0073089

Meeting Minutes Transmittal/Approval
Inter Agency Management Integration Team (IAMIT)
January 26, 1999

Appvl.: _____ Date: 4-27-99
Jackson E. Kinzer, RL (S7-50)
IAMIT Representative

Appvl.: _____ Date: 4/27/99
Douglas R. Sherwood, EPA (B5-01)
IAMIT Representative

Appvl.: _____ Date: 4/27/99
Michael A. Wilson, Ecology (B5-18)
IAMIT Representative

Prepared by
Appvl.: _____ Date: 4/14/99
Jeffrey S. Hertzel (H8-67)
Fluor Daniel Hanford, Inc.

Distribution

Blazek, M. L.	ODOE	OR*	Murphy-Fitch, E. J.	FDH	H8-67*
Bryson, D. C.	RL	S7-54	Palmos, A. J.	RL	R3-78*
Bowers, E. M.	RL	S7-55	Piippo, R. E.	FDH	
Clark, C. E.	RL	A5-15	Rasmussen, J. E.	RL	A5-15*
Cruz, R. O.	NezPerce		Richards, J.	CTUIR*	
Cusack, L.	Ecology	B5-18*	Rodriguez, H. M.	RL	A5-15
Dahl, S.	Ecology	B5-18*	Sanders, G. H	RL	A5-15*
DeLozier, M. P.	LMHC	H7-07*	Sherwood, D. R.	EPA	B5-01*
Hertzel, J.	FDH	H8-67*	Stone, A.	Ecology	B5-18
Hopkins, A. M.	FDH	L5-65*	Umek, A. M.	FDH	S7-40*
Jaraysi, M	Ecology	B5-18	Valero, T.	Ecology	B5-18*
Jim, R.	YIN		Wallace, J.	Ecology	B5-18*
Kinzer, J. E.	RL	S7-50*	Wilson, M. A.	Ecology	B5-18*
Knollmeyer, P.	RL	A5-11*	Yerxa, J. K.	RL	A5-15*
Miera, F.	RL	A5-15*	EDMC		H6-08
Morrison, R. D.	FDH	H8-67*			

* W/Attachments

Inter Agency Management Integration Team (IAMIT)
EPA Conference Room, 712 Swift Boulevard, Richland, Washington
January 26, 1999

Office of River Protection

The Strom Thurmond National Defense Authorization Act for FY 1999, Section 3139, Hanford Tank Cleanup Program Reforms , established the Office of River Protection (ORP) at Hanford. The Office will be headed by a senior official reporting to the Assistant Secretary for Environmental Management. The Integrated Management Plan for the Hanford Tank Waste Remediation System (TWRS) was submitted in January 1999 and outlines ORP workscope. A follow-on document will describe how that work will be done (anticipate it will be available in six months).

EPA Hanford Project Office expressed concern over process and signatory authority for change requests associated with the ORP. As written, the Memorandum of Agreement (MOA) between the U.S. Department of Energy-Headquarter's Office of Environmental Management (EM-1), RL and ORP, does not agree with the enabling legislation. The MOA states that the RL Manager is responsible for Hanford site safety and regulatory compliance and has signatory authority for Safety Authorization Basis documents and regulatory agreements (i.e., Tri-Party Agreement). The enabling legislation states that the ORP shall be headed by a senior official for the Department of Energy, who shall report to the Assistant Secretary of Energy for Environmental Management and who is responsible for managing all aspects of TWRS. Since ORP is not in the Tri-Party Agreement, EM-1 is not recognized in the Tri-Party Agreement as a signatory. Either the Tri-Party Agreement will need to be modified to reflect the new ORP or the legislation changed so that the RL Manager has signatory authority for ORP. RL stated that the follow-on document to the Integrated Management Plan for the Hanford TWRS will address how the new relationship will work.

M-41 Consent Decree

EPA expressed concern on the Agreement in Principle for the Interim Stabilization Consent Decree (M-41). EPA needs to have a clear understanding of what milestones will be deleted, how they will be deleted, etc.

Tank 241-C-106 (M-45)

The first of the required bi-monthly reports was provided to Ecology in accordance with the Ecology Director's October 8, 1997, letter. In addition, RL formally notified Ecology that completion of sluicing by December 31, 1999, is in jeopardy. It is anticipated that an estimated completion date will be determined by the end of April 1999. Work is underway to fix the jumper leak in the C-106 sluice pit. Process testing will be completed after the leak is repaired. Ecology stated that they (Ecology) and DOE will need to define what "end of sluicing" means.

Tank 241-C-103 (M-40-07)

On April 2, 1997, Ecology issued a letter to RL alleging that Tri-Party Agreement Milestone M-40-07, Commence Operation of a Vapor Treatment System in Tank 241-C-103, was not completed on June 30, 1995, as previously claimed by RL. RL invoked the Tri-Party Agreement dispute resolution process on April 9, 1997. RL and Ecology agreed to incorporate stabilization

work at Single-Shell Tank (SST) 241-C-103 within the scope of the parties' tentatively agreed to SST Interim Stabilization Consent Decree. The dispute is suspended and will be resolved effective upon final approval of the SST Interim Stabilization Consent Decree and associated Tri-Party Agreement M-41-99-01 Change Request.

The process of developing, submitting for public comment, resolution of resulting comments and final approval of the SST Interim Stabilization Consent Decree and its associated Tri-Party Agreement M-41-99-01 Change Request will proceed in lieu of the underlying dispute resolution for M-40-07. Should the parties fail to achieve final approval of the Consent Decree and/or the associated Tri-Party Agreement M-41-99-01 Change Request, the M-40-07 dispute shall resume uninterrupted at the IAMIT level; the IAMIT shall have 21 days to resolve, extend or elevate the underlying dispute.

Groundwater/Vadose Zone Negotiations

Tentative agreement was reached on January 8, 1999 and notice was provided to the Hanford Advisory Board (HAB). The public comment period for the change request begins on February 15, 1999, and will conclude on April 1, 1999. The HAB will be briefed on the tentative agreement.

303-K Facility

Closure of the 303-K Storage Facility was discussed.

NOTE: NEXT INTER AGENCY MANAGEMENT INTEGRATION TEAM MEETING IS SCHEDULED FOR TUESDAY, FEBRUARY 23, 1999

Pete Knollmeyer, Chairperson

Office of River Protection (ORP) Status

Jackson Kinzer
Acting Manager
Office of River Protection

Attachment 1
Inter Agency Management Integration Team (IAMIT)
January 26, 1999

Why ORP was Established

- Increased size and complexity of TWRS with the Privatization Contract
  - Demands DOE Headquarters attention
  - Need streamlined management structure to make timely decisions
  - Needs to generate and sustain support within DOE officials and Congress
- ORP was established on December 6, 1998

Congress Direction to DOE

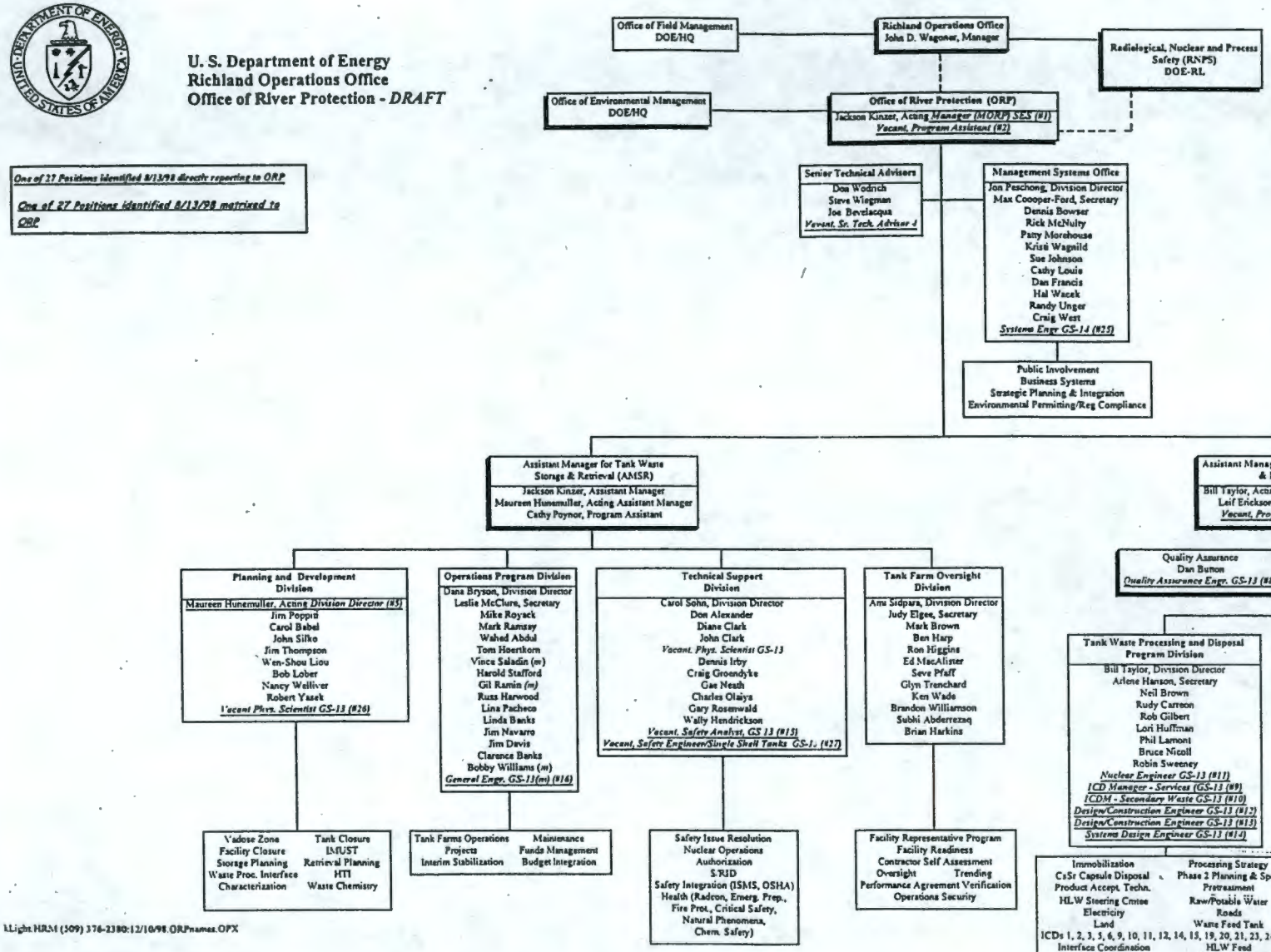
- Strom Thurmond National Defense Authorization Act for Fiscal Year 1999, Section 3139, Hanford Tank Cleanup Program Reforms:
  - Establish Office of River Protection at Hanford
  - Office to be headed by Senior Official reporting to the Assistant Secretary for Environmental Management
  - Secretary of Energy will provide the Manager of the Office of River Protection with resources and personnel necessary
  - Submit an Integrated Management Plan within 90 days
  - Submit a Report in two years on any progress or improvements
  - Terminate the Office in five years unless the Secretary of Energy determines termination would be disruptive

ORP Description

- Work scope same as TWRS
  - Tank waste storage, including safety issue resolution, waste characterization, and single-shell tank interim stabilization
  - Tank waste retrieval
  - Tank farm closure, including vadose zone study
  - Waste treatment and immobilization
  - Immobilized waste storage/disposal
  - Disposal of cesium and strontium capsules declared waste

Federal Staffing Status

- TWRS staff reassigned to ORP
- Executive Search firms recruiting nation-wide for key positions, some in selection process
- 27 new positions being filled to do expanded work
- Expect to have most positions filled by Spring



Attachment 2
Inter Agency Management Integration Team (IAMIT)
January 26, 1999

Department of Energy
Richland Operations Office
P.O. Box 550
Richland, Washington 99352

99-EAP-132

JAN 26 1999

Ms. Suzanne L. Dahl
State of Washington
Department of Ecology
1315 W. 4th Avenue
Kennewick, Washington 99336

Dear Ms. Dahl:

BI-MONTHLY REPORT ON STATUS OF TANK C-106 WASTE RETRIEVAL SLUICING SYSTEM

This letter responds to provisions contained in the letter dated October 8, 1998, from Tom Fitzsimmons, State of Washington Department of Ecology (Ecology), to J. D. Wagoner, U.S. Department of Energy (DOE), Richland Operations Office (RL), entitled, "Final Determination Pursuant to Hanford Federal Facility Agreement and Consent Order in the Matter of the Disapproval of the DOE's Change Control Form M-45-97-03, dated October 8, 1997." This letter also serves as the bimonthly report pursuant to Item D of the referenced letter, and our discussions with you on January 6, 1999, to provide Ecology with the project status, issues and actions taken.

Tank C-106 sluicing was initiated on November 18, 1998. Approximately two hours into the initial waste retrieval operation, the exhaust emissions reached 450 parts per million (ppm) Volatile Organic Compounds (VOC), exceeding the Notice of Construction (NOC) limit of 50 ppm. Sluicing operations were suspended immediately, C-farm was evacuated and Ecology was notified. Eleven workers were sent to the Hanford Environmental Health Foundation due to potential exposure to the emissions. All workers were evaluated and determined to have no adverse health effects.

Ecology permitted a temporary increase in the NOC limit to 500 ppm to allow performance of a Process Test to obtain exhaust samples to determine the potential for presence of air emission VOC constituents and their quantity. The Process Test was started on December 16, 1998, after extensive planning for worker protection and testing controls. The Process Test was suspended an hour into the testing after the leak detector in the Tank C-106 Sluice pit alarmed due to a jumper leak. At that time exhaust emissions were at about 34 ppm VOC. Currently, activities are ongoing for replacement of the jumper. Replacement of the jumper involves work in a highly contaminated pit. Jumper replacement is scheduled to be completed in early March 1999.

Preliminary results from samples collected during the aborted Process Test show organic compounds similar to those during the initial sluicing operation. Since the level of waste agitation reached during the aborted test was much lower than what is anticipated during future sluicing operations, the results from those samples may not be representative. The Process Test will be resumed to obtain VOC samples at representative VOC levels after the completion of jumper replacement. The test results will be used to determine the path forward for resuming sluicing operations. See attachment 1 for details.

The Schedule for completion of sluicing will be established after the path forward is determined. The December 1999 date for completion of sluicing activities for Tank C-106 as proposed in the Director's letter is in jeopardy. The required data to establish an achievable schedule is expected to be available in April 1999. The contractor's original schedule prepared in October 1998, before the start of operations, is attached, (attachment 2) for reference only. We will keep you appraised of our progress through these bi-monthly reports and with personal communications.

If you have any questions, please contact Wahed Abdul, Operations Program Division, at (509) 372-2355.

Sincerely,

George H. Sanders, Administrator
Hanford Tri-Party Agreement

OPD:WA

Attachments

cc w/attachs:
S. McKinney, Ecology
R. F. Stanley, Ecology
D. R. Sherwood, EPA
J. S. Hertzel, FDH
M. L. Blazek, O OE
R. Jim, YIN
D. Powaukee, NPT
J. R. Wilkinson, CTUIR
M. Reeves, HAB
K. Lang, EM-38

Attachment 1

Tank C-106 Sluicing Path Forward

History

During sluicing of the first batch of sludge from tank C-106 on November 18, 1998, an unexpected high concentration of volatile organic compounds (VOC) was measured in the stack of the new tank ventilation system. Approximately 450 ppm VOC was observed at approximately one and one half hours after the start of sluicing, which exceeded the air discharge permit (Department of Ecology Notice of Construction or NOC) concentration of 50 ppm VOC, measured as TOC. Sluicing was stopped. Several workers reported an acrid smell. A limited number of breathing zone samples was inconclusive. Eleven workers were sent to HEHF for medical evaluations as a result, with no residual health effects reported.

A limited number of stack samples were collected for analysis by PNNL. Stack samples were found to contain twenty-four different organic compounds, most of which do not have published concentrations for occupational exposure. The source of many of these compounds is thought to be the degradation of the solvent ethyl hexyl phosphate which is known to be present in the waste of C-106 from Strontium-90 recovery operations at B-Plant.

After thorough review, and with the documented concurrence of the Department of Ecology, a brief process test was conducted on December 16. Controlled sluicing was performed for expanded characterization of the gaseous emissions. Using conservative personnel exclusion area controls, respiratory protection equipment, and a stack VOC concentration limit of 100 ppm, improved samples were collected in the stack and in surrounding areas. A maximum stack VOC concentration of 34 ppm was measured. Again, the breathing zone samples showed non-detectable concentrations of gases (except for a couple of ppm of nitrous oxide and sub-ppm concentrations of ammonia). Stack samples are still being analyzed; preliminary results showed approximately 80 different organic compounds. Unfortunately, this process test was stopped after a few minutes into the sluicing, due to a leak in the supernate jumper in the sluice pit at tank C-106. Although the organic compounds were similar to those seen previously, the results cannot be considered to be representative of what might be obtained over a wider or deeper sluice volume in the tank, which contains layers of different waste types.

Path Forward

The path forward for C-106 sluicing to resolve the high-heat issue and to remove all the soft sludge from this tank for stabilization consists of several steps. The first priority is to repair the jumper leak at the tank C-106 sluice pit, and to perform a preliminary industrial hygiene evaluation of the actions needed to protect workers during sluicing. Both of these actions will then be validated by completing the process test that was started on December 16. While these actions are being taken, the remaining sluicing work will be rebaselined, including the scope, cost, and schedule of both start-up problem resolution to date, potential future modifications, and evaluation of schedule compression for completion of sluicing. A decision will be made after industrial hygiene evaluation based on the analysis of gas samples from the next process test. The decision of whether to continue sluicing under administrative controls with personnel respiratory protection, or install a new air treatment system or other engineered controls could occur in April 1999.

Jumper Repair

The leaking jumper in the sluice pit at tank C-106 is currently being repaired. It is believed that the leak occurred due to a misalignment that occurred during original construction, and was perhaps complicated by water slugging during sluice pump startup. This pit is highly contaminated as a result of the leak (in excess of 30 rad/hr), and requires decontamination, special shielding, containment, and restrictive work controls. A new jumper is being fabricated with a flexible joint to improve installation alignment. A special high-pressure flush will be used to hydro test the jumper prior to restart of sluicing. This work is scheduled to complete in late February.

Industrial Hygiene Evaluation

A team of experts will evaluate the gaseous emissions and occupational exposures during past and future sluicing operations. The team will consist of:

- Philip Bartley (Team Lead), Certified Industrial Hygienist, Foster-Wheeler Environmental Corp.
- Dr. John Wesley Clayton, Toxicologist, Professor Emeritus and former Director of Toxicology, University of Arizona
- Dr. Richard C. Pleus, Toxicologist, Intertox, Inc.
- Dr. Leon Stock, Organic Chemist, Professor Emeritus, University of Chicago, and former Director of Chemistry Division at Argonne National Laboratory
- Brit Hey, Safety and Meteorology Analyst, Fluor Daniel Northwest Co.

The team will be managed by Nancy Butler, Industrial Safety Manager and Certified Industrial Hygienist for TWRS. This team will assess the measured and potential levels of gaseous compounds in the C-106 work area, in relation to PEL/TLV and IDLH recommendations, using professional judgement to encompass the unknowns in both the gas composition and the health effects. They will then recommend what measures and options will be required to protect workers during completion of the process test and future sluicing operations. After thorough review of the result and path forward, employees will be briefed.

Completion of Process Test

The process test that was started on December 16 will be revised to include a different sequence of pump operations. The stack VOC limit will be increased to less than the 500 ppm value approved by the Department of Ecology, to allow for more representative sluicing operations. The test will be limited to a total duration of 24 hours, minus the test duration to date. Testing will be performed during the weekend to minimize personnel exposures. Similar administrative controls to those of December 16 will be implemented, factoring in lessons-learned from the aborted test.

New Air Filtration System

In case the decision is made to install ventilation modification for worker protection, a preliminary design for a new charcoal adsorber air filtration system has been prepared as a contingency plan. A preliminary hazards assessment has been performed for this system. Several of the long-lead components have been procured. This system is complicated by safety issues resulting from potential fires resulting from the interaction of organic solvents with the charcoal. Extensive safety design features would be required. New operating procedures and additional operator training would be required. Revisions to both the Authorization Basis and the air discharge permit would be required. The preliminary schedule to build, install, test, and place this system into operation is approximately February, 2000, and the rough order of magnitude cost is in the range of $1-2M. Further work on this system has been delayed until the Industrial Hygiene Evaluation Team has completed their work and a decision is made on how to proceed.

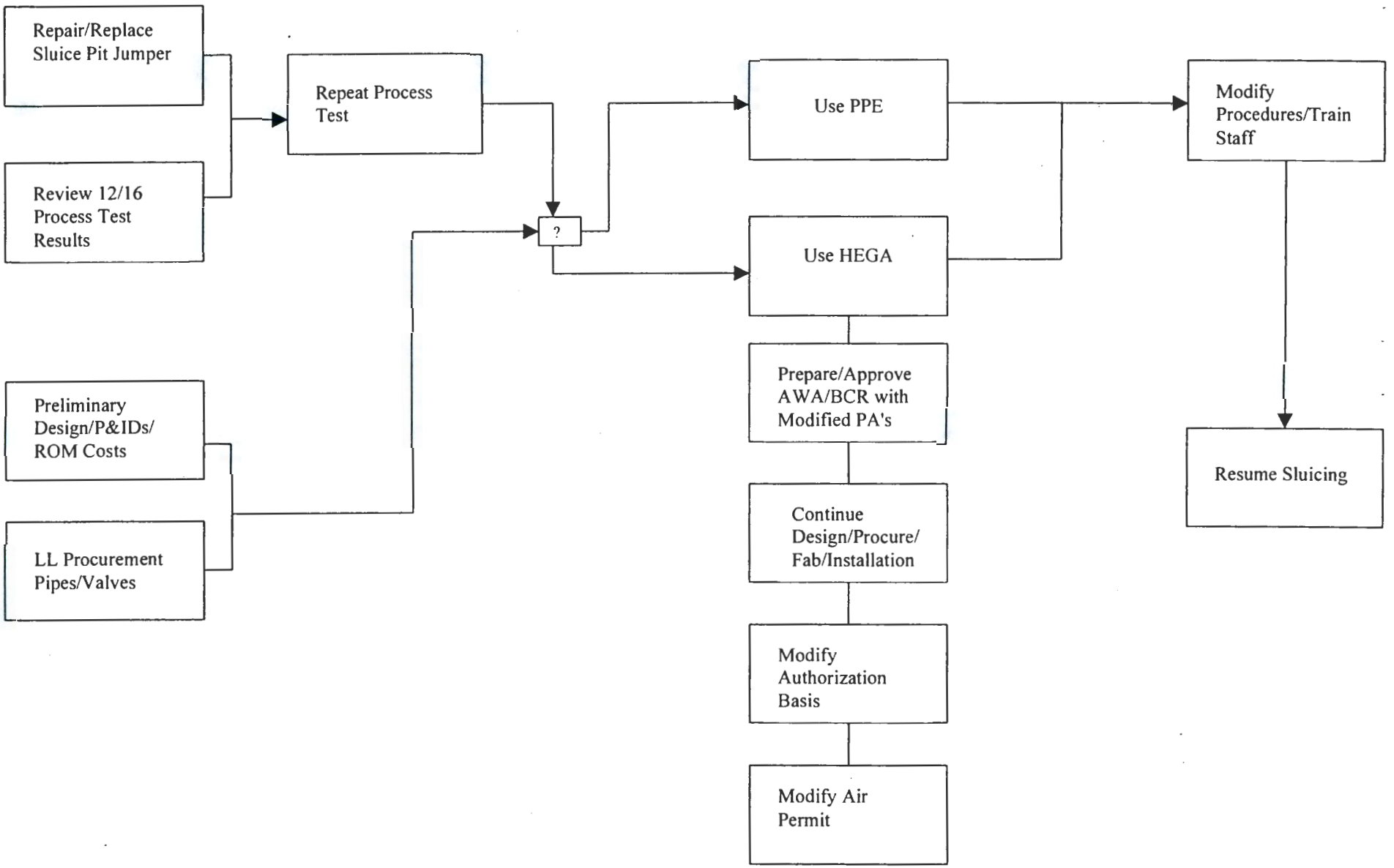
Rebaselining

Significant costs have been expended to date on resolving problems with sluice pump priming, stack emissions, and jumper repair. Additional costs will be incurred to complete the process test and to perform the additional analyses and evaluations. Future additional costs would result from installing an air treatment system. Potential cost savings could result if the remaining schedule for sluicing were compressed, such as by reducing hold times between sluice batches.

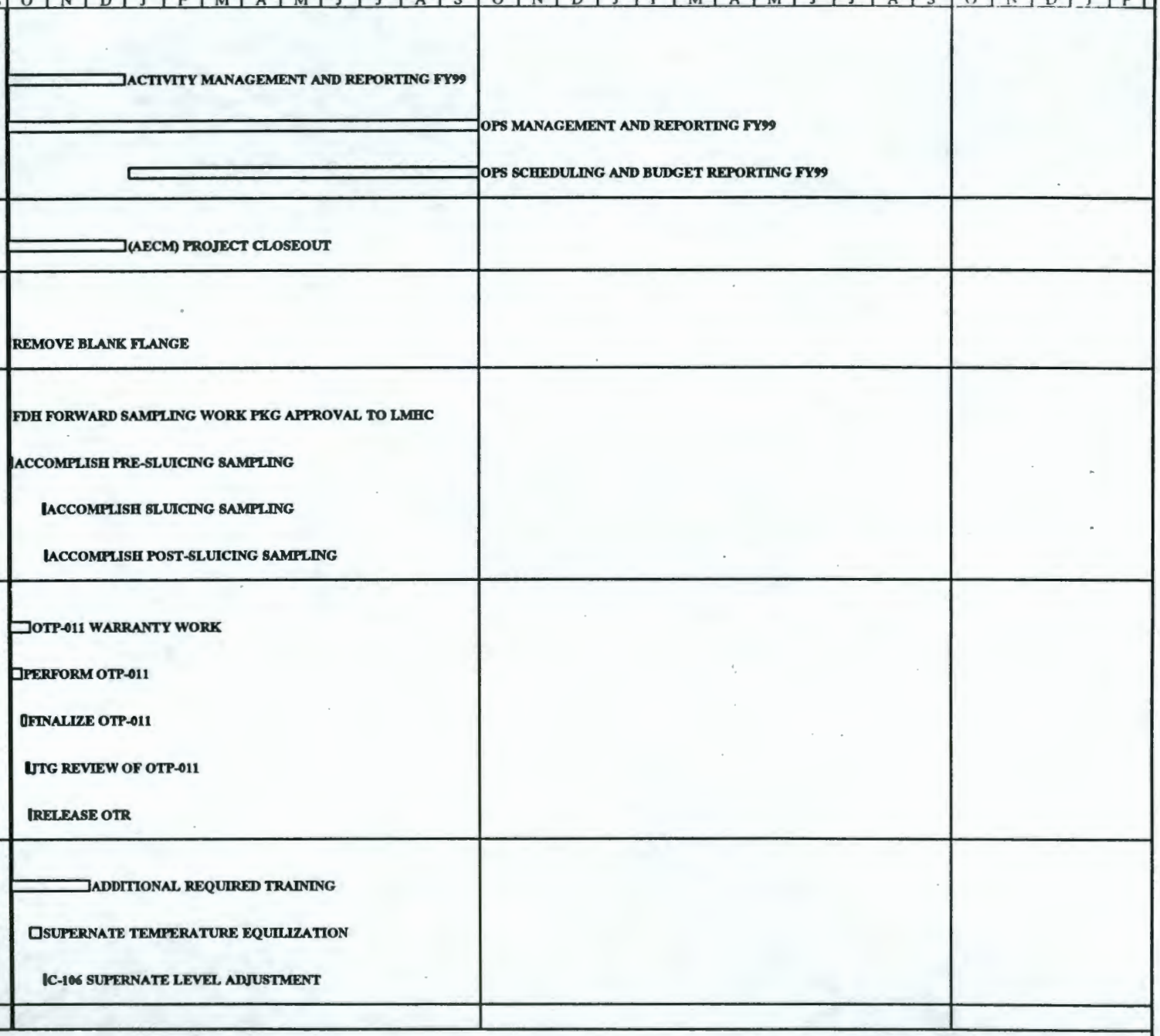
Decision Process

The attached flow diagram depicts the approach to the decision process.

C-106 Resumption of Sluicing



Activity ID	Early start	Early finish	O D	R D	Total float
050.010 PROJECT MANAGEMENT					
ADMINISTRATIVE					
05010A	10/01/98	12/31/98	62	62	116
05010B	10/01/98	09/30/99	251	251	116
05010A1	01/04/99	09/30/99	189	189	116
PROJECT CLOSEOUT					
05010C	10/01/98	12/31/98	62	62	305
050.090 SLUICE SLUDGE INTO AY-102					
PRE-SLUICING) STARTUP CONSTRUCTION					
0509010A	10/01/98	10/01/98	1	1	3
PRE-SLUICING) STACK MEASUREMENT (VOC #					
0509025A	10/01/98	10/01/98	1	1	19
0509026A	10/02/98	10/02/98	1	1	19
0509027A	10/27/98	10/27/98	1	1	5
0509028A	10/28/98	10/28/98	1	1	5
PRE-SLUICING) START SLUICING					
0509043A	10/01/98	10/15/98	11	11	3
0509031A	10/02/98	10/08/98	5	5	3
0509032A	10/09/98	10/12/98	2	2	3
0509033A	10/13/98	10/14/98	2	2	3
0509034A	10/15/98	10/15/98	1	1	3
PRE-SLUICING) SUPERNATE TEMPERATURE E					
0509044A	10/01/98	11/30/98	41	41	175
0509041A	10/15/98	10/23/98	7	7	3
0509042A	10/26/98	10/26/98	1	1	3
PRE-SLUICING) BEGIN SLUDGE REMOVAL					



Project Start	10/02/95
Project Finish	03/20/00
Data Date	10/01/98
Plot Date	01/25/99

© Primavera Systems, Inc.

Early Bar
Progress Bar
Critical Activity

C106

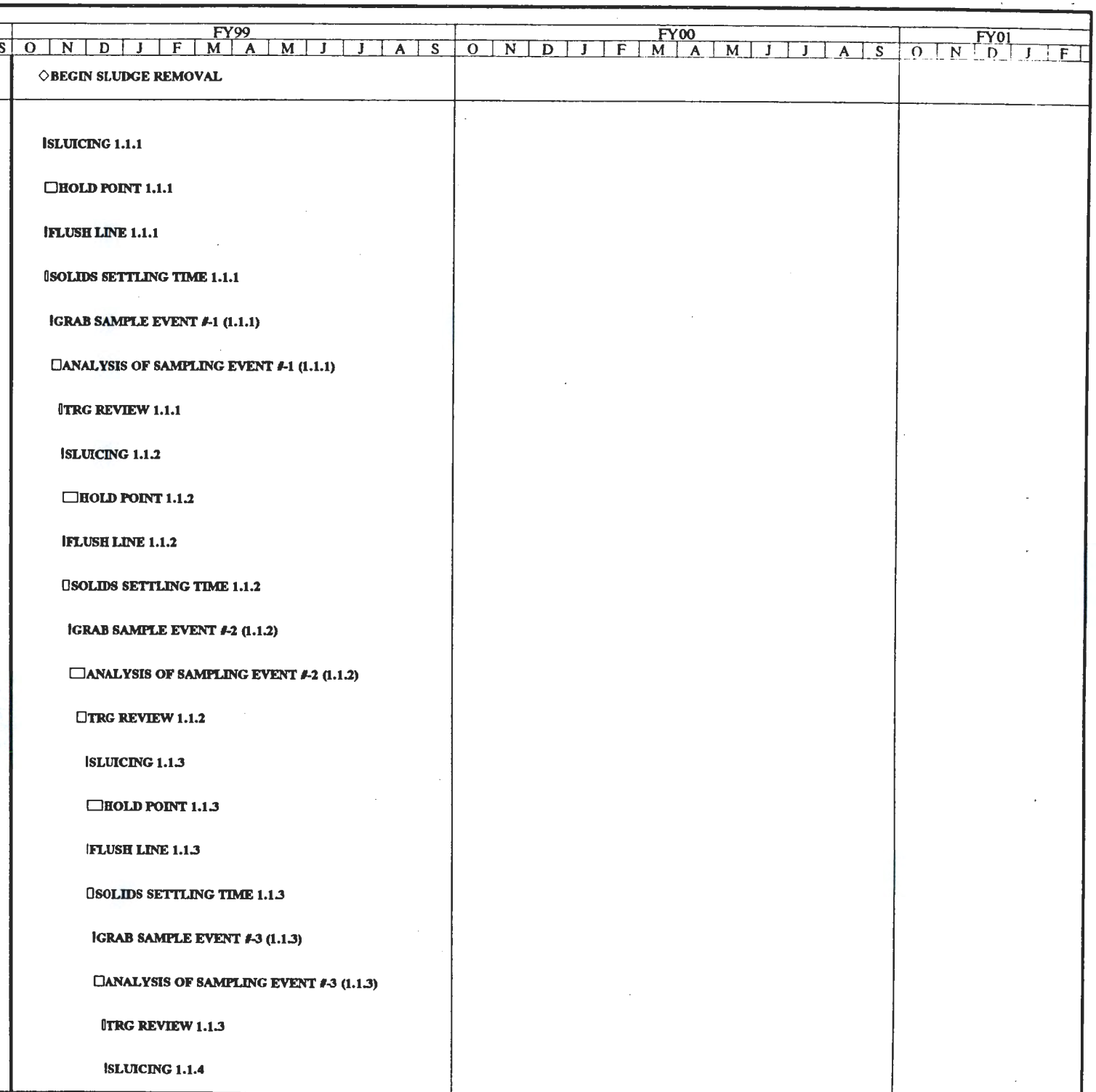
Sheet 1 of 8

WRSS C-106 Sluicing
FY-99 FY99 MYPP
11/11/98 (ALL ACTIVITIES)

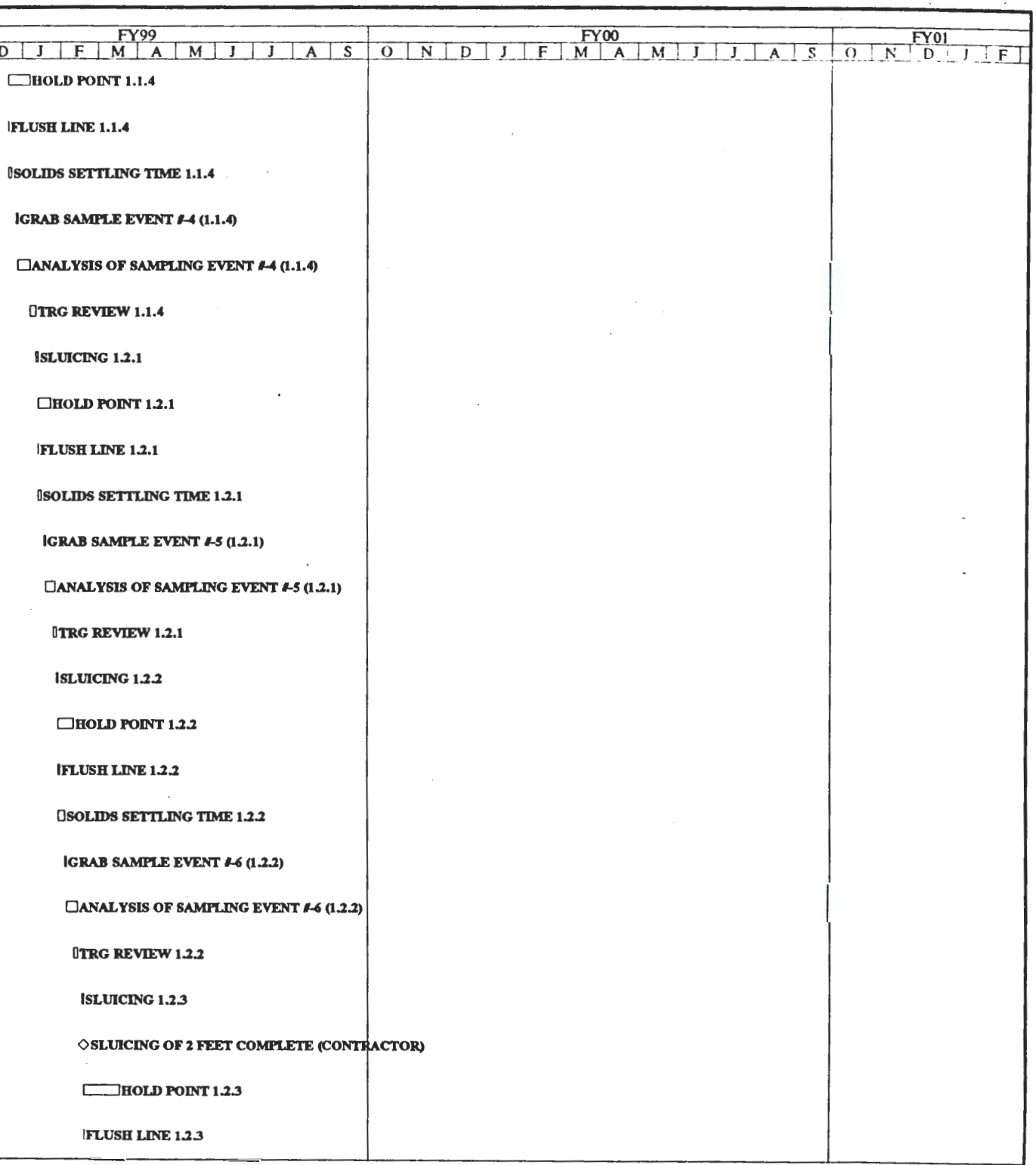
Rob DeMarais II (372-8959)

Date	Revision	Checked	Approved

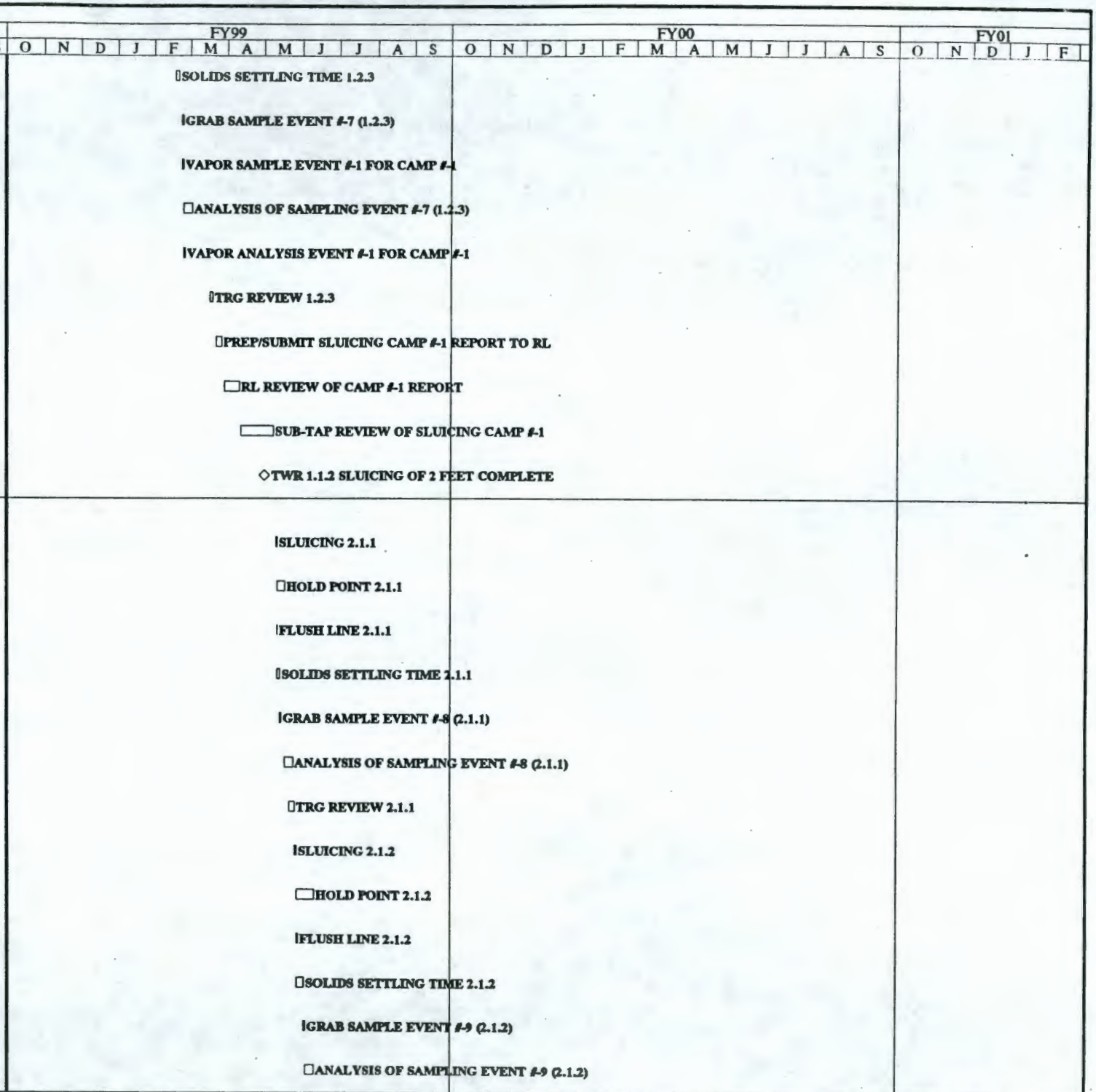
Activity ID	Early start	Early finish	O D	R D	Total float
05090M00	10/27/98		0	0	3
SLUICING CAMPAGIN #-1					
05090AA1	10/27/98*	10/27/98	1	1	3
05090AAA	10/28/98	11/06/98	8	8	3
05090F01	10/28/98	10/28/98	1	1	6
05090W01	10/28/98	10/30/98	3	3	3
05090S01	11/02/98	11/02/98	1	1	3
05090S1A	11/03/98	11/10/98	6	6	3
05090T01	11/09/98	11/11/98	3	3	3
05090AA2	11/12/98	11/12/98	1	1	3
05090AAB	11/13/98	11/24/98	8	8	3
05090F02	11/13/98	11/13/98	1	1	6
05090W02	11/13/98	11/17/98	3	3	3
05090S02	11/18/98	11/18/98	1	1	3
05090S2A	11/19/98	11/30/98	6	6	3
05090T02	11/25/98	12/01/98	3	3	3
05090AA3	12/02/98	12/02/98	1	1	3
05090AAC	12/03/98	12/14/98	8	8	3
05090F03	12/03/98	12/03/98	1	1	6
05090W03	12/03/98	12/07/98	3	3	3
05090S03	12/08/98	12/08/98	1	1	3
05090S3A	12/09/98	12/16/98	6	6	3
05090T03	12/15/98	12/17/98	3	3	3
05090AA4	12/18/98	12/18/98	1	1	3



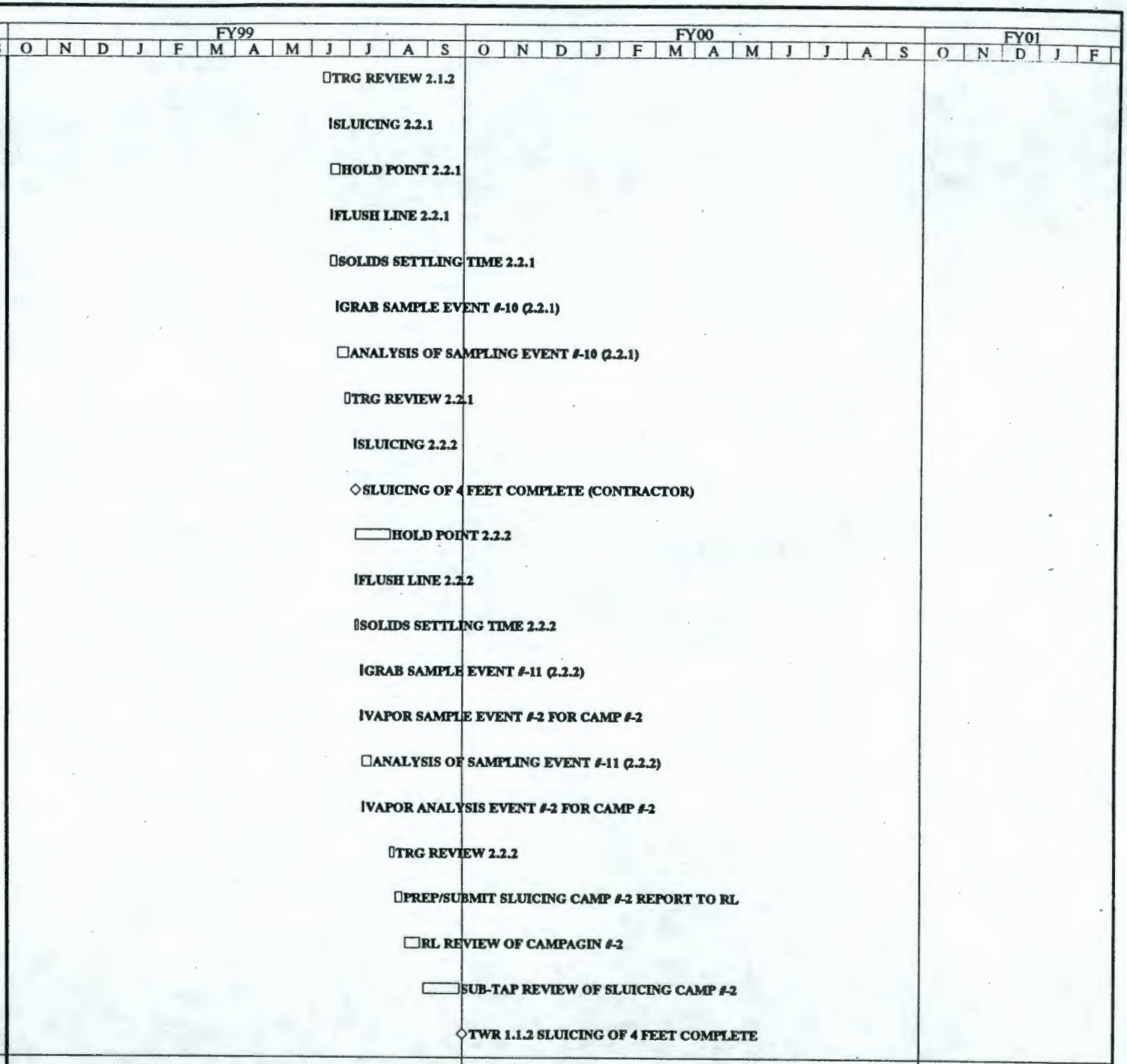
Activity ID	Early start	Early finish	O D	R D	Total float
05090AAD	12/21/98	01/06/99	10	10	3
05090F04	12/21/98	12/21/98	1	1	8
05090W04	12/21/98	12/23/98	3	3	5
05090S04	12/28/98	12/28/98	1	1	5
05090S4A	12/29/98	01/06/99	6	6	5
05090T04	01/07/99	01/11/99	3	3	3
05090AB1	01/12/99	01/12/99	1	1	3
05090ABA	01/13/99	01/22/99	8	8	3
05090F05	01/13/99	01/13/99	1	1	6
05090W05	01/13/99	01/15/99	3	3	3
05090S05	01/18/99	01/18/99	1	1	3
05090S5A	01/19/99	01/26/99	6	6	3
05090T05	01/25/99	01/27/99	3	3	3
05090AB2	01/28/99	01/28/99	1	1	3
05090ABB	01/29/99	02/09/99	8	8	3
05090F06	01/29/99	01/29/99	1	1	6
05090W06	01/29/99	02/02/99	3	3	3
05090S06	02/03/99	02/03/99	1	1	3
05090S6A	02/04/99	02/11/99	6	6	3
05090T06	02/10/99	02/12/99	3	3	3
05090AB3	02/16/99	02/16/99	1	1	3
05090C1		02/16/99	0	0	53
05090ABC	02/17/99	03/16/99	20	20	3
05090F07	02/17/99	02/17/99	1	1	18



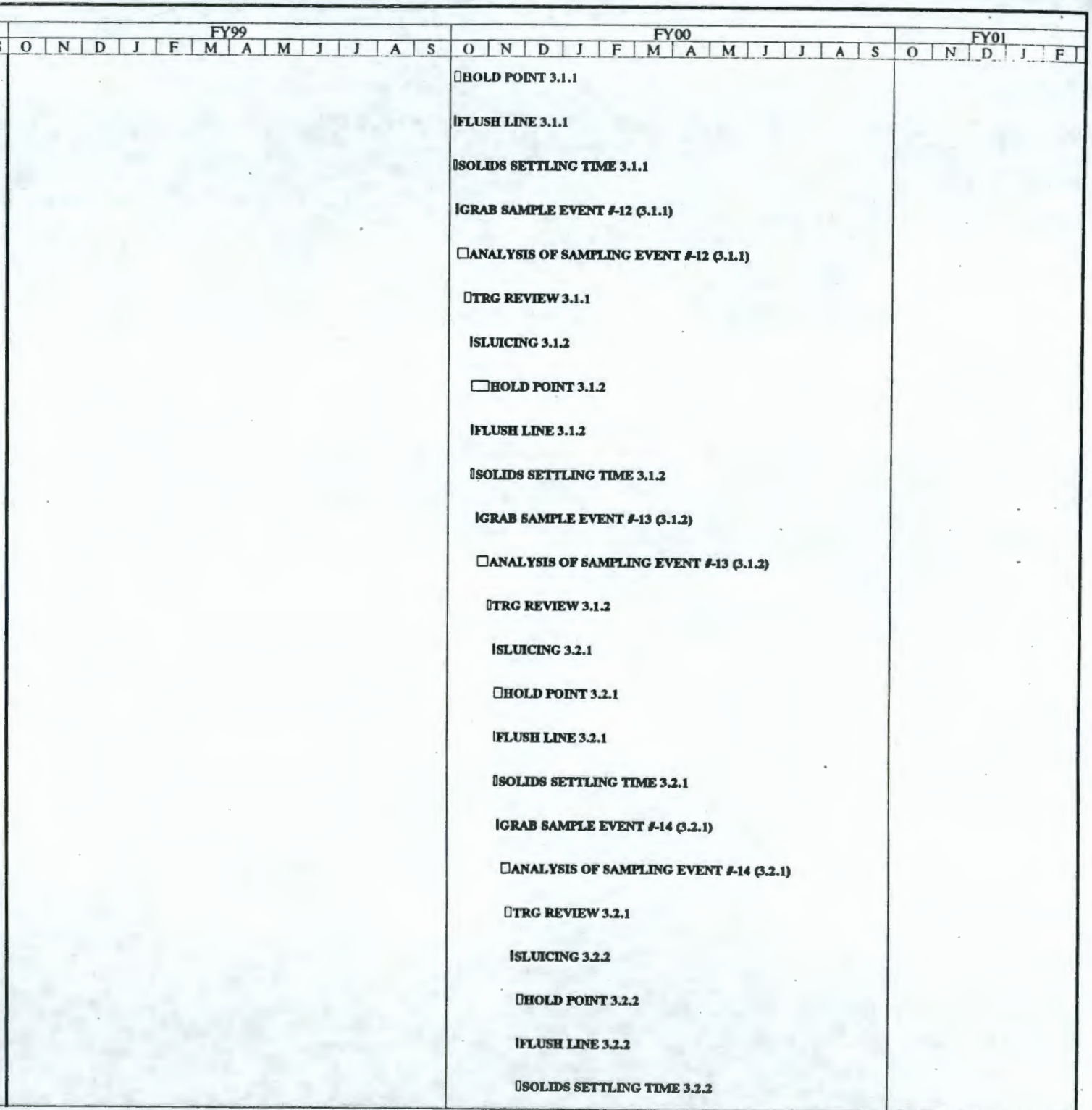
Activity ID	Early start	Early finish	O D	R D	Total float
05090W07	02/17/99	02/19/99	3	3	15
05090S07	02/22/99	02/22/99	1	1	15
05090V01	02/22/99	02/22/99	1	1	19
05090S7A	02/23/99	03/02/99	6	6	15
05090VA1	02/23/99	02/24/99	2	2	19
05090T07	03/17/99	03/19/99	3	3	3
05090RP1	03/22/99	03/26/99	5	5	3
050901RL	03/29/99	04/09/99	10	10	3
05090ST1	04/12/99	05/07/99	20	20	3
05090P1		04/30/99*	0	0	0
SLUICING CAMPAGIN #-2					
05090BA1	05/10/99	05/10/99	1	1	3
05090BAA	05/11/99	05/17/99	5	5	6
05090F08	05/11/99	05/11/99	1	1	6
05090W08	05/11/99	05/13/99	3	3	3
05090S08	05/14/99	05/14/99	1	1	3
05090S8A	05/17/99	05/24/99	6	6	3
05090T08	05/21/99	05/25/99	3	3	3
05090BA2	05/26/99	05/26/99	1	1	3
05090BAB	05/27/99	06/10/99	10	10	3
05090F09	05/27/99	05/27/99	1	1	8
05090W09	05/27/99	06/01/99	3	3	5
05090S09	06/02/99	06/02/99	1	1	5
05090S9A	06/03/99	06/10/99	6	6	5



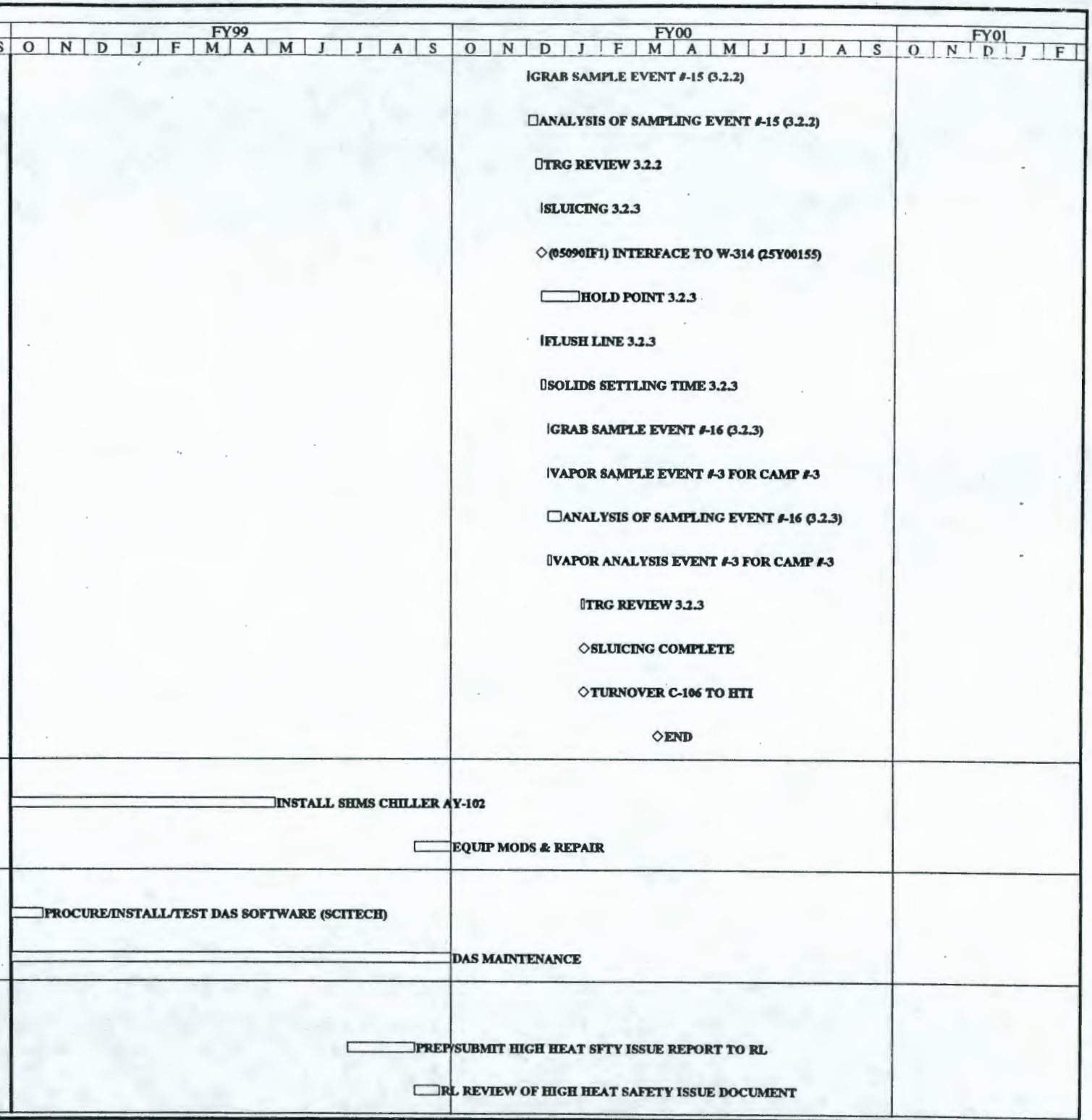
Activity ID	Early start	Early finish	O D	R D	Total float
05090T09	06/11/99	06/15/99	3	3	3
05090BB1	06/16/99	06/16/99	1	1	3
05090BBA	06/17/99	06/23/99	5	5	6
05090F10	06/17/99	06/17/99	1	1	6
05090W10	06/17/99	06/21/99	3	3	3
05090S10	06/22/99	06/22/99	1	1	3
05090SAA	06/23/99	06/30/99	6	6	3
05090T10	06/29/99	07/01/99	3	3	3
05090BB2	07/06/99	07/06/99	1	1	3
05090C2		07/06/99	0	0	61
05090BBB	07/07/99	08/03/99	20	20	3
05090F11	07/07/99	07/07/99	1	1	18
05090W11	07/07/99	07/09/99	3	3	15
05090S11	07/12/99	07/12/99	1	1	15
05090V02	07/12/99	07/12/99	1	1	19
05090SBA	07/13/99	07/20/99	6	6	15
05090VA2	07/13/99	07/14/99	2	2	19
05090T11	08/04/99	08/06/99	3	3	3
05090RP2	08/09/99	08/13/99	5	5	3
050902RL	08/16/99	08/27/99	10	10	3
05090ST2	08/30/99	09/27/99	20	20	3
05090P2		09/30/99*	0	0	0
SLUICING CAMPAGIN #-3					
05090CA1	10/01/99*	10/01/99	1	1	0



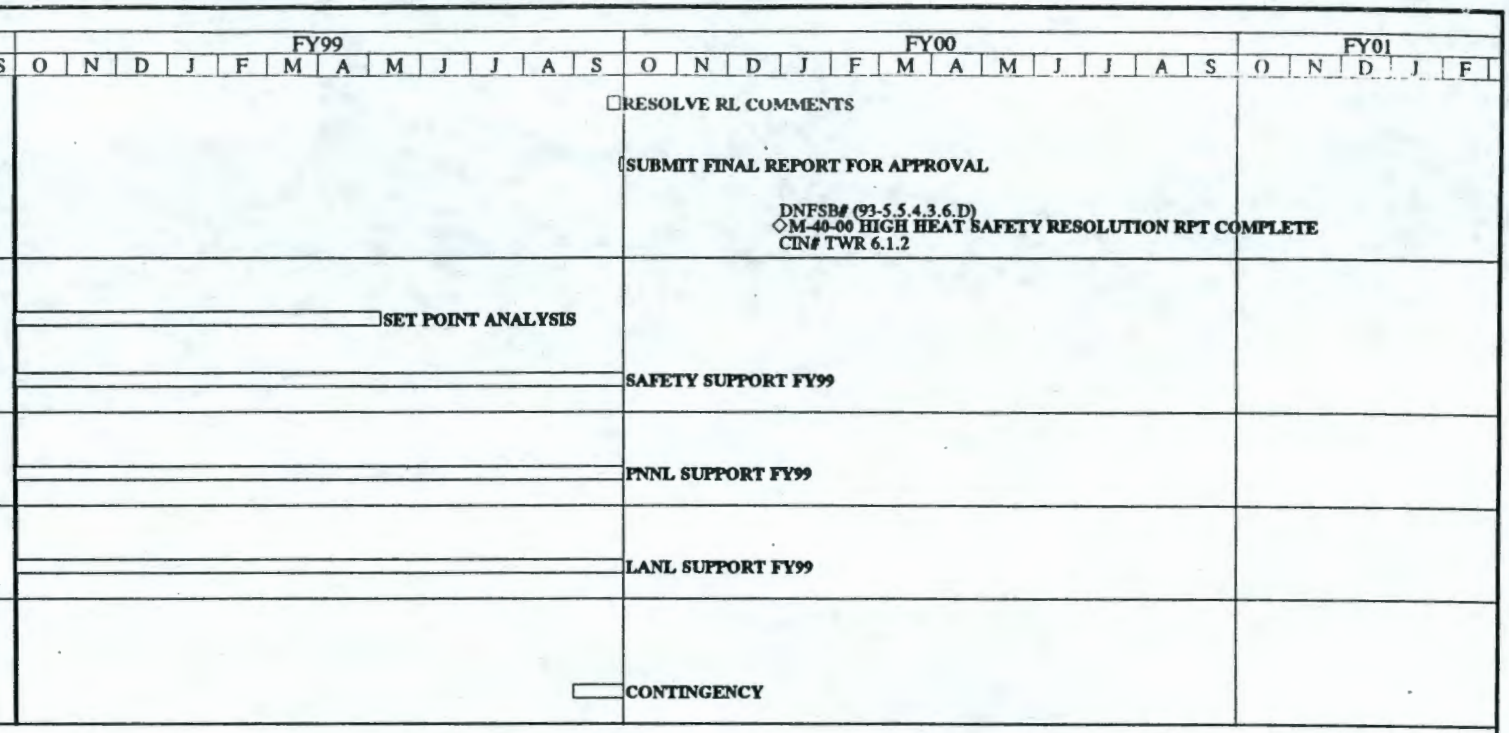
Activity ID	Early start	Early finish	O D	R D	Total float
05090CAA	10/04/99	10/08/99	5	5	3
05090F12	10/04/99	10/04/99	1	1	3
05090W12	10/04/99	10/06/99	3	3	0
05090S12	10/07/99	10/07/99	1	1	0
05090SCA	10/08/99	10/15/99	6	6	0
05090T12	10/14/99	10/18/99	3	3	0
05090CA2	10/19/99	10/19/99	1	1	0
05090CAB	10/20/99	11/02/99	10	10	0
05090F13	10/20/99	10/20/99	1	1	5
05090W13	10/20/99	10/22/99	3	3	2
05090S13	10/25/99	10/25/99	1	1	2
05090SDA	10/26/99	11/02/99	6	6	2
05090T13	11/03/99	11/05/99	3	3	0
05090CB1	11/08/99	11/08/99	1	1	0
05090CBA	11/09/99	11/15/99	5	5	3
05090F14	11/09/99	11/09/99	1	1	3
05090W14	11/09/99	11/11/99	3	3	0
05090S14	11/12/99	11/12/99	1	1	0
05090SEA	11/15/99	11/22/99	6	6	0
05090T14	11/19/99	11/23/99	3	3	0
05090CB2	11/24/99	11/24/99	1	1	0
05090CBB	11/29/99	12/03/99	5	5	3
05090F15	11/29/99	11/29/99	1	1	3
05090W15	11/29/99	12/01/99	3	3	0



Activity ID	Early start	Early finish	O D	R D	Total float
05090S15	12/02/99	12/02/99	1	1	0
05090SFA	12/03/99	12/10/99	6	6	0
05090T15	12/09/99	12/13/99	3	3	0
05090CB3	12/14/99	12/14/99	1	1	0
05090IF1		12/14/99	0	0	65
05090CBC	12/15/99	01/14/00	20	20	0
05090F16	12/15/99	12/15/99	1	1	15
05090W16	12/15/99	12/17/99	3	3	12
05090S16	12/20/99	12/20/99	1	1	12
05090V03	12/20/99	12/20/99	1	1	16
05090SGA	12/21/99	12/30/99	6	6	12
05090VA3	12/21/99	12/22/99	2	2	16
05090T16	01/17/00	01/19/00	3	3	0
05090M02		01/19/00	0	0	0
05090M03		01/19/00	0	0	0
05090END		03/20/00*	0	0	0
EQUIPMENT MODIFICATIONS & REPAIR					
0509025B	10/01/98*	05/07/99	151	151	3
0509025C	09/01/99*	09/30/99	21	21	116
AY-102 DAS MAINTENANCE					
0509025D	10/01/98	10/26/98	18	18	3
0509025E	10/01/98	09/30/99	251	251	116
050.130 PROCESS CONTROL DOCUMENTATION					
HIGH HEAT SAFETY RESOLUTION REPORT					
0513093A	07/07/99	08/30/99	39	39	62
0513093B	08/31/99	09/20/99	14	14	62



Activity ID	Early start	Early finish	O D	R D	Total float
0513093C	09/21/99	09/27/99	5	5	62
0513093D	09/28/99	09/30/99	3	3	62
05130P3		12/31/99*	0	0	0
SAFETY SUPPORT					
0513093E	10/01/98	05/07/99	151	151	3
0513093F	10/01/98	09/30/99	251	251	116
PNNL SUPPORT					
0513093G	10/01/98	09/30/99	251	251	116
LANL SUPPORT					
0513093H	10/01/98	09/30/99	251	251	116
050.140 CONTINGENCY					
CONTINGENCY					
0514094A	09/01/99*	09/30/99	21	21	116



MEMORANDUM OF AGREEMENT

AMONG

THE OFFICE OF ENVIRONMENTAL

MANAGEMENT,

THE RICHLAND OPERATIONS OFFICE,

AND

THE OFFICE OF RIVER PROTECTION

MEMORANDUM OF AGREEMENT
AMONG
THE OFFICE OF ENVIRONMENTAL MANAGEMENT,
THE RICHLAND OPERATIONS OFFICE,
AND
THE OFFICE OF RIVER PROTECTION

I. PURPOSE

This Memorandum Of Agreement (MOA) establishes an agreement among the United States' Department of Energy's Assistant Secretary for Environmental Management, the Manager of Richland Operations Office (RL) , and the Manager of the Office of River Protection (ORP) regarding the organizational authorities, roles and responsibilities, and reporting structure for the Office of River Protection.

II. BACKGROUND

Approximately 54 million gallons of highly radioactive wastes are stored in 177 underground tanks, including 149 older single-shell tanks, at the Hanford Site in Washington State. The waste is derived from production of plutonium for the nation's nuclear defense program and has been accumulating at Hanford since 1944. The waste poses a serious safety concern to the public and the environment. Most of the tanks have exceeded their design life, and removal of the waste from the tanks is an urgent priority.

On August 24, 1998, DOE entered into a contract with BNFL for a 24-month period to design and engineer the technical, financial, and business approaches for the Tank Waste Remediation System (TWRS) privatization project, which will treat and immobilize the tank waste. The deliverables from this design phase will provide enough information for DOE to decide whether to authorize BNFL to proceed to construction and operations.

III. AUTHORITY

As set forth by Congress in the *Strom Thurmond National Defense Authorization Act for Fiscal Year 1999 (PL-105-261)*, the Secretary of Energy is required to establish an office at the Hanford Site, Richland, Washington, to be known as the Office of River Protection.

Congressional language states:

- The Office shall be headed by a senior official of the Department of Energy, who shall report to the Assistant Secretary of Energy for Environmental Management.

- The head of the Office shall be responsible for managing all aspects of the Tank

Waste Remediation System (also referred to as the Hanford Tank Farm operations), including those portions under privatization contracts, of the Department Energy at Hanford.

The Manager of the Office of River Protection (ORP), has responsibility and authority for all functions formerly performed by the Assistant Manager of the Tank Waste Remediation System (TWRS) organization. Primary functions to be performed by ORP include management of the "privatized" contract for treatment of the tank waste and management of the of the PHMC contractors conducting the operations, maintenance, engineering, and construction activities of the 200 East and 200 West Tank Farms.

IV. ROLES AND RESPONSIBILITIES

- The Manager of the Office of River Protection shall retain full responsibility within DOE for all aspects of effective operation of the Office of River Protection.

- The Manager of the Office of River Protection shall report programmatically to the Assistant Secretary for Environmental Management (EM-1) and coordinates with the Manager of the Richland Operations Office.

- The Manager of the Richland Operations Office shall ensure effective integration between the Office of River Protection and other Hanford site activities. The Manager of the Richland Operations Office shall also provide administrative support to the Office of River Protection.

- The *Memorandum of Agreement for the Execution of Radiological, Nuclear, and Process Safety Regulation of TWRS Privatization Contractors* dated July 3, 1996 delineates the specific interactions between the Assistant Secretary for Environmental Management, the Assistant Secretary for Environment, Safety, and Health, and the Manager of the Richland Operations Office for this activity. This document is incorporated by reference.

- Attachment 1 is an organizational chart illustrating structure and organizational reporting relationships for the Office of River Protection.

- Attachment 2 is a matrix further defining roles and responsibilities of EM-1, the Manager of Richland Operations, and the Manager of the Office of River Protection.

- Key personnel have been designated in the Office of River Protection. These are the Manager, Office of River Protection; the Assistant Manager for Tank Waste Processing and Disposal; and the Assistant Manager for Tank Waste Storage and Retrieval. These positions are the senior management responsible for the Office

of River Protection. The Assistant Secretary for Environmental Management will approve personnel actions and performance evaluations for these positions.

- In cases where BNFL, Inc., contract modifications signed by the Manager, Office of River Protection, affect the Tri-Party Agreement or PHMC, the Manager, Richland Operations Office, will need to concur. In cases where PHMC contract modifications signed by the Manager, Richland Operations Office, affect TWRS functions, the Manager, Office of River Protection, will need to concur.

- The Manager, Richland Operations Office, is responsible for Hanford site safety and regulatory compliance. He has signatory authority for Safety Authorization Basis documents and regulatory agreements such as the *Hanford Federal Facility Agreement and Consent Order* (commonly called the Tri-Party Agreement). The Manager, Office of River Protection, is responsible for conducting operations within these requirements and recommending changes as needed. As reflected in the matrix, the integration among the Assistant Secretary for Environmental Management; the Manager, Richland Operations Office; and the Manager, Office of River Protection, will ensure safe and effective operations and successful project execution.

- The Assistant Secretary for Environmental Management has the programmatic role of developing, submitting, and defending the Environmental Management budget and setting allocations based on Congressional authorization and appropriations. The Manager, Richland Operations Office (RL), has a similar responsibility for Richland. Guidance issued by Headquarters will, therefore, contain target funding for RL including the Office of River Protection (ORP). The Manager, ORP, will be responsible for developing a budget request and integrated project priority list for TWRS. The Manager, ORP, will collaborate with the Manager, RL, who is responsible for submitting a consolidated Richland budget and integrated priority list, including the TWRS budget request and integrated project priority list, to Headquarters. Execution guidance and appropriation allocations will be issued in the same manner. The Manager, ORP, will be responsible for the execution of the TWRS allocation. Both the administrative budget request and execution allocation for the ORP will be part of the overall RL administrative budget.

- The Hanford Advisory Board, representing local government, business, Hanford workers, and special interest groups, provides consensus advice to the Department of Energy on Hanford programs. The Manager, Office of River Protection, is the primary interface with the Hanford Advisory Board on Hanford tank waste management and is responsible for any resulting actions. This includes periodic briefings to the Hanford Advisory Board by Office of River Protection staff on project status and issues, responding to questions, and responding to advice from

the Hanford Advisory Board. Broader Hanford Advisory Board concerns and advice that affect more than Hanford tank waste management are the responsibility of the Manager, Richland Operations Office, incorporating input from the Office of River Protection as well as other Hanford programs.

V. IMPLEMENTATION

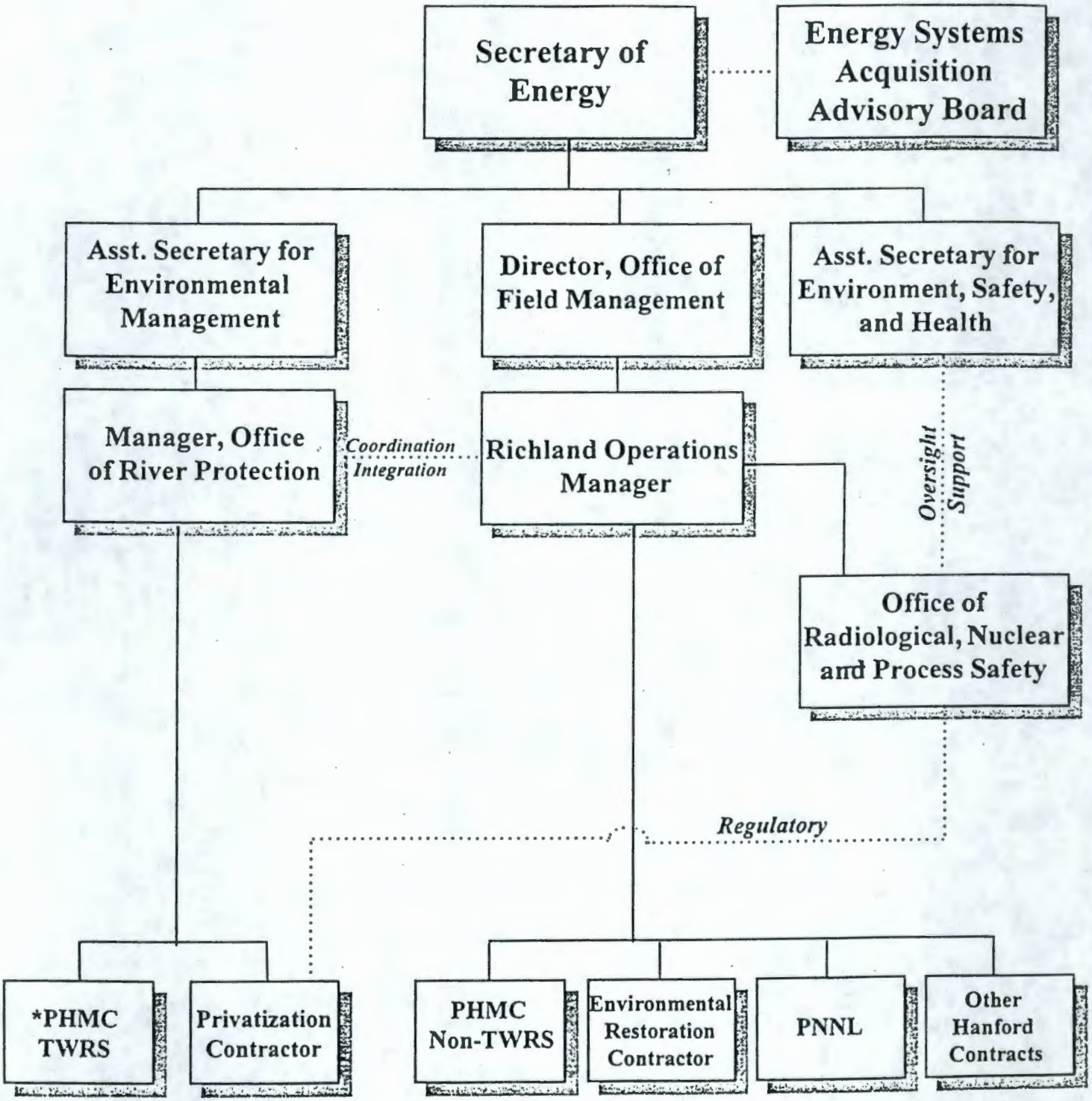
This agreement will be effective when signed by the parties indicated below.

James M. Owendoff — 1/8/99
Acting Assistant Secretary for Environmental Management — Date

John D. Wagoner — 12/31/98
Manager, DOE Richland Operations Office — Date

Jackson Knotts — 1-7-99
Acting Manager, Office of River Protection — Date

Key Organizational Structure for the Office of River Protection



* Project Hanford Management Contract

ROLES, RESPONSIBILITIES, AND AUTHORITIES FOR THE OFFICE OF RIVER PROTECTION

Attachment 2

ACTIVITIES/PRODUCTS	MANAGER, ORP	MANAGER, RL	ASSISTANT SECRETARY, EM	RATIONALE / COMMENTS
1. Contractual				
Signs BNFL Inc. Contract and modifications	A	C	C	RL Manager to concur only when modifications affect TPA or PHMC. MORP to be delegated CO authority for BNFL contract. EM-1 provides authority to CO to sign BNFL contract based on concurrence of Acquisition Executive, when needed.
Signs PHMC Contract and modifications	C	A		ORP Manager to concur only when modifications affect TWRS.
Determines plan for PHMC fee allocation for ORP	R	A	C	
Determines how much fee PHMC will receive for ORP	R	A	C	
2. Representation				
Represents ORP to public, media, HAB, Tribes, and stakeholders	P	S	S	
Represents ORP to Congress, OMB and other Federal agencies	S	S	P	
Represents ORP to states of Washington and Oregon	P	S	S	
3. Personnel				
Evaluates performance of manager, ORP		ADVISORY	RATING / REVIEWING OFF.	
Approves ORP key personnel actions	R		A	EM-1 will consult with RL Manager. For this activity, key personnel include only the two Assistant Managers for ORP.
Evaluates ORP key personnel	RATING OFF.		REVIEWING OFF.	EM-1 will consult with RL Manager. For this activity, key personnel include only the two Assistant Managers for ORP.
Makes final decision on Differing Professional Opinions*		A	C	Only goes to Manager of RL if not resolved by the MORP
EEO cases within ORP		A		Only goes to Manager of RL if not resolved by the MORP
4. Hanford Compliance and Site Safety				
Signs Tri-Party Agreement and amendments for ORP	R	A	C	
Responsible for ORP safety	P	S	S	
Responsible for Site safety	S	P	S	
Approves Authorization Basis for TWRS	R	A	I	
Who Regulatory Unit reports to		P		
Resolves conflicts between MORP and Manager of the Reg Unit		R	A	EM-1 resolves conflicts with input from EH-1
Appoints ORP Type B accident investigation boards and accepts/rejects final report*		A		
Approves RL Integrated Safety Management directive*	I	A	I	
Site-level permit actions ORP must coordinate with RL	R	A		
Responds to DNFSB recommendations regarding ORP	P	S		
5. Budget and Funding Allocation				
Submits Budget for ORP to HQ	R	P/R		
Controls Allocation of Funds within ORP	R	R	A	
Controls allocation of funds for ORP within RL	R	R	A	
Allocates budget for GSSC and RL training and travel*	R	A		
6. Project Management & Controls				
Approves ORP Project Management Plan	R	C	A	Acquisition Executive to concur on project baseline (Critical Decision)
Conducts ESAAB equivalent for delegated Critical Decisions	A			
Resolves interface conflicts with other RL programs	R	A	I	
Recommends to Secretary to proceed with Phase I-B2 (Constuction and Operations)	R	C	A	Acquisition Executive (Critical Decision)
Approves Authorization to Proceed for Phase I-B2 of BNFL Contract	R	I	A	EM-1 provides authority to CO to sign BNFL contract based on concurrence of Acquisition Executive.
Establishes Baseline Change Thresholds for ORP's contracts**	R		A	Acquisition Executive to concur on thresholds
Approves ORP programmatic review per EIS-ROD***	R	C	A	

ROLES, RESPONSIBILITIES, AND AUTHORITIES FOR THE OFFICE OF RIVER PROTECTION

Attachment 2

ACTIVITIES/PRODUCTS	MANAGER, ORP	MANAGER, RL	ASSISTANT SECRETARY, EM	RATIONALE / COMMENTS
Approves ORR's for BNFL	R	C	A	Reg. Unit responsible for BNFL safety oversight and reports to RL Manager
Approves ORR's for PHMC associated with ORP	R	A	C	RL Manager in charge of site safety.
7. Other				
Approves exemption requests from RL directives*	R	A	I	
Approves exemption requests from HQ directives*	R	I	A	

Basic Premises:

1. ORP Subject to RL, EM, DOE Policies and Procedures unless Specific exemption approved by RL Manager, EM-1, S-1 as appropriate for procedures/policy (e.g., HR, Budget, Legal, Procurement/HCA, CFO, PC, etc.)
2. MORP manages ORP within allocation/requirements from RL/EM

A - Approves: Is final decision authority.
P - Primary: Lead responsibility
I - Involved /Input: Actively participates as an informal advisor.
R- Recommends: An opinion on a course of action provided to the approving official.
C - Concurs: Shows acceptance of approved decisions but does not authorize veto power.
S - Secondary: Serves as a back-up to the primary lead.

Note:

* Identifies specific items from RL's Functions, Responsibilities, and Authorities Manual (FRAM)
** Assumes a change control board for the BNFL contract will be established separate from RL Site Management Board. If ORP action on BNFL contract impacts other RL programs then RL Site Management Board will be used.
*** In the 1997 EIS-ROD, the Department committed to conduct programmatic reviews, considering any new information, to determine if planned path is still appropriate or if changes are needed.

List of Abbreviations:

BNFL Inc.: U.S. subsidiary of British Nuclear Fuels plc
CO: Contracting Officer / Official
DNFSB: Defense Nuclear Facilities Safety Board
EEO: Equal Employment Opportunity
EIS: Environmental Impact Statement
ESAAB: Energy Systems Acquisition Advisory Board
GSSC: General Site Services Contract
HAB: Hanford Advisory Board
HQ: Headquarters
MORP: Manager of the Office of River Protection
OMB: Office of Management and Budget
ORP: Office of River Protection
ORR: Operational Readiness Review
PHMC: Project Hanford Management Contract
RL SMB: Richland Operations Office Site Management Board
RL: Richland Operations Office
ROD: Record of Decision
TPA: Tri-Party Agreement
TWRS: Tank Waste Remediation System

Tri-Party Agreement

January 26, 1999

HANFORD FEDERAL FACILITY AGREEMENT AND CONSENT ORDER (AGREEMENT)

RESOLUTION OF DISPUTE REGARDING MILESTONE M-40-07

On April 9, 1997 the U. S. Department of Energy (DOE) invoked the dispute resolution provisions of Agreement Article VIII following receipt of State of Washington Department of Ecology (Ecology) concerns regarding completion of Interim Milestone M-40-07. The dispute is currently at the IAMIT level through January 26, 1999.

On consideration, DOE and Ecology have agreed to incorporate stabilization work at Single-Shell Tank C-103 (the subject of Agreement interim milestone M-40-07) within the scope of the parties' tentatively agreed-to Single-Shell Tank Interim Stabilization Consent Decree. Consequently, this M-40-07 dispute is hereby suspended, and will be resolved effective upon final approval of the Single-Shell Tank Interim Stabilization Consent Decree and its associated M-41-99-01 change request.

The process of developing, submitting for public comment, resolution of resulting comments and final approval of the Single-Shell Tank Interim Stabilization Consent Decree and its associated M-41-99-01 change request will proceed in lieu of the underlying dispute resolution for Milestone M-40-07. Should the Parties fail to achieve final approval of the Consent Decree and/or the associated M-41-99-01 change request, this milestone M-40-07 dispute shall resume uninterrupted at the IAMIT level. Whereupon, the IAMIT shall have 21 days in which to resolve, extend or elevate the underlying dispute per the requirements of Agreement Paragraph 30.

Jackson E. Kinzer
Assistant Manager,
Tank Waste Remediation System
U.S. Department of Energy
Richland Operations Office

Michael A. Wilson
Manager, Nuclear Waste Program
State of Washington
Department of Ecology

cc: Administrative Record

CLOSURE OF THE 303-K STORAGE FACILITY

IAMIT Meeting Presentation

January 26, 1999

Background

- Presented at the December TPA Milestone Review
- One final meeting to reach agreement, January 20, 1999
- Agreed to take issue to January IAMIT

Background

- 303-K Facility has been used to manage radioactive materials since it was constructed in 1943.
- Radioactively contaminated equipment was decontaminated at the facility from 1953 until 1977.

Background

- A Part A, Form 3 was issued for 303-K to store containerized mixed waste August 1987.
- The unit was placed into the RCRA Site Wide Permit, December 1996 with an approved Closure Plan.

Agreements

- Uranium is present and needs to be addressed.
- RCRA hazardous substances in the soil are below either; site wide soil background or MTCA Method B soil values and there are no further action.

DOE Position

- Uranium is excluded from RCRA as a solid waste per 261.4(a)(4).
- Uranium contamination predates the RCRA TSD Storage Activities.
- Once the building is demolished in FY2001 all of the actions required by the approved Closure Plan will have been completed and this unit can be clean closed.

DOE Position

- The uranium will be addressed under CERCLA in the 300-FF-2 Operable Unit. The two uranium hot spots will be documented in WIDS and in the Focus Feasibility Study.

Ecology Position

- DOE and Ecology agree the U contamination is to be remediated as part of the CERCLA operable unit
- Disagree on maintaining interim status (i.e. keeping the Part A active). DOE wants clean closure with U in place. Ecology wants to maintain interim status until U is remediated.

Ecology Position

- Ecology is *not* regulating U as waste but as a contaminant
- DOE does not have adequate process knowledge to support position concerning source of U
- Ecology recognizes radionuclides in the definition of "hazardous substances" as used in the Dangerous Waste Regulations

Ecology requested that the following be included to clarify their position:

Ecology stated that it is applying both RCRA and the Dangerous Waste Regulations for the State of Washington that does not contain any exclusion for radionuclides. In addition, uranium is a constituent identified under MTCA and therefore must be addressed as a dangerous waste constituent. Ecology identified that RL's process knowledge concerning the source of the uranium is incomplete and inadequate. Uranium is not a waste but a contaminant produced by the SD activities. Therefore uranium must be addressed as part of the closure activities before clean closure can be certified.

Early discussions between RL and Ecology on this issue, the two parties agreed the uranium contamination could be remediated as part of the CERCLA operable unit. Since that time, however, questions have been raised concerning the level used for the CERCLA cleanup when DOE is requesting a Clean Closure. Ecology notified the IAMIT that it would be holding internal discussions on the Dangerous Waste Closure performance standards required by Ecology at Hanford. Ecology requires maintaining interim status (i.e. keeping Part A active) until the uranium is remediated.