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000022858

MEETING NOTES

TO: Distribution

DATE: January 10, 1994

FROM: Philip Nixon

MEMO #: SP307:010194:01

PROJECT #: Solar Pond IM/IRA

ATTENDANCE:

Randy Ogg, EG&G
Harlan Ainscough, CDH
Mark Austin, EG&G
Phil Nixon, ES
Richard Henry, ES
Andy Ledford, EG&G
Alan MacGregor, ERM
Dave Ericson, EG&G
Scott Surouchak, DOE
Peg Witherill, DOE
Arturo Duran, EPA
Ted Kearns, DOE/KMI
Michelle McKee,EG&G
Steve Paris, EG&G
Lee Pivonka, G&M
Cindy Gee, ES
Kim Ruger, EG&G

DISTRIBUTION:

Attendees
L. Benson
A. Conklin
P. Breen
H. Heidkamp
K. Cutter
S. Stenseng
A. Fricke
R. Stegen
T. Kuykendall
T. Evans
S. Hughes
B. Cropper
C. Montes
W. Edmonson
B. Wallace EG&G (Admin. Record) (2)
K. London, EG&G
Martin McBride, EPA
Helen Belencan, DOE
Steve Cook
Joe Schieffelin, CDH
Bob Segris, LATO
Steve Keith, EG&G
Dave Myers, ES
R. Wilkinson, ES
S. Winston, ES
Frazer Lockhart, DOE
Steve Howard, DOE/SMS

MAR 1994
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SUBJECT: Weekly Status Meeting

DOCUMENT CLASSIFICATION
REVIEW WAIVER PER
CLASSIFICATION OFFICE

ADMIN RECORD

A-OU04-000659

1) **Conceptual Design Update/Status**

Leigh Benson discussed the Contaminants of Concern (COCs) identified by depth in the vicinity of the OU4 Solar Evaporation Ponds (SEPs), and provided maps utilizing the Phase I RFI/RI data and both the Phase I and historical data. In general contamination is found within the SEP berms and in the first few feet beneath the liners. This information is being used to calculate the amount of material that will be excavated and consolidated under the engineered cover.

Contamination on the north hillside and in the areas surrounding the security fence is found only in the surface soils. It has been agreed at previous meetings that surface soils on the hillside from the area between the SEP berms and the seepline will be excavated and consolidated beneath the engineered cover. Phil Nixon provided a map depicting this area. The surface soils beyond the seepline will be addressed during the Phase II program.

There is some contamination below the surficial soils in the area adjacent to the cooling towers located south of SEP 207-C and east of SEP 207-A. This soil contamination may be contributed to the original SEP. It was agreed that this area will not be remediated as part of the IM/IRA. Remediation of this area will be addressed when the industrial area is closed/remediated. **This will be stated in the IM/IRA.**

It was agreed that there are benefits associated with minimizing the areal extent of the 1,000 year cover design. Sandy Stenseng presented an engineered cover design concept that would consolidate the liner/berms from SEP 207-B north and the northern third of SEP 207-A over SEPs 207-B center, 207-B south, and the southern two thirds of 207-A. The excavated areas would be closed by backfilling to establish a desired grade, considering seeding/erosion control. This concept was generally approved; however, Harlan Ainscough specified that the cover should extend beyond the limits of the consolidated waste and the "edge effects" should be considered.

Sandy Stenseng also indicated that the current design concept had a 1,000 year engineered cover over SEP 207-C. She specified that this was conservatively proposed since there was some contamination at depth which may be due to the original SEP, and there is no subsurface data from beneath SEP 207-C. There are advantages to removing Pond 207-C and consolidating it within the proposed 207-A/207-B pond cover:

- Cost savings from a reduction in the required backfill
- Reduced stress on the potentially unstable hillside
- Reduced impacts to the utilities and swale adjacent to the east side of Pond 207-C

It should be noted however, that there is risk associated with assuming during the conceptual design that Pond 207-C can be removed. If contamination is identified at great depth below the surface, then a large amount of excavation could be

required. It was discussed that the data for the other ponds indicates that the maximum migration of contamination has been to depths of 4-6 feet. ES will assume during the conceptual design phase that Pond 207-C will be excavated to a depth between 4-6 feet and that the material will be consolidated under the other engineered cover. The Pond 207-C area will then be backfilled and seeded. This assumption will be assessed when the results of the C-Pond Borings are received. The design will be modified if necessary. **EG&G should expedite the drilling activities in this pond if possible. The sooner the drilling results are received, the lower the cost and schedule impacts would be from changing the design strategy.**

It was agreed that sampling and analysis would be required to verify that the excavated areas could be "clean" closed with backfill and seeding. The vadose zone PRGs would be used as the assessment basis for this verification.

The potential for reducing the flow of groundwater through the covered area was discussed. Arturo Duran specified that DOE had agreed at previous team meetings to assess the impacts from groundwater contacting the wastes for the 1,000 year period. An assessment will be made as to whether a groundwater control mechanism is required. This will be dependent upon the depth to the water table under the consolidated wastes, and the modeling results. If it can be demonstrated by TCLP analysis or VLEACH modeling that groundwater will not be impacted, then a groundwater control mechanism would not be required. Scott Surouchak indicated that a slurry wall or grout curtain would only be effective for lateral groundwater migration, and would not be effective for a general rising of the water table. Mark Austin questioned if a groundwater flow barrier were used, would the diverted groundwater need to be collected or channeled back toward the ITS system. It was agreed that this would be necessary if the groundwater was contaminated.

2) HELP Model Data/Criteria

Cathy Cutter presented the site specific input parameters proposed for the HELP model. It was discussed that the values are conservative such that the modeling results would over estimate the infiltration. The proposed parameters are site specific values or the HELP model default values for Denver. It was discussed that the HELP model would be performed for both the cover alternative with and without the asphalt layer. The model will be run over a range of precipitation amounts to assess the change in cover performance based on potential changes in the climate. **The Team was asked to provide comments on the HELP input parameters by the next team meeting.**

3) Phase II RFI/RI Work Plan Annotated Outline

Cindy Gee presented the annotated outline for the Phase II workplan.

1. Introduction

2. Environmental Setting

It was agreed that this section would primarily reference an earlier section of the IM/IRA

3. Data Evaluation/Summary

It was agreed that this section will largely consist of an evaluation of the existing groundwater data in the vicinity of OU4.

4. Data Objectives/Requirements

This section will include Data Quality objectives and analytical criteria. Constituents that were not detected in historical data or in the Phase I program may not be included in the analyte list.

5. Field Sampling Plan

This Section will include:

- Location maps for wells/borings
- Aquifer testing identification/location
- Volumes of generated cuttings/wastewater
- Groundwater seep assessment

It was discussed that the OU9 original process waste lines would not need to be explicitly addressed in the work plan.

6. Schedule

7. Baseline Risk Assessment

It was discussed that there would be a human health and environmental assessment. However, much of the environmental assessment has already been completed. and the Phase II effort will focus on ensuring that the previous work is adequate and valid.

8. QA Plan

9. Standard Operating Procedures

10. References

11. Appendices

Scott Surouchak requested that the Phase II workplan investigate whether the ITS system collects contaminants from the 700 Area. Cindy Gee stated that this would be done.

4) **Post-Closure Monitoring and Maintenance Plan**

Lee Pivonka presented the outline for the performance monitoring system.

1. Introduction

2. Design Basis

   This section will include a regulatory frame work discussion, a discussion of the performance criteria and how the system will be integrated Geraghty & Miller and ES will work closely to integrate the engineered cover and monitoring designs. It was agreed that the integration would be complete by the first IAG milestone (March 23, 1994).

3. Technology Evaluation

4. Conceptual Design of Monitoring System

5. Monitoring Protocols

   This section will include the monitoring methodology and data analysis procedures for the cover monitoring system, the groundwater monitoring system, and the vadose zone monitoring system. In addition, this section will present the response triggers and response actions if any of the monitoring devices detect liquids.

6. Implementation Plan

7. Cost

8. Schedule

9. References

Arturo Duran voiced a concern that the three monitoring systems might be overkill. He suggested that vadose zone modeling and contaminant mass balance calculations (predicting the impact to groundwater quality if it were assumed that all the vadose contaminants entered the groundwater) might substitute for the vadose zone monitoring equipment.

Alan MacGregor stated that regulatory requirements for vadose zone monitoring are expected within the year. Lee Pivonka stated that the engineered cover monitoring

system would provide early warning that liquid was migrating through the cover. The vadose zone monitoring system would provide an early warning that liquids were in the vadose zone. The groundwater monitoring system would provide the final warning that groundwater was being impacted by contaminants. The combination of the three systems may be required to demonstrate that contamination migration resulted from a failure of the engineered cover. **Harlan Ainscough will investigate whether the approval of the IM/IRA would cover approval of an interim Post Closure Care Plan.**

5) **Utilities**

It was discussed that each utility will be individually addressed with respect to whether or not it would be impacted by the closure/remediation. Piping that will be removed will be disposed beneath the engineered cover as debris. Piping that will not be impacted by Closure/Remediation will be grouted in-place. Utilities that will be impacted, but are required for RFP operations, will be relocated. Scott Surouchak indicated that the piping might have to have a waste determination performed prior to being removed/disposed.

6) **Status of the 750 Pad Change in Interim Status**

Andy Ledford asked Harlan Ainscough if CDH would approve the change in interim status for the 750 pad. Harlan specified that CDH thought they could meet the commitment date.

Philip Nixon, Project Manager

OPERABLE UNIT 4/SOLAR EVAPORATION PONDS

JANUARY 11, 1994

AGENDA

MEETING MINUTES REVIEW	8:00-8:15
MEETING MINUTES COMMENTS/ ISSUE RESOLUTION	8:15-8:30
SCHEDULE REVIEW & STATUS-A. LEDFORD	8:30-9:00
PERMITTING ISSUES-BLDG. 788-T. KERNS	9:00-9:30
BREAK	9:30-9:45
SCHEDULE/BUDGET IMPACTS OF CURRENT BARRIER DESIGN-D. ERICSON	9:45-10:30
GROUND WATER ISSUES ASSOCIATED WITH 1000 YR CRITERIA	10:30-11:00
GROUND WATER COMMUNICATION W/WASTE	
LEACHABILITY OF WASTE FROM LINERS	
CONTAMINANTS ASSOCIATED W/LINERS	
GROUP COMMENTS	11:00-11:30
HELP MODEL	
POST CLOSURE MONITORING AND MAINTENANCE PLAN OUTLINE	
PHASE II RFI/RI WORK PLAN OUTLINE	
OPEN ISSUES	11:30-12:00

QUANTITATIVE COMPARISON OF REMEDIATION OPTIONS

	Baseline (September)	Option A (1000 yr Cap)	Option B (1000/30 yr Cap)	Option C (Partial1000 yr Cap)
Schedule Impact				
Scope Impact	None	High	High	Medium
Initial IAG Milestone	On Schedule	8 weeks	4 weeks	1 weeks
Implemention of Workaround	N/A	4 weeks *1 &*2	No Slip *1 & *2	No Slip *1 or *2
Title II Design	No Impact	No Impact	No Impact	6 Weeks *3
Construction	Baseline	Greater Than Baseline	Equal to Baseline	Less Than Baseline
Budget Impacts				
Initial IAG Milestone	N/A	$35,000	$21,000	$5,000
Title II Design	N/A	N/A	N/A	$50K *3
Construction Costs	$49M - $79M	$16M - $29M	$12M - $22 M *4	$9M - $18M *5
Constructability	Difficult	Most Difficult	Difficult	Least Difficult
Total Costs	**$55M - $85M**	**$18M - $32M**	**$15M - $25M**	**$10M - $20M**
Other Potential Costs				
Groundwater Diversion	$2.6M	$2.6M	$2.3M	$2.3M

Footnotes:

Workarounds to prevent schedule slippage

*1= Additionally Staff/Overtime

*2 = Delivery of a 25% Conceptual Design Rather Than 40%

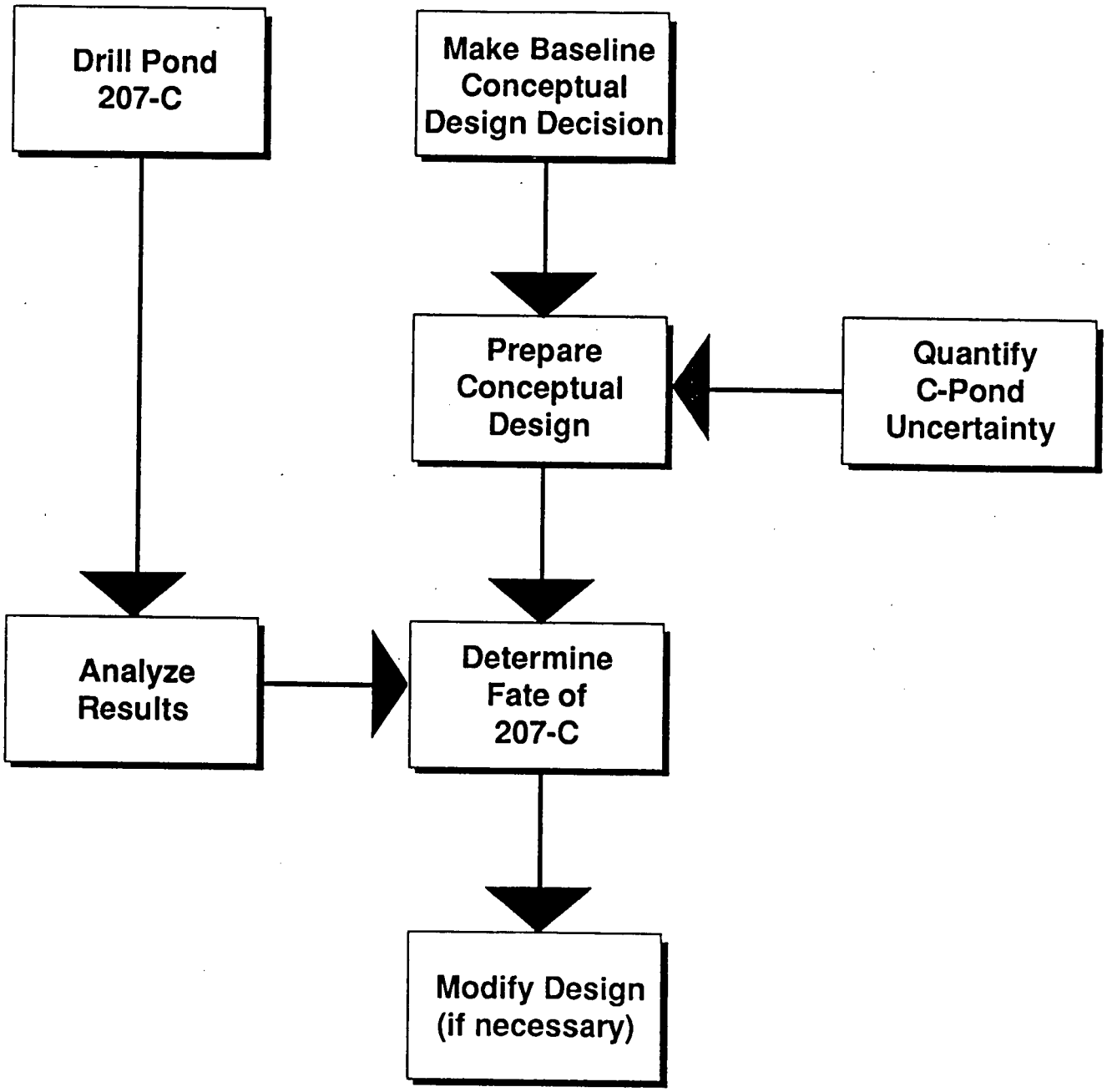
*3 = Potential Redesign based on Pond C Sampling Results

*4 = $2M to $3M if clean closure of B North and part of A is not possible

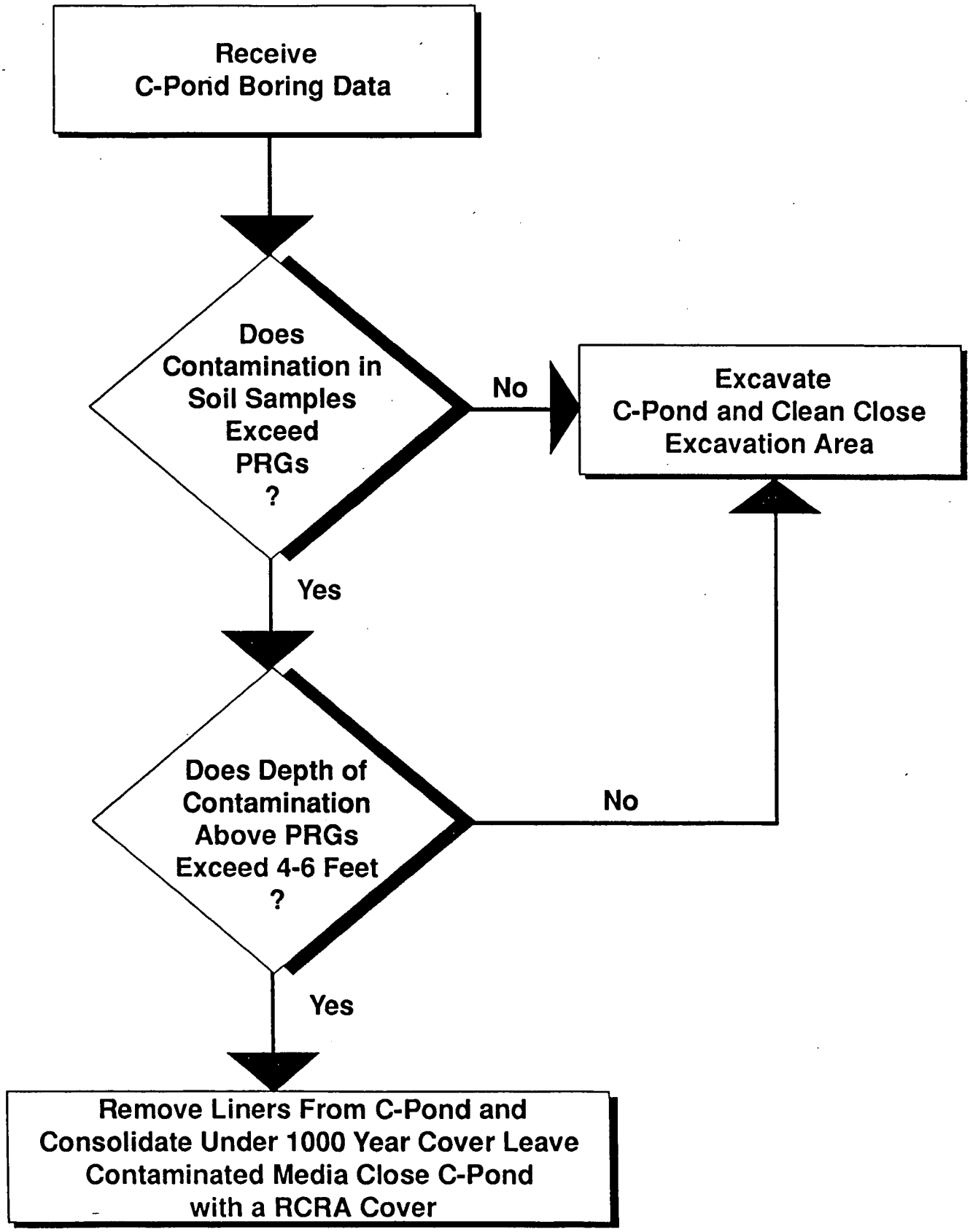
*5 = $3M to $5M if clean closure of B North, C and part of A is not possible

Attachment 2
SP307:010194:01
Page 1 of 4

DECISION FLOWSHEET



DECISION FLOWSHEET



AREAS OF UNDERSTANDING REQUIRED TO ASSURE A SUCCESSFUL 788 REMOVAL PLAN

• What has to be done and what conditions would have to be met to allow relocation of 788 and the interim status to remain with the building.

This would allow provision of badly needed storage space on the plant. This would allow timely provision of a permit for this storage space. 800K spent in 1986 to provide compliant space for a waste process, it seems to be rational that this space be reclaimed for waste control purposes if possible instead of add to the waste quantity on plant site.

• If relocation can be effected would a closure plan for unit 21 be required or just a change to the permit be satisfactory

• The closure plans that would be submitted would be very similar to those that the state has taken exception to in the past. However the design documents, Hazardous Material Sampling Plans, and the Engineering work package will contain the technical detail that would attempt to address the past exceptions.

• What are the limitations on the placement of debris under the cap? Could rubbleized metal ancillary equipment be placed in the fill? Could the rubbleized metal be treated to allow compaction
1 within the fill, or mixed in proportion to the soil so that sufficient compactor would occur.?

The purpose of discussion on this item is to explore the possibility of removal and shipment of a large quantity of material (debris) to off site disposal sites when material of the same or more contamination levels remains on site.

• Insure that all interested parties are aware of the current baseline plans and courses of action to allow some assessment of the success orientation of the schedule and cost...

COLORADO DEPARTMENT OF HEALTH
Hazardous Materials and Waste Management Division

INTEROFFICE COMMUNICATION

TO: Harlen Ainscough

FROM: Wendy Naugle WN

DATE: January 10, 1994

SUBJECT: HELP Model Input for Solar Ponds Cover Design

Harlen, as you requested, I have reviewed the input parameters for the HELP model simulations of the Solar Ponds Cover design. I have several comments, which are listed below.

General Comments regarding the use of the HELP model:

Use of the HELP model has many limitations. Therefore, it is extremely important to ascertain more definitively how the results will be used. If the model is to be used in conjunction with other models to confirm that the cover designs is appropriate, then the use of the HELP model is most likely merited. However, if the results from the HELP model runs will be used in a stand-alone fashion to predict the absolute leakage out the existing liner layers, I do not believe this model is appropriate by itself.

Since the cover design life is 1000-years, the HELP model may not be appropriate due to the fact that typically only 20-years are modeled. Climatic variation beyond a 20-year period will not be predicted or accounted for using the input parameters proposed in this document.

Given the unique situations presented in this case, including the 1000-year design life, the inclusion of a capillary break, inclusion of an asphalt layer, and inclusion of the existing liners in the model domain, the application of the HELP model to this situation is a bit beyond its capabilities, especially when using "default" model values for these layers.

General Comments regarding the model domain:

For both cover design scenarios, it is proposed to model the entire cover from the vegetative layer all the way down to the existing liners. In this manner, the model results will predict percolation from the liner layer only. Thus, the model results will be most strongly influence by the following factors: evapotranspiration from the upper two layers (strongly dependent upon the soil parameters and the thickness of the layers), lateral drainage from the sand layer beneath the capillary break (dependent upon the slope of the layer, the saturated hydraulic conductivity and the maximum lateral drainage distance) and the leakage through the existing liner (dependent upon the saturated hydraulic conductivity of the layer

and its thickness). In other words, inclusion of all three of the above mentioned layers in the model domain, using normal climatic values as proposed, will most likely result in model output that indicates no leakage through the existing liner. [I ran the model to simulate the first 20 years, and basically confirmed this result -- the majority of the water will leave the system through Et, a small amount will escape via lateral drainage, and after three years of simulation, very small amounts of water percolate through liner layer.]

Specific Comments:

Depending upon the continuity of the existing liner, and the amount of backfill needed to reach "final grade" it may not be appropriate to model these two layers together. This is particularly important if there will be areas beneath the cover where the existing liner is absent. The saturated hydraulic conductivity of the backfill may not be as low as 1×10^{-7} cm/sec, and the thickness of this layer will exert a large degree of control on the output.

Use of default values for the soils in each layer is not appropriate. Actual values should be determined for the material to be used for layers 1, 2, and 7, at a minimum.

The initial soil moisture content for layers 1 and 2 should probably be higher than the field capacity, unless they have data to prove otherwise.

Other input parameters not given which should be reviewed by CDH:

thickness of the existing liner layer
initial quantity of water on the soil surface (snow depth)
vegetation type
slope of the drain layer
Soil Conservation Service runoff curve number
surface area
lateral drainage distance

As a result of these comments I suggest that you request the following:

- clarification of what the results of the model will be used for
- additional information regarding the specific soil types that will be used in the construction
- additional information listed above under "Other input parameters not given"
- that a method be developed to assess the impact of climatic variations over the 1000-year design life (whether by sensitivity analysis, or through synthetic climate generation to simulate a wetter 20-year period, or another method/model.)

Informal comments on outline of Phase II Workplan component of OU-4 IM/IRA DD
Provided to IM/IRA Team 1/11/94

General: Need Acronyms List in IM/IRA

A Benchmarks section with tables may need to be added to establish analytical detection limits for ground water samples. It is unlikely the ARARs section of the IM/IRA can be referenced since this workplan is for groundwater.

The workplan, per IAG Table 5, must characterize nature, rate and extent of contamination, define pathways and methods of migration, identify areas that would be threatened by releases, and determine short/long term effects on human health and the environment. Please be sure that these basic objects can be meet from the data to be gathered under the WP.

Section 2.0: Reference as much as possible to information in the introductory section of the IM/IRA. However avoid references that would require back and forth comparisons of information, i. e. especially maps.

A map showing the bedrock topography and surficial bedrock lithologies, to the extent known, is desirable. If enough is known to include bedrock lithologic cross-sections please do so.

Delete preliminary Section Figures 2.1, 2.2 and 2.5 (wind rose, etc) from this workplan. They should be include in the IM/IRA introductory section.

Section 5: Regarding 5.1, please specify the determinations that will be supported by the data to be collected. For example, the extent to determine vertical ground water movement, head differences between alluvium and bedrock, vertical hydraulic conductivity, etc., should be stated as appropriate.

Regarding 5.2, explain the need/desire for additional surficial soil samples. Are they being taken at hole/well locations or elsewhere as well.

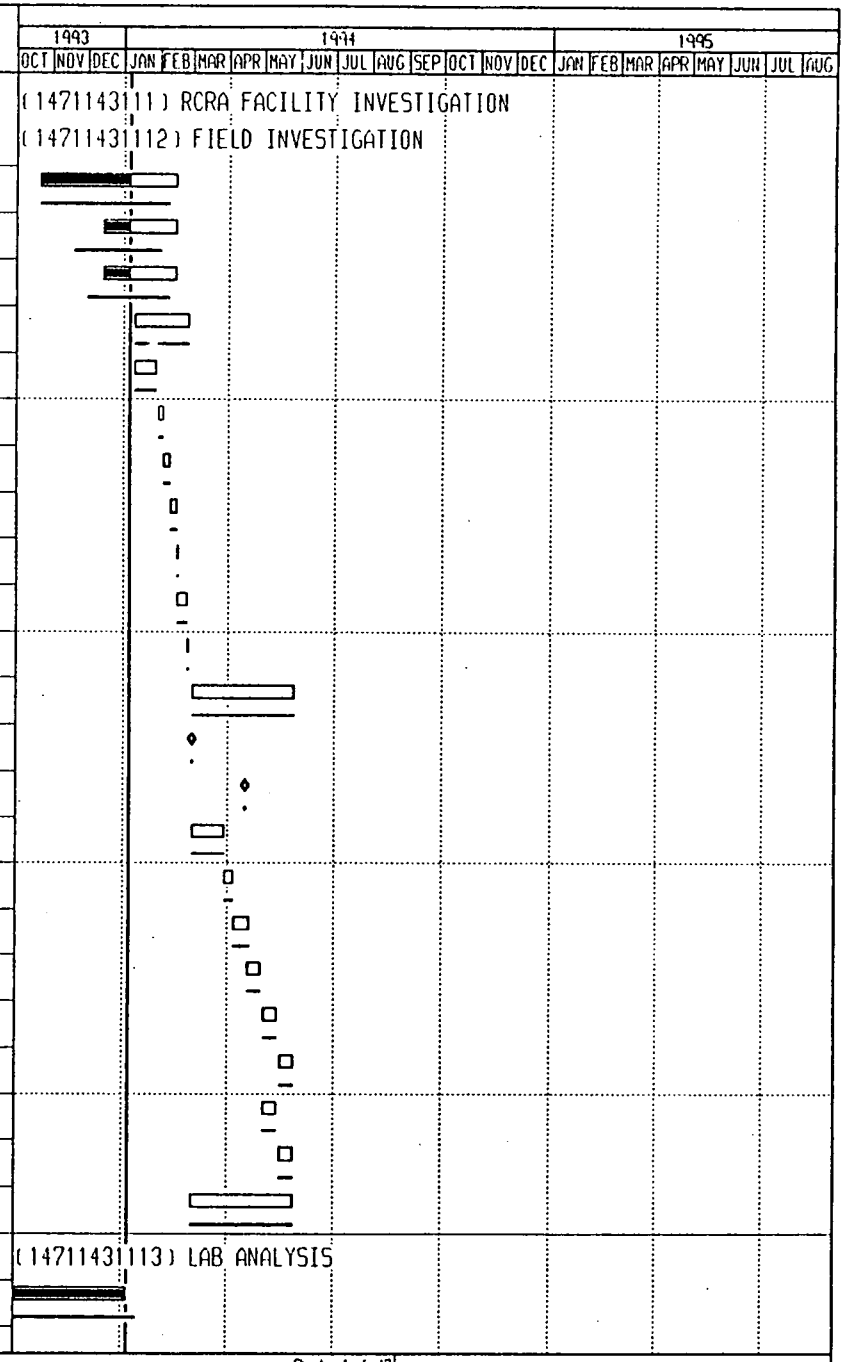
What seep specific investigations are proposed? Are they alluded to in Section 5.4, surface water sampling?

Section 7.1&7.2:

Per the IAG a comprehensive risk assessment must be developed in the Phase II Report. It is recognized that the solar ponds themselves had little ecology and the closure action would likely change any current impacts to humans or ecology. However, there must be an assessment of the impacts to HH & the environment if no further actions are taken in regard to past releases to

ground water and that may continue to impact surface water. Therefore, DOE must still develop a Phase II work plan (or utilize the Phase I workplan, with modifications, if necessary) to ensure that the assessment can be accomplished. Please minimize the degree of effort yet meet the objective of a comprehensive assessment.

ACTIVITY ID	ACTIVITY DESCRIPTION	EARLY START	EARLY FINISH	ORIG DUR	REM DUR	TOTL FLT
(1471143 1111) RCRA FACILITY INVESTIGATION						
(1471143 1112) FIELD INVESTIGATION						
40121200	207B NORTH & CENTER DRILLING	21OCT93A	14FEB94	80	28	71
40121231	CORE LOGGING (207B NORTH)	14DEC93A	14FEB94	40	28	71
40121232	CORE LOGGING (207B CENTER)	14DEC93A	14FEB94	40	28	71
40121300	CHANGE BOARD TO ADD B-SOUTH & C POND DRILLING	10JAN94	25FEB94	35	35	146
40121305	BASIS OF ESTIMATES FROM PROJECT	10JAN94	28JAN94	15	15	146
40121310	BOE INPUTS AND PRICING WITHIN PCS SYSTEM	31JAN94	3FEB94	4	4	146
40121315	BCP WRITTEN AND SUBMITTED TO ER CCB FOR REVIEW	4FEB94	9FEB94	4	4	146
40121320	ER CCB PREVIEW	10FEB94	15FEB94	4	4	146
40121325	ER CCB APPROVAL	16FEB94	16FEB94	1	1	152
40121335	PLANT CCB PREVIEW	16FEB94	24FEB94	7	7	146
40121339	PLANT CCB APPROVAL	25FEB94	25FEB94	1	1	146
40121340	POND 207B-SOUTH & C DRILLING	1MAR94	27MAY94	63	63	332
40121345	B-SOUTH POND EMPTY		28FEB94	0	0	0
40121350	C POND EMPTY		15APR94	0	0	0
40121355	READINESS REVIEW (POND 207B-SOUTH/207C DRILLING	1MAR94	28MAR94	20	20	145
40121365	RADIATION SURVEY	29MAR94	5APR94	5	5	145
40121370	MOBILIZE FOR DRILLING (POND 207B-SOUTH & C)	6APR94	19APR94	10	10	145
40121375	DRILL 4 BOREHOLES (POND 207C)	18APR94	29APR94	10	10	34
40121380	DRILL 3 BOREHOLES (POND 207B-SOUTH)	2MAY94	13MAY94	10	10	137
40121385	DEMOBILIZE (POND 207B-SOUTH & C)	16MAY94	27MAY94	10	10	254
40121390	CORE LOGGING (POND 207C)	2MAY94	13MAY94	10	10	342
40121395	CORE LOGGING (POND 207B-SOUTH)	16MAY94	27MAY94	10	10	195
40121420	CONSTRUCTION MANAGEMENT (BS & C POND DRILLING)	1MAR94	27MAY94	63	63	254
(1471143 1113) LAB ANALYSIS						
40131400	NON RAD (VADOSE)	3MAY93A	5JAN94A	76	0	



Target Date 5NOV93
Plot Date 10JAN94
Data Date 6JAN94
Project Start 1DEC92
Project Finish 26SEP95

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Activity Bar/Early Dates
Critical Activity
Progress Bar
Target Dates
Milestone/Flag Activity

OU4C

Sheet 1 of 17

EG&G ROCKY FLATS
OPERABLE UNIT #04
SOLAR PONDS REMEDIATION

Date	Revision	Checked	Approved

Attachment 4
SP307:010194:01
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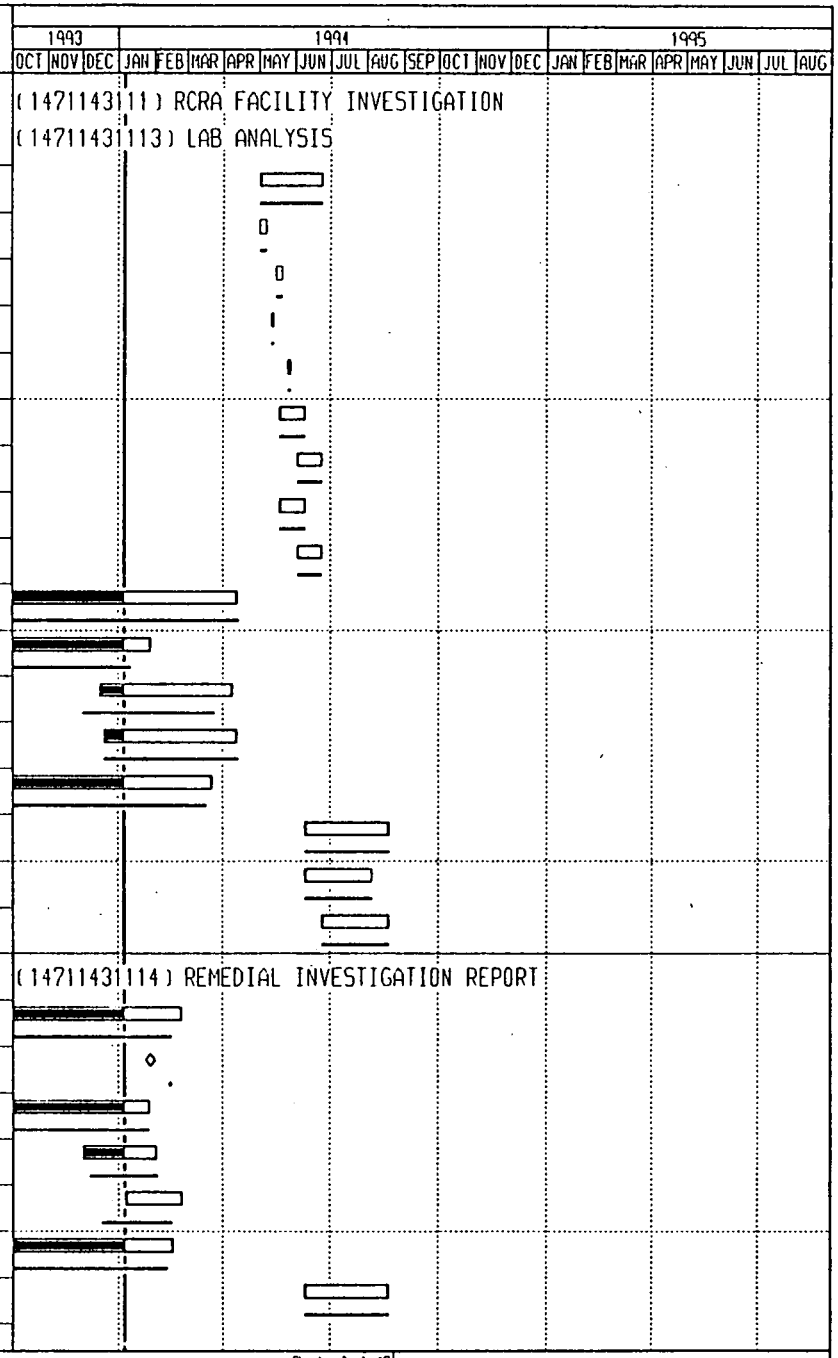
ACTIVITY ID	ACTIVITY DESCRIPTION	EARLY START	EARLY FINISH	ORIG DUR	REM DUR	TOTL FLT
	(14711431111) RCRA FACILITY INVESTIGATION					
	(14711431113) LAB ANALYSIS					
40131900	LAB ANALYSIS (POND 207B-SOUTH & C)	2MAY94	23JUN94	38	38	137
40131912	TRANSMIT SAMPLES (POND 207C)	2MAY94	6MAY94	5	5	34
40131914	TRANSMIT SAMPLES (POND 207B-SOUTH)	16MAY94	20MAY94	5	5	137
40131922	RAD SCREEN SAMPLES (POND 207C)	12MAY94	13MAY94	2	2	34
40131924	RAD SCREEN SAMPLES (POND 207B-SOUTH)	26MAY94	27MAY94	2	2	137
40131932	RAD SAMPLE ANALISYS (POND 207C)	19MAY94	9JUN94	15	15	34
40131934	RAD SAMPLE ANALISYS (POND 207B-SOUTH)	3JUN94	23JUN94	15	15	137
40131936	NON RAD SAMPLE ANALISYS (POND 207C)	19MAY94	9JUN94	15	15	34
40131938	NON RAD SAMPLE ANALISYS (POND 207B-SOUTH)	3JUN94	23JUN94	15	15	137
40132000	DATA VALIDATION (EXEC,B-N,B-CTR,VADOSE)	21DEC92A	12APR94	323	68	31
40132100	EXECUTED VERTICAL DRILLING (VALIDATION)	21DEC92A	28JAN94	90	17	82
40132200	207B NORTH (VALIDATION)	16DEC93A	8APR94	76	66	33
40132300	207B CENTER (VALIDATION)	20DEC93A	12APR94	76	68	31
40132400	VADOSE ZONE SAMPLING (VALIDATION)	7SEP93A	22MAR94	106	54	45
40132500	DATA VALIDATION (POND 207B-SOUTH & C)	10JUN94	19AUG94	50	50	137
40132510	DATA VALIDATION (POND 207C)	10JUN94	5AUG94	40	40	34
40132520	DATA VALIDATION (POND 207B-SOUTH)	24JUN94	19AUG94	40	40	137
	(14711431114) REMEDIAL INVESTIGATION REPORT					
40141000	DATA EVALUATION (EXEC,B-N,B-CTR,VADOSE)	20FEB93A	24FEB94	252	36	28
40141009	PHASE I RFI/RI REPORT COMPLETE		28JAN94	0	0	12
40141100	EXECUTED VERTICAL DRILLING (EVAL)	20FEB93A	27JAN94	232	16	13
40141200	207B NORTH (EVAL)	1DEC93A	2FEB94	37	20	29
40141300	207B CENTER (EVAL)	7JAN94	24FEB94	35	35	28
40141400	VADOSE ZONE SAMPLING (EVAL) PHYSICAL/CHEMICAL	5JUL93A	16FEB94	76	30	28
40141500	POND 207B-SOUTH & C (EVAL)	10JUN94	19AUG94	50	50	137



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Activity Bar/Early Dates
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Progress Bar
Target Dates
◇/P Milestone/Flag Activity

OU4C

Sheet 2 of 17

EG&G ROCKY FLATS
OPERABLE UNIT #04
SOLAR PONDS REMEDIATION

Date	Revision	Checked	Approved

Attachment 4
SP307:010194:01
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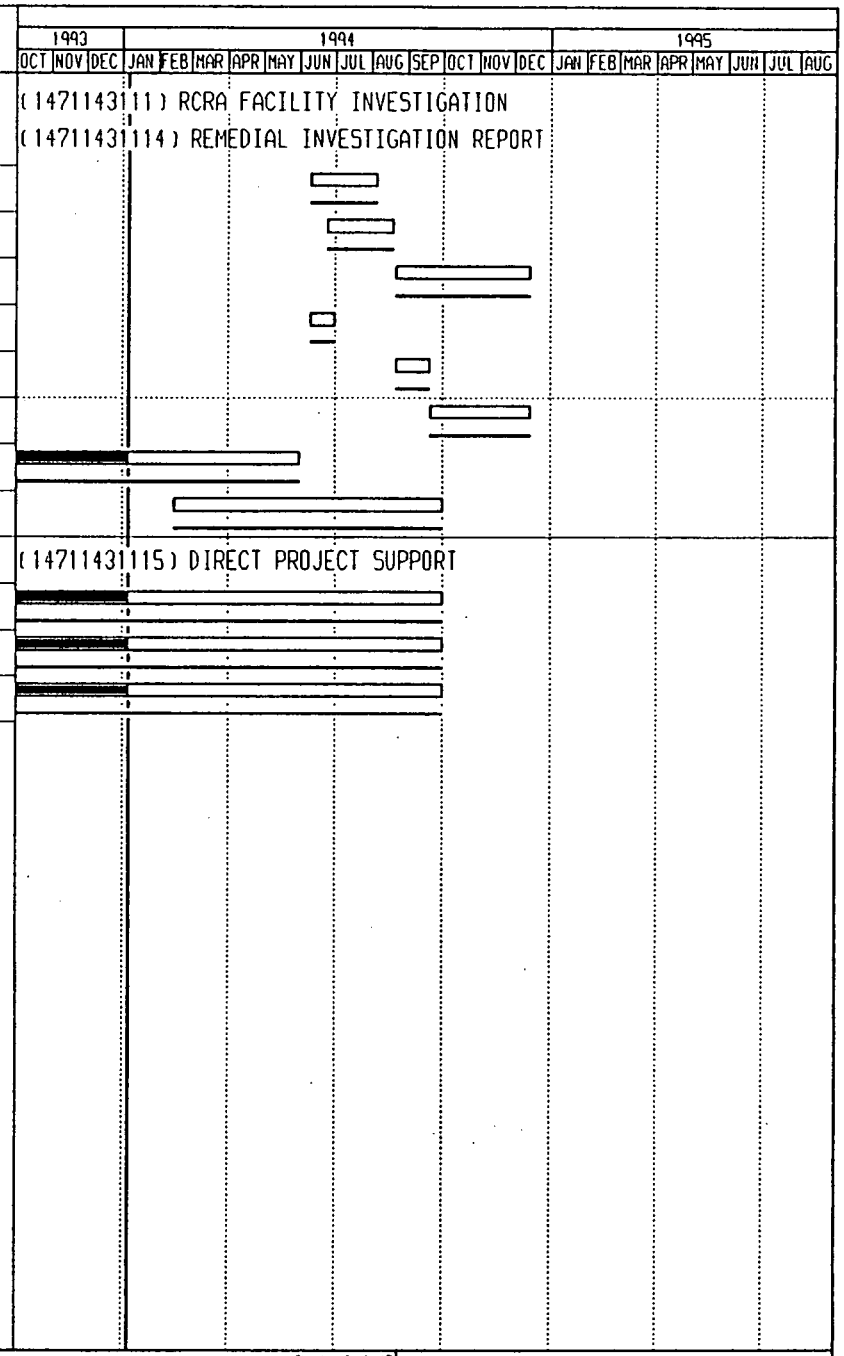
ACTIVITY ID	ACTIVITY DESCRIPTION	EARLY START	EARLY FINISH	ORIG DUR	REM DUR	TOTL FLT
	(1471143111) RCRA FACILITY INVESTIGATION					
	(1471143111 4) REMEDIAL INVESTIGATION REPORT					
40141510	POND 207C (EVAL)	10JUN94	5AUG94	40	40	34
40141520	POND 207B-SOUTH (EVAL)	24JUN94	19AUG94	40	40	137
40141530	POND 207B-SOUTH & C ADENDUM TO IM/IRA *	22AUG94	14DEC94	80	80	137
40141540	POND 207B-SOUTH & C CLN CLSUR VIABILITY STUDY *	10JUN94	30JUN94	15	15	34
40141550	POND 207B-SOUTH & C DRAFT REPORT	22AUG94	19SEP94	20	20	137
40141560	POND 207B-SOUTH & C ADENDUM (APPROVAL)	20SEP94	14DEC94	60	60	137
40141600	DATA BASE MANAGEMENT	10CT93A	31MAY94	163	102	331
40142000	INCORPORATE IM/IRA REVIEW COMMENTS	14FEB94	30SEP94	161	161	26
	(1471143111 5) DIRECT PROJECT SUPPORT					
40151000	PROGRAM/PROJECT MANAGEMENT SUPPORT	10CT93A	30SEP94	249	188	245
40152000	PROJECT GEOLOGIST	10CT93A	30SEP94	249	188	245
40153000	QA/QC	10CT93A	30SEP94	249	188	245



Target Date 5NOV93
Plot Date 10JAN94
Data Date 6JAN94
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Activity Bar/Early Dates
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EG&G ROCKY FLATS
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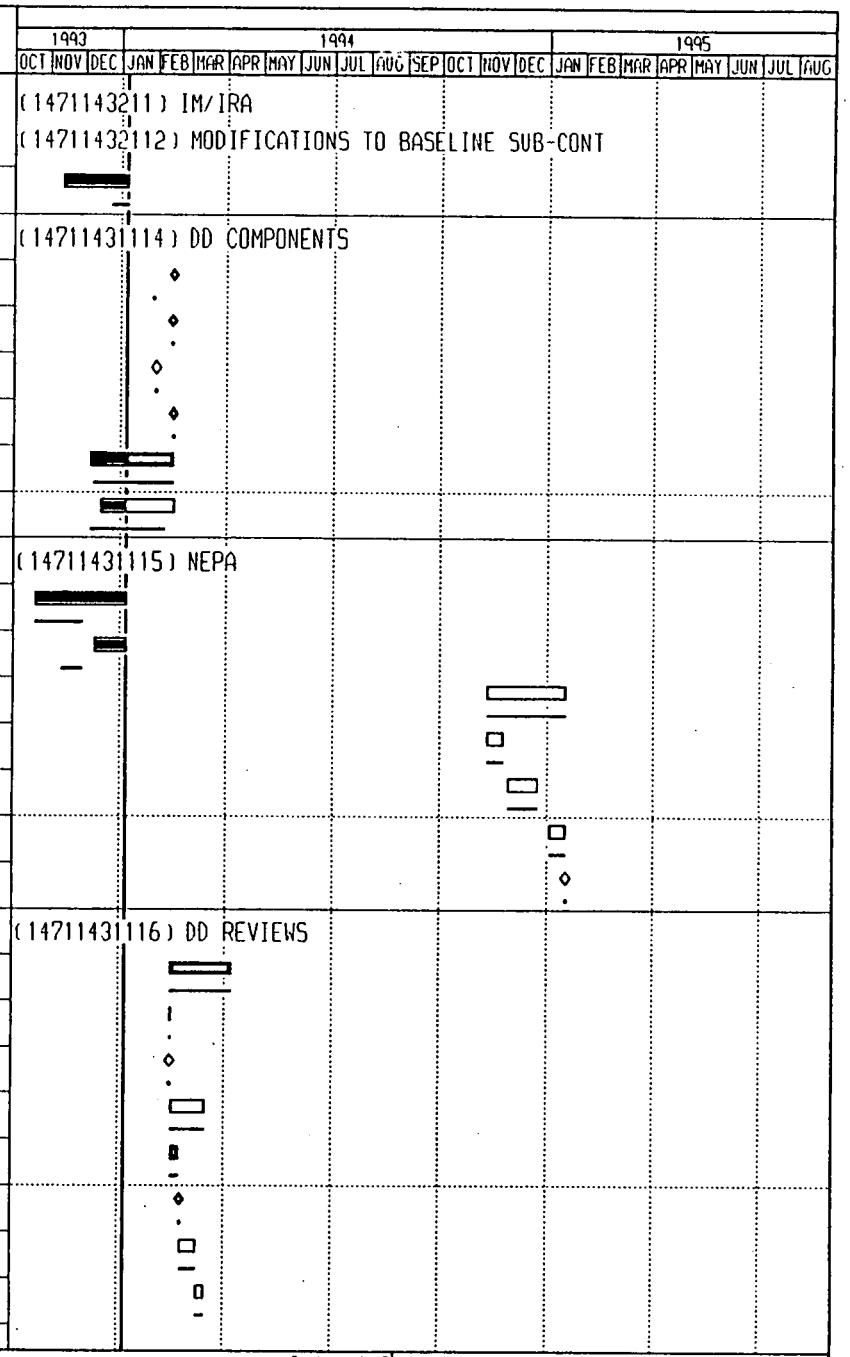
ACTIVITY ID	ACTIVITY DESCRIPTION	EARLY START	EARLY FINISH	ORIG DUR	REM DUR	TOTL FLT
	(1471143211) IM/IRA					
	(1471143212) MODIFICATIONS TO BASELINE SUB-CONT					
40226100	DOE HQ APPROVAL OF BASELINE CHANGE PROPOSAL	12NOV93A	6JAN94	31	1	375
	(1471143111 4) DD COMPONENTS					
40241000	PHASE I RFI/RI REPORT (PART II)		14FEB94	0	0	0
40242000	PHASE II RFI/RI WORK PLAN (PART VI)	14FEB94		0	0	0
40243000	CONCEPTUAL DESIGN COMPLETE (PART IV)	31JAN94		0	0	11
40244000	POST CLOSURE PLAN (PART V)		14FEB94	0	0	0
40245000	IM/IRA EA REPORT (PARTS III & IV)	6DEC93A	14FEB94	42	28	0
40246000	MODELING SUPPORT	15DEC93A	15FEB94	40	29	78
	(1471143111 5) NEPA					
40251000	ACTION DECRIPTION MEMORANDUM	20OCT93A	6JAN94	49	1	26
40251200	DOE/EGG REVIEW (ADM)	10DEC93A	6JAN94	10	1	26
40254000	FONSI	10NOV94	16JAN95	40	40	120
40254100	PREPARE (FONSI)	10NOV94	23NOV94	10	10	120
40254200	DOE/EGG REVIEW (FONSI)	28NOV94	23DEC94	20	20	120
40254300	COMMENT RESOLUTION (FONSI)	3JAN95	16JAN95	10	10	120
40254400	ISSUE FONSI		16JAN95	0	0	120
	(1471143111 6) DD REVIEWS					
40261100	ROUND TABLE REVIEW (PH I DRAFT)	14FEB94	6APR94	37	37	0
40261110	TRANSMITTAL (PH I DRAFT RT)	14FEB94	14FEB94	1	1	0
40261119	TRANSMITTAL (PH I DRAFT RT)	14FEB94		0	0	1
40261120	PARTS I & II INTRO & PHASE 1 REPORT	15FEB94	15MAR94	21	21	15
40261121	REVIEW & COMMENT (PARTS I & II)	15FEB94	21FEB94	5	5	0
40261122	TEAM MEETING (PARTS I & II)		22FEB94	0	0	0
40261123	COMMENT RESOLUTION (PARTS I & II)	23FEB94	8MAR94	10	10	15
40261124	INCORPORATE COMMENTS (PARTS I & II)	9MAR94	15MAR94	5	5	15



Target Date 5NOV93
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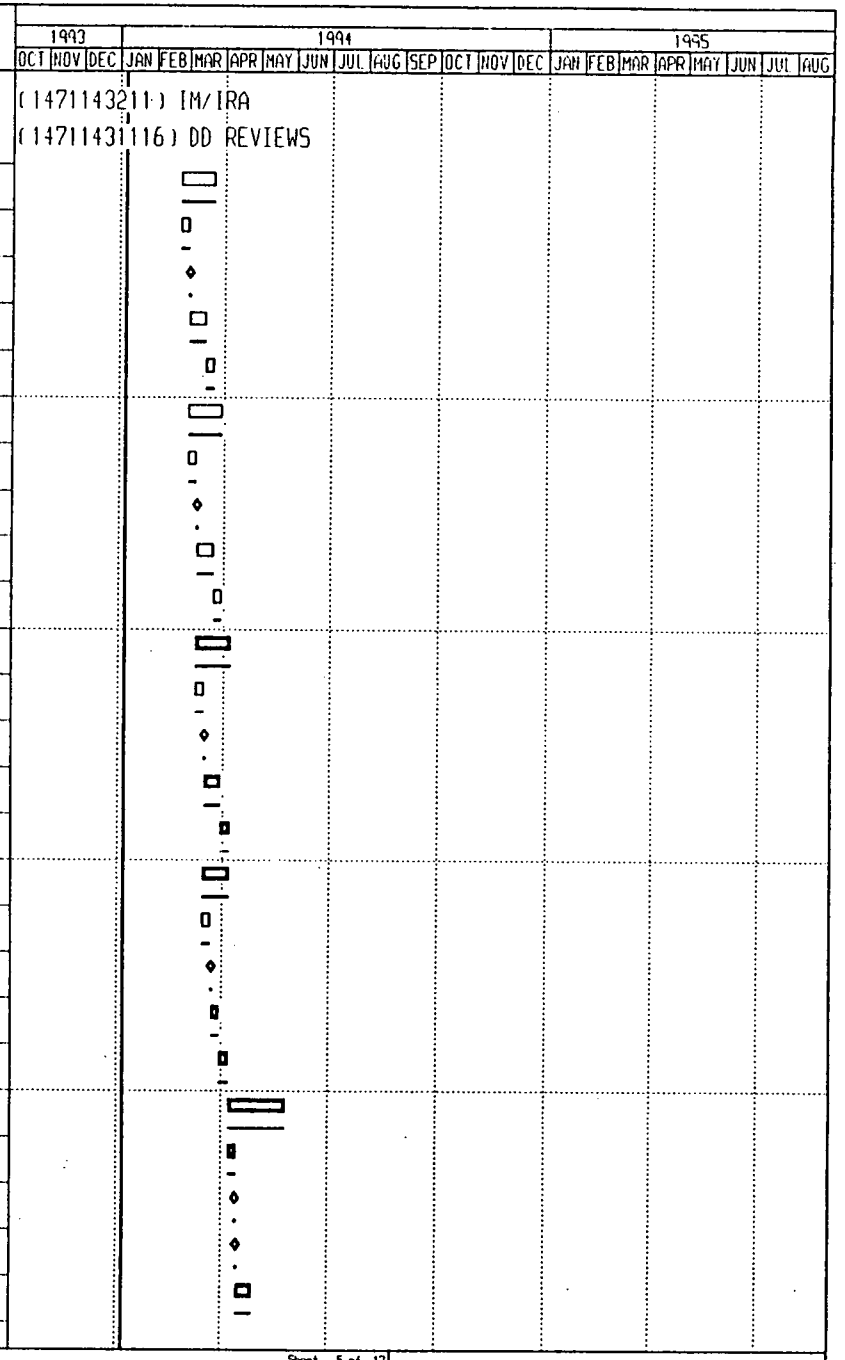
40261130	PART III IM/IRA DD ANALYSIS	22FEB94	22MAR94	21	21	10
40261131	REVIEW & COMMENT (PART III)	22FEB94	28FEB94	5	5	2
40261132	TEAM MEETING (PART III)		1MAR94	0	0	0
40261133	COMMENT RESOLUTION (PART III)	2MAR94	15MAR94	10	10	10
40261134	INCORPORATE COMMENTS (PART III)	16MAR94	22MAR94	5	5	10
40261140	PART IV IM/IRA ALTERNATIVE	1MAR94	29MAR94	21	21	5
40261141	REVIEW & COMMENT (PART IV)	1MAR94	7MAR94	5	5	2
40261142	TEAM MEETING (PART IV)		8MAR94	0	0	0
40261143	COMMENT RESOLUTION (PART IV)	9MAR94	22MAR94	10	10	5
40261144	INCORPORATE COMMENTS (PART IV)	23MAR94	29MAR94	5	5	5
40261150	PART V IM/IRA POST CLOSURE C & M	8MAR94	6APR94	21	21	0
40261151	REVIEW & COMMENT (PART V)	8MAR94	14MAR94	5	5	1
40261152	TEAM MEETING (PART V)		15MAR94	0	0	0
40261153	COMMENT RESOLUTION (PART V)	16MAR94	29MAR94	10	10	0
40261154	INCORPORATE COMMENTS (PART V)	30MAR94	6APR94	5	5	0
40261160	PART VI (PH II RFI/RI WORK PLAN)	15MAR94	6APR94	16	16	0
40261161	REVIEW & COMMENT (PART VI)	15MAR94	21MAR94	5	5	1
40261162	TEAM MEETING (PART VI)		22MAR94	0	0	0
40261163	COMMENT RESOLUTION (PART VI)	23MAR94	29MAR94	5	5	0
40261164	INCORPORATE COMMENTS (PART VI)	30MAR94	6APR94	5	5	0
40261200	REVIEW CYCLE (PH I DRAFT)	7APR94	25MAY94	35	35	0
40261210	TRANSMITTAL (PH I DRAFT REVIEW)	7APR94	13APR94	5	5	0
40261218	TRANSMITTAL (PH I DRAFT REVIEW) (IAG #1)	13APR94		0	0	0
40261219	(IAG #1 COMMITMENT)	14APR94		0	0	0
40261220	REVIEW & COMMENT PERIOD (PH I DRAFT REVIEW)	14APR94	27APR94	10	10	0



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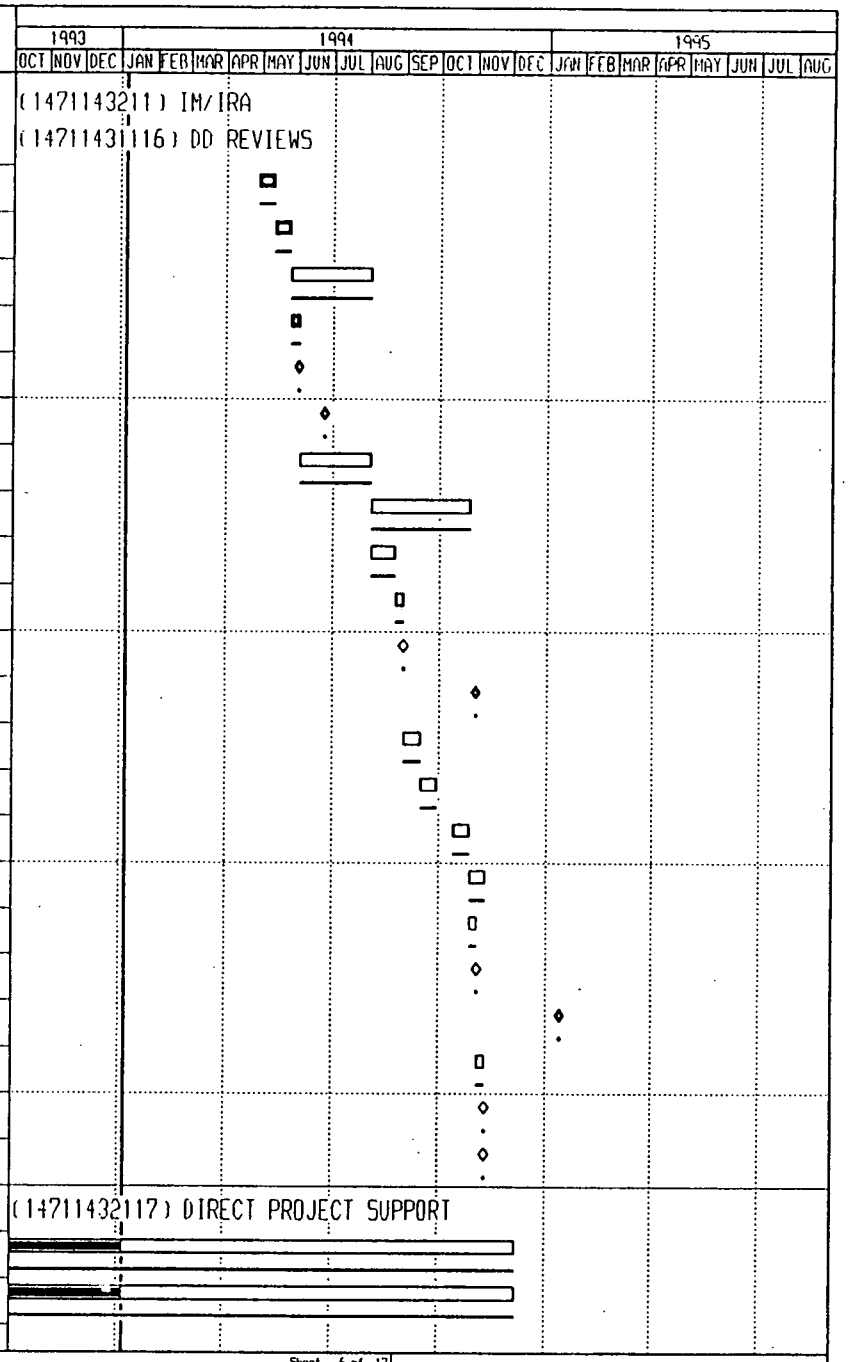
ACTIVITY ID	ACTIVITY DESCRIPTION	EARLY START	EARLY FINISH	ORIG DUR	REM DUR	TOTL FLT
	(14711432 11) IM/IRA					
	(14711431 116) DD REVIEWS					
40261230	COMMENT RESOLUTION (PH I DRAFT REVIEW)	28APR94	11MAY94	10	10	0
40261240	INCORPORATE COMMENTS (PH I DRAFT REVIEW)	12MAY94	25MAY94	10	10	0
40262000	PHASE I PROPOSED DD	26MAY94	2AUG94	47	47	3
40262110	TRANSMITTAL (PH I PROPOSED REVIEW)	26MAY94	2JUN94	5	5	0
40262118	TRANSMITTAL (PH I REVIEW)(IAG #2)	2JUN94		0	0	0
40262119	(IAG #2 COMMITMENT)	24JUN94		0	0	0
40262150	PUBLIC COMMENT PERIOD (PH I REVIEW)	3JUN94	2AUG94	42	42	3
40263000	DRAFT RESPONSIVENESS SUMMARY	3AUG94	26OCT94	60	60	3
40263100	REPORT PREPARATION (DRAFT RESP SUMM)	3AUG94	23AUG94	15	15	3
40263210	TRANSMITTAL (DRAFT RESP SUMM REVIEW)	24AUG94	30AUG94	5	5	3
40263218	TRANSMITTAL (DRAFT RESP SUMM REVIEW)(IAG #3)	31AUG94		0	0	3
40263219	(IAG #3 COMMITMENT)	1NOV94		0	0	0
40263220	REVIEW & COMMENT PERIOD (DRAFT RESP SUMM RVW)	31AUG94	14SEP94	10	10	3
40263230	COMMENT RESOLUTION (DRAFT RESP SUMM REVIEW)	15SEP94	28SEP94	10	10	13
40263240	INCORPORATE COMMENTS (DRAFT RESP SUMM REVIEW)	13OCT94	26OCT94	10	10	3
40264000	FINAL IM/IRA DD & RESPONSIVENESS SUMMARY	27OCT94	9NOV94	10	10	217
40264110	TRANSMITTAL (FINAL DD & RESP SUMM RVW)	27OCT94	2NOV94	5	5	3
40264118	TRANSMITTAL (FINAL DD & RESP SUMM RVW)(IAG #4)	3NOV94		0	0	3
40264119	(IAG #4 COMMITMENT)	13JAN95		0	0	0
40264140	EPA/CDH APPROVAL (FINAL DD & RESP SUMM RVW)	3NOV94	9NOV94	5	5	114
40264149	EPA/CDH APPROVAL (FINAL DD & RESP SUMM RVW)		9NOV94	0	0	114
40264200	PUBLIC READING		9NOV94	0	0	217
	(14711432 117) DIRECT PROJECT SUPPORT					
40271000	PROGRAM/PROJECT MANAGEMENT	21JUN93A	6DEC94	366	233	200
40272000	PROJECT ENGINEER	21JUN93A	6DEC94	366	233	200



Target Date 5NOV93
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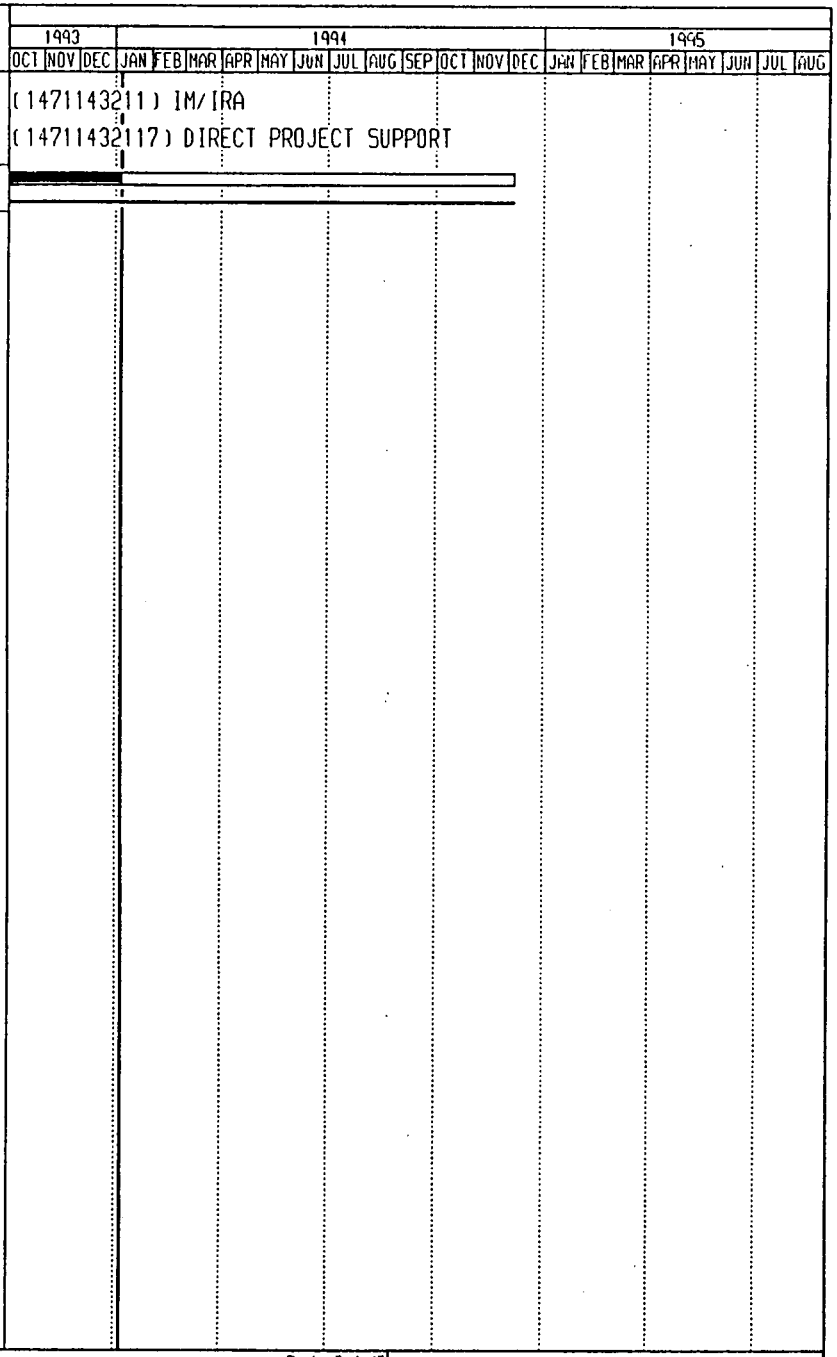
10273000	REGULATORY SUPPORT	21JUN93A	6DEC94	366	233	200



Target Date 5NOV93
Plot Date 10JAN94
Data Date 6JAN94
Project Start 1DEC92
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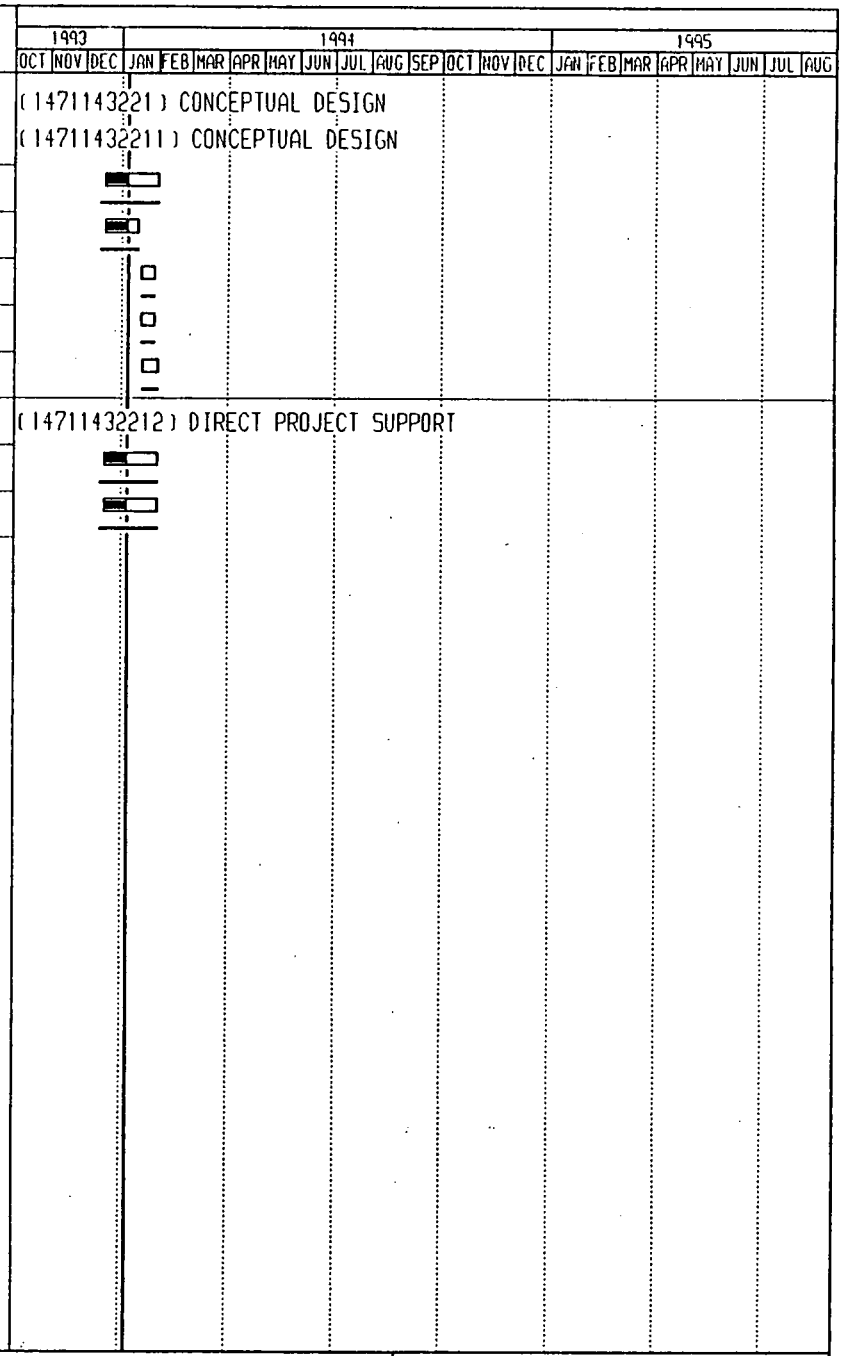
40310000	CONCEPTUAL DESIGN 40%	17DEC93A	31JAN94	31	18	11
40311000	40 % DRAWINGS	17DEC93A	14JAN94	20	7	11
40312000	40 % SPECIFICATIONS	17JAN94	28JAN94	10	10	11
40313000	40% SCHEDULE	17JAN94	28JAN94	10	10	12
40314000	40% COST ESTIMATE	18JAN94	31JAN94	10	10	11
40331000	CD PROGRAM/PROJECT MANAGEMENT SUPPORT	17DEC93A	31JAN94	31	18	11
40332000	CD PROJECT ENGINEER	17DEC93A	31JAN94	31	18	11



Target Date 5NOV93
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Data Date 6JAN94
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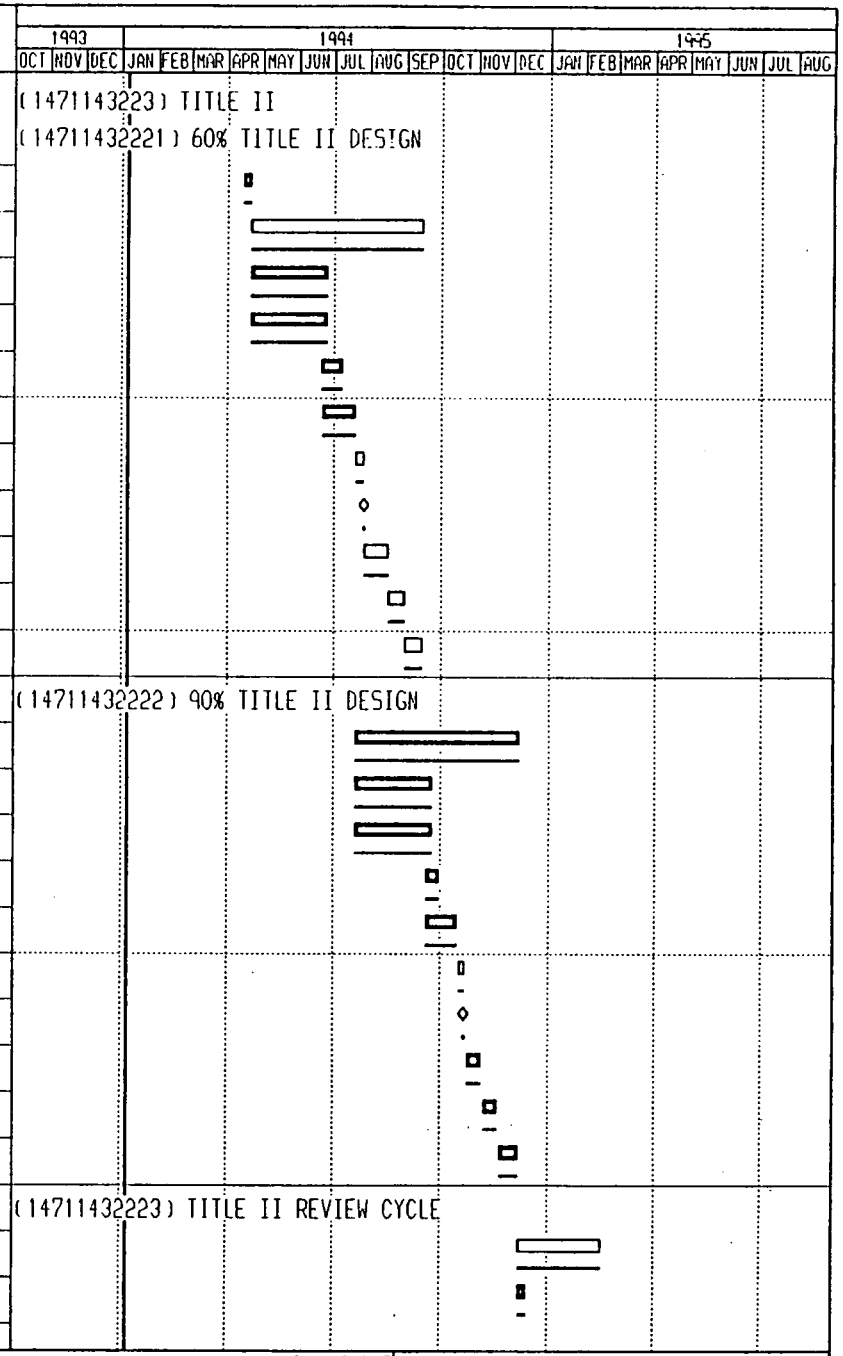
ACTIVITY ID	ACTIVITY DESCRIPTION	EARLY START	EARLY FINISH	ORIG DUR	REM DUR	TOTL FLT
	(14711432223) TITLE II					
	(14711432221) 60% TITLE II DESIGN					
40411000	KEY DECISIONS #1 & 2	14APR94	20APR94	5	5	0
40420000	60% TITLE II DESIGN	21APR94	14SEP94	102	102	22
40421000	60% DRAWINGS	21APR94	24JUN94	46	46	0
40422000	60% SPECIFICATIONS	21APR94	24JUN94	46	46	0
40423000	60% SCHEDULE	20JUN94	7JUL94	13	13	0
40424000	60% COST ESTIMATE	21JUN94	19JUL94	20	20	0
40425000	60% TRANSMITAL	20JUL94	26JUL94	5	5	22
40425009	60% TRANSMITAL (TITLE II)	27JUL94		0	0	22
40426000	60% REVIEW & COMMENT	27JUL94	16AUG94	15	15	22
40427000	60% COMMENT RESOLUTION	17AUG94	30AUG94	10	10	22
40428000	60% INCORPORATE COMMENTS	31AUG94	14SEP94	10	10	22
	(14711432222) 90% TITLE II DESIGN					
40430000	90% TITLE II DESIGN	20JUL94	6DEC94	97	97	0
40431000	90% DRAWINGS	20JUL94	23SEP94	47	47	0
40432000	90% SPECIFICATIONS	20JUL94	23SEP94	47	47	0
40433000	90% SCHEDULE	19SEP94	29SEP94	9	9	0
40434000	90% COST ESTIMATE	19SEP94	14OCT94	20	20	0
40435000	90% TRANSMITTAL	17OCT94	21OCT94	5	5	0
40435009	90% TRANSMITTAL (TITLE II)	21OCT94		0	0	1
40436000	90% REVIEW & COMMENT	24OCT94	4NOV94	10	10	0
40437000	90% COMMENT RESOLUTION	7NOV94	18NOV94	10	10	0
40438000	90% INCORPORATE COMMENTS	21NOV94	6DEC94	10	10	0
	(14711432223) TITLE II REVIEW CYCLE					
40440000	TITLE II IMPLEMENTATION	7DEC94	15FEB95	45	45	52
40441000	TRANSMITTAL (TITLE II)	7DEC94	13DEC94	5	5	0



Target Date 5NOV93
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Activity Bar/Early Dates
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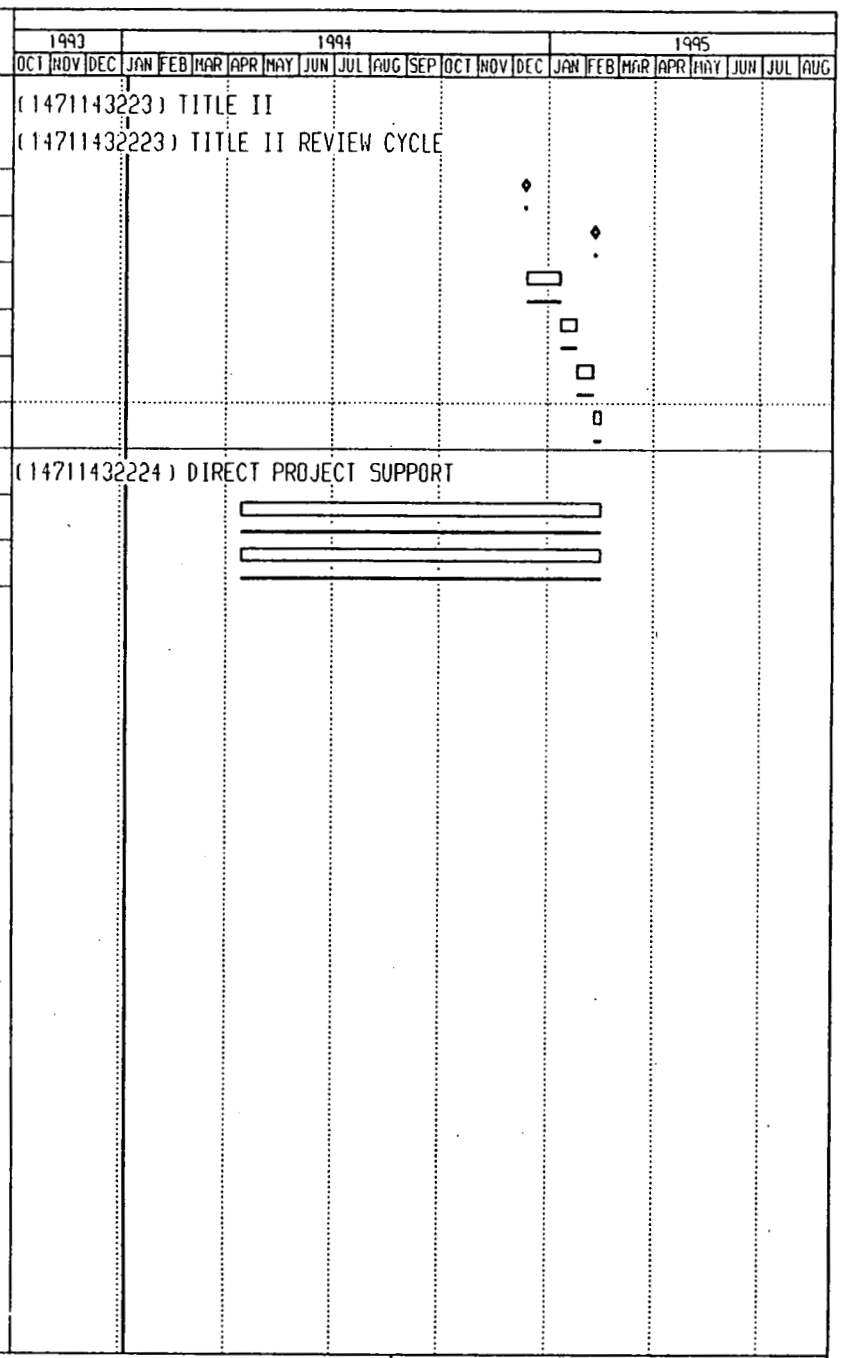
	(14711432223) TITLE II					
	(14711432223) TITLE II REVIEW CYCLE					
40441008	TRANSMITTAL (TITLE II DESIGN PACKAGE - IAG #5)	12DEC94		0	0	0
40441009	(IAG #5 COMMITMENT)	10FEB95		0	0	0
40442000	REVIEW & COMMENT (TITLE II)	14DEC94	11JAN95	15	15	52
40443000	COMMENT RESOLUTION (TITLE II)	12JAN95	25JAN95	10	10	52
40444000	INCORPORATE COMMENTS (TITLE II)	26JAN95	8FEB95	10	10	52
40445000	APPROVAL (TITLE II)	9FEB95	15FEB95	5	5	52
	(14711432224) DIRECT PROJECT SUPPORT					
40461000	PROGRAM/PROJECT MANAGEMENT	14APR94	15FEB95	209	209	52
40462000	PROJECT ENGINEER	14APR94	15FEB95	209	209	52



Target Date 5NOV93
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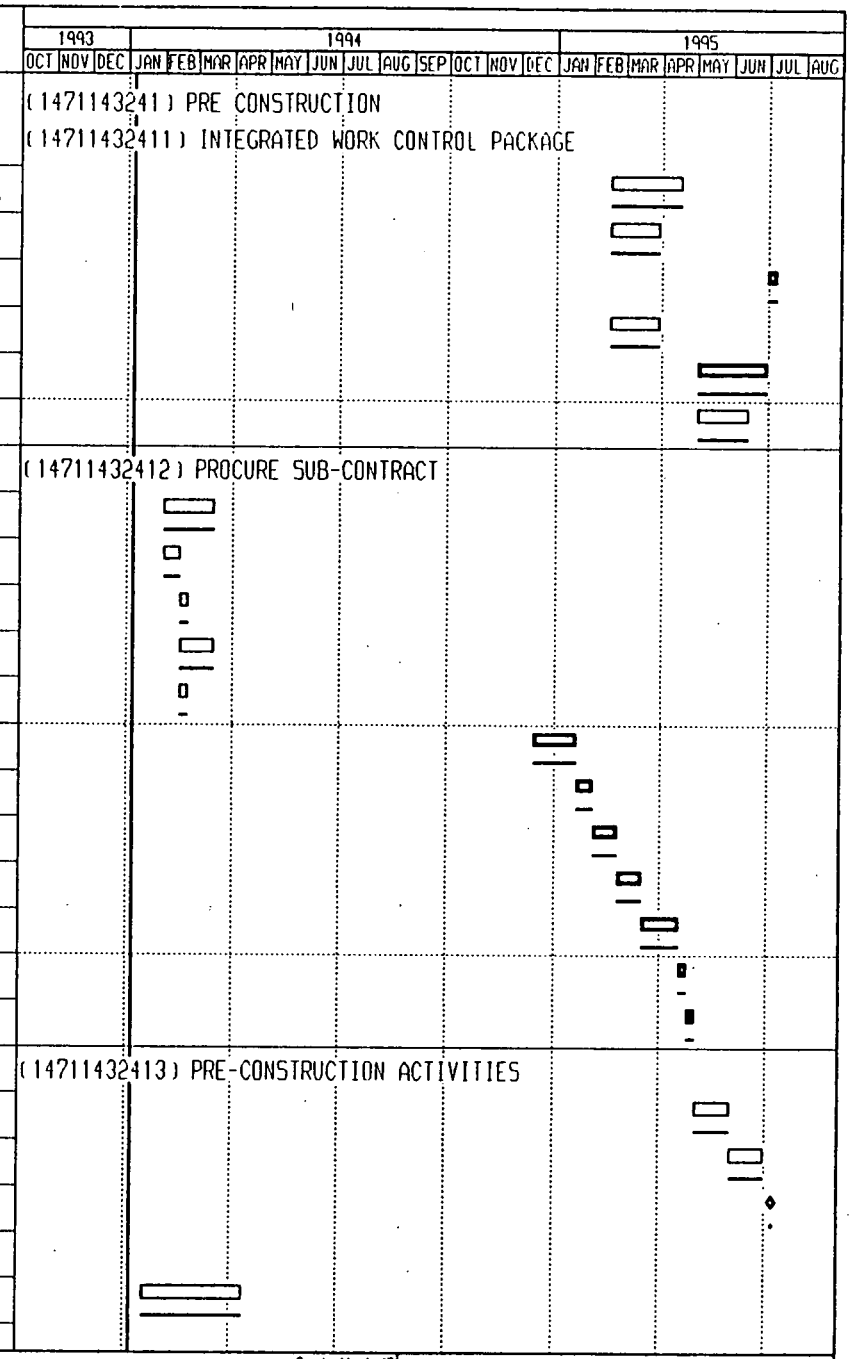
ACTIVITY ID	ACTIVITY DESCRIPTION	EARLY START	EARLY FINISH	ORIG DUR	REM DUR	TOTL FLT
	(14711432411) INTEGRATED WORK CONTROL PACKAGE					
40521000	WASTE DISPOSAL PLAN	16FEB95	17APR95	42	42	52
40522000	EXCAVATION PERMIT	16FEB95	29MAR95	30	30	64
40523000	IWCP ROUNDTABLE	30JUN95	7JUL95	5	5	0
40524000	SECURITY PLAN	16FEB95	29MAR95	30	30	64
40525000	SITE SPECIFIC H & S PLAN	2MAY95	29JUN95	42	42	0
40526000	JOB SAFETY ANALYSIS	2MAY95	13JUN95	30	30	12
	(14711432412) PROCURE SUB-CONTRACT					
40531000	REQUEST FOR PROPOSAL	1FEB94	15MAR94	31	31	189
40531100	BID PACKAGE	1FEB94	14FEB94	10	10	189
40531200	DAVIS BACON	15FEB94	21FEB94	5	5	205
40531300	SHORT LIST OF BIDDERS	15FEB94	15MAR94	21	21	189
40531400	KEY DECISION #3	15FEB94	21FEB94	5	5	205
40532000	PROPOSAL	14DEC94	19JAN95	21	21	0
40533000	DOE HQ PROCUREMENT COORDINATION	20JAN95	2FEB95	10	10	0
40534000	TECHNICAL EVALUATION	3FEB95	23FEB95	15	15	0
40535000	COST EVALUATION	24FEB95	16MAR95	15	15	0
40536000	NEGOTIATIONS	17MAR95	17APR95	21	21	0
40537000	RECOMMENDATION TO DOE HQ	18APR95	24APR95	5	5	0
40538000	DOE HQ APPROVAL	25APR95	1MAY95	5	5	0
	(14711432413) PRE-CONSTRUCTION ACTIVITIES					
40541000	TRAINING	2MAY95	31MAY95	21	21	4
40542000	MOBILIZATION	1JUN95	29JUN95	21	21	4
40543000	START CONSTRUCTION (IAG #6)	7JUL95		0	0	0
40543009	(IAG #6 COMMITMENT)	27SEP95		0	0	0
40544000	SAFETY ASSESSMENT DOCUMENT	17JAN94	11APR94	60	60	267



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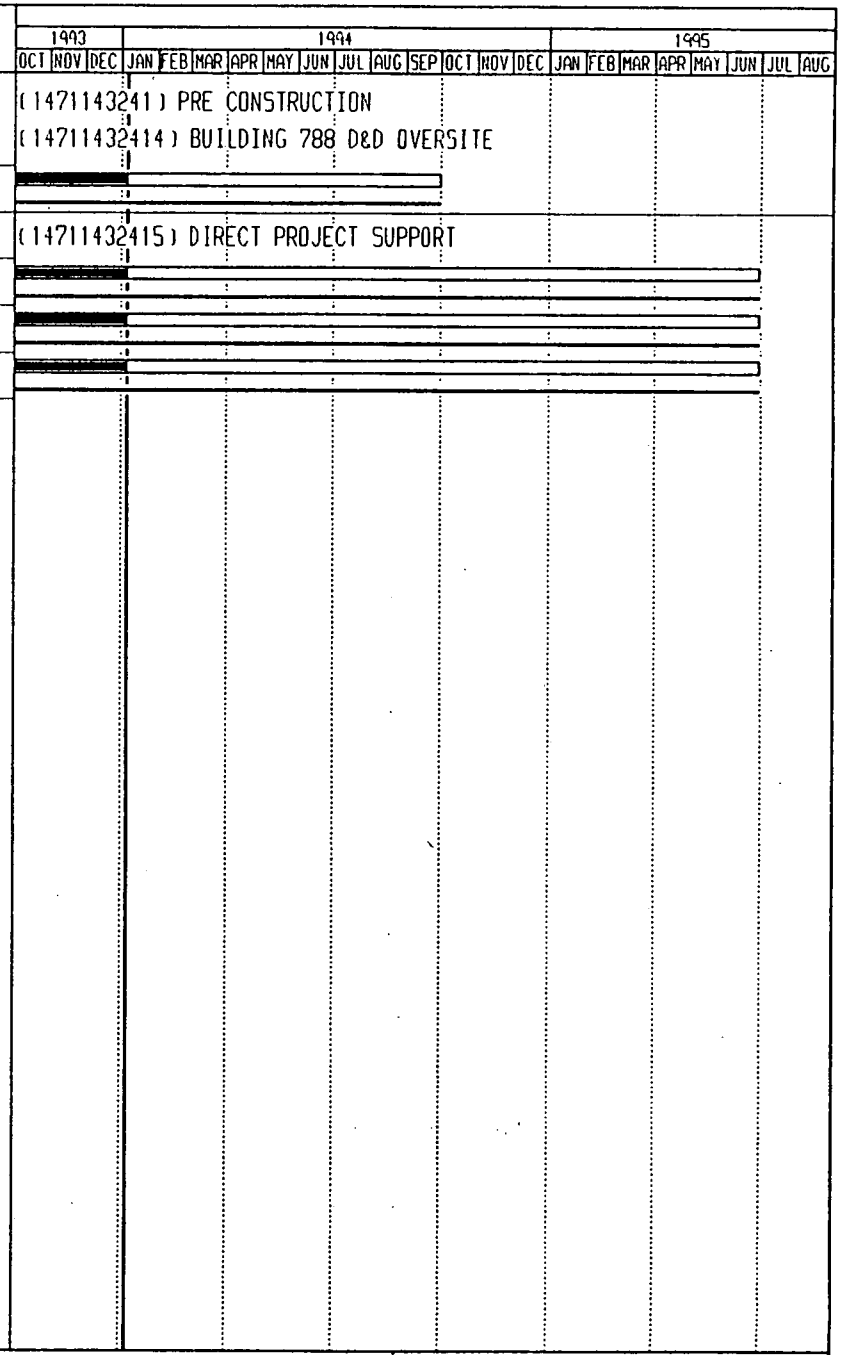
40551000	BUILDING 788 D & D OVERSITE	10CT93A	30SEP94	249	188	188
40581000	PROGRAM/PROJECT MANAGEMENT	10CT93A	29JUN95	433	372	4
40583000	QA/QS	10CT93A	29JUN95	433	372	4
40584000	PROJECT ENGINEER	10CT93A	29JUN95	433	372	4



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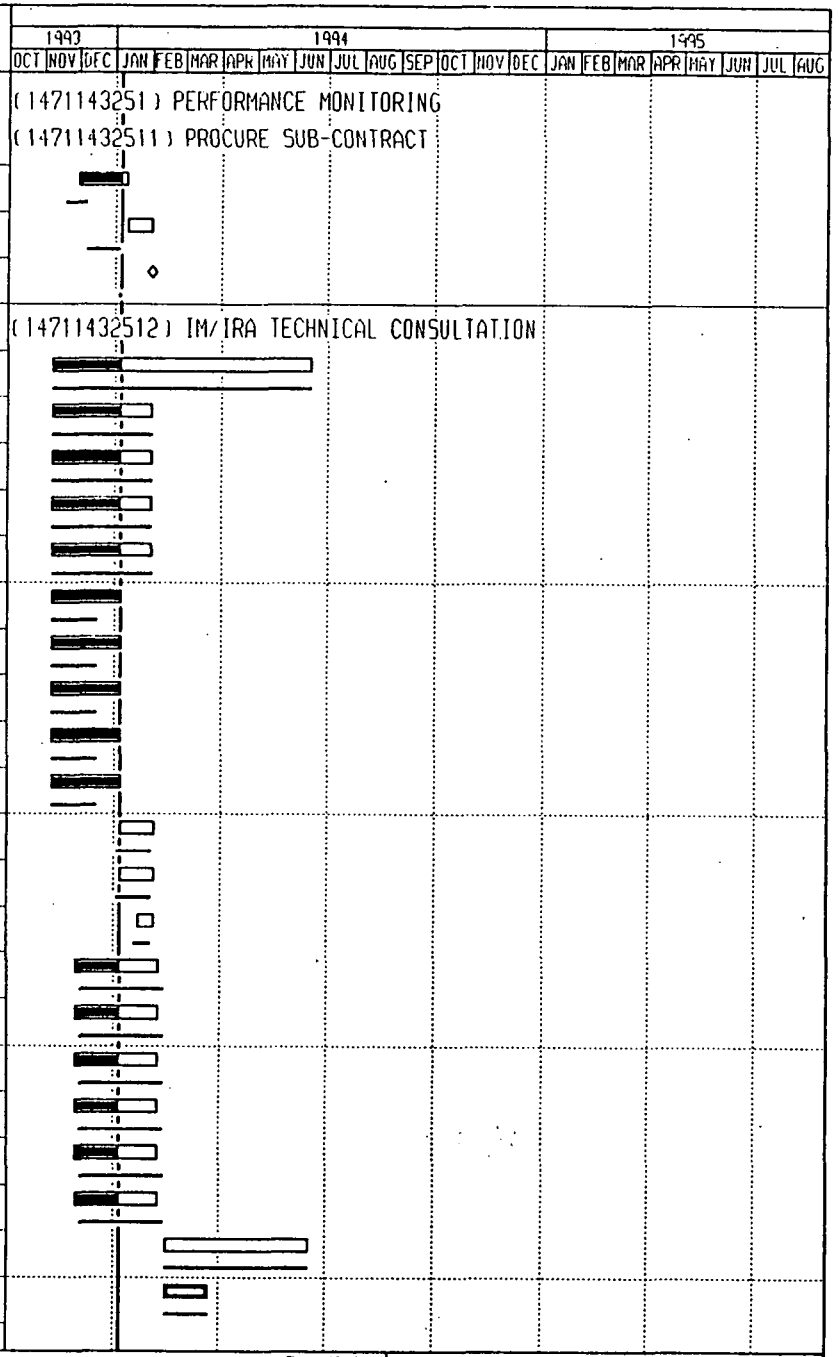
	(1471143251) PERFORMANCE MONITORING					
	(14711432511) PROCURE SUB-CONTRACT					
40614000	COST EVALUATION	30NOV93A	10JAN94	10	3	18
40616000	NEGOTIATIONS	11JAN94	31JAN94	15	15	18
40617000	AWARD	1FEB94		0	0	18
	(14711432512) IM/IRA TECHNICAL CONSULTATION					
40623000	IM/IRAP/DD REVIEW/SUPPORT *	8NOV93A	16JUN94	149	114	35
40623100	REVIEW/SUPPORT OF DD PART II (ACT# 40141009) *	8NOV93A	31JAN94	53	18	9
40623110	REVIEW/SUPPORT PHASE 1 RI DATA	8NOV93A	31JAN94	53	18	9
40623120	RVW/SUPPORT NATURE & EXTENT OF CONTAMINATION	8NOV93A	31JAN94	53	18	9
40623130	REVIEW/SUPPORT CONTAMINANT FATE & TRANSPORT	8NOV93A	31JAN94	53	18	9
40623200	RVW/SUPPORT OF DD PART III (ACT#402340000)	8NOV93A	6JAN94	36	1	26
40623210	REVIEW/SUPPORT IDENTIFICATION OF ARARs	8NOV93A	6JAN94	27	1	26
40623220	REVIEW/SUPPORT EVAL OF REMEDIAL ALTERNATIVES	8NOV93A	6JAN94	27	1	26
40623230	RVW/SUPPORT SELECTION OF PREFERRED ALTERNATIVE	8NOV93A	6JAN94	27	1	26
40623240	REVIEW/SUPPORT RISK ANALYSIS	8NOV93A	6JAN94	27	1	26
40623300	RVW/SUPPORT OF DD PART IV (ACT#40310000) *	6JAN94	3FEB94	21	21	6
40623310	REVIEW/SUPPORT 40% CONCEPTUAL DESIGN	6JAN94	3FEB94	21	21	6
40623320	REVW/SUPPORT OF PRELIMINARY COST ESTIMATE	21JAN94	3FEB94	10	10	6
40623400	RVW/SUPPORT OF DD PART VI (ACT# 40722000) *	29NOV93A	7FEB94	45	23	4
40623410	REVW/SUPPORT DATA EVALUATION SUMMARY	29NOV93A	7FEB94	45	23	4
40623420	REVW/SUPPORT DATA QUALITY OBJECTIVES	29NOV93A	7FEB94	45	23	4
40623430	REVW/SUPPORT FIELD SAMPLING PLAN	29NOV93A	7FEB94	45	23	4
40623440	REVW/SUPPORT BASELINE RISK ASSESSMENT	29NOV93A	7FEB94	45	23	4
40623450	REVW/SUPPORT QUALITY ASSURANCE/QUALITY CONTROL	29NOV93A	7FEB94	45	23	4
40623500	IM/IRA DD REVIEWS (ACTIVITY 40261100) *	14FEB94	16JUN94	87	87	35
40623510	REVW THE ROUND TABLE IM/IRA DD	14FEB94	22MAR94	27	27	0



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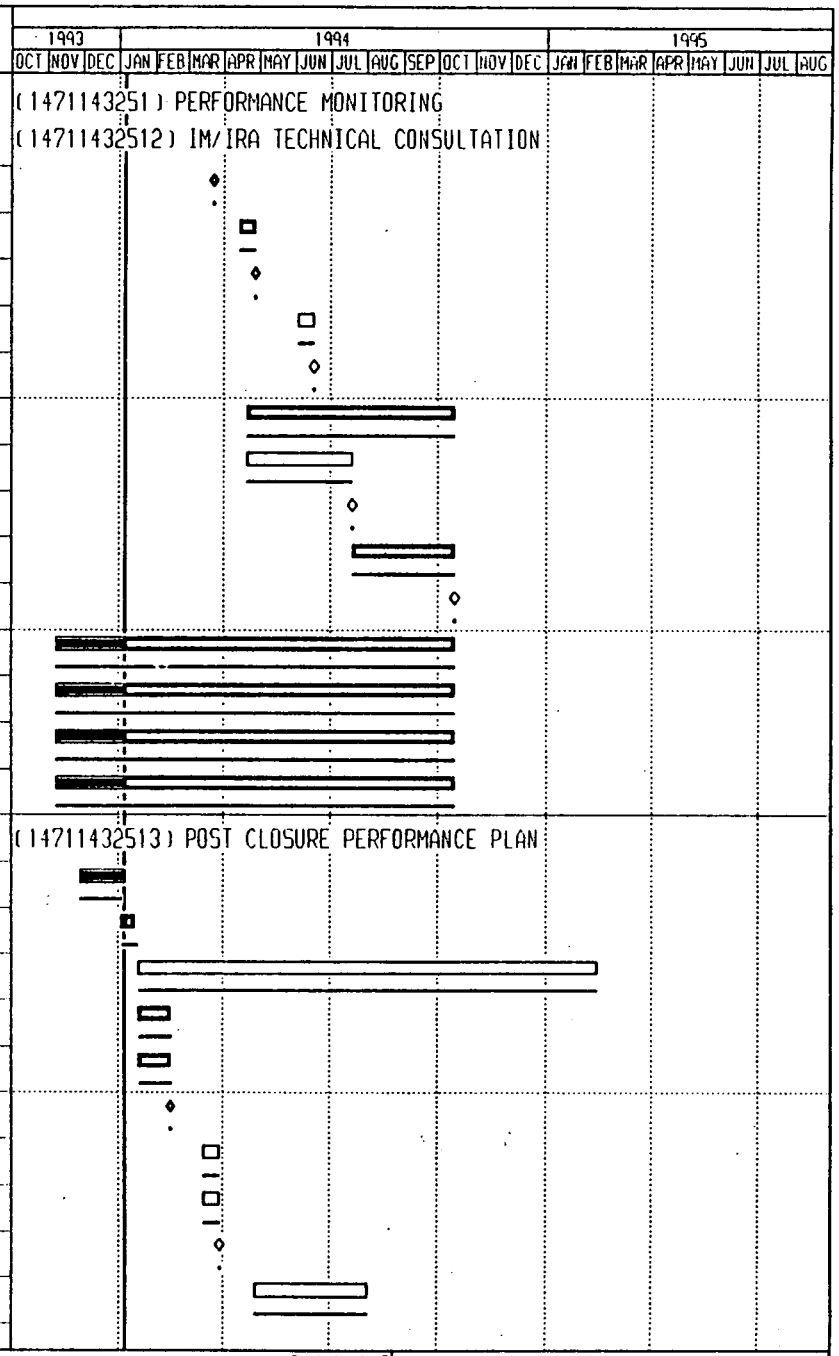
	(14711432511) PERFORMANCE MONITORING					
	(14711432512) IM/IRA TECHNICAL CONSULTATION					
40623520	SUBMIT COMMENTS ON ROUND TABLE IM/IRA DD		22MAR94	0	0	0
40623530	REVW THE PHASE 1 DRAFT IM/IRA DD	14APR94	27APR94	10	10	0
40623540	SUBMIT COMMENTS ON PHASE 1 DRAFT IM/IRA DD		27APR94	0	0	0
40623550	REVW THE PHASE 1 PROPOSED IM/IRA DD	3JUN94	16JUN94	10	10	35
40623560	SUBMIT COMMENTS ON PHASE 1 PROPOSED IM/IRA DD		16JUN94	0	0	35
40624000	TITLE II DESIGN (ACT# 40420000 & 40430000)	21APR94	14OCT94	124	124	0
40624010	REVW/SUPPORT 60% TITLE II DESIGN	21APR94	19JUL94	62	62	1
40624020	SUBMIT COMMENTS ON 60% TITLE II DESIGN		19JUL94	0	0	27
40624030	REVW/SUPPORT 90% TITLE II DESIGN	20JUL94	14OCT94	62	62	0
40624040	SUBMIT COMMENTS ON 90% TITLE II DESIGN		14OCT94	0	0	5
40625000	GENERAL REGULATORY SUPPORT	8NOV93A	14OCT94	233	198	0
40625010	REGULATORY AGENCY MEETINGS	8NOV93A	14OCT94	233	198	0
40625020	ANALYSIS OF REGULATORY REQIUREMENTS	8NOV93A	14OCT94	233	198	0
40625030	WEEKLY STATUS MEETINGS	8NOV93A	14OCT94	233	198	0
	(14711432513) POST CLOSURE PERFORMANCE PLAN					
40632000	EVAL ALTERNATIVES-MEASURING PERFORM PARAMETERS	29NOV93A	6JAN94	20	1	0
40633000	CONCEPTUAL DESIGN OF PERFORMANCE MONITORING SYS	3JAN94A	14JAN94	10	6	0
40634000	POST CLOSURE PERFORMANCE & ASSESSMENT DOCUMENT	18JAN94	13FEB95	268	268	54
40634100	ROUND TABLE IM/IRA DD-PART V	18JAN94	14FEB94	20	20	0
40634110	PREPARE ROUND TABLE IM/IRA DD-PART V	18JAN94	14FEB94	20	20	0
40634120	SUBMIT ROUND TABLE IM/IRA DD-PART V		14FEB94	0	0	0
40634200	PHASE#1 DRAFT IM/IRA DD-PART V	15MAR94	28MAR94	10	10	7
40634210	RESOLVE COMMTS-PHASE#1 DRAFT IM/IRA DD-PART V	15MAR94	28MAR94	10	10	7
40634220	SUBMIT PHASE#1 DRAFT IM/IRA DD-PART V		28MAR94	0	0	7
40634300	PHASE#1 PROPOSED IM/IRA DD-PART V	28APR94	2AUG94	67	67	4



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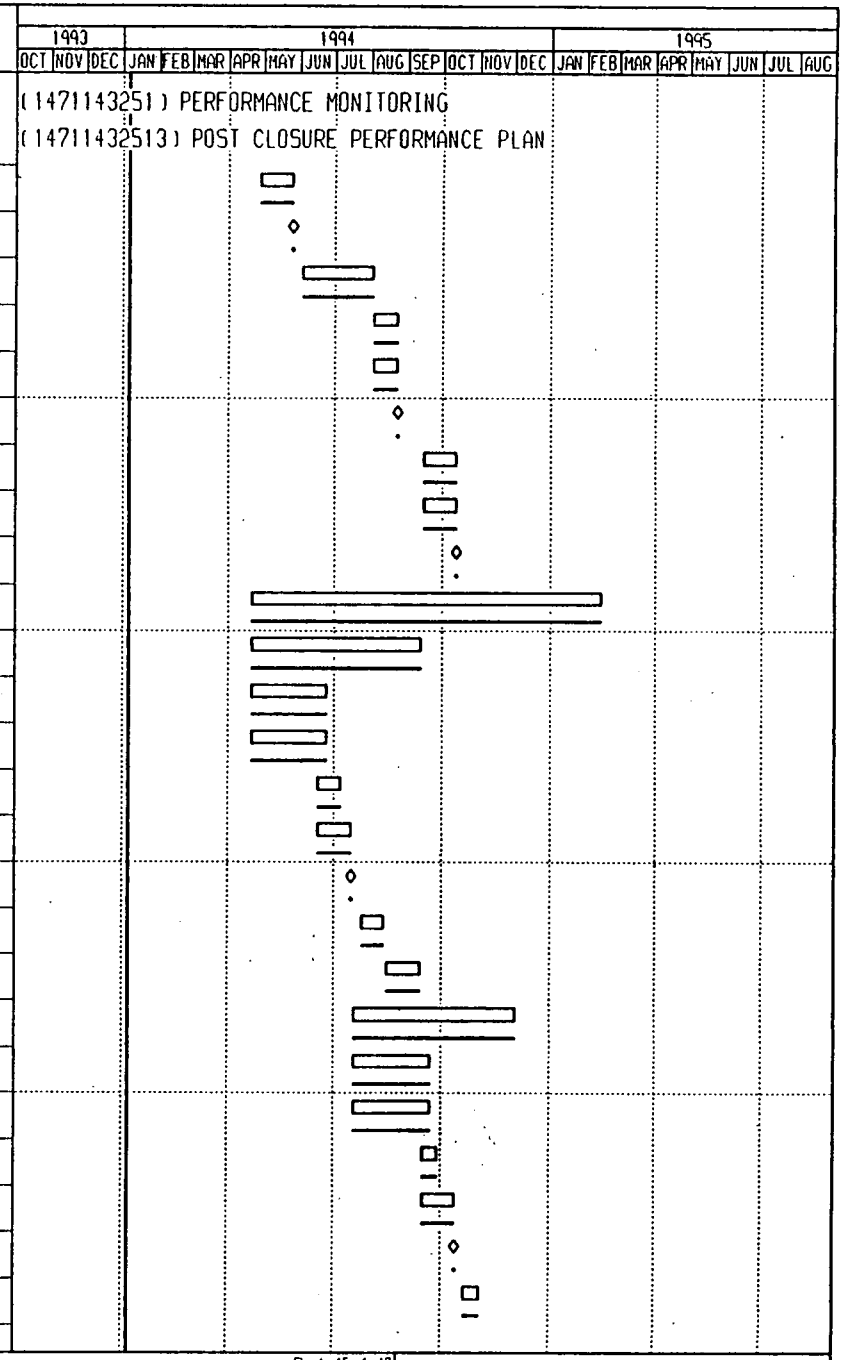
40634310	RESOLVE COMMTS-PHASE#1 PROPOSED IM/IRA DD-PRTV	28APR94	25MAY94	20	20	1
40634320	SUBMIT PHASE#1 PROPOSED IM/IRA DD-PART V		25MAY94	0	0	1
40634330	PUBLIC COMMENT	3JUN94	2AUG94	42	42	4
40634400	DRAFT RESPONSIVENESS SUMMARY-PART V	3AUG94	23AUG94	15	15	4
40634410	PREPARE DRAFT RESPONSIVENESS SUMMARY-PART V	3AUG94	23AUG94	15	15	4
40634420	SUBMIT DRAFT RESPONSIVENESS SUMMARY-PART V		23AUG94	0	0	4
40634500	FNL IM/IRA DD & RESPONSIVENESS SUMMARY-PART V	15SEP94	12OCT94	20	20	3
40634510	RESOLVE COMMTS-FNL IM/IRA DD & RESP SUMMARY-#5	15SEP94	12OCT94	20	20	3
40634520	SUBMIT FNL IM/IRA DD&RESPONSIVENESS SUMMARY-#5		12OCT94	0	0	3
40635000	TITLE II DESIGN-PART V (ACT#40420000&40430000)	21APR94	13FEB95	202	202	54
40635100	60% TITLE II DESIGN	21APR94	12SEP94	100	100	39
40635110	DRAWINGS	21APR94	24JUN94	46	46	2
40635120	SPECIFICATIONS	21APR94	24JUN94	46	46	2
40635130	SCHEDULE	17JUN94	6JUL94	13	13	9
40635140	COST ESTIMATE	17JUN94	15JUL94	20	20	2
40635150	SUBMIT 60% DESIGN		15JUL94	0	0	2
40635160	60% DESIGN REVIEW & COMMENT	25JUL94	12AUG94	15	15	39
40635170	60% COMMENT RESOLUTION & INCORPORATION	15AUG94	12SEP94	20	20	39
40635200	90% TITLE II DESIGN	18JUL94	2DEC94	97	97	2
40635210	DRAWINGS	18JUL94	21SEP94	47	47	2
40635220	SPECIFICATIONS	18JUL94	21SEP94	47	47	23
40635230	SCHEDULE	15SEP94	27SEP94	9	9	19
40635240	COST ESTIMATE	15SEP94	12OCT94	20	20	2
40635250	SUBMIT 90% DESIGN		12OCT94	0	0	8
40635260	90% DESIGN REVIEW & COMMENT	20OCT94	2NOV94	10	10	2



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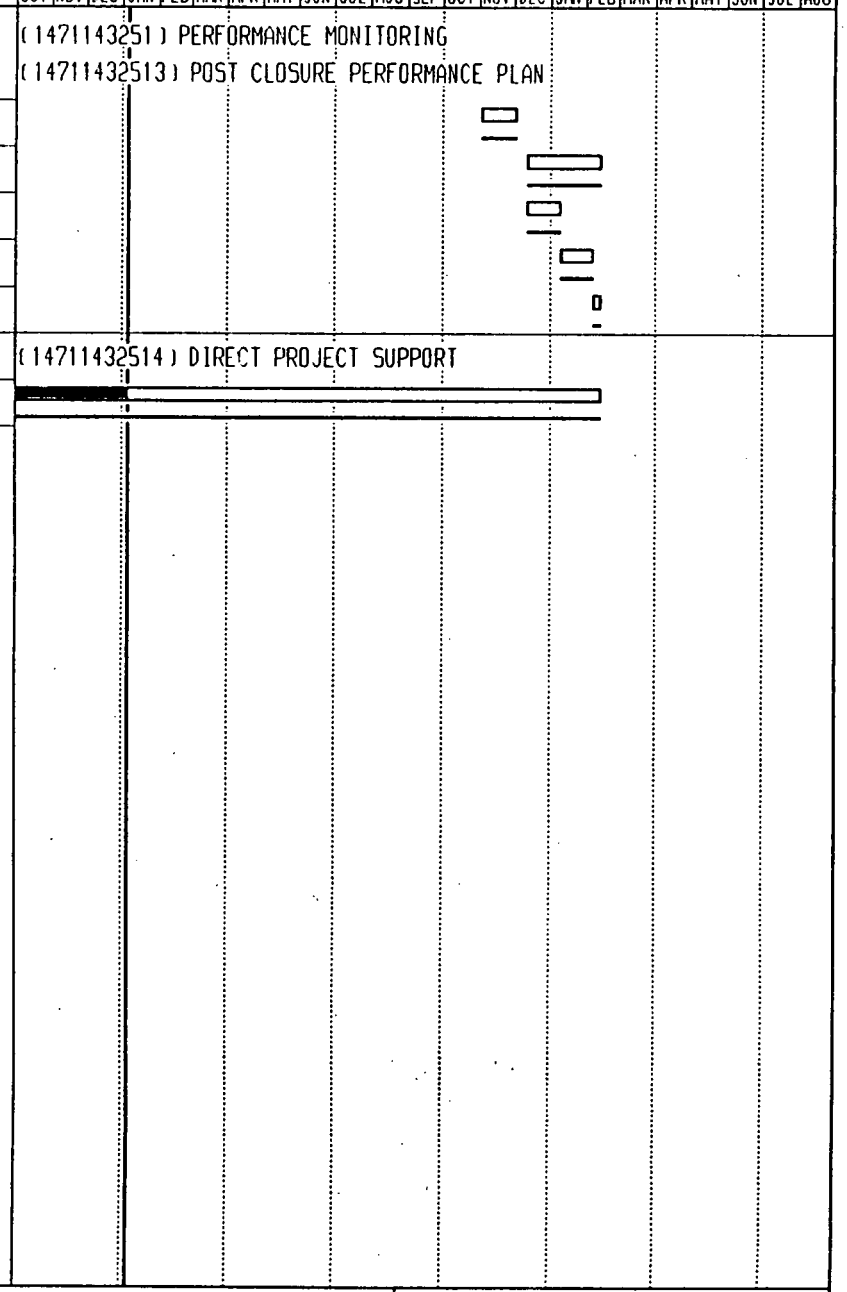
	(1471143251) PERFORMANCE MONITORING					
	(14711432513) POST CLOSURE PERFORMANCE PLAN					
40635270	90% COMMENT RESOLUTION & INCORPORATION	3NOV94	2DEC94	20	20	2
40635300	TITLE II REVIEW CYCLE	12DEC94	13FEB95	40	40	54
40635310	REVIEW & COMMENT	12DEC94	9JAN95	15	15	54
40635320	COMMENT RESOLUTION & INCORPORATION	10JAN95	6FEB95	20	20	54
40635330	TITLE II APPROVAL	7FEB95	13FEB95	5	5	54
	(14711432514) DIRECT PROJECT SUPPORT					
40660000	PROGRAM/PROJECT MANAGEMENT SUPPORT	19AUG93A	13FEB95	367	276	54



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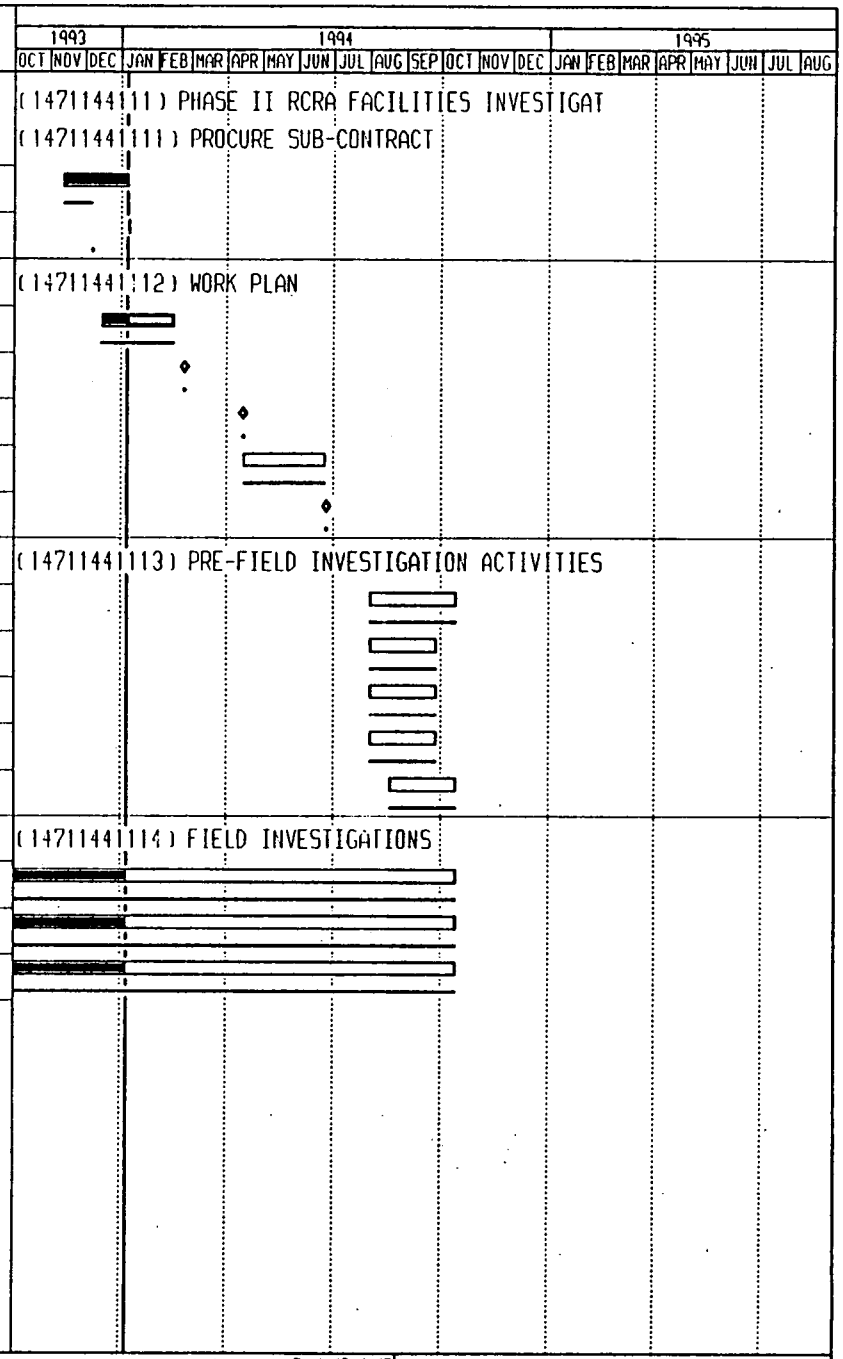
	(1471144111) PHASE II RCRA FACILITIES INVESTIGAT					
	(1471144111) PROCURE SUB-CONTRACT					
40716000	NEGOTIATIONS	12NOV93A	6JAN94	15	1	26
40717000	AWARD	7JAN94	7JAN94	1	1	26
	(1471144112) WORK PLAN					
40722000	WORK PLAN DEVELOPMENT	15DEC93A	14FEB94	34	28	0
40722109	SUBMIT PHASE II DRAFT WORK PLAN (IAG #7 INTERNL)		23FEB94	0	0	0
40722209	SUBMIT PHASE II DRAFT WORK PLAN (IAG #7 EXTERNL)		14APR94	0	0	0
40722210	INCORPORATE COMMENTS PH II PLAN	15APR94	23JUN94	49	49	1
40722309	SUBMIT PHASE II FINAL WORK PLAN (IAG #8 EXTERNL)		24JUN94	0	0	0
	(1471144113) PRE-FIELD INVESTIGATION ACTIVITIES					
40730000	MOBILIZATION	1AUG94	13OCT94	53	53	236
40731000	PERMITS	1AUG94	26SEP94	40	40	249
40732000	HEALTH & SAFETY PLAN	1AUG94	26SEP94	40	40	249
40733000	TRAINING	1AUG94	26SEP94	40	40	249
40734000	QA/QC	18AUG94	13OCT94	40	40	236
	(1471144114) FIELD INVESTIGATIONS					
40741000	PROJECT MANAGEMENT SUPPORT	10CT93A	13OCT94	258	197	236
40742000	GEOSCIENCES	10CT93A	13OCT94	258	197	236
40743000	QA/QC	28JUL93A	13OCT94	304	197	236



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