS # 1.1.03.06.01.01) Cost Performance Report dated 10/7/98 and WADlet manager tracking files - on file in Bldg. T893A, Cube 46.</p> <p>DESCRIPTION OF ITEMS ESTIMATED Sample & Field Data Collection. Items estimated include labor and subcontract support for sampling and analysis and major subcontract for Surface Water Sampling Program for the Site.</p> <p>BREAKDOWN OF HISTORICAL COST DATA The FY01 BOE was developed using activity based cost estimating. Estimate based on annualized historical program costs for FY99 program.</p> <p>Item - SW Sample & Field Data Collection Units - lot Unit Cost - 940 hours and 472K nonlabor dollars Unit Cost Adjustment factor - NA Revised Unit Cost - NA Basis for Adjustment - NA</p> <p>This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.</p>							
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Resources

Cost Element		Skill		Department		Curve	Quantity	Units
750	STRAIGHT TIME BASE	E050	ENVIRONMENTAL ENGINEERS	C222S	Water Svstem Operations	Linear	337.95	Hours
Factors 380 hours							0.88934 [SYS 061400] .88934200 - Svstem	
750	STRAIGHT TIME BASE	P050	COMPLIANCE INSPECTORS	C222S	Water Svstem Operations	Linear	213.44	Hours
Factors 240 hours							0.88934 [SYS 061400] .88934200 - Svstem	
750	STRAIGHT TIME BASE	S020	ENVIRONMENTAL SCIENTISTS	C222S	Water Svstem Operations	Linear	284.59	Hours
Factors 320 hours							0.88934 [SYS 061400] .88934200 - Svstem	
A58	ASI	0000	NONE	K267S	Analvtical Laboratory Services	Linear	418.437.00	Dollars
Factors 460000 dollars		1.02283 -- FY00 Escalation --					0.88934 [SYS 061400] .88934200 - Svstem	
A5H	SUBCONTRACTED SRVS	0000	NONE	C222S	Water Svstem Operations	Linear	10,915.75	Dollars
Factors 12000 dollars		1.02283 -- FY00 Escalation --					0.88934 [SYS 061400] .88934200 - Svstem	

Line Item IBCGER0003 - Monitoring Data Assessment

BOE	<p>SOURCE OF HISTORICAL DATA RFETS FY98 Surface Water Monitoring WADlet (WBS # 1.1.03.06.01.01) Cost Performance Report dated 10/7/98 and WADlet manager tracking files - on file in Bldg. T893A, Cube 46.</p> <p>DESCRIPTION OF ITEMS ESTIMATED Monitoring Data Assessment. Items estimated include analytical data package and field data assessment; and monitoring data compilation, statistical analysis, and assessment.</p> <p>BREAKDOWN OF HISTORICAL COST DATA The FY01 BOE was developed using activity based cost estimating. Estimate based on annualized historical program costs for FY99 program.</p> <p>Item - Monitoring Data Assessment Units - lot Unit Cost - 1,220 hours and 68K nonlabor dollars Unit Cost Adjustment factor - NA Revised Unit Cost - NA Basis for Adjustment - NA</p> <p>This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.</p>							
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WBS No: 1EBB0402
 Activity ID: 1EBB425050

Rockv Flats Closure Project
Baseline Cost and Basis of Estimate

Project: Baseline Devl
 WBS Filter: 1EBB
 Activity Filter: *

Starts In FY *

Resources	Cost Element	Skill	Department	Curve	Quantity	Units
	750 STRAIGHT TIME BASE	E050 ENVIRONMENTAL ENGINEERS	C222S Water Svstem Operations	Linear	337.95	Hours
Factors	380 hours					
	750 STRAIGHT TIME BASE	P050 COMPLIANCE INSPECTORS	C222S Water Svstem Operations	Linear	213.44	Hours
Factors	240 hours					
	750 STRAIGHT TIME BASE	S020 ENVIRONMENTAL SCIENTISTS	C222S Water Svstem Operations	Linear	533.61	Hours
Factors	600 hours					
	A5H SUBCONTRACTED SRVS	0000 NONE	C222S Water Svstem Operations	Linear	61,855.91	Dollars
Factors	68000 dollars	1.02283 -- FY00 Escalation --				

0.88934 [SYS 061400] .88934200 - Svstem

Line Item IBCGER0004 - Automated SW Monitoring

BOE

SOURCE OF HISTORICAL DATA
 RFETS FY98 Surface Water Monitoring WADlet (WBS # 1.1.03.06.01.01) Cost Performance Report dated 10/7/98 and WADlet manager tracking files - on file in Bldg. T893A, Cube 46.

DESCRIPTION OF ITEMS ESTIMATED
 Automated surface water monitoring program implementation (per IMP requirements). Items estimated include installation, operation, and maintenance of automated flow monitoring and sampling equipment; water quality probe operation; telemetry system operation and management; and hydrologic monitoring program implementation and management.

BREAKDOWN OF HISTORICAL COST DATA
 The FY01 BOE was developed using activity based cost estimating. Estimate based on annualized historical program costs for FY99 program.

Item - Automated Surface Water Monitoring Program Implementation and Management
 Units - lot
 Unit Cost - 2,010 hours and 79K nonlabor dollars
 Unit Cost Adjustment factor - NA
 Revised Unit Cost - NA
 Basis for Adjustment - NA

This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

Resources	Cost Element	Skill	Department	Curve	Quantity	Units
	750 STRAIGHT TIME BASE	E050 ENVIRONMENTAL ENGINEERS	C222S Water Svstem Operations	Linear	337.95	Hours
Factors	380 hours					
	750 STRAIGHT TIME BASE	P050 COMPLIANCE INSPECTORS	C222S Water Svstem Operations	Linear	1,111.68	Hours
Factors	1250 hours					
	750 STRAIGHT TIME BASE	S020 ENVIRONMENTAL SCIENTISTS	C222S Water Svstem Operations	Linear	337.95	Hours
Factors	380 hours					
	A5C SUPPLIES	0000 NONE	C222S Water Svstem Operations	Back Loaded	21,664.37	Dollars
Factors	24000 dollars	1.015 -- FY00 Escalation --				
	A5H SUBCONTRACTED SRVS	0000 NONE	C222S Water Svstem Operations	Linear	41,843.70	Dollars
Factors	46000 dollars	1.02283 -- FY00 Escalation --				
	A5L RENTALS	0000 NONE	C106S Business Management Office	Linear	5,416.09	Dollars
Factors	6000 dollars	1.015 -- FY00 Escalation --				
	A5M TRAVEL/TRAIN/RELOCAT	0000 NONE	C222S Water Svstem Operations	Max Backload	2,134.42	Dollars
Factors	2400 dollars					

0.88934 [SYS 061400] .88934200 - Svstem

WBS No: 1EBB0402
 Activity ID: 1EBB425050

Rockv Flats Closure Project
Baseline Cost and Basis of Estimate

Project: Baseline Devl
 WBS Filter: 1EBB
 Activity Filter: *

Starts In FY *

Line Item IBCGER0005 - Compliance & Stakeholder Reporting

BOE

SOURCE OF HISTORICAL DATA
 RFETS FY98 Surface Water Monitoring WADlet (WBS # 1.1.03.06.01.01) Cost Performance Report dated 10/7/98 and WADlet manager tracking files - on file in Bldg. T893A, Cube 46.

DESCRIPTION OF ITEMS ESTIMATED
 Surface Water monitoring program reporting. Items estimated include NPDES monthly and annual Discharge Monitoring Report (DMR) preparation and delivery; RFCA quarterly & off-normal reporting including source evaluation planning; EPA annual sewage sludge reporting; monitoring program status and special report; GIS support including map preparation and database maintenance; and special request reports for stakeholders.

BREAKDOWN OF HISTORICAL COST DATA
 The FY01 BOE was developed using activity based cost estimating. Estimate based on annualized historical program costs for FY99 program.

Item - Compliance & Stakeholder Reporting
 Units - lot
 Unit Cost - 1,320 hours and 12K dollars
 Unit Cost Adjustment factor - NA
 Revised Unit Cost - NA
 Basis for Adjustment - NA

This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

Resources		Cost Element	Skill	Department	Curve	Quantity	Units
750	STRAIGHT TIME BASE	E050	ENVIRONMENTAL ENGINEERS	C222S	Water System Operations	Linear	106.72 Hours
Factors		120	hours				
							0.88934 [SYS 061400] .88934200 - System
750	STRAIGHT TIME BASE	G010	ADMINISTRATIVE ASSISTANTS	C222S	Water System Operations	Linear	35.57 Hours
Factors		40	hours				
							0.88934 [SYS 061400] .88934200 - System
750	STRAIGHT TIME BASE	M020	MANAGERS (GRADE 69 - 72)	C222S	Water System Operations	Linear	160.08 Hours
Factors		180	hours				
							0.88934 [SYS 061400] .88934200 - System
750	STRAIGHT TIME BASE	P050	COMPLIANCE INSPECTORS	C222S	Water System Operations	Linear	53.36 Hours
Factors		60	hours				
							0.88934 [SYS 061400] .88934200 - System
750	STRAIGHT TIME BASE	P060	COMPUTER SYSTEMS ANALYSTS	C222S	Water System Operations	Linear	284.59 Hours
Factors		320	hours				
							0.88934 [SYS 061400] .88934200 - System
750	STRAIGHT TIME BASE	S020	ENVIRONMENTAL SCIENTISTS	C222S	Water System Operations	Linear	533.61 Hours
Factors		600	hours				
							0.88934 [SYS 061400] .88934200 - System
A5H	SUBCONTRACTED SRVS	0000	NONE	C222S	Water System Operations	Linear	10.915.75 Dollars
Factors		12000	dollars	1.02283 -- FY00 Escalation --			
							0.88934 [SYS 061400] .88934200 - System

Line Item IBCGER0006 - SW Monitoring AD Hoc Projects

BOE

SOURCE OF HISTORICAL DATA
 RFETS FY98 Surface Water Monitoring WADlet (WBS # 1.1.03.06.01.01) Cost Performance Report dated 10/7/98 and WADlet manager tracking files - on file in Bldg. T893A, Cube 46.

DESCRIPTION OF ITEM ESTIMATED
 Site involvement in Colorado Water Quality Control Commission Hearing (CWQCC) hearings to ensure that appropriate and achievable water quality standards are established for Site surface water to facilitate movement toward Site closure.

BREAKDOWN OF HISTORICAL COST DATA
 The FY01 BOE was developed using activity based cost estimating. Estimate based on annualized historical program costs for FY99 program.

Item - Colorado Water Quality Control Commission Hearing(s) support
 Units - lot
 Unit Cost - 870 hours

WBS No: 1EBB0402
 Activity ID: 1EBB425050

Rockv Flats Closure Project
Baseline Cost and Basis of Estimate

Project: Baseline Devl
 WBS Filter: 1EBB
 Activity Filter: *

Starts In FY *

Unit Cost Adjustment factor - NA
 Revised Unit Cost - NA
 Basis for Adjustment - NA
 This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

Resources	Cost Element	Skill	Department	Curve	Quantity	Units
	750 STRAIGHT TIME BASE	G010 ADMINISTRATIVE ASSISTANTS	C222S Water Svstem Operations	Back Loaded	26.68	Hours
Factors	30 hours					
	750 STRAIGHT TIME BASE	M020 MANAGERS (GRADE 69 - 72)	C222S Water Svstem Operations	Back Loaded	106.72	Hours
Factors	120 hours					
	750 STRAIGHT TIME BASE	S020 ENVIRONMENTAL SCIENTISTS	C222S Water Svstem Operations	Linear	569.18	Hours
Factors	640 hours					
	750 STRAIGHT TIME BASE	S020 ENVIRONMENTAL SCIENTISTS	C222S Water Svstem Operations	Back Loaded	71.15	Hours
Factors	80 hours					

Line Item SYS - Contingency And Escalation

Resources	Cost Element	Skill	Department	Curve	Quantity	Units
	CON CONTINGENCY	0000 NONE	ZDEPT No Department	Linear	38,297.17	Dollars
Factors	38297.2 Dollars					
	ESC ESCALATION	0000 NONE	ZDEPT No Department	Linear	15,849.57	Dollars
Factors	15849.6 Dollars					

Activity ID: 1EBB425060 Description: Stormwater Control System FY07

Cost Risk 1 Schedule Risk 1

Line Item	Description	Quantity	Units	BOE Type	Labor Hours/Unit	Labor Hours Total	Labor Cost Total	Materials/ Sub Cost	Contingency & Escalation	Total Prime Cost	Burden Cost	Total Cost
IBCGER0001	SW Monitoring Program Mgmt.	0.00	lot	HC	#Num!	0	0	0	0	0	0	0
IBCGER0002	Sample & Field Data Collection	0.14	lot	HC	836	117	3,446	60,109	0	63,555	4,290	67,845
IBCGER0003	Monitoring Data Assessment	0.14	lot	HC	1,085	152	4,571	8,660	0	13,231	5,691	18,921
IBCGER0004	Automated SW Monitoring	0.00	lot	HC	#Num!	0	0	0	0	0	0	0
IBCGER0005	Compliance & Stakeholder Reporting	0.00	lot	HC	#Num!	0	0	0	0	0	0	0
IBCGER0006	SW Monitoring AD Hoc Projects	0.00	lot	HC	#Num!	0	0	0	0	0	0	0
SYS	Contingency And Escalation	1.00	lea	EE	0	0	0	0	35,632	35,632	0	35,632
Total for Activity 1EBB425060:						269	8,016	68,769	35,632	112,418	9,981	122,398

Line Item IBCGER0001 - SW Monitoring Program Mgmt.

BOE
 SOURCE OF HISTORICAL DATA
 RFETS FY98 Surface Water Monitoring WADlet (WBS # 1.1.03.06.01.01) Cost Performance Report dated 10/7/98 and WADlet manager tracking files - on file in Bldg. T893A, Cube 46.
 DESCRIPTION OF ITEMS ESTIMATED
 Surface Water Monitoring Program Management. Items estimated include of management guidance and assessments; program planning; budget management; data quality assurance and management; radiological and safety engineering; and occurrence reporting.
 BREAKDOWN OF HISTORICAL COST DATA:
 The FY01 BOE was developed using activity based cost estimating. Estimate based on annualized historical program costs for FY99 program.
 Item - SW Monitoring Program Management
 Units - lot
 Unit Cost - 2,930 hours and 34K nonlabor dollars
 Unit Cost Adjustment factor - NA
 Revised Unit Cost - NA
 Basis for Adjustment - NA
 This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

WBS No: 1EBB0402
 Activity ID: 1EBB425060

Rockv Flats Closure Project
Baseline Cost and Basis of Estimate

Project: Baseline Devl
 WBS Filter: 1EBB
 Activity Filter: *

Starts In FY *

Resources	Cost Element	Skill	Department	Curve	Quantity	Units
	750 STRAIGHT TIME BASE	E050 ENVIRONMENTAL ENGINEERS	C222S Water Svstem Operations	Linear	53.36	Hours
Factors	60 hours					
	750 STRAIGHT TIME BASE	G010 ADMINISTRATIVE ASSISTANTS	C222S Water Svstem Operations	Linear	231.23	Hours
Factors	260 hours					
	750 STRAIGHT TIME BASE	M020 MANAGERS (GRADE 69 - 72)	C222S Water Svstem Operations	Linear	658.11	Hours
Factors	740 hours					
	750 STRAIGHT TIME BASE	P050 COMPLIANCE INSPECTORS	C222S Water Svstem Operations	Linear	26.68	Hours
Factors	30 hours					
	750 STRAIGHT TIME BASE	P060 COMPUTER SYSTEMS ANALYSTS	C222S Water Svstem Operations	Linear	426.88	Hours
Factors	480 hours					
	750 STRAIGHT TIME BASE	P090 INDUSTRIAL HYGIENISTS	C222S Water Svstem Operations	Linear	106.72	Hours
Factors	120 hours					
	750 STRAIGHT TIME BASE	S020 ENVIRONMENTAL SCIENTISTS	C222S Water Svstem Operations	Linear	53.36	Hours
Factors	60 hours					
	750 STRAIGHT TIME BASE	S020 ENVIRONMENTAL SCIENTISTS	C222S Water Svstem Operations	Linear	1,049.42	Hours
Factors	1180 hours					
	A5C SUPPLIES	0000 NONE	C222S Water Svstem Operations	Linear	10,832.19	Dollars
Factors	12000 dollars	1.015 -- FY00 Escalation --				
	A5H SUBCONTRACTED SRVS	0000 NONE	C222S Water Svstem Operations	Linear	9,096.46	Dollars
Factors	10000 dollars	1.02283 -- FY00 Escalation --				
	A5H SUBCONTRACTED SRVS	0000 NONE	C222S Water Svstem Operations	Linear	727.72	Dollars
Factors	800 dollars	1.02283 -- FY00 Escalation --				
	A5H SUBCONTRACTED SRVS	S020 ENVIRONMENTAL SCIENTISTS	C222S Water Svstem Operations	Linear	8,895.42	Dollars
Factors	9779 d	1.02283 -- FY00 Escalation --				
	A5M TRAVEL/TRAIN/RELOCAT	0000 NONE	C222S Water Svstem Operations	Linear	1,067.21	Dollars
Factors	1200 dollars					

Line Item IBCGER0002 - Sample & Field Data Collection

BOE	<p>SOURCE OF HISTORICAL DATA RFETS FY98 Surface Water Monitoring WADlet (WBS # 1.1.03.06.01.01) Cost Performance Report dated 10/7/98 and WADlet manager tracking files - on file in Bldg. T893A, Cube 46.</p> <p>DESCRIPTION OF ITEMS ESTIMATED Sample & Field Data Collection. Items estimated include labor and subcontract support for sampling and analysis and major subcontract for Surface Water Sampling Program for the Site.</p> <p>BREAKDOWN OF HISTORICAL COST DATA The FY01 BOE was developed using activity based cost estimating. Estimate based on annualized historical program costs for FY99 program.</p> <p>Item - SW Sample & Field Data Collection Units - lot Unit Cost - 940 hours and 472K nonlabor dollars</p>
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WBS No: 1EBB0402
 Activity ID: 1EBB425060

Rockv Flats Closure Project
Baseline Cost and Basis of Estimate

Project: Baseline Devl
 WBS Filter: 1EBB
 Activity Filter: *

Starts In FY *

Unit Cost Adjustment factor - NA
 Revised Unit Cost - NA
 Basis for Adjustment - NA
 This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

Resources

Cost Element	Skill	Department	Curve	Quantity	Units
750 STRAIGHT TIME BASE	E050 ENVIRONMENTAL ENGINEERS	C222S Water Svstem Operations	Linear	337.95	Hours
<i>Factors</i> 380 hours					
0.88934 ISYS 0614001.88934200 - Svstem					
750 STRAIGHT TIME BASE	P050 COMPLIANCE INSPECTORS	C222S Water Svstem Operations	Linear	213.44	Hours
<i>Factors</i> 240 hours					
0.88934 ISYS 0614001.88934200 - Svstem					
750 STRAIGHT TIME BASE	S020 ENVIRONMENTAL SCIENTISTS	C222S Water Svstem Operations	Linear	284.59	Hours
<i>Factors</i> 320 hours					
0.88934 ISYS 0614001.88934200 - Svstem					
A58 ASI	0000 NONE	K267S Analytical Laboratory Services	Linear	418.437.00	Dollars
<i>Factors</i> 460000 dollars 1.02283 -- FY00 Escalation --					
0.88934 ISYS 0614001.88934200 - Svstem					
A5H SUBCONTRACTED SRVS	0000 NONE	C222S Water Svstem Operations	Linear	10.915.75	Dollars
<i>Factors</i> 12000 dollars 1.02283 -- FY00 Escalation --					
0.88934 ISYS 0614001.88934200 - Svstem					

Line Item IBCGER0003 - Monitoring Data Assessment

BOE
 SOURCE OF HISTORICAL DATA
 RFETS FY98 Surface Water Monitoring WADlet (WBS # 1.1.03.06.01.01) Cost Performance Report dated 10/7/98 and WADlet manager tracking files - on file in Bldg. T893A, Cube 46.
 DESCRIPTION OF ITEMS ESTIMATED
 Monitoring Data Assessment. Items estimated include analytical data package and field data assessment; and monitoring data compilation, statistical analysis, and assessment.
 BREAKDOWN OF HISTORICAL COST DATA
 The FY01 BOE was developed using activity based cost estimating. Estimate based on annualized historical program costs for FY99 program.
 Item - Monitoring Data Assessment
 Units - lot
 Unit Cost - 1,220 hours and 68K nonlabor dollars
 Unit Cost Adjustment factor - NA
 Revised Unit Cost - NA
 Basis for Adjustment - NA
 This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

Resources

Cost Element	Skill	Department	Curve	Quantity	Units
750 STRAIGHT TIME BASE	E050 ENVIRONMENTAL ENGINEERS	C222S Water Svstem Operations	Linear	337.95	Hours
<i>Factors</i> 380 hours					
0.88934 ISYS 0614001.88934200 - Svstem					
750 STRAIGHT TIME BASE	P050 COMPLIANCE INSPECTORS	C222S Water Svstem Operations	Linear	213.44	Hours
<i>Factors</i> 240 hours					
0.88934 ISYS 0614001.88934200 - Svstem					
750 STRAIGHT TIME BASE	S020 ENVIRONMENTAL SCIENTISTS	C222S Water Svstem Operations	Linear	533.61	Hours
<i>Factors</i> 600 hours					
0.88934 ISYS 0614001.88934200 - Svstem					
A5H SUBCONTRACTED SRVS	0000 NONE	C222S Water Svstem Operations	Linear	61.855.91	Dollars
<i>Factors</i> 68000 dollars 1.02283 -- FY00 Escalation --					
0.88934 ISYS 0614001.88934200 - Svstem					

Line Item IBCGER0004 - Automated SW Monitoring

BOE
 SOURCE OF HISTORICAL DATA

WBS No: 1EBB0402
 Activity ID: 1EBB425060

Rockv Flats Closure Project
Baseline Cost and Basis of Estimate

Project Baseline Devl
 WBS Filter 1EBB
 Activity Filter *

Starts In FY *

RFETS FY98 Surface Water Monitoring WADlet (WBS # 1.1.03.06.01.01) Cost Performance Report dated 10/7/98 and WADlet manager tracking files - on file in Bldg. T893A, Cube 46.

DESCRIPTION OF ITEMS ESTIMATED
 Automated surface water monitoring program implementation (per IMP requirements). Items estimated include installation, operation, and maintenance of automated flow monitoring and sampling equipment; water quality probe operation; telemetry system operation and management; and hydrologic monitoring program implementation and management.

BREAKDOWN OF HISTORICAL COST DATA
 The FY01 BOE was developed using activity based cost estimating. Estimate based on annualized historical program costs for FY99 program.

Item - Automated Surface Water Monitoring Program Implementation and Management
 Units - lot
 Unit Cost - 2,010 hours and 79K nonlabor dollars
 Unit Cost Adjustment factor - NA
 Revised Unit Cost - NA
 Basis for Adjustment - NA

This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

Resources

Cost Element	Skill	Department	Curve	Quantity	Units
750 STRAIGHT TIME BASE	E050 ENVIRONMENTAL ENGINEERS	C222S Water System Operations	Linear	337.95	Hours
Factors 380 hours					
			0.88934 [SYS 061400]	.88934200	- System
750 STRAIGHT TIME BASE	P050 COMPLIANCE INSPECTORS	C222S Water System Operations	Linear	1,111.68	Hours
Factors 1250 hours					
			0.88934 [SYS 061400]	.88934200	- System
750 STRAIGHT TIME BASE	S020 ENVIRONMENTAL SCIENTISTS	C222S Water System Operations	Linear	337.95	Hours
Factors 380 hours					
			0.88934 [SYS 061400]	.88934200	- System
A5C SUPPLIES	0000 NONE	C222S Water System Operations	Back Loaded	21,664.37	Dollars
Factors 24000 dollars	1.015 -- FY00 Escalation --				
			0.88934 [SYS 061400]	.88934200	- System
A5H SUBCONTRACTED SRVS	0000 NONE	C222S Water System Operations	Linear	41,843.70	Dollars
Factors 46000 dollars	1.02283 -- FY00 Escalation --				
			0.88934 [SYS 061400]	.88934200	- System
A5L RENTALS	0000 NONE	C106S Business Management Office	Linear	5,416.09	Dollars
Factors 6000 dollars	1.015 -- FY00 Escalation --				
			0.88934 [SYS 061400]	.88934200	- System
A5M TRAVEL/TRAIN/RELOCAT	0000 NONE	C222S Water System Operations	Max Backload	2,134.42	Dollars
Factors 2400 dollars					
			0.88934 [SYS 061400]	.88934200	- System

Line Item IBCGER0005 - Compliance & Stakeholder Reporting

BOE

SOURCE OF HISTORICAL DATA
 RFETS FY98 Surface Water Monitoring WADlet (WBS # 1.1.03.06.01.01) Cost Performance Report dated 10/7/98 and WADlet manager tracking files - on file in Bldg. T893A, Cube 46.

DESCRIPTION OF ITEMS ESTIMATED
 Surface Water monitoring program reporting. Items estimated include NPDES monthly and annual Discharge Monitoring Report (DMR) preparation and delivery; RFCA quarterly & off-normal reporting including source evaluation planning; EPA annual sewage sludge reporting; monitoring program status and special report; GIS support including map preparation and database maintenance; and special request reports for stakeholders.

BREAKDOWN OF HISTORICAL COST DATA
 The FY01 BOE was developed using activity based cost estimating. Estimate based on annualized historical program costs for FY99 program.

Item - Compliance & Stakeholder Reporting
 Units - lot
 Unit Cost - 1,320 hours and 12K dollars
 Unit Cost Adjustment factor - NA

WBS No: 1EBB0402
 Activity ID: 1EBB425060

Rockv Flats Closure Project
Baseline Cost and Basis of Estimate

Project Baseline Devl
 WBS Filter 1EBB
 Activity Filter *

Starts In FY *

Revised Unit Cost - NA
 Basis for Adjustment - NA
 This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

Resources	Cost Element	Skill	Department	Curve	Quantity	Units
	750 STRAIGHT TIME BASE	E050 ENVIRONMENTAL ENGINEERS	C222S Water System Operations	Linear	106.72	Hours
Factors	120 hours					
				0.88934 [SYS 061400] .88934200 - System		
	750 STRAIGHT TIME BASE	G010 ADMINISTRATIVE ASSISTANTS	C222S Water System Operations	Linear	35.57	Hours
Factors	40 hours					
				0.88934 [SYS 061400] .88934200 - System		
	750 STRAIGHT TIME BASE	M020 MANAGERS (GRADE 69 - 72)	C222S Water System Operations	Linear	160.08	Hours
Factors	180 hours					
				0.88934 [SYS 061400] .88934200 - System		
	750 STRAIGHT TIME BASE	P050 COMPLIANCE INSPECTORS	C222S Water System Operations	Linear	53.36	Hours
Factors	60 hours					
				0.88934 [SYS 061400] .88934200 - System		
	750 STRAIGHT TIME BASE	P060 COMPUTER SYSTEMS ANALYSTS	C222S Water System Operations	Linear	284.59	Hours
Factors	320 hours					
				0.88934 [SYS 061400] .88934200 - System		
	750 STRAIGHT TIME BASE	S020 ENVIRONMENTAL SCIENTISTS	C222S Water System Operations	Linear	533.61	Hours
Factors	600 hours					
				0.88934 [SYS 061400] .88934200 - System		
	A5H SUBCONTRACTED SRVS	0000 NONE	C222S Water System Operations	Linear	10,915.75	Dollars
Factors	12000 dollars	1.02283 -- FY00 Escalation --				
				0.88934 [SYS 061400] .88934200 - System		

Line Item IBCGER0006 - SW Monitoring AD Hoc Projects

BOE
 SOURCE OF HISTORICAL DATA
 RFETS FY98 Surface Water Monitoring WADlet (WBS # 1.1.03.06.01.01) Cost Performance Report dated 10/7/98 and WADlet manager tracking files - on file in Bldg. T893A, Cube 46.
 DESCRIPTION OF ITEM ESTIMATED
 Site involvement in Colorado Water Quality Control Commission Hearing (CWQCC) hearings to ensure that appropriate and achievable water quality standards are established for Site surface water to facilitate movement toward Site closure.
 BREAKDOWN OF HISTORICAL DATA
 The FY01 BOE was developed using activity based cost estimating. Estimate based on annualized historical program costs for FY99 program.
 Item - Colorado Water Quality Control Commission Hearing(s) support
 Units - lot
 Unit Cost - 870 hours
 Unit Cost Adjustment factor - NA
 Revised Unit Cost - NA
 Basis for Adjustment - NA
 This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

Resources	Cost Element	Skill	Department	Curve	Quantity	Units
	750 STRAIGHT TIME BASE	G010 ADMINISTRATIVE ASSISTANTS	C222S Water System Operations	Back Loaded	26.68	Hours
Factors	30 hours					
				0.88934 [SYS 061400] .88934200 - System		
	750 STRAIGHT TIME BASE	M020 MANAGERS (GRADE 69 - 72)	C222S Water System Operations	Back Loaded	106.72	Hours
Factors	120 hours					
				0.88934 [SYS 061400] .88934200 - System		
	750 STRAIGHT TIME BASE	S020 ENVIRONMENTAL SCIENTISTS	C222S Water System Operations	Linear	569.18	Hours
Factors	640 hours					
				0.88934 [SYS 061400] .88934200 - System		

WBS No: 1EBB0402
 Activity ID: 1EBB425060

Rockv Flats Closure Project
Baseline Cost and Basis of Estimate

Project: Baseline Devl
 WBS Filter: 1EBB
 Activity Filter: *

Starts In FY: *

750	STRAIGHT TIME BASE	S020	ENVIRONMENTAL SCIENTISTS	C222S	Water Svstem Operations	Back Loaded	71.15	Hours
<i>Factors</i>		80	hours					

0.88934 [SYS 061400] .88934200 - System

Line Item SYS - Contingency And Escalation

BOE

Resources

Cost Element	Skill	Department	Curve	Quantity	Units
CON CONTINGENCY	0000 NONE	ZDEPT No Department	Linear	19.283.34	Dollars
<i>Factors</i> 19283.3 Dollars					
ESC ESCALATION	0000 NONE	ZDEPT No Department	Linear	16.348.67	Dollars
<i>Factors</i> 16348.7 Dollars					

Activity ID: 1EBB426000

Description: Clean Water Program Implementation FY00

Cost Risk 1 Schedule Risk 1

Line Item	Description	Quantity	Units	BOE Type	Labor Hours/Unit	Labor Hours Total	Labor Cost Total	Materials/ Sub Cost	Contingency & Escalation	Total Prime Cost	Burden Cost	Total Cost
IBCGER0805	Stormwater Pollution Prevention Plan	1.00	each	EE	46	46	1,471	5,191	0	6,662	718	7,380
IBCGER0820	Ammonia Measurement Data Links	1.00	each	EE	21	21	543	3,461	0	4,004	265	4,269
IBCGER0830	Chronic Whole Effluent Testing	1.00	each	HC	31	31	815	0	0	815	398	1,213
IBCGER0845	Clean Water Act Program Mgmt.	1.00	each	HC	295	295	11,652	3,370	0	15,022	5,686	20,708
IBCGER0860	New NPDES Permit Compliance	1.00	each	EE	167	167	6,091	0	0	6,091	2,972	9,064
Total for Activity 1EBB426000:						559	20,572	12,022	0	32,594	10,039	42,633

Line Item IBCGER0805 - Stormwater Pollution Prevention Plan

BOE

Estimators Experience - This estimate was developed from a review of the Stormwater Pollution Prevention Plan (SWP3) requirements stated in the latest draft of the Site's draft NPDES Permit using past estimation and WADlet management experience in the Surface Water organization.

The Stormwater Pollution Prevention Plan (SWPPP) is a requirement of 40 CFR 122.26(a)(14)(7-1-92 Edition) and is required to minimize pollution associated with stormwater runoff from the Rocky Flats Plant. The Site's new National Pollutant Discharge Elimination System (NPDES) permit is assumed to be signed and effective by October 1, 2000. The SWPPP is required to be completed within 6 months after the permit is effective.

Source of Estimator Experience - Estimator has experience estimating costs and labor hours for similar activities (specifically the Spill Prevention Controls and Countermeasures Plan) which were performed by the Surface Water group.

Descrip. Of Item Estimated: Stormwater Pollution Prevention Plan

Breakdown of Cost Data:

Item & Unit Cost -A P170 will be required for 155 hours for six months to (1) review the draft SWPPP and identify sections for update, (2) prepare a subcontract to modify the document, (3) subcontract management and (4) to provide final review and plan approval.

Item & Unit Cost -A secretary will be required for 15 hours of support during this six month project to prepare correspondence.

Item & Unit Cost -Approximately 20 hours of Project Management for document review and oversight will be required.

Item & Unit Cost - Estimated \$20K for subcontracted services to develop the SWPPP including requirements specified in the latest draft of the new NPDES permit.

Unit Cost Adjustment factor - N/A
 Revised Unit Cost - N/A
 Basis for adjustment -N/A

This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

Resources

Cost Element	Skill	Department	Curve	Quantity	Units
750 STRAIGHT TIME BASE	G010 ADMINISTRATIVE ASSISTANTS	C222S Water Svstem Operations	Front Loaded	3.16	Hours
<i>Factors</i>		15	hours	0.4	May 2000 Earned Value Factor
0.52618 [SYS 061300] 0.526183 - Target					
750 STRAIGHT TIME BASE	M020 MANAGERS (GRADE 69 - 72)	C222S Water Svstem Operations	Front Loaded	10.52	Hours
<i>Factors</i>		20	hours		
0.52618 [SYS 061300] 0.526183 - Target					

WBS No: 1EBB0402
 Activity ID: 1EBB426000

Rockv Flats Closure Project
Baseline Cost and Basis of Estimate

Project: Baseline Devl
 WBS Filter: 1EBB
 Activity Filter: *

Starts In FY *

750	STRAIGHT TIME BASE	P170	OTHER ADMINISTRATIVE & PROFE	C222S	Water Svstem Operations	Front Loaded	32.62	Hours
<i>Factors</i>		155	hours	0.4	May 2000 Earned Value Factor			
							0.52618	[SYS 061300] 0.526183 - Target
A5H	SUBCONTRACTED SRVS	P170	OTHER ADMINISTRATIVE & PROFE	C222S	Water Svstem Operations	Front Loaded	5.191.22	Dollars
<i>Factors</i>		1.015	-- FY00 Escalation --	12000	dollars	0.81	May 2000 Earned Value Factor	
							0.52618	[SYS 061300] 0.526183 - Target

Line Item IBCGER0820 - Ammonia Measurement Data Links

BOE Experience Item Desc - Historical cost and hours tracking from FY98 WBS 1.1.03.06.04 Activity IBCGER0815 September Spending Variance Report dated 10/07/99. The FY00 scope of work is for similar FY98 activities which were performed by the Surface Water group.

Breakdown of Cost Data:

Item & Units- Ammonia measurement development techniques research will require a minimum of 8 hours per month for P170 support.

Item & Units- A total expenditure for FY00 for ammonia analysis equipment and telemetry capabilities is estimated to be \$4,800

Item & Units- Estimators Experience - Was used to predict the cost and schedule requirements for this activity.

Unit Cost Adjustment factor - 0
 Revised Unit Cost - N/A
 Basis for adjustment - N/A

This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

Resources

	<i>Cost Element</i>		<i>Skill</i>		<i>Department</i>	<i>Curve</i>	<i>Quantity</i>	<i>Units</i>
750	STRAIGHT TIME BASE	P170	OTHER ADMINISTRATIVE & PROFE	C222S	Water Svstem Operations	Linear	20.71	Hours
<i>Factors</i>		96	h	0.41	May Earned Value Factor			
							0.52618	[SYS 061300] 0.526183 - Target
A5C	SUPPLIES	0000	NONE	C222S	Water Svstem Operations	Linear	3.460.81	Dollars
<i>Factors</i>		1.015	-- FY00 Escalation --	8000	\$	0.81	May 2000 Earned Value Factor	
							0.52618	[SYS 061300] 0.526183 - Target

Line Item IBCGER0830 - Chronic Whole Effluent Testing

BOE Historical Data Source - Historical cost and hours tracking from FY98 WBS 1.1.03.06.04 September Spending Variance Report dated 10/07/99. The FY00 scope of work is for similar FY98 activities which were performed by the Surface Water group.

Item Desc - Big Dry Creek Water Quality Focus Group support

Breakdown of Historical Data:

Item & Unit - Quaterly WET test reporting requires 36 hours per reporting period of Env. Eng. support to review sample analysis, prepare formal reports and provide discussions for follow-on briefings.

Unit Cost Adjustment factor - 0
 Revised Unit Cost - N/A
 Basis for adjustment - N/A

This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

Resources

	<i>Cost Element</i>		<i>Skill</i>		<i>Department</i>	<i>Curve</i>	<i>Quantity</i>	<i>Units</i>
750	STRAIGHT TIME BASE	P170	OTHER ADMINISTRATIVE & PROFE	C222S	Water Svstem Operations	Linear	31.07	Hours
<i>Factors</i>		144	h	0.41	May Earned Value Factor			
							0.52618	[SYS 061300] 0.526183 - Target

Line Item IBCGER0845 - Clean Water Act Program Mgmt.

BOE Historical Data Source - Historical cost and hours tracking from FY98 WBS 1.1.03.06.04 September Spending Variance Report dated 10/07/99. The FY00 scope of work is for similar FY98 activities which were performed by the Surface Water group.

Item Desc - Site compliance with requirements of the Clean Water Act and RFCA.

Breakdown of Historical Data:

Item & Unit - Cost Estimator/Planner skills will be required to track budget & financial control systems and are estimated to be 8 hours per month based on

WBS No: 1EBB0402
 Activity ID: 1EBB426000

Rockv Flats Closure Project
Baseline Cost and Basis of Estimate

Project: Baseline Devl
 WBS Filter: 1EBB
 Activity Filter: *

Starts In FY *

historical data.

Item & Unit -Surface Water staff member (P170) support for 48 hours per month is required to develop or revise project/program plans and provide technical information for regulatory negotiations and compliance issues.

Item & Unit -Secretarial support is required for 8 hours per month. Subcontracted clerical services at \$6720.

Item & Unit -A5C Supplies are estimated to be \$100 per month.

Item & Unit -Program/Project Manager support is required for 24 hours per month to provide senior project oversight.

Item & Unit -A5M Travel/Training expenses are estimated to be \$300 per month, based on historical data, to attend regulator and stakeholder meetings and stay current with training requirements.

Unit Cost Adjustment factor - 0
 Revised Unit Cost - N/A
 Basis for adjustment - N/A

This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

Resources

Cost Element	Skill	Department	Curve	Quantity	Units
750 STRAIGHT TIME BASE	G010 ADMINISTRATIVE ASSISTANTS	C222S Water System Operations	Linear	20.71	Hours
Factors 96 h	0.41 Mav Earned Value Factor				
			0.52618 ISYS 0613001	0.526183 - Target	
750 STRAIGHT TIME BASE	M020 MANAGERS (GRADE 69 - 72)	C222S Water System Operations	Linear	151.54	Hours
Factors 288 h					
			0.52618 ISYS 0613001	0.526183 - Target	
750 STRAIGHT TIME BASE	P170 OTHER ADMINISTRATIVE & PROFE	C222S Water System Operations	Linear	122.32	Hours
Factors 567 h	0.41 Mav Earned Value Factor				
			0.52618 ISYS 0613001	0.526183 - Target	
A5C SUPPLIES	0000 NONE	C222S Water System Operations	Linear	262.77	Dollars
Factors 1.015 -- FY00 Escalation --	1200 \$	0.41 Mav Earned Value Factor			
			0.52618 ISYS 0613001	0.526183 - Target	
A5H SUBCONTRACTED SRVS	G010 ADMINISTRATIVE ASSISTANTS	C222S Water System Operations	Linear	1,482.84	Dollars
Factors 1.02283 -- FY00 Escalation --	6720 \$	0.41 Mav Earned Value Factor			
			0.52618 ISYS 0613001	0.526183 - Target	
A5H SUBCONTRACTED SRVS	P070 COST ESTIMATORS PLANNERS AN	C222S Water System Operations	Linear	847.34	Dollars
Factors 1.02283 -- FY00 Escalation --	3840 \$	0.41 Mav Earned Value Factor			
			0.52618 ISYS 0613001	0.526183 - Target	
A5M TRAVEL/TRAIN/RELOCAT	0000 NONE	C222S Water System Operations	Linear	776.65	Dollars
Factors 3600 \$	0.41 Mav Earned Value Factor				
			0.52618 ISYS 0613001	0.526183 - Target	

Line Item IBCGER0860 - New NPDES Permit Compliance

BOE

Estimators Experience - This estimate was developed from a review of the latest draft of the Site's draft NPDES Permit using past estimation and WADlet management experience in the Surface Water organization.

Experience Item Desc - The new NPDES Permit is expected to be issued before FY01 begins. Once the NPDES Permit is effective, there are several compliance plans and studies which must be submitted to the Permit issuing authority for review no later than six months after the effective date. There are also some compliance plans and studies which must be submitted to EPA no later than one year from the effective date of the Permit.

This activity only addresses two compliance documents that must be submitted to EPA as required by the new NPDES Permit. These are a Non-Stormwater Discharge Study (within 6 months) and a Comprehensive Site Compliance Evaluation Report (within one year), which are described below.

Breakdown of Cost Data:

Areas contributing to a storm water discharge associated with industrial activities shall be visually inspected for evidence of, or the potential for,

WBS No: 1EBB0402
 Activity ID: 1EBB426000

Rocky Flats Closure Project
Baseline Cost and Basis of Estimate

Project: Baseline Devl
 WBS Filter: 1EBB
 Activity Filter: *

Starts In FY *

pollutants entering the drainage system. Measures to reduce pollutant loading shall be evaluated and implemented. Structural storm water management measures, sediment and erosion control measures, and other structural pollution prevention measures identified in the Permit shall be observed to ensure they are operating correctly. A visual inspection of equipment needed to implement the Storm Water Pollution Prevention Plan, such as spill response equipment, shall be made. The annual Comprehensive Site Evaluation report must document the scope of the inspections, personnel making the inspections, major observations relating to the implementation of the Storm Water Pollution Prevention Plan, and any mitigating actions taken.

This task requires 480 hours of a Surface Water Environmental Engineer, 120 hours of Surface Water Project Management (to provide technical direction for the project, perform cost and schedule tracking, and review draft sections of preliminary, draft and final report), and \$36K of subcontracted services to fulfill the Certification requirements of the new NPDES Permit.

Unit Cost Adjustment factor - 0
 Revised Unit Cost - N/A
 Basis for adjustment - N/A

This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

Resources		Cost Element	Skill	Department	Curve	Quantity	Units
750	STRAIGHT TIME BASE	M020	MANAGERS (GRADE 69 - 72)	C222S	Water System Operations	Linear	63.14 Hours
Factors		120	hours				
						0.52618 [SYS 061300]	0.526183 - Target
750	STRAIGHT TIME BASE	P170	OTHER ADMINISTRATIVE & PROFE	C222S	Water System Operations	Linear	103.55 Hours
Factors		480	hours	0.41	Max Earned Value Factor		

Activity ID: 1EBB426010 Description: Clean Water Program Implementation FY01

Cost Risk 1 Schedule Risk 1

Line Item	Description	Quantity	Units	BOE Type	Labor Hours/Unit	Labor Hours Total	Labor Cost Total	Materials/ Sub Cost	Contingency & Escalation	Total Prime Cost	Burden Cost	Total Cost	
IBCGER0805	Stormwater Pollution Prevention Plan	1.00	each	EE	169	169	4,788	18,193	0	22,981	2,284	25,265	
IBCGER0820	Ammonia Measurement Data Links	1.00	each	EE	85	85	2,239	4,333	0	6,572	1,068	7,641	
IBCGER0830	Chronic Whole Effluent Testina	1.00	each	HC	128	128	3,359	0	0	3,359	1,602	4,961	
IBCGER0845	Clean Water Act Program Mamt.	1.00	each	HC	846	846	28,335	195,820	0	224,155	13,516	237,671	
IBCGER0860	New NPDES Permit Compliance	1.00	each	EE	534	534	16,901	0	0	16,901	8,062	24,963	
SYS	Contingency And Escalation	1.00	lea	EE	0	0	0	0	15,784	15,784	0	15,784	
						Total for Activity 1EBB426010:	1,762	55,623	218,346	15,784	289,752	26,532	316,285

Line Item IBCGER0805 - Stormwater Pollution Prevention Plan

BOE

Estimators Experience - This estimate was developed from a review of the Stormwater Pollution Prevention Plan (SWP3) requirements stated in the latest draft of the Site's draft NPDES Permit using past estimation and WADlet management experience in the Surface Water organization.

The Stormwater Pollution Prevention Plan (SWPPP) is a requirement of 40 CFR 122.26(a)(14)(7-1-92 Edition) and is required to minimize pollution associated with stormwater runoff from the Rocky Flats Plant. The Site's new National Pollutant Discharge Elimination System (NPDES) permit is assumed to be signed and effective by October 1, 2000. The SWPPP is required to be completed within 6 months after the permit is effective.

Source of Estimator Experience - Estimator has experience estimating costs and labor hours for similar activities (specifically the Spill Prevention Controls and Countermeasures Plan) which were performed by the Surface Water group.

Descrip. Of Item Estimated: Stormwater Pollution Prevention Plan

Breakdown of Cost Data:

Item & Unit Cost -A P170 will be required for 155 hours for six months to (1) review the draft SWPPP and identify sections for update, (2) prepare a subcontract to modify the document, (3) subcontract management and (4) to provide final review and plan approval.

Item & Unit Cost -A secretary will be required for 15 hours of support during this six month project to prepare correspondence.

Item & Unit Cost -Approximately 20 hours of Project Management for document review and oversight will be required.

Item & Unit Cost - Estimated \$20K for subcontracted services to develop the SWPPP including requirements specified in the latest draft of the new NPDES permit.

Unit Cost Adjustment factor - N/A

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Rockv Flats Closure Project
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Project: Baseline Devl
 WBS Filter: 1EBB
 Activity Filter: *

Starts In FY *

Revised Unit Cost - N/A
 Basis for adjustment -N/A
 This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

Resources	Cost Element	Skill	Department	Curve	Quantity	Units
	750 STRAIGHT TIME BASE	G010 ADMINISTRATIVE ASSISTANTS	C222S Water System Operations	Front Loaded	13.34	Hours
Factors	15 hours					
	750 STRAIGHT TIME BASE	M020 MANAGERS (GRADE 69 - 72)	C222S Water System Operations	Front Loaded	17.79	Hours
Factors	20 hours					
	750 STRAIGHT TIME BASE	P170 OTHER ADMINISTRATIVE & PROFE	C222S Water System Operations	Front Loaded	137.85	Hours
Factors	155 hours					
	A5H SUBCONTRACTED SRVS	P170 OTHER ADMINISTRATIVE & PROFE	C222S Water System Operations	Front Loaded	18,192.91	Dollars
Factors	1.02283 -- FY00 Escalation --	20000 dollars				

Line Item IBCGER0820 - Ammonia Measurement Data Links

BOE
 Experience Item Desc - Historical cost and hours tracking from FY98 WBS 1.1.03.06.04 Activity IBCGER0815 September Spending Variance Report dated 10/07/99. The FY00 scope of work is for similar FY98 activities which were performed by the Surface Water group.
 Breakdown of Cost Data:
 Item & Units- Ammonia measurement development techniques research will require a minimum of 8 hours per month for P170 support.
 Item & Units- A total expenditure for FY00 for ammonia analysis equipment and telemetry capabilities is estimated to be \$4,800
 Item & Units- Estimators Experience - Was used to predict the cost and schedule requirements for this activity.
 Unit Cost Adjustment factor - 0
 Revised Unit Cost - N/A
 Basis for adjustment -N/A
 This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

Resources	Cost Element	Skill	Department	Curve	Quantity	Units
	750 STRAIGHT TIME BASE	P170 OTHER ADMINISTRATIVE & PROFE	C222S Water System Operations	Linear	85.38	Hours
Factors	96 h					
	A5C SUPPLIES	0000 NONE	C222S Water System Operations	Linear	4,332.87	Dollars
Factors	1.015 -- FY00 Escalation --	4800 \$				

Line Item IBCGER0830 - Chronic Whole Effluent Testing

BOE
 Historical Data Source - Historical cost and hours tracking from FY98 WBS 1.1.03.06.04 September Spending Variance Report dated 10/07/99. The FY00 scope of work is for similar FY98 activities which were performed by the Surface Water group.
 Item Desc - Big Dry Creek Water Quality Focus Group support
 Breakdown of Historical Data:
 Item & Unit -Quarterly WET test reporting requires 36 hours per reporting period of Env. Eng. support to review sample analysis, prepare formal reports and provide discussions for follow-on briefings.
 Unit Cost Adjustment factor - 0
 Revised Unit Cost - N/A
 Basis for adjustment -N/A
 This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

Resources	Cost Element	Skill	Department	Curve	Quantity	Units
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WBS No: 1EBB0402
 Activity ID: 1EBB426010

Rockv Flats Closure Project
Baseline Cost and Basis of Estimate

Project: Baseline Devl
 WBS Filter: 1EBB
 Activity Filter: *

Starts In FY: *

750	STRAIGHT TIME BASE	P170	OTHER ADMINISTRATIVE & PROFE	C222S	Water Svstem Operations	Linear	128.07	Hours
<i>Factors</i>		144	h					

0.88934 [SYS 061400] .88934200 - System

Line Item IBCGER0845 - Clean Water Act Program Mgmt.

BOE
 Historical Data Source - Historical cost and hours tracking from FY98 WBS 1.1.03.06.04 September Spending Variance Report dated 10/07/99. The FY00 scope of work is for similar FY98 activities which were performed by the Surface Water group.

Item Desc - Site compliance with requirements of the Clean Water Act and RFCA.

Breakdown of Historical Data:

Item & Unit - Cost Estimator/Planner skills will be required to track budget & financial control systems and are estimated to be 8 hours per month based on historical data.

Item & Unit -Surface Water staff member (P170) support for 48 hours per month is required to develop or revise project/program plans and provide technical information for regulatory negotiations and compliance issues.

Item & Unit -Secretarial support is required for 8 hours per month. Subcontracted clerical services at \$6720.

Item & Unit -A5C Supplies are estimated to be \$100 per month.

Item & Unit -Program/Project Manager support is required for 24 hours per month to provide senior project oversight.

Item & Unit -A5M Travel/Training expenses are estimated to be \$300 per month, based on historical data, to attend regulator and stakeholder meetings and stay current with training requirements.

Unit Cost Adjustment factor - 0
 Revised Unit Cost - N/A
 Basis for adjustment - N/A

This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

Resources

<i>Cost Element</i>		<i>Skill</i>		<i>Department</i>		<i>Curve</i>	<i>Quantity</i>	<i>Units</i>
750	STRAIGHT TIME BASE	G010	ADMINISTRATIVE ASSISTANTS	C222S	Water Svstem Operations	Linear	85.38	Hours
<i>Factors</i>		96	h					
							0.88934	[SYS 061400] .88934200 - System
750	STRAIGHT TIME BASE	M020	MANAGERS (GRADE 69 - 72)	C222S	Water Svstem Operations	Linear	256.13	Hours
<i>Factors</i>		288	h					
							0.88934	[SYS 061400] .88934200 - System
750	STRAIGHT TIME BASE	P170	OTHER ADMINISTRATIVE & PROFE	C222S	Water Svstem Operations	Linear	504.26	Hours
<i>Factors</i>		567	h					
							0.88934	[SYS 061400] .88934200 - System
A5C	SUPPLIES	0000	NONE	C222S	Water Svstem Operations	Linear	1.083.22	Dollars
<i>Factors</i>		1.015	-- FY00 Escalation --	1200	\$			
							0.88934	[SYS 061400] .88934200 - System
A5H	SUBCONTRACTED SRVS	G010	ADMINISTRATIVE ASSISTANTS	C222S	Water Svstem Operations	Linear	188.042.00	Dollars
<i>Factors</i>		1.02283	-- FY00 Escalation --	206720	\$			
							0.88934	[SYS 061400] .88934200 - System
A5H	SUBCONTRACTED SRVS	P070	COST ESTIMATORS PLANNERS AN	C222S	Water Svstem Operations	Linear	3.493.04	Dollars
<i>Factors</i>		1.02283	-- FY00 Escalation --	3840	\$			
							0.88934	[SYS 061400] .88934200 - System
A5M	TRAVEL/TRAIN/RELOCAT	0000	NONE	C222S	Water Svstem Operations	Linear	3.201.63	Dollars
<i>Factors</i>		3600	\$					

0.88934 [SYS 061400] .88934200 - System

Line Item IBCGER0860 - New NPDES Permit Compliance

BOE
 Estimators Experience - This estimate was developed from a review of the latest draft of the Site's draft NPDES Permit using past estimation and WADlet

WBS No: 1EBB0402
 Activity ID: 1EBB426010

Rockv Flats Closure Project
Baseline Cost and Basis of Estimate

Project Baseline Devl
 WBS Filter 1EBB
 Activity Filter *

Starts In FY *

management experience in the Surface Water organization.

Experience Item Desc - The new NPDES Permit is expected to be issued before FY01 begins. Once the NPDES Permit is effective, there are several compliance plans and studies which must be submitted to the Permit issuing authority for review no later than six months after the effective date. There are also some compliance plans and studies which must be submitted to EPA no later than one year from the effective date of the Permit.

This activity only addresses two compliance documents that must be submitted to EPA as required by the new NPDES Permit. These are a Non-Stormwater Discharge Study (within 6 months)and a Comprehensive Site Compliance Evaluation Report(within one year), which are described below.

Breakdown of Cost Data:

Areas contributing to a storm water discharge associated with industrial activities shall be visually inspected for evidence of, or the potential for, pollutants entering the drainage system. Measures to reduce pollutant loading shall be evaluated and implemented. Structural storm water management measures, sediment and erosion control measures, and other structural pollution prevention measures identified in the Permit shall be observed to ensure they are operating correctly. A visual inspection of equipment needed to implement the Storm Water Pollution Prevention Plan, such as spill response equipment, shall be made. The annual Comprehensive Site Evaluation report must document the scope of the inspections, personnel making the inspections, major observations relating to the implementation of the Storm Water Pollution Prevention Plan, and any mitigating actions taken.

This task requires 480 hours of a Surface Water Environmental Engineer, 120 hours of Surface Water Project Management (to provide technical direction for the project, perform cost and schedule tracking, and review draft sections of preliminary, draft and final report), and \$36K of subcontracted services to fulfill the Certification requirements of the new NPDES Permit.

Unit Cost Adjustment factor - 0
 Revised Unit Cost - N/A
 Basis for adjustment - N/A

This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

Resources	Cost Element	Skill	Department	Curve	Quantity	Units
	750 STRAIGHT TIME BASE	M020 MANAGERS (GRADE 69 - 72)	C222S Water System Operations	Linear	106.72	Hours
<i>Factors</i> 120 hours						
					0.88934	ISYS 0614001.88934200 - System
	750 STRAIGHT TIME BASE	P170 OTHER ADMINISTRATIVE & PROFF	C222S Water System Operations	Linear	426.88	Hours
<i>Factors</i> 480 hours						
					0.88934	ISYS 0614001.88934200 - Svsstem

Line Item SYS - Contingency And Escalation

Resources	Cost Element	Skill	Department	Curve	Quantity	Units
	CON CONTINGENCY	0000 NONE	ZDEPT No Department	Linear	9.464.88	Dollars
<i>Factors</i> 9464.88 Dollars						
	ESC ESCALATION	0000 NONE	ZDEPT No Department	Linear	6.318.86	Dollars
<i>Factors</i> 6318.86 Dollars						

Activity ID: 1EBB426020 Description: Clean Water Program Implementation FY02

Cost Risk 1 Schedule Risk 1

Line Item	Description	Quantity	Units	BOE Type	Labor Hours/Unit	Labor Hours Total	Labor Cost Total	Materials/ Sub Cost	Contingency & Escalation	Total Prime Cost	Burden Cost	Total Cost
IBCGER0820	Ammonia Measurement Data Links	4.00	each	EE	43	171	4,479	4,333	0	8,812	1,581	10,393
IBCGER0830	Chronic Whole Effluent Testina	4.00	each	HC	21	85	2,239	0	0	2,239	791	3,030
IBCGER0845	Clean Water Act Program Mamt.	1.00	each	HC	811	811	27,836	31,598	0	59,433	9,826	69,259
IBCGER0860	New NPDES Permit Compliance	1.00	each	EE	711	711	23,504	3,639	0	27,142	8,297	35,439
IBCGER0870	Revision Water Management Closure Plan	1.00	each	EE	0	0	0	136,447	0	136,447	0	136,447
SYS	Contingency And Escalation	1.00	ea	EE	0	0	0	0	37,632	37,632	0	37,632
Total for Activity 1EBB426020:						1,779	58,058	176,016	37,632	271,706	20,494	292,200

Line Item IBCGER0820 - Ammonia Measurement Data Links

BOE "Specific analogy" and "expert opinion" approaches were used to predict the cost and schedule requirements for this activity. Historical cost and hours tracking from FY97 and FY98 for the same scope of work and similar activities which were performed by the Surface Water group were used to prepare the following estimate:

WBS No: 1EBB0402
 Activity ID: 1EBB426020

Rockv Flats Closure Project
Baseline Cost and Basis of Estimate

Project Baseline Devl
 WBS Filter 1EBB
 Activity Filter *

Starts In FY *

Ammonia measurement development techniques research will require a minimum of 4 hours per month for a Surface Water staff member support.
 A total expenditure for FY02 for ammonia analysis equipment and telemetry capabilities is estimated to be \$1200.
 This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

Resources	Cost Element	Skill	Department	Curve	Quantity	Units
	750 STRAIGHT TIME BASE	P170 OTHER ADMINISTRATIVE & PROFE	C222S Water System Operations	Linear	42.69	Hours
Factors	48 h					
	A5C SUPPLIES	0000 NONE	C222S Water System Operations	Linear	1.08322	Dollars
Factors	1200 \$	1.015 -- FY00 Escalation --				
					0.88934 [SYS 061400] .88934200 - System	

Line Item IBCGER0830 - Chronic Whole Effluent Testing

BOE Historical Data Source - Historical cost and hours tracking from FY98 WBS 1.1.03.06.04 September Spending Variance Report dated 10/07/99. The FY02 scope of work is for similar FY98 activities which were performed by the Surface Water group.
 Quaterly WET test reporting requires 24 hours (6 hr/Qtr) of a Surface Water staff member (P170) support to review sample analysis, prepare formal reports and provide discussions for follow-on briefings.
 This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

Resources	Cost Element	Skill	Department	Curve	Quantity	Units
	750 STRAIGHT TIME BASE	P170 OTHER ADMINISTRATIVE & PROFE	C222S Water System Operations	Linear	21.34	Hours
Factors	24 h					
					0.88934 [SYS 061400] .88934200 - System	

Line Item IBCGER0845 - Clean Water Act Program Mgmt.

BOE Historical Data Source - Historical cost and hours tracking from FY98 WBS 1.1.03.06.04 September Spending Variance Report dated 10/07/99. The FY02 scope of work is for similar FY98 activities which were performed by the Surface Water group.
 Cost Estimator/Planner skills will be required to track budget controls and are estimated to be \$2,160 based on historical data.
 Surface Water staff support(P170) for 576 hours is required to develop or revise project/program plans and provide technical information for regulatory negotiations and compliance issues.
 Secretarial support is required for 8 hours per month.
 Program/Project Manager support is required for 24 hours per month to provide senior project oversight.
 \$17,600 A5H Proj/Prog Mgt. support is needed to provide environmental compliance assurance.
 A5C Supplies are estimated to be \$100 per month.
 A5M0468 Education Reimbursement for employees = \$10,500
 A5M Travel/Training expenses are estimated to be \$300 per month, based on historical data, to attend regulator and stakeholder meetings and stay current with training requirements.
 This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

Resources	Cost Element	Skill	Department	Curve	Quantity	Units
	750 STRAIGHT TIME BASE	G010 ADMINISTRATIVE ASSISTANTS	C222S Water System Operations	Linear	42.69	Hours
Factors	48 h					
					0.88934 [SYS 061400] .88934200 - System	
	750 STRAIGHT TIME BASE	M020 MANAGERS (GRADE 69 - 72)	C222S Water System Operations	Linear	256.13	Hours
Factors	288 h					
					0.88934 [SYS 061400] .88934200 - System	

WBS No: 1EBB0402
 Activity ID: 1EBB426020

Rockv Flats Closure Project
Baseline Cost and Basis of Estimate

Project: Baseline Devl
 WBS Filter: 1EBB
 Activity Filter: *

Starts In FY: *

750	STRAIGHT TIME BASE	P170	OTHER ADMINISTRATIVE & PROFE	C222S	Water System Operations	Linear	512.26	Hours
Factors 576 h								
						0.88934	[SYS 061400]	.88934200 - System
A5C	SUPPLIES	0000	NONE	C222S	Water System Operations	Linear	1,083.22	Dollars
Factors 1200 \$ 1.015 -- FY00 Escalation --								
						0.88934	[SYS 061400]	.88934200 - System
A5H	SUBCONTRACTED SRVS	P070	COST ESTIMATORS PLANNERS AN	C222S	Water System Operations	Linear	1,964.83	Dollars
Factors 2160 Dollars 1.02283 -- FY00 Escalation --								
						0.88934	[SYS 061400]	.88934200 - System
A5H	SUBCONTRACTED SRVS	S090	OTHER SCIENTISTS	C222S	Water System Operations	Linear	16,009.76	Dollars
Factors 17600 \$ 1.02283 -- FY00 Escalation --								
						0.88934	[SYS 061400]	.88934200 - System
A5M	TRAVEL/TRAIN/RELOCAT	0000	NONE	C222S	Water System Operations	Linear	3,201.63	Dollars
Factors 3600 \$								
						0.88934	[SYS 061400]	.88934200 - System
A5M	TRAVEL/TRAIN/RELOCAT	0000	NONE	C222S	Water System Operations	Linear	9,338.09	Dollars
Factors 10500 \$ Educatin Reimbursement								
						0.88934	[SYS 061400]	.88934200 - System

Line Item IBCGER0860 - New NPDES Permit Compliance

BOE "Specific analogy" and "expert opinion" approaches were used to predict the cost and schedule requirements for this activity. Historical cost and hours tracking from FY97, and FY98 for the same scope of work and similar activities which were performed by the Surface Water group were used to prepare the following estimate:

The new NPDES Permit is expected to be issued in early FY00. Once the NPDES Permit is effective, there are several compliance plans and studies which must be submitted to the Permit issuing authority for review within six months of the effective date and also compliance plans and studies which must be submitted to EPA no later than one year from the effective date of the Permit.

This activity only addresses two compliance documents that must be submitted to EPA as required by the new NPDES Permit. These are a Non-Discharge Study (within 6 months) and a Comprehensive Site Compliance Evaluation Report (within one year), which are described below.

New Draft NPDES Permit plans will require implementation and management. This is estimated to require 120 hours of a Surface Water Environmental Engineer, 80 hours of a Surface Water Project Manager, and subcontracted services of \$2K.

Areas contributing to a storm water discharge associated with industrial activities shall be visually inspected for evidence of, or the potential for, pollutants entering the drainage system. Measures to reduce pollutant loadings shall be evaluated and implemented. Structural storm water management measures, sediment and erosion control measures, and other structural pollution prevention measures identified in the Permit shall be observed to ensure they are operating correctly. A visual inspection of equipment needed to implement the Storm Water Pollution Prevention Plan, such as spill response equipment, shall be made. The annual Comprehensive Site Evaluation report must document the scope of the inspections, personnel making the inspections, major observations relating to the implementation of the Storm Water Pollution Prevention Plan, and any mitigating actions taken.

This task requires 480 hours of a Surface Water Environmental Engineer, 120 hours of Surface Water Project Management (to provide technical direction for the project, perform cost and schedule tracking, and review draft sections of preliminary, draft and final report), and \$2K of subcontracted services.

This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

Resources

Cost Element	Skill	Department	Curve	Quantity	Units			
750	STRAIGHT TIME BASE	M020	MANAGERS (GRADE 69 - 72)	C222S	Water System Operations	Linear	177.87	Hours
Factors 200 hours								
						0.88934	[SYS 061400]	.88934200 - System
750	STRAIGHT TIME BASE	P170	OTHER ADMINISTRATIVE & PROFE	C222S	Water System Operations	Linear	533.61	Hours
Factors 600 hours								
						0.88934	[SYS 061400]	.88934200 - System
A5H	SUBCONTRACTED SRVS	P170	OTHER ADMINISTRATIVE & PROFE	C222S	Water System Operations	Linear	3,638.58	Dollars
Factors 4000 dollars 1.02283 -- FY00 Escalation --								
						0.88934	[SYS 061400]	.88934200 - System

Line Item IBCGER0870 - Revision Water Management Closure Plan

BOE Annual revision to Water Management Closure Plan. Based on previous experience with similar document updates. Based on six months at 80 hours per month

WBS No: 1EBB0402
 Activity ID: 1EBB426020

Rockv Flats Closure Project
Baseline Cost and Basis of Estimate

Project Baseline Devl
 WBS Filter 1EBB
 Activity Filter *

Starts In FY *

subcontracted labor for two FTE's - rounded to 1875 total hours.
 This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

Resources	Cost Element	Skill	Department	Curve	Quantity	Units
A5H	SUBCONTRACTED SRVS	0000 NONE	K109S Env Sys Stewardship & Compliance	Linear	136.446.90	Dollars
Factors	1875 hours	80 dollars per hour	1.02283 -- FY00 Escalation --			

0.88934 [SYS 061400] .88934200 - System

Line Item SYS - Contingency And Escalation

BOE

Resources	Cost Element	Skill	Department	Curve	Quantity	Units
CON	CONTINGENCY	0000 NONE	ZDEPT No Department	Linear	25.735.74	Dollars
Factors	25735.7 Dollars					
ESC	ESCALATION	0000 NONE	ZDEPT No Department	Linear	11.896.32	Dollars
Factors	11896.3 Dollars					

Activity ID: 1EBB426030 Description: Clean Water Program Implementation FY03

Cost Risk 1 Schedule Risk 1

Line Item	Description	Quantity	Units	BOE Type	Labor Hours/Unit	Labor Hours Total	Labor Cost Total	Materials/ Sub Cost	Contingency & Escalation	Total Prime Cost	Burden Cost	Total Cost
IBCGER0820	Ammonia Measurement Data Links	4.00	each	EE	43	171	4,479	4,333	0	8,812	1,550	10,361
IBCGER0830	Chronic Whole Effluent Testing	4.00	each	HC	21	85	2,239	0	0	2,239	775	3,014
IBCGER0845	Clean Water Act Program Mgmt	1.00	each	HC	811	811	27,836	31,598	0	59,433	9,631	69,065
IBCGER0860	New NPDES Permit Compliance	1.00	each	EE	178	178	9,507	24,241	0	33,748	3,289	37,038
IBCGER0870	Water Management Closure Plan	1.00	each	EE	0	0	0	45,482	0	45,482	0	45,482
SYS	Contingency And Escalation	1.00	ea	EE	0	0	0	0	45,248	45,248	0	45,248
Total for Activity 1EBB426030:						1,245	44,061	105,654	45,248	194,963	15,245	210,209

Line Item IBCGER0820 - Ammonia Measurement Data Links

BOE
 "Specific analogy" and "expert opinion" approaches were used to predict the cost and schedule requirements for this activity. Historical cost and hours tracking from FY97 and FY98 for the same scope of work and similar activities which were performed by the Surface Water group were used to prepare the following estimate:
 Ammonia measurement development techniques research will require a minimum of 4 hours per month for Surface Water support (P170).
 A total expenditure for FY03 for ammonia analysis equipment and telemetry capabilities is estimated to be \$1200.
 This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

Resources	Cost Element	Skill	Department	Curve	Quantity	Units
750	STRAIGHT TIME BASE	P170 OTHER ADMINISTRATIVE & PROFE	C222S Water System Operations	Linear	42.69	Hours
Factors	48 h					
A5C	SUPPLIES	0000 NONE	C222S Water System Operations	Linear	1.083.22	Dollars
Factors	1200 \$	1.015 -- FY00 Escalation --				

0.88934 [SYS 061400] .88934200 - System

Line Item IBCGER0830 - Chronic Whole Effluent Testing

BOE
 Historical Data Source - Historical cost and hours tracking from FY98 WBS 1.1.03.06.04 September Spending Variance Report dated 10/07/99. The FY03 scope of work is for similar FY98 activities which were performed by the Surface Water group.
 Quaterly WET test reporting requires 24 hours (6 hr/Qtr) of Surface Water support (P170) to review sample analysis, prepare formal reports and provide discussions for follow-on briefings.
 This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

Resources	Cost Element	Skill	Department	Curve	Quantity	Units
750	STRAIGHT TIME BASE	P170 OTHER ADMINISTRATIVE & PROFE	C222S Water System Operations	Linear	21.34	Hours
Factors	24 h					

0.88934 [SYS 061400] .88934200 - System

WBS No: 1EBB0402
 Activity ID: 1EBB426030

Rockv Flats Closure Project
Baseline Cost and Basis of Estimate

Project Baseline Devl
 WBS Filter 1EBB
 Activity Filter *

Starts In FY *

Line Item IBCGER0845 - Clean Water Act Program Mgmt.

BOE
 Historical Data Source - Historical cost and hours tracking from FY98 WBS 1.1.03.06.04 September Spending Variance Report dated 10/07/99. The FY03 scope of work is for similar FY98 activities which were performed by the Surface Water group.

Cost Estimator/Planner skills will be required to track budget controls and are estimated to be 8 hours per month based on historical data.

Surface Water support (P170) for 576 hours per month is required to develop or revise project/program plans and provide technical information for regulatory negotiations and compliance issues.

Secretarial support is required for 8 hours per month.

Program/Project Manager support is required for 24 hours per month to provide senior project oversight.

\$17,600 A5H Proj/Prog Mgt. support is needed to provide environmental compliance assurance.

A5C Supplies are estimated to be \$100 per month.

A5M0468 - Education Reimbursement for employees = \$10,500

A5M Travel/Training expenses are estimated to be \$300 per month, based on historical data, to attend regulator and stakeholder meetings and stay current with training requirements.

This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

Resources

Cost Element	Skill	Department	Curve	Quantity	Units
750 STRAIGHT TIME BASE	G010 ADMINISTRATIVE ASSISTANTS	C222S Water System Operations	Linear	42.69	Hours
Factors 48 h					
			0.88934 [SYS 061400]	.88934200	- System
750 STRAIGHT TIME BASE	M020 MANAGERS (GRADE 69 - 72)	C222S Water System Operations	Linear	256.13	Hours
Factors 288 h					
			0.88934 [SYS 061400]	.88934200	- System
750 STRAIGHT TIME BASE	P170 OTHER ADMINISTRATIVE & PROFE	C222S Water System Operations	Linear	512.26	Hours
Factors 576 h					
			0.88934 [SYS 061400]	.88934200	- System
A5C SUPPLIES	0000 NONE	C222S Water System Operations	Linear	1.083.22	Dollars
Factors 1200 \$	1.015 -- FY00 Escalation --				
			0.88934 [SYS 061400]	.88934200	- System
A5H SUBCONTRACTED SRVS	P070 COST ESTIMATORS PLANNERS AN	C222S Water System Operations	Linear	1.964.83	Dollars
Factors 2160 Dollars	1.02283 -- FY00 Escalation --				
			0.88934 [SYS 061400]	.88934200	- System
A5H SUBCONTRACTED SRVS	S090 OTHER SCIENTISTS	C222S Water System Operations	Linear	16.009.76	Dollars
Factors 17600 \$	1.02283 -- FY00 Escalation --				
			0.88934 [SYS 061400]	.88934200	- System
A5M TRAVEL/TRAIN/RELOCAT	0000 NONE	C222S Water System Operations	Linear	3.201.63	Dollars
Factors 3600 \$					
			0.88934 [SYS 061400]	.88934200	- System
A5M TRAVEL/TRAIN/RELOCAT	0000 NONE	C222S Water System Operations	Linear	9.338.09	Dollars
Factors 10500 \$	Education Reimbursement				
			0.88934 [SYS 061400]	.88934200	- System

Line Item IBCGER0860 - New NPDES Permit Compliance

BOE
 "Specific analogy" and "expert opinion" approaches were used to predict the cost and schedule requirements for this activity. Historical cost and hours tracking from FY97, and FY98 for the same scope of work and similar activities which were performed by the Surface Water group were used to prepare the following estimate:

The new NPDES Permit is expected to be issued in early FY00. Once the NPDES Permit is effective, there are several compliance plans and studies which must be submitted to the Permit issuing authority for review within six months of the effective date and also compliance plans and studies which must be submitted to EPA no later than one year from the effective date of the Permit.

WBS No: 1EBB0402
 Activity ID: 1EBB426030

Rockv Flats Closure Project
Baseline Cost and Basis of Estimate

Project: Baseline Devl
 WBS Filter: 1EBB
 Activity Filter: *
 Starts In FY: *

This activity only addresses two compliance documents that must be submitted to EPA as required by the new NPDES Permit. These are a Non-Discharge Study (within 6 months) and a Comprehensive Site Compliance Evaluation Report (within one year), which are described below.

New Draft NPDES Permit plans will require implementation and management. This is estimated to require 120 hours of a Surface Water Environmental Engineer, 80 hours of a Surface Water Project Manager, and subcontracted services of \$2K.

Areas contributing to a storm water discharge associated with industrial activities shall be visually inspected for evidence of, or the potential for, pollutants entering the drainage system. Measures to reduce pollutant loadings shall be evaluated and implemented. Structural storm water management measures, sediment and erosion control measures, and other structural pollution prevention measures identified in the Permit shall be observed to ensure they are operating correctly. A visual inspection of equipment needed to implement the Storm Water Pollution Prevention Plan, such as spill response equipment, shall be made. The annual Comprehensive Site Evaluation report must document the scope of the inspections, personnel making the inspections, major observations relating to the implementation of the Storm Water Pollution Prevention Plan, and any mitigating actions taken.

This task requires 480 hours of a Surface Water Environmental Engineer, 120 hours of Surface Water Project Management (to provide technical direction for the project, perform cost and schedule tracking, and review draft sections of preliminary, draft and final report), and \$2K of subcontracted services.

This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

Resources	Cost Element	Skill	Department	Curve	Quantity	Units
	750 STRAIGHT TIME BASE	M020 MANAGERS (GRADE 69 - 72)	C222S Water Svstem Operations	Linear	177.87	Hours
Factors	200 hours					
	A5H SUBCONTRACTED SRVS	P170 OTHER ADMINISTRATIVE & PROFE	C222S Water Svstem Operations	Linear	20.602.56	Dollars
Factors	22649 DOLLARS	1.02283 -- FY00 Escalation --				
	A5H SUBCONTRACTED SRVS	P170 OTHER ADMINISTRATIVE & PROFE	C222S Water Svstem Operations	Linear	3.638.58	Dollars
Factors	4000 dollars	1.02283 -- FY00 Escalation --				

Line Item IBCGER0870 - Water Management Closure Plan

BOE Annual revision to Water Management Closure Plan. Based on previous experience with similar document updates. Based on six months at 80 hours per month subcontracted labor and materials.

This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

Resources	Cost Element	Skill	Department	Curve	Quantity	Units
	A5H SUBCONTRACTED SRVS	0000 NONE	K109S Env Svcs. Stewardship & Compliance	Linear	43.662.99	Dollars
Factors	80 hours per month	100 dollars per hour	6 months			
	A5H SUBCONTRACTED SRVS	0000 NONE	K109S Env Svcs. Stewardship & Compliance	Linear	1.819.29	Dollars
Factors	2000 dollars for supplies	1.02283 -- FY00 Escalation --				

Line Item SYS - Contingency And Escalation

Resources	Cost Element	Skill	Department	Curve	Quantity	Units
	CON CONTINGENCY	0000 NONE	ZDEPT No Department	Linear	32.598.29	Dollars
Factors	32598.3 Dollars					
	ESC ESCALATION	0000 NONE	ZDEPT No Department	Linear	12.650.02	Dollars
Factors	12650.0 Dollars					

Activity ID: 1EBB426040 Description: Clean Water Program Implementation FY04

Cost Risk 1 Schedule Risk 1

Line Item	Description	Quantity	Units	BOE Type	Labor Hours/Unit	Labor Hours Total	Labor Cost Total	Materials/ Sub Cost	Contingency & Escalation	Total Prime Cost	Burden Cost	Total Cost
IBCGER0820	Ammonia Measurement Data Links	4.00	each	EE	43	171	4.479	4.333	0	8.812	1.263	10.075
IBCGER0830	Chronic Whole Effluent Testina	4.00	each	HC	21	85	2.239	0	0	2.239	632	2.871
IBCGER0845	Clean Water Act Program Mamt.	1.00	each	HC	811	811	27.836	6.250	0	34.086	7.850	41.935
IBCGER0860	New NPDES Permit Compliance	1.00	each	EE	711	711	23.504	3.639	0	27.142	6.628	33.770
IBCGER0870	Water Management Closure Plan	1.00	each	EE	0	0	0	45.482	0	45.482	0	45.482

WBS No: 1EBB0402
 Activity ID: 1EBB426040

Rockv Flats Closure Project
Baseline Cost and Basis of Estimate

Project Baseline Devl
 WBS Filter 1EBB
 Activity Filter * Starts In FY *

SYS	Contingency And Escalation	1.00	ea	EE	0	0	0	0	18.997	18.997	0	18.997			
					Total for Activity 1EBB426040:				1.779	58.058	59.703	18.997	136.758	16.372	153.130

Line Item IBCGER0820 - Ammonia Measurement Data Links

BOE "Specific analogy" and "expert opinion" approaches were used to predict the cost and schedule requirements for this activity. Historical cost and hours tracking from FY97 and FY98 for the same scope of work and similar activities which were performed by the Surface Water group were used to prepare the following estimate:
 Ammonia measurement development techniques research will require a minimum of 4 hours per month for Surface Water staff support (P170).
 A total expenditure for FY04 for ammonia analysis equipment and telemetry capabilities is estimated to be \$1200.
 This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

Resources	Cost Element	Skill	Department	Curve	Quantity	Units
	750 STRAIGHT TIME BASE	P170 OTHER ADMINISTRATIVE & PROFE	C222S Water Svstem Operations	Linear	42.69	Hours
	Factors 48 h					
	A5C SUPPLIES	0000 NONE	C222S Water Svstem Operations	Linear	1.083.22	Dollars
	Factors 1200 \$	1.015 -- FY00 Escalation --				
				0.88934 [SYS 061400]	.88934200 - Svstem	
				0.88934 [SYS 061400]	.88934200 - Svstem	

Line Item IBCGER0830 - Chronic Whole Effluent Testing

BOE Historical Data Source - Historical cost and hours tracking from FY98 WBS 1.1.03.06.04 September Spending Variance Report dated 10/07/99. The FY04 scope of work is for similar FY98 activities which were performed by the Surface Water group.
 Quaterly WET test reporting requires 24 hours (6 hr/Qtr) of Surface Water support (P170) to review sample analysis, prepare formal reports and provide discussions for follow-on briefings.
 This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

Resources	Cost Element	Skill	Department	Curve	Quantity	Units
	750 STRAIGHT TIME BASE	P170 OTHER ADMINISTRATIVE & PROFE	C222S Water Svstem Operations	Linear	21.34	Hours
	Factors 24 h					
				0.88934 [SYS 061400]	.88934200 - Svstem	

Line Item IBCGER0845 - Clean Water Act Program Mgmt.

BOE Historical Data Source - Historical cost and hours tracking from FY98 WBS 1.1.03.06.04 September Spending Variance Report dated 10/07/99. The FY04 scope of work is for similar FY98 activities which were performed by the Surface Water group.
 Cost Estimator/Planner skills will be required to track budget controls and are estimated to be \$2,160 based on historical data.
 Surface Water staff support (P170)for 576 hours is required to develop or revise project/program plans and provide technical information for regulatory negotiations and compliance issues.
 Secretarial support is required for 8 hours per month.
 Program/Project Manager support is required for 24 hours per month to provide senior project oversight.
 \$17,600 A5H Proj/Prog Mgt. support is needed to provide environmental compliance assurance.
 A5C Supplies are estimated to be \$100 per month.
 A5M0468 - Education Reimbursement for Employees = \$10,500
 A5M Travel/Training expenses are estimated to be \$300 per month, based on historical data, to attend regulator and stakeholder meetings and stay current with training requirements.
 This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

Resources	Cost Element	Skill	Department	Curve	Quantity	Units
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WBS No: 1EBB0402
 Activity ID: 1EBB426040

Rockv Flats Closure Project
Baseline Cost and Basis of Estimate

Project: Baseline Devl
 WBS Filter: 1EBB
 Activity Filter: *

Starts In FY: *

750	STRAIGHT TIME BASE	G010	ADMINISTRATIVE ASSISTANTS	C222S	Water Svstem Operations	Linear	42.69	Hours
							0.88934	[SYS 061400] .88934200 - Svstem
Factors	48	h						
750	STRAIGHT TIME BASE	M020	MANAGERS (GRADE 69 - 72)	C222S	Water Svstem Operations	Linear	256.13	Hours
							0.88934	[SYS 061400] .88934200 - Svstem
Factors	288	h						
750	STRAIGHT TIME BASE	P170	OTHER ADMINISTRATIVE & PROFE	C222S	Water Svstem Operations	Linear	512.26	Hours
							0.88934	[SYS 061400] .88934200 - Svstem
Factors	576	h						
A5C	SUPPLIES	0000	NONE	C222S	Water Svstem Operations	Linear	1,083.22	Dollars
							0.88934	[SYS 061400] .88934200 - Svstem
Factors	1200	\$	1.015	-- FY00 Escalation --				
A5H	SUBCONTRACTED SRVS	P070	COST ESTIMATORS PLANNERS AN	C222S	Water Svstem Operations	Linear	1,964.83	Dollars
							0.88934	[SYS 061400] .88934200 - Svstem
Factors	2160	Dollars	1.02283	-- FY00 Escalation --				
A5H	SUBCONTRACTED SRVS	S090	OTHER SCIENTISTS	C222S	Water Svstem Operations	Linear	0.00	Dollars
							0.88934	[SYS 061400] .88934200 - Svstem
Factors	0	\$	1.02283	-- FY00 Escalation --				
A5M	TRAVEL/TRAIN/RELOCAT	0000	NONE	C222S	Water Svstem Operations	Linear	3,201.63	Dollars
							0.88934	[SYS 061400] .88934200 - Svstem
Factors	3600	\$						
A5M	TRAVEL/TRAIN/RELOCAT	0000	NONE	C222S	Water Svstem Operations	Linear	0.00	Dollars
							0.88934	[SYS 061400] .88934200 - System
Factors	0	Dollars	Education Reimbursement					

Line Item IBCGER0860 - New NPDES Permit Compliance

BOE

"Specific analogy" and "expert opinion" approaches were used to predict the cost and schedule requirements for this activity. Historical cost and hours tracking from FY97, and FY98 for the same scope of work and similar activities which were performed by the Surface Water group were used to prepare the following estimate:

The new NPDES Permit is expected to be issued in early FY00. Once the NPDES Permit is effective, there are several compliance plans and studies which must be submitted to the Permit issuing authority for review within six months of the effective date and also compliance plans and studies which must be submitted to EPA no later than one year from the effective date of the Permit.

This activity only addresses two compliance documents that must be submitted to EPA as required by the new NPDES Permit. These are a Non-Discharge Study (within 6 months) and a Comprehensive Site Compliance Evaluation Report (within one year), which are described below.

New Draft NPDES Permit plans will require implementation and management. This is estimated to require 120 hours of a Surface Water Environmental Engineer, 80 hours of a Surface Water Project Manager, and subcontracted services of \$2K.

Areas contributing to a storm water discharge associated with industrial activities shall be visually inspected for evidence of, or the potential for, pollutants entering the drainage system. Measures to reduce pollutant loadings shall be evaluated and implemented. Structural storm water management measures, sediment and erosion control measures, and other structural pollution prevention measures identified in the Permit shall be observed to ensure they are operating correctly. A visual inspection of equipment needed to implement the Storm Water Pollution Prevention Plan, such as spill response equipment, shall be made. The annual Comprehensive Site Evaluation report must document the scope of the inspections, personnel making the inspections, major observations relating to the implementation of the Storm Water Pollution Prevention Plan, and any mitigating actions taken.

This task requires 480 hours of a Surface Water Environmental Engineer, 120 hours of Surface Water Project Management (to provide technical direction for the project, perform cost and schedule tracking, and review draft sections of preliminary, draft and final report), and \$2K of subcontracted services.

This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

Resources

Cost Element	Skill	Department	Curve	Quantity	Units			
750	STRAIGHT TIME BASE	M020	MANAGERS (GRADE 69 - 72)	C222S	Water Svstem Operations	Linear	177.87	Hours
Factors	200	hours						
							0.88934	[SYS 061400] .88934200 - System

WBS No: 1EBB0402
 Activity ID: 1EBB426040

Rockv Flats Closure Project
Baseline Cost and Basis of Estimate

Project Baseline Devl
 WBS Filter 1EBB
 Activity Filter * Starts In FY *

750	STRAIGHT TIME BASE	P170	OTHER ADMINISTRATIVE & PROFE	C222S	Water System Operations	Linear	533.61	Hours
<i>Factors</i> 600 hours								
							0.88934	[SYS 061400] .88934200 - System
A5H	SUBCONTRACTED SRVS	P170	OTHER ADMINISTRATIVE & PROFE	C222S	Water System Operations	Linear	3,662.58	Dollars
<i>Factors</i> 4000 dollars 1.02283 -- FY00 Escalation --								
							0.88934	[SYS 061400] .88934200 - System

Line Item IBCGER0870 - Water Management Closure Plan

BOE Annual revision to Water Management Closure Plan. Based on previous experience with similar document updates. Based on six months at 80 hours per month subcontracted labor and materials.
 This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

Resources

Cost Element	Skill	Department	Curve	Quantity	Units	
A5H SUBCONTRACTED SRVS	0000 NONE	K109S Env Sys. Stewardship & Compliance	Linear	43.662.99	Dollars	
<i>Factors</i> 80 hours per month 100 dollars per hour 6 months 1.02283 -- FY00 Escalation --						
0.88934 [SYS 061400] .88934200 - System						
A5H SUBCONTRACTED SRVS	0000 NONE	K109S Env Sys. Stewardship & Compliance	Linear	1,819.29	Dollars	
<i>Factors</i> 2000 dollars for supplies 1.02283 -- FY00 Escalation --						
0.88934 [SYS 061400] .88934200 - System						

Line Item SYS - Contingency And Escalation

BOE

Resources

Cost Element	Skill	Department	Curve	Quantity	Units
CON CONTINGENCY	0000 NONE	ZDEPT No Department	Linear	6,118.01	Dollars
<i>Factors</i> 6118.01 Dollars					
ESC ESCALATION	0000 NONE	ZDEPT No Department	Linear	12,878.98	Dollars
<i>Factors</i> 12879 Dollars					

Activity ID: 1EBB426050 Description: Clean Water Program Implementation FY05

Cost Risk 1 Schedule Risk 1

Line Item	Description	Quantity	Units	BOE Type	Labor Hours/Unit	Labor Hours Total	Labor Cost Total	Materials/ Sub Cost	Contingency & Escalation	Total Prime Cost	Burden Cost	Total Cost
IBCGER0820	Ammonia Measurement Data Links	4.00	each	EE	43	171	4,479	4,333	0	8,812	1,559	10,370
IBCGER0830	Chronic Whole Effluent Testing	4.00	each	HC	21	85	2,239	0	0	2,239	779	3,019
IBCGER0845	Clean Water Act Program Mgmt.	1.00	each	HC	811	811	27,836	15,588	0	43,424	9,687	53,110
IBCGER0860	New NPDES Permit Compliance	1.00	each	EE	711	711	23,504	3,639	0	27,142	8,179	35,321
IBCGER0870	Revision Water Management Closure Plan	0.50	each	EE	0	0	0	22,741	0	22,741	0	22,741
SYS	Contingency And Escalation	1.00	lea	EE	0	0	0	0	65,923	65,923	0	65,923
Total for Activity 1EBB426050:						1,779	58,058	46,300	65,923	170,281	20,204	190,485

Line Item IBCGER0820 - Ammonia Measurement Data Links

BOE "Specific analogy" and "expert opinion" approaches were used to predict the cost and schedule requirements for this activity. Historical cost and hours tracking from FY97 and FY98 for the same scope of work and similar activities which were performed by the Surface Water group were used to prepare the following estimate:
 Ammonia measurement development techniques research will require a minimum of 4 hours per month for Surface Water support (P170).
 A total expenditure for FY05 for ammonia analysis equipment and telemetry capabilities is estimated to be \$1200.
 This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

Resources

Cost Element	Skill	Department	Curve	Quantity	Units	
750 STRAIGHT TIME BASE	P170 OTHER ADMINISTRATIVE & PROFE	C222S Water System Operations	Linear	42.69	Hours	
<i>Factors</i> 48 h						
0.88934 [SYS 061400] .88934200 - System						
A5C SUPPLIES	0000 NONE	C222S Water System Operations	Linear	1,083.22	Dollars	
<i>Factors</i> 1200 \$ 1.015 -- FY00 Escalation --						
0.88934 [SYS 061400] .88934200 - System						

WBS No: 1EBB0402
 Activity ID: 1EBB426050

Rockv Flats Closure Project
Baseline Cost and Basis of Estimate

Project: Baseline Devl
 WBS Filter: 1EBB
 Activity Filter: *

Starts In FY *

Line Item IBCGER0830 - Chronic Whole Effluent Testing

BOE Historical Data Source - Historical cost and hours tracking from FY98 WBS 1.1.03.06.04 September Spending Variance Report dated 10/07/99. The FY04 scope of work is for similar FY98 activities which were performed by the Surface Water group.

Quarterly WET test reporting requires 24 hours (6 hr/Qtr) of Surface Water staff support (P170) to review sample analysis, prepare formal reports and provide discussions for follow-on briefings.

This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

Resources	Cost Element	Skill	Department	Curve	Quantity	Units
	750 STRAIGHT TIME BASE	P170 OTHER ADMINISTRATIVE & PROFE	C222S Water System Operations	Linear	21.34	Hours

Factors 24 h

0.88934 [SYS 061400] .88934200 - System

Line Item IBCGER0845 - Clean Water Act Program Mgmt.

BOE Historical Data Source - Historical cost and hours tracking from FY98 WBS 1.1.03.06.04 September Spending Variance Report dated 10/07/99. The FY05 scope of work is for similar FY98 activities which were performed by the Surface Water group.

Cost Estimator/Planner skills will be required to track budget controls and are estimated to be \$2,160 based on historical data.

Surface Water staff support (P170) for 576 hours is required to develop or revise project/program plans and provide technical information for regulatory negotiations and compliance issues.

Secretarial support is required for 8 hours per month.

Program/Project Manager support is required for 24 hours per month to provide senior project oversight.

\$17,600 A5H Proj/Prog Mgt. support is needed to provide environmental compliance assurance.

A5C Supplies are estimated to be \$100 per month.

A5M0468 - Education Reimbursement for Employees = \$10,500

A5M Travel/Training expenses are estimated to be \$300 per month, based on historical data, to attend regulator and stakeholder meetings and stay current with training requirements.

This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

Resources	Cost Element	Skill	Department	Curve	Quantity	Units
	750 STRAIGHT TIME BASE	G010 ADMINISTRATIVE ASSISTANTS	C222S Water System Operations	Linear	42.69	Hours

Factors 48 h

0.88934 [SYS 061400] .88934200 - System

	750 STRAIGHT TIME BASE	M020 MANAGERS (GRADE 69 - 72)	C222S Water System Operations	Linear	256.13	Hours
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Factors 288 h

0.88934 [SYS 061400] .88934200 - System

	750 STRAIGHT TIME BASE	P170 OTHER ADMINISTRATIVE & PROFE	C222S Water System Operations	Linear	512.26	Hours
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Factors 576 h

0.88934 [SYS 061400] .88934200 - System

	A5C SUPPLIES	0000 NONE	C222S Water System Operations	Linear	1,083.22	Dollars
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Factors 1200 \$ 1.015 -- FY00 Escalation --

0.88934 [SYS 061400] .88934200 - System

	A5H SUBCONTRACTED SRVS	P070 COST ESTIMATORS PLANNERS AN	C222S Water System Operations	Linear	1,964.83	Dollars
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Factors 2160 Dollars 1.02283 -- FY00 Escalation --

0.88934 [SYS 061400] .88934200 - System

	A5H SUBCONTRACTED SRVS	S090 OTHER SCIENTISTS	C222S Water System Operations	Linear	0.00	Dollars
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Factors 0 \$ 1.02283 -- FY00 Escalation --

0.88934 [SYS 061400] .88934200 - System

WBS No: 1EBB0402
 Activity ID: 1EBB426050

Rockv Flats Closure Project
Baseline Cost and Basis of Estimate

Project Baseline Devl
 WBS Filter 1EBB
 Activity Filter *

Starts In FY *

A5M	TRAVEL/TRAIN/RELOCAT	0000	NONE	C222S	Water Svstem Operations	Linear	9.338.09	Dollars
<i>Factors</i>		10500	Dollars	Education Reimbursement				

0.88934 [SYS 061400] .88934200 - Svstem

A5M	TRAVEL/TRAIN/RELOCAT	0000	NONE	C222S	Water Svstem Operations	Linear	3.201.63	Dollars
<i>Factors</i>		3600	\$					

0.88934 [SYS 061400] .88934200 - Svstem

Line Item IBCGER0860 - New NPDES Permit Compliance

BOE "Specific analogy" and "expert opinion" approaches were used to predict the cost and schedule requirements for this activity. Historical cost and hours tracking from FY97, and FY98 for the same scope of work and similar activities which were performed by the Surface Water group were used to prepare the following estimate:

The new NPDES Permit is expected to be issued in early FY00. Once the NPDES Permit is effective, there are several compliance plans and studies which must be submitted to the Permit issuing authority for review within six months of the effective date and also compliance plans and studies which must be submitted to EPA no later than one year from the effective date of the Permit.

This activity only addresses two compliance documents that must be submitted to EPA as required by the new NPDES Permit. These are a Non-Discharge Study (within 6 months)and a Comprehensive Site Compliance Evaluation Report(within one year), which are described below.

New Draft NPDES Permit plans will require implementation and management. This is estimated to require 120 hours of a Surface Water Environmental Engineer, 80 hours of a Surface Water Project Manager, and subcontracted services of \$2K.

Areas contributing to a storm water discharge associated with industrial activities shall be visually inspected for evidence of, or the potential for, pollutants entering the drainage system. Measures to reduce pollutant loadings shall be evaluated and implemented. Structural storm water management measures, sediment and erosion control measures, and other structural pollution prevention measures identified in the Permit shall be observed to ensure they are operating correctly. A visual inspection of equipment needed to implement the Storm Water Pollution Prevention Plan, such as spill response equipment, shall be made. The annual Comprehensive Site Evaluation report must document the scope of the inspections, personnel making the inspections, major observations relating to the implementation of the Storm Water Pollution Prevention Plan, and any mitigating actions taken.

This task requires 480 hours of a Surface Water Environmental Engineer, 120 hours of Surface Water Project Management (to provide technical direction for the project, perform cost and schedule tracking, and review draft sections of preliminary, draft and final report), and \$2K of subcontracted services.

This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

<i>Cost Element</i>		<i>Skill</i>		<i>Department</i>		<i>Curve</i>	<i>Quantity</i>	<i>Units</i>
750	STRAIGHT TIME BASE	M020	MANAGERS (GRADE 69 - 72)	C222S	Water Svstem Operations	Linear	177.87	Hours
<i>Factors</i>		200	hours					

0.88934 [SYS 061400] .88934200 - Svstem

750	STRAIGHT TIME BASE	P170	OTHER ADMINISTRATIVE & PROFE	C222S	Water Svstem Operations	Linear	533.61	Hours
<i>Factors</i>		600	hours					

0.88934 [SYS 061400] .88934200 - Svstem

A5H	SUBCONTRACTED SRVS	P170	OTHER ADMINISTRATIVE & PROFE	C222S	Water Svstem Operations	Linear	3.638.58	Dollars
<i>Factors</i>		4000	dollars	1.02283 -- FY00 Escalation --				

0.88934 [SYS 061400] .88934200 - Svstem

Line Item IBCGER0870 - Revision Water Management Closure Plan

BOE Annual revision to Water Management Closure Plan. Based on previous experience with similar document updates. Based on six months at 80 hours per month subcontracted labor and materials.

This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

<i>Cost Element</i>		<i>Skill</i>		<i>Department</i>		<i>Curve</i>	<i>Quantity</i>	<i>Units</i>
A5H	SUBCONTRACTED SRVS	0000	NONE	K109S	Env Svcs. Stewardship & Compliance	Linear	43.662.99	Dollars
<i>Factors</i>		80	hours per month	100	dollars per hour	6	months	1.02283 -- FY00 Escalation --

0.88934 [SYS 061400] .88934200 - Svstem

A5H	SUBCONTRACTED SRVS	0000	NONE	K109S	Env Svcs. Stewardship & Compliance	Linear	1.819.29	Dollars
<i>Factors</i>		2000	supplies for document uprade	1.02283 -- FY00 Escalation --				

0.88934 [SYS 061400] .88934200 - Svstem

Line Item SYS - Contingency And Escalation

BOE

WBS No: 1EBB0402
 Activity ID: 1EBB426050

Rockv Flats Closure Project
Baseline Cost and Basis of Estimate

Project: Baseline Devl
 WBS Filter: 1EBB
 Activity Filter: *

Starts In FY *

Resources	Cost Element	Skill	Department	Curve	Quantity	Units
	CON CONTINGENCY	0000 NONE	ZDEPT No Department	Linear	46.626.20	Dollars
<i>Factors</i> 46626.2 Dollars						
	ESC ESCALATION	0000 NONE	ZDEPT No Department	Linear	19.296.60	Dollars
<i>Factors</i> 19296.6 Dollars						

Activity ID: 1EBB426060 Description: Clean Water Program Implementation FY07

Cost Risk 1 Schedule Risk 1

Line Item	Description	Quantity	Units	BOE Type	Labor Hours/Unit	Labor Hours Total	Labor Cost Total	Materials/ Sub Cost	Contingency & Escalation	Total Prime Cost	Burden Cost	Total Cost
IBCGER0845	Clean Water Act Program Mgmt.	1.00	each	HC	811	811	27.836	15.588	0	43.424	34.656	78.080
SYS	Contingency And Escalation	1.00	ea	EE	0	0	0	0	30.852	30.852	0	30.852
Total for Activity 1EBB426060:						811	27.836	15.588	30.852	74.276	34.656	108.932

Line Item IBCGER0845 - Clean Water Act Program Mgmt.

BOE
 Historical Data Source - Historical cost and hours tracking from FY98 WBS 1.1.03.06.04 September Spending Variance Report dated 10/07/99. The FY05 scope of work is for similar FY98 activities which were performed by the Surface Water group.

Cost Estimator/Planner skills will be required to track budget controls and are estimated to be \$2,160 based on historical data.

Surface Water staff support (P170) for 576 hours is required to develop or revise project/program plans and provide technical information for regulatory negotiations and compliance issues.

Secretarial support is required for 8 hours per month.

Program/Project Manager support is required for 24 hours per month to provide senior project oversight.

\$17,600 A5H Proj/Prog Mgt. support is needed to provide environmental compliance assurance.

A5C Supplies are estimated to be \$100 per month.

A5M0468 - Education Reimbursement for Employees = \$10,500

A5M Travel/Training expenses are estimated to be \$300 per month, based on historical data, to attend regulator and stakeholder meetings and stay current with training requirements.

This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

Resources	Cost Element	Skill	Department	Curve	Quantity	Units
	750 STRAIGHT TIME BASE	G010 ADMINISTRATIVE ASSISTANTS	C222S Water Svstem Operations	Linear	42.69	Hours
<i>Factors</i> 48 h						
0.88934 [SYS 061400] .88934200 - System						
	750 STRAIGHT TIME BASE	M020 MANAGERS (GRADE 69 - 72)	C222S Water Svstem Operations	Linear	256.13	Hours
<i>Factors</i> 288 h						
0.88934 [SYS 061400] .88934200 - System						
	750 STRAIGHT TIME BASE	P170 OTHER ADMINISTRATIVE & PROFE	C222S Water Svstem Operations	Linear	512.26	Hours
<i>Factors</i> 576 h						
0.88934 [SYS 061400] .88934200 - System						
	A5C SUPPLIES	0000 NONE	C222S Water Svstem Operations	Linear	1.083.22	Dollars
<i>Factors</i> 1200 \$ 1.015 -- FY00 Escalation --						
0.88934 [SYS 061400] .88934200 - System						
	A5H SUBCONTRACTED SRVS	P070 COST ESTIMATORS PLANNERS AN	C222S Water Svstem Operations	Linear	1.964.83	Dollars
<i>Factors</i> 2160 Dollars 1.02283 -- FY00 Escalation --						
0.88934 [SYS 061400] .88934200 - System						
	A5H SUBCONTRACTED SRVS	S090 OTHER SCIENTISTS	C222S Water Svstem Operations	Linear	0.00	Dollars
<i>Factors</i> 0 \$ 1.02283 -- FY00 Escalation --						
0.88934 [SYS 061400] .88934200 - System						

WBS No: 1EBB0402
 Activity ID: 1EBB42606

Rockv Flats Closure Project
Baseline Cost and Basis of Estimate

Project Baseline Devl
 WBS Filter 1EBB
 Activity Filter * *Starts In FY **

A5M	TRAVEL/TRAIN/RELOCAT	0000	NONE	C222S	Water Svstem Operations	Linear	3,201.63	Dollars
<i>Factors</i>		3600	\$					

0.88934 [SYS 061400] .88934200 - Svstem

A5M	TRAVEL/TRAIN/RELOCAT	0000	NONE	C222S	Water Svstem Operations	Linear	9,338.09	Dollars
<i>Factors</i>		10500	Dollars	Education Reimbursement				

0.88934 [SYS 061400] .88934200 - Svstem

Line Item SYS - Contingency And Escalation

BOE

Resources

<i>Cost Element</i>		<i>Skill</i>		<i>Department</i>		<i>Curve</i>	<i>Quantity</i>	<i>Units</i>
CON	CONTINGENCY	0000	NONE	ZDEPT	No Department	Linear	16,250.56	Dollars
<i>Factors</i>		16250.6	Dollars					

ESC	ESCALATION	0000	NONE	ZDEPT	No Department	Linear	14,601.48	Dollars
<i>Factors</i>		14601.5	Dollars					

Activity ID: 1EXXX42005 Description: Dams/Watershed Mgmt & Maintenance FY06

Cost Risk 1 Schedule Risk 1

Line Item	Description	Quantity	Units	BOE Type	Labor Hours/Unit	Labor Hours Total	Labor Cost Total	Materials/ Sub Cost	Contingency & Escalation	Total Prime Cost	Burden Cost	Total Cost
IBCGER0205	Dam/Watershed Proj Mgt	0.96	ea	EE	1,160	1,119	43,447	17,660	0	61,107	15,120	76,226
IBCGER0210	Dam Safetv Inspections	0.96	ea	EE	168	162	5,498	4,176	0	9,674	1,913	11,587
IBCGER0220	Dam Safetv Inspections-FERC	0.96	each	EE	130	125	4,436	3,152	0	7,589	1,544	9,133
IBCGER0225	Dam and Waterwav Maintenance	0.96	ls	EE	318	307	11,352	70,070	0	81,422	3,950	85,373
IBCGER0235	Watershed Repairs	0.96	ls	EE	538	519	17,663	19,879	0	37,542	6,147	43,688
SYS	Contingency And Escalation	1.00	ea	EE	0	0	0	0	189,666	189,666	0	189,666
Total for Activity 1EXXX42005:						2,233	82,396	114,937	189,666	386,999	28,674	415,673

Line Item IBCGER0205 - Dam/Watershed Proj Mgt

BOE

DAM/WATERSHED PROJ MGT
Estimators Experience - The estimator has served as the WADlet manager overseeing the Dams and Watershed Management and Maintenance activities for the past 4 fiscal years. The has post-graduate instruction in project management and experience in construction cost estimating. The estimator is also a Professional Engineer Licensed in the State of Colorado.
Experience Item Desc - Project management and oversight of the Dams and Watershed Management and Maintenance WADlet and activities contained therein.
Breakdown of Cost Data:
Item - Mech Eng hours for project management Units - hours Unit Cost - 17.76 hours/week Unit Cost Adjustment factor - 52 weeks Revised Unit Cost - 923.55 hours Basis for adjustment - 52 weeks/year
Item - Gen Mgr hours for project management Units - hours Unit Cost - 7.33 hours/week Unit Cost Adjustment factor - 52 weeks Revised Unit Cost - 381.16 hours Basis for adjustment - 52 weeks/year
Item - Admin Assist hours for project management Units - Dollars Unit Cost - 0.21 hours/week X \$45/Hr. Unit Cost Adjustment factor - 52 weeks Revised Unit Cost - \$501.75 Basis for adjustment - 52 weeks/year
Item - Civil Eng hours for project management Units - Dollars Unit Cost - 8.58 hours X \$45/Hr.

WBS No: 1EBB0402
 Activity ID: 1EXXX42005

Rockv Flats Closure Project
Baseline Cost and Basis of Estimate

Project: Baseline Devl
 WBS Filter: 1EBB
 Activity Filter: *

Starts In FY *

Unit Cost Adjustment factor - 52 weeks
 Revised Unit Cost - \$20,077.2
 Basis for adjustment - 52 weeks/year
 This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

Resources

Cost Element	Skill	Department	Curve	Quantity	Units
750 STRAIGHT TIME BASE	E070 MECHANICAL ENGINEERS	C222S Water Svstem Operations	Linear	821.35	Hours
<i>Factors</i> 923.55 Hours					
750 STRAIGHT TIME BASE	M020 MANAGERS (GRADE 69 - 72)	C222S Water Svstem Operations	Linear	338.85	Hours
<i>Factors</i> 381.01 Hours					
A5H SUBCONTRACTED SRVS	E020 CIVIL ENGINEERS	C222S Water Svstem Operations	Linear	17,855.50	Dollars
<i>Factors</i> 20077.2 \$					
A5H SUBCONTRACTED SRVS	G010 ADMINISTRATIVE ASSISTANTS	C222S Water Svstem Operations	Linear	446.23	Dollars
<i>Factors</i> 501.75 \$					

0.88934 [SYS 061400] .88934200 - Svstem
 0.88934 [SYS 061400] .88934200 - Svstem
 0.88934 [SYS 061400] .88934200 - Svstem

Line Item IBCGER0210 - Dam Safety Inspections

BOE

DAM SAFETY INSPECTIONS

Estimators Experience - The estimator has served as the WADlet manager overseeing the Dams and Watershed Management and Maintenance activities for the past 4 fiscal years. The estimator has directed and/or participated in the inspection of the dams for the past 6 years. The estimator is also a Professional Engineer Licensed in the State of Colorado.

Experience Item Desc - annual visual/physical inspections of dam structures; collection, compilation and interpretation of dam monitoring instrumentation data; and reporting of results to appropriate authorities. Also, developing recommendations for dam upgrades/improvement to correct deficiencies detected during the inspections.

Breakdown of Cost Data:

Item - Mech Eng hours for dam safety inspections
 Units - hours
 Unit Cost - 10.47 hours/dam
 Unit Cost Adjustment factor - 12 dams
 Revised Unit Cost - 125.61 hours
 Basis for adjustment - 12 dams inspected

Item - Mech Eng hours for reporting of dam safety inspections results
 Units - hours
 Unit Cost - 52 hours/reporting process
 Unit Cost Adjustment factor - N/A
 Revised Unit Cost - N/A
 Basis for adjustment - N/A

Item - Gen Mgr hours for safety inspections
 Units - hours
 Unit Cost - 10.97 hours/inspection process
 Unit Cost Adjustment factor - N/A
 Revised Unit Cost - N/A
 Basis for adjustment - N/A

Item - Admin Assist hours for dam safety inspections
 Units - \$
 Unit Cost -5.14 hours x \$45/Hr./inspection process
 Unit Cost Adjustment factor - N/A
 Revised Unit Cost - \$231.30
 Basis for adjustment - N/A

WBS No: 1EBB0402
 Activity ID: 1EXXX42005

Rockv Flats Closure Project
Baseline Cost and Basis of Estimate

Project Baseline Devl
 WBS Filter 1EBB
 Activity Filter *

Starts In FY *

Item - Civil Eng hours for dam safety inspections
 Units - \$
 Unit Cost - 6.86 hours x \$45/Hr./dam
 Unit Cost Adjustment factor - 12 dams
 Revised Unit Cost - \$3,704.40
 Basis for adjustment - 12 dams inspected

Item - Civil Eng hours for compilation of data for dam safety inspections
 Units - \$
 Unit Cost - 1.72 hours x \$45/Hr./dam
 Unit Cost Adjustment factor - 12 dams
 Revised Unit Cost - \$928.80
 Basis for adjustment - 12 dams inspected

This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

Resources

Cost Element	Skill	Department	Curve	Quantity	Units
750 STRAIGHT TIME BASE	E070 MECHANICAL ENGINEERS	C222S Water System Operations	Linear	157.96	Hours
<i>Factors</i> 177.61 Hours					
750 STRAIGHT TIME BASE	M020 MANAGERS (GRADE 69 - 72)	C222S Water System Operations	Linear	9.76	Hours
<i>Factors</i> 10.97 Hours					
A5H SUBCONTRACTED SRVS	E020 CIVIL ENGINEERS	C222S Water System Operations	Linear	4,122.33	Dollars
<i>Factors</i> 4635.26 \$					
A5H SUBCONTRACTED SRVS	G010 ADMINISTRATIVE ASSISTANTS	C222S Water System Operations	Linear	205.70	Dollars
<i>Factors</i> 231.3 \$					

0.88934 [SYS 061400] .88934200 - System

Line Item IBCGER0220 - Dam Safety Inspections-FERC

BOE

DAM SAFETY INSPECTIONS-FERC

Estimators Experience - The estimator has served as the WADlet manager overseeing the Dams and Watershed Management and Maintenance activities for the past 4 fiscal years. The estimator has directed and/or participated in the inspection of the dams for the past 6 years. The estimator is also a Professional Engineer Licensed in the State of Colorado.

Experience Item Desc - annual visual/physical inspections of dam structures conducted with Federal Energy Regulatory Commission dam inspector, and presentation of compiled monitoring data.

Breakdown of Cost Data:

Item - annual FERC dam inspections
 Units - hours
 Unit Cost - Mech Eng - 2 hours/inspection
 Civil Eng 3.55 hours/inspection
 Unit Cost Adjustment factor - 4 inspections
 Revised Unit Cost - Mech Eng - 14.21 hours
 Civil Eng 6.88 hours X \$45/Hr.
 Basis for adjustment - 4 dams inspected

Item - preparation for FERC dam inspections
 Units - hours
 Unit Cost - Mech Eng - 71.2 hours
 Civil Eng 43 hours X \$45/Hr.
 Unit Cost Adjustment factor - N/A
 Revised Unit Cost - N/A
 Basis for adjustment - N/A

Item - response to annual FERC dam inspections report
 Units - hours

WBS No: 1EBB0402
 Activity ID: 1EXXX42005

Rockv Flats Closure Project
Baseline Cost and Basis of Estimate

Project: Baseline Devl
 WBS Filter: 1EBB
 Activity Filter: *

Starts In FY *

Unit Cost - Mech Eng - 42.72 hours
 Civil Eng - 27.46 hours X \$45/Hr.
 Unit Cost Adjustment factor - N/A
 Revised Unit Cost - N/A
 Basis for adjustment - N/A

Item - Gen Mgr hours for FERC dam inspection
 Units - hours
 Unit Cost - 18.32 hours/inspection process
 Unit Cost Adjustment factor - N/A
 Revised Unit Cost - N/A
 Basis for adjustment - N/A

Item - Admin Assist hours for FERC dam inspection
 Units - hours
 Unit Cost - 4.29 hours X \$45/Hr./inspection process
 Unit Cost Adjustment factor - N/A
 Revised Unit Cost - N/A
 Basis for adjustment - N/A

This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

Resources

Cost Element	Skill	Department	Curve	Quantity	Units
750 STRAIGHT TIME BASE	E070 MECHANICAL ENGINEERS	C222S Water System Operations	Linear	113.73	Hours
<i>Factors</i> 127.88 HR					
750 STRAIGHT TIME BASE	M020 MANAGERS (GRADE 69 - 72)	C222S Water System Operations	Linear	16.29	Hours
<i>Factors</i> 18.32 HR					
A5H SUBCONTRACTED SRVS	E020 CIVIL ENGINEERS	C222S Water System Operations	Linear	3.09518	Dollars
<i>Factors</i> 3480.3 \$					
A5H SUBCONTRACTED SRVS	G010 ADMINISTRATIVE ASSISTANTS	C222S Water System Operations	Linear	171.69	Dollars
<i>Factors</i> 193.05 \$					

0.88934 [SYS 061400] .88934200 - System
 0.88934 [SYS 061400] .88934200 - System
 0.88934 [SYS 061400] .88934200 - System

Line Item IBCGER0225 - Dam and Waterway Maintenance

BOE

DAM AND WATERWAY MAINTENANCE

Estimators Experience - The estimator has served as the WADlet manager overseeing the Dams and Watershed Management and Maintenance activities for the past 4 fiscal years. The has post-graduate instruction in project management and experience in construction cost estimating. The estimator is also a Professional Engineer Licensed in the State of Colorado.

Experience Item Desc - Routine dam and waterway maintenance activity typically conducted during 2nd qtr

Breakdown of Cost Data:

Item - Subcontracted labor cost for typical maintenance activities
 Units - dollars
 Unit Cost - \$70,000
 Unit Cost Adjustment factor - 0.86
 Revised Unit Cost - \$60,202.55
 Basis for adjustment - adjustment necessary to meet fiscal constraints

Item - Industrial Hygienist labor hours
 Units - hours
 Unit Cost - 17.16 Hr./project (typical for project of this scope)
 Unit Cost Adjustment factor - N/A
 Revised Unit Cost - N/A
 Basis for adjustment - N/A

Item - pre-construction labor hours

WBS No: 1EBB0402
 Activity ID: 1EXXX42005

Rockv Flats Closure Project
Baseline Cost and Basis of Estimate

Project Baseline Devl
 WBS Filter 1EBB
 Activity Filter *

Starts In FY *

Units - hours
 Unit Cost - Mech Eng 35.52 hours/week
 Admin Assist 2 hours/week
 Gen Mgr 9.16 hours/week
 Civil Eng 41.18 Hr./week \$45/Hr.
 Unit Cost Adjustment factor - 5 weeks
 Revised Unit Cost - Mech Eng 177.61 hours
 Admin Assist 10 hours
 Gen Mgr. 45.79 hours
 Civil Eng \$9,266.40
 Basis for adjustment - period of preconstruction effort

Item - construction labor hours
 Units - hours
 Unit Cost - Mech Eng 35.52 hours/week
 Gen Mgr 9.16 hours/week
 Civil Eng 68.64 hours/week X \$45/Hr.
 Unit Cost Adjustment factor - 3 weeks
 Revised Unit Cost - Mech Eng 106.56 hours
 Gen Mgr 27.48 hours
 Civil Eng \$9,266.40
 Basis for adjustment - period of construction effort

This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

Resources

Cost Element	Skill	Department	Curve	Quantity	Units
750 STRAIGHT TIME BASE	E070 MECHANICAL ENGINEERS	C222S Water Svstem Operations	Linear	252.72	Hours
<i>Factors</i> 284.17 HR					
750 STRAIGHT TIME BASE	M020 MANAGERS (GRADE 69 - 72)	C222S Water Svstem Operations	Linear	65.16	Hours
<i>Factors</i> 73.27 HR					
A5H SUBCONTRACTED SRVS	0000 NONE	C222S Water Svstem Operations	Linear	54.762.99	Dollars
<i>Factors</i> 60202.6 \$ 1.02283 -- FY00 Escalation --					
A5H SUBCONTRACTED SRVS	E020 CIVIL ENGINEERS	C222S Water Svstem Operations	Linear	16.482.00	Dollars
<i>Factors</i> 18532.8 \$					
A5H SUBCONTRACTED SRVS	G010 ADMINISTRATIVE ASSISTANTS	C222S Water Svstem Operations	Linear	686.75	Dollars
<i>Factors</i> 772.2 \$					
A5H SUBCONTRACTED SRVS	P090 INDUSTRIAL HYGIENISTS	C222S Water Svstem Operations	Linear	686.75	Dollars
<i>Factors</i> 772.2 \$					
0.88934 [SYS 061400] .88934200 - Svstem					

Line Item IBCGER0235 - Watershed Repairs

BOE	<p>WATERSHED REPAIRS</p> <p>Estimators Experience - The estimator has served as the WADlet manager overseeing the Dams and Watershed Management and Maintenance activities for the past 4 fiscal years. The has post-graduate instruction in project management and experience in construction cost estimating. The estimator is also a Professional Engineer Licensed in the State of Colorado.</p> <p>Experience Item Desc - Routine watershed repair activity typically conducted during the 3rd & 4th qtrs</p> <p>Breakdown of Cost Data:</p> <p>Item - Subcontracted labor cost for typical maintenance activity Units - dollars Unit Cost - \$20,000 Unit Cost Adjustment factor - N/A Revised Unit Cost - N/A</p>
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WBS No: 1EBB0402
 Activity ID: 1EXXX42005

Rockv Flats Closure Project
Baseline Cost and Basis of Estimate

Project: Baseline Devl
 WBS Filter: 1EBB
 Activity Filter: *

Starts In FY *

Basis for adjustment - N/A

Item - Industrial Hygienist labor hours
 Units - hours & \$
 Unit Cost - 8.58 Hr. X \$45/Hr./project (typical for project of this scope)
 Unit Cost Adjustment factor - N/A
 Revised Unit Cost - N/A
 Basis for adjustment - N/A

Item - pre-construction labor hours
 Units - hours
 Unit Cost - Mech Eng 56.83 hours/week
 Admin Assist .86 Hr./week X \$45/Hr.
 Gen Mgr 3.66 hours/week
 Civil Eng 6.86 Hr./week X \$45/Hr.
 Unit Cost Adjustment factor - 5 weeks
 Revised Unit Cost - Mech Eng 284.17 hours
 Admin Assist \$193.05
 Gen Mgr 18.32 hours
 Civil Eng \$1,544.40
 Basis for adjustment - period of preconstruction effort

Item - construction labor hours
 Units - hours
 Unit Cost - Mech Eng 56.83 hours/week
 Gen Mgr 3.66 hours/week
 Civil Eng 13.73 Hr./week X \$45/Hr.
 Unit Cost Adjustment factor - 5 weeks
 Revised Unit Cost - Mech Eng 284.17 hours
 Gen Mgr 18.32hours
 Civil Eng \$3,088.80
 Basis for adjustment - period of construction effort

This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

Resources

Cost Element		Skill		Department		Curve	Quantity	Units
750	STRAIGHT TIME BASE	E070	MECHANICAL ENGINEERS	C222S	Water System Operations	Linear	505.45	Hours
<i>Factors</i> 568.34 HR								
							0.88934	[SYS 061400] .88934200 - System
750	STRAIGHT TIME BASE	M020	MANAGERS (GRADE 69 - 72)	C222S	Water System Operations	Linear	32.59	Hours
<i>Factors</i> 36.64 HR								
							0.88934	[SYS 061400] .88934200 - System
A5H	SUBCONTRACTED SRVS	0000	NONE	C222S	Water System Operations	Linear	15,965.88	Dollars
<i>Factors</i> 17551.8 DOLLARS		1.02283 -- FY00 Escalation --						
							0.88934	[SYS 061400] .88934200 - System
A5H	SUBCONTRACTED SRVS	E020	CIVIL ENGINEERS	C222S	Water System Operations	Linear	4,120.50	Dollars
<i>Factors</i> 4633.2 \$								
							0.88934	[SYS 061400] .88934200 - System
A5H	SUBCONTRACTED SRVS	G010	ADMINISTRATIVE ASSISTANTS	C222S	Water System Operations	Linear	171.69	Dollars
<i>Factors</i> 193.05 \$								
							0.88934	[SYS 061400] .88934200 - System
A5H	SUBCONTRACTED SRVS	P090	INDUSTRIAL HYGIENISTS	C222S	Water System Operations	Linear	343.37	Dollars
<i>Factors</i> 386.1 \$								
							0.88934	[SYS 061400] .88934200 - System

Line Item SYS - Contingency And Escalation

BOE

Resources

Cost Element		Skill		Department		Curve	Quantity	Units
CON	CONTINGENCY	0000	NONE	ZDEPT	No Department	Linear	139,254.60	Dollars
<i>Factors</i> 139255 Dollars								

WBS No: 1EBB0402
 Activity ID: 1EXXX42005

Rocky Flats Closure Project
Baseline Cost and Basis of Estimate

Project: Baseline Devl
 WBS Filter: 1EBB
 Activity Filter: *

Starts In FY *

ESC	ESCALATION	0000	NONE	ZDEPT	No Department	Linear	50,410.94	Dollars
Factors 50410.9 Dollars								

Activity ID: 1EXXX42105 Description: Surface Pond Water Maint/Ops FY06

Cost Risk 1 Schedule Risk 1

Line Item	Description	Quantity	Units	BOE Type	Labor Hours/Unit	Labor Hours Total	Labor Cost Total	Materials/ Sub Cost	Contingency & Escalation	Total Prime Cost	Burden Cost	Total Cost
20	Terminal Pond Operations	0.96	lot	HC	0	0	0	242,539	0	242,539	0	242,539
25	Interior Pond Pumping Operations	0.96	ea	HC	160	154	3,137	0	0	3,137	1,092	4,229
30	Equipment Replacement	0.96	ea	HC	0	0	0	6,968	0	6,968	0	6,968
35	Pond Staff Gage Surveys	0.96	ea	HC	178	172	4,272	0	0	4,272	1,487	5,758
40	RFCSS Pond Operations Mat/Reporting	0.96	ea	HC	2,220	2,142	58,143	0	0	58,143	20,234	78,376
45	Ecological Reviews	0.96	lot	HC	0	0	0	4,740	0	4,740	0	4,740
50	Surface Water Program Management	0.96	ea	HC	416	402	21,466	0	0	21,466	7,470	28,936
55	Health and Safety Inspections	0.96	ea	HC	107	103	2,701	0	0	2,701	940	3,641
60	Pond Operations Support Services	0.96	ea	HC	267	257	6,351	8,230	0	14,581	2,210	16,791
SYS	Contingency And Escalation	1.00	ea	EE	0	0	0	0	328,949	328,949	0	328,949
Total for Activity 1EXXX42105:						3,230	96,070	262,476	328,949	687,495	33,432	720,927

Line Item 20 - Terminal Pond Operations

BOE Historical Data Source - September FY98 WBS Spending Variance Report for WBS element 1.1.03.06.01.02, Activity BZCG100200, dated 10/7/98
 Item Desc - Subcontracted Labor for Terminal Pond Operations
 Breakdown of Historical Data:
 Item - Subcontracted Labor & GSA Vehicle for Terminal Pond Operations
 Units - Dollars
 Unit Cost - \$219,751 for FY98
 Unit Cost Adjustment factor - \$46,798
 Revised Unit Cost - \$266,549
 Basis for adjustment - This estimate is for only the 1st Quarter of FY2007. Revised unit cost reflects one pumped-discharge of Pond C-2 to Woman Creek reservoir.
 This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

Resources	Cost Element	Skill	Department	Curve	Quantity	Units
A5H	SUBCONTRACTED SRVS	0000 NONE	C222S Water System Operations	Linear	242,465.10	Dollars
Factors 266549 \$ 1.02283 -- FY00 Escalation --						
A5L	RENTALS	0000 NONE	C106S Business Management Office	Linear	8,893.42	Dollars
Factors 10000 Dollars						
0.88934 [SYS 061400] .88934200 - System						

Line Item 25 - Interior Pond Pumping Operations

BOE Historical Data Source - September FY98 WBS Spending Variance Report for WBS element 1.1.03.06.01.02, Activity BZCG100200, dated 10/7/98
 Item Desc - Interior Pond Pumping Operations
 Breakdown of Historical Data:
 Item - Interior Pond Pumping Operations
 Units - Site Labor Hours
 Unit Cost - 248 hours for Site Process Specialists during FY98
 Unit Cost Adjustment factor - (-68)
 Revised Unit Cost - 180 hours
 Basis for adjustment - This estimate is for only the 1st Quarter of FY2007.
 This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

Resources	Cost Element	Skill	Department	Curve	Quantity	Units
750	STRAIGHT TIME BASE	R010 CHEMICAL SYSTEMS OPERATOR (	KE10H Indust/Site Srvs Steelworkers	Back Loaded	160.08	Hours
Factors 180 hrs						
0.88934 [SYS 061400] .88934200 - System						

Line Item 30 - Equipment Replacement

BOE Historical Data Source - September FY98 WBS Spending Variance Report for WBS element 1.1.03.06.01.02, Activity BZCG100200, dated 10/7/98
 Item Desc - Pond Operations Equipment Replacement and Maintenance
 Breakdown of Historical Data:

WBS No: 1EBB0402
 Activity ID: 1EXXX42105

Rockv Flats Closure Project
Baseline Cost and Basis of Estimate

Project: Baseline Devl
 WBS Filter: 1EBB
 Activity Filter: *

Starts In FY *

Item - Pond Operations Equipment Replacement and Maintenance
 Units - Dollars (Supplies-A5C)
 Unit Cost - \$11,195 during FY98
 Unit Cost Adjustment factor - (-\$3,195)
 Revised Unit Cost - \$8,000
 Basis for adjustment - The existing equipment is used to ensure detention pond dam safety. This equipment is at the end of its effective service life and could fail at any time. This funding provides for maintenance and/or replacement of this equipment.
 This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

Resources	Cost Element	Skill	Department	Curve	Quantity	Units
	A5C SUPPLIES	0000 NONE	C222S Water System Operations	Back Loaded	7,221.46	Dollars
Factors 8000 \$ 1.015 -- FY00 Escalation --						

0.88934 [SYS 061400] .88934200 - System

Line Item 35 - Pond Staff Gage Surveys

BOE
 Historical Data Source - September FY98 WBS Spending Variance Report for WBS element 1.1.03.06.01.02, Activity BZCG100200, dated 10/7/98
 Item Desc - Pond Staff Gage Surveys
 Breakdown of Historical Data:
 Item - Pond Staff Gage Surveys
 Units - Site Labor hours
 Unit Cost - 96 hours for a civil engineer during FY98
 Unit Cost Adjustment factor - 104
 Revised Unit Cost - 200 hours
 Basis for adjustment - This estimate is for only the 1st Quarter of FY2007.
 This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

Resources	Cost Element	Skill	Department	Curve	Quantity	Units
	750 STRAIGHT TIME BASE	E020 CIVIL ENGINEERS	C222S Water System Operations	Back Loaded	177.87	Hours
Factors 200 hrs						

0.88934 [SYS 061400] .88934200 - System

Line Item 40 - RFCSS Pond Operations Mgt/Reporting

BOE
 Historical Data Source - September FY98 WBS Spending Variance Report for WBS element 1.1.03.06.01.02, Activity BZCG100200, dated 10/7/98
 Item Desc - Pond Operations Daily Management, Dam Inspections, WADlet Management, Reporting Functions.
 Breakdown of Historical Data:
 Item - Pond Operations Daily Management, Dam Inspections, WADlet Management, Reporting Functions
 Units - Site Labor hours
 Unit Cost - 1,955 hours for an Environmental Engineer during FY98
 Unit Cost Adjustment factor - 994
 Revised Unit Cost - 2,949 hours
 Basis for adjustment - This estimate is only for the 1st Quarter of FY2006.
 This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

Resources	Cost Element	Skill	Department	Curve	Quantity	Units
	750 STRAIGHT TIME BASE	E050 ENVIRONMENTAL ENGINEERS	C222S Water System Operations	Linear	610.09	Hours
Factors 686 hrs						

0.88934 [SYS 061400] .88934200 - System

	750 STRAIGHT TIME BASE	P170 OTHER ADMINISTRATIVE & PROFE	C222S Water System Operations	Linear	1,609.71	Hours
Factors 1810 hrs						

0.88934 [SYS 061400] .88934200 - System

Line Item 45 - Ecological Reviews

BOE
 Historical Data Source - September FY98 WBS Spending Variance Report for WBS element 1.1.03.06.01.02, Activity BZCG100200, dated 10/7/98
 Item Desc - Ecological Reviews for Pond Operations
 Breakdown of Historical Data:
 Item - Ecological Reviews for Pond Operations
 Units - Dollars
 Unit Cost - \$2,850 for a subcontracted Ecologist during FY98
 Unit Cost Adjustment factor - \$2,550
 Revised Unit Cost - \$5,400
 Basis for adjustment - Preble's Mouse surveys must be increased due to listing as a threatened species.

WBS No: 1EBB0402
 Activity ID: 1EXXX42105

Rockv Flats Closure Project
Baseline Cost and Basis of Estimate

Project Baseline Devl
 WBS Filter 1EBB
 Activity Filter *

Starts In FY *

This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

Resources	Cost Element	Quantity	Skill	Department	Curve	Units
A5H	SUBCONTRACTED SRVS	0000	NONE	C222S	Water System Operations	Linear 4,912.09 Dollars
Factors 5400 \$		1.02283 -- FY00 Escalation --		0.88934 [SYS 061400] .88934200 - System		

Line Item 50 - Surface Water Program Management

BOE Historical Data Source - September FY98 WBS Spending Variance Report for WBS element 1.1.03.06.01.02, Activity BZCG100200, dated 10/7/98
 Item Desc - Surface Water Program Management for Pond Operations
 Breakdown of Historical Data:
 Item - Surface Water Program Manager
 Units - Site Labor Hours
 Unit Cost - 69 hours during FY98
 Unit Cost Adjustment factor - 399 hours
 Revised Unit Cost - 468 hours
 Basis for adjustment - Increased hours are required for Surface Water participation in the Stakeholder Water Working Groups.
 This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

Resources	Cost Element	Quantity	Skill	Department	Curve	Units
750	STRAIGHT TIME BASE	M020	MANAGERS (GRADE 69 - 72)	C222S	Water System Operations	Linear 416.21 Hours
Factors 468 hrs					0.88934 [SYS 061400] .88934200 - System	

Line Item 55 - Health and Safety Inspections

BOE Historical Data Source - September FY98 WBS Spending Variance Report for WBS element 1.1.03.06.01.02, Activity BZCG100200, dated 10/7/98
 Item Desc - Health and Safety Inspections
 Breakdown of Historical Data:
 Item - Health and Safety Inspections
 Units - Site Labor Hours
 Unit Cost - 84 hours for Health and Safety Professionals during FY98
 Unit Cost Adjustment factor - 36
 Revised Unit Cost - 120 hours
 Basis for adjustment - Additional hours are necessary due to implementation of the Activity screening Process, Integrated Safety Management system, and additional safety reviews for the updated Integrated work control process.
 This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

Resources	Cost Element	Quantity	Skill	Department	Curve	Units
750	STRAIGHT TIME BASE	P170	OTHER ADMINISTRATIVE & PROFE	C222S	Water System Operations	Linear 106.72 Hours
Factors 120 hrs					0.88934 [SYS 061400] .88934200 - System	

Line Item 60 - Pond Operations Support Services

BOE Historical Data Source - September FY98 WBS Spending Variance Report for WBS element 1.1.03.06.01.02, Activity BZCG100200, dated 10/7/98
 Item Desc - Pond Operations Quality Assurance Support
 Breakdown of Historical Data:
 Item - Pond Operations Quality Assurance Support
 Units - Dollars (Subcontract Labor Hours)
 Unit Cost - 270 hours for Quality Assurance Specialists during FY98
 Unit Cost Adjustment factor - (-190)
 Revised Unit Cost - \$4,076 (80 hours X \$50.95/Hr.)
 Basis for adjustment - QA personnel will perform fewer management assessments of Pond Operations during the year.
 Item - Pond Operations Planning-Budget Integration
 Units - Dollars (Subcontracted Labor Hours)
 Unit Cost - \$9,526 (217 hours for Cost Estimators/Planners during FY98)
 Unit Cost Adjustment factor - (-\$4,226)(-97 hours)
 Revised Unit Cost - \$5,300 (120 hours X \$44.17/Hr.)
 Basis for adjustment - Management Directive
 Item - K-H Radiation Control Technologist Support

WBS No: 1EBB0402
 Activity ID: 1EXXX42105

Rockv Flats Closure Project
Baseline Cost and Basis of Estimate

Project: Baseline Devl
 WBS Filter: 1EBB
 Activity Filter: *

Starts In FY *

Units - Site Labor Hours
 Unit Cost - 0 hours for Radiation Control Technologists during FY98
 Unit Cost Adjustment factor - 40
 Revised Unit Cost - 40 hours
 Basis for adjustment - Dispositioning of excess PondOps field equipment requires radiological screening or evaluation prior to acceptance by Site PU&D.

Item - Program Compliance Activities for Pond Operations
 Units - Site Labor Hours
 Unit Cost - 86 hours for Program Compliance Activities during FY98
 Unit Cost Adjustment factor - 14
 Revised Unit Cost - 100 hours
 Basis for adjustment - Program compliance requirements are increased in FY05 because Surface Water Ops personnel will attend more required training.

Item - Trucking and Transportation for Pond Operations
 Units - Site Labor Hours
 Unit Cost - 119 hours for Trucking and Transportation during FY98
 Unit Cost Adjustment factor - (-19)
 Revised Unit Cost - 100 hours
 Basis for adjustment - Dispositioning of excess PondOps field equipment requires transportation to Site PU&D.

Item - Secretarial Support for Pond Operations
 Units - Site Labor Hours
 Unit Cost - 40 hours for Secretary during FY98
 Unit Cost Adjustment factor - none
 Revised Unit Cost - 40 hours
 Basis for adjustment - none

Item - Radiological Engineers for Pond Operations
 Units - Site Labor Hours
 Unit Cost - 5 hours for Rad Engineers during FY98
 Unit Cost Adjustment factor -15
 Revised Unit Cost - 20 hours
 Basis for adjustment - Dispositioning of excess PondOps field equipment requires radiological screening or evaluation prior to acceptance by Site PU&D.

This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

Resources

Cost Element	Skill	Department	Curve	Quantity	Units
750 STRAIGHT TIME BASE	G010 ADMINISTRATIVE ASSISTANTS	C222S Water Svstem Operations	Linear	35.57	Hours
Factors 40 hrs			0.88934 [SYS 061400] .88934200 - Svstem		
750 STRAIGHT TIME BASE	P080 HEALTH PHYSICISTS	C222S Water Svstem Operations	Linear	17.79	Hours
Factors 20 hrs			0.88934 [SYS 061400] .88934200 - Svstem		
750 STRAIGHT TIME BASE	P170 OTHER ADMINISTRATIVE & PROFE	C222S Water Svstem Operations	Linear	88.93	Hours
Factors 100 Hours			0.88934 [SYS 061400] .88934200 - Svstem		
750 STRAIGHT TIME BASE	P170 OTHER ADMINISTRATIVE & PROFE	C242S Transportation	Linear	88.93	Hours
Factors 100 hrs			0.88934 [SYS 061400] .88934200 - Svstem		
750 STRAIGHT TIME BASE	T050 RADIATION CONTROL TECHNOLOGI	KE10H Indust/Site Svrs Steelworkers	Linear	35.57	Hours
Factors 40 hrs			0.88934 [SYS 061400] .88934200 - Svstem		
A5H SUBCONTRACTED SRVS	0000 NONE	C222S Water Svstem Operations	Linear	3.707.72	Dollars
Factors 4076 dollars	1.02283 -- FY00 Escalation --		0.88934 [SYS 061400] .88934200 - Svstem		
A5H SUBCONTRACTED SRVS	S020 ENVIRONMENTAL SCIENTISTS	C222S Water Svstem Operations	Linear	4.821.12	Dollars
Factors 5300 dollars	1.02283 -- FY00 Escalation --		0.88934 [SYS 061400] .88934200 - System		

WBS No: 1EBB0402
 Activity ID: 1EXXX42105

Rockv Flats Closure Project
Baseline Cost and Basis of Estimate

Project: Baseline Devl
 WBS Filter: 1EBB
 Activity Filter: *

Starts In FY *

Line Item SYS - Contingency And Escalation

BOE

Resources		Cost Element	Skill	Department	Curve	Quantity	Units
CON	CONTINGENCY	0000	NONE	ZDEPT	No Department	Linear	241,517.90 Dollars
Factors		241518 Dollars					
ESC	ESCALATION	0000	NONE	ZDEPT	No Department	Linear	87,430.86 Dollars
Factors		87430.9 Dollars					

Activity ID: 1EXXX42205 Description: Pollutant Source Control FY06

Cost Risk 1 Schedule Risk 1

Line Item	Description	Quantity	Units	BOE Type	Labor Hours/Unit	Labor Hours Total	Labor Cost Total	Materials/ Sub Cost	Contingency & Escalation	Total Prime Cost	Burden Cost	Total Cost
IBCGER0305	Watershed Pollutant Source Control Projects	4.82	ea	HC	188	905	29,723	54,858	0	84,581	10,343	94,924
IBCGER0310	Pollutant Source Reponses/Investigations	0.96	ls	HC	212	204	7,021	3,072	0	10,093	2,443	12,537
IBCGER0315	Incidental Waters	11.58	ea	HC	61	711	24,448	0	0	24,448	8,508	32,955
IBCGER0320	Internal Waste Streams	11.58	ea	HC	41	474	17,446	0	0	17,446	6,071	23,518
IBCGER0330	Master Tank Database/DIS Query Support	0.96	ls	HC	228	220	6,905	0	0	6,905	2,403	9,308
SYS	Contingency And Escalation	1.00	ea	EE	0	0	0	0	145,385	145,385	0	145,385
Total for Activity 1EXXX42205:						2,513	85,543	57,930	145,385	288,858	29,769	318,626

Line Item IBCGER0305 - Watershed Pollutant Source Control Projects

BOE

HISTORICAL DATA SOURCE:
 Historic cost data for similar projects - on file in Bldg. T130D, Room 71.

ITEM DESCRIPTION:
 Erosion control project to enhance quality of Site stormwater runoff - includes application of SoilGuard and/or TopSeal erosion control products to 3,000 square yards.(5 Projects/Year)

BREAKDOWN OF HISTORICAL DATA:
 The BOE was developed using activity based cost estimating. Estimate based on historic costs from FY96.
 Item - Erosion control project - 3,000 square yards
 Units -1 LOT
 Unit Cost - 1,055 Hours & \$63,927
 Unit Cost Adjustment factor - N/A
 Revised Unit Cost - N/A
 Basis for adjustment - N/A

This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

Resources

Resources		Cost Element	Skill	Department	Curve	Quantity	Units
750	STRAIGHT TIME BASE	E050	ENVIRONMENTAL ENGINEERS	C222S	Water System Operations	Linear	118.28 Hours
Factors		133 Hours					
						0.88934	[SYS 061400] .88934200 - System
750	STRAIGHT TIME BASE	E120	SAFETY ENGINEERS	C222S	Water System Operations	Linear	8.00 Hours
Factors		9 Hours					
						0.88934	[SYS 061400] .88934200 - System
750	STRAIGHT TIME BASE	M020	MANAGERS (GRADE 69 - 72)	C222S	Water System Operations	Linear	29.35 Hours
Factors		33 Hours					
						0.88934	[SYS 061400] .88934200 - System
750	STRAIGHT TIME BASE	P140	SAFEGUARDS AND OTHER SECURI	W101S	Operations Support	Linear	32.02 Hours
Factors		36 Hours					
						0.88934	[SYS 061400] .88934200 - System
A5H	SUBCONTRACTED SRVS	0000	NONE	C222S	Water System Operations	Linear	11,370.57 Dollars
Factors		12500 Dollars					
						1.02283	-- FY00 Escalation --
						0.88934	[SYS 061400] .88934200 - System

Line Item IBCGER0310 - Pollutant Source Reponses/Investigations

BOE

HISTORICAL DATA SOURCE:
 FY99 WBS Spending Variance Reports for WBS Element 1.1.03.06.01.04, Activity BZCG100620.

WBS No: 1EBB0402
 Activity ID: 1EXXX42205

Rockv Flats Closure Project
Baseline Cost and Basis of Estimate

Project: Baseline Devl
 WBS Filter: 1EBB
 Activity Filter: *

Starts In FY *

ITEM DESCRIPTION:
 Respond to Site spills that may impact surface water quality; perform inspections to prevent release of surface water pollutant sources.

BREAKDOWN OF HISTORICAL DATA:
 The BOE was developed using activity based cost estimating. Estimate based on historic costs from FY99.
 Item - Pollutant Source Responses/Investigations
 Units - 1 Lot
 Unit Cost - 238 Hours & \$3,580
 Unit Cost Adjustment factor - N/A
 Revised Unit Cost - N/A
 Basis for adjustment - N/A

This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

Resources	Cost Element	Skill	Department	Curve	Quantity	Units
	750 STRAIGHT TIME BASE	E050 ENVIRONMENTAL ENGINEERS	C222S Water Svstem Operations	Linear	168.97	Hours
Factors	190 Hours					
	750 STRAIGHT TIME BASE	M020 MANAGERS (GRADE 69 - 72)	C222S Water Svstem Operations	Linear	42.69	Hours
Factors	48 Hours					
	A5R MISC EXPENSES	0000 NONE	C222S Water Svstem Operations	Linear	3.183.76	Dollars
Factors	3500 \$ Education Reimbursement	1.02283 -- FY00 Escalation --				

0.88934 [SYS 061400] .88934200 - Svstem

0.88934 [SYS 061400] .88934200 - Svstem

Line Item IBCGER0315 - Incidental Waters

BOE
 HISTORICAL DATA SOURCE:
 FY99 WBS Spending Variance Reports for WBS Element 1.1.03.06.01.04, Activity BZCG100620.

ITEM DESCRIPTION:
 Coordinate characterization and disposition of incidental waters with building personnel, utilities and environmental coordinators; maintain and upgrade incidental waters database, and prepare monthly summary report. Monthly report (12/Year)

BREAKDOWN OF HISTORICAL DATA:
 The BOE was developed using activity based cost estimating. Estimate based on historic costs from FY99.
 Item - Incidental Waters Program
 Units -HOURS
 Unit Cost - 828 Hours
 Unit Cost Adjustment factor - N/A
 Revised Unit Cost - N/A
 Basis for adjustment - N/A

This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

Resources	Cost Element	Skill	Department	Curve	Quantity	Units
	750 STRAIGHT TIME BASE	E050 ENVIRONMENTAL ENGINEERS	C222S Water Svstem Operations	Linear	48.91	Hours
Factors	55 Hours					
	750 STRAIGHT TIME BASE	M020 MANAGERS (GRADE 69 - 72)	C222S Water Svstem Operations	Linear	12.45	Hours
Factors	14 Hours					

0.88934 [SYS 061400] .88934200 - Svstem

0.88934 [SYS 061400] .88934200 - Svstem

Line Item IBCGER0320 - Internal Waste Streams

BOE
 HISTORICAL DATA SOURCE:
 FY99 WBS Spending Variance Reports for WBS Element 1.1.03.06.01.04, Activity BZCG100620.

ITEM DESCRIPTION:
 Coordinate characterization and disposition of internal waste streams with Waste Water Treatment Plant (WWTP) manager, maintain and upgrade internal waste streams database, and prepare monthly reports. Monthly report (12/Year)

BREAKDOWN OF HISTORICAL DATA:
 The BOE was developed using activity based cost estimating. Estimate based on historic costs from FY99.

WBS No: 1EBB0402
 Activity ID: 1EXXX42205

Rockv Flats Closure Project
Baseline Cost and Basis of Estimate

Project: Baseline Devl
 WBS Filter: 1EBB
 Activity Filter: *

Starts In FY *

Item - Incidental Waters Program
 Units - HOURS
 Unit Cost - 552 Hours
 Unit Cost Adjustment factor - N/A
 Revised Unit Cost - N/A
 Basis for adjustment - N/A

This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

Resources	Cost Element	Skill	Department	Curve	Quantity	Units
	750 STRAIGHT TIME BASE	E050 ENVIRONMENTAL ENGINEERS	C222S Water Svstem Operations	Linear	28.46	Hours
Factors	32 Hours					
	750 STRAIGHT TIME BASE	M020 MANAGERS (GRADE 69 - 72)	C222S Water Svstem Operations	Linear	12.45	Hours
Factors	14 Hours					
				0.88934 [SYS 061400]	.88934200	- Svstem
				0.88934 [SYS 061400]	.88934200	- Svstem

Line Item IBCGER0330 - Master Tank Database/DIS Query Support

BOE

HISTORICAL DATA SOURCE:
 FY99 WBS Spending Variance Reports for WBS Element 1.1.03.06.01.06, Activity BZCG1010.

ITEM DESCRIPTION:
 Support queries and data entry in the Master Tank Database (MTDB)and support Drain Identification Study (DIS) file control/information requests.

BREAKDOWN OF HISTORICAL DATA:
 The BOE was developed using activity based cost estimating. Estimate based on historic costs from FY98.
 Item - Master Tank Database/DIS query annual support
 Units - HOURS
 Unit Cost - 256 hours
 Unit Cost Adjustment factor - N/A
 Revised Unit Cost - N/A
 Basis for adjustment - N/A

This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

Resources	Cost Element	Skill	Department	Curve	Quantity	Units
	750 STRAIGHT TIME BASE	E050 ENVIRONMENTAL ENGINEERS	C222S Water Svstem Operations	Linear	64.03	Hours
Factors	72 hr					
	750 STRAIGHT TIME BASE	M020 MANAGERS (GRADE 69 - 72)	C222S Water Svstem Operations	Linear	42.69	Hours
Factors	48 Hours/ls					
	750 STRAIGHT TIME BASE	P060 COMPUTER SYSTEMS ANALYSTS	C222S Water Svstem Operations	Linear	92.49	Hours
Factors	104 Hours					
	750 STRAIGHT TIME BASE	T070 MAINT. TECHS. (INSTRUMENT TEC	KE10H Indust/Site Svcs Steelworkers	Linear	28.46	Hours
Factors	32 hrs					
				0.88934 [SYS 061400]	.88934200	- Svstem
				0.88934 [SYS 061400]	.88934200	- Svstem

Line Item SYS - Contingency And Escalation

BOE

Resources	Cost Element	Skill	Department	Curve	Quantity	Units
	CON CONTINGENCY	0000 NONE	ZDEPT No Department	Linear	106.743.10	Dollars
Factors	106743 Dollars					
	ESC ESCALATION	0000 NONE	ZDEPT No Department	Linear	38.641.60	Dollars
Factors	38641.6 Dollars					

Activity ID: 1EXXX42405 Description: NPDES Sampling, Analysis, & Rptg FY06

Cost Risk 1 Schedule Risk 1

Line Item	Description	Quantity	Units	BOE Type	Labor Hours/Unit	Labor Hours Total	Labor Cost Total	Materials/ Sub Cost	Contingency & Escalation	Total Prime Cost	Burden Cost	Total Cost
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WBS No: 1EBB0402
 Activity ID: 1EXXX42405

Rockv Flats Closure Project
Baseline Cost and Basis of Estimate

Project Baseline Devl
 WBS Filter 1EBB
 Activity Filter *

Starts In FY *

OPNCIN5101	Analysis Support for SW Projects	0.96	each	HC	427	412	13,292	307,545	0	320,838	4,626	325,463
OPNCIN5102	Analytical Data Verification	0.96	each	HC	0	0	0	82,274	0	82,274	0	82,274
SYS	Contingency And Escalation	1.00	ea	EE	0	0	0	0	342,174	342,174	0	342,174
Total for Activity 1EXXX42405:						412	13,292	389,819	342,174	745,285	4,626	749,911

Line Item OPNCIN5101 - Analysis Support for SW Projects

BOE
 Historical Data Source -
 RFETS FY98 and FY99 actuals for sample analysis - on file in Bldg. T030D.

Item Desc -
 Major sampling subcontract for Surface Water Monitoring programs. Includes sample collection, preparation, and shipment.

NPDES required sampling was estimated using requirements from the new draft permit as the NPDES regulating document for the entire Fiscal Year. Sample locations, parameters and frequencies are dictated in the terms of the draft permit. It is expected that the new permit will be issued and implemented at the latter part of FY99.

Incidental Waters sample needs for FY00 were estimated using the actuals from FY98 and FY99 to date, as well as the currently available D&D schedules.

Ad hoc samples were included in the overall estimate, as well as analytical support for contaminant tracking near the ITS and for monitoring after close-out of selected IM/IRA locations.

All programs were estimated using the FY99 price list. The list provided specific charges for currently contracted labs and the average price for an individual analyte type and turnaround time were used.

Total number of samples estimated for FY00 is 1,686.

It is estimated that 173 hours of a Surface Water environmental engineer are necessary for sample tracking and analytical problem resolution. This estimate is based upon the following monthly time estimate.

- 5 hrs per month for Project Performance Report preparation for the cognizant WADlet Manager including reconciliation of samples charged to WAD 001 versus actual samples collected. This includes reviewing other WADs to assure analytical services are not mis-charged.
- 5 hrs per month for preparation of requests to Analytical Services Division staff for completed analytical data for NPDES/RFCAs programs.
- 12 hrs per month to verify that all requested data was delivered by due date, data review for reasonableness, usability, historical significance and data distribution.
- 5 hrs per month to re-request missing data.
- 5 hrs per month to provide to status of analytical data for specific programs to RFCSS and K-H Team.
- 8 hrs per month to request resolution of questions/concerns/problems with analytical data for NPDES/RFCAs programs.

Breakdown of Historical Data:
 Item - Analytical Services
 Units - lot
 Unit Cost - 480 hours and \$350,388 Non-Labor Dollars
 Unit Cost Adjustment factor - NA
 Revised Unit Cost - NA

This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

Resources	Cost Element	Skill	Department	Curve	Quantity	Units
	750 STRAIGHT TIME BASE	S020 ENVIRONMENTAL SCIENTISTS	C103S Environmental Compliance	Linear	426.88	Hours
Factors	480 hrs					
	A5H SUBCONTRACTED SRVS	0000 NONE	C222S Water System Operations	Linear	318,728.90	Dollars
Factors	350388 \$	1.02283 -- FY00 Escalation --				

0.88934 [SYS 061400] .88934200 - Svsstem
 0.88934 [SYS 061400] .88934200 - Svsstem

Line Item OPNCIN5102 - Analytical Data Verification

BOE
 Historical Data Source -

WBS No: 1EBB0402
 Activity ID: 1EXXX42405

Rockv Flats Closure Project
Baseline Cost and Basis of Estimate

Project: Baseline Devl
 WBS Filter: 1EBB
 Activity Filter: *

Starts In FY *

RFETS FY98 and FY99 actuals for sample analysis - on file in Bldg. T893A, Cube 35.

Item Desc -
 Estimate based on requirements determined by the Analytical Services Division, all analytical data packages produced by subcontracted laboratories will be 100% verified by ASD subcontracted staff. All verification will be complete (not partial) and will be charged back to the individual programs. Kaiser-Hill estimates indicate that the funding provided is sufficient provided that there is a minimum of 6 samples in each RIN. However, it is not possible to always plan sampling events such that a specified number of samples is included in each RIN, therefore the total number of samples (4469) for FY00 was subdivided into two categories. The first category assumes that there are 6 samples in each RIN. The second category assumes that only 2 samples are available for each RIN. The following estimates were developed using price sheets provided by ASD for subcontracted verification services.

1st Category
 Number of samples collected = 1517 samples
 Average cost per RIN for routine, 30-day turn-around time = \$108/RIN
 (cost based on 6-10 samples per RIN and for complete verification)
 Total Cost for complete verification = 670 RINS x \$108/RIN = \$72,360

2nd Category
 Number of samples collected = 168 samples
 Average cost per RIN for routine, 30-day turn-around time = \$95/RIN
 (cost based upon 1-5 samples per RIN and for complete verification)
 Total Cost for complete verification = 225 RINS x \$95/RIN = \$21,375

Breakdown of Historical Data:
 Item - Analytical Data Valification
 Units - lot
 Unit Cost - 93,735 nonlabor dollars
 Unit Cost Adjustment factor - NA
 Revised Unit Cost - NA

This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

Resources	Cost Element	Skill	Department	Curve	Quantity	Units
	A5H SUBCONTRACTED SRVS	0000 NONE	C222S Water System Operations	Linear	85,265.64	Dollars
<i>Factors</i>	93735 hrs	1.02283 -- FY00 Escalation --				
				0.88934 [SYS 061400] .88934200 - System		

Line Item SYS - Contingency And Escalation

Resources	Cost Element	Skill	Department	Curve	Quantity	Units
	CON CONTINGENCY	0000 NONE	ZDEPT No Department	Linear	251,227.70	Dollars
<i>Factors</i>	251228 Dollars					
	ESC ESCALATION	0000 NONE	ZDEPT No Department	Linear	90,945.84	Dollars
<i>Factors</i>	90945.8 Dollars					

Activity ID: 1EXXX42505 Description: Stormwater Control System FY06 Cost Risk 1 Schedule Risk 1

Line Item	Description	Quantity	Units	BOE Type	Labor Hours/Unit	Labor Hours Total	Labor Cost Total	Materials/ Sub Cost	Contingency & Escalation	Total Prime Cost	Burden Cost	Total Cost
IBCGER0001	SW Monitoring Program Mgmt.	0.00	lot	HC	#Num!	0	0	0	0	0	0	0
IBCGER0002	Sample & Field Data Collection	0.17	lot	HC	836	145	4,275	74,572	0	78,847	1,488	80,334
IBCGER0003	Monitoring Data Assessment	0.17	lot	HC	1,085	188	5,670	10,743	0	16,414	1,973	18,387
IBCGER0004	Automated SW Monitoring	0.00	lot	HC	#Num!	0	0	0	0	0	0	0
IBCGER0005	Compliance & Stakeholder Reporting	0.00	lot	HC	#Num!	0	0	0	0	0	0	0
IBCGER0006	SW Monitoring AD Hoc Projects	0.00	lot	HC	#Num!	0	0	0	0	0	0	0
SYS	Contingency And Escalation	1.00	lea	EE	0	0	0	0	82,847	82,847	0	82,847
						334	9,945	85,315	82,847	178,107	3,461	181,568
												Total for Activity 1EXXX42505:

Line Item IBCGER0001 - SW Monitoring Program Mgmt.

BOE	Description
	SOURCE OF HISTORICAL DATA RFETS FY98 Surface Water Monitoring WADlet (WBS # 1.1.03.06.01.01) Cost Performance Report dated 10/7/98 and WADlet manager tracking files - on file in Bldg.

WBS No: 1EBB0402
 Activity ID: 1EXXX42505

Rockv Flats Closure Project
Baseline Cost and Basis of Estimate

Project: Baseline Devl
 WBS Filter: 1EBB
 Activity Filter: *

Starts In FY *

T893A, Cube 46.

DESCRIPTION OF ITEMS ESTIMATED
 Surface Water Monitoring Program Management. Items estimated include of management guidance and assessments; program planning; budget management; data quality assurance and management; radiological and safety engineering; and occurrence reporting.

BREAKDOWN OF HISTORICAL COST DATA:
 The FY01 BOE was developed using activity based cost estimating. Estimate based on annualized historical program costs for FY99 program.
 Item - SW Monitoring Program Management
 Units - lot
 Unit Cost - 2,930 hours and 34K nonlabor dollars
 Unit Cost Adjustment factor - NA
 Revised Unit Cost - NA
 Basis for Adjustment - NA

This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

Resources

	Cost Element		Skill		Department	Curve	Quantity	Units
750	STRAIGHT TIME BASE	E050	ENVIRONMENTAL ENGINEERS	C222S	Water Svstem Operations	Linear	53.36	Hours
Factors	60	hours						
						0.88934 [SYS 061400]	88934200	- Svstem
750	STRAIGHT TIME BASE	G010	ADMINISTRATIVE ASSISTANTS	C222S	Water Svstem Operations	Linear	231.23	Hours
Factors	260	hours						
						0.88934 [SYS 061400]	88934200	- Svstem
750	STRAIGHT TIME BASE	M020	MANAGERS (GRADE 69 - 72)	C222S	Water Svstem Operations	Linear	658.11	Hours
Factors	740	hours						
						0.88934 [SYS 061400]	88934200	- Svstem
750	STRAIGHT TIME BASE	P050	COMPLIANCE INSPECTORS	C222S	Water Svstem Operations	Linear	26.68	Hours
Factors	30	hours						
						0.88934 [SYS 061400]	88934200	- Svstem
750	STRAIGHT TIME BASE	P060	COMPUTER SYSTEMS ANALYSTS	C222S	Water Svstem Operations	Linear	426.88	Hours
Factors	480	hours						
						0.88934 [SYS 061400]	88934200	- Svstem
750	STRAIGHT TIME BASE	P090	INDUSTRIAL HYGIENISTS	C222S	Water Svstem Operations	Linear	106.72	Hours
Factors	120	hours						
						0.88934 [SYS 061400]	88934200	- Svstem
750	STRAIGHT TIME BASE	S020	ENVIRONMENTAL SCIENTISTS	C222S	Water Svstem Operations	Linear	53.36	Hours
Factors	60	hours						
						0.88934 [SYS 061400]	88934200	- Svstem
750	STRAIGHT TIME BASE	S020	ENVIRONMENTAL SCIENTISTS	C222S	Water Svstem Operations	Linear	1,049.42	Hours
Factors	1180	hours						
						0.88934 [SYS 061400]	88934200	- Svstem
A5C	SUPPLIES	0000	NONE	C222S	Water Svstem Operations	Linear	10,832.19	Dollars
Factors	12000	dollars	1.015 -- FY00 Escalation --					
						0.88934 [SYS 061400]	88934200	- Svstem
A5H	SUBCONTRACTED SRVS	0000	NONE	C222S	Water Svstem Operations	Linear	9,096.46	Dollars
Factors	10000	dollars	1.02283 -- FY00 Escalation --					
						0.88934 [SYS 061400]	88934200	- Svstem
A5H	SUBCONTRACTED SRVS	0000	NONE	C222S	Water Svstem Operations	Linear	727.72	Dollars
Factors	800	dollars	1.02283 -- FY00 Escalation --					
						0.88934 [SYS 061400]	88934200	- Svstem
A5H	SUBCONTRACTED SRVS	S020	ENVIRONMENTAL SCIENTISTS	C222S	Water Svstem Operations	Linear	8,895.42	Dollars
Factors	9779	d	1.02283 -- FY00 Escalation --					
						0.88934 [SYS 061400]	88934200	- Svstem

WBS No: 1EBB0402
 Activity ID: 1EXXX42505

Rockv Flats Closure Project
Baseline Cost and Basis of Estimate

Project: Baseline Devl
 WBS Filter: 1EBB
 Activity Filter: *

Starts In FY: *

A5M	TRAVEL/TRAIN/RELOCAT	0000	NONE	C222S	Water Svstem Operations	Linear	1,067.21	Dollars
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Factors 1200 dollars

0.88934 [SYS 061400] .88934200 - System

Line Item IBCGER0002 - Sample & Field Data Collection

BOE
 SOURCE OF HISTORICAL DATA
 RFETS FY98 Surface Water Monitoring WADlet (WBS # 1.1.03.06.01.01) Cost Performance Report dated 10/7/98 and WADlet manager tracking files - on file in Bldg. T893A, Cube 46.

DESCRIPTION OF ITEMS ESTIMATED
 Sample & Field Data Collection. Items estimated include labor and subcontract support for sampling and analysis and major subcontract for Surface Water Sampling Program for the Site.

BREAKDOWN OF HISTORICAL COST DATA
 The FY01 BOE was developed using activity based cost estimating. Estimate based on annualized historical program costs for FY99 program.

Item - SW Sample & Field Data Collection
 Units - lot
 Unit Cost - 940 hours and 472K nonlabor dollars
 Unit Cost Adjustment factor - NA
 Revised Unit Cost - NA
 Basis for Adjustment - NA

This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

Resources		Cost Element	Skill	Department	Curve	Quantity	Units
750	STRAIGHT TIME BASE	E050	ENVIRONMENTAL ENGINEERS	C222S	Water Svstem Operations	Linear	337.95 Hours
Factors		380	hours				
							0.88934 [SYS 061400] .88934200 - System
750	STRAIGHT TIME BASE	P050	COMPLIANCE INSPECTORS	C222S	Water Svstem Operations	Linear	213.44 Hours
Factors		240	hours				
							0.88934 [SYS 061400] .88934200 - System
750	STRAIGHT TIME BASE	S020	ENVIRONMENTAL SCIENTISTS	C222S	Water Svstem Operations	Linear	284.59 Hours
Factors		320	hours				
							0.88934 [SYS 061400] .88934200 - System
A58	ASI	0000	NONE	K267S	Analvtical Laboratory Services	Linear	418,437.00 Dollars
Factors		460000	dollars	1.02283 -- FY00 Escalation --			
							0.88934 [SYS 061400] .88934200 - System
A5H	SUBCONTRACTED SRVS	0000	NONE	C222S	Water Svstem Operations	Linear	10,915.75 Dollars
Factors		12000	dollars	1.02283 -- FY00 Escalation --			

0.88934 [SYS 061400] .88934200 - System

Line Item IBCGER0003 - Monitoring Data Assessment

BOE
 SOURCE OF HISTORICAL DATA
 RFETS FY98 Surface Water Monitoring WADlet (WBS # 1.1.03.06.01.01) Cost Performance Report dated 10/7/98 and WADlet manager tracking files - on file in Bldg. T893A, Cube 46.

DESCRIPTION OF ITEMS ESTIMATED
 Monitoring Data Assessment. Items estimated include analytical data package and field data assessment; and monitoring data compilation, statistical analysis, and assessment.

BREAKDOWN OF HISTORICAL COST DATA
 The FY01 BOE was developed using activity based cost estimating. Estimate based on annualized historical program costs for FY99 program.

Item - Monitoring Data Assessment
 Units - lot
 Unit Cost - 1,220 hours and 68K nonlabor dollars
 Unit Cost Adjustment factor - NA
 Revised Unit Cost - NA
 Basis for Adjustment - NA

This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

WBS No: 1EBB0402
 Activity ID: 1EXXX42505

Rockv Flats Closure Project
Baseline Cost and Basis of Estimate

Project: Baseline Devl
 WBS Filter: 1EBB
 Activity Filter: *

Starts In FY *

Resources	Cost Element	Skill	Department	Curve	Quantity	Units
750	STRAIGHT TIME BASE	E050	ENVIRONMENTAL ENGINEERS	C222S	Water Svstem Operations	Linear 337.95 Hours
Factors 380 hours						
0.88934 [SYS 061400] .88934200 - Svstem						
750	STRAIGHT TIME BASE	P050	COMPLIANCE INSPECTORS	C222S	Water Svstem Operations	Linear 213.44 Hours
Factors 240 hours						
0.88934 [SYS 061400] .88934200 - Svstem						
750	STRAIGHT TIME BASE	S020	ENVIRONMENTAL SCIENTISTS	C222S	Water Svstem Operations	Linear 533.61 Hours
Factors 600 hours						
0.88934 [SYS 061400] .88934200 - Svstem						
A5H	SUBCONTRACTED SRVS	0000	NONE	C222S	Water Svstem Operations	Linear 61,855.91 Dollars
Factors 68000 dollars 1.02283 -- FY00 Escalation --						
0.88934 [SYS 061400] .88934200 - Svstem						

Line Item IBCGER0004 - Automated SW Monitoring

BOE

SOURCE OF HISTORICAL DATA
 RFETS FY98 Surface Water Monitoring WADlet (WBS # 1.1.03.06.01.01) Cost Performance Report dated 10/7/98 and WADlet manager tracking files - on file in Bldg. T893A, Cube 46.

DESCRIPTION OF ITEMS ESTIMATED
 Automated surface water monitoring program implementation (per IMP requirements). Items estimated include installation, operation, and maintenance of automated flow monitoring and sampling equipment; water quality probe operation; telemetry system operation and management; and hydrologic monitoring program implementation and management.

BREAKDOWN OF HISTORICAL COST DATA
 The FY01 BOE was developed using activity based cost estimating. Estimate based on annualized historical program costs for FY99 program.

Item - Automated Surface Water Monitoring Program Implementation and Management
 Units - lot
 Unit Cost - 2,010 hours and 79K nonlabor dollars
 Unit Cost Adjustment factor - NA
 Revised Unit Cost - NA
 Basis for Adjustment - NA

This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

Resources	Cost Element	Skill	Department	Curve	Quantity	Units
750	STRAIGHT TIME BASE	E050	ENVIRONMENTAL ENGINEERS	C222S	Water Svstem Operations	Linear 337.95 Hours
Factors 380 hours						
0.88934 [SYS 061400] .88934200 - Svstem						
750	STRAIGHT TIME BASE	P050	COMPLIANCE INSPECTORS	C222S	Water Svstem Operations	Linear 1,111.68 Hours
Factors 1250 hours						
0.88934 [SYS 061400] .88934200 - Svstem						
750	STRAIGHT TIME BASE	S020	ENVIRONMENTAL SCIENTISTS	C222S	Water Svstem Operations	Linear 337.95 Hours
Factors 380 hours						
0.88934 [SYS 061400] .88934200 - Svstem						
A5C	SUPPLIES	0000	NONE	C222S	Water Svstem Operations	Back Loaded 21,664.37 Dollars
Factors 24000 dollars 1.015 -- FY00 Escalation --						
0.88934 [SYS 061400] .88934200 - Svstem						
A5H	SUBCONTRACTED SRVS	0000	NONE	C222S	Water Svstem Operations	Linear 41,843.70 Dollars
Factors 46000 dollars 1.02283 -- FY00 Escalation --						
0.88934 [SYS 061400] .88934200 - Svstem						
A5L	RENTALS	0000	NONE	C106S	Business Management Office	Linear 5,416.09 Dollars
Factors 6000 dollars 1.015 -- FY00 Escalation --						
0.88934 [SYS 061400] .88934200 - Svstem						
A5M	TRAVEL/TRAIN/RELOCAT	0000	NONE	C222S	Water Svstem Operations	Max Backload 2,134.42 Dollars
Factors 2400 dollars						
0.88934 [SYS 061400] .88934200 - Svstem						

WBS No: 1EBB0402
 Activity ID: 1EXXX42505

Rockv Flats Closure Project
Baseline Cost and Basis of Estimate

Project Baseline Devl
 WBS Filter 1EBB
 Activity Filter *

Starts In FY *

Line Item IBCGER0005 - Compliance & Stakeholder Reporting

BOE

SOURCE OF HISTORICAL DATA
 RFETS FY98 Surface Water Monitoring WADlet (WBS # 1.1.03.06.01.01) Cost Performance Report dated 10/7/98 and WADlet manager tracking files - on file in Bldg. T893A, Cube 46.

DESCRIPTION OF ITEMS ESTIMATED
 Surface Water monitoring program reporting. Items estimated include NPDES monthly and annual Discharge Monitoring Report (DMR) preparation and delivery; RFCA quarterly & off-normal reporting including source evaluation planning; EPA annual sewage sludge reporting; monitoring program status and special report; GIS support including map preparation and database maintenance; and special request reports for stakeholders.

BREAKDOWN OF HISTORICAL COST DATA
 The FY01 BOE was developed using activity based cost estimating. Estimate based on annualized historical program costs for FY99 program.

Item - Compliance & Stakeholder Reporting
 Units - lot
 Unit Cost - 1,320 hours and 12K dollars
 Unit Cost Adjustment factor - NA
 Revised Unit Cost - NA
 Basis for Adjustment - NA

This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

Resources		Cost Element	Skill	Department	Curve	Quantity	Units
750	STRAIGHT TIME BASE	E050	ENVIRONMENTAL ENGINEERS	C222S	Water System Operations	Linear	106.72 Hours
Factors		120	hours				
							0.88934 [SYS 061400] .88934200 - System
750	STRAIGHT TIME BASE	G010	ADMINISTRATIVE ASSISTANTS	C222S	Water System Operations	Linear	35.57 Hours
Factors		40	hours				
							0.88934 [SYS 061400] .88934200 - System
750	STRAIGHT TIME BASE	M020	MANAGERS (GRADE 69 - 72)	C222S	Water System Operations	Linear	160.08 Hours
Factors		180	hours				
							0.88934 [SYS 061400] .88934200 - System
750	STRAIGHT TIME BASE	P050	COMPLIANCE INSPECTORS	C222S	Water System Operations	Linear	53.36 Hours
Factors		60	hours				
							0.88934 [SYS 061400] .88934200 - System
750	STRAIGHT TIME BASE	P060	COMPUTER SYSTEMS ANALYSTS	C222S	Water System Operations	Linear	284.59 Hours
Factors		320	hours				
							0.88934 [SYS 061400] .88934200 - System
750	STRAIGHT TIME BASE	S020	ENVIRONMENTAL SCIENTISTS	C222S	Water System Operations	Linear	533.61 Hours
Factors		600	hours				
							0.88934 [SYS 061400] .88934200 - System
A5H	SUBCONTRACTED SRVS	0000	NONE	C222S	Water System Operations	Linear	10.915.75 Dollars
Factors		12000	dollars	1.02283 -- FY00 Escalation --			
							0.88934 [SYS 061400] .88934200 - System

Line Item IBCGER0006 - SW Monitoring AD Hoc Projects

BOE

SOURCE OF HISTORICAL DATA
 RFETS FY98 Surface Water Monitoring WADlet (WBS # 1.1.03.06.01.01) Cost Performance Report dated 10/7/98 and WADlet manager tracking files - on file in Bldg. T893A, Cube 46.

DESCRIPTION OF ITEM ESTIMATED
 Site involvement in Colorado Water Quality Control Commission Hearing (CWQCC) hearings to ensure that appropriate and achievable water quality standards are established for Site surface water to facilitate movement toward Site closure.

BREAKDOWN OF HISTORICAL COST DATA
 The FY01 BOE was developed using activity based cost estimating. Estimate based on annualized historical program costs for FY99 program.

Item - Colorado Water Quality Control Commission Hearing(s) support
 Units - lot
 Unit Cost - 870 hours

WBS No: 1EBB0402
 Activity ID: 1EXXX42505

Rockv Flats Closure Project
Baseline Cost and Basis of Estimate

Project: Baseline Devl
 WBS Filter: 1EBB
 Activity Filter: *

Starts In FY *

Unit Cost Adjustment factor - NA
 Revised Unit Cost - NA
 Basis for Adjustment - NA
 This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

Resources	Cost Element	Skill	Department	Curve	Quantity	Units
	750 STRAIGHT TIME BASE	G010 ADMINISTRATIVE ASSISTANTS	C222S Water Svstem Operations	Back Loaded	26.68	Hours
Factors	30 hours					
	750 STRAIGHT TIME BASE	M020 MANAGERS (GRADE 69 - 72)	C222S Water Svstem Operations	Back Loaded	106.72	Hours
Factors	120 hours					
	750 STRAIGHT TIME BASE	S020 ENVIRONMENTAL SCIENTISTS	C222S Water Svstem Operations	Linear	569.18	Hours
Factors	640 hours					
	750 STRAIGHT TIME BASE	S020 ENVIRONMENTAL SCIENTISTS	C222S Water Svstem Operations	Back Loaded	71.15	Hours
Factors	80 hours					

0.88934 [SYS 061400] .88934200 - System
 0.88934 [SYS 061400] .88934200 - System
 0.88934 [SYS 061400] .88934200 - System

Line Item SYS - Contingency And Escalation

Resources	Cost Element	Skill	Department	Curve	Quantity	Units
	CON CONTINGENCY	0000 NONE	ZDEPT No Department	Linear	60.827.17	Dollars
Factors	60827.2 Dollars					
	ESC ESCALATION	0000 NONE	ZDEPT No Department	Linear	22.019.78	Dollars
Factors	22019.8 Dollars					

Activity ID: 1EXXX42605 Description: Clean Water Program Implementation FY06

Cost Risk 1 Schedule Risk 1

Line Item	Description	Quantity	Units	BOE Type	Labor Hours/Unit	Labor Hours Total	Labor Cost Total	Materials/ Sub Cost	Contingency & Escalation	Total Prime Cost	Burden Cost	Total Cost
IBCGER0820	Ammonia Measurement Data Links	3.86	each	EE	43	165	4,322	4,181	0	8,503	1,504	10,007
IBCGER0830	Chronic Whole Effluent Testing	3.86	each	HC	21	82	2,161	0	0	2,161	752	2,913
IBCGER0845	Clean Water Act Program Mamt.	0.96	each	HC	811	783	26,859	15,041	0	41,900	9,347	51,247
IBCGER0860	New NPDES Permit Compliance	0.96	each	EE	711	687	22,679	3,511	0	26,190	7,892	34,082
IBCGER0870	Revision Water Management Closure Plan	0.48	each	EE	0	0	0	21,943	0	21,943	0	21,943
SYS	Contingency And Escalation	1.00	ea	EE	0	0	0	0	100.865	100.865	0	100.865
Total for Activity 1EXXX42605:						1,716	56,021	44,676	100.865	201,561	19,495	221,056

Line Item IBCGER0820 - Ammonia Measurement Data Links

BOE "Specific analogy" and "expert opinion" approaches were used to predict the cost and schedule requirements for this activity. Historical cost and hours tracking from FY97 and FY98 for the same scope of work and similar activities which were performed by the Surface Water group were used to prepare the following estimate:
 Ammonia measurement development techniques research will require a minimum of 4 hours per month for Surface Water support (P170).
 A total expenditure for FY05 for ammonia analysis equipment and telemetry capabilities is estimated to be \$1200.
 This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

Resources	Cost Element	Skill	Department	Curve	Quantity	Units
	750 STRAIGHT TIME BASE	P170 OTHER ADMINISTRATIVE & PROFE	C222S Water System Operations	Linear	42.69	Hours
Factors	48 h					
	A5C SUPPLIES	0000 NONE	C222S Water System Operations	Linear	1,083.22	Dollars
Factors	1200 \$	1.015 -- FY00 Escalation --				

0.88934 [SYS 061400] .88934200 - System
 0.88934 [SYS 061400] .88934200 - System

Line Item IBCGER0830 - Chronic Whole Effluent Testing

BOE

WBS No: 1EBB0402
 Activity ID: 1EXXX42605

Rockv Flats Closure Project
Baseline Cost and Basis of Estimate

Project: Baseline Devl
 WBS Filter: 1EBB
 Activity Filter: *
 Starts In FY: *

Historical Data Source - Historical cost and hours tracking from FY98 WBS 1.1.03.06.04 September Spending Variance Report dated 10/07/99. The FY04 scope of work is for similar FY98 activities which were performed by the Surface Water group.

Quarterly WET test reporting requires 24 hours (6 hr/Qtr) of Surface Water staff support (P170) to review sample analysis, prepare formal reports and provide discussions for follow-on briefings.

This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

Resources	Cost Element	Skill	Department	Curve	Quantity	Units
	750 STRAIGHT TIME BASE	P170 OTHER ADMINISTRATIVE & PROFE	C222S Water Svstem Operations	Linear	21.34	Hours
<i>Factors</i> 24 h						

0.88934 [SYS 061400] .88934200 - Svstem

Line Item IBCGER0845 - Clean Water Act Program Mgmt.

BOE Historical Data Source - Historical cost and hours tracking from FY98 WBS 1.1.03.06.04 September Spending Variance Report dated 10/07/99. The FY05 scope of work is for similar FY98 activities which were performed by the Surface Water group.

Cost Estimator/Planner skills will be required to track budget controls and are estimated to be \$2,160 based on historical data.

Surface Water staff support (P170) for 576 hours is required to develop or revise project/program plans and provide technical information for regulatory negotiations and compliance issues.

Secretarial support is required for 8 hours per month.

Program/Project Manager support is required for 24 hours per month to provide senior project oversight.

\$17,600 A5H Proj/Prog Mgt. support is needed to provide environmental compliance assurance.

A5C Supplies are estimated to be \$100 per month.

A5M0468 - Education Reimbursement for Employees = \$10,500

A5M Travel/Training expenses are estimated to be \$300 per month, based on historical data, to attend regulator and stakeholder meetings and stay current with training requirements.

This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

Resources	Cost Element	Skill	Department	Curve	Quantity	Units
	750 STRAIGHT TIME BASE	G010 ADMINISTRATIVE ASSISTANTS	C222S Water Svstem Operations	Linear	42.69	Hours
<i>Factors</i> 48 h						
0.88934 [SYS 061400] .88934200 - Svstem						
	750 STRAIGHT TIME BASE	M020 MANAGERS (GRADE 69 - 72)	C222S Water Svstem Operations	Linear	256.13	Hours
<i>Factors</i> 288 h						
0.88934 [SYS 061400] .88934200 - Svstem						
	750 STRAIGHT TIME BASE	P170 OTHER ADMINISTRATIVE & PROFE	C222S Water Svstem Operations	Linear	512.26	Hours
<i>Factors</i> 576 h						
0.88934 [SYS 061400] .88934200 - Svstem						
	A5C SUPPLIES	0000 NONE	C222S Water Svstem Operations	Linear	1,083.22	Dollars
<i>Factors</i> 1200 \$ 1.015 -- FY00 Escalation --						
0.88934 [SYS 061400] .88934200 - Svstem						
	A5H SUBCONTRACTED SRVS	P070 COST ESTIMATORS PLANNERS AN	C222S Water Svstem Operations	Linear	1,964.83	Dollars
<i>Factors</i> 2160 Dollars 1.02283 -- FY00 Escalation --						
0.88934 [SYS 061400] .88934200 - Svstem						
	A5H SUBCONTRACTED SRVS	S090 OTHER SCIENTISTS	C222S Water Svstem Operations	Linear	0.00	Dollars
<i>Factors</i> 0 \$ 1.02283 -- FY00 Escalation --						
0.88934 [SYS 061400] .88934200 - Svstem						
	A5M TRAVEL/TRAIN/RELOCAT	0000 NONE	C222S Water Svstem Operations	Linear	3,201.63	Dollars
<i>Factors</i> 3600 \$						
0.88934 [SYS 061400] .88934200 - Svstem						

WBS No: 1EBB0402
 Activity ID: 1EXXX42605

Rockv Flats Closure Project
Baseline Cost and Basis of Estimate

Project Baseline Devl
 WBS Filter 1EBB
 Activity Filter *

Starts In FY *

A5M	TRAVEL/TRAIN/RELOCAT	0000	NONE	C222S	Water Svstem Operations	Linear	9,338.09	Dollars
<i>Factors</i> 10500 Dollars		Education Reimbursement						

0.88934 [SYS 061400] .88934200 - Svstem

Line Item IBCGER0860 - New NPDES Permit Compliance

BOE "Specific analogy" and "expert opinion" approaches were used to predict the cost and schedule requirements for this activity. Historical cost and hours tracking from FY97, and FY98 for the same scope of work and similar activities which were performed by the Surface Water group were used to prepare the following estimate:

The new NPDES Permit is expected to be issued in early FY00. Once the NPDES Permit is effective, there are several compliance plans and studies which must be submitted to the Permit issuing authority for review within six months of the effective date and also compliance plans and studies which must be submitted to EPA no later than one year from the effective date of the Permit.

This activity only addresses two compliance documents that must be submitted to EPA as required by the new NPDES Permit. These are a Non-Discharge Study (within 6 months) and a Comprehensive Site Compliance Evaluation Report (within one year), which are described below.

New Draft NPDES Permit plans will require implementation and management. This is estimated to require 120 hours of a Surface Water Environmental Engineer, 80 hours of a Surface Water Project Manager, and subcontracted services of \$2K.

Areas contributing to a storm water discharge associated with industrial activities shall be visually inspected for evidence of, or the potential for, pollutants entering the drainage system. Measures to reduce pollutant loadings shall be evaluated and implemented. Structural storm water management measures, sediment and erosion control measures, and other structural pollution prevention measures identified in the Permit shall be observed to ensure they are operating correctly. A visual inspection of equipment needed to implement the Storm Water Pollution Prevention Plan, such as spill response equipment, shall be made. The annual Comprehensive Site Evaluation report must document the scope of the inspections, personnel making the inspections, major observations relating to the implementation of the Storm Water Pollution Prevention Plan, and any mitigating actions taken.

This task requires 480 hours of a Surface Water Environmental Engineer, 120 hours of Surface Water Project Management (to provide technical direction for the project, perform cost and schedule tracking, and review draft sections of preliminary, draft and final report), and \$2K of subcontracted services.

This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

<i>Cost Element</i>		<i>Skill</i>		<i>Department</i>		<i>Curve</i>	<i>Quantity</i>	<i>Units</i>
750	STRAIGHT TIME BASE	M020	MANAGERS (GRADE 69 - 72)	C222S	Water Svstem Operations	Linear	177.87	Hours
<i>Factors</i> 200 hours								
						0.88934 [SYS 061400] .88934200 - Svstem		
750	STRAIGHT TIME BASE	P170	OTHER ADMINISTRATIVE & PROFE	C222S	Water Svstem Operations	Linear	533.61	Hours
<i>Factors</i> 600 hours								
						0.88934 [SYS 061400] .88934200 - Svstem		
A5H	SUBCONTRACTED SRVS	P170	OTHER ADMINISTRATIVE & PROFE	C222S	Water Svstem Operations	Linear	3,638.58	Dollars
<i>Factors</i> 4000 dollars		1.02283 -- FY00 Escalation --						
						0.88934 [SYS 061400] .88934200 - Svstem		

Line Item IBCGER0870 - Revision Water Management Closure Plan

BOE Annual revision to Water Management Closure Plan. Based on previous experience with similar document updates. Based on six months at 80 hours per month subcontracted labor and materials.

This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

<i>Cost Element</i>		<i>Skill</i>		<i>Department</i>		<i>Curve</i>	<i>Quantity</i>	<i>Units</i>
A5H	SUBCONTRACTED SRVS	0000	NONE	K109S	Env Svcs. Stewardship & Compliance	Linear	1,819.29	Dollars
<i>Factors</i> 2000 supplies for document uprade		1.02283 -- FY00 Escalation --						
						0.88934 [SYS 061400] .88934200 - Svstem		
A5H	SUBCONTRACTED SRVS	0000	NONE	K109S	Env Svcs. Stewardship & Compliance	Linear	43,662.99	Dollars
<i>Factors</i> 80 hours per month		100 dollars per hour		6 months		1.02283 -- FY00 Escalation --		
						0.88934 [SYS 061400] .88934200 - Svstem		

Line Item SYS - Contingency And Escalation

<i>Cost Element</i>		<i>Skill</i>		<i>Department</i>		<i>Curve</i>	<i>Quantity</i>	<i>Units</i>
CON	CONTINGENCY	0000	NONE	ZDEPT	No Department	Linear	74,056.12	Dollars
<i>Factors</i> 74056.1 Dollars								

WBS No: 1EBB0402
 Activity ID: 1EXXX42605

Rockv Flats Closure Project
Baseline Cost and Basis of Estimate

Project: Baseline Devl
 WBS Filter: 1EBB
 Activity Filter: *

Starts In FY: *

ESC	ESCALATION	0000	NONE	ZDEPT	No Department	Linear	26,808.73	Dollars
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Factors 26808.7 Dollars

WBS No: 1EBB040301 Title: Steam Plant
 Activity ID: 1EBB431000 Description: Operate Steam Plant FY00 Cost Risk 2 Schedule Risk 1

Line Item	Description	Quantity	Units	BOE Type	Labor Hours/Unit	Labor Hours Total	Labor Cost Total	Materials/ Sub Cost	Contingency & Escalation	Total Prime Cost	Burden Cost	Total Cost
100	Operate Steam Plant	1.00	ea	HC	3.947	3.947	94,931	34,908	0	129,839	47,689	177,528
Total for Activity 1EBB431000:						3.947	94,931	34,908	0	129,839	47,689	177,528

Line Item 100 - Operate Steam Plant

BOE

Historical Data Source - Initial estimate is taken from FY 98 Basis Of Estimate Tool (BEST) as modified by the RFCSS proposal.
 Item Desc - This activity provides for the continuous 24 hour operation and surveillance of the Sites Steam Plant.
 Breakdown of Historical Data:
 Item - Operation of the steam plant.
 Units - 1 Lot
 Unit Cost - 20,745 hrs. \$156,988 Materials/SubCosts - \$4,800 Lease
 Unit Cost Adjustment factor - FY 99 budget is used as the base year. FY00 thru 05 are adjusted based on the D&D schedule.
 Revised Unit Cost - same as FY00
 Basis for adjustment -None

This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

Resources

Cost Element	Skill	Department	Curve	Quantity	Units
750 STRAIGHT TIME BASE	M010 FOREMEN / TEAM LEADS / GROUP	C221S Steam Plant Operations	Linear	344.43	Hours
Factors 1810 hrs	0.36164 January 2000 Earned Value Factor		0.52618 [SYS 061300] 0.526183 - Target		
750 STRAIGHT TIME BASE	R070 WASTE TREATMENT OPERATOR A	KE10H Indust/Site Svcs Steelworkers	Linear	7.61	Hours
Factors 40 hrs.	0.36164 January 2000 Earned Value Factor		0.52618 [SYS 061300] 0.526183 - Target		
750 STRAIGHT TIME BASE	R070 WASTE TREATMENT OPERATOR A	KE10H Indust/Site Svcs Steelworkers	Linear	2,724.78	Hours
Factors 14319 hrs.	0.36164 January 2000 Earned Value Factor		0.52618 [SYS 061300] 0.526183 - Target		
750 STRAIGHT TIME BASE	T050 RADIATION CONTROL TECHNOLOGI	KE10H Indust/Site Svcs Steelworkers	Alternate Linear	7.61	Hours
Factors 40 hr.	0.36164 January 2000 Earned Value Factor		0.52618 [SYS 061300] 0.526183 - Target		
751 OVERTIME BASE & PRE.	M010 FOREMEN / TEAM LEADS / GROUP	C221S Steam Plant Operations	Linear	23.98	Hours
Factors 126 hrs.	0.36164 January 2000 Earned Value Factor		0.52618 [SYS 061300] 0.526183 - Target		
751 OVERTIME BASE & PRE.	R070 WASTE TREATMENT OPERATOR A	KE10H Indust/Site Svcs Steelworkers	Linear	838.99	Hours
Factors 4409 hrs.	0.36164 January 2000 Earned Value Factor		0.52618 [SYS 061300] 0.526183 - Target		
754 OTHER PREMIUMS	0000 NONE	C221S Steam Plant Operations	Linear	2,791.57	Dollars
Factors 14670 h	0.36164 January 2000 Earned Value Factor		0.52618 [SYS 061300] 0.526183 - Target		
A5C SUPPLIES	0000 NONE	C220S Utility Operations	Linear	22,215.18	Dollars
Factors 115018 dollars	1.015 -- FY00 Escalation --	0.36164 January 2000 Earned Value Factor	0.52618 [SYS 061300] 0.526183 - Target		
A5H SUBCONTRACTED SRVS	0000 NONE	C220S Utility Operations	Linear	8,174.68	Dollars
Factors 42000 dollars	1.02283 -- FY00 Escalation --	0.36164 January 2000 Earned Value Factor	0.52618 [SYS 061300] 0.526183 - Target		
A5L RENTALS	0000 NONE	C232S NG Vehicle/Equip Maintenance	Linear	927.10	Dollars
Factors 1.015 -- FY00 Escalation --	4800 dollars	0.36164 January 2000 Earned Value Factor	0.52618 [SYS 061300] 0.526183 - Target		
A5T TAXES	0000 NONE	C220S Utility Operations	Linear	799.62	Dollars
Factors 4140 dollars	1.015 -- FY00 Escalation --	0.36164 January 2000 Earned Value Factor	0.52618 [SYS 061300] 0.526183 - Target		

WBS No: 1EBB040301
 Activity ID: 1EBB431010

Rockv Flats Closure Project
Baseline Cost and Basis of Estimate

Project: Baseline Devl
 WBS Filter: 1EBB
 Activity Filter: *
 Cost Risk: 4 Schedule Risk: 1
 Starts In FY: *

Activity ID: 1EBB431010 Description: Operate Steam Plant FY01

Line Item	Description	Quantity	Units	BOE Type	Labor Hours/Unit	Labor Hours Total	Labor Cost Total	Materials/ Sub Cost	Contingency & Escalation	Total Prime Cost	Burden Cost	Total Cost
100	Operate Steam Plant	1.00	ea	HC	19,517	19,517	443,673	163,130	0	606,803	217,855	824,659
SYS	Contingency And Escalation	1.00	ea	EE	0	0	0	0	43,720	43,720	0	43,720
Total for Activity 1EBB431010:						19,517	443,673	163,130	43,720	650,523	217,855	868,379

Line Item 100 - Operate Steam Plant

BOE
 Historical Data Source - Initial estimate is taken from FY 98 Basis Of Estimate Tool (BEST) as modified by the RFCSS proposal.
 Item Desc - This activity provides for the continuous 24 hour operation and surveillance of the Sites Steam Plant.
 Breakdown of Historical Data:
 Item - Operation of the steam plant.
 Units - 1 Lot
 Unit Cost - 21,945 hrs. \$157,000 Materials/SubCosts - \$4,800 Lease
 Unit Cost Adjustment factor - FY 99 budget is used as the base year. FY00 thru 05 are adjusted based on the D&D schedule.
 Revised Unit Cost - same as FY00
 Basis for adjustment -None
 This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

Resources

Cost Element	Skill	Department	Curve	Quantity	Units
750 STRAIGHT TIME BASE	M010 FOREMEN / TEAM LEADS / GROUP	C221S Steam Plant Operations	Linear	1.609,71	Hours
Factors 1810 hrs					
0.88934 [SYS 061400] .88934200 - Svsstem					
750 STRAIGHT TIME BASE	R070 WASTE TREATMENT OPERATOR A	KE10H Indust/Site Srvs Steelworkers	Linear	35.57	Hours
Factors 40 hrs.					
0.88934 [SYS 061400] .88934200 - Svsstem					
750 STRAIGHT TIME BASE	R070 WASTE TREATMENT OPERATOR A	KE10H Indust/Site Srvs Steelworkers	Linear	15,581.27	Hours
Factors 17520 hrs.					
0.88934 [SYS 061400] .88934200 - Svsstem					
750 STRAIGHT TIME BASE	T050 RADIATION CONTROL TECHNOLOGI	KE10H Indust/Site Srvs Steelworkers	Alternate Linear	35.57	Hours
Factors 40 hr.					
0.88934 [SYS 061400] .88934200 - Svsstem					
751 OVERTIME BASE & PRE.	M010 FOREMEN / TEAM LEADS / GROUP	C221S Steam Plant Operations	Linear	112.06	Hours
Factors 126 hrs.					
0.88934 [SYS 061400] .88934200 - Svsstem					
751 OVERTIME BASE & PRE.	R070 WASTE TREATMENT OPERATOR A	KE10H Indust/Site Srvs Steelworkers	Linear	2,142.42	Hours
Factors 2409 hrs.					
0.88934 [SYS 061400] .88934200 - Svsstem					
754 OTHER PREMIUMS	0000 NONE	C221S Steam Plant Operations	Linear	13,046.65	Dollars
Factors 14670 d					
0.88934 [SYS 061400] .88934200 - Svsstem					
A5C SUPPLIES	0000 NONE	C220S Utility Operations	Linear	103,808.50	Dollars
Factors 115000 dollars 1.015 -- FY00 Escalation --					
0.88934 [SYS 061400] .88934200 - Svsstem					
A5H SUBCONTRACTED SRVS	0000 NONE	C220S Utility Operations	Linear	38,205.12	Dollars
Factors 42000 dollars 1.02283 -- FY00 Escalation --					
0.88934 [SYS 061400] .88934200 - Svsstem					
A5L RENTALS	0000 NONE	C232S NG Vehicle/Equip Maintenance	Linear	4,332.87	Dollars
Factors 4800 dollars 1.015 -- FY00 Escalation --					
0.88934 [SYS 061400] .88934200 - Svsstem					
A5T TAXES	0000 NONE	C220S Utility Operations	Linear	3,737.10	Dollars
Factors 4140 dollars 1.015 -- FY00 Escalation --					
0.88934 [SYS 061400] .88934200 - Svsstem					

Line Item SYS - Contingency And Escalation

BOE

WBS No: 1EBB040301
 Activity ID: 1EBB431010

Rockv Flats Closure Project
Baseline Cost and Basis of Estimate

Project Baseline Devl
 WBS Filter 1EBB
 Activity Filter *

Starts In FY *

Resources	Cost Element	Skill	Department	Curve	Quantity	Units
	CON CONTINGENCY	0000 NONE	ZDEPT No Department	Linear	26.379.12	Dollars
<i>Factors</i> 26379.1 Dollars						
	ESC ESCALATION	0000 NONE	ZDEPT No Department	Linear	17.340.73	Dollars
<i>Factors</i> 17340.7 Dollars						

Activity ID: 1EBB431020 Description: Operate Steam Plant FY02

Cost Risk 2 Schedule Risk 1

Line Item	Description	Quantity	Units	BOE Type	Labor Hours/Unit	Labor Hours Total	Labor Cost Total	Materials/ Sub Cost	Contingency & Escalation	Total Prime Cost	Burden Cost	Total Cost
100	Operate Steam Plant	1.00	ea	HC	19.517	19.517	443.673	163.130	0	606.803	161.222	768.025
200	Transition Plan	1.00	each	EE	0	0	0	4.075	0	4.075	0	4.075
SYS	Contingency And Escalation	1.00	ea	EE	0	0	0	0	115.401	115.401	0	115.401
Total for Activity 1EBB431020:						19.517	443.673	167.205	115.401	726.279	161.222	887.501

Line Item 100 - Operate Steam Plant

BOE
 Historical Data Source - Initial estimate is taken from FY 98 Basis Of Estimate Tool (BEST) as modified by the RFCSS proposal.
 Item Desc - This activity provides for the continuous 24 hour operation and surveillance of the Sites Steam Plant.
 Breakdown of Historical Data:
 Item - Operation of the steam plant.
 Units - 1 Lot
 Unit Cost - 21,945 hrs. \$157,000 Materials/SubCosts - \$4,800 Lease
 Unit Cost Adjustment factor - FY 99 budget is used as the base year. FY00 thru 05 are adjusted based on the D&D schedule.
 Revised Unit Cost - same as FY00
 Basis for adjustment -None
 This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

Resources	Cost Element	Skill	Department	Curve	Quantity	Units
	750 STRAIGHT TIME BASE	M010 FOREMEN / TEAM LEADS / GROUP	C221S Steam Plant Operations	Linear	1.609.71	Hours
<i>Factors</i> 1810 hrs						
	750 STRAIGHT TIME BASE	R070 WASTE TREATMENT OPERATOR A	KE10H Indust/Site Svcs Steelworkers	Linear	35.57	Hours
<i>Factors</i> 40 hrs.						
	750 STRAIGHT TIME BASE	R070 WASTE TREATMENT OPERATOR A	KE10H Indust/Site Svcs Steelworkers	Linear	15.581.27	Hours
<i>Factors</i> 17520 hrs.						
	750 STRAIGHT TIME BASE	T050 RADIATION CONTROL TECHNOLOGI	KE10H Indust/Site Svcs Steelworkers	Alternate Linear	35.57	Hours
<i>Factors</i> 40 hr.						
	751 OVERTIME BASE & PRE.	M010 FOREMEN / TEAM LEADS / GROUP	C221S Steam Plant Operations	Linear	112.06	Hours
<i>Factors</i> 126 hrs.						
	751 OVERTIME BASE & PRE.	R070 WASTE TREATMENT OPERATOR A	KE10H Indust/Site Svcs Steelworkers	Linear	2.142.42	Hours
<i>Factors</i> 2409 hrs.						
	754 OTHER PREMIUMS	0000 NONE	C221S Steam Plant Operations	Linear	13.046.65	Dollars
<i>Factors</i> 14670 d						
	A5C SUPPLIES	0000 NONE	C220S Utility Operations	Linear	103.808.50	Dollars
<i>Factors</i> 115000 dollars 1.015 -- FY00 Escalation --						
	A5H SUBCONTRACTED SRVS	0000 NONE	C220S Utility Operations	Linear	38.205.12	Dollars
<i>Factors</i> 42000 dollars 1.02283 -- FY00 Escalation --						

WBS No: 1EBB040301
 Activity ID: 1EBB431020

Rockv Flats Closure Project
Baseline Cost and Basis of Estimate

Project Baseline Devl
 WBS Filter 1EBB
 Activity Filter *

Starts In FY *

A5L	RENTALS	0000	NONE	C232S	NG Vehicle/Equip Maintenance	Linear	4,332.87	Dollars
<i>Factors</i>		4800	dollars	1.015	-- FY00 Escalation --			
							0.88934	[SYS 061400] .88934200 - Svsstem
A5T	TAXES	0000	NONE	C220S	Utility Operations	Linear	3,737.10	Dollars
<i>Factors</i>		4140	dollars	1.015	-- FY00 Escalation --			
							0.88934	[SYS 061400] .88934200 - Svsstem

Line Item 200 - Transition Plan

BOE
 Develop an formal steam system Transition Plan. This plan will address cold shutdown requirements, hazards assessment and mitigation, equipment utility isolations, records disposition, equipment fluid draining, securing the process, etc. This estimate is based on the K-H Estimates to Transition Utilities Template.
 This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

Resources

A5H	SUBCONTRACTED SRVS	0000	NONE	C220S	Utility Operations	Linear	4,075.21	Dollars
<i>Factors</i>		4480	Dollars	1.02283	-- FY00 Escalation --			
							0.88934	[SYS 061400] .88934200 - Svsstem

Line Item SYS - Contingency And Escalation

BOE

Resources

CON	CONTINGENCY	0000	NONE	ZDEPT	No Department	Linear	79,319.30	Dollars
<i>Factors</i>		79319.3	Dollars					
ESC	ESCALATION	0000	NONE	ZDEPT	No Department	Linear	36,081.38	Dollars
<i>Factors</i>		36081.4	Dollars					

Activity ID: 1EBB431030 Description: Operate Steam Plant FY03

Cost Risk 2 Schedule Risk 1

Line Item	Description	Quantity	Units	BOE Type	Labor Hours/Unit	Labor Hours Total	Labor Cost Total	Materials/ Sub Cost	Contingency & Escalation	Total Prime Cost	Burden Cost	Total Cost
100	Operate Steam Plant	1.00	ea	HC	19,517	19,517	443,673	163,130	0	606,803	158,025	764,828
200	Transition Steam Plant	1.00	each	EE	0	0	0	19,357	0	19,357	0	19,357
SYS	Contingency And Escalation	1.00	ea	EE	0	0	0	0	217,413	217,413	0	217,413
Total for Activity 1EBB431030:						19,517	443,673	182,487	217,413	843,574	158,025	1,001,599

Line Item 100 - Operate Steam Plant

BOE
 Historical Data Source - Initial estimate is taken from FY 98Basis Of Estimate Tool(BEST) as modified by the RFCSS proposal.
 Item Desc -This activity provides for the continuous 24 hour operation and surveillance of the Sites Steam Plant.
 Breakdown of Historical Data:
 Item - Operation of the steam plant.
 Units - 1 Lot
 Unit Cost - 21,945 hrs. \$157,000 Materials/SubCosts - \$4,800 Lease
 Unit Cost Adjustment factor - FY 99 budget is used as the base year. FY00 thru 05 are adjusted based on the D&D schedule.
 Revised Unit Cost - same as FY00
 Basis for adjustment -None
 This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

Resources

750	STRAIGHT TIME BASE	M010	FOREMEN / TEAM LEADS / GROUP	C221S	Steam Plant Operations	Linear	1,609.71	Hours
<i>Factors</i>		1810	hrs					
							0.88934	[SYS 061400] .88934200 - Svsstem
750	STRAIGHT TIME BASE	R070	WASTE TREATMENT OPERATOR A	KB30H	B707 Facility Disposition	Linear	15,581.27	Hours
<i>Factors</i>		17520	hrs.					
							0.88934	[SYS 061400] .88934200 - Svsstem
750	STRAIGHT TIME BASE	R070	WASTE TREATMENT OPERATOR A	KE10H	Indust/Site Srvs Steelworkers	Linear	35.57	Hours
<i>Factors</i>		40	hrs.					
							0.88934	[SYS 061400] .88934200 - Svsstem

WBS No: 1EBB040301
 Activity ID: 1EBB431030

Rockv Flats Closure Project
Baseline Cost and Basis of Estimate

Project: Baseline Devl
 WBS Filter: 1EBB
 Activity Filter: *

Starts In FY: *

750	STRAIGHT TIME BASE	T050	RADIATION CONTROL TECHNOLIGI	KE10H	Indust/Site Srvs Steelworkers	Alternate Linear	35.57	Hours
<i>Factors</i> 40 hr.								
						0.88934 [SYS 061400] .88934200 - Svsystem		
751	OVERTIME BASE & PRE.	M010	FOREMEN / TEAM LEADS / GROUP	C221S	Steam Plant Operations	Linear	112.06	Hours
<i>Factors</i> 126 hrs.								
						0.88934 [SYS 061400] .88934200 - Svsystem		
751	OVERTIME BASE & PRE.	R070	WASTE TREATMENT OPERATOR A	KE10H	Indust/Site Srvs Steelworkers	Linear	2,142.42	Hours
<i>Factors</i> 2409 hrs.								
						0.88934 [SYS 061400] .88934200 - Svsystem		
754	OTHER PREMIUMS	0000	NONE	C221S	Steam Plant Operations	Linear	13,046.65	Dollars
<i>Factors</i> 14670 d								
						0.88934 [SYS 061400] .88934200 - Svsystem		
A5C	SUPPLIES	0000	NONE	C220S	Utility Operations	Linear	103,808.50	Dollars
<i>Factors</i> 115000 dollars 1.015 -- FY00 Escalation --								
						0.88934 [SYS 061400] .88934200 - Svsystem		
A5H	SUBCONTRACTED SRVS	0000	NONE	C220S	Utility Operations	Linear	38,205.12	Dollars
<i>Factors</i> 42000 dollars 1.02283 -- FY00 Escalation --								
						0.88934 [SYS 061400] .88934200 - Svsystem		
A5L	RENTALS	0000	NONE	C232S	NG Vehicle/Equip Maintenance	Linear	4,332.87	Dollars
<i>Factors</i> 4800 dollars 1.015 -- FY00 Escalation --								
						0.88934 [SYS 061400] .88934200 - Svsystem		
A5T	TAXES	0000	NONE	C220S	Utility Operations	Linear	3,737.10	Dollars
<i>Factors</i> 4140 dollars 1.015 -- FY00 Escalation --								
						0.88934 [SYS 061400] .88934200 - System		

Line Item 200 - Transition Steam Plant

BOE This line item includes effort to isolate the steam plant, drain internal systems, disposition of facility records and transition report. The estimate is based on the K-H Estimates to Transition Utilities Template.
 This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

Resources

Cost Element	Skill	Department	Curve	Quantity	Units
A5H SUBCONTRACTED SRVS	0000 NONE	C200S Engineering Services	Linear	19,357.26	Dollars
<i>Factors</i> 21280 Dollars 1.02283 -- FY00 Escalation --					
0.88934 [SYS 061400] .88934200 - System					

Line Item SYS - Contingency And Escalation

BOE

Resources

Cost Element	Skill	Department	Curve	Quantity	Units
CON CONTINGENCY	0000 NONE	ZDEPT No Department	Linear	157,277.40	Dollars
<i>Factors</i> 157277 Dollars					
ESC ESCALATION	0000 NONE	ZDEPT No Department	Linear	60,135.48	Dollars
<i>Factors</i> 60135.5 Dollars					

Activity ID: 1EBB431130 Description: Operate Package Boiler FY03

Cost Risk 2 Schedule Risk 1

Line Item	Description	Quantity	Units	BOE Type	Labor Hours/Unit	Labor Hours Total	Labor Cost Total	Materials/ Sub Cost	Contingency & Escalation	Total Prime Cost	Burden Cost	Total Cost
100	Operate Portable Boiler	1.00	each	EE	0	0	0	81,241	0	81,241	0	81,241
SYS	Contingency And Escalation	1.00	ea	EE	0	0	0	0	22,524	22,524	0	22,524
Total for Activity 1EBB431130:						0	0	81,241	22,524	103,765	0	103,765

Line Item 100 - Operate Portable Boiler

BOE Install and test two leased portable boilers for two months.
 This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

Resources

Cost Element	Skill	Department	Curve	Quantity	Units
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WBS No: 1EBB040301
 Activity ID: 1EBB431130

Rockv Flats Closure Project
Baseline Cost and Basis of Estimate

Project: Baseline Devl
 WBS Filter: 1EBB
 Activity Filter: *

Starts In FY *

A5L	RENTALS	0000	NONE	C220S	Utility Operations	Linear	81,241.39	Dollars
<i>Factors</i> 90000 dollars		1.015 -- FY00 Escalation --					0.88934 [SYS 061400] .88934200 - System	

Line Item SYS - Contingency And Escalation

BOE

Resources

Cost Element	Skill	Department	Curve	Quantity	Units
CON CONTINGENCY	0000 NONE	ZDEPT No Department	Linear	16,293.9	Dollars
<i>Factors</i> 16293.9 Dollars					
ESC ESCALATION	0000 NONE	ZDEPT No Department	Linear	6,230.02	Dollars
<i>Factors</i> 6230.02 Dollars					

Activity ID: 1EBB431140 Description: Operate Package Boiler FY04

Cost Risk 2 Schedule Risk 1

Line Item	Description	Quantity	Units	BOE Type	Labor Hours/Unit	Labor Hours Total	Labor Cost Total	Materials/ Sub Cost	Contingency & Escalation	Total Prime Cost	Burden Cost	Total Cost
100	Operate Portable Boilers	1.00	ea	HC	8,641	8,641	188,731	531,483	0	720,214	54,143	774,356
SYS	Contingency And Escalation	1.00	ea	EE	0	0	0	0	110,568	110,568	0	110,568
Total for Activity 1EBB431140:						8,641	188,731	531,483	110,568	830,782	54,143	884,925

Line Item 100 - Operate Portable Boilers

BOE

Historical Data Source - Initial estimate is taken from FY 98Basis Of Estimate Tool(BEST) as modified by the RFCSS proposal.
 Item Desc -This activity provides for the continuous 24 hour operation and surveillance of the Sites Portable Boiler.
 Breakdown of Historical Data:
 Item - Operation of portable boilers.
 Units - 1 Lot
 Unit Cost - 9,716 hrs. \$39,250 Materials/SubCosts - \$4,800 Equip Lease - \$540,000 Boiler Lease
 Unit Cost Adjustment factor - FY 99 budget is used as the base year. FY00 thru 05 are adjusted based on the D&D schedule.
 Revised Unit Cost - same as FY00
 Basis for adjustment -None
 This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

Resources

Cost Element	Skill	Department	Curve	Quantity	Units
750 STRAIGHT TIME BASE	R070 WASTE TREATMENT OPERATOR A	C221S Steam Plant Operations	Linear	7,790.64	Hours
<i>Factors</i> 8760 hrs.			0.88934 [SYS 061400] .88934200 - System		
750 STRAIGHT TIME BASE	R070 WASTE TREATMENT OPERATOR A	KE10H Indust/Site Svcs Steelworkers	Linear	35.57	Hours
<i>Factors</i> 40 hrs.			0.88934 [SYS 061400] .88934200 - System		
750 STRAIGHT TIME BASE	T050 RADIATION CONTROL TECHNOLOGI	KE10H Indust/Site Svcs Steelworkers	Alternate Linear	35.57	Hours
<i>Factors</i> 40 hr.			0.88934 [SYS 061400] .88934200 - System		
751 OVERTIME BASE & PRE.	R070 WASTE TREATMENT OPERATOR A	KE10H Indust/Site Svcs Steelworkers	Linear	779.06	Hours
<i>Factors</i> 876 hrs.			0.88934 [SYS 061400] .88934200 - System		
754 OTHER PREMIUMS	0000 NONE	C221S Steam Plant Operations	Linear	3,263.89	Dollars
<i>Factors</i> 3670 d			0.88934 [SYS 061400] .88934200 - System		
A5C SUPPLIES	0000 NONE	C220S Utility Operations	Linear	25,952.11	Dollars
<i>Factors</i> 28750 dollars		1.015 -- FY00 Escalation --			
A5H SUBCONTRACTED SRVS	0000 NONE	C220S Utility Operations	Linear	9,551.28	Dollars
<i>Factors</i> 10500 dollars		1.02283 -- FY00 Escalation --			
A5L RENTALS	0000 NONE	C220S Utility Operations	Linear	487,448.30	Dollars
<i>Factors</i> 540000 dollars		1.015 -- FY00 Escalation --			
			0.88934 [SYS 061400] .88934200 - System		

WBS No: 1EBB040301
 Activity ID: 1EBB431140

Rockv Flats Closure Project
Baseline Cost and Basis of Estimate

Project: Baseline Devl
 WBS Filter: 1EBB
 Activity Filter: *

Starts In FY *

A5L	RENTALS	0000	NONE	C232S	NG Vehicle/Equip Maintenance	Linear	4.332.87	Dollars	
Factors 4800 dollars 1.015 -- FY00 Escalation --									
							0.88934	[SYS 061400]	88934200 - Svsystem
A5T	TAXES	0000	NONE	C220S	Utility Operations	Linear	934.28	Dollars	
Factors 1035 dollars 1.015 -- FY00 Escalation --									
							0.88934	[SYS 061400]	88934200 - Svsystem

Line Item SYS - Contingency And Escalation

BOE

Resources

Cost Element	Skill	Department	Curve	Quantity	Units
CON	CONTINGENCY	ZDEPT No Department	Linear	36.217.45	Dollars
Factors 36217.5 Dollars					
ESC	ESCALATION	ZDEPT No Department	Linear	74.350.80	Dollars
Factors 74350.8 Dollars					

Activity ID: 1EBB431150

Description: Operate Package Boiler FY05

Cost Risk 2 Schedule Risk 1

Line Item	Description	Quantity	Units	BOE Type	Labor Hours/Unit	Labor Hours Total	Labor Cost Total	Materials/ Sub Cost	Contingency & Escalation	Total Prime Cost	Burden Cost	Total Cost
100	Operate Portable Boiler	1.00	ea	HC	8.641	8.641	188.731	287.759	0	476.490	66.814	543.304
200	Transition Portable Boiler	1.00	each	EE	0	0	0	18.338	0	18.338	0	18.338
SYS	Contingency And Escalation	1.00	ea	EE	0	0	0	0	300.438	300.438	0	300.438
Total for Activity 1EBB431150:						8.641	188.731	306.097	300.438	795.266	66.814	862.080

Line Item 100 - Operate Portable Boiler

BOE

Historical Data Source - Initial estimate is taken from FY 98Basis Of Estimate Tool(BEST) as modified by the RFCSS proposal.
 Item Desc -This activity provides for the continuous 24 hour operation and surveillance of the Sites Portable Boiler.
 Breakdown of Historical Data:
 Item - Operation of the portable boiler.
 Units - 1 Lot
 Unit Cost - 9,716 hrs. \$39,250 Materials/SubCosts - \$4,800 Equip.Lease - \$270,000 Lease of portable boiler
 Unit Cost Adjustment factor - FY 99 budget is used as the base year. FY00 thru 05 are adjusted based on the D&D schedule.
 Revised Unit Cost - same as FY00
 Basis for adjustment -None
 This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

Resources

Cost Element	Skill	Department	Curve	Quantity	Units	
750	STRAIGHT TIME BASE	R070 WASTE TREATMENT OPERATOR A	Linear	7.790.64	Hours	
Factors 8760 hrs.						
0.88934 [SYS 061400] 88934200 - Svsystem						
750	STRAIGHT TIME BASE	R070 WASTE TREATMENT OPERATOR A	Linear	35.57	Hours	
Factors 40 hrs.						
0.88934 [SYS 061400] 88934200 - Svsystem						
750	STRAIGHT TIME BASE	T050 RADIATION CONTROL TECHNOLOGI	Alternate Linear	35.57	Hours	
Factors 40 hr.						
0.88934 [SYS 061400] 88934200 - Svsystem						
751	OVERTIME BASE & PRE.	R070 WASTE TREATMENT OPERATOR A	Linear	779.06	Hours	
Factors 876 hrs.						
0.88934 [SYS 061400] 88934200 - Svsystem						
754	OTHER PREMIUMS	0000 NONE	Linear	3.263.89	Dollars	
Factors 3670 d						
0.88934 [SYS 061400] 88934200 - Svsystem						
A5C	SUPPLIES	0000 NONE	Linear	25.952.11	Dollars	
Factors 28750 dollars 1.015 -- FY00 Escalation --						
0.88934 [SYS 061400] 88934200 - Svsystem						
A5H	SUBCONTRACTED SRVS	0000 NONE	Linear	9.551.28	Dollars	
Factors 10500 dollars 1.02283 -- FY00 Escalation --						
0.88934 [SYS 061400] 88934200 - Svsystem						

WBS No: 1EBB040301
 Activity ID: 1EBB431150

Rockv Flats Closure Project
Baseline Cost and Basis of Estimate

Project: Baseline Devl
 WBS Filter: 1EBB
 Activity Filter: *

Starts In FY *

A5L	RENTALS	0000	NONE	C220S	Utility Operations	Linear	243,724.20	Dollars
<i>Factors</i>		270000	dollars	1.015	-- FY00 Escalation --			
							0.88934	[SYS 061400] .88934200 - Svsystem
A5L	RENTALS	0000	NONE	C232S	NG Vehicle/Equip Maintenance	Linear	4,332.87	Dollars
<i>Factors</i>		4800	dollars	1.015	-- FY00 Escalation --			
							0.88934	[SYS 061400] .88934200 - Svsystem
A5T	TAXES	0000	NONE	C220S	Utility Operations	Linear	934.28	Dollars
<i>Factors</i>		1035	dollars	1.015	-- FY00 Escalation --			
							0.88934	[SYS 061400] .88934200 - Svsystem

Line Item 200 - Transition Portable Boiler

BOE
 This line item includes effort to isolate the steam distribution system and remove portable boilers, drain internal systems, disposition of facility records and transition report.
 The estimate is based on the K-H Estimates to Transition Utilities Template.
 This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

Resources

Cost Element		Skill		Department		Curve	Quantity	Units
A5H	SUBCONTRACTED SRVS	0000	NONE	C220S	Utility Operations	Linear	18,338.46	Dollars
<i>Factors</i>		20160	Dollars	1.02283	-- FY00 Escalation --			
							0.88934	[SYS 061400] .88934200 - Svsystem

Line Item SYS - Contingency And Escalation

BOE

Resources

Cost Element		Skill		Department		Curve	Quantity	Units
CON	CONTINGENCY	0000	NONE	ZDEPT	No Department	Linear	213,431.20	Dollars
<i>Factors</i>		213431	Dollars					
ESC	ESCALATION	0000	NONE	ZDEPT	No Department	Linear	87,007.07	Dollars
<i>Factors</i>		87007.1	Dollars					

Activity ID: 1EBB431200 Description: Steam Plant/Dist Sys Corr Mtce FY00

Cost Risk 2 Schedule Risk 1

Line Item	Description	Quantity	Units	BOE Type	Labor Hours/Unit	Labor Hours Total	Labor Cost Total	Materials/ Sub Cost	Contingency & Escalation	Total Prime Cost	Burden Cost	Total Cost
100	Corrective Maintenance	1.00	each	HC	354	354	9,570	6,777	0	16,347	4,670	21,017
Total for Activity 1EBB431200:						354	9,570	6,777	0	16,347	4,670	21,017

Line Item 100 - Corrective Maintenance

BOE
 Historical Data Source - Initial estimate is taken from FY98 Basis Of Estimate Tool(BEST) as modified by the RFCSS proposal.
 Item Desc -This activity addresses basic corrective maintenance needs at a level necessary and sufficient to maintain safe and compliant operation.
 Breakdown of Historical Data:
 Item - Corrective maintenance
 Units - 1 Lot
 Unit Cost - 1,858 hrs. \$33,880 Materials/SubCosts
 Unit Cost Adjustment factor - FY 99 is used as the base year. FY00 thru 05 are adjusted based on the D&D schedule.
 Revised Unit Cost - same as FY00
 Basis for adjustment -None
 The Engineering, Planning, Health & Safety and Environmental support functions for maintenance efforts are contained in WAD 025.
 This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

Resources

Cost Element		Skill		Department		Curve	Quantity	Units
750	STRAIGHT TIME BASE	C010	CARPENTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	14.31	Hours
<i>Factors</i>		75.2	hrs	0.36164	January 2000 Earned Value Factor			
							0.52618	[SYS 061300] 0.526183 - Target
750	STRAIGHT TIME BASE	C020	ELECTRICIANS	KE10H	Indust/Site Srvs Steelworkers	Linear	24.47	Hours
<i>Factors</i>		128.6	hr	0.36164	January 2000 Earned Value Factor			
							0.52618	[SYS 061300] 0.526183 - Target

WBS No: 1EBB040301
 Activity ID: 1EBB431200

Rockv Flats Closure Project
Baseline Cost and Basis of Estimate

Project Baseline Devl
 WBS Filter 1EBB
 Activity Filter * Starts In FY *

750	STRAIGHT TIME BASE	C020	ELECTRICIANS	KE10H	Indust/Site Srvs Steelworkers	Linear	18.91	Hours	
<i>Factors</i> 99.4 hr. 0.36164 January 2000 Earned Value Factor									
							0.52618	[SYS 061300]	0.526183 - Target
750	STRAIGHT TIME BASE	C070	PAINTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	7.48	Hours	
<i>Factors</i> 39.3 hr 0.36164 January 2000 Earned Value Factor									
							0.52618	[SYS 061300]	0.526183 - Target
750	STRAIGHT TIME BASE	C080	PLUMBERS AND PIPEFITTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	7.48	Hours	
<i>Factors</i> 39.3 h 0.36164 January 2000 Earned Value Factor									
							0.52618	[SYS 061300]	0.526183 - Target
750	STRAIGHT TIME BASE	C080	PLUMBERS AND PIPEFITTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	56.44	Hours	
<i>Factors</i> 296.6 h 0.36164 January 2000 Earned Value Factor									
							0.52618	[SYS 061300]	0.526183 - Target
750	STRAIGHT TIME BASE	C080	PLUMBERS AND PIPEFITTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	60.36	Hours	
<i>Factors</i> 317.2 h 0.36164 January 2000 Earned Value Factor									
							0.52618	[SYS 061300]	0.526183 - Target
750	STRAIGHT TIME BASE	C090	STRUCTURAL AND METAL WORKE	KE10H	Indust/Site Srvs Steelworkers	Linear	12.03	Hours	
<i>Factors</i> 63.22 h 0.36164 January 2000 Earned Value Factor									
							0.52618	[SYS 061300]	0.526183 - Target
751	OVERTIME BASE & PRE.	C010	CARPENTERS	KE10H	Indust/Site Srvs Steelworkers	Back Loaded	11.72	Hours	
<i>Factors</i> 61.6 h 0.36164 January 2000 Earned Value Factor									
							0.52618	[SYS 061300]	0.526183 - Target
751	OVERTIME BASE & PRE.	C020	ELECTRICIANS	KE10H	Indust/Site Srvs Steelworkers	Back Loaded	14.61	Hours	
<i>Factors</i> 76.8 h 0.36164 January 2000 Earned Value Factor									
							0.52618	[SYS 061300]	0.526183 - Target
751	OVERTIME BASE & PRE.	C020	ELECTRICIANS	KE10H	Indust/Site Srvs Steelworkers	Back Loaded	17.05	Hours	
<i>Factors</i> 89.6 h 0.36164 January 2000 Earned Value Factor									
							0.52618	[SYS 061300]	0.526183 - Target
751	OVERTIME BASE & PRE.	C070	PAINTERS	KE10H	Indust/Site Srvs Steelworkers	Back Loaded	6.55	Hours	
<i>Factors</i> 34.4 h 0.36164 January 2000 Earned Value Factor									
							0.52618	[SYS 061300]	0.526183 - Target
751	OVERTIME BASE & PRE.	C080	PLUMBERS AND PIPEFITTERS	KE10H	Indust/Site Srvs Steelworkers	Back Loaded	6.55	Hours	
<i>Factors</i> 34.4 h 0.36164 January 2000 Earned Value Factor									
							0.52618	[SYS 061300]	0.526183 - Target
751	OVERTIME BASE & PRE.	C080	PLUMBERS AND PIPEFITTERS	KE10H	Indust/Site Srvs Steelworkers	Back Loaded	44.60	Hours	
<i>Factors</i> 234.4 h 0.36164 January 2000 Earned Value Factor									
							0.52618	[SYS 061300]	0.526183 - Target
751	OVERTIME BASE & PRE.	C080	PLUMBERS AND PIPEFITTERS	KE10H	Indust/Site Srvs Steelworkers	Back Loaded	47.19	Hours	
<i>Factors</i> 248 h 0.36164 January 2000 Earned Value Factor									
							0.52618	[SYS 061300]	0.526183 - Target
751	OVERTIME BASE & PRE.	C090	STRUCTURAL AND METAL WORKE	KE10H	Indust/Site Srvs Steelworkers	Back Loaded	3.96	Hours	
<i>Factors</i> 20.8 h 0.36164 January 2000 Earned Value Factor									
							0.52618	[SYS 061300]	0.526183 - Target
A5C	SUPPLIES	0000	NONE	C220S	Utility Operations	Linear	6,541.06	Dollars	
<i>Factors</i> 1.015 -- FY00 Escalation -- 33866 d 0.36164 January 2000 Earned Value Factor									
							0.52618	[SYS 061300]	0.526183 - Target
A5T	TAXES	0000	NONE	C220S	Utility Operations	Linear	235.64	Dollars	
<i>Factors</i> 1220 dollars 1.015 -- FY00 Escalation -- 0.36164 January 2000 Earned Value Factor									

Activity ID: 1EBB431210 Description: Steam Plant/Dist Svs Corr Mtce FY01

Cost Risk 2 Schedule Risk 1

Line Item	Description	Quantity	Units	BOE Type	Labor Hours/Unit	Labor Hours Total	Labor Cost Total	Materials/ Sub Cost	Contingency & Escalation	Total Prime Cost	Burden Cost	Total Cost
100	Corrective Maintenance	1.00	each	HC	2.023	2.023	44.720	31.683	0	76.403	21.332	97.735
SYS	Contingency And Escalation	1.00	ea	EE	0	0	0	0	5.181	5.181	0	5.181

WBS No: 1EBB040301
 Activity ID: 1EBB431210

Rockv Flats Closure Project
Baseline Cost and Basis of Estimate

Project Baseline Devl
 WBS Filter 1EBB
 Activity Filter *

Starts In FY *

Total for Activity 1EBB431210:

2.023	44.720	31.683	5.181	81.585	21.332	102.916
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Line Item 100 - Corrective Maintenance

BOE

Historical Data Source - Initial estimate is taken from FY98 Basis Of Estimate Tool(BEST) as modified by the RFCSS proposal.
 Item Desc -This activity addresses basic corrective maintenance needs at a level necessary and sufficient to maintain safe and compliant operation.
 Breakdown of Historical Data:
 Item - Corrective maintenance
 Units - 1 Lot
 Unit Cost - 2,275 hrs. \$33,879 Materials/SubCosts
 Unit Cost Adjustment factor - FY 99 is used as the base year. FY00 thru 05 are adjusted based on the D&D schedule.
 Revised Unit Cost - same as FY00
 Basis for adjustment -None
 The Engineering, Planning, Health & Safety and Environmental support functions for maintenance efforts are contained in WAD 025.
 This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

Resources

Cost Element	Skill	Department	Curve	Quantity	Units
750 STRAIGHT TIME BASE	C010 CARPENTERS	KE10H Indust/Site Svcs Steelworkers	Linear	147.22	Hours
<i>Factors</i> 165.54 hrs					
0.88934 [SYS 061400] .88934200 - Svstem					
750 STRAIGHT TIME BASE	C020 ELECTRICIANS	KE10H Indust/Site Svcs Steelworkers	Linear	177.82	Hours
<i>Factors</i> 199.95 hr.					
0.88934 [SYS 061400] .88934200 - Svstem					
750 STRAIGHT TIME BASE	C020 ELECTRICIANS	KE10H Indust/Site Svcs Steelworkers	Linear	222.49	Hours
<i>Factors</i> 250.17 hr					
0.88934 [SYS 061400] .88934200 - Svstem					
750 STRAIGHT TIME BASE	C070 PAINTERS	KE10H Indust/Site Svcs Steelworkers	Linear	88.91	Hours
<i>Factors</i> 99.975 hr					
0.88934 [SYS 061400] .88934200 - Svstem					
750 STRAIGHT TIME BASE	C080 PLUMBERS AND PIPEFITTERS	KE10H Indust/Site Svcs Steelworkers	Linear	88.91	Hours
<i>Factors</i> 99.975 h					
0.88934 [SYS 061400] .88934200 - Svstem					
750 STRAIGHT TIME BASE	C080 PLUMBERS AND PIPEFITTERS	KE10H Indust/Site Svcs Steelworkers	Linear	555.80	Hours
<i>Factors</i> 624.96 h					
0.88934 [SYS 061400] .88934200 - Svstem					
750 STRAIGHT TIME BASE	C080 PLUMBERS AND PIPEFITTERS	KE10H Indust/Site Svcs Steelworkers	Linear	601.29	Hours
<i>Factors</i> 676.11 h					
0.88934 [SYS 061400] .88934200 - Svstem					
750 STRAIGHT TIME BASE	C090 STRUCTURAL AND METAL WORKE	KE10H Indust/Site Svcs Steelworkers	Linear	44.66	Hours
<i>Factors</i> 50.22 h					
0.88934 [SYS 061400] .88934200 - Svstem					
751 OVERTIME BASE & PRE.	C010 CARPENTERS	KE10H Indust/Site Svcs Steelworkers	Linear	7.44	Hours
<i>Factors</i> 8.37 h					
0.88934 [SYS 061400] .88934200 - Svstem					
751 OVERTIME BASE & PRE.	C020 ELECTRICIANS	KE10H Indust/Site Svcs Steelworkers	Linear	9.10	Hours
<i>Factors</i> 10.23 h					
0.88934 [SYS 061400] .88934200 - Svstem					
751 OVERTIME BASE & PRE.	C020 ELECTRICIANS	KE10H Indust/Site Svcs Steelworkers	Linear	10.75	Hours
<i>Factors</i> 12.09 h					
0.88934 [SYS 061400] .88934200 - Svstem					
751 OVERTIME BASE & PRE.	C070 PAINTERS	KE10H Indust/Site Svcs Steelworkers	Linear	4.14	Hours
<i>Factors</i> 4.65 h					
0.88934 [SYS 061400] .88934200 - Svstem					
751 OVERTIME BASE & PRE.	C080 PLUMBERS AND PIPEFITTERS	KE10H Indust/Site Svcs Steelworkers	Linear	4.14	Hours
<i>Factors</i> 4.65 h					
0.88934 [SYS 061400] .88934200 - Svstem					

WBS No: 1EBB040301
 Activity ID: 1EBB431210

Rockv Flats Closure Project
Baseline Cost and Basis of Estimate

Project: Baseline Devl
 WBS Filter: 1EBB
 Activity Filter: *

Starts In FY *

751	OVERTIME BASE & PRE.	C080	PLUMBERS AND PIPEFITTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	28.12	Hours
							0.88934	[SYS 061400] .88934200 - System
<i>Factors</i> 31.62 h								
751	OVERTIME BASE & PRE.	C080	PLUMBERS AND PIPEFITTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	29.78	Hours
<i>Factors</i> 33.48 h								
751	OVERTIME BASE & PRE.	C090	STRUCTURAL AND METAL WORKE	KE10H	Indust/Site Srvs Steelworkers	Linear	2.48	Hours
<i>Factors</i> 2.79 h								
A5C	SUPPLIES	0000	NONE	C220S	Utility Operations	Linear	30.581.57	Dollars
							0.88934	[SYS 061400] .88934200 - System
<i>Factors</i> 33878.6 d 1.015 -- FY00 Escalation --								
A5T	TAXES	0000	NONE	C220S	Utility Operations	Linear	1.101.27	Dollars
							0.88934	[SYS 061400] .88934200 - System
<i>Factors</i> 1220 dollars 1.015 -- FY00 Escalation --								
							0.88934	[SYS 061400] .88934200 - System

Line Item SYS - Contingency And Escalation

BOE

Resources

Cost Element	Skill	Department	Curve	Quantity	Units		
CON	CONTINGENCY	0000 NONE	ZDEPT	No Department	Linear	3.126.34	Dollars
<i>Factors</i> 3126.34 Dollars							
ESC	ESCALATION	0000 NONE	ZDEPT	No Department	Linear	2.055.15	Dollars
<i>Factors</i> 2055.15 Dollars							

Activity ID: 1EBB431220 Description: Steam Plant/Dist Sys Corr Mtce FY02

Cost Risk 2 Schedule Risk 1

Line Item	Description	Quantity	Units	BOE Type	Labor Hours/Unit	Labor Hours Total	Labor Cost Total	Materials/ Sub Cost	Contingency & Escalation	Total Prime Cost	Burden Cost	Total Cost
100	Corrective Maintenance	1.00	each	HC	2.023	2.023	44.720	31.683	0	76.403	15.786	92.190
SYS	Contingency And Escalation	1.00	ea	EE	0	0	0	0	13.779	13.779	0	13.779
Total for Activity 1EBB431220:						2.023	44.720	31.683	13.779	90.182	15.786	105.968

Line Item 100 - Corrective Maintenance

BOE

Historical Data Source - Initial estimate is taken from FY98 Basis Of Estimate Tool(BEST) as modified by the RFCSS proposal.
 Item Desc -This activity addresses basic corrective maintenance needs at a level necessary and sufficient to maintain safe and compliant operation.
 Breakdown of Historical Data:
 Item - Corrective maintenance
 Units - 1 Lot
 Unit Cost - 2,275 hrs. \$33,879 Materials/SubCosts
 Unit Cost Adjustment factor - FY 99 is used as the base year. FY00 thru 05 are adjusted based on the D&D schedule.
 Revised Unit Cost - same as FY00
 Basis for adjustment -None
 The Engineering, Planning, Health & Safety and Environmental support functions for maintenance efforts are contained in WAD 025.
 This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

Resources

Cost Element	Skill	Department	Curve	Quantity	Units			
750	STRAIGHT TIME BASE	C010 CARPENTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	147.22	Hours	
<i>Factors</i> 165.54 hrs								
0.88934 [SYS 061400] .88934200 - System								
750	STRAIGHT TIME BASE	C020 ELECTRICIANS	KE10H	Indust/Site Srvs Steelworkers	Linear	222.49	Hours	
<i>Factors</i> 250.17 hr								
0.88934 [SYS 061400] .88934200 - System								
750	STRAIGHT TIME BASE	C020 ELECTRICIANS	KE10H	Indust/Site Srvs Steelworkers	Linear	177.82	Hours	
<i>Factors</i> 199.95 hr.								
0.88934 [SYS 061400] .88934200 - System								

WBS No: 1EBB040301
 Activity ID: 1EBB431220

Rockv Flats Closure Project
Baseline Cost and Basis of Estimate

Project: Baseline Devl
 WBS Filter: 1EBB
 Activity Filter: *

Starts In FY *

750	STRAIGHT TIME BASE	C070	PAINTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	88.91	Hours
<i>Factors</i> 99.975 hr								
						0.88934	[SYS 061400]	.88934200 - Svsystem
750	STRAIGHT TIME BASE	C080	PLUMBERS AND PIPEFITTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	88.91	Hours
<i>Factors</i> 99.975 h								
						0.88934	[SYS 061400]	.88934200 - Svsystem
750	STRAIGHT TIME BASE	C080	PLUMBERS AND PIPEFITTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	555.80	Hours
<i>Factors</i> 624.96 h								
						0.88934	[SYS 061400]	.88934200 - Svsystem
750	STRAIGHT TIME BASE	C080	PLUMBERS AND PIPEFITTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	601.29	Hours
<i>Factors</i> 676.11 h								
						0.88934	[SYS 061400]	.88934200 - Svsystem
750	STRAIGHT TIME BASE	C090	STRUCTURAL AND METAL WORKE	KE10H	Indust/Site Srvs Steelworkers	Linear	44.66	Hours
<i>Factors</i> 50.22 h								
						0.88934	[SYS 061400]	.88934200 - Svsystem
751	OVERTIME BASE & PRE.	C010	CARPENTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	7.44	Hours
<i>Factors</i> 8.37 h								
						0.88934	[SYS 061400]	.88934200 - Svsystem
751	OVERTIME BASE & PRE.	C020	ELECTRICIANS	KE10H	Indust/Site Srvs Steelworkers	Linear	9.10	Hours
<i>Factors</i> 10.23 h								
						0.88934	[SYS 061400]	.88934200 - Svsystem
751	OVERTIME BASE & PRE.	C020	ELECTRICIANS	KE10H	Indust/Site Srvs Steelworkers	Linear	10.75	Hours
<i>Factors</i> 12.09 h								
						0.88934	[SYS 061400]	.88934200 - Svsystem
751	OVERTIME BASE & PRE.	C070	PAINTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	4.14	Hours
<i>Factors</i> 4.65 h								
						0.88934	[SYS 061400]	.88934200 - Svsystem
751	OVERTIME BASE & PRE.	C080	PLUMBERS AND PIPEFITTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	4.14	Hours
<i>Factors</i> 4.65 h								
						0.88934	[SYS 061400]	.88934200 - Svsystem
751	OVERTIME BASE & PRE.	C080	PLUMBERS AND PIPEFITTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	28.12	Hours
<i>Factors</i> 31.62 h								
						0.88934	[SYS 061400]	.88934200 - Svsystem
751	OVERTIME BASE & PRE.	C080	PLUMBERS AND PIPEFITTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	29.78	Hours
<i>Factors</i> 33.48 h								
						0.88934	[SYS 061400]	.88934200 - Svsystem
751	OVERTIME BASE & PRE.	C090	STRUCTURAL AND METAL WORKE	KE10H	Indust/Site Srvs Steelworkers	Linear	2.48	Hours
<i>Factors</i> 2.79 h								
						0.88934	[SYS 061400]	.88934200 - Svsystem
A5C	SUPPLIES	0000	NONE	C220S	Utility Operations	Linear	30.581.57	Dollars
<i>Factors</i> 33878.6 d 1.015 -- FY00 Escalation --								
						0.88934	[SYS 061400]	.88934200 - Svsystem
A5T	TAXES	0000	NONE	C220S	Utility Operations	Linear	1.101.27	Dollars
<i>Factors</i> 1220 dollars 1.015 -- FY00 Escalation --								
						0.88934	[SYS 061400]	.88934200 - Svsystem

Line Item SYS - Contingency And Escalation

BOE

Resources

Cost Element		Skill		Department		Curve	Quantity	Units
CON	CONTINGENCY	0000	NONE	ZDEPT	No Department	Linear	9.470.80	Dollars
<i>Factors</i> 9470.8 Dollars								
ESC	ESCALATION	0000	NONE	ZDEPT	No Department	Linear	4.308.15	Dollars
<i>Factors</i> 4308.15 Dollars								

Activity ID: 1EBB431230 Description: Package Boiler/Dist Sys Corr Mtce FY03

Cost Risk 2 Schedule Risk 1

WBS No: 1EBB040301
 Activity ID: 1EBB431230

Rockv Flats Closure Project
Baseline Cost and Basis of Estimate

Project Baseline Devl
 WBS Filter 1EBB
 Activity Filter *

Starts In FY *

Line Item	Description	Quantity	Units	BOE Type	Labor Hours/Unit	Labor Hours Total	Labor Cost Total	Materials/ Sub Cost	Contingency & Escalation	Total Prime Cost	Burden Cost	Total Cost
100	Corrective Maintenance	1.00	each	HC	2.023	2.023	44.720	31.683	0	76.403	15.473	91.876
SYS	Contingency And Escalation	1.00	lea	EE	0	0	0	0	25.472	25.472	0	25.472
Total for Activity 1EBB431230:						2.023	44.720	31.683	25.472	101.876	15.473	117.349

Line Item 100 - Corrective Maintenance

BOE

Historical Data Source - Initial estimate is taken from FY98 Basis Of Estimate Tool(BEST) as modified by the RFCSS proposal.
 Item Desc -This activity addresses basic corrective maintenance needs at a level necessary and sufficient to maintain safe and compliant operation.
 Breakdown of Historical Data:
 Item - Corrective maintenance
 Units - 1 Lot
 Unit Cost - 2,275 hrs. \$33,879 Materials/SubCosts
 Unit Cost Adjustment factor - FY 99 is used as the base year. FY00 thru 05 are adjusted based on the D&D schedule.
 Revised Unit Cost - same as FY00
 Basis for adjustment -None
 The Engineering, Planning, Health & Safety and Environmental support functions for maintenance efforts are contained in WAD 025.
 This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

Resources

Cost Element	Skill	Department	Curve	Quantity	Units
750 STRAIGHT TIME BASE	C010 CARPENTERS	KE10H Indust/Site Srvs Steelworkers	Linear	147.22	Hours
Factors 165.54 hrs					
0.88934 [SYS 061400] .88934200 - System					
750 STRAIGHT TIME BASE	C020 ELECTRICIANS	KE10H Indust/Site Srvs Steelworkers	Linear	177.82	Hours
Factors 199.95 hr.					
0.88934 [SYS 061400] .88934200 - System					
750 STRAIGHT TIME BASE	C020 ELECTRICIANS	KE10H Indust/Site Srvs Steelworkers	Linear	222.49	Hours
Factors 250.17 hr					
0.88934 [SYS 061400] .88934200 - System					
750 STRAIGHT TIME BASE	C070 PAINTERS	KE10H Indust/Site Srvs Steelworkers	Linear	88.91	Hours
Factors 99.975 hr					
0.88934 [SYS 061400] .88934200 - System					
750 STRAIGHT TIME BASE	C080 PLUMBERS AND PIPEFITTERS	KE10H Indust/Site Srvs Steelworkers	Linear	88.91	Hours
Factors 99.975 h					
0.88934 [SYS 061400] .88934200 - System					
750 STRAIGHT TIME BASE	C080 PLUMBERS AND PIPEFITTERS	KE10H Indust/Site Srvs Steelworkers	Linear	555.80	Hours
Factors 624.96 h					
0.88934 [SYS 061400] .88934200 - System					
750 STRAIGHT TIME BASE	C080 PLUMBERS AND PIPEFITTERS	KE10H Indust/Site Srvs Steelworkers	Linear	601.29	Hours
Factors 676.11 h					
0.88934 [SYS 061400] .88934200 - System					
750 STRAIGHT TIME BASE	C090 STRUCTURAL AND METAL WORKE	KE10H Indust/Site Srvs Steelworkers	Linear	44.66	Hours
Factors 50.22 h					
0.88934 [SYS 061400] .88934200 - System					
751 OVERTIME BASE & PRE.	C010 CARPENTERS	KE10H Indust/Site Srvs Steelworkers	Linear	7.44	Hours
Factors 8.37 h					
0.88934 [SYS 061400] .88934200 - System					
751 OVERTIME BASE & PRE.	C020 ELECTRICIANS	KE10H Indust/Site Srvs Steelworkers	Linear	9.10	Hours
Factors 10.23 h					
0.88934 [SYS 061400] .88934200 - System					
751 OVERTIME BASE & PRE.	C020 ELECTRICIANS	KE10H Indust/Site Srvs Steelworkers	Linear	10.75	Hours
Factors 12.09 h					
0.88934 [SYS 061400] .88934200 - System					

WBS No: 1EBB040301
 Activity ID: 1EBB431230

Rockv Flats Closure Project
Baseline Cost and Basis of Estimate

Project: Baseline Devl
 WBS Filter: 1EBB
 Activity Filter: *

Starts In FY: *

751	OVERTIME BASE & PRE.	C070	PAINTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	4.14	Hours
							0.88934	[SYS 061400] .88934200 - Svsstem
<i>Factors</i> 4.65 h								
751	OVERTIME BASE & PRE.	C080	PLUMBERS AND PIPEFITTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	4.14	Hours
							0.88934	[SYS 061400] .88934200 - Svsstem
<i>Factors</i> 4.65 h								
751	OVERTIME BASE & PRE.	C080	PLUMBERS AND PIPEFITTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	28.12	Hours
							0.88934	[SYS 061400] .88934200 - Svsstem
<i>Factors</i> 31.62 h								
751	OVERTIME BASE & PRE.	C080	PLUMBERS AND PIPEFITTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	29.78	Hours
							0.88934	[SYS 061400] .88934200 - Svsstem
<i>Factors</i> 33.48 h								
751	OVERTIME BASE & PRE.	C090	STRUCTURAL AND METAL WORKE	KE10H	Indust/Site Srvs Steelworkers	Linear	2.48	Hours
							0.88934	[SYS 061400] .88934200 - Svsstem
<i>Factors</i> 2.79 h								
A5C	SUPPLIES	0000	NONE	C220S	Utility Operations	Linear	30.581.57	Dollars
							0.88934	[SYS 061400] .88934200 - Svsstem
<i>Factors</i> 33878.6 d 1.015 -- FY00 Escalation --								
A5T	TAXES	0000	NONE	C220S	Utility Operations	Linear	1.101.27	Dollars
							0.88934	[SYS 061400] .88934200 - Svsstem
<i>Factors</i> 1220 dollars 1.015 -- FY00 Escalation --								
							0.88934	[SYS 061400] .88934200 - Svsstem

Line Item SYS - Contingency And Escalation

BOE

Resources	<i>Cost Element</i>	<i>Skill</i>	<i>Department</i>	<i>Curve</i>	<i>Quantity</i>	<i>Units</i>
CON	CONTINGENCY	0000	NONE	ZDEPT	No Department	Linear 18.426.89 Dollars
<i>Factors</i> 18426.9 Dollars						
ESC	ESCALATION	0000	NONE	ZDEPT	No Department	Linear 7.045.57 Dollars
<i>Factors</i> 7045.57 Dollars						

Activity ID: 1EBB431240 Description: Package Boiler/Dist Svs Corr Mtce FY04

Cost Risk 2 Schedule Risk 1

Line Item	Description	Quantity	Units	BOE Type	Labor Hours/Unit	Labor Hours Total	Labor Cost Total	Materials/ Sub Cost	Contingency & Escalation	Total Prime Cost	Burden Cost	Total Cost
100	Corrective Maintenance	1.00	each	HC	509	509	11.276	7.921	0	19.197	3.180	22.377
SYS	Contingency And Escalation	1.00	ea	EE	0	0	0	0	3.195	3.195	0	3.195
Total for Activity 1EBB431240:						509	11.276	7.921	3.195	22.392	3.180	25.572

Line Item 100 - Corrective Maintenance

BOE

Historical Data Source - Initial estimate is taken from FY98 Basis Of Estimate Tool (BEST) as modified by the RFCSS proposal.
 Item Desc -This activity addresses basic corrective maintenance needs at a level necessary and sufficient to maintain safe and compliant operation.
 Breakdown of Historical Data:
 Item - Corrective maintenance
 Units - 1 Lot
 Unit Cost - 572 hrs. \$8,470 Materials/SubCosts
 Unit Cost Adjustment factor - FY 99 is used as the base year. FY00 thru 05 are adjusted based on the D&D schedule.
 Revised Unit Cost - same as FY00
 Basis for adjustment -None
 The Engineering, Planning, Health & Safety and Environmental support functions for maintenance efforts are contained in WAD 025.
 This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

Resources	<i>Cost Element</i>	<i>Skill</i>	<i>Department</i>	<i>Curve</i>	<i>Quantity</i>	<i>Units</i>
750	STRAIGHT TIME BASE	C010	CARPENTERS	KE10H	Indust/Site Srvs Steelworkers	Linear 37.35 Hours
<i>Factors</i> 42 hrs						
0.88934 [SYS 061400] .88934200 - Svsstem						

WBS No: 1EBB040301
 Activity ID: 1EBB431240

Rockv Flats Closure Project
Baseline Cost and Basis of Estimate

Project: Baseline Devl
 WBS Filter: 1EBB
 Activity Filter: *

Starts In FY *

750	STRAIGHT TIME BASE	C020	ELECTRICIANS	KE10H	Indust/Site Srvs Steelworkers	Linear	44.47	Hours
<i>Factors</i> 50 hr.								
						0.88934	[SYS 061400]	.88934200 - Svstem
750	STRAIGHT TIME BASE	C020	ELECTRICIANS	KE10H	Indust/Site Srvs Steelworkers	Linear	56.03	Hours
<i>Factors</i> 63 hr								
						0.88934	[SYS 061400]	.88934200 - Svstem
750	STRAIGHT TIME BASE	C070	PAINTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	22.23	Hours
<i>Factors</i> 25 hr								
						0.88934	[SYS 061400]	.88934200 - Svstem
750	STRAIGHT TIME BASE	C080	PLUMBERS AND PIPEFITTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	22.23	Hours
<i>Factors</i> 25 h								
						0.88934	[SYS 061400]	.88934200 - Svstem
750	STRAIGHT TIME BASE	C080	PLUMBERS AND PIPEFITTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	138.74	Hours
<i>Factors</i> 156 h								
						0.88934	[SYS 061400]	.88934200 - Svstem
750	STRAIGHT TIME BASE	C080	PLUMBERS AND PIPEFITTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	150.30	Hours
<i>Factors</i> 169 h								
						0.88934	[SYS 061400]	.88934200 - Svstem
750	STRAIGHT TIME BASE	C090	STRUCTURAL AND METAL WORKE	KE10H	Indust/Site Srvs Steelworkers	Linear	10.67	Hours
<i>Factors</i> 12 h								
						0.88934	[SYS 061400]	.88934200 - Svstem
751	OVERTIME BASE & PRE.	C010	CARPENTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	1.78	Hours
<i>Factors</i> 2 h								
						0.88934	[SYS 061400]	.88934200 - Svstem
751	OVERTIME BASE & PRE.	C020	ELECTRICIANS	KE10H	Indust/Site Srvs Steelworkers	Linear	2.67	Hours
<i>Factors</i> 3 h								
						0.88934	[SYS 061400]	.88934200 - Svstem
751	OVERTIME BASE & PRE.	C020	ELECTRICIANS	KE10H	Indust/Site Srvs Steelworkers	Linear	2.67	Hours
<i>Factors</i> 3 h								
						0.88934	[SYS 061400]	.88934200 - Svstem
751	OVERTIME BASE & PRE.	C070	PAINTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	1.78	Hours
<i>Factors</i> 2 h								
						0.88934	[SYS 061400]	.88934200 - Svstem
751	OVERTIME BASE & PRE.	C080	PLUMBERS AND PIPEFITTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	1.78	Hours
<i>Factors</i> 2 h								
						0.88934	[SYS 061400]	.88934200 - Svstem
751	OVERTIME BASE & PRE.	C080	PLUMBERS AND PIPEFITTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	7.11	Hours
<i>Factors</i> 8 h								
						0.88934	[SYS 061400]	.88934200 - Svstem
751	OVERTIME BASE & PRE.	C080	PLUMBERS AND PIPEFITTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	8.00	Hours
<i>Factors</i> 9 h								
						0.88934	[SYS 061400]	.88934200 - Svstem
751	OVERTIME BASE & PRE.	C090	STRUCTURAL AND METAL WORKE	KE10H	Indust/Site Srvs Steelworkers	Linear	0.89	Hours
<i>Factors</i> 1 h								
						0.88934	[SYS 061400]	.88934200 - Svstem
A5C	SUPPLIES	0000	NONE	C220S	Utility Operations	Linear	7,645.72	Dollars
<i>Factors</i> 8470 d 1.015 -- FY00 Escalation --								
						0.88934	[SYS 061400]	.88934200 - Svstem
A5T	TAXES	0000	NONE	C220S	Utility Operations	Linear	275.32	Dollars
<i>Factors</i> 305 dollars 1.015 -- FY00 Escalation --								
						0.88934	[SYS 061400]	.88934200 - System

Line Item SYS - Contingency And Escalation
 BOE

WBS No: 1EBB040301
 Activity ID: 1EBB431240

Rockv Flats Closure Project
Baseline Cost and Basis of Estimate

Project: Baseline Devl
 WBS Filter: 1EBB
 Activity Filter: *

Starts In FY *

Resources	Cost Element	Skill	Department	Curve	Quantity	Units
	CON CONTINGENCY	0000 NONE	ZDEPT No Department	Linear	1,046.58	Dollars
<i>Factors</i> 1046.58 Dollars						
	ESC ESCALATION	0000 NONE	ZDEPT No Department	Linear	2,148.52	Dollars
<i>Factors</i> 2148.52 Dollars						

Activity ID: 1EBB431300 Description: Steam Plant/Dist Sys Prevent Mtce FY00

Cost Risk 2 Schedule Risk 1

Line Item	Description	Quantity	Units	BOE Type	Labor Hours/Unit	Labor Hours Total	Labor Cost Total	Materials/ Sub Cost	Contingency & Escalation	Total Prime Cost	Burden Cost	Total Cost
100	Preventive Maintenance	1.00	each	HC	976	976	21,277	1,271	0	22,548	10,383	32,931
Total for Activity 1EBB431300:						976	21,277	1,271	0	22,548	10,383	32,931

Line Item 100 - Preventive Maintenance

BOE
 Historical Data Source - Initial estimate is taken from FY98 Basis Of Estimate Tool(BEST) as modified by the RFCSS proposal.
 Item Desc -This activity addresses basic routine maintenance needs at a level necessary and sufficient to maintain safe and compliant operation.
 Breakdown of Historical Data:
 Item -Routine maintenance
 Units - 1 Lot
 Unit Cost - 5,129 hrs. \$6,359 Materials/SubCosts
 Unit Cost Adjustment factor - FY 99 budget is used as the base year. FY00 thru 05 are adjusted based on the D&D schedule.
 Revised Unit Cost - same as FY00
 Basis for adjustment -None
 The Engineering, Planning, Health & Safety and Environmental support functions for maintenance efforts are contained in WAD 025.
 This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

Resources	Cost Element	Skill	Department	Curve	Quantity	Units
	750 STRAIGHT TIME BASE	C080 PLUMBERS AND PIPEFITTERS	KE10H Indust/Site Srvs Steelworkers	Linear	976.01	Hours
<i>Factors</i> 5129.04 hrs. 0.36164 May 2000 Earned Value Factor						
	A5C SUPPLIES	0000 NONE	C220S Utility Operations	Linear	1,228.13	Dollars
<i>Factors</i> 6358.59 dollars 1.015 -- FY00 Escalation -- 0.36164 May 2000 Earned Value Factor						
	A5T TAXES	0000 NONE	C220S Utility Operations	Linear	42.88	Dollars
<i>Factors</i> 222 Dollars 1.015 -- FY00 Escalation -- 0.36164 May 2000 Earned Value Factor						

0.52618 [SYS 061300] 0.526183 - Target
 0.52618 [SYS 061300] 0.526183 - Target

Activity ID: 1EBB431310 Description: Steam Plant/Dist Sys Prevent Mtce FY01

Cost Risk 2 Schedule Risk 1

Line Item	Description	Quantity	Units	BOE Type	Labor Hours/Unit	Labor Hours Total	Labor Cost Total	Materials/ Sub Cost	Contingency & Escalation	Total Prime Cost	Burden Cost	Total Cost
100	Preventive Maintenance	1.00	each	HC	4,561	4,561	99,440	5,940	0	105,380	47,433	152,813
SYS	Contingency And Escalation	1.00	ea	EE	0	0	0	0	8,101	8,101	0	8,101
Total for Activity 1EBB431310:						4,561	99,440	5,940	8,101	113,482	47,433	160,915

Line Item 100 - Preventive Maintenance

BOE
 Historical Data Source - Initial estimate is taken from FY98 Basis Of Estimate Tool(BEST) as modified by the RFCSS proposal.
 Item Desc -This activity addresses basic routine maintenance needs at a level necessary and sufficient to maintain safe and compliant operation.
 Breakdown of Historical Data:
 Item -Routine maintenance
 Units - 1 Lot
 Unit Cost - 5,129 hrs. \$6,359 Materials/SubCosts
 Unit Cost Adjustment factor - FY 99 budget is used as the base year. FY00 thru 05 are adjusted based on the D&D schedule.
 Revised Unit Cost - same as FY00
 Basis for adjustment -None
 The Engineering, Planning, Health & Safety and Environmental support functions for maintenance efforts are contained in WAD 025.
 This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

Resources	Cost Element	Skill	Department	Curve	Quantity	Units
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WBS No: 1EBB040301
 Activity ID: 1EBB431310

Rockv Flats Closure Project
Baseline Cost and Basis of Estimate

Project: Baseline Devl
 WBS Filter: 1EBB
 Activity Filter: *

Starts In FY: *

750	STRAIGHT TIME BASE	C080	PLUMBERS AND PIPEFITTERS	KE10H	Indust/Site Svcs Steelworkers	Linear	4,561.47	Hours
<i>Factors</i> 5129.04 hrs.								
0.88934 [SYS 061400] .88934200 - Svsstem								
A5C	SUPPLIES	0000	NONE	C220S	Utility Operations	Linear	5,739.79	Dollars
<i>Factors</i> 6358.59 dollars 1.015 -- FY00 Escalation --								
0.88934 [SYS 061400] .88934200 - Svsstem								
A5T	TAXES	0000	NONE	C220S	Utility Operations	Linear	200.40	Dollars
<i>Factors</i> 222 dollars 1.015 -- FY00 Escalation --								
0.88934 [SYS 061400] .88934200 - Svsstem								

Line Item SYS - Contingency And Escalation

BOE

Resources	<i>Cost Element</i>		<i>Skill</i>		<i>Department</i>		<i>Curve</i>	<i>Quantity</i>	<i>Units</i>
	CON	CONTINGENCY	0000	NONE	ZDEPT	No Department	Linear	4,888.18	Dollars
<i>Factors</i> 4888.18 Dollars									
ESC		ESCALATION	0000	NONE	ZDEPT	No Department	Linear	3,213.32	Dollars
<i>Factors</i> 3213.32 Dollars									

Activity ID: 1EBB431320 Description: Steam Plant/Dist Sys Prevent Mtce FY02

Cost Risk 2 Schedule Risk 1

Line Item	Description	Quantity	Units	BOE Type	Labor Hours/Unit	Labor Hours Total	Labor Cost Total	Materials/ Sub Cost	Contingency & Escalation	Total Prime Cost	Burden Cost	Total Cost
100	Preventive Maintenance	1.00	each	HC	4,561	4,561	99,440	5,940	0	105,380	35,102	140,483
SYS	Contingency And Escalation	1.00	ea	EF	0	0	0	0	20,997	20,997	0	20,997
Total for Activity 1EBB431320:						4,561	99,440	5,940	20,997	126,377	35,102	161,480

Line Item 100 - Preventive Maintenance

BOE

Historical Data Source - Initial estimate is taken from FY98 Basis Of Estimate Tool(BEST) as modified by the RFCSS proposal.
 Item Desc -This activity addresses basic routine maintenance needs at a level necessary and sufficient to maintain safe and compliant operation.
 Breakdown of Historical Data:
 Item -Routine maintenance
 Units - 1 Lot
 Unit Cost - 5,129 hrs. \$6,358 Materials/SubCosts
 Unit Cost Adjustment factor - FY 99 budget is used as the base year. FY00 thru 05 are adjusted based on the D&D schedule.
 Revised Unit Cost - same as FY00
 Basis for adjustment -None
 The Engineering, Planning, Health & Safety and Environmental support functions for maintenance efforts are contained in WAD 025.
 This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

Resources	<i>Cost Element</i>		<i>Skill</i>		<i>Department</i>		<i>Curve</i>	<i>Quantity</i>	<i>Units</i>
	750	STRAIGHT TIME BASE	C080	PLUMBERS AND PIPEFITTERS	KE10H	Indust/Site Svcs Steelworkers	Linear	4,561.47	Hours
<i>Factors</i> 5129.04 hrs.									
0.88934 [SYS 061400] .88934200 - Svsstem									
A5C	SUPPLIES	0000	NONE	C220S	Utility Operations	Linear	5,739.79	Dollars	
<i>Factors</i> 6358.59 dollars 1.015 -- FY00 Escalation --									
0.88934 [SYS 061400] .88934200 - Svsstem									
A5T	TAXES	0000	NONE	C220S	Utility Operations	Linear	200.40	Dollars	
<i>Factors</i> 222 Dollars 1.015 -- FY00 Escalation --									
0.88934 [SYS 061400] .88934200 - Svsstem									

Line Item SYS - Contingency And Escalation

BOE

Resources	<i>Cost Element</i>		<i>Skill</i>		<i>Department</i>		<i>Curve</i>	<i>Quantity</i>	<i>Units</i>
	CON	CONTINGENCY	0000	NONE	ZDEPT	No Department	Linear	14,432.03	Dollars
<i>Factors</i> 14432.0 Dollars									
ESC		ESCALATION	0000	NONE	ZDEPT	No Department	Linear	6,564.95	Dollars
<i>Factors</i> 6564.95 Dollars									

Activity ID: 1EBB431330 Description: Package Boiler/Dist Sys Prevent Mtce FY03

Cost Risk 2 Schedule Risk 1

WBS No: 1EBB040301
 Activity ID: 1EBB431330

Rockv Flats Closure Project
Baseline Cost and Basis of Estimate

Project Baseline Devl
 WBS Filter 1EBB
 Activity Filter * Starts In FY *

Line Item	Description	Quantity	Units	BOE Type	Labor Hours/Unit	Labor Hours Total	Labor Cost Total	Materials/ Sub Cost	Contingency & Escalation	Total Prime Cost	Burden Cost	Total Cost
100	Preventive Maintenance	1.00	each	HC	4.561	4.561	99,440	5,940	0	105,380	34,406	139,787
SYS	Contingency And Escalation	1.00	ea	EE	0	0	0	0	38,755	38,755	0	38,755
Total for Activity 1EBB431330:						4.561	99,440	5,940	38,755	144,136	34,406	178,542

Line Item 100 - Preventive Maintenance

BOE
 Historical Data Source - Initial estimate is taken from FY98 Basis Of Estimate Tool(BEST) as modified by the RFCSS proposal.
 Item Desc -This activity addresses basic routine maintenance needs at a level necessary and sufficient to maintain safe and compliant operation.
 Breakdown of Historical Data:
 Item -Routine maintenance
 Units - 1 Lot
 Unit Cost - 5,129 hrs. \$6,358 Materials/SubCosts
 Unit Cost Adjustment factor - FY 99 budget is used as the base year. FY00 thru 05 are adjusted based on the D&D schedule.
 Revised Unit Cost - same as FY00
 Basis for adjustment -None
 The Engineering, Planning, Health & Safety and Environmental support functions for maintenance efforts are contained in WAD 025.
 This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

Resources

Cost Element	Skill	Department	Curve	Quantity	Units
750 STRAIGHT TIME BASE	C080 PLUMBERS AND PIPEFITTERS	KE10H Indust/Site Srvs Steelworkers	Linear	4.561	4.7 Hours
<i>Factors</i> 5129.04 hrs.					
A5C SUPPLIES	0000 NONE	C220S Utility Operations	Linear	5.739	5.739 Dollars
<i>Factors</i> 6358.59 dollars 1.015 -- FY00 Escalation --					
A5T TAXES	0000 NONE	C220S Utility Operations	Linear	200.40	200.40 Dollars
<i>Factors</i> 222 Dollars 1.015 -- FY00 Escalation --					

0.88934 [SYS 061400] .88934200 - System

Line Item SYS - Contingency And Escalation

BOE

Resources

Cost Element	Skill	Department	Curve	Quantity	Units
CON CONTINGENCY	0000 NONE	ZDEPT No Department	Linear	28.035	28.035 Dollars
<i>Factors</i> 28035.8 Dollars					
ESC ESCALATION	0000 NONE	ZDEPT No Department	Linear	10.719	10.719 Dollars
<i>Factors</i> 10719.6 Dollars					

Activity ID: 1EBB431400 Description: Steam Plant/Dist Svs Routine Mtce FY00

Cost Risk 2 Schedule Risk 1

Line Item	Description	Quantity	Units	BOE Type	Labor Hours/Unit	Labor Hours Total	Labor Cost Total	Materials/ Sub Cost	Contingency & Escalation	Total Prime Cost	Burden Cost	Total Cost
100	Routine Maintenance	1.00	each	HC	41	41	881	78	0	960	430	1,390
Total for Activity 1EBB431400:						41	881	78	0	960	430	1,390

Line Item 100 - Routine Maintenance

BOE
 Historical Data Source - Initial estimate is taken from FY98 Basis Of Estimate Tool(BEST) as modified by the RFCSS proposal.
 Item Desc -This activity addresses basic routine maintenance needs at a level necessary and sufficient to maintain safe and compliant operation.
 Breakdown of Historical Data:
 Item -Routine maintenance
 Units - 1 Lot
 Unit Cost - 215 hrs. \$392 Materials/SubCosts
 Unit Cost Adjustment factor - FY 99 is used as the base year. FY00 thru 05 are adjusted based on the D&D schedule.
 Revised Unit Cost - same as FY00
 Basis for adjustment -None
 The Engineering, Planning, Health & Safety and Environmental support functions for maintenance efforts are contained in WAD 025.
 This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

Resources

Cost Element	Skill	Department	Curve	Quantity	Units
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WBS No: 1EBB040301
 Activity ID: 1EBB431400

Rockv Flats Closure Project
Baseline Cost and Basis of Estimate

Project: Baseline Devl
 WBS Filter: 1EBB
 Activity Filter: *

Starts In FY *

750	STRAIGHT TIME BASE	C010	CARPENTERS	KE10H	Indust/Site Svcs Steelworkers	Linear	3.14	Hours	
<i>Factors</i> 16.498 h 0.36164 January 2000 Earned Value Factor									
							0.52618	[SYS 061300]	0.526183 - Target
750	STRAIGHT TIME BASE	C020	ELECTRICIANS	KE10H	Indust/Site Svcs Steelworkers	Linear	3.87	Hours	
<i>Factors</i> 20.34 h 0.36164 January 2000 Earned Value Factor									
							0.52618	[SYS 061300]	0.526183 - Target
750	STRAIGHT TIME BASE	C020	ELECTRICIANS	KE10H	Indust/Site Svcs Steelworkers	Linear	4.73	Hours	
<i>Factors</i> 24.86 h 0.36164 January 2000 Earned Value Factor									
							0.52618	[SYS 061300]	0.526183 - Target
750	STRAIGHT TIME BASE	C070	PAINTERS	KE10H	Indust/Site Svcs Steelworkers	Linear	1.72	Hours	
<i>Factors</i> 9.04 h 0.36164 January 2000 Earned Value Factor									
							0.52618	[SYS 061300]	0.526183 - Target
750	STRAIGHT TIME BASE	C080	PLUMBERS AND PIPEFITTERS	KE10H	Indust/Site Svcs Steelworkers	Linear	1.72	Hours	
<i>Factors</i> 9.04 h 0.36164 January 2000 Earned Value Factor									
							0.52618	[SYS 061300]	0.526183 - Target
750	STRAIGHT TIME BASE	C080	PLUMBERS AND PIPEFITTERS	KE10H	Indust/Site Svcs Steelworkers	Linear	12.04	Hours	
<i>Factors</i> 63.28 h 0.36164 January 2000 Earned Value Factor									
							0.52618	[SYS 061300]	0.526183 - Target
750	STRAIGHT TIME BASE	C080	PLUMBERS AND PIPEFITTERS	KE10H	Indust/Site Svcs Steelworkers	Linear	12.90	Hours	
<i>Factors</i> 67.8 h 0.36164 January 2000 Earned Value Factor									
							0.52618	[SYS 061300]	0.526183 - Target
750	STRAIGHT TIME BASE	C090	STRUCTURAL AND METAL WORKE	KE10H	Indust/Site Svcs Steelworkers	Linear	0.86	Hours	
<i>Factors</i> 4.52 h 0.36164 January 2000 Earned Value Factor									
							0.52618	[SYS 061300]	0.526183 - Target
A5C	SUPPLIES	0000	NONE	C220S	Utility Operations	Linear	75.77	Dollars	
<i>Factors</i> 392.32 d 1.015 -- FY00 Escalation -- 0.36164 January 2000 Earned Value Factor									
							0.52618	[SYS 061300]	0.526183 - Target
A5T	TAXES	0000	NONE	C220S	Utility Operations	Linear	2.65	Dollars	
<i>Factors</i> 13.72 Dollars 1.015 -- FY00 Escalation -- 0.36164 January 2000 Earned Value Factor									

Activity ID: 1EBB431410 Description: Steam Plant/Dist Sys Routine Mtce FY01

Cost Risk 2 Schedule Risk 1

Line Item	Description	Quantity	Units	BOE Type	Labor Hours/Unit	Labor Hours Total	Labor Cost Total	Materials/ Sub Cost	Contingency & Escalation	Total Prime Cost	Burden Cost	Total Cost
100	Routine Maintenance	1.00	each	HC	192	192	4,119	366	0	4,485	1,965	6,449
SYS	Contingency And Escalation	1.00	ea	EE	0	0	0	0	342	342	0	342
Total for Activity 1EBB431410:						192	4,119	366	342	4,826	1,965	6,791

Line Item 100 - Routine Maintenance

BOE
 Historical Data Source - Initial estimate is taken from FY98 Basis Of Estimate Tool(BEST) as modified by the RFCSS proposal.
 Item Desc -This activity addresses basic routine maintenance needs at a level necessary and sufficient to maintain safe and compliant operation.
 Breakdown of Historical Data:
 Item -Routine maintenance
 Units - 1 Lot
 Unit Cost - 215 hrs. \$392 Materials/SubCosts
 Unit Cost Adjustment factor - FY 99 is used as the base year. FY00 thru 05 are adjusted based on the D&D schedule.
 Revised Unit Cost - same as FY00
 Basis for adjustment -None
 The Engineering, Planning, Health & Safety and Environmental support functions for maintenance efforts are contained in WAD 025.
 This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

Resources	Cost Element	Skill	Department	Curve	Quantity	Units			
750	STRAIGHT TIME BASE	C010	CARPENTERS	KE10H	Indust/Site Svcs Steelworkers	Linear	14.67	Hours	
<i>Factors</i> 16.498 h									
							0.88934	[SYS 061400]	0.88934200 - Svsstem

WBS No: 1EBB040301
 Activity ID: 1EBB431410

Rockv Flats Closure Project
Baseline Cost and Basis of Estimate

Project: Baseline Devl
 WBS Filter: 1EBB
 Activity Filter: *

Starts In FY: *

750	STRAIGHT TIME BASE	C020	ELECTRICIANS	KE10H	Indust/Site Srvs Steelworkers	Linear	22.11	Hours
							0.88934	[SYS 061400] .88934200 - Svsystem
<i>Factors</i> 24.86 h								
750	STRAIGHT TIME BASE	C020	ELECTRICIANS	KE10H	Indust/Site Srvs Steelworkers	Linear	18.09	Hours
<i>Factors</i> 20.34 h								
750	STRAIGHT TIME BASE	C070	PAINTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	8.04	Hours
<i>Factors</i> 9.04 h								
750	STRAIGHT TIME BASE	C080	PLUMBERS AND PIPEFITTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	56.28	Hours
<i>Factors</i> 63.28 h								
750	STRAIGHT TIME BASE	C080	PLUMBERS AND PIPEFITTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	60.30	Hours
<i>Factors</i> 67.8 h								
750	STRAIGHT TIME BASE	C080	PLUMBERS AND PIPEFITTERS	KE10H	Indust/Site Srvs Steelworkers	Linear	8.04	Hours
<i>Factors</i> 9.04 h								
750	STRAIGHT TIME BASE	C090	STRUCTURAL AND METAL WORKE	KE10H	Indust/Site Srvs Steelworkers	Linear	4.02	Hours
<i>Factors</i> 4.52 h								
A5C	SUPPLIES	0000	NONE	C220S	Utility Operations	Linear	354.14	Dollars
<i>Factors</i> 392.32 d							1.015	-- FY00 Escalation --
A5T	TAXES	0000	NONE	C220S	Utility Operations	Linear	11.73	Dollars
<i>Factors</i> 13 Dollars							1.015	-- FY00 Escalation --

Line Item SYS - Contingency And Escalation

BOE

Resources

Cost Element	Skill	Department	Curve	Quantity	Units
CON CONTINGENCY	0000 NONE	ZDEPT No Department	Linear	206.29	Dollars
<i>Factors</i> 206.294 Dollars					
ESC ESCALATION	0000 NONE	ZDEPT No Department	Linear	135.61	Dollars
<i>Factors</i> 135.611 Dollars					

Activity ID: 1EBB431420

Description: Steam Plant/Dist Svs Routine Mtce FY02

Cost Risk 2 Schedule Risk 1

Line Item	Description	Quantity	Units	BOE Type	Labor Hours/Unit	Labor Hours Total	Labor Cost Total	Materials/ Sub Cost	Contingency & Escalation	Total Prime Cost	Burden Cost	Total Cost
100	Routine Maintenance	1.00	each	HC	192	192	4.119	366	0	4.485	1.454	5.938
SYS	Contingency And Escalation	1.00	ea	EE	0	0	0	0	888	888	0	888
Total for Activity 1EBB431420:						192	4.119	366	888	5.372	1.454	6.826

Line Item 100 - Routine Maintenance

BOE

Historical Data Source - Initial estimate is taken from FY98 Basis Of Estimate Tool(BEST) as modified by the RFCSS proposal.
 Item Desc -This activity addresses basic routine maintenance needs at a level necessary and sufficient to maintain safe and compliant operation.
 Breakdown of Historical Data:
 Item -Routine maintenance
 Units - 1 Lot
 Unit Cost - 215 hrs. \$392 Materials/SubCosts
 Unit Cost Adjustment factor - FY 99 is used as the base year. FY00 thru 05 are adjusted based on the D&D schedule.
 Revised Unit Cost - same as FY00
 Basis for adjustment -None
 The Engineering, Planning, Health & Safety and Environmental support functions for maintenance efforts are contained in WAD 025.
 This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

WBS No: 1EBB040301
 Activity ID: 1EBB431420

Rockv Flats Closure Project
Baseline Cost and Basis of Estimate

Project: Baseline Devl
 WBS Filter: 1EBB
 Activity Filter: *

Starts In FY *

Resources	Cost Element	Skill	Department	Curve	Quantity	Units
750	STRAIGHT TIME BASE	C010 CARPENTERS	KE10H Indust/Site Srvs Steelworkers	Linear	14.67	Hours
Factors 16.498 h						
0.88934 [SYS 061400] .88934200 - Svsstem						
750	STRAIGHT TIME BASE	C020 ELECTRICIANS	KE10H Indust/Site Srvs Steelworkers	Linear	18.09	Hours
Factors 20.34 h						
0.88934 [SYS 061400] .88934200 - Svsstem						
750	STRAIGHT TIME BASE	C020 ELECTRICIANS	KE10H Indust/Site Srvs Steelworkers	Linear	22.11	Hours
Factors 24.86 h						
0.88934 [SYS 061400] .88934200 - Svsstem						
750	STRAIGHT TIME BASE	C070 PAINTERS	KE10H Indust/Site Srvs Steelworkers	Linear	8.04	Hours
Factors 9.04 h						
0.88934 [SYS 061400] .88934200 - Svsstem						
750	STRAIGHT TIME BASE	C080 PLUMBERS AND PIPEFITTERS	KE10H Indust/Site Srvs Steelworkers	Linear	8.04	Hours
Factors 9.04 h						
0.88934 [SYS 061400] .88934200 - Svsstem						
750	STRAIGHT TIME BASE	C080 PLUMBERS AND PIPEFITTERS	KE10H Indust/Site Srvs Steelworkers	Linear	56.28	Hours
Factors 63.28 h						
0.88934 [SYS 061400] .88934200 - Svsstem						
750	STRAIGHT TIME BASE	C080 PLUMBERS AND PIPEFITTERS	KE10H Indust/Site Srvs Steelworkers	Linear	60.30	Hours
Factors 67.8 h						
0.88934 [SYS 061400] .88934200 - Svsstem						
750	STRAIGHT TIME BASE	C090 STRUCTURAL AND METAL WORKE	KE10H Indust/Site Srvs Steelworkers	Linear	4.02	Hours
Factors 4.52 h						
0.88934 [SYS 061400] .88934200 - Svsstem						
A5C	SUPPLIES	0000 NONE	C220S Utility Operations	Linear	354.14	Dollars
Factors 392.32 d 1.015 -- FY00 Escalation --						
0.88934 [SYS 061400] .88934200 - Svsstem						
A5T	TAXES	0000 NONE	C220S Utility Operations	Linear	11.73	Dollars
Factors 13 Dollars 1.015 -- FY00 Escalation --						
0.88934 [SYS 061400] .88934200 - Svsstem						

Line Item SYS - Contingency And Escalation

Resources	Cost Element	Skill	Department	Curve	Quantity	Units
CON	CONTINGENCY	0000 NONE	ZDEPT No Department	Linear	610.06	Dollars
Factors 610.065 Dollars						
ESC	ESCALATION	0000 NONE	ZDEPT No Department	Linear	277.51	Dollars
Factors 277.511 Dollars						

Activity ID: 1EBB431430 Description: Package Boiler/Dist Svs Routine Mtce FY03

Cost Risk 2 Schedule Risk 1

Line Item	Description	Quantity	Units	BOE Type	Labor Hours/Unit	Labor Hours Total	Labor Cost Total	Materials/ Sub Cost	Contingency & Escalation	Total Prime Cost	Burden Cost	Total Cost
100	Routine Maintenance	1.00	each	HC	192	192	4,119	366	0	4,485	1,425	5,910
SYS	Contingency And Escalation	1.00	ea	EE	0	0	0	0	1,638	1,638	0	1,638
Total for Activity 1EBB431430:						192	4,119	366	1,638	6,123	1,425	7,548

Line Item 100 - Routine Maintenance

BOE	Description
	Historical Data Source - Initial estimate is taken from FY98 Basis Of Estimate Tool(BEST) as modified by the RFCSS proposal. Item Desc -This activity addresses basic routine maintenance needs at a level necessary and sufficient to maintain safe and compliant operation. Breakdown of Historical Data: Item -Routine maintenance Units - 1 Lot Unit Cost - 215 hrs. \$392 Materials/SubCosts Unit Cost Adjustment factor - FY 99 is used as the base year. FY00 thru 05 are adjusted based on the D&D schedule. Revised Unit Cost - same as FY00

WBS No: 1EBB040301
 Activity ID: 1EBB431430

Rockv Flats Closure Project
Baseline Cost and Basis of Estimate

Project Baseline Devl
 WBS Filter 1EBB
 Activity Filter *

Starts In FY *

Basis for adjustment -None
 The Engineering, Planning, Health & Safety and Environmental support functions for maintenance efforts are contained in WAD 025.
 This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

Resources

Cost Element	Skill	Department	Curve	Quantity	Units
750 STRAIGHT TIME BASE	C010 CARPENTERS	KE10H Indust/Site Srvs Steelworkers	Linear	14.67	Hours
Factors 16.498 h					
0.88934 [SYS 061400] .88934200 - System					
750 STRAIGHT TIME BASE	C020 ELECTRICIANS	KE10H Indust/Site Srvs Steelworkers	Linear	22.11	Hours
Factors 24.86 h					
0.88934 [SYS 061400] .88934200 - System					
750 STRAIGHT TIME BASE	C020 ELECTRICIANS	KE10H Indust/Site Srvs Steelworkers	Linear	18.09	Hours
Factors 20.34 h					
0.88934 [SYS 061400] .88934200 - System					
750 STRAIGHT TIME BASE	C070 PAINTERS	KE10H Indust/Site Srvs Steelworkers	Linear	8.04	Hours
Factors 9.04 h					
0.88934 [SYS 061400] .88934200 - System					
750 STRAIGHT TIME BASE	C080 PLUMBERS AND PIPEFITTERS	KE10H Indust/Site Srvs Steelworkers	Linear	8.04	Hours
Factors 9.04 h					
0.88934 [SYS 061400] .88934200 - System					
750 STRAIGHT TIME BASE	C080 PLUMBERS AND PIPEFITTERS	KE10H Indust/Site Srvs Steelworkers	Linear	56.28	Hours
Factors 63.28 h					
0.88934 [SYS 061400] .88934200 - System					
750 STRAIGHT TIME BASE	C080 PLUMBERS AND PIPEFITTERS	KE10H Indust/Site Srvs Steelworkers	Linear	60.30	Hours
Factors 67.8 h					
0.88934 [SYS 061400] .88934200 - System					
750 STRAIGHT TIME BASE	C090 STRUCTURAL AND METAL WORKE	KE10H Indust/Site Srvs Steelworkers	Linear	4.02	Hours
Factors 4.52 h					
0.88934 [SYS 061400] .88934200 - System					
A5C SUPPLIES	0000 NONE	C220S Utility Operations	Linear	354.14	Dollars
Factors 392.32 d 1.015 -- FY00 Escalation --					
0.88934 [SYS 061400] .88934200 - System					
A5T TAXES	0000 NONE	C220S Utility Operations	Linear	11.73	Dollars
Factors 13 Dollars 1.015 -- FY00 Escalation --					
0.88934 [SYS 061400] .88934200 - System					

Line Item SYS - Contingency And Escalation

BOE

Resources

Cost Element	Skill	Department	Curve	Quantity	Units
CON CONTINGENCY	0000 NONE	ZDEPT No Department	Linear	1,185.24	Dollars
Factors 1185.24 Dollars					
ESC ESCALATION	0000 NONE	ZDEPT No Department	Linear	453.18	Dollars
Factors 453.178 Dollars					

Activity ID: 1EBB431440

Description: Package Boiler/Dist Svs Rout Mtce FY04

Cost Risk 2 Schedule Risk 1

Line Item	Description	Quantity	Units	BOE Type	Labor Hours/Unit	Labor Hours Total	Labor Cost Total	Materials/ Sub Cost	Contingency & Escalation	Total Prime Cost	Burden Cost	Total Cost
100	Routine Maintenance	1.00	each	HC	50	50	1,068	93	0	1,161	301	1,463
SYS	Contingency And Escalation	1.00	lea	EE	0	0	0	0	209	209	0	209
Total for Activity 1EBB431440:						50	1,068	93	209	1,370	301	1,672

Line Item 100 - Routine Maintenance

BOE

Historical Data Source - Initial estimate is taken from FY98 Basis Of Estimate Tool(BEST) as modified by the RFCSS proposal.
 Item Desc -This activity addresses basic routine maintenance needs at a level necessary and sufficient to maintain safe and compliant operation.
 Breakdown of Historical Data:

WBS No: 1EBB040301
 Activity ID: 1EBB431440

Rockv Flats Closure Project
Baseline Cost and Basis of Estimate

Project: Baseline Devl
 WBS Filter: 1EBB
 Activity Filter: *

Starts In FY *

Item -Routine maintenance
 Units - 1 Lot
 Unit Cost - 58 hrs. \$100 Materials/SubCosts
 Unit Cost Adjustment factor - FY 99 is used as the base year. FY00 thru 05 are adjusted based on the D&D schedule.
 Revised Unit Cost - same as FY00
 Basis for adjustment -None
 The Engineering, Planning, Health & Safety and Environmental support functions for maintenance efforts are contained in WAD 025.
 This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

Resources

Cost Element	Skill	Department	Curve	Quantity	Units
750 STRAIGHT TIME BASE	C010 CARPENTERS	KE10H Indust/Site Srvs Steelworkers	Linear	4.45	Hours
Factors 5 h					
0.88934 [SYS 061400] .88934200 - Svsstem					
750 STRAIGHT TIME BASE	C020 ELECTRICIANS	KE10H Indust/Site Srvs Steelworkers	Linear	5.34	Hours
Factors 6 h					
0.88934 [SYS 061400] .88934200 - Svsstem					
750 STRAIGHT TIME BASE	C020 ELECTRICIANS	KE10H Indust/Site Srvs Steelworkers	Linear	4.45	Hours
Factors 5 h					
0.88934 [SYS 061400] .88934200 - Svsstem					
750 STRAIGHT TIME BASE	C070 PAINTERS	KE10H Indust/Site Srvs Steelworkers	Linear	2.67	Hours
Factors 3 h					
0.88934 [SYS 061400] .88934200 - Svsstem					
750 STRAIGHT TIME BASE	C080 PLUMBERS AND PIPEFITTERS	KE10H Indust/Site Srvs Steelworkers	Linear	14.23	Hours
Factors 16 h					
0.88934 [SYS 061400] .88934200 - Svsstem					
750 STRAIGHT TIME BASE	C080 PLUMBERS AND PIPEFITTERS	KE10H Indust/Site Srvs Steelworkers	Linear	15.12	Hours
Factors 17 h					
0.88934 [SYS 061400] .88934200 - Svsstem					
750 STRAIGHT TIME BASE	C080 PLUMBERS AND PIPEFITTERS	KE10H Indust/Site Srvs Steelworkers	Linear	2.67	Hours
Factors 3 h					
0.88934 [SYS 061400] .88934200 - Svsstem					
750 STRAIGHT TIME BASE	C090 STRUCTURAL AND METAL WORKE	KE10H Indust/Site Srvs Steelworkers	Linear	0.89	Hours
Factors 1 h					
0.88934 [SYS 061400] .88934200 - Svsstem					
A5C SUPPLIES	0000 NONE	C220S Utility Operations	Linear	90.27	Dollars
Factors 100 d 1.015 -- FY00 Escalation --					
0.88934 [SYS 061400] .88934200 - Svsstem					
A5T TAXES	0000 NONE	C220S Utility Operations	Linear	2.71	Dollars
Factors 3 Dollars 1.015 -- FY00 Escalation --					
0.88934 [SYS 061400] .88934200 - Svsstem					

Line Item SYS - Contingency And Escalation

BOE

Resources

Cost Element	Skill	Department	Curve	Quantity	Units
CON CONTINGENCY	0000 NONE	ZDEPT No Department	Linear	68.41	Dollars
Factors 68.4137 Dollars					
ESC ESCALATION	0000 NONE	ZDEPT No Department	Linear	140.45	Dollars
Factors 140.447 Dollars					

Activity ID: 1EBB431500

Description: Steam Utility Projects FY00

Cost Risk 4 Schedule Risk 1

Line Item	Description	Quantity	Units	BOE Type	Labor Hours/Unit	Labor Hours Total	Labor Cost Total	Materials/ Sub Cost	Contingency & Escalation	Total Prime Cost	Burden Cost	Total Cost
100	Boiler Efficiency Tune Up	1.00	each	EE	0	0	0	2.920	0	2.920	0	2.920
200	As-Built Drawings/Component Labeling	1.00	each	EE	128	128	2.794	14.525	0	17.319	1.364	18.683
Total for Activity 1EBB431500:						128	2.794	17.444	0	20.239	1.364	21.602

WBS No: 1EBB040301
 Activity ID: 1EBB431500

Rockv Flats Closure Project
Baseline Cost and Basis of Estimate

Project: Baseline Devl
 WBS Filter: 1EBB
 Activity Filter: *

Starts In FY *

Line Item 100 - Boiler Efficiency Tune Up

BOE
 Conduct boiler efficiency balancing and tuning on all four boilers each year through FY03.
 This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

Resources		Cost Element	Skill	Department	Curve	Quantity	Units
A5H	SUBCONTRACTED SRVS	0000	NONE	C220S Utility Operations	Linear	2.919	53 Dollars
<i>Factors</i>		15000 dollars	1.02283 -- FY00 Escalation --	0.36164 May 2000 Earned Value Factor			

0.52618 [SYS 061300] 0.526183 - Target

Line Item 200 - As-Built Drawings/Component Labeling

BOE
 Review and verify mechanical and electrical drawings and perform a detailed labeling program oif the sream plant components.
 15 Mechanical Drawings 40hrs per dwg.
 12 Electrical drawings 40hrs per dwg.
 1251 Mechanical components need to be labeled.
 98 Electrical components need to be labeled.
 This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

Resources		Cost Element	Skill	Department	Curve	Quantity	Units
750	STRAIGHT TIME BASE	C020	ELECTRICIANS	KE10H Indust/Site Srvs Steelworkers	Linear	9.32	Hours
<i>Factors</i>		49 hrs.	0.36164 May 2000 Earned Value Factor				
750	STRAIGHT TIME BASE	C080	PLUMBERS AND PIPEFITTERS	KE10H Indust/Site Srvs Steelworkers	Linear	118.93	Hours
<i>Factors</i>		625 hrs.	0.36164 May 2000 Earned Value Factor				
A53	E-2	0000	NONE	C200S Engineering Services	Linear	14.524	66 Dollars
<i>Factors</i>		74625 Dollars	1.02283 -- FY00 Escalation --	0.36164 May 2000 Earned Value Factor			

0.52618 [SYS 061300] 0.526183 - Target

Activity ID: 1EBB431510 Description: Steam Utility Projects FY01

Cost Risk 2 Schedule Risk 1

Line Item	Description	Quantity	Units	BOE Type	Labor Hours/Unit	Labor Hours Total	Labor Cost Total	Materials/ Sub Cost	Contingency & Escalation	Total Prime Cost	Burden Cost	Total Cost
100	Boiler Efficiency Tune Up	1.00	each	EE	0	0	0	13.645	0	13.645	0	13.645
SYS	Contingency And Escalation	1.00	ea	EE	0	0	0	0	723	723	0	723
Total for Activity 1EBB431510:						0	0	13.645	723	14.368	0	14.368

Line Item 100 - Boiler Efficiency Tune Up

BOE
 Conduct boiler efficiency balancing and tuning on all four boilers each year through FY03.
 This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

Resources		Cost Element	Skill	Department	Curve	Quantity	Units
A5H	SUBCONTRACTED SRVS	0000	NONE	C220S Utility Operations	Linear	13.644	69 Dollars
<i>Factors</i>		15000 Dollars	1.02283 -- FY00 Escalation --				

0.88934 [SYS 061400] .88934200 - Svsstem

Line Item SYS - Contingency And Escalation

Resources		Cost Element	Skill	Department	Curve	Quantity	Units
CON	CONTINGENCY	0000	NONE	ZDEPT No Department	Linear	436.47	Dollars
<i>Factors</i>		436.465 Dollars					
ESC	ESCALATION	0000	NONE	ZDEPT No Department	Linear	286.92	Dollars
<i>Factors</i>		286.917 Dollars					

Activity ID: 1EBB431520 Description: Steam Utility Projects FY02

Cost Risk 2 Schedule Risk 1

Line Item	Description	Quantity	Units	BOE Type	Labor Hours/Unit	Labor Hours Total	Labor Cost Total	Materials/ Sub Cost	Contingency & Escalation	Total Prime Cost	Burden Cost	Total Cost
100	Package Boiler B443	1.00	each	EE	0	0	0	76.623	0	76.623	0	76.623

WBS No: 1EBB040301
 Activity ID: 1EBB431520

Rockv Flats Closure Project
Baseline Cost and Basis of Estimate

Project: Baseline Devl
 WBS Filter: 1EBB
 Activity Filter: *

Starts In FY *

200	Modular Boilers	1.00	each	EE	0	0	0	248,092	0	248,092	0	248,092		
300	Air Quality Permit	1.00	each	EE	0	0	0	4,380	0	4,380	0	4,380		
400	Boiler Efficiency Tune Up	1.00	each	EE	0	0	0	13,645	0	13,645	0	13,645		
SYS	Contingency And Escalation	1.00	ea	EE	0	0	0	0	51,227	51,227	0	51,227		
Total for Activity 1EBB431520:								0	0	342,740	51,227	393,967	0	393,967

Line Item 100 - Package Boiler B443

BOE Package Boiler - Develop Scope & Estimate, authorize funding, and design of package boiler. This boiler will be located near B443 and will provide hot water and space heating for the south side of the plant site. The estimate is based on Scope of Work from K-H and estimated by the RFCSS Engineering and Construction group. The project title is "SOW/Design Package for Portable Boilers at Steam Plant", dated 2/26/99.
 This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

Resources		Cost Element	Skill	Department	Curve	Quantity	Units
A5H	SUBCONTRACTED SRVS	0000	NONE	C200S	Engineering Services	Linear	76,623.09
Factors		84234	Dollars	1.02283 -- FY00 Escalation --		0.88934	[SYS 061400].88934200 - System

Line Item 200 - Modular Boilers

BOE Design, procurement and installation of modular boilers for B778. The estimate is based on a Scope of Work from K-H and estimated by the RFCSS Engineering and Construction group. The project title is " B778 Boilers - Fiscal Year 2002", dated 2/26/99.
 This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

Resources		Cost Element	Skill	Department	Curve	Quantity	Units
A5H	SUBCONTRACTED SRVS	0000	NONE	C200S	Engineering Services	Linear	248,092.20
Factors		272735	dollars	1.02283 -- FY00 Escalation --		0.88934	[SYS 061400].88934200 - System

Line Item 300 - Air Quality Permit

BOE Prepare application to secure a Air Operating Permit for operations in FY03. This estimate was provided by K-H Air Quality.
 This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

Resources		Cost Element	Skill	Department	Curve	Quantity	Units
A5H	SUBCONTRACTED SRVS	P050	COMPLIANCE INSPECTORS	K109S	Env Sys. Stewardship & Compliance	Linear	4,379.94
Factors		4815	dollars	1.02283 -- FY00 Escalation --		0.88934	[SYS 061400].88934200 - System

Line Item 400 - Boiler Efficiency Tune Up

BOE Conduct boiler efficiency balancing and tuning on all four boilers each year through FY03.
 This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

Resources		Cost Element	Skill	Department	Curve	Quantity	Units
A5H	SUBCONTRACTED SRVS	0000	NONE	C220S	Utility Operations	Linear	13,644.69
Factors		15000	Dollars	1.02283 -- FY00 Escalation --		0.88934	[SYS 061400].88934200 - System

Line Item SYS - Contingency And Escalation

Resources		Cost Element	Skill	Department	Curve	Quantity	Units
CON	CONTINGENCY	0000	NONE	ZDEPT	No Department	Linear	35,210.30
Factors		35210.3	Dollars				
ESC	ESCALATION	0000	NONE	ZDEPT	No Department	Linear	16,016.73
Factors		16016.7	Dollars				

Activity ID: 1EBB431530 Description: Steam Utility Projects FY03

Cost Risk 2 Schedule Risk 1

Line Item	Description	Quantity	Units	BOE Type	Labor Hours/Unit	Labor Hours Total	Labor Cost Total	Materials/ Sub Cost	Contingency & Escalation	Total Prime Cost	Burden Cost	Total Cost
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WBS No: 1EBB040301
 Activity ID: 1EBB431530

Rockv Flats Closure Project
Baseline Cost and Basis of Estimate

Project Baseline Devl
 WBS Filter 1EBB
 Activity Filter * Starts In FY *

100	Install Portable Steam Plant	1.00	each	EE	0	0	0	552,155	0	552,155	0	552,155
200	Air Quality Testing	1.00	each	HC	0	0	0	6,368	0	6,368	0	6,368
300	Boiler Efficiency Tune Up	1.00	each	EE	0	0	0	13,645	0	13,645	0	13,645
SYS	Contingency And Escalation	1.00	ea	EE	0	0	0	0	158,631	158,631	0	158,631
Total for Activity 1EBB431530:					0	0	0	572,167	158,631	730,799	0	730,799

Line Item 100 - Install Portable Steam Plant

BOE Construction contract to install a portable boiler system near B443 for the south side of the plant site. The project will include changes to sections of the distribution system for safety purposes (additional steam traps) and to tie the existing 140 psi system together. The estimate is based on a Scope of Work from K-H and estimated by the RFCSS Engineering and Construction group. The project title is "Install Trailer Mounted Portable Boilers near Steam Plant", dated 2/26/99.
 This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

Resources	Cost Element	Skill	Department	Curve	Quantity	Units
A5H	SUBCONTRACTED SRVS	0000 NONE	C200S Engineering Services	Linear	552,154.90	Dollars
Factors 607000 Dollars 1.02283 -- FY00 Escalation --						
0.88934 [SYS 061400] .88934200 - Ssystem						

Line Item 200 - Air Quality Testing

BOE Perform initial stack testing to secure a air operating permit for operations in FY03. This estimate was provided by K-H air quality.
 This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

Resources	Cost Element	Skill	Department	Curve	Quantity	Units
A5H	SUBCONTRACTED SRVS	P050 COMPLIANCE INSPECTORS	K109S Env Svs. Stewardship & Compliance	Linear	6,367.52	Dollars
Factors 7000 dollars 1.02283 -- FY00 Escalation --						
0.88934 [SYS 061400] .88934200 - Ssystem						

Line Item 300 - Boiler Efficiency Tune Up

BOE Conduct boiler efficiency balancing and tuning on all four boilers each year through FY03.
 This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

Resources	Cost Element	Skill	Department	Curve	Quantity	Units
A5H	SUBCONTRACTED SRVS	0000 NONE	C220S Utility Operations	Linear	13,644.69	Dollars
Factors 15000 Dollars 1.02283 -- FY00 Escalation --						
0.88934 [SYS 061400] .88934200 - Ssystem						

Line Item SYS - Contingency And Escalation

Resources	Cost Element	Skill	Department	Curve	Quantity	Units
CON	CONTINGENCY	0000 NONE	ZDEPT No Department	Linear	114,754.70	Dollars
Factors 114755 Dollars						
ESC	ESCALATION	0000 NONE	ZDEPT No Department	Linear	43,876.79	Dollars
Factors 43876.8 Dollars						

Activity ID: 1EXXX43115 Description: Operate Package Boiler FY06

Cost Risk 2 Schedule Risk 1

Line Item	Description	Quantity	Units	BOE Type	Labor Hours/Unit	Labor Hours Total	Labor Cost Total	Materials/ Sub Cost	Contingency & Escalation	Total Prime Cost	Burden Cost	Total Cost
100	Operate Portable Boiler	1.00	ea	HC	8,641	8,617	188,214	286,970	0	475,184	66,631	541,815
200	Transition Portable Boiler	1.00	each	EE	0	0	0	18,288	0	18,288	0	18,288
SYS	Contingency And Escalation	1.00	ea	EE	0	0	0	0	475,445	475,445	0	475,445
Total for Activity 1EXXX43115:						8,617	188,214	305,258	475,445	968,917	66,631	1,035,548

Line Item 100 - Operate Portable Boiler

BOE Historical Data Source - Initial estimate is taken from FY 98Basis Of Estimate Tool(BEST) as modified by the RFCSS proposal. Item Desc -This activity provides for the continuous 24 hour operation and surveillance of the Sites Portable Boiler.
 Breakdown of Historical Data:
 Item - Operation of the portable boiler.
 Units - 1 Lot
 Unit Cost - 9,716 hrs. \$39,250 Materials/SubCosts - \$4,800 Equip.Lease - \$270,000 Lease of portable boiler

WBS No: 1EBB040301
 Activity ID: 1EXXX43115

Rockv Flats Closure Project
Baseline Cost and Basis of Estimate

Project Baseline Devl
 WBS Filter 1EBB
 Activity Filter *

Starts In FY *

Unit Cost Adjustment factor - FY 99 budget is used as the base year. FY00 thru 05 are adjusted based on the D&D schedule.
 Revised Unit Cost - same as FY00
 Basis for adjustment -None

This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

Resources

Cost Element	Skill	Department	Curve	Quantity	Units
750 STRAIGHT TIME BASE	R070 WASTE TREATMENT OPERATOR A	KE10H Indust/Site Srvs Steelworkers	Linear	7,790.64	Hours
<i>Factors</i> 8760 hrs.					
750 STRAIGHT TIME BASE	R070 WASTE TREATMENT OPERATOR A	KE10H Indust/Site Srvs Steelworkers	Linear	35.57	Hours
<i>Factors</i> 40 hrs.					
750 STRAIGHT TIME BASE	T050 RADIATION CONTROL TECHNOLOGI	KE10H Indust/Site Srvs Steelworkers	Alternate Linear	35.57	Hours
<i>Factors</i> 40 hr.					
751 OVERTIME BASE & PRE.	R070 WASTE TREATMENT OPERATOR A	KE10H Indust/Site Srvs Steelworkers	Linear	779.06	Hours
<i>Factors</i> 876 hrs.					
754 OTHER PREMIUMS	0000 NONE	C221S Steam Plant Operations	Linear	3,263.89	Dollars
<i>Factors</i> 3670 d					
A5C SUPPLIES	0000 NONE	C220S Utility Operations	Linear	25,952.11	Dollars
<i>Factors</i> 28750 dollars 1.015 -- FY00 Escalation --					
A5H SUBCONTRACTED SRVS	0000 NONE	C220S Utility Operations	Linear	9,551.28	Dollars
<i>Factors</i> 10500 dollars 1.02283 -- FY00 Escalation --					
A5L RENTALS	0000 NONE	C220S Utility Operations	Linear	243,724.20	Dollars
<i>Factors</i> 270000 dollars 1.015 -- FY00 Escalation --					
A5L RENTALS	0000 NONE	C232S NG Vehicle/Equip Maintenance	Linear	4,332.87	Dollars
<i>Factors</i> 4800 dollars 1.015 -- FY00 Escalation --					
A5T TAXES	0000 NONE	C220S Utility Operations	Linear	934.28	Dollars
<i>Factors</i> 1035 dollars 1.015 -- FY00 Escalation --					

Line Item 200 - Transition Portable Boiler

BOE
 This line item includes effort to isolate the steam distribution system and remove portable boilers, drain internal systems, disposition of facility records and transition report.
 The estimate is based on the K-H Estimates to Transition Utilities Template.

This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

Resources

Cost Element	Skill	Department	Curve	Quantity	Units
A5H SUBCONTRACTED SRVS	0000 NONE	C220S Utility Operations	Linear	18,338.46	Dollars
<i>Factors</i> 20160 Dollars 1.02283 -- FY00 Escalation --					

Line Item SYS - Contingency And Escalation

BOE

Cost Element	Skill	Department	Curve	Quantity	Units
CON CONTINGENCY	0000 NONE	ZDEPT No Department	Linear	350,513.70	Dollars
<i>Factors</i> 350514 Dollars					
ESC ESCALATION	0000 NONE	ZDEPT No Department	Linear	124,931.20	Dollars
<i>Factors</i> 124931 Dollars					

WBS No: 1EBB040302
 Activity ID: 1EBB432000

Rockv Flats Closure Project
Baseline Cost and Basis of Estimate

Project Baseline Devl
 WBS Filter 1EBB
 Activity Filter *

Starts In FY *

WBS No: 1EBB040302 Title: Gas Operations
 Activity ID: 1EBB432000 Description: Provide Gas Supply FY00 Cost Risk 2 Schedule Risk 1

Line Item	Description	Quantity	Units	BOE Type	Labor Hours/Unit	Labor Hours Total	Labor Cost Total	Materials/ Sub Cost	Contingency & Escalation	Total Prime Cost	Burden Cost	Total Cost
100	Propane procurement and delivery	80.00	1000gal	HC	0	0	0	7.874	0	7.874	0	7.874
200	Gas Services Support	1.00	ea	HC	642	642	16.838	1.296	0	18.133	8.217	26.350
Total for Activity 1EBB432000:						642	16.838	9.170	0	26.008	8.217	34.224

Line Item 100 - Propane procurement and delivery

BOE Historical Data Source - Initial estimate is taken from FY98 Basis Of Estimate Tool(BEST) as modified by the RFCSS proposal.
 Item Desc - FY propane service
 Breakdown of Historical Data:
 Item - propane
 Units - 1000 gallons
 Unit Cost - \$549
 Unit Cost Adjustment factor - FY 99 budget is used as the base year. FY00 thru 05 are adjusted based on the D&D schedule.
 Revised Unit Cost - same as FT00.
 Basis for adjustment - none
 This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

Resources

Cost Element	Skill	Department	Curve	Quantity	Units
A5H SUBCONTRACTED SRVS	0000 NONE	C220S Utility Operations	Linear	95.03	Dollars
Factors 549 \$/ 1,000 gallon	1.02283 -- FY00 Escalation --	0.32163 May 2000 Earned Value Factor	0.52618 [SYS 061300]	0.526183 - Target	
A5T TAXES	0000 NONE	C220S Utility Operations	Linear	3.39	Dollars
Factors 19.76 dollars	1.015 -- FY00 Escalation --	0.32163 May 2000 Earned Value Factor	0.52618 [SYS 061300]	0.526183 - Target	

Line Item 200 - Gas Services Support

BOE Historical Data Source - Initial estimate is taken from FY98 Basis Of Estimate Tool(BEST) as modified by the RFCSS proposal.
 Item Desc -Gas services support.
 Breakdown of Historical Data:
 Item - 1 Lot
 Unit Cost - 1,810 hrs. \$3,600 Lease
 Unit Cost Adjustment factor - FY 99 budget is used as the base year. FY00 thru 05 are adjusted based on the D&D schedule.
 Revised Unit Cost - same as FY00.
 Basis for adjustment -None
 This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

Resources

Cost Element	Skill	Department	Curve	Quantity	Units
750 STRAIGHT TIME BASE	P170 OTHER ADMINISTRATIVE & PROFE	C220S Utility Operations	Linear	641.92	Hours
Factors 1810 hrs	0.67401 January 2000 Earned Value Factor	0.52618 [SYS 061300]	0.526183 - Target		
A5L RENTALS	0000 NONE	C106S Business Management Office	Linear	1,295.90	Dollars
Factors 3600 dollars	1.015 -- FY00 Escalation --	0.67401 January 2000 Earned Value Factor	0.52618 [SYS 061300]	0.526183 - Target	

Activity ID: 1EBB432100 Description: Provide Gas Supply FY01 Cost Risk 2 Schedule Risk 1

Line Item	Description	Quantity	Units	BOE Type	Labor Hours/Unit	Labor Hours Total	Labor Cost Total	Materials/ Sub Cost	Contingency & Escalation	Total Prime Cost	Burden Cost	Total Cost
100	Propane procurement and delivery	80.00	1000gal	HC	0	0	0	41.379	0	41.379	0	41.379
200	Gas Services Support	1.00	ea	HC	1.610	1.610	42.223	3.250	0	45.472	20.140	65.613
SYS	Contingency And Escalation	1.00	ea	EE	0	0	0	0	5.672	5.672	0	5.672
Total for Activity 1EBB432100:						1.610	42.223	44.628	5.672	92.523	20.140	112.663

Line Item 100 - Propane procurement and delivery

BOE Historical Data Source - Initial estimate is taken from FY98 Basis Of Estimate Tool(BEST) as modified by the RFCSS proposal.
 Item Desc - FY propane service
 Breakdown of Historical Data:

WBS No: 1EBB040302
 Activity ID: 1EBB432100

Rockv Flats Closure Project
Baseline Cost and Basis of Estimate

Project: Baseline Devl
 WBS Filter: 1EBB
 Activity Filter: *

Starts In FY *

Item - propane
 Units - 1000 gallons
 Unit Cost - \$549
 Unit Cost Adjustment factor - FY 99 budget is used as the base year. FY00 thru 05 are adjusted based on the D&D schedule.
 Revised Unit Cost - same as FT00.
 Basis for adjustment - none
 This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

Resources	Cost Element	Quantity	Units	Skill	Department	Curve	Quantity	Units	
A5H	SUBCONTRACTED SRVS	0000	NONE	C220S	Utility Operations	Linear	499.40	Dollars	
Factors	549 \$/ 1.000 gallon			1.02283 -- FY00 Escalation --					
A5T	TAXES	0000	NONE	C220S	Utility Operations	Linear	17.84	Dollars	
Factors	19.76 dollars			1.015 -- FY00 Escalation --					
							0.88934 [SYS 061400]	.88934200 - Svstem	
							0.88934 [SYS 061400]	.88934200 - Svstem	

Line Item 200 - Gas Services Support

BOE
 Historical Data Source - Initial estimate is taken from FY98 Basis Of Estimate Tool(BEST) as modified by the RFCSS proposal.
 Item Desc -Gas services support.
 Breakdown of Historical Data:
 Item - 1 Lot
 Unit Cost - 1,810 hrs. \$3,600 Lease
 Unit Cost Adjustment factor - FY 99 budget is used as the base year. FY00 thru 05 are adjusted based on the D&D schedule.
 Revised Unit Cost - same as FY00.
 Basis for adjustment -None
 This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

Resources	Cost Element	Quantity	Units	Skill	Department	Curve	Quantity	Units	
750	STRAIGHT TIME BASE	P170	OTHER ADMINISTRATIVE & PROFE	C220S	Utility Operations	Linear	1,609.71	Hours	
Factors	1810 hrs								
							0.88934 [SYS 061400]	.88934200 - Svstem	
A5L	RENTALS	0000	NONE	C106S	Business Management Office	Linear	3,249.66	Dollars	
Factors	3600 dollars			1.015 -- FY00 Escalation --					
							0.88934 [SYS 061400]	.88934200 - Svstem	

Line Item SYS - Contingency And Escalation

Resources	Cost Element	Quantity	Units	Skill	Department	Curve	Quantity	Units
CON	CONTINGENCY	0000	NONE	ZDEPT	No Department	Linear	3,422.42	Dollars
Factors	3422.42 Dollars							
ESC	ESCALATION	0000	NONE	ZDEPT	No Department	Linear	2,249.78	Dollars
Factors	2249.78 Dollars							

Activity ID: 1EBB432200 Description: Provide Gas Supply FY02

Cost Risk 2 Schedule Risk 1

Line Item	Description	Quantity	Units	BOE Type	Labor Hours/Unit	Labor Hours Total	Labor Cost Total	Materials/ Sub Cost	Contingency & Escalation	Total Prime Cost	Burden Cost	Total Cost
100	Propane procurement and delivery	80.00	1000gal	HC	0	0	0	41,379	0	41,379	0	41,379
200	Gas Services Support	1.00	ea	HC	1,610	1,610	42,223	3,250	0	45,472	14,905	60,377
300	Transition Plan	1.00	each	EE	0	0	0	4,075	0	4,075	0	4,075
SYS	Contingency And Escalation	1.00	ea	EE	0	0	0	0	15,818	15,818	0	15,818
Total for Activity 1EBB432200:						1,610	42,223	48,703	15,818	106,744	14,905	121,649

Line Item 100 - Propane procurement and delivery

BOE
 Historical Data Source - Initial estimate is taken from FY98 Basis Of Estimate Tool(BEST) as modified by the RFCSS proposal.
 Item Desc - FY propane service
 Breakdown of Historical Data:
 Item - propane
 Units - 1000 gallons
 Unit Cost - \$549 SubContract

WBS No: 1EBB040302
 Activity ID: 1EBB432200

Rockv Flats Closure Project
Baseline Cost and Basis of Estimate

Project Baseline Devl
 WBS Filter 1EBB
 Activity Filter *

Starts In FY *

Unit Cost Adjustment factor - FY 99 budget is used as the base year. FY00 thru 05 are adjusted based on the D&D schedule.
 Revised Unit Cost - same as FT00.
 Basis for adjustment - none
 This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

Resources	Cost Element	Skill	Department	Curve	Quantity	Units
A5H	SUBCONTRACTED SRVS	0000 NONE	C220S Utility Operations	Linear	499.40	Dollars
Factors 549 \$/ 1.000 gallon 1.02283 -- FY00 Escalation --						
A5T	TAXES	0000 NONE	C220S Utility Operations	Linear	17.84	Dollars
Factors 19.76 dollars 1.015 -- FY00 Escalation --						
0.88934 [SYS 061400] .88934200 - System						

Line Item 200 - Gas Services Support

BOE Historical Data Source - Initial estimate is taken from FY98 Basis Of Estimate Tool(BEST) as modified by the RFCSS proposal.
 Item Desc -Gas services support.
 Breakdown of Historical Data:
 Item - 1 Lot
 Unit Cost - 1,810 hrs. \$3,600 Lease
 Unit Cost Adjustment factor - FY 99 budget is used as the base year. FY00 thru 05 are adjusted based on the D&D schedule.
 Revised Unit Cost - same as FY00.
 Basis for adjustment -None
 This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

Resources	Cost Element	Skill	Department	Curve	Quantity	Units
750	STRAIGHT TIME BASE	P170 OTHER ADMINISTRATIVE & PROFE	C220S Utility Operations	Linear	1,609.71	Hours
Factors 1810 hrs						
A5L	RENTALS	0000 NONE	C106S Business Management Office	Linear	3,249.66	Dollars
Factors 3600 dollars 1.015 -- FY00 Escalation --						
0.88934 [SYS 061400] .88934200 - System						

Line Item 300 - Transition Plan

BOE Develop a formal gas system Transition Plan. This plan will address cold shutdown requirements, hazards assessment and mitigation, equipment utility isolations, records disposition, equipment fluid draining, securing the process, etc.
 This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

Resources	Cost Element	Skill	Department	Curve	Quantity	Units
A5H	SUBCONTRACTED SRVS	0000 NONE	C200S Engineering Services	Linear	4,075.21	Dollars
Factors 4480 dollars 1.02283 -- FY00 Escalation --						
0.88934 [SYS 061400] .88934200 - System						

Line Item SYS - Contingency And Escalation

Resources	Cost Element	Skill	Department	Curve	Quantity	Units
CON	CONTINGENCY	0000 NONE	ZDEPT No Department	Linear	10,872.18	Dollars
Factors 10872.2 Dollars						
ESC	ESCALATION	0000 NONE	ZDEPT No Department	Linear	4,945.62	Dollars
Factors 4945.62 Dollars						

Activity ID: 1EBB432300

Description: Provide Gas Supply FY03

Cost Risk 2 Schedule Risk 1

Line Item	Description	Quantity	Units	BOE Type	Labor Hours/Unit	Labor Hours Total	Labor Cost Total	Materials/ Sub Cost	Contingency & Escalation	Total Prime Cost	Burden Cost	Total Cost
100	Propane procurement and delivery	80.00	1000gal	HC	0	0	0	41,379	0	41,379	0	41,379
200	Gas Services Support	1.00	ea	HC	1,610	1,610	42,223	3,250	0	45,472	14,609	60,081
SYS	Contingency And Escalation	1.00	ea	EE	0	0	0	0	28,129	28,129	0	28,129
Total for Activity 1EBB432300:						1,610	42,223	44,628	28,129	114,980	14,609	129,589

WBS No: 1EBB040302
 Activity ID: 1EBB432300

Rockv Flats Closure Project
Baseline Cost and Basis of Estimate

Project Baseline Devl
 WBS Filter 1EBB
 Activity Filter *

Starts In FY *

Line Item 100 - Propane procurement and delivery

BOE
 Historical Data Source - Initial estimate is taken from FY98 Basis Of Estimate Tool(BEST) as modified by the RFCSS proposal.
 Item Desc - FY propane service
 Breakdown of Historical Data:
 Item - propane
 Units - 1000 gallons
 Unit Cost - \$549
 Unit Cost Adjustment factor - FY 99 budget is used as the base year. FY00 thru 05 are adjusted based on the D&D schedule.
 Revised Unit Cost - same as FT00.
 Basis for adjustment - none
 This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

Cost Element		Skill		Department		Curve	Quantity	Units
A5H	SUBCONTRACTED SRVS	0000	NONE	C220S	Utility Operations	Linear	499.40	Dollars
<i>Factors</i> 549 \$/ 1,000 gallon		1.02283 -- FY00 Escalation --						
							0.88934	[SYS 061400] .88934200 - System
A5T	TAXES	0000	NONE	C220S	Utility Operations	Linear	17.84	Dollars
<i>Factors</i> 19.76 dollars		1.015 -- FY00 Escalation --						
							0.88934	[SYS 061400] .88934200 - System

Line Item 200 - Gas Services Support

BOE
 Historical Data Source - Initial estimate is taken from FY98 Basis Of Estimate Tool(BEST) as modified by the RFCSS proposal.
 Item Desc -Gas services support.
 Breakdown of Historical Data:
 Item - 1 Lot
 Unit Cost - 1,810 hrs. \$3,600 Lease
 Unit Cost Adjustment factor - FY 99 budget is used as the base year. FY00 thru 05 are adjusted based on the D&D schedule.
 Revised Unit Cost - same as FY00.
 Basis for adjustment -None
 This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

Cost Element		Skill		Department		Curve	Quantity	Units
750	STRAIGHT TIME BASE	P170	OTHER ADMINISTRATIVE & PROFE	C220S	Utility Operations	Linear	1,609.71	Hours
<i>Factors</i> 1810 hrs								
							0.88934	[SYS 061400] .88934200 - System
A5L	RENTALS	0000	NONE	C106S	Business Management Office	Linear	3,249.66	Dollars
<i>Factors</i> 3600 dollars		1.015 -- FY00 Escalation --						
							0.88934	[SYS 061400] .88934200 - System

Line Item SYS - Contingency And Escalation

BOE

Cost Element		Skill		Department		Curve	Quantity	Units
CON	CONTINGENCY	0000	NONE	ZDEPT	No Department	Linear	20,348.96	Dollars
<i>Factors</i> 20349 Dollars								
ESC	ESCALATION	0000	NONE	ZDEPT	No Department	Linear	7,780.48	Dollars
<i>Factors</i> 7780.48 Dollars								

Activity ID: 1EBB432400 Description: Provide Gas Supply FY04

Cost Risk 2 Schedule Risk 1

Line Item	Description	Quantity	Units	BOE Type	Labor Hours/Unit	Labor Hours Total	Labor Cost Total	Materials/ Sub Cost	Contingency & Escalation	Total Prime Cost	Burden Cost	Total Cost
100	Propane procurement and delivery	86.00	1000gal	HC	0	0	0	44.482	0	44.482	0	44.482
200	Gas Services Support	1.00	ea	HC	1.610	1.610	42.223	3.250	0	45.472	11.907	57.379
SYS	Contingency And Escalation	1.00	ea	EE	0	0	0	0	14.544	14.544	0	14.544
Total for Activity 1EBB432400:						1.610	42.223	47.732	14.544	104.499	11.907	116.406

Line Item 100 - Propane procurement and delivery

BOE
 Historical Data Source - Initial estimate is taken from FY98 Basis Of Estimate Tool(BEST) as modified by the RFCSS proposal.
 Item Desc - FY propane service
 Breakdown of Historical Data:

WBS No: 1EBB040302
 Activity ID: 1EBB432400

Rockv Flats Closure Project
Baseline Cost and Basis of Estimate

Project: Baseline Devl
 WBS Filter: 1EBB
 Activity Filter: *

Starts In FY *

Item - propane
 Units - 1000 gallons
 Unit Cost - \$549
 Unit Cost Adjustment factor - FY 99 budget is used as the base year. FY00 thru 05 are adjusted based on the D&D schedule.
 Revised Unit Cost - same as FT00.
 Basis for adjustment - none
 This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

Resources	Cost Element	Quantity	Units	Skill	Department	Curve	Quantity	Units
A5H	SUBCONTRACTED SRVS	0000	NONE	C220S	Utility Operations	Linear	499.40	Dollars
<i>Factors</i>		549	\$/ 1.000 gallon	1.02283	-- FY00 Escalation --			
							0.88934	[SYS 061400] .88934200 - Svsstem
A5T	TAXES	0000	NONE	C220S	Utility Operations	Linear	17.84	Dollars
<i>Factors</i>		19.76	dollars	1.015	-- FY00 Escalation --			
							0.88934	[SYS 061400] .88934200 - Svsstem

Line Item 200 - Gas Services Support

BOE
 Historical Data Source - Initial estimate is taken from FY98 Basis Of Estimate Tool(BEST) as modified by the RFCSS proposal.
 Item Desc -Gas services support.
 Breakdown of Historical Data:
 Item - 1 Lot
 Unit Cost - 1,810 hrs. \$3,600 Lease
 Unit Cost Adjustment factor - FY 99 budget is used as the base year. FY00 thru 05 are adjusted based on the D&D schedule.
 Revised Unit Cost - same as FY00.
 Basis for adjustment -None
 This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

Resources	Cost Element	Quantity	Units	Skill	Department	Curve	Quantity	Units
750	STRAIGHT TIME BASE	P170	OTHER ADMINISTRATIVE & PROFE	C220S	Utility Operations	Linear	1,609.71	Hours
<i>Factors</i>		1810	hrs					
							0.88934	[SYS 061400] .88934200 - Svsstem
A5L	RENTALS	0000	NONE	C106S	Business Management Office	Linear	3,249.66	Dollars
<i>Factors</i>		3600	dollars	1.015	-- FY00 Escalation --			
							0.88934	[SYS 061400] .88934200 - Svsstem

Line Item SYS - Contingency And Escalation

BOE

Resources	Cost Element	Quantity	Units	Skill	Department	Curve	Quantity	Units
CON	CONTINGENCY	0000	NONE	ZDEPT	No Department	Linear	4,764.15	Dollars
<i>Factors</i>		4764.15	Dollars					
ESC	ESCALATION	0000	NONE	ZDEPT	No Department	Linear	9,780.32	Dollars
<i>Factors</i>		9780.32	Dollars					

Activity ID: 1EBB432500 Description: Provide Gas Supply FY05

Cost Risk 2 Schedule Risk 1

Line Item	Description	Quantity	Units	BOE Type	Labor Hours/Unit	Labor Hours Total	Labor Cost Total	Materials/ Sub Cost	Contingency & Escalation	Total Prime Cost	Burden Cost	Total Cost
100	Propane procurement and delivery	40.00	1000gal	HC	0	0	0	20,689	0	20,689	0	20,689
200	Transition Gas Utility	1.00	each	EE	0	0	0	8,405	0	8,405	0	8,405
SYS	Contingency And Escalation	1.00	lea	EE	0	0	0	0	24,697	24,697	0	24,697
Total for Activity 1EBB432500:						0	0	29,094	24,697	53,791	0	53,791

Line Item 100 - Propane procurement and delivery

BOE
 Historical Data Source - Initial estimate is taken from FY98 Basis Of Estimate Tool(BEST) as modified by the RFCSS proposal.
 Item Desc - FY propane service
 Breakdown of Historical Data:
 Item - propane
 Units - 1000 gallons
 Unit Cost - \$549
 Unit Cost Adjustment factor - FY 99 budget is used as the base year. FY00 thru 05 are adjusted based on the D&D schedule.

WBS No: 1EBB040302
 Activity ID: 1EBB432500

Rockv Flats Closure Project
Baseline Cost and Basis of Estimate

Project: Baseline Devl
 WBS Filter: 1EBB
 Activity Filter: *

Starts In FY *

Revised Unit Cost - same as FT00.
 Basis for adjustment - none
 This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

Resources	Cost Element	Quantity	Units	Skill	Department	Curve	Quantity	Units
	A5H SUBCONTRACTED SRVS	0000	NONE		C220S Utility Operations	Linear	499.40	Dollars
Factors	549 \$/ 1,000 gallon			1.02283 -- FY00 Escalation --				
	A5T TAXES	0000	NONE		C220S Utility Operations	Linear	17.84	Dollars
Factors	19.76 dollars			1.015 -- FY00 Escalation --				

0.88934 [SYS 061400] .88934200 - System
 0.88934 [SYS 061400] .88934200 - System

Line Item 200 - Transition Gas Utility

BOE
 This line item includes the effort to isolate the gas distribution system, drain internal systems (tanks), disposition of facility records and transition report.
 The estimate is based on the K-H Estimate to Transition Utilities Template.
 This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

Resources	Cost Element	Quantity	Units	Skill	Department	Curve	Quantity	Units
	A5H SUBCONTRACTED SRVS	0000	NONE		C200S Engineering Services	Linear	8.40513	Dollars
Factors	9240 Dollars			1.02283 -- FY00 Escalation --				

0.88934 [SYS 061400] .88934200 - System

Line Item SYS - Contingency And Escalation

Resources	Cost Element	Quantity	Units	Skill	Department	Curve	Quantity	Units
	CON CONTINGENCY	0000	NONE		ZDEPT No Department	Linear	18.207.34	Dollars
Factors	18207.3 Dollars							
	ESC ESCALATION	0000	NONE		ZDEPT No Department	Linear	6.489.52	Dollars
Factors	6489.52 Dollars							

Activity ID: 1EXXX43240

Description: Provide Gas Supply FY05

Cost Risk 2 Schedule Risk 1

Line Item	Description	Quantity	Units	BOE Type	Labor Hours/Unit	Labor Hours Total	Labor Cost Total	Materials/ Sub Cost	Contingency & Escalation	Total Prime Cost	Burden Cost	Total Cost
100	Propane procurement and delivery	85.62	1000gal	HC	0	0	0	44.288	0	44.288	0	44.288
200	Gas Services Support	1.00	ea	HC	1.610	1.603	42.038	3.235	0	45.274	14.629	59.903
SYS	Contingency And Escalation	1.00	ea	EE	0	0	0	0	55.735	55.735	0	55.735
Total for Activity 1EXXX43240:						1.603	42.038	47.523	55.735	145.296	14.629	159.925

Line Item 100 - Propane procurement and delivery

BOE
 Historical Data Source - Initial estimate is taken from FY98 Basis Of Estimate Tool(BEST) as modified by the RFCSS proposal.
 Item Desc - FY propane service
 Breakdown of Historical Data:
 Item - propane
 Units - 1000 gallons
 Unit Cost - \$549
 Unit Cost Adjustment factor - FY 99 budget is used as the base year. FY00 thru 05 are adjusted based on the D&D schedule.
 Revised Unit Cost - same as FT00.
 Basis for adjustment - none
 This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

Resources	Cost Element	Quantity	Units	Skill	Department	Curve	Quantity	Units
	A5H SUBCONTRACTED SRVS	0000	NONE		C220S Utility Operations	Linear	499.40	Dollars
Factors	549 \$/ 1,000 gallon			1.02283 -- FY00 Escalation --				
	A5T TAXES	0000	NONE		C220S Utility Operations	Linear	17.84	Dollars
Factors	19.76 dollars			1.015 -- FY00 Escalation --				

0.88934 [SYS 061400] .88934200 - System

WBS No: 1EBB040302
 Activity ID: 1EXXX43240

Rockv Flats Closure Project
Baseline Cost and Basis of Estimate

Project Baseline Devl
 WBS Filter 1EBB
 Activity Filter *

Starts In FY *

Line Item 200 - Gas Services Support

BOE
 Historical Data Source - Initial estimate is taken from FY98 Basis Of Estimate Tool(BEST) as modified by the RFCSS proposal.
 Item Desc -Gas services support.
 Breakdown of Historical Data:
 Item - 1 Lot
 Unit Cost - 1,810 hrs. \$3,600 Lease
 Unit Cost Adjustment factor - FY 99 budget is used as the base year. FY00 thru 05 are adjusted based on the D&D schedule.
 Revised Unit Cost - same as FY00.
 Basis for adjustment -None
 This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

Resources	Cost Element	Skill	Department	Curve	Quantity	Units
	750 STRAIGHT TIME BASE	P170 OTHER ADMINISTRATIVE & PROFE	C220S Utility Operations	Linear	1,609.71	Hours
<i>Factors</i> 1810 hrs						
	A5L RENTALS	0000 NONE	C106S Business Management Office	Linear	3,249.66	Dollars
<i>Factors</i> 3600 dollars 1.015 -- FY00 Escalation --						
					0.88934	ISYS 0614001.88934200 - Svsstem
					0.88934	ISYS 0614001.88934200 - Svsstem

Line Item SYS - Contingency And Escalation

BOE

Resources	Cost Element	Skill	Department	Curve	Quantity	Units
	CON CONTINGENCY	0000 NONE	ZDEPT No Department	Linear	39,593.84	Dollars
<i>Factors</i> 39593.8 Dollars						
	ESC ESCALATION	0000 NONE	ZDEPT No Department	Linear	16,140.77	Dollars
<i>Factors</i> 16140.8 Dollars						

WBS No: 1EBB040303 Title: Nitrogen Plant
Activity ID: 1EBB433000 Description: Operate Nitrogen Plant & Supply FY00 Cost Risk 1 Schedule Risk 1

Line Item	Description	Quantity	Units	BOE Type	Labor Hours/Unit	Labor Hours Total	Labor Cost Total	Materials/ Sub Cost	Contingency & Escalation	Total Prime Cost	Burden Cost	Total Cost
100	Operate Nitrogen Plant and Supply	1.00	ea	VQ	0	0	0	71,555	0	71,555	0	71,555
Total for Activity 1EBB433000:						0	0	71,555	0	71,555	0	71,555

Line Item 100 - Operate Nitrogen Plant and Supply

BOE
 Vendor Name - Air Products
 Vendor Quote - \$353,496.02 per year plus a contracted economic price indicator increase which will be about 4% per year from FY99.
 Quote Received by - Don Landry
 Item being quoted - Operations of Nitrogen Plant
 Other Info -
 Availability - immediate
 A5H \$367,636 Maintenance & Service 1-year contract.
 This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

Resources	Cost Element	Skill	Department	Curve	Quantity	Units
	A5H SUBCONTRACTED SRVS	0000 NONE	C220S Utility Operations	Linear	71,554.93	Dollars
<i>Factors</i> 367636 dollars / quarter in FY99 1.02283 -- FY00 Escalation -- 0.36164 May 2000 Earned Value Factor						
					0.52618	ISYS 0613001.0526183 - Target

Activity ID: 1EBB433100 Description: Operate Nitrogen Plant & Supply FY01 Cost Risk 1 Schedule Risk 1

Line Item	Description	Quantity	Units	BOE Type	Labor Hours/Unit	Labor Hours Total	Labor Cost Total	Materials/ Sub Cost	Contingency & Escalation	Total Prime Cost	Burden Cost	Total Cost
100	Operate Nitrogen Plant and Supply	1.00	ea	VQ	0	0	0	347,795	0	347,795	0	347,795
200	Transition Plan	1.00	each	EE	0	0	0	4,075	0	4,075	0	4,075
SYS	Contingency And Escalation	1.00	ea	EE	0	0	0	0	18,482	18,482	0	18,482
Total for Activity 1EBB433100:						0	0	351,870	18,482	370,352	0	370,352

WBS No: 1EBB040303
 Activity ID: 1EBB433100

Rockv Flats Closure Project
Baseline Cost and Basis of Estimate

Project: Baseline Devl
 WBS Filter: 1EBB
 Activity Filter: *

Starts In FY *

Line Item 100 - Operate Nitrogen Plant and Supply

BOE
 Vendor Name - Air Products
 Vendor Quote - \$353,496.02 per year plus a contracted economic price indicator increase which will be about 4% per year.
 Quote Received by - Don Landry
 Item being quoted - Operations of Nitrogen Plant
 Other Info -
 Availability - immediate
 A5H \$382,341 Maintenance & Service 1-year contract based on current FY98 contract costs.
 This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

Resources		Cost Element	Skill	Department	Curve	Quantity	Units
A5H	SUBCONTRACTED SRVS	0000	NONE	C220S Utility Operations	Linear	347.794	80 Dollars
Factors		382341 dollars / quarter in FY99	1.02283 -- FY00 Escalation --				
							0.88934 [SYS 061400].88934200 - System

Line Item 200 - Transition Plan

BOE
 Develop a formal nitrogen system Transition Plan. This plan will address cold shutdown requirements, hazards assessment and mitigation, equipment utility isolations, records disposition, equipment fluid draining, securing the process, etc.
 Estimate was developed using the K-H Facility Transition Cost Estimating Worksheet.
 This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

Resources		Cost Element	Skill	Department	Curve	Quantity	Units
A53	E-2	0000	NONE	C200S Engineering Services	Linear	4.075	21 Dollars
Factors		4480 dollars	1.02283 -- FY00 Escalation --				
							0.88934 [SYS 061400].88934200 - System

Line Item SYS - Contingency And Escalation

BOE

Resources		Cost Element	Skill	Department	Curve	Quantity	Units
CON	CONTINGENCY	0000	NONE	ZDEPT No Department	Linear	11.082	86 Dollars
Factors		11082.9 Dollars					
ESC	ESCALATION	0000	NONE	ZDEPT No Department	Linear	7.399	04 Dollars
Factors		7399.04 Dollars					

Activity ID: 1EBB433200 Description: Operate Nitrogen Plant & Supply FY02

Cost Risk 1 Schedule Risk 1

Line Item	Description	Quantity	Units	BOE Type	Labor Hours/Unit	Labor Hours Total	Labor Cost Total	Materials/ Sub Cost	Contingency & Escalation	Total Prime Cost	Burden Cost	Total Cost
100	Operate Nitrogen Plant and Supply	1.00	ea	VQ	0	0	0	361.707	0	361.707	0	361.707
200	Transition Nitrogen Utility	1.00	each	EE	0	0	0	10.697	0	10.697	0	10.697
SYS	Contingency And Escalation	1.00	ea	EE	0	0	0	0	55.052	55.052	0	55.052
Total for Activity 1EBB433200:						0	0	372.404	55.052	427.456	0	427.456

Line Item 100 - Operate Nitrogen Plant and Supply

BOE
 Vendor Name - Air Products
 Vendor Quote - \$353,496.02 per year plus a contracted economic price indicator increase which will be about 4% per year.
 Quote Received by - Don Landry
 Item being quoted - Operations of Nitrogen Plant
 Other Info -
 Availability - immediate
 A5H \$397,635 Maintenance & Service 1-year contract based on current FY98 contract costs.
 This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

Resources		Cost Element	Skill	Department	Curve	Quantity	Units
A5H	SUBCONTRACTED SRVS	0000	NONE	C220S Utility Operations	Linear	361.707	00 Dollars
Factors		397635 dollars	1.02283 -- FY00 Escalation --				
							0.88934 [SYS 061400].88934200 - System

WBS No: 1EBB04030
 Activity ID: 1EBB43200

Rockv Flats Closure Project
Baseline Cost and Basis of Estimate

Project: Baseline Devl
 WBS Filter: 1EBB
 Activity Filter: *

Starts In FY *

Line Item 200 - Transition Nitrogen Utility

BOE
 This line item includes effort to isolate the nitrogen plant, drain internal systems, disposition of facility records and transition report. The estimate is based on the K-H Estimates to Transition Utilities Template.
 This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

Resources	Cost Element	Skill	Department	Curve	Quantity	Units
	A5H SUBCONTRACTED SRVS	0000 NONE	C220S Utility Operations	Linear	10.69743	Dollars
Factors 11760 dollars 1.02283 -- FY00 Escalation --						
0.88934 [SYS 061400] .88934200 - System						

Line Item SYS - Contingency And Escalation

BOE

Resources	Cost Element	Skill	Department	Curve	Quantity	Units
	CON CONTINGENCY	0000 NONE	ZDEPT No Department	Linear	37.64852	Dollars
Factors 37648.5 Dollars						
	ESC ESCALATION	0000 NONE	ZDEPT No Department	Linear	17.40299	Dollars
Factors 17403 Dollars						

WBS No: 1EBB0404 Title: Electrical Distribution System

Activity ID: 1EBB440000 Description: Electric Utility Maintenance FY00 Cost Risk 2 Schedule Risk 1

Line Item	Description	Quantity	Units	BOE Type	Labor Hours/Unit	Labor Hours Total	Labor Cost Total	Materials/ Sub Cost	Contingency & Escalation	Total Prime Cost	Burden Cost	Total Cost
100	Corrective Maintenance/Emergency Power Restoration	1.00	each	HC	1.137	1.137	25.926	5.349	0	31.275	12.652	43.927
200	Transition SubStation	1.00	each	HC	0	0	0	339	0	339	0	339
Total for Activity 1EBB440000:						1.137	25.926	5.688	0	31.614	12.652	44.266

Line Item 100 - Corrective Maintenance/Emergency Power Restoration

BOE
 This activity addresses basic maintenance needs at a level necessary and sufficient to maintain safe and compliant operation.
 This funding level supports high voltage line maintenance activities anticipated for the fiscal year.
 Historical Data Source - Initial estimate is taken from the FY98 basis of Estimate Tool (BEST) as modified by the RFCSS proposal.
 Item Desc - The activity addresses basic corrective maintenance needs at a level necessary and sufficient to maintain safe and compliant operation.
 Breakdown of Historical Data:
 Item - Electrical utility maintenance work package.
 Units - 1 lot
 Unit Cost - 5,973 hrs. \$30,145 materials.
 Unit Cost Adjustment factor - FY99 budget is used as the base year. FY00 thru 05 are adjusted based on the D&D schedule.
 Revised Unit Cost - same as FY00
 Basis for adjustment - None
 The Engineering, Planning, Health & Safety and Environmental support functions for maintenance efforts are contained in WAD 025.
 This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

Resources	Cost Element	Skill	Department	Curve	Quantity	Units
	750 STRAIGHT TIME BASE	C020 ELECTRICIANS	KE10H Indust/Site Srvs Steelworkers	Linear	1.03328	Hours
Factors 5430 hours 0.36164 May 2000 Earned Value Factor						
					0.52618 [SYS 061300] 0.526183 - Target	
	751 OVERTIME BASE & PRE.	C020 ELECTRICIANS	KE10H Indust/Site Srvs Steelworkers	Linear	7.61	Hours
Factors 40 h 0.36164 May 2000 Earned Value Factor						
					0.52618 [SYS 061300] 0.526183 - Target	
	751 OVERTIME BASE & PRE.	C020 ELECTRICIANS	KE10H Indust/Site Srvs Steelworkers	Linear	95.72	Hours
Factors 503 hrs 0.36164 May 2000 Earned Value Factor						
					0.52618 [SYS 061300] 0.526183 - Target	
	A5C SUPPLIES	0000 NONE	C220S Utility Operations	Linear	5.16743	Dollars
Factors 1.015 -- FY00 Escalation -- 30082.3 dollars 0.32163 May 2000 Earned Value Factor						
					0.52618 [SYS 061300] 0.526183 - Target	

WBS No: 1EBB0404
 Activity ID: 1EBB440000

Rockv Flats Closure Project
Baseline Cost and Basis of Estimate

Project Baseline Devl
 WBS Filter 1EBB
 Activity Filter * Starts In FY *

A5T	TAXES	0000	NONE	C220S	Utility Operations	Linear	181.22	Dollars
<i>Factors</i>		1.015	-- FY00 Escalation --	1055	dollars	0.32163	May 2000	Earned Value Factor
						0.52618	[SYS 061300]	0.526183 - Target

Line Item 200 - Transition SubStation

BOE
 This line item includes effort to isolate, shutdown and close substations 132, 515/516, and plainview transmission line, drain internal systems (transformers etc.), disposition of facility records and transition report. The estimate is based on the K-H Estimates to Transition Utilities Template.
 This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

Resources

A5H	SUBCONTRACTED SRVS	0000	NONE	C220S	Utility Operations	Linear	339.28	Dollars
<i>Factors</i>		1960	dollars	1.02283	-- FY00 Escalation --	0.32163	May 2000	Earned Value Factor
						0.52618	[SYS 061300]	0.526183 - Target

Activity ID: 1EBB440100 Description: Electric Utility Maintenance FY01

Cost Risk 2 Schedule Risk 1

Line Item	Description	Quantity	Units	BOE Type	Labor Hours/Unit	Labor Hours Total	Labor Cost Total	Materials/ Sub Cost	Contingency & Escalation	Total Prime Cost	Burden Cost	Total Cost
100	Corrective Maintenance/Emergency Power Restoration	1.00	each	HC	5.312	5.312	121.168	28.164	0	149.332	57.797	207.128
SYS	Contingency And Escalation	1.00	ea	EE	0	0	0	0	10.981	10.981	0	10.981
Total for Activity 1EBB440100:						5.312	121.168	28.164	10.981	160.313	57.797	218.110

Line Item 100 - Corrective Maintenance/Emergency Power Restoration

BOE
 This activity addresses basic maintenance needs at a level necessary and sufficient to maintain safe and compliant operation.
 This funding level supports high voltage line maintenance activities anticipated for the fiscal year.
 Historical Data Source - Initial estimate is taken from the FY98 basis of Estimate Tool (BEST) as modified by the RFCSS proposal.
 Item Desc - The activity addresses basic corrective maintenance needs at a level necessary and sufficient to maintain safe and compliant operation.
 Breakdown of Historical Data:
 Item - Electrical utility maintenance work package.
 Units - 1 lot
 Unit Cost - 5,973 hrs. \$30,145 materials.
 Unit Cost Adjustment factor - FY99 budget is used as the base year. FY00 thru 05 are adjusted based on the D&D schedule.
 Revised Unit Cost - same as FY00
 Basis for adjustment - None
 The Engineering, Planning, Health & Safety and Environmental support functions for maintenance efforts are contained in WAD 025.
 This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

Resources

750	STRAIGHT TIME BASE	C020	ELECTRICIANS	KE10H	Indust/Site Svcs Steelworkers	Linear	4.829	13 Hours
						0.88934	[SYS 061400]	.88934200 - System
751	OVERTIME BASE & PRE.	C020	ELECTRICIANS	KE10H	Indust/Site Svcs Steelworkers	Linear	482.91	Hours
						0.88934	[SYS 061400]	.88934200 - System
A5C	SUPPLIES	0000	NONE	C220S	Utility Operations	Linear	27.211	57 Dollars
<i>Factors</i>		30145.2	dollars	1.015	-- FY00 Escalation --	0.88934	[SYS 061400]	.88934200 - System
A5T	TAXES	0000	NONE	C220S	Utility Operations	Linear	952.33	Dollars
<i>Factors</i>		1055	dollars	1.015	-- FY00 Escalation --	0.88934	[SYS 061400]	.88934200 - System

Line Item SYS - Contingency And Escalation

BOE

Resources

CON	CONTINGENCY	0000	NONE	ZDEPT	No Department	Linear	6.625	61 Dollars
<i>Factors</i>		6625.61	Dollars					

WBS No: 1EBB0404
 Activity ID: 1EBB440100

Rockv Flats Closure Project
Baseline Cost and Basis of Estimate

Project Baseline Devl
 WBS Filter 1EBB
 Activity Filter *

Starts In FY *

ESC	ESCALATION	0000	NONE	ZDEPT	No Department	Linear	4,355.45	Dollars
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Factors 4355.45 Dollars

Activity ID: 1EBB440200 Description: Electric Utility Maintenance FY02

Cost Risk 2 Schedule Risk 1

Line Item	Description	Quantity	Units	BOE Type	Labor Hours/Unit	Labor Hours Total	Labor Cost Total	Materials/ Sub Cost	Contingency & Escalation	Total Prime Cost	Burden Cost	Total Cost
100	Corrective Maintenance/Emergency Power Restoration	1.00	each	HC	5.312	5.312	121.168	28.164	0	149.332	42.772	192.104
SYS	Contingency And Escalation	1.00	ea	EE	0	0	0	0	28.712	28.712	0	28.712
Total for Activity 1EBB440200:						5.312	121.168	28.164	28.712	178.044	42.772	220.816

Line Item 100 - Corrective Maintenance/Emergency Power Restoration

BOE

This activity addresses basic maintenance needs at a level necessary and sufficient to maintain safe and compliant operation.

This funding level supports high voltage line maintenance activities anticipated for the fiscal year.

Historical Data Source - Initial estimate is taken from the FY98 basis of Estimate Tool (BEST) as modified by the RFCSS proposal.

Item Desc - The activity addresses basic corrective maintenance needs at a level necessary and sufficient to maintain safe and compliant operation.

Breakdown of Historical Data:
 Item - Electrical utility maintenance work package.
 Units - 1 lot
 Unit Cost - 5,973 hrs. \$30,145 materials.
 Unit Cost Adjustment factor - FY99 budget is used as the base year. FY00 thru 05 are adjusted based on the D&D schedule.
 Revised Unit Cost - same as FY00
 Basis for adjustment - None

The Engineering, Planning, Health & Safety and Environmental support functions for maintenance efforts are contained in WAD 025.

This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

Resources

Cost Element	Skill	Department	Curve	Quantity	Units
750 STRAIGHT TIME BASE	C020 ELECTRICIANS	KE10H Indust/Site Svcs Steelworkers	Linear	4.829	13 Hours
Factors 5430 hours					
751 OVERTIME BASE & PRE.	C020 ELECTRICIANS	KE10H Indust/Site Svcs Steelworkers	Linear	482.91	Hours
Factors 543 hrs					
A5C SUPPLIES	0000 NONE	C220S Utility Operations	Linear	27,211.57	Dollars
Factors 30145.2 dollars 1.015 -- FY00 Escalation --					
A5T TAXES	0000 NONE	C220S Utility Operations	Linear	952.33	Dollars
Factors 1055 dollars 1.015 -- FY00 Escalation --					

0.88934 [SYS 061400] .88934200 - System

Line Item SYS - Contingency And Escalation

BOE

Resources

Cost Element	Skill	Department	Curve	Quantity	Units
CON CONTINGENCY	0000 NONE	ZDEPT No Department	Linear	19.735	16 Dollars
Factors 19735.2 Dollars					
ESC ESCALATION	0000 NONE	ZDEPT No Department	Linear	8.977	28 Dollars
Factors 8977.28 Dollars					

Activity ID: 1EBB440300 Description: Electric Utility Maintenance FY03

Cost Risk 2 Schedule Risk 1

Line Item	Description	Quantity	Units	BOE Type	Labor Hours/Unit	Labor Hours Total	Labor Cost Total	Materials/ Sub Cost	Contingency & Escalation	Total Prime Cost	Burden Cost	Total Cost
100	Corrective Maintenance/Emergency Power Restoration	1.00	each	HC	5.312	5.312	121.168	28.164	0	149.332	41.924	191.256
200	Transition Plan	1.00	each	HC	0	0	0	4.075	0	4.075	0	4.075
SYS	Contingency And Escalation	1.00	ea	EE	0	0	0	0	54.155	54.155	0	54.155
Total for Activity 1EBB440300:						5.312	121.168	32.239	54.155	207.562	41.924	249.486

Line Item 100 - Corrective Maintenance/Emergency Power Restoration

BOE

This activity addresses basic maintenance needs at a level necessary and sufficient to maintain safe and compliant operation.

WBS No: 1EBB0404
 Activity ID: 1EBB440300

Rockv Flats Closure Project
Baseline Cost and Basis of Estimate

Project Baseline Devl
 WBS Filter 1EBB
 Activity Filter *

Starts In FY *

This funding level supports high voltage line maintenance activities anticipated for the fiscal year.

Historical Data Source - Initial estimate is taken from the FY98 basis of Estimate Tool (BEST) as modified by the RFCSS proposal.

Item Desc - The activity addresses basic corrective maintenance needs at a level necessary and sufficient to maintain safe and compliant operation.

Breakdown of Historical Data:
 Item - Electrical utility maintenance work package.
 Units - 1 lot
 Unit Cost - 5,973 hrs. \$30,145 materials.
 Unit Cost Adjustment factor - FY99 budget is used as the base year. FY00 thru 05 are adjusted based on the D&D schedule.
 Revised Unit Cost - same as FY00
 Basis for adjustment - None

The Engineering, Planning, Health & Safety and Environmental support functions for maintenance efforts are contained in WAD 025.

This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

Resources	Cost Element	Quantity	Units	Skill	Department	Curve	Quantity	Units
	750 STRAIGHT TIME BASE	C020	ELECTRICIANS	KE10H	Indust/Site Svcs Steelworkers	Linear	4,829.13	Hours
Factors	5430 hours							
	751 OVERTIME BASE & PRE.	C020	ELECTRICIANS	KE10H	Indust/Site Svcs Steelworkers	Linear	482.91	Hours
Factors	543 hrs							
	A5C SUPPLIES	0000	NONE	C220S	Utility Operations	Linear	27,211.57	Dollars
Factors	30145.2 dollars	1.015	-- FY00 Escalation --					
	A5T TAXES	0000	NONE	C220S	Utility Operations	Linear	952.33	Dollars
Factors	1055 dollars	1.015	-- FY00 Escalation --					

Line Item 200 - Transition Plan

BOE Develop a formal electrical distribution system Transition Plan. This Plan will address cold shutdown requirements, hazards assessment and mitigation, equipment utility isolations, records disposition, etc.
 The estimate was developed using the K-H Facility Transition Cost Estimating Worksheet.

This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

Resources	Cost Element	Quantity	Units	Skill	Department	Curve	Quantity	Units
	A5H SUBCONTRACTED SRVS	0000	NONE	C220S	Utility Operations	Linear	4,075.21	Dollars
Factors	4480 Dollars	1.02283	-- FY00 Escalation --					

Line Item SYS - Contingency And Escalation

BOE

Resources	Cost Element	Quantity	Units	Skill	Department	Curve	Quantity	Units
	CON CONTINGENCY	0000	NONE	ZDEPT	No Department	Linear	39,175.82	Dollars
Factors	39175.8 Dollars							
	ESC ESCALATION	0000	NONE	ZDEPT	No Department	Linear	14,978.99	Dollars
Factors	14979 Dollars							

Activity ID: 1EBB440400 Description: Electric Utility Maintenance FY04

Cost Risk 2 Schedule Risk 1

Line Item	Description	Quantity	Units	BOE Type	Labor Hours/Unit	Labor Hours Total	Labor Cost Total	Materials/ Sub Cost	Contingency & Escalation	Total Prime Cost	Burden Cost	Total Cost
100	Corrective Maintenance/Emergency Power Restoration	1.00	each	HC	5,312	5,312	121,168	28,164	0	149,332	34,169	183,501
SYS	Contingency And Escalation	1.00	ea	EE	0	0	0	0	26,202	26,202	0	26,202
Total for Activity 1EBB440400:						5,312	121,168	28,164	26,202	175,533	34,169	209,702

Line Item 100 - Corrective Maintenance/Emergency Power Restoration

BOE This activity addresses basic maintenance needs at a level necessary and sufficient to maintain safe and compliant operation.

This funding level supports high voltage line maintenance activities anticipated for the fiscal year.

WBS No: 1EBB0404
 Activity ID: 1EBB440400

Rockv Flats Closure Project
Baseline Cost and Basis of Estimate

Project Baseline Devl
 WBS Filter 1EBB
 Activity Filter *

Starts In FY *

Historical Data Source - Initial estimate is taken from the FY98 basis of Estimate Tool (BEST) as modified by the RFCSS proposal.
 Item Desc - The activity addresses basic corrective maintenance needs at a level necessary and sufficient to maintain safe and compliant operation.
 Breakdown of Historical Data:
 Item - Electrical utility maintenance work package.
 Units - 1 lot
 Unit Cost - 5,973 hrs. \$30,145 materials.
 Unit Cost Adjustment factor - FY99 budget is used as the base year. FY00 thru 05 are adjusted based on the D&D schedule.
 Revised Unit Cost - same as FY00
 Basis for adjustment - None
 The Engineering, Planning, Health & Safety and Environmental support functions for maintenance efforts are contained in WAD 025.
 This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

Resources	Cost Element	Skill	Department	Curve	Quantity	Units
750	STRAIGHT TIME BASE	C020 ELECTRICIANS	KE10H Indust/Site Srvs Steelworkers	Linear	4,829.13	Hours
Factors 5430 hours						
751	OVERTIME BASE & PRE.	C020 ELECTRICIANS	KE10H Indust/Site Srvs Steelworkers	Linear	482.91	Hours
Factors 543 hrs						
A5C	SUPPLIES	0000 NONE	C220S Utility Operations	Linear	27,211.57	Dollars
Factors 30145.2 dollars 1.015 -- FY00 Escalation --						
A5T	TAXES	0000 NONE	C220S Utility Operations	Linear	952.33	Dollars
Factors 1055 dollars 1.015 -- FY00 Escalation --						

Line Item SYS - Contingency And Escalation

Resources	Cost Element	Skill	Department	Curve	Quantity	Units
CON	CONTINGENCY	0000 NONE	ZDEPT No Department	Linear	8,582.52	Dollars
Factors 8582.52 Dollars						
ESC	ESCALATION	0000 NONE	ZDEPT No Department	Linear	17,619.06	Dollars
Factors 17619.1 Dollars						

Activity ID: 1EBB440500 Description: Electric Utility Maintenance FY05

Cost Risk 2 Schedule Risk 1

Line Item	Description	Quantity	Units	BOE Type	Labor Hours/Unit	Labor Hours Total	Labor Cost Total	Materials/ Sub Cost	Contingency & Escalation	Total Prime Cost	Burden Cost	Total Cost
100	Corrective Maintenance/Emergency Power Restoration	1.00	each	HC	3.541	3.541	80.778	28.164	0	108.942	28.111	137.053
200	Transition Distribution System	1.00	each	HC	0	0	0	5.858	0	5.858	0	5.858
300	Transition SubStation	1.00	each	HC	0	0	0	1.783	0	1.783	0	1.783
SYS	Contingency And Escalation	1.00	ea	EE	0	0	0	0	122.824	122.824	0	122.824
Total for Activity 1EBB440500:						3.541	80.778	35.805	122.824	239.407	28.111	267.518

Line Item 100 - Corrective Maintenance/Emergency Power Restoration

BOE
 This activity addresses basic maintenance needs at a level necessary and sufficient to maintain safe and compliant operation.
 This funding level supports high voltage line maintenance activities anticipated for the fiscal year.
 Historical Data Source - Initial estimate is taken from the FY98 basis of Estimate Tool (BEST) as modified by the RFCSS proposal.
 Item Desc - The activity addresses basic corrective maintenance needs at a level necessary and sufficient to maintain safe and compliant operation.
 Breakdown of Historical Data:
 Item - Electrical utility maintenance work package.
 Units - 1 lot
 Unit Cost - 3,982 hrs. \$30,145 materials.
 Unit Cost Adjustment factor - FY99 budget is used as the base year. FY00 thru 05 are adjusted based on the D&D schedule.
 Revised Unit Cost - same as FY00
 Basis for adjustment - None
 The Engineering, Planning, Health & Safety and Environmental support functions for maintenance efforts are contained in WAD 025.

WBS No: 1EBB0404
 Activity ID: 1EBB440500

Rockv Flats Closure Project
Baseline Cost and Basis of Estimate

Project: Baseline Devl
 WBS Filter: 1EBB
 Activity Filter: *

Starts In FY *

This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

Resources

Cost Element	Skill	Department	Curve	Quantity	Units
750 STRAIGHT TIME BASE	C020 ELECTRICIANS	KE10H Indust/Site Svcs Steelworkers	Linear	3,219.42	Hours
<i>Factors</i> 3620 hours					
751 OVERTIME BASE & PRE.	C020 ELECTRICIANS	KE10H Indust/Site Svcs Steelworkers	Linear	321.94	Hours
<i>Factors</i> 362 hrs					
A5C SUPPLIES	0000 NONE	C220S Utility Operations	Linear	27,211.57	Dollars
<i>Factors</i> 30145.2 dollars 1.015 -- FY00 Escalation --					
A5T TAXES	0000 NONE	C220S Utility Operations	Linear	952.33	Dollars
<i>Factors</i> 1055 dollars 1.015 -- FY00 Escalation --					

0.88934 [SYS 061400] .88934200 - System
 0.88934 [SYS 061400] .88934200 - System
 0.88934 [SYS 061400] .88934200 - System
 0.88934 [SYS 061400] .88934200 - System

Line Item 200 - Transition Distribution System

BOE This line item includes effort to shutdown remaining power distribution system, drain internal systems (transformers etc.) disposition of facility records and transition report. This estimate is based on the K-H Estimate to Transition Utilities Template.

This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

Resources

Cost Element	Skill	Department	Curve	Quantity	Units
A5H SUBCONTRACTED SRVS	0000 NONE	C220S Utility Operations	Linear	5,858.12	Dollars
<i>Factors</i> 6440 Dollars 1.02283 -- FY00 Escalation --					

0.88934 [SYS 061400] .88934200 - System

Line Item 300 - Transition SubStation

BOE This line item includes effort to isolate, shutdown and close substations 517/518, drain internal systems (transformers etc.), disposition of facility records and transition report. The estimate is based on the K-H Estimates to Transition Utilities Template.

This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

Resources

Cost Element	Skill	Department	Curve	Quantity	Units
A5H SUBCONTRACTED SRVS	0000 NONE	C220S Utility Operations	Linear	1,782.91	Dollars
<i>Factors</i> 1960 dollars 1.02283 -- FY00 Escalation --					

0.88934 [SYS 061400] .88934200 - System

Line Item SYS - Contingency And Escalation

BOE

Cost Element	Skill	Department	Curve	Quantity	Units
CON CONTINGENCY	0000 NONE	ZDEPT No Department	Linear	90,549.88	Dollars
<i>Factors</i> 90549.9 Dollars					
ESC ESCALATION	0000 NONE	ZDEPT No Department	Linear	32,274.06	Dollars
<i>Factors</i> 32274.1 Dollars					

Activity ID: 1EBB441000 Description: Electric Utility Projects FY00

Cost Risk 4 Schedule Risk 1

Line Item	Description	Quantity	Units	BOE Type	Labor Hours/Unit	Labor Hours Total	Labor Cost Total	Materials/ Sub Cost	Contingency & Escalation	Total Prime Cost	Burden Cost	Total Cost
100	Transition and Close 515/516 SubStation	1.00	each	EE	14	14	296	11,795	0	12,091	145	12,236
Total for Activity 1EBB441000:						14	296	11,795	0	12,091	145	12,236

Line Item 100 - Transition and Close 515/516 SubStation

BOE Deactivation of substation 515/516 requires procedure writer time to support required changes to the authorization basis documents for B559,707,776/777, and 771/774 that are currently connected to substation 515/516.

This also includes the effort necessary to resize the conductors between B771 and substation 517/518.

This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

WBS No: 1EBB0404
 Activity ID: 1EBB441000

Rockv Flats Closure Project
Baseline Cost and Basis of Estimate

Project Baseline Devl
 WBS Filter 1EBB
 Activity Filter *

Starts In FY *

Resources	Cost Element	Skill	Department	Curve	Quantity	Units
750	STRAIGHT TIME BASE	C020 ELECTRICIANS	KE10H Indust/Site Srvs Steelworkers	Linear	13.70	Hours
Factors 72 hrs 0.36164 May 2000 Earned Value Factor						
A53	E-2	0000 NONE	C200S Engineering Services	Linear	11.794.90	Dollars
Factors 60600 Dollars 1.02283 -- FY00 Escalation -- 0.36164 May 2000 Earned Value Factor						

0.52618 [SYS 061300] 0.526183 - Target
 0.52618 [SYS 061300] 0.526183 - Target

Activity ID: 1EXXX44040 Description: Electric Utility Maintenance FY05

Cost Risk 2 Schedule Risk 1

Line Item	Description	Quantity	Units	BOE Type	Labor Hours/Unit	Labor Hours Total	Labor Cost Total	Materials/ Sub Cost	Contingency & Escalation	Total Prime Cost	Burden Cost	Total Cost
100	Corrective Maintenance/Emergency Power Restoration	1.00	each	HC	5.312	5.289	120.639	28.041	0	148.679	41.982	190.662
SYS	Contingency And Escalation	1.00	lea	EE	0	0	0	0	101.990	101.990	0	101.990
Total for Activity 1EXXX44040:						5.289	120.639	28.041	101.990	250.670	41.982	292.652

Line Item 100 - Corrective Maintenance/Emergency Power Restoration

BOE

This activity addresses basic maintenance needs at a level necessary and sufficient to maintain safe and compliant operation.
 This funding level supports high voltage line maintenance activities anticipated for the fiscal year.
 Historical Data Source - Initial estimate is taken from the FY98 basis of Estimate Tool (BEST) as modified by the RFCSS proposal.
 Item Desc - The activity addresses basic corrective maintenance needs at a level necessary and sufficient to maintain safe and compliant operation.
 Breakdown of Historical Data:
 Item - Electrical utility maintenance work package.
 Units - 1 lot
 Unit Cost - 5,973 hrs. \$30,145 materials.
 Unit Cost Adjustment factor - FY99 budget is used as the base year. FY00 thru 05 are adjusted based on the D&D schedule.
 Revised Unit Cost - same as FY00
 Basis for adjustment - None
 The Engineering, Planning, Health & Safety and Environmental support functions for maintenance efforts are contained in WAD 025.
 This estimate includes a project productivity/efficiency factor for committed but as yet undefined cost reductions.

Resources

Resources	Cost Element	Skill	Department	Curve	Quantity	Units
750	STRAIGHT TIME BASE	C020 ELECTRICIANS	KE10H Indust/Site Srvs Steelworkers	Linear	4.829.13	Hours
Factors 5430 hours 0.88934 [SYS 061400] .88934200 - System						
751	OVERTIME BASE & PRE.	C020 ELECTRICIANS	KE10H Indust/Site Srvs Steelworkers	Linear	482.91	Hours
Factors 543 hrs 0.88934 [SYS 061400] .88934200 - System						
A5C	SUPPLIES	0000 NONE	C220S Utility Operations	Linear	27.211.57	Dollars
Factors 30145.2 dollars 1.015 -- FY00 Escalation -- 0.88934 [SYS 061400] .88934200 - System						
A5T	TAXES	0000 NONE	C220S Utility Operations	Linear	952.33	Dollars
Factors 1055 dollars 1.015 -- FY00 Escalation -- 0.88934 [SYS 061400] .88934200 - System						

Line Item SYS - Contingency And Escalation

BOE

Resources

Resources	Cost Element	Skill	Department	Curve	Quantity	Units
CON	CONTINGENCY	0000 NONE	ZDEPT No Department	Linear	72.453.84	Dollars
Factors 72453.8 Dollars						
ESC	ESCALATION	0000 NONE	ZDEPT No Department	Linear	29.536.44	Dollars
Factors 29536.4 Dollars						

Report Totals:

Labor Hours Total	Labor Cost Total	Materials/ Sub Cost	Contingency & Escalation	Total Prime Cost	Burden Cost	Total Cost
355.136	9,584.963	18,775.381	8,191.223	36,551.568	3,720.850	40,272.418