

WBS No: 1BAHPC
 Activity ID: 1BAHPRJCLO

Rockv Flats Closure Project
Baseline Cost and Basis of Estimate

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

Starts In FY *

WBS No: 1BAHPC Title: Project Close-Out for Ash Residue
 Activity ID: 1BAHPRJCLO Description: Project Closeout - Ash/Drv 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
010	FY01 Project Mgmt Support of Closeout	62.00	each	EE	9	558	29,825	29,388	0	59,213	14,227	73,440
020	FY01 Project Support of Closeout	62.00	each	EE	0	0	0	321,408	0	321,408	0	321,408
SYS	Contingency And Escalation	1.00	ea	EE	0	0	0	0	21,116	21,116	0	21,116
Total for Activity 1BAHPRJCLO:						558	29,825	350,796	21,116	401,737	14,227	415,963

Line Item 010 - FY01 Project Mgmt Support of Closeout

BOE
 Historical Data Source: The historical data is based on FY00 Project Management Cost which were tracked by charge number EM2453.
 Description of the item supported by the historical data: Project Closeout.
 Breakdown of Historical Data:
 Item: Project Closeout
 Units: Cost per day
 Unit Cost: \$13K
 Unit Cost Adjustment Factor -53%
 Revised Unit Cost: \$6K
 Basis for Adjustment - The estimated costs were reduced by combining the Ash & Dry teams together and the elimination of IWCP/operations support which will no longer be needed.

Resources	Cost Element	Skill	Department	Curve	Quantity	Units
750	STRAIGHT TIME BASE	M020 MANAGERS (GRADE 69 - 72)	KB40S B707 Ash/Drv Residues	Linear	9.00	Hours
<i>Factors</i> 9 hours (Project Mgr)						
A52	TENERA	P170 OTHER ADMINISTRATIVE & PROFE	KB40S B707 Ash/Drv Residues	Linear	324.00	Dollars
<i>Factors</i> 4.5 Hours (analyst/scheduler)						
A5C	SUPPLIES	0000 NONE	KB40S B707 Ash/Drv Residues	Linear	150.00	Dollars
<i>Factors</i> 150 dollars (supplies)						

Line Item 020 - FY01 Project Support of Closeout

BOE
 Historical Data Source: The historical data is based on FY00 Project Management Cost which were tracked by charge number EM2453.
 Description of the item supported by the historical data: Project Closeout.
 Breakdown of Historical Data:
 Item: Project Closeout
 Units: Cost per day
 Unit Cost: \$13K
 Unit Cost Adjustment Factor -53%
 Revised Unit Cost: \$6K
 Basis for Adjustment - The estimated costs were reduced by combining the Ash & Dry teams together and the elimination of IWCP/operations support which will no longer be needed.

Resources	Cost Element	Skill	Department	Curve	Quantity	Units
A57	LATA	E130 OTHER ENGINEERS	KB40S B707 Ash/Drv Residues	Linear	1,296.00	Dollars
<i>Factors</i> 18 Hours (SME)						
A5H	SUBCONTRACTED SRVS	E110 QUALITY CONTROL ENGINEERS	KB40S B707 Ash/Drv Residues	Linear	1,296.00	Dollars
<i>Factors</i> 18 Hours (QAO)						
A5H	SUBCONTRACTED SRVS	E130 OTHER ENGINEERS	KB40S B707 Ash/Drv Residues	Linear	1,296.00	Dollars
<i>Factors</i> 18 Hours (Indep. Tech Reviewers)						
A5H	SUBCONTRACTED SRVS	E130 OTHER ENGINEERS	KB40S B707 Ash/Drv Residues	Linear	648.00	Dollars
<i>Factors</i> 9 Hours (Record Cust)						
A5H	SUBCONTRACTED SRVS	E130 OTHER ENGINEERS	KB50S B707 Eng Envir. Sftv & Quality	Linear	648.00	Dollars
<i>Factors</i> 9 Hours (Quality End)						

Line Item SYS - Contingency And Escalation

BOE

Resources	Cost Element	Skill	Department	Curve	Quantity	Units
CON	CONTINGENCY	0000 NONE	ZDEPT No Department	Linear	12,812.79	Dollars
<i>Factors</i> 12812.8 Dollars						

WBS No: 1BAHPC
 Activity ID: 1BAHPRJCLO

Rockv Flats Closure Project
Baseline Cost and Basis of Estimate

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

Starts In FY: *
 8,302.76 Dollars

ESC	ESCALATION	0000	NONE	ZDEPT	No Department	Linear	8,302.76	Dollars
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Factors 8302.76 Dollars

WBS No: 1BAHPM Title: Project Management of Ash Residue
 Activity ID: 1BAHPRMGMT Description: Project Management - ASH/DRY 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
010	Project Management	138.00	each	EE	8	1,131	60,431	162,085	0	222,516	29,221	251,737
SYS	Contingency And Escalation	1.00	ea	EE	0	0	0	0	5,140	5,140	0	5,140
Total for Activity 1BAHPRMGMT:						1,131	60,431	162,085	5,140	227,656	29,221	256,877

Line Item 010 - Project Management

BOE
 Historical Data Source: The historical data is based on FY99/FY00 Project Management Cost (WBS 1.1.04.09.04.03 and 1.1.04.09.04.07) charge number EM2453.
 Description of the item supported by the historical data: Project Management
 Breakdown of Historical Data:
 Item: Project Management
 Units: Cost per day
 Unit Cost - \$2K
 Unit Cost Adjustment Factor - None.
 Revised Unit Cost - Same
 Basis for Adjustment - None.

Resources

Cost Element	Skill	Department	Curve	Quantity	Units
750 STRAIGHT TIME BASE	M020 MANAGERS (GRADE 69 - 72)	KB40S B707 Ash/Drv Residues	Linear	8.19	Hours
Factors 9 Hours (Program Manager)	0.89 Holiday/Vac factor	1.02283 --FY00 Escalation --			
A57 LATA	G010 ADMINISTRATIVE ASSISTANTS	KB40S B707 Ash/Drv Residues	Linear	460.27	Dollars
Factors 9 Hours (Administrative Support)		1.02283 --FY00 Escalation --	50 Dollars per hour		
A5C SUPPLIES	0000 NONE	KB40S B707 Ash/Drv Residues	Linear	51.46	Dollars
Factors 50.7 Shift (Office Supplies)	1.015 --FY00 Escalation --				
A5H SUBCONTRACTED SRVS	P170 OTHER ADMINISTRATIVE & PROFE	KB40S B707 Ash/Drv Residues	Linear	662.79	Dollars
Factors 9 Hours (Budget Analyst)	1.02283 --FY00 Escalation --		72 Dollars per hour		

Line Item SYS - Contingency And Escalation

BOE

Resources

Cost Element	Skill	Department	Curve	Quantity	Units
CON CONTINGENCY	0000 NONE	ZDEPT No Department	Linear	2,995.27	Dollars
Factors 2995.27 Dollars					
ESC ESCALATION	0000 NONE	ZDEPT No Department	Linear	2,144.70	Dollars
Factors 2144.70 Dollars					

WBS No: 1BAHPR Title: Processing of Ash Residue
 Activity ID: 1BAH310ASH Description: Processing IDC 310 - 946 KGs (Non-RCRA) - Mod D 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
010-1	Process Ash Residues - IDC 310	35.00	day	EE	172	6,019	142,665	110,250	0	252,915	69,621	322,536
Total for Activity 1BAH310ASH:						6,019	142,665	110,250	0	252,915	69,621	322,536

Line Item 010-1 - Process Ash Residues - IDC 310

BOE
 Historical Data Source: The historical data is based on IDC301 Graphite Shapes, which were traced in FY99 by charge number EM2544.
 Description of the item supported by the historical data: Process Ash Residue IDC 310
 Breakdown of Historical Data:
 Item: IDC301 Graphite Operations
 Unit - cost per kg
 Unit Cost - \$525/kg
 Unit Cost Adjustment Factor - 15% overtime to 34% overtime
 Revised Unit Cost - \$544/kg
 Basis for Adjustment - estimated cost per day increased due to increased overtime requirements, and larger crew size. Some of the estimated costs were reduced by operation crew proficiency.
 Assumptions:

WBS No: 1BAHPR
 Activity ID: 1BAH310ASH

Rockv Flats Closure Project
Baseline Cost and Basis of Estimate

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

Starts In FY *

80% Process Availability =(90% building) x (95% personnel) x (95% equipment)
 This IDC will be completed in the D module.

Resources	Cost Element	Skill	Department	Curve	Quantity	Units
	750 STRAIGHT TIME BASE	M010 FOREMEN / TEAM LEADS / GROUP	S100S SSOC Salaried	Linear	4.50	Hours
Factors	4.5 Hours (RCT Foreman .5)					
	750 STRAIGHT TIME BASE	R010 CHEMICAL SYSTEMS OPERATOR (	KB40H B707 Ash/Drv Residues	Linear	85.14	Hours
Factors	99 Hours (Operators-11)	0.86 Holiday/Vac factor				
	750 STRAIGHT TIME BASE	R010 CHEMICAL SYSTEMS OPERATOR (	KB40H B707 Ash/Drv Residues	Linear	15.48	Hours
Factors	18 Hours (Operators-2)	0.86 Holiday/Vac factor				
	750 STRAIGHT TIME BASE	T050 RADIATION CONTROL TECHNOLOGI	KB50H B707 Eng Envir. Sftv & Quality	Linear	23.22	Hours
Factors	27 Hours (RCTs-3)	0.86 Holiday/Vac factor				
	751 OVERTIME BASE & PRE.	M010 FOREMEN / TEAM LEADS / GROUP	S100S SSOC Salaried	Linear	1.53	Hours
Factors	4.5 Hours (RCT Foreman .5)	0.34 Overtime Factor				
	751 OVERTIME BASE & PRE.	R010 CHEMICAL SYSTEMS OPERATOR (	KB40H B707 Ash/Drv Residues	Linear	5.26	Hours
Factors	18 Hours (Operators-2)	0.34 Overtime Factor	0.86 Holiday/Vac factor			
	751 OVERTIME BASE & PRE.	R010 CHEMICAL SYSTEMS OPERATOR (	KB40H B707 Ash/Drv Residues	Linear	28.95	Hours
Factors	99 Hours (Operators-11)	0.34 Overtime Factor	0.86 Holiday/Vac factor			
	751 OVERTIME BASE & PRE.	T050 RADIATION CONTROL TECHNOLOGI	KB50H B707 Eng Envir. Sftv & Quality	Linear	7.89	Hours
Factors	27 Hours (RCTs-3)	0.34 Overtime Factor	0.86 Holiday/Vac factor			
	A5H SUBCONTRACTED SRVS	E130 OTHER ENGINEERS	KB50S B707 Eng Envir. Sftv & Quality	Linear	720.00	Dollars
Factors	9 Hours (Rad eng -1)			80 dollars per hour		
	A5H SUBCONTRACTED SRVS	M010 FOREMEN / TEAM LEADS / GROUP	KB40S B707 Ash/Drv Residues	Linear	2,430.00	Dollars
Factors	27 Hours (Foreman-3)			90 Dollars per hour		

Activity ID: 1BAH372ASH Description: Processing IDC 372 - 103 KGs (RCRA)

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
010-1	Process Ash Residues - IDC 372	3.00	day	EE	392	1,176	28,242	11,341	0	39,584	13,472	53,055
SYS	Contingency And Escalation	1.00	ea	EE	0	0	0	0	2,837	2,837	0	2,837
Total for Activity 1BAH372ASH:						1,176	28,242	11,341	2,837	42,421	13,472	55,893

Line Item 010-1 - Process Ash Residues - IDC 372

BOE
 Historical Data Source: The historical data is based on FY00 Ash processing actuals (WBS 1.1.04.09.04.03), charge number EM2452 & EM2461
 Description of the item supported by the historical data: Process Ash Residue IDC 372
 Breakdown of Historical Data:
 Item: FY00-707 Process Ash Residue 1st Shift, Process Ash Residue 2nd Shift, Process Ash Residue 3rd Shift & B776 Ash Processing.
 Unit - cost per day
 Unit Cost - \$13K
 Unit Cost Adjustment Factor - 15% overtime to 34% overtime
 Revised Unit Cost - \$18K
 Basis for Adjustment - estimated cost per day increased due to increased overtime requirements, and larger crew size. Some of the estimated costs were reduced by operation crew proficiency.

Assumptions:
 80% Process Availability =(90% building) x (95% personnel) x (95% equipment)

Resources	Cost Element	Skill	Department	Curve	Quantity	Units
	750 STRAIGHT TIME BASE	M010 FOREMEN / TEAM LEADS / GROUP	KB50S B707 Eng Envir. Sftv & Quality	Linear	4.50	Hours
Factors	4.5 Hours (RCT Foreman)					
	750 STRAIGHT TIME BASE	M010 FOREMEN / TEAM LEADS / GROUP	S100S SSOC Salaried	Linear	7.74	Hours
Factors	9 Hours (Foreman-1)	0.86 Holiday/Vac factor				
	750 STRAIGHT TIME BASE	R010 CHEMICAL SYSTEMS OPERATOR (	KB40H B707 Ash/Drv Residues	Linear	208.98	Hours
Factors	243 Hours (Operators-27)	0.86 Holiday/Vac factor				

WBS No: 1BAHPR
 Activity ID: 1BAH372ASH

Rockv Flats Closure Project
Baseline Cost and Basis of Estimate

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

Starts In FY *

750	STRAIGHT TIME BASE	T050	RADIATION CONTROL TECHNOLIGI	KB50H	B707 Eng Envir. Sftv & Quality	Linear	63.00	Hours	
<i>Factors</i> 63 Hours (RCTs-7)									
751	OVERTIME BASE & PRE.	M010	FOREMEN / TEAM LEADS / GROUP	KB50S	B707 Eng Envir. Sftv & Quality	Linear	0.68	Hours	
<i>Factors</i> 4.5 Hours (RCT Foreman - OT) 0.15 Overtime Factor									
751	OVERTIME BASE & PRE.	M010	FOREMEN / TEAM LEADS / GROUP	S100S	SSOC Salaried	Linear	3.06	Hours	
<i>Factors</i> 9 Hours (Foreman-1) 0.34 Overtime Factor									
751	OVERTIME BASE & PRE.	R010	CHEMICAL SYSTEMS OPERATOR (	KB40H	B707 Ash/Drv Residues	Linear	82.62	Hours
<i>Factors</i> 243 Hours (Operators-27) 0.34 Overtime Factor									
751	OVERTIME BASE & PRE.	T050	RADIATION CONTROL TECHNOLIGI	KB50H	B707 Eng Envir. Sftv & Quality	Linear	21.42	Hours	
<i>Factors</i> 63 Hours (RCTs-7) 0.34 Overtime Factor									
A5H	SUBCONTRACTED SRVS	E130	OTHER ENGINEERS	KB50S	B707 Eng Envir. Sftv & Quality	Linear	540.40	Dollars	
<i>Factors</i> 9.65 Hours (Rad end) 0.7 Adi Factor							80	dollars per Hour	
A5H	SUBCONTRACTED SRVS	M010	FOREMEN / TEAM LEADS / GROUP	KB40S	B707 Ash/Drv Residues	Linear	3,240.00	Dollars	
<i>Factors</i> 36 Hours (Foreman-4)							90	Dollars per Hour	

Line Item SYS - Contingency And Escalation

BOE

Resources

Cost Element	Skill	Department	Curve	Quantity	Units
CON CONTINGENCY	0000 NONE	ZDEPT No Department	Linear	1,721.64	Dollars
<i>Factors</i> 1721.64 Dollars					
ESC ESCALATION	0000 NONE	ZDEPT No Department	Linear	1,115.64	Dollars
<i>Factors</i> 1115.64 Dollars					

Activity ID: 1BAH373ASH Description: Processing IDC 373 - 60 KGs (RCRA)

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
010-1	Process Ash Residues - IDC 373	5.00	day	EE	392	1,960	47,071	18,902	0	65,973	22,453	88,426
SYS	Contingency And Escalation	1.00	lea	EE	0	0	0	0	4,729	4,729	0	4,729
Total for Activity 1BAH373ASH:						1,960	47,071	18,902	4,729	70,702	22,453	93,154

Line Item 010-1 - Process Ash Residues - IDC 373

BOE

Historical Data Source: The historical data is based on FY00 Ash processing actuals (WBS 1.1.04.09.04.03), charge number EM2452 & EM2461.
 Description of the item supported by the historical data: Process Ash Residue IDC 373
 Breakdown of Historical Data:
 Item: FY00-707 Process Ash Residue 1st Shift, Process Ash Residue 2nd Shift, Process Ash Residue 3rd Shift & B776 Ash Processing.
 Unit - cost per day
 Unit Cost - \$13K
 Unit Cost Adjustment Factor - 15% overtime to 34% overtime.
 Revised Unit Cost - \$18K
 Basis for Adjustment - estimated cost per day increased due to increased overtime requirements, and larger crew size. Some of the estimated costs were reduced by operation crew proficiency.

Assumptions:
 80% Process Availability =(90% building) x (95% personnel) x (95% equipment)

Resources

Cost Element	Skill	Department	Curve	Quantity	Units
750 STRAIGHT TIME BASE	M010 FOREMEN / TEAM LEADS / GROUP	KB50S B707 Eng Envir. Sftv & Quality	Linear	4.50	Hours
<i>Factors</i> 4.5 Hours (RCT Foreman)					
750 STRAIGHT TIME BASE	M010 FOREMEN / TEAM LEADS / GROUP	S100S SSOC Salaried	Linear	7.74	Hours
<i>Factors</i> 9 Hours (Foreman-1) 0.86 Holiday/Vac factor					
750 STRAIGHT TIME BASE	R010 CHEMICAL SYSTEMS OPERATOR (	KB40H B707 Ash/Drv Residues	Linear	208.98	Hours
<i>Factors</i> 243 Hours (Operators-27) 0.86 Holiday/Vac factor					
750 STRAIGHT TIME BASE	T050 RADIATION CONTROL TECHNOLIGI	KB50H B707 Eng Envir. Sftv & Quality	Linear	63.00	Hours
<i>Factors</i> 63 Hours (RCTs-7)					

WBS No: 1BAHPR
 Activity ID: 1BAH373ASH

Rockv Flats Closure Project
Baseline Cost and Basis of Estimate

Project Baseline Devl
 WBS Filter 1BAH
 Activity Filter *

Starts In FY *

751	OVERTIME BASE & PRE.	M010	FOREMEN / TEAM LEADS / GROUP	KB50S	B707 Eng Envir. Sftv & Quality	Linear	0.68	Hours
<i>Factors</i>		4.5	Hours (RCT Foreman - OT)	0.15	Overtime Factor			
751	OVERTIME BASE & PRE.	M010	FOREMEN / TEAM LEADS / GROUP	S100S	SSOC Salaried	Linear	3.06	Hours
<i>Factors</i>		9	Hours (Foreman-1)	0.34	Overtime Factor			
751	OVERTIME BASE & PRE.	R010	CHEMICAL SYSTEMS OPERATOR (	KB40H	B707 Ash/Drv Residues	Linear	82.62	Hours
<i>Factors</i>		243	Hours (Operators-27)	0.34	Overtime Factor			
751	OVERTIME BASE & PRE.	T050	RADIATION CONTROL TECHNOLIGI	KB50H	B707 Eng Envir. Sftv & Quality	Linear	21.42	Hours
<i>Factors</i>		63	Hours (RCTs-7)	0.34	Overtime Factor			
A5H	SUBCONTRACTED SRVS	E130	OTHER ENGINEERS	KB50S	B707 Eng Envir. Sftv & Quality	Linear	540.40	Dollars
<i>Factors</i>		9.65	Hours (Rad end)	0.7	Adi Factor	80	dollars per Hour	
A5H	SUBCONTRACTED SRVS	M010	FOREMEN / TEAM LEADS / GROUP	KB40S	B707 Ash/Drv Residues	Linear	3,240.00	Dollars
<i>Factors</i>		36	Hours (Foreman-4)			90	dollars per Hour	

Line Item SYS - Contingency And Escalation

BOE

Resources

Cost Element	Skill	Department	Curve	Quantity	Units
CON CONTINGENCY	0000 NONE	ZDEPT No Department	Linear	2,869.40	Dollars
<i>Factors</i> 2869.40 Dollars					
ESC ESCALATION	0000 NONE	ZDEPT No Department	Linear	1,859.39	Dollars
<i>Factors</i> 1859.39 Dollars					

Activity ID: 1BAH374ASH Description: Processing IDC 374 - 15 KGs (Non-RCRA) - Mod D

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
010-1	Process Ash Residues - IDC 374	7.00	day	EE	4	25	745	0	0	745	355	1,100
SYS	Contingency And Escalation	1.00	lea	EE	0	0	0	0	59	59	0	59
Total for Activity 1BAH374ASH:						25	745	0	59	804	355	1,159

Line Item 010-1 - Process Ash Residues - IDC 374

BOE

Historical Data Source: The historical data is based on FY00 Ash processing actuals (WBS 1.1.04.09.04.03), charge number EM2452 & EM2461.
 Description of the item supported by the historical data: Process Ash Residue IDC 374
 Breakdown of Historical Data:
 Item: IDC301 Graphite Operations
 Unit - cost per kg
 Unit Cost - \$525/kg
 Unit Cost Adjustment Factor - 15% overtime to 34% overtime
 Revised Unit Cost - \$544/kg
 Basis for Adjustment - estimated cost per day increased due to increased overtime requirements, and larger crew size. Some of the estimated costs were reduced by operation crew proficiency.
 Assumptions:
 80% Process Availability =(90% building) x (95% personnel) x (95% equipment)

Resources

Cost Element	Skill	Department	Curve	Quantity	Units
750 STRAIGHT TIME BASE	M010 FOREMEN / TEAM LEADS / GROUP	KB40S B707 Ash/Drv Residues	Linear	2.58	Hours
<i>Factors</i> 3 Hours (Foreman-1) 0.86 Holiday/Vac factor					
751 OVERTIME BASE & PRE.	M010 FOREMEN / TEAM LEADS / GROUP	KB40S B707 Ash/Drv Residues	Linear	1.02	Hours
<i>Factors</i> 3 Hours (Operators-1) 0.34 Overtime Factor					

Line Item SYS - Contingency And Escalation

BOE

Resources

Cost Element	Skill	Department	Curve	Quantity	Units
CON CONTINGENCY	0000 NONE	ZDEPT No Department	Linear	35.71	Dollars
<i>Factors</i> 35.7086 Dollars					
ESC ESCALATION	0000 NONE	ZDEPT No Department	Linear	23.14	Dollars
<i>Factors</i> 23.1394 Dollars					

Activity ID: 1BAH378ASH Description: Processing IDC 378 - 284 KGs (RCRA)

Cost Risk 2 Schedule Risk 2

WBS No: 1BAHPR
 Activity ID: 1BAH378ASH

Rockv Flats Closure Project
Baseline Cost and Basis of Estimate

Project Baseline Devl
 WBS Filter 1BAH
 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
010-1	Process Ash Residues - IDC 378	10.00	day	EE	392	3,920	94,142	37,804	0	131,946	44,906	176,851
SYS	Contingency And Escalation	1.00	lea	EE	0	0	0	0	9,458	9,458	0	9,458
Total for Activity 1BAH378ASH:						3,920	94,142	37,804	9,458	141,403	44,906	186,309

Line Item 010-1 - Process Ash Residues - IDC 378

BOE
 Historical Data Source: The historical data is based on FY00 Ash processing actuals (WBS 1.1.04.09.04.03), charge number EM2452 & EM2461
 Description of the item supported by the historical data: Process Ash Residue IDC 378
 Breakdown of Historical Data:
 Item: FY00-707 Process Ash Residue 1st Shift, Process Ash Residue 2nd Shift, Process Ash Residue 3rd Shift & B776 Ash Processing.
 Unit - cost per day
 Unit Cost - \$13K
 Unit Cost Adjustment Factor - 15% overtime to 34% overtime
 Revised Unit Cost - \$18K
 Basis for Adjustment - estimated cost per day increased due to increased overtime requirements, and larger crew size. Some of the estimated costs were reduced by operation crew proficiency.

Assumptions:
 80% Process Availability =(90% building) x (95% personnel) x (95% equipment)

Resources

Cost Element	Skill	Department	Curve	Quantity	Units
750 STRAIGHT TIME BASE	M010 FOREMEN / TEAM LEADS / GROUP	KB50S B707 Env Envir. Sftv & Quality	Linear	4.50	Hours
<i>Factors</i> 4.5 Hours (RCT Foreman)					
750 STRAIGHT TIME BASE	M010 FOREMEN / TEAM LEADS / GROUP	S100S SSOC Salaried	Linear	7.74	Hours
<i>Factors</i> 9 Hours (Foreman-1) 0.86 Holiday/Vac factor					
750 STRAIGHT TIME BASE	R010 CHEMICAL SYSTEMS OPERATOR (	KB40H B707 Ash/Drv Residues	Linear	208.98	Hours
<i>Factors</i> 243 Hours (Operators-27) 0.86 Holiday/Vac factor					
750 STRAIGHT TIME BASE	T050 RADIATION CONTROL TECHNOLOGI	KB50H B707 Env Envir. Sftv & Quality	Linear	63.00	Hours
<i>Factors</i> 63 Hours (RCTs-7) 0.34 Overtime Factor					
751 OVERTIME BASE & PRE.	M010 FOREMEN / TEAM LEADS / GROUP	KB50S B707 Env Envir. Sftv & Quality	Linear	0.68	Hours
<i>Factors</i> 4.5 Hours (RCT Foreman - OT) 0.15 Overtime Factor					
751 OVERTIME BASE & PRE.	M010 FOREMEN / TEAM LEADS / GROUP	S100S SSOC Salaried	Linear	3.06	Hours
<i>Factors</i> 9 Hours (Foreman-1) 0.34 Overtime Factor					
751 OVERTIME BASE & PRE.	R010 CHEMICAL SYSTEMS OPERATOR (	KB40H B707 Ash/Drv Residues	Linear	82.62	Hours
<i>Factors</i> 243 Hours (Operators-27) 0.34 Overtime Factor					
751 OVERTIME BASE & PRE.	T050 RADIATION CONTROL TECHNOLOGI	KB50H B707 Env Envir. Sftv & Quality	Linear	21.42	Hours
<i>Factors</i> 63 Hours (RCTs-7) 0.34 Overtime Factor					
A5H SUBCONTRACTED SRVS	E130 OTHER ENGINEERS	KB50S B707 Env Envir. Sftv & Quality	Linear	540.40	Dollars
<i>Factors</i> 9.65 Hours (Rad eng) 0.7 Adj Factor 80 dollars per Hour					
A5H SUBCONTRACTED SRVS	M010 FOREMEN / TEAM LEADS / GROUP	KB40S B707 Ash/Drv Residues	Linear	3,240.00	Dollars
<i>Factors</i> 36 Hours (Foreman-4) 90 dollars per Hour					

Line Item SYS - Contingency And Escalation

BOE

Resources

Cost Element	Skill	Department	Curve	Quantity	Units
CON CONTINGENCY	0000 NONE	ZDEPT No Department	Linear	5,738.81	Dollars
<i>Factors</i> 5738.81 Dollars					
ESC ESCALATION	0000 NONE	ZDEPT No Department	Linear	3,718.78	Dollars
<i>Factors</i> 3718.78 Dollars					

Activity ID: 1BAH419ASH Description: Processing IDC 419 - 29 KGs (RCRA)

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
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WBS No: 1BAHPR
 Activity ID: 1BAH419ASH

Rockv Flats Closure Project
Baseline Cost and Basis of Estimate

Project Baseline Devl
 WBS Filter 1BAH
 Activity Filter *

Starts In FY *

010-1	Process Ash Residues - IDC 419	1.00	day	EE	392	392	9,414	3,780	0	13,195	4,491	17,685
SYS	Contingency And Escalation	1.00	ea	EE	0	0	0	0	946	946	0	946
Total for Activity 1BAH419ASH:						392	9,414	3,780	946	14,140	4,491	18,631

Line Item 010-1 - Process Ash Residues - IDC 419

BOE
 Historical Data Source: The historical data is based on FY00 Ash processing actuals (WBS 1.1.04.09.04.03), charge number EM2452 & EM2461
 Description of the item supported by the historical data: Process Ash Residue IDC 419
 Breakdown of Historical Data:
 Item: FY00-707 Process Ash Residue 1st Shift, Process Ash Residue 2nd Shift, Process Ash Residue 3rd Shift & B776 Ash Processing.
 Unit - cost per day
 Unit Cost - \$13K
 Unit Cost Adjustment Factor - 15% overtime to 34% overtime
 Revised Unit Cost - \$18K
 Basis for Adjustment - estimated cost per day increased due to increased overtime requirements, and larger crew size. Some of the estimated costs were reduced by operation crew proficiency.

Assumptions:
 80% Process Availability =(90% building) x (95% personnel) x (95% equipment)

Resources

Cost Element	Skill	Department	Curve	Quantity	Units
750 STRAIGHT TIME BASE	M010 FOREMEN / TEAM LEADS / GROUP	KB50S B707 Eng Envir. Sftv & Quality	Linear	4.50	Hours
<i>Factors</i> 4.5 Hours (RCT Foreman)					
750 STRAIGHT TIME BASE	M010 FOREMEN / TEAM LEADS / GROUP	S100S SSOC Salaried	Linear	7.74	Hours
<i>Factors</i> 9 Hours (Foreman-1) 0.86 Holiday/Vac factor					
750 STRAIGHT TIME BASE	R010 CHEMICAL SYSTEMS OPERATOR (	KB40H B707 Ash/Drv Residues	Linear	208.98	Hours
<i>Factors</i> 243 Hours (Operators-27) 0.86 Holiday/Vac factor					
750 STRAIGHT TIME BASE	T050 RADIATION CONTROL TECHNOLIGI	KB50H B707 Eng Envir. Sftv & Quality	Linear	63.00	Hours
<i>Factors</i> 63 Hours (RCTs-7)					
751 OVERTIME BASE & PRE.	M010 FOREMEN / TEAM LEADS / GROUP	KB50S B707 Eng Envir. Sftv & Quality	Linear	0.68	Hours
<i>Factors</i> 4.5 Hours (RCT Foreman - OT) 0.15 Overtime Factor					
751 OVERTIME BASE & PRE.	M010 FOREMEN / TEAM LEADS / GROUP	S100S SSOC Salaried	Linear	3.06	Hours
<i>Factors</i> 9 Hours (Foreman-1) 0.34 Overtime Factor					
751 OVERTIME BASE & PRE.	R010 CHEMICAL SYSTEMS OPERATOR (	KB40H B707 Ash/Drv Residues	Linear	82.62	Hours
<i>Factors</i> 243 Hours (Operators-27) 0.34 Overtime Factor					
751 OVERTIME BASE & PRE.	T050 RADIATION CONTROL TECHNOLIGI	KB50H B707 Eng Envir. Sftv & Quality	Linear	21.42	Hours
<i>Factors</i> 63 Hours (RCTs-7) 0.34 Overtime Factor					
A5H SUBCONTRACTED SRVS	E130 OTHER ENGINEERS	KB50S B707 Eng Envir. Sftv & Quality	Linear	540.40	Dollars
<i>Factors</i> 9.65 Hours (Rad eng) 0.7 Adj Factor 80 Dollars per Hour					
A5H SUBCONTRACTED SRVS	M010 FOREMEN / TEAM LEADS / GROUP	KB40S B707 Ash/Drv Residues	Linear	3,240.00	Dollars
<i>Factors</i> 36 Hours (Foreman-4) 90 Dollars per Hour					

Line Item SYS - Contingency And Escalation

BOE

Resources

Cost Element	Skill	Department	Curve	Quantity	Units
CON CONTINGENCY	0000 NONE	ZDEPT No Department	Linear	573.88	Dollars
<i>Factors</i> 573.881 Dollars					
ESC ESCALATION	0000 NONE	ZDEPT No Department	Linear	371.88	Dollars
<i>Factors</i> 371.878 Dollars					

Activity ID: 1BAH420ASH Description: Processing IDC 420P - 19588 KGs (RCRA) Cost Risk 3 Schedule Risk 3

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
010-1	Process Ash Residues - IDC 420P	119.00	day	EE	370	44,056	1,035,612	449,868	0	1,485,480	500,375	1,985,855
SYS	Contingency And Escalation	1.00	ea	EE	0	0	0	0	43,670	43,670	0	43,670

WBS No: 1BAHPR
 Activity ID: 1BAH420ASH

Rockv Flats Closure Project
Baseline Cost and Basis of Estimate

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

Starts In FY *

Total for Activity 1BAH420ASH:

44.056	1,035.612	449.868	43.670	1,529.150	500.375	2,029.525
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Line Item 010-1 - Process Ash Residues - IDC 420P

BOE

Historical Data Source: The historical data is based on FY00 Ash processing actuals (WBS 1.1.04.09.04.03), charge number EM2452 & EM2461
 Description of the item supported by the historical data: Process Ash Residue IDC 420P
 Breakdown of Historical Data:
 Item: FY00-707 Process Ash Residue 1st Shift, Process Ash Residue 2nd Shift, Process Ash Residue 3rd Shift & B776 Ash Processing.
 Unit - cost per day
 Unit Cost - \$13K
 Unit Cost Adjustment Factor - 15% overtime to 34% overtime
 Revised Unit Cost - \$18K
 Basis for Adjustment - estimated cost per day increased due to increased overtime requirements, and larger crew size. Some of the estimated costs were reduced by operation crew proficiency.

Assumptions:
 80% Process Availability =(90% building) x (95% personnel) x (95% equipment)

Resources

Cost Element	Skill	Department	Curve	Quantity	Units
750 STRAIGHT TIME BASE	M010 FOREMEN / TEAM LEADS / GROUP	KB50S B707 Eng Envir. Sftv & Quality	Linear	4.50	Hours
Factors 4.5 Hours (RCT Foreman)					
750 STRAIGHT TIME BASE	M010 FOREMEN / TEAM LEADS / GROUP	S100S SSQC Salaried	Linear	7.74	Hours
Factors 9 Hours (Foreman-1)	0.86 Holiday/Vac factor				
750 STRAIGHT TIME BASE	R010 CHEMICAL SYSTEMS OPERATOR (	KB40H B707 Ash/Drv Residues	Linear	208.98	Hours
Factors 243 Hours (Operators-27)	0.86 Holiday/Vac factor				
750 STRAIGHT TIME BASE	T050 RADIATION CONTROL TECHNOLIGI	KB50H B707 Eng Envir. Sftv & Quality	Linear	63.00	Hours
Factors 63 Hours (RCTs-7)					
751 OVERTIME BASE & PRE.	M010 FOREMEN / TEAM LEADS / GROUP	KB50S B707 Eng Envir. Sftv & Quality	Linear	0.68	Hours
Factors 4.5 Hours (RCT Foreman - OT)	0.15 Overtime Factor				
751 OVERTIME BASE & PRE.	M010 FOREMEN / TEAM LEADS / GROUP	S100S SSQC Salaried	Back Loaded	2.70	Hours
Factors 9 Hours (Foreman-1)	0.3 Overtime Factor				
751 OVERTIME BASE & PRE.	R010 CHEMICAL SYSTEMS OPERATOR (	KB40H B707 Ash/Drv Residues	Linear	53.46	Hours
Factors 243 Hours (Operators-27)	0.22 Overtime Factor				
751 OVERTIME BASE & PRE.	R010 CHEMICAL SYSTEMS OPERATOR (	KB40H B707 Ash/Drv Residues	Max Backload	12.15	Hours
Factors 243 Hours	0.05 Overtime Factor				
751 OVERTIME BASE & PRE.	T050 RADIATION CONTROL TECHNOLIGI	KB50H B707 Eng Envir. Sftv & Quality	Back Loaded	13.86	Hours
Factors 63 Hours (RCTs-7)	0.22 Overtime Factor				
751 OVERTIME BASE & PRE.	T050 RADIATION CONTROL TECHNOLIGI	KB50H B707 Eng Envir. Sftv & Quality	Max Backload	3.15	Hours
Factors 63 Hours (RCTs-7)	0.05 Overtime Factor				
A5H SUBCONTRACTED SRVS	E130 OTHER ENGINEERS	KB50S B707 Eng Envir. Sftv & Quality	Linear	540.40	Dollars
Factors 9.65 Hours (Rad eng)	0.7 Adi Factor		80 dollars per Hour		
A5H SUBCONTRACTED SRVS	M010 FOREMEN / TEAM LEADS / GROUP	KB40S B707 Ash/Drv Residues	Linear	3,240.00	Dollars
Factors 36 Hours (Foreman-4)			90 dollars per Hour		

Line Item SYS - Contingency And Escalation

BOE

Resources

Cost Element	Skill	Department	Curve	Quantity	Units
CON CONTINGENCY	0000 NONE	ZDEPT No Department	Linear	25,786.39	Dollars
Factors 25786.4 Dollars					
ESC ESCALATION	0000 NONE	ZDEPT No Department	Linear	17,883.53	Dollars
Factors 17883.5 Dollars					

Activity ID: 1BAH601ASH Description: Processing IDC 601 - 1 KGs (Non-RCRA) - Mod D

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
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WBS No: 1BAHPR
 Activity ID: 1BAH601ASH

Rockv Flats Closure Project
Baseline Cost and Basis of Estimate

Project Baseline Devl
 WBS Filter 1BAH
 Activity Filter *

Starts In FY *

010-1	Process Ash Residues - IDC 601	7.00	day	EE	4	25	745	0	0	745	355	1.100
SYS	Contingency And Escalation	1.00	ea	EE	0	0	0	0	59	59	0	59
Total for Activity 1BAH601ASH:						25	745	0	59	804	355	1.159

Line Item 010-1 - Process Ash Residues - IDC 601

BOE
 Historical Data Source: The historical data is based on FY00 Ash processing actuals (WBS 1.1.04.09.04.03), charge number EM2452 & EM2461
 Description of the item supported by the historical data: Process Ash Residue IDC 601
 Breakdown of Historical Data:
 Item: IDC301 Graphite Operations
 Unit - cost per kg
 Unit Cost - \$525/kg
 Unit Cost Adjustment Factor - 15% overtime to 34% overtime
 Revised Unit Cost - \$544/kg
 Basis for Adjustment - estimated cost per day increased due to increased overtime requirements, and larger crew size. Some of the estimated costs were reduced by operation crew proficiency.

 Assumptions:

 80% Process Availability =(90% building) x (95% personnel) x (95% equipment)

Resources	Cost Element	Quantity	Units	Skill	Department	Curve	Quantity	Units
	750 STRAIGHT TIME BASE	M010		FOREMEN / TEAM LEADS / GROUP	KB40S B707 Ash/Drv Residues	Linear	2.58	Hours
	Factors 3 Hours (Foreman-1)			0.86 Holiday/Vac factor				
	751 OVERTIME BASE & PRE.	M010		FOREMEN / TEAM LEADS / GROUP	KB40S B707 Ash/Drv Residues	Linear	1.02	Hours
	Factors 3 Hours (Operators-1)			0.34 Overtime Factor				

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	35.71	Dollars
	Factors 35.7086 Dollars							
	ESC ESCALATION	0000		NONE	ZDEPT No Department	Linear	23.14	Dollars
	Factors 23.1394 Dollars							

WBS No: 1BAHPS Title: Production Support of Ash Residue

Activity ID: 1BAHOPSPRT Description: Production Support - ASH/DRY

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
220-2	Project Support of Operations-Ash	138.00	day	EE	15	2,008	68,921	1,579,116	0	1,648,037	33,326	1,681,363
230-3	Building Support of Operations	7.00	mo	EE	576	4,033	115,892	182,559	0	298,451	56,038	354,489
240-4	Ash Processing - Training	138.00	day	EE	23	3,204	65,081	44,712	0	109,793	31,469	141,261
250-5	Project Support of Operations-Dry	138.00	day	EE	19	2,560	71,411	784,797	0	856,208	34,530	890,737
SYS	Contingency And Escalation	1.00	ea	EE	0	0	0	0	62,695	62,695	0	62,695
Total for Activity 1BAHOPSPRT:						11,805	321,304	2,591,184	62,695	2,975,183	155,362	3,130,545

Line Item 220-2 - Project Support of Operations-Ash

BOE
 Historical Data Source: The historical data is based on FY00 Ash/Dry Operations Support (WBS 1.1.04.09.04.03 and 1.1.04.09.04.07), charge number EM2457
 Description of the item supported by the historical data: Project Support of Operations - Ash
 Breakdown of Historical Data:
 Item: FY00 Production Support -Ash/Dry
 Unit - cost per day/ 9.245 IWCPs per month
 Unit Cost - \$11K
 Unit Cost Adjustment Factor - The addition of the dry production support and dry IWCP support
 Revised Unit Cost - \$22K
 Basis for Adjustment - estimated cost per day increased due to increased overtime, larger crew size, and the combination of addition the Ash & Dry teams together.

Resources	Cost Element	Quantity	Units	Skill	Department	Curve	Quantity	Units
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WBS No: 1BAHPS
 Activity ID: 1BAHOPSPRT

Rockv Flats Closure Project
Baseline Cost and Basis of Estimate

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

Starts In FY *

750	STRAIGHT TIME BASE	E130	OTHER ENGINEERS	S100S	SSOC Salaried	Linear	14.00	Hours
<i>Factors</i> 14 Hours (Technical Support)								
750	STRAIGHT TIME BASE	S090	OTHER SCIENTISTS	S100S	SSOC Salaried	Linear	0.55	Hours
<i>Factors</i> 0.55 Hours - Drum Tracker								
A52	TENERA	E130	OTHER ENGINEERS	KB40S	B707 Ash/Dry Residues	Linear	810.00	Dollars
<i>Factors</i> 9 Hours (Production Lead)								
A57	LATA	E110	QUALITY CONTROL ENGINEERS	K273S	Waste Management	Linear	324.00	Dollars
<i>Factors</i> 9 Hours per Shift (Analytic V & V-WIPP) 0.5 Support Adj Factor								
A57	LATA	E130	OTHER ENGINEERS	KB40S	B707 Ash/Dry Residues	Linear	1,296.00	Dollars
<i>Factors</i> 18 Hours (SMEs Batchind)								
A57	LATA	M020	MANAGERS (GRADE 69 - 72)	KB40S	B707 Ash/Dry Residues	Linear	648.00	Dollars
<i>Factors</i> 9 Hours (Production Support)								
A57	LATA	P150	TRAINERS	KB10S	B707 Program Management	Linear	144.00	Dollars
<i>Factors</i> 2 Hours (Trainers)								
A57	LATA	P160	TECHNICAL WRITERS AND EDITOR	KB10S	B707 Program Management	Linear	144.00	Dollars
<i>Factors</i> 2 Hours (Tech Writers)								
A5C	SUPPLIES	0000	NONE	K215S	Information Resource Mat	Linear	55.55	Dollars
<i>Factors</i> 55.55 dollars (Drum Tracker - Supplies)								
A5C	SUPPLIES	0000	NONE	KB40S	B707 Ash/Dry Residues	Linear	2,199.08	Dollars
<i>Factors</i> 1.02283 --FY00 Escalation -- 2150 Dollars								
A5H	SUBCONTRACTED SRVS	E080	NUCLEAR (CRITICALITY) ENGINEER	K266S	Envir. Safetv. Health & Quality	Linear	198.00	Dollars
<i>Factors</i> 2 Hours (Crit)								
A5H	SUBCONTRACTED SRVS	E080	NUCLEAR (CRITICALITY) ENGINEER	K266S	Envir. Safetv. Health & Quality	Linear	180.00	Dollars
<i>Factors</i> 1.5 Hours - Crit Safetv								
A5H	SUBCONTRACTED SRVS	E110	QUALITY CONTROL ENGINEERS	KB50S	B707 Eng Envir. Sfty & Quality	Linear	648.00	Dollars
<i>Factors</i> 9 Hours (QAOTS)								
A5H	SUBCONTRACTED SRVS	E120	SAFETY ENGINEERS	KB50S	B707 Eng Envir. Sfty & Quality	Linear	100.00	Dollars
<i>Factors</i> 1 Hour - Safetv eng								
A5H	SUBCONTRACTED SRVS	E130	OTHER ENGINEERS	KB40S	B707 Ash/Dry Residues	Linear	2,268.00	Dollars
<i>Factors</i> 31.5 Hours (Technical Support)								
A5H	SUBCONTRACTED SRVS	E130	OTHER ENGINEERS	KB40S	B707 Ash/Dry Residues	Linear	648.00	Dollars
<i>Factors</i> 9 Hours (Independent Tech. Reviewer-								
A5H	SUBCONTRACTED SRVS	E130	OTHER ENGINEERS	KB50S	B707 Eng Envir. Sfty & Quality	Linear	662.79	Dollars
<i>Factors</i> 9 Hours (Hoke/Engr Suot) 1,02283 --FY00 Escalation --								
A5H	SUBCONTRACTED SRVS	P090	INDUSTRIAL HYGIENISTS	KB50S	B707 Eng Envir. Sfty & Quality	Linear	108.00	Dollars
<i>Factors</i> 1.5 Hours (IH&S)								
A5H	SUBCONTRACTED SRVS	P170	OTHER ADMINISTRATIVE & PROFE	KB40S	B707 Ash/Dry Residues	Linear	648.00	Dollars
<i>Factors</i> 9 Hours (Escort)								
A5H	SUBCONTRACTED SRVS	S090	OTHER SCIENTISTS	K215S	Information Resource Mat	Linear	164.16	Dollars
<i>Factors</i> 2.28 Hours (Drum Tracker)								
A5H	SUBCONTRACTED SRVS	S090	OTHER SCIENTISTS	K215S	Information Resource Mat	Linear	197.28	Dollars
<i>Factors</i> 2.74 Hours - Drum Tracker support								

Line Item 230-3 - Building Support of Operations

BOE Historical Data Source: The historical data is based on FY00 Ash/Dry Operations Support (WBS 1.1.04.09.04.03 and 1.1.04.09.04.07), charge number EM2457
 Description of the item supported by the historical data: Project Support of Operations - Ash
 Breakdown of Historical Data:
 Item: FY00 Production Support -Ash/Dry
 Unit - cost per day/ 9.245 IWCPs per month
 Unit Cost - \$11K
 Unit Cost Adjustment Factor - The addition of the dry production support and dry IWCP support
 Revised Unit Cost - \$22K
 Basis for Adjustment - estimated cost per day increased due to increased overtime, larger crew size, and the combination of addition the Ash & Dry teams together.

Resources	Cost Element	Skill	Department	Curve	Quantity	Units
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WBS No: 1BAHPS
 Activity ID: 1BAHOPSPRT

Rockv Flats Closure Project
Baseline Cost and Basis of Estimate

Project
 WBS Filter
 Activity Filter *
 Baseline Devl
 1BAH

								Starts In FY	*
750	STRAIGHT TIME BASE	C020	ELECTRICIANS	KB20H	B707 Facilities Management		Linear	34.11	Hours
Factors	3.79 Hours (IWCP Support)		9 IWCPs/Month						
750	STRAIGHT TIME BASE	C020	ELECTRICIANS	KB20H	B707 Facilities Management		Linear	52.78	Hours
Factors	52.78 Hours								
750	STRAIGHT TIME BASE	C040	MAINTENANCE MACHINIST (incl Exp	KB20H	B707 Facilities Management		Linear	34.11	Hours
Factors	3.79 Hours (IWCP Support)		9 IWCPs/Month						
750	STRAIGHT TIME BASE	C080	PLUMBERS AND PIPEFITTERS	KB20H	B707 Facilities Management		Linear	34.11	Hours
Factors	3.79 Hours (IWCP Support)		9 IWCPs/Month						
750	STRAIGHT TIME BASE	C090	STRUCTURAL AND METAL WORKE	KB20H	B707 Facilities Management		Linear	34.11	Hours
Factors	3.79 Hours		9 IWCPs/Month						
750	STRAIGHT TIME BASE	E040	ELECTRICAL ENGINEERS	S100S	SSOC Salaried		Linear	27.00	Hours
Factors	3 Hours (IWCP Desian)		9 IWCPs/Month						
750	STRAIGHT TIME BASE	E070	MECHANICAL ENGINEERS	S100S	SSOC Salaried		Linear	27.00	Hours
Factors	3 Hours (IWCP Desian)		9 IWCPs/Month						
750	STRAIGHT TIME BASE	E120	SAFETY ENGINEERS	S100S	SSOC Salaried		Linear	65.70	Hours
Factors	7.3 Hours (Planning IWCP)		9 IWCPs/Month						
750	STRAIGHT TIME BASE	E130	OTHER ENGINEERS	S100S	SSOC Salaried		Linear	27.00	Hours
Factors	3 Hours (IWCP Desian)		9 IWCPs/Month						
750	STRAIGHT TIME BASE	M010	FOREMEN / TEAM LEADS / GROUP	S100S	SSOC Salaried		Linear	15.30	Hours
Factors	1.7 Hours (Foreman Review IWCP)		9 IWCPs/Month						
750	STRAIGHT TIME BASE	M010	FOREMEN / TEAM LEADS / GROUP	S100S	SSOC Salaried		Linear	38.07	Hours
Factors	4.23 Hours (IWCP Support)		9 IWCPs/Month						
750	STRAIGHT TIME BASE	M020	MANAGERS (GRADE 69 - 72)	K312S	Construction		Linear	15.00	Hours
Factors	15 Hours								
750	STRAIGHT TIME BASE	M020	MANAGERS (GRADE 69 - 72)	S100S	SSOC Salaried		Linear	18.00	Hours
Factors	2 Hours (Shift Manager Review - IWCP)		9 IWCPs/Month						
750	STRAIGHT TIME BASE	T050	RADIATION CONTROL TECHNOLIGI	KB50H	B707 Eng Envir. Sfty & Quality		Linear	34.11	Hours
Factors	3.79 Hours (IWCP Support)		9 IWCPs/Month						
750	STRAIGHT TIME BASE	T070	MAINT. TECHS. (INSTRUMENT TEC	KB20H	B707 Facilities Management		Linear	34.11	Hours
Factors	3.79 Hours (IWCP Support)		9 IWCPs/Month						
751	OVERTIME BASE & PRE.	C020	ELECTRICIANS	KB20H	B707 Facilities Management		Linear	5.83	Hours
Factors	5.829 OT Hours								
751	OVERTIME BASE & PRE.	C020	ELECTRICIANS	KB20H	B707 Facilities Management		Linear	6.82	Hours
Factors	3.79 Hours		9 IWCP/Month		0.2 Overtime factor				
751	OVERTIME BASE & PRE.	C040	MAINTENANCE MACHINIST (incl Exp	KB20H	B707 Facilities Management		Linear	6.82	Hours
Factors	3.79 Hours		9 IWCP/Month		0.2 Overtime Factor				
751	OVERTIME BASE & PRE.	C080	PLUMBERS AND PIPEFITTERS	KB20H	B707 Facilities Management		Linear	6.82	Hours
Factors	3.79 Hours		9 IWCP/Month		0.2 Overtime Factor				
751	OVERTIME BASE & PRE.	C090	STRUCTURAL AND METAL WORKE	KB20H	B707 Facilities Management		Linear	7.01	Hours
Factors	9.245 IWCP/Month		3.79 Hours		0.2 Overtime factor				
751	OVERTIME BASE & PRE.	E120	SAFETY ENGINEERS	S100S	SSOC Salaried		Linear	26.28	Hours
Factors	14.6 Hours		0.2 Overtime Factor		9 IWCP/Month				
751	OVERTIME BASE & PRE.	M010	FOREMEN / TEAM LEADS / GROUP	S100S	SSOC Salaried		Linear	7.61	Hours
Factors	4.23 Hours		0.2 Overtime factor		9 IWCP/Month				
751	OVERTIME BASE & PRE.	M010	FOREMEN / TEAM LEADS / GROUP	S100S	SSOC Salaried		Linear	3.14	Hours
Factors	9.245 IWCP/Month		1.7 hours		0.2 Overtime factor				
751	OVERTIME BASE & PRE.	M020	MANAGERS (GRADE 69 - 72)	K312S	Construction		Linear	1.50	Hours
Factors	1.5 10% OT Hours								
751	OVERTIME BASE & PRE.	T050	RADIATION CONTROL TECHNOLIGI	KB50H	B707 Eng Envir. Sfty & Quality		Linear	6.82	Hours
Factors	3.79 Hours		0.2 Overtime factor		9 IWCP/Month				
751	OVERTIME BASE & PRE.	T070	MAINT. TECHS. (INSTRUMENT TEC	KB20H	B707 Facilities Management		Linear	7.01	Hours
Factors	9.245 IWCP/Month		3.79 Hours		0.2 Overtime factor				

WBS No: 1BAHPS
 Activity ID: 1BAHOPSPRT

Rockv Flats Closure Project
Baseline Cost and Basis of Estimate

Project Baseline Devl
 WBS Filter 1BAH
 Activity Filter *

Starts In FY *

A57	LATA	P160	TECHNICAL WRITERS AND EDITOR	KB10S	B707 Program Management	Linear	2,741.04	Dollars
<i>Factors</i>		4.23	Hours (Planning IWCP)	9	IWCPS/Month	72	dollars per hour	
A5C	SUPPLIES	0000	NONE	C220S	Utility Operations	Linear	158.33	Dollars
<i>Factors</i>		158.33	Tank Rental					
A5H	SUBCONTRACTED SRVS	E040	ELECTRICAL ENGINEERS	KB50S	B707 Eng Envir. Sftv & Quality	Linear	2,430.00	Dollars
<i>Factors</i>		3	Hours (IWCP Desian)	9	IWCPS/Month	90	dollars per hour	
A5H	SUBCONTRACTED SRVS	E070	MECHANICAL ENGINEERS	KB50S	B707 Eng Envir. Sftv & Quality	Linear	2,430.00	Dollars
<i>Factors</i>		3	Hours (IWCP Desian)	9	IWCPS/Month	90	dollars per hour	
A5H	SUBCONTRACTED SRVS	E120	SAFETY ENGINEERS	KB50S	B707 Eng Envir. Sftv & Quality	Linear	5,913.00	Dollars
<i>Factors</i>		7.3	Hours (Planning IWCP)	9	IWCPS/Month	90	dollars per hour	
A5H	SUBCONTRACTED SRVS	E130	OTHER ENGINEERS	K312S	Construction	Linear	208.33	Dollars
<i>Factors</i>		208.33	Dollars					
A5H	SUBCONTRACTED SRVS	E130	OTHER ENGINEERS	KB50S	B707 Eng Envir. Sftv & Quality	Linear	2,430.00	Dollars
<i>Factors</i>		3	Hours (IWCP Desian)	9	IWCPS/Month	90	dollars per hour	
A5H	SUBCONTRACTED SRVS	P090	INDUSTRIAL HYGIENISTS	KB50S	B707 Eng Envir. Sftv & Quality	Linear	9,460.80	Dollars
<i>Factors</i>		14.6	Hours (Planning IWCP)	9	IWCPS/Month	72	dollars per hour	
A5L	RENTALS	0000	NONE	C220S	Utility Operations	Linear	308.33	Dollars
<i>Factors</i>		308.33	Cryoagenic Nitroden					

Line Item 240-4 - Ash Processing - Training

BOE Historical Data Source: The historical data is based on FY00 Ash/Dry Operations Support (WBS 1.1.04.09.04.03 and 1.1.04.09.04.07), charge number EM2457
 Description of the item supported by the historical data: Project Support of Operations - Ash
 Breakdown of Historical Data:
 Item: FY00 Production Support -Ash/Dry
 Unit - cost per day/ 9.245 IWCPS per month
 Unit Cost - \$11K
 Unit Cost Adjustment Factor - The addition of the dry production support and dry IWCP support
 Revised Unit Cost - \$22K
 Basis for Adjustment - estimated cost per day increased due to increased overtime, larger crew size, and the combination of addition the Ash & Dry teams together.

Resources

Cost Element	Skill	Department	Curve	Quantity	Units
750 STRAIGHT TIME BASE	R010 CHEMICAL SYSTEMS OPERATOR (	KB40H B707 Ash/Drv Residues	Linear	23.22	Hours
<i>Factors</i>		27	hours	0.86	Holiday/Vac factor
A5H SUBCONTRACTED SRVS	P150 TRAINERS	KB10S B707 Program Management	Linear	324.00	Dollars
<i>Factors</i>		4.5	Hours	72	dollars per hour

Line Item 250-5 - Project Support of Operations-Dry

BOE Historical Data Source: The historical data is based on FY00 Ash/Dry Operations Support (WBS 1.1.04.09.04.03 and 1.1.04.09.04.07), charge number EM2457
 Description of the item supported by the historical data: Project Support of Operations - Ash
 Breakdown of Historical Data:
 Item: FY00 Production Support -Ash/Dry
 Unit - cost per day/ 9.245 IWCPS per month
 Unit Cost - \$11K
 Unit Cost Adjustment Factor - The addition of the dry production support and dry IWCP support
 Revised Unit Cost - \$22K
 Basis for Adjustment - estimated cost per day increased due to increased overtime, larger crew size, and the combination of addition the Ash & Dry teams together.

Resources

Cost Element	Skill	Department	Curve	Quantity	Units
750 STRAIGHT TIME BASE	M010 FOREMEN / TEAM LEADS / GROUP	S100S SSOC Salaried	Linear	18.00	Hours
<i>Factors</i>		18	Hours (Production Support)		
750 STRAIGHT TIME BASE	S090 OTHER SCIENTISTS	S100S SSOC Salaried	Linear	0.55	Hours
<i>Factors</i>		0.55	Hours - Drum Tracker		
A57 LATA	E130 OTHER ENGINEERS	KB40S B707 Ash/Drv Residues	Linear	648.00	Dollars
<i>Factors</i>		9	Hours per Shift (Analytic V & V-WIPP)	72	dollars per hour
A57 LATA	E130 OTHER ENGINEERS	KB40S B707 Ash/Drv Residues	Linear	648.00	Dollars
<i>Factors</i>		9	Hours (SMEs Batching)	72	dollars per hour

WBS No: 1BAHPS
 Activity ID: 1BAHOPSPRT

Rockv Flats Closure Project
Baseline Cost and Basis of Estimate

Project Baseline Devl
 WBS Filter 1BAH
 Activity Filter *

Starts In FY *

A57	LATA	E130	OTHER ENGINEERS	KB40S	B707 Ash/Drv Residues	Linear	648.00	Dollars
<i>Factors</i>		9	Hours (WIPP Administrator)			72	dollars per hour	
A57	LATA	P150	TRAINERS	KB10S	B707 Program Management	Linear	144.00	Dollars
<i>Factors</i>		2	Hours (Trainers)			72	dollars per hour	
A57	LATA	P160	TECHNICAL WRITERS AND EDITOR	KB10S	B707 Program Management	Linear	144.00	Dollars
<i>Factors</i>		2	Hours (Tech Writers)			72	dollars per hour	
A5C	SUPPLIES	0000	NONE	K215S	Information Resource Mgt	Linear	55.55	Dollars
<i>Factors</i>		55.55	dollars (Drum Tracker - Supplies)					
A5C	SUPPLIES	0000	NONE	KB40S	B707 Ash/Drv Residues	Linear	1,111.82	Dollars
<i>Factors</i>		1.02283	--FY00 Escalation --	1087	Dollars			
A5C	SUPPLIES	0000	NONE	S100S	SSOC Salaried	Linear	724.63	Dollars
<i>Factors</i>		100000	Dollars (line counter)	0.00725	duration factor			
A5H	SUBCONTRACTED SRVS	E080	NUCLEAR (CRITICALITY) ENGINEER	K266S	Envir. Safetv. Health & Quality	Linear	148.50	Dollars
<i>Factors</i>		1.5	Hours - Crit Safetv			99	dollars per hour	
A5H	SUBCONTRACTED SRVS	E080	NUCLEAR (CRITICALITY) ENGINEER	K266S	Envir. Safetv. Health & Quality	Linear	198.00	Dollars
<i>Factors</i>		2	Hours (Crit)			99	dollars per hour	
A5H	SUBCONTRACTED SRVS	E120	SAFETY ENGINEERS	KB50S	B707 Eng Envir. Sftv & Quality	Linear	99.00	Dollars
<i>Factors</i>		1	Hour - Safetv eng			99	dollars per hour	
A5H	SUBCONTRACTED SRVS	E130	OTHER ENGINEERS	KB50S	B707 Eng Envir. Sftv & Quality	Linear	648.00	Dollars
<i>Factors</i>		9	Hours (Eng. Group)			72	dollars per hour	
A5H	SUBCONTRACTED SRVS	P090	INDUSTRIAL HYGIENISTS	KB50S	B707 Eng Envir. Sftv & Quality	Linear	108.00	Dollars
<i>Factors</i>		1.5	Hours (IH&S)			72	dollars per hour	
A5H	SUBCONTRACTED SRVS	S090	OTHER SCIENTISTS	K215S	Information Resource Mgt	Linear	164.16	Dollars
<i>Factors</i>		2.28	Hours (Drum Tracker)			72	dollars per hour	
A5H	SUBCONTRACTED SRVS	S090	OTHER SCIENTISTS	K215S	Information Resource Mgt	Linear	197.28	Dollars
<i>Factors</i>		2.74	Hours - Drum Tracker support			72	dollars per hour	

Line Item SYS - Contingency And Escalation

BOE

Resources

Cost Element	Skill	Department	Curve	Quantity	Units
CON CONTINGENCY	0000 NONE	ZDEPT No Department	Linear	36,534.88	Dollars
<i>Factors</i>		36534.9	Dollars		
ESC ESCALATION	0000 NONE	ZDEPT No Department	Linear	26,160.06	Dollars
<i>Factors</i>		26160.1	Dollars		

WBS No: 1BAHSC Title: Sample Collection for Ash/Drv
 Activity ID: 1BAHSAMPLG Description: Sample Collection for Ash/Drv

Cost Risk 5 Schedule Risk 5

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
030-3	Sampling	167.00	ea	VQ	0	0	0	71.126	0	71.126	0	71.126
SYS	Contingency And Escalation	1.00	ea	EE	0	0	0	0	1,981	1,981	0	1,981
Total for Activity 1BAHSAMPLG:						0	0	71.126	1,981	73.107	0	73.107

Line Item 030-3 - Sampling

BOE

Historical Data Source: The historical data is based on FY00 Ash/Dry Operations Support (WBS 1.1.04.09.04.03 and 1.1.04.09.04.07), charge number EM245270
 Description of the item supported by the historical data: Sample Collection for Ash/Dry
 Breakdown of Historical Data:
 Item: FY00 Production Support -Ash/Dry
 Unit - cost per day - total sample events estimated
 Unit Cost Adjustment Factor - additional WIPP samples
 Basis for Adjustment - Additional WIPP samples to meet the WAP requirements.

Resources

Cost Element	Skill	Department	Curve	Quantity	Units
A5H SUBCONTRACTED SRVS	S090 OTHER SCIENTISTS	K267S Analytical Laboratory Services	Linear	278.62	Dollars
<i>Factors</i>		227	Each Sampling Event	1.02283	--FY00 Escalation -
A5H SUBCONTRACTED SRVS	S090 OTHER SCIENTISTS	K267S Analytical Laboratory Services	Linear	147.29	Dollars
<i>Factors</i>		2	Hours	1.02283	--FY00 Escalation --

WBS No: 1BAHSC
 Activity ID: 1BAHSAMPLG

Rockv Flats Closure Project
Baseline Cost and Basis of Estimate

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

Starts In FY *

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	1,202.59	Dollars
<i>Factors</i>		1202.59 Dollars					
ESC	ESCALATION		0000 NONE	ZDEPT No Department	Linear	778.43	Dollars
<i>Factors</i>		778.427 Dollars					

Report Totals:

<i>Labor Hours Total</i>	<i>Labor Cost Total</i>	<i>Materials/ Sub Cost</i>	<i>Contingency & Escalation</i>	<i>Total Prime Cost</i>	<i>Burden Cost</i>	<i>Total Cost</i>
71.067	1,770,197	3,807,136	152,689	5,730,022	854,836	6,584,858