0073087

Meeting Minutes
Hanford Federal Facility Agreement and Consent Order Milestone Review
EPA Conference Room, 712 Swift Blvd., Richland
June 22, 1999

Appvl.: Jackson Kinzer Date: 8-24-99
for Peter M. Knollmeyer, RL (A5-11)
IAMIT Representative

Appvl.: Douglas R. Sherwood Date: 8/24/99
Douglas R. Sherwood, EPA (B5-01)
IAMIT Representative

Appvl.: Michael A. Wilson Date: 8/24/99
Michael A. Wilson, Ecology (B5-18)
IAMIT Representative

Prepared by
Appvl.: RD Morrison Date: 8/23/99
Ronald D. Morrison (A1-14)
Fluor Daniel Hanford, Inc.

Distribution

Black, D. G.	WMH	H6-20	Piippo, R. E.	FDH	A5-15
Blazek, M. L.	ODOE	OR*	Price, S. M.	FDH	H6-23
Borneman, L. E.	FDH	A3-03	Rasmussen, J. E.	RL	A5-15*
Bowers, E. M.	RL	S7-55	Royack, M. J.	RL	S7-54
Clark, C. E.	RL	A5-15	Ruud, L. E.	Ecology	B5-18
Crawford, G. L.	ESG	B1-44	Sanders, G. H	RL	A5-15*
Cusack, L.	Ecology	B5-18*	Sherwood, A. R.	WMH	H6-26
Einan, D. R.	EPA	B5-01	Sherwood, D. R.	EPA	B5-01*
Hertzel, J. S.	FDH	H8-67	Skinnarland, E. R.	Ecology	B5-18
Jaraysi, M.	Ecology	B5-18*	Sobczyk, S.	Nez Perce	
Jarvis, M. F.	RL	A5-15	Stanley, R.	Ecology	Lacey*
Jim, R.	YIN		Tilden, H. T.	PNNL	P7-79
Knollmeyer, P. M.	RL	A5-11	Wilkinson, J. R.	CTUIR	
McDonald, K. M.	WMH	H6-06	Williams, J, D.	FDH	H6-06
Miskho, A. G.	FDH	H6-06	Wilson, M. A.	Ecology	B5-18*
Morrison, R. D.	FDH	A1-14*	Yerxa, J. K.	RL	A5-15
Murphy-Fitch, E. J.	FDH	A1-14*	EDMC/ Administrative Record		H6-08

* W/Attachments

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Hanford Federal Facility Agreement and Consent order (Tri-Party Agreement)
Milestone Review
EPA Conference Room, 712 Swift Boulevard, Richland, Washington
June 22, 1999

M-26-01I Land Disposal Restrictions Annual Report

E. Bowers provided a discussion of Attachment 1 "Land Disposal Restrictions Annual Report M-26-01". See the Tri-Party Agreement Inter Agency Management Integration Team meeting minutes dated June 22, 1999 for additional information related to this milestone.

M-19-00 Mixed Waste Treatment and M-91-00 Acquisition of Facilities to TSD TRU/TRUM, LLMW and GTC3

E. Bowers provided a discussion of Attachment 2 "M-19-00 and M-91-00 Waste Programs Division". M. Jaraysi noted that the project management plan to be submitted to fulfill interim milestone M-91-10 should include a draft Tri-Party Agreement change request. This expected change request would be a draft submitted with the project management plan reflecting the path forward addressing the treatment of the waste. E. Bowers acknowledged this expectation but, stated that a change request will not be necessary.

It was pointed out that the wording of milestone M-91-10 does include the submittal of a change request. E. Bowers stated that the DOE would have to work with Ecology to determine the necessity of a change request.

D. Sherwood stated that in planning meetings it came out that there was no funding identified in FY 2000 for milestone M-91-03. E. Bowers stated that the DOE is seeking the necessary funding to support M-91-03. J. Williams added that a memorandum of agreement was being developed with the Spent Nuclear Fuel Program to obtain some funding.

M-32-00 Waste Tanks/Corrective Action (non ORP milestones)

E. Bowers provided a discussion of Attachment 3 "Interim Status Dangerous Waste Tank Systems Hanford Federal Facility Agreement and Consent Order Milestone M-32-00".

Ecology stated during the discussion that, in their view, M-32-04 is not complete.

M-20-00 RCRA Part B Permits and Closure Plans

R. Bowman provided a discussion of Attachment 4 "Permits and Closure Plans".

A discussion was conducted of existing unresolved issues related to the Central Waste Complex and the Waste Receiving and Processing Facility (see page 11 of Attachment 4). It was stated by the DOE that an appeal to the Pollution Control Hearings Board may ultimately be necessary to resolve some issues. Other options for elevating/resolving the issues were also discussed. Ecology committed to work with the project personnel to see if any modifications are justifiable in light of comments received during the permitting process.

L. Ruud stated that Ecology has signed a class I modification related to the 1100 Area legal description. R. Bowman responded that if changes have been made to the legal description then the Form 2 to the Hanford Site Wide Permit will reflect this.

A question arose of what the current issue is with the Waste Encapsulation and Storage Facility Part B permit application. It was explained that a page change was performed and now it is under consideration whether a "recertification" of the Part B is necessary.

The DOE expressed a desire to conduct additional informal discussions to attempt to resolve some of the outstanding issues.

Ecology stated that the formal appeals process may be the only way to completely resolve some of these issues. Additionally, some of these issues seem to be recurring ones on different projects and need to be dealt with in a global manner.

M-34-00 Spent Nuclear Fuel

The Spent Nuclear Fuel presentation has been deferred to the July 1999 Milestone Review by agreement of the DOE, EPA and Ecology.

M-26-05F Tritium Treatment Technology Evaluation

It was determined that the Milestone Review Form dated March 15, 1999 and submitted at the March 23, 1999 Milestone Review (Attachment 5) was still valid and stands in lieu of a formal presentation at this Milestone Review.

AGENDA

TRI-PARTY AGREEMENT MAJOR MILESTONE MANAGEMENT REVIEW
(CHAIRPERSON: D. R. SHERWOOD)

TUESDAY, JUNE 22, 1999

Location: EPA Conference Room
712 Swift Blvd. Richland

TIME	MILESTONE	TITLE	RL DIVISION DIRECTOR	CONTRACTOR MANAGER	PRESENTER
9:30am	M-26-0l	LDR Annual Report	H. E. Bilson	J. D. Williams	E. M. Bowers
	M-19-00	Mixed Waste Treatment	H. E. Bilson	J. D. Williams	E. M. Bowers
	M-91-00	Acquisition of Facilities to TSD TRU/TRUM, LLMW and GTC3	H. E. Bilson	J. D. Williams	E. M. Bowers
10:30am	M-32-00	Waste Tanks/ Corrective Action (non TWRS milestones)	J. E. Rasmussen	S. M. Price	E. M. Bowers
11:00am	M-20-00	Part B and Closure Plans	J. E. Rasmussen	S. M. Price	E. M. Mattlin

THE SPENT NUCLEAR FUEL PRESENTATION (M-34-00) HAS BEEN DEFERRED TO THE JULY MILESTONE REVIEW BY AGREEMENT OF THE DOE, EPA AND ECOLOGY

ATTENDEES

TPA MILESTONE REVIEW

DATE: 6/22/99

NAME	ORGANIZATION	MAILSTOP	(√) FOR ATTACHMENTS
Ron Morrison	FDH TPAI	A1-15	✓
Doug Sherwood	EPA	B5-01	✓
Moses Jaraysi	Ecology	B5-18	✓
Mary Jarvis	DOE-TPA	K8-50	✓
Ann Sherwood	WMH - BNV SBPV	H6-26	✓
Dale Black	WMH - " "	H6-20	
Kent McDonald	WMH - Tech. Planning	H6-06	
Janice Williams	FDH	H6-06	
Laura Ruud	Ecology	B5-18	
Doug Huston	Oregon Office of Energy		
[illegible]	Ecology	B5-18	✓
Elizabeth Bowers	DOE-RL/WMD	S7-55	
Ron Skinnarland	Ecology	B5-18	
JON YERXA	DOE - TPA	A5-15	

ATTENDEES

TPA MILESTONE REVIEW

DATE: 6/22/99

NAME	ORGANIZATION	MAILSTOP	(√) FOR ATTACHMENTS
Cliff Clark	RL-EAP	A5-15	✓
Harold Tilden	PNNL-EMS	P7-79	
Pete Knollmeyer	DOE-RL	A5-11	
Sue Price	FDH-EP	H6-23	✓
Stan Sobczyk	Nez Perce ERWM		
ROB PIPPO	FDH TPA	K8-50	

LAND DISPOSAL RESTRICTIONS ANNUAL REPORT

M-26-01

WASTE PROGRAMS DIVISION
E. M. Bowers
June 22, 1999

Milestone Description

- M-26-01 Submit an annual Hanford Site LDR Report accordance with the LDR Plan to cover the period from April 1 through March 31.
- Deliverables Submit the "2000 Hanford Site Land Restrictions for Mixed Waste" to EPA and Ecology (M-26-01J).
- Schedule Report submitted annually by April 30.

RL Program Manager's Assessment of Contractor Performance

- Satisfactory performance, on schedule.

Accomplishments/Activities

- Completed 1999 report. Transmitted on April 15, 1999.

Milestone Assessment - schedule and technical

- RL believes milestone submittals have been complete and on schedule.
- Ecology letter dated May 11, 1999 stated that Ecology had reviewed the Report and "found it to be incomplete."
- RL & contractors have reviewed the May 11, 1999 letter and are evaluating a response.

Planned Actions

- See Ecology Notice of Correction Letter, below. RL is currently reviewing Ecology's letters; DOE plans to address issues raised and work with Ecology to determine the path forward for resolving the issues.

Non-TPA Regulatory Issues

- DOE does not believe that there are any non-TPA regulatory issues.
- Ecology issued letter dated June 3, 1999 alleging 4 regulatory violations.

Potential Impacts on TPA

- RL letter dated June 10, 1999 initiated TPA dispute on Ecology's June 3, 1999 letter.
- Ecology issued letter dated June 15, 1999 stating their opinion that the June 3, 1999 letter was not subject to TPA dispute.

Budget

Budget data is not available for FY 1999 because the budget for this report has been combined with several other environmental reports. The report is considered within the expected cost range with no unexpected costs to date. (Annual budget in the past has been around $100K).

Ecology Notice of Correction Letter

- Transmitted to RL on June 3, 1999. Received June 4, 1999.
- RL believes issues raised by Ecology belong under the TPA.

ATTACHMENT 1

M-19-00 & M-91-00

WASTE PROGRAMS DIVISION
E. M. Bowers
June 1999

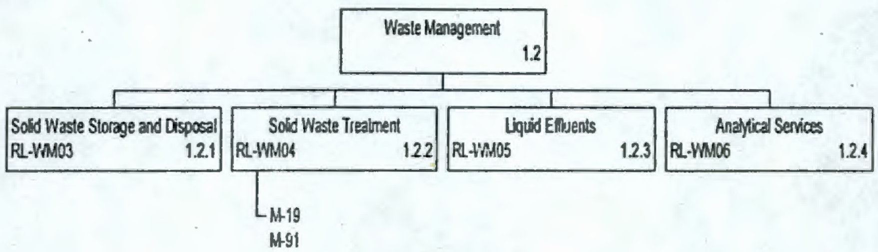
TPA MILESTONE REVIEW	WASTE MANAGEMENT FEDERAL SERVICES OF HANFORD, INC. SOLID WASTE TREATMENT	JUNE 1999

MILESTONE DESCRIPTION

TPA MILESTONE	DESCRIPTION
M-19-00	Complete treatment and/or direct disposal of at least 1,644 cubic meters of Contact Handled Low Level Mixed Waste already in storage as of October 1, 1995, as well as newly generated Hanford Site low level mixed waste. Cumulative treatment and/or direct disposal rates will be at least 246 cubic meters by the end of FY 2000, 822 cubic meters by the end of FY 2001, and 1,644 cubic meters by the end of FY 2002.
M-91-00	Complete the acquisition of new facilities, modification of existing facilities, and/or modification of planned facilities necessary for storage, treatment/processing, and disposal of all Hanford site TRU/TRUM, LLMW, and GTC3.

TPA MILESTONE REVIEW	WASTE MANAGEMENT FEDERAL SERVICES OF HANFORD, INC. SOLID WASTE TREATMENT	JUNE 1999

WORK BREAKDOWN STRUCTURE



TPA MILESTONE REVIEW	WASTE MANAGEMENT FEDERAL SERVICES OF HANFORD, INC. SOLID WASTE TREATMENT	JUNE 1999

MILESTONE SCHEDULE

WBS (ADS)	BASELINE DATE	FISCAL YEAR 1999 (OCT NOV DEC JAN FEB MAR APR MAY JUN JUL AUG SEP)	STATUS
1.2.2 (RL-WM04) Solid Waste Treatment	9/30/99	(M-19-01) Initiate treatment of CH-LLMW	Initial shipment to ATG staged and ready for shipment. Other treatment ongoing (see Scorecard and Planned Actions).
	12/31/98	(M-91-02) Initiate processing of CH-TRU/TRUM at WRAP 1	Milestone completed November 1998.
	6/30/99	(M-91-10) Submit Hanford Site LLMW and GTC 3 Waste PMP to Ecology	PMP submitted to RL May 20. DOE review is complete and comments are being incorporated.
MILESTONE TYPES:	M TPA MILESTONE; I TPA INTERIM	DOE-HQ; DOE-FO; FORECAST; DOE-RL	

TPA MILESTONE REVIEW	WASTE MANAGEMENT FEDERAL SERVICES OF HANFORD, INC. SOLID WASTE TREATMENT	JUNE 1999

MILESTONE SCHEDULE

WBS (ADS)	BASELINE DATE	FISCAL YEAR 2000	
		OCT | NOV | DEC | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP	
1.2.2 (RL-WM04) Solid Waste Treatment	6/30/00	(M-91-03) Submit Hanford Site TRU/TRUM PMP to Ecology	Not Funded in FY 2000.
	9/30/00	(M-91-04) Complete Construction of W-113. Initiate TRU Retrieval	Not Funded in FY 2000.
MILESTONE TYPES:	M TPA MILESTONE; I TPA INTERIM	DOE-HQ; DOE-FO; FORECAST; DOE-RL	

TPA0699 ppt 06/15/99

TPA MILESTONE REVIEW	WASTE MANAGEMENT FEDERAL SERVICES OF HANFORD, INC. SOLID WASTE TREATMENT	JUNE 1999

MILESTONE EXCEPTION REPORT

TPA MILESTONE	FUTURE MILESTONES IN JEOPARDY
M-91-03	"Submit Hanford Site TRU/TRUM Waste Project Management Plan" by June 2000.
M-91-04	"Complete construction of small container Contact Handled (CH) TRU/TRUM retrieval facility(s) and initiate (Project W-113) retrieval of small container TRU/TRUM from 200 Area burial grounds" by September 2000.
M-91-07	"Complete Project W-113 for Post 1970 CH TRU/TRUM retrieval" by September 2004.

TPA0699 ppt 06/15/99

TPA MILESTONE REVIEW	WASTE MANAGEMENT FEDERAL SERVICES OF HANFORD, INC. SOLID WASTE TREATMENT	JUNE 1999

M-19 ACCOMPLISHMENTS

WBS
1.2.2.3

M-19-01-T03
LOW LEVEL MIXED WASTE TREATMENT

The Thermal Treatment Environmental Assessment (EA) FONSI was signed May 6, 1999.

ATG received their RCRA/TSCA Permit June 2, 1999. The permit becomes effective July 7, 1999 after which construction can begin.

Eighteen (of about 37) lots of waste have been staged and are ready to ship for treatment at ATG.

TPA0699.ppt 06/15/99

TPA MILESTONE REVIEW	WASTE MANAGEMENT FEDERAL SERVICES OF HANFORD, INC. SOLID WASTE TREATMENT	JUNE 1999

M-19-00 SCORECARD

"Treat and/or directly dispose of at least 246 cubic meters of CH-LLMW by September 2000, 822 cubic meters by September 2001, and 1,644 by September 2002"	Quantity in cubic meters
M-19 Waste:	
– Macroencapsulation Pilot	183
– Long Length Equipment	95
– Backlog Soils Disposal	54
– B Plant Organic Liquid (TBP)	11
– Mixed Waste from PNNL	2
– Lead Decontamination Project	1
TOTAL M-19 WASTE	346

TPA0699.ppt 06/15/99

TPA MILESTONE REVIEW	WASTE MANAGEMENT FEDERAL SERVICES OF HANFORD, INC. SOLID WASTE TREATMENT	JUNE 1999

PLANNED ACTIONS

TPA MILESTONE SUPPORTED	DESCRIPTION	SCHEDULED COMPLETION DATE
M-19-00	Dispose of non-PCB Backlog Soils as LLW – approximately 25 cubic meters scheduled for 4th quarter of FY99.	9/30/99
M-19-00	Complete the demonstration of mixed waste incineration using the Waste Experimental Reduction Facility (WERF) at the INEEL. 96 drums (16 cubic meters) of MLLW have been shipped to WERF for incineration. The residues will be returned to Hanford for stabilization and disposal in the Mixed Waste Trench. (May not complete this year due to delays at WERF).	9/30/99
M-19-00 & M-19-01	Treat 560 cubic meters of mixed low-level waste using the non-thermal treatment contract with ATG. Treatment is currently scheduled to begin 4th quarter of FY99.	9/30/99

TPA0699.ppt 06/15/99

TPA MILESTONE REVIEW	WASTE MANAGEMENT FEDERAL SERVICES OF HANFORD, INC. SOLID WASTE TREATMENT	JUNE 1999

PLANNED ACTIONS (continued)

TPA MILESTONE SUPPORTED	DESCRIPTION	SCHEDULED COMPLETION DATE
M-91-04	Pursue more cost-effective alternatives for TRU container retrieval based upon similar projects at Savannah River and Los Alamos.	9/30/00
M-91-04 and M-91-07	Renegotiate milestones to include processing rate.	7/30/99
M-91-10	Complete and Submit the Hanford Site LLMW and GTC3 Project Management Plan.	6/30/99
M-91-03	Prepare the Hanford Site TRU/TRUM Waste Project Management Plan.	6/30/00

TPA0699.ppt 06/15/99

TPA MILESTONE REVIEW	WASTE MANAGEMENT FEDERAL SERVICES OF HANFORD, INC. SOLID WASTE TREATMENT	JUNE 1999

EXPENSE COST PERFORMANCE
($ in Millions)

WBS	FY 1999 TO DATE (May)					AT COMPLETION					COMMENTS
	BUDGETED COST		ACTUAL CST	VARIANCE		BAC	EAC	FYSF	EXPECTED FUNDS FY 99	PROJECTED CARRYOVER WORKSCOPE	
	WORK SCHED	WORK PERF	WORK PERF	SCHED	COST	BCWS					
1.2.2.3 M-19 AND M-91 TREATMENT	1.8	0.4	0.4	1.4	0.0	3.7	6.5	3.0	6.1	3.55	Carryover: $3.1 M - T for C $0.45 M TRU Retr.

TPA0699 ppt 06/15/99

TPA MILESTONE REVIEW	WASTE MANAGEMENT FEDERAL SERVICES OF HANFORD, INC. SOLID WASTE TREATMENT	JUNE 1999

EXPENSE COST VARIANCE ANALYSIS

WBS	COST VARIANCE $18K	
	(Description and Cause:)	(Impacts and Corrective Action:)
1.2.2.3	- The cost variance is within established thresholds.	No impacts.

TPA0699 ppt 06/15/99

TPA MILESTONE REVIEW	WASTE MANAGEMENT FEDERAL SERVICES OF HANFORD, INC. SOLID WASTE TREATMENT	JUNE 1999

EXPENSE SCHEDULE VARIANCE ANALYSIS

WBS	SCHEDULE VARIANCE $(1,400K)	
	(Description and Cause:)	(Impacts and Corrective Action:)
1.2.2.3	The schedule variance is due to a combination of the following: • Treatment of waste at ATG has not yet begun. • TRU Retrieval activities have been progressing slowly due to a need to develop a less costly, more efficient plan.	• Determine recovery plan with ATG. Consider other contingencies. • Plan being developed. • Dialogue needed with Ecology to renegotiate milestone.

TPA0699.ppt 06/15/99

TPA MILESTONE REVIEW	WASTE MANAGEMENT FEDERAL SERVICES OF HANFORD, INC. SOLID WASTE TREATMENT	JUNE 1999

M-19 ISSUES

TPA MILESTONE	DATE IDENT	ISSUE	IMPACT	STATUS
M-19-00 & M-19-01	8/98	Issuance of ATG's final draft permit to public review by Ecology and EPA is almost two months behind schedule.	The current implementation schedule for non-thermal treatment of 560 cubic meters using the contract with ATG is extremely tight.	M-19-01 treatment has been initiated (as evidenced by the Scorecard). ATG permit was issued June 2, 1999, to be effective July 7, 1999. A recovery schedule is due from ATG June 23, 1999.
M-19-01-T03	3/99	Although milestone was completed with FONSI signed on September 29, 1998, no formal closeout letter was issued.	No impact	A formal closeout letter is being prepared and should be issued by 9/30/99.

TPA0699.ppt 06/15/99

TPA MILESTONE REVIEW	WASTE MANAGEMENT FEDERAL SERVICES OF HANFORD, INC. SOLID WASTE TREATMENT	JUNE 1999

M-91 ISSUES

TPA MILESTONE	DATE IDENT	ISSUE	IMPACT	STATUS
M-91-04 & M-91-07	6/99	Milestones cannot be accomplished as written due to funding limitations.	Replacement milestones will need to be renegotiated.	Proposed language for replacement milestones was developed 5/25/99.

Interim Status Dangerous Waste Tank Systems Hanford Federal Facility Agreement and Consent Order Milestone M-32-00

June 22, 1999

ATTACHMENT 3

Milestone Description

"Complete Identified Dangerous Waste Tank Corrective Actions" - September 1999

M-32-00 establishes Tri-Party Agreement compliance schedules for correcting known compliance deficiencies in certain Hanford interim status dangerous waste tank systems while allowing the continued operation of those tank systems.

Milestone Assessment

- **Milestones due but not complete (next six months)**

M-32-02 Complete 219-S Tank Interim Status Actions June 1999

M-32-02-T03 Complete construction upgrades to 219-S Facility (Project W-178).

(TPA change request approved to reflect schedule impacts of 1998 PCB issues)

M-32-03 Complete T Plant Tank Actions Sept 1999

M-32-03-T06 Complete scheduled upgrades to T Plant tank system (Project W-259).

- **Milestones in jeopardy (beyond six months)**

None

Budget/Cost Status

- Project W-178 (tank system upgrades):

  - Budgeted to date $5.5M
  - Cost to date $5.4M
  - Estimate at completion $5.5M

Issues - None

<u>Significant Planned Activities</u> (next six months)

- Commence facility operational readiness startup review.
- Submit TPA Change Control Form M-32-99-03 clarifying Project W-259 rescope.
- Submit TPA Interim Milestone M-32-03 completion notification to Ecology. Closeout project.

PERMITS AND CLOSURE PLANS

C. E. Clark

Environmental Assurance, Permits and Policy Division
U.S. Department of Energy,
Richland Operations Office

June 22, 1999

ATTACHMENT 4

ACCOMPLISHMENTS
(last 3 months)

- Closure Plans
  - Submitted the 300 Area Waste Acid Treatment System Closure Plan for inclusion in Modification E of the Hanford Facility RCRA Permit
- Part A
  - Submitted a revised Part A permit application, Form 3, for the PUREX Plant (Revision 9)

ACCOMPLISHMENTS
(last 3 months)

- Part A (cont'd)
  - Transferred co-operator responsibilities for the PUREX Plant from FDH to BHI
  - Submitted Page 1 of the Part A permit application, Form 3s, stamped "closed" completing procedural closure for the following units:
    - 221-T Containment Systems Test Facility
    - 2727-WA SRE Sodium Storage Building

ACCOMPLISHMENTS
(last 3 months)

- Part B
  - Submitted 616 Nonradioactive Dangerous Waste Storage Facility Part B Chapter 11 (Closure Plan) to Ecology for inclusion in Modification E of the Hanford Facility RCRA Permit
- Form 2
  - Submitted a Notification of Dangerous Waste Activities, Form 2, to address continued DOE/RL waste management activities at the property formerly referred to as the 1100 Area. Ownership of this property was transferred to the Port of Benton on 9/30/98.

ACCOMPLISHMENTS
(last 3 months)

- Hanford Facility RCRA Permit
  - Ecology issued Revision 5 of the Hanford Facility RCRA Permit (5/18/99)
  - Revision 5 of the Hanford Facility RCRA Permit became effective (6/17/99)
  - Quarterly Class 1 modification packages submitted to Ecology in accordance with Permit Condition I.C.3 (4/8/99)

ACCOMPLISHMENTS
(last 3 months)

- Hanford Facility RCRA Permit (cont'd)
  - Submitted Modification E documentation (616 Part B update package and 300 Area Waste Acid Treatment System Closure Plan) to Ecology (6/1/99)

PLANNED ACTION
(next 6 months)

- Closure Plans
  - Submit the 600 Area Purgewater Storage and Treatment Facility Closure Plan to Ecology
  - Submit the 2401-W Waste Storage Building Closure Plan to Ecology
  - Designate the 224-T TRUSAF as a Key Facility and remove closure from Mod. E. Schedule
    - Agreement-in-principle slated for approval today

PLANNED ACTION(next 6 months)

- Closure Plans (cont'd)
  - Continue closure activities and/or discussions associated with the following units:
    - 616 Nonradioactive Dangerous Waste Storage Facility
    - 2401-W Storage Building (partial closure of CWC)
    - 224-T TRUSAF
    - 221-T T Plant Canyon Tank System
    - 303-K Storage Facility
  - Establish closure strategy for the 1706-KE Waste Treatment System

PLANNED ACTION (next 6 months)

- Part A
  - Submit revised/new Hanford Facility Dangerous Waste part A Permit Application, Form 3s, for the following units:
    - IHLW Interim Storage Facility, Revision 0
    - WRAP Facility, Revision 3
    - CWC Revision 6
    - B Plant Complex, Revision 7
    - 216-B-63 Trench, Revision 4
    - LLBG, Revision 12
    - T Plant Complex, Revision 8
    - 222-S Laboratory Complex, Revision 8

PLANNED ACTION (next 6 months)

- Part A (cont'd)
  - Transfer co-operator responsibilities from FDH to BHI for the following units:
    - 216-B-63 Trench
    - B Plant
  - Resolve issues associated with submittal of the following Part A Permit Application, Form 3s:
    - Purex Plant, Revision 9
    - Waste Encapsulation and Storage Facility, Revision 0

PLANNED ACTION(next 6 months)

- Part B
  - Submit part B Permit Application update packages to Ecology (7/1/99) for inclusion in Modification E of the Hanford Facility RCRA Permit for the following units:
    - CWC
    - Waste Receiving and Processing Facility
  - Continue efforts associated with finalization of the following Part B Permit Applications for inclusion in Modification F of the Hanford Facility RCRA Permit:
    - DST System
    - 222-S Laboratory Complex

PLANNED ACTION (next 6 months)

- Part B (cont'd)
  - Begin preparation of Class 3 modification of 325 HWTUs Permit Application/permit conditions as specified in Permit Condition III.6.B.b.

PLANNED ACTION (next 6 months)

- Form 2
  - Submit a revised Hanford Facility Notification of Dangerous Waste Activities, Form 2, to address transfer of the property formerly referred to as the 1100 Area to the Port of Benton
- Interim Status Requirements
  - Begin discussions on implementation of interim status requirements at WESF

PLANNED ACTION (next 6 months)

- Hanford Facility RCRA Permit
  - Submit Quarterly Class 1 Modification packages to Ecology in accordance with permit Condition I.C.3 (7/9/99, 10/8/99)
  - Remaining Modification E documentation (CWC and WRAP Part B update packages) to be submitted to Ecology (7/1/99)
  - Finalize Permit Modification Schedule (Attachment 27) through the year 2004
  - Discuss submittal of currently identified Part B permit applications and closure plans by the year 2004

PLANNED ACTION(next 6 months)

- Hanford Facility RCRA Permit (cont'd)
  - Public comment period (45 days) begins for revision 6 of the Hanford Facility RCRA Permit (8/12/99)
  - Public comment period ends (9/27/99)
  - Ecology issues final modification decision and responsiveness summary for Revision 6 of the Hanford Facility RCRA Permit (10/27/99)

PLANNED ACTION(next 6 months)

- Hanford Facility RCRA Permit (cont'd)
  - Complete Annual 300 Area Inspection (7/99)
  - Complete Annual 200 East Area Inspection (7/99)
  - Complete Annual Low River Inspection (9/99)

- ISSUES
  - Closure requirements for the 303-K Storage Facility

Hanford Federal Facility Agreement and Consent Order
IAMIT Milestone Review Form
(For Milestones Without Issues or Significant Activity)

ATTACHMENT 5

M-26-05 ~~D~~ F Summary

Date: 3/15/99

1. Significant Activities Last Three Months

As requested by Waste Management Federal Services of Hanford, Inc. a task plan for the preparation of a 1999 status report on the evaluation of technologies for the removal and mitigation of tritium in Hanford Site wastewaters was prepared by COGEMA Engineering Corporation. A copy of the task plan is attached. COGEMA Engineering is currently conducting a literature review, consulting with national and international experts on tritium technologies, and preparing a summary update report.

New developments in tritium containment and separation concepts identified to date include: 1) a groundwater pump and recycle operation implemented at Brookhaven National Laboratory in 1997, 2) a ground freezing demonstration at Oak Ridge National Laboratory implemented in 1997, 3) improvements in the combined electrolysis catalytic exchange process, 4) a bithermal - hydrogen exchange process using a wetproof catalyst, and 4) an ion exchange process recently developed and being demonstrated for effective tritium removal from water.

2. Budget Status (within budget or explain variance)

Tritium evaluation study is within budget.

3. Issues

There are no significant issues associated with the tritium technology evaluation.

4. Non-TPA Regulatory Issues with Potential Impact to TPA Milestone

None.

5. Significant Activities Planned Next Three Months

A baseline schedule is contained in the attached task description.

Note: Approved form to be submitted to IAMIT members 7 days prior to scheduled Milestone Review.

E M Bowers
RL Project Manager

Douglas R. Sherwood
Ecology/EPA Project Manager

Attachment 1

COGEMA ENGINEERING CORPORATION
TASK PLAN

OBJECTIVES:

Conduct a review and prepare a biennial summary update report on the evaluation of tritium removal and mitigation technologies for treatment of Hanford Site wastewaters. This report is required for the Department of Energy (DOE) Hanford site and is in support of the Tri-Party Agreement Milestone M-26-05F (Evaluation of Treatment Technology). The review includes a literature search and collaboration with national and international experts in the field of tritium separation and its removal from wastewaters.

BACKGROUND:

Tritium has been generated as a by-product in reactor fuel at the Hanford Site by the U. S. defense program nuclear reactor operations from 1944 to 1989. The bulk of this tritium was released to the ground from the fuel separations facilities on the 200 Area plateau in the form of tritiated water in process condensates. Tritium releases to the ground have greatly decreased since the last fuel was processed through the fuel separations plant in 1989. Tritium in these liquid effluents has migrated in the groundwater toward the Columbia River. Tritium decays at a 12.3 year half-life and it is estimated that the tritium inventory from processed fuel has decayed to about 2.0 x 10^5 curies at the present time.

Significant tritium inventories exist in Hanford Site facilities, such as the underground storage tanks and the KE, KW, and N fuel storage basins. Since 1995 a state-approved land disposal site (SALDS) receives condensates from the Hanford Site Effluent Treatment Facility (ETF), which is free of all contaminants except tritium. The tritium comes from processing wastes from single-shell and double-shell underground storage tanks and other miscellaneous wastes. Wastewaters from KE, KW, and N fuel storage basins are expected to be processed through the ETF with their tritium contents being discharged to SALDS.

SALDS is the prescribed location because it has been determined by groundwater sample results evaluation and groundwater flow modeling to allow sufficient decay of the tritium prior to migration to the Columbia River. A minimum 80-year decay time is expected prior to migration to the river.

Tritium separation and isolation technologies to control Hanford Site liquid effluents and groundwaters to meet the Code of Federal Regulations (CFR), 40 CFR 141.14 drinking water maximum contaminant level MCL of 20,000 pCi/L (~2 ppQD) and/or DOE Order 5400.5 as low as reasonably achievable (ALARA) are reviewed on a biennial basis to support evaluations of implementation feasibility. Status of technology reviews have been documented in reports DOE/RL-95-68 and DOE/RL-97-54, Rev. 0.

PROPOSED DOCUMENT OUTLINE:

TITLE: 1999 EVALUATION OF TRITIUM REMOVAL AND MITIGATION TECHNOLOGIES FOR HANFORD SITE WASTEWATERS

ABSTRACT

1.0 INTRODUCTION

2.0 REMOVAL AND MITIGATION TECHNOLOGIES FOR TRITIUM IN WASTEWATERS

- 2.1 Group One Removal Technologies
  - 2.1.1 Water Distillation
  - 2.1.2 Hydrogen Isotope Distillation
  - 2.1.3 Water Electrolysis

TASK CRITERIA:

Identify and describe any new technologies or improvements of previously reported technologies for removal or mitigation of tritium in wastewaters. The baseline report is the *1997 Evaluation of Tritium Removal and Mitigation Technologies for Hanford Site Wastewaters* , DOE/RL-97-54 Rev. 0.

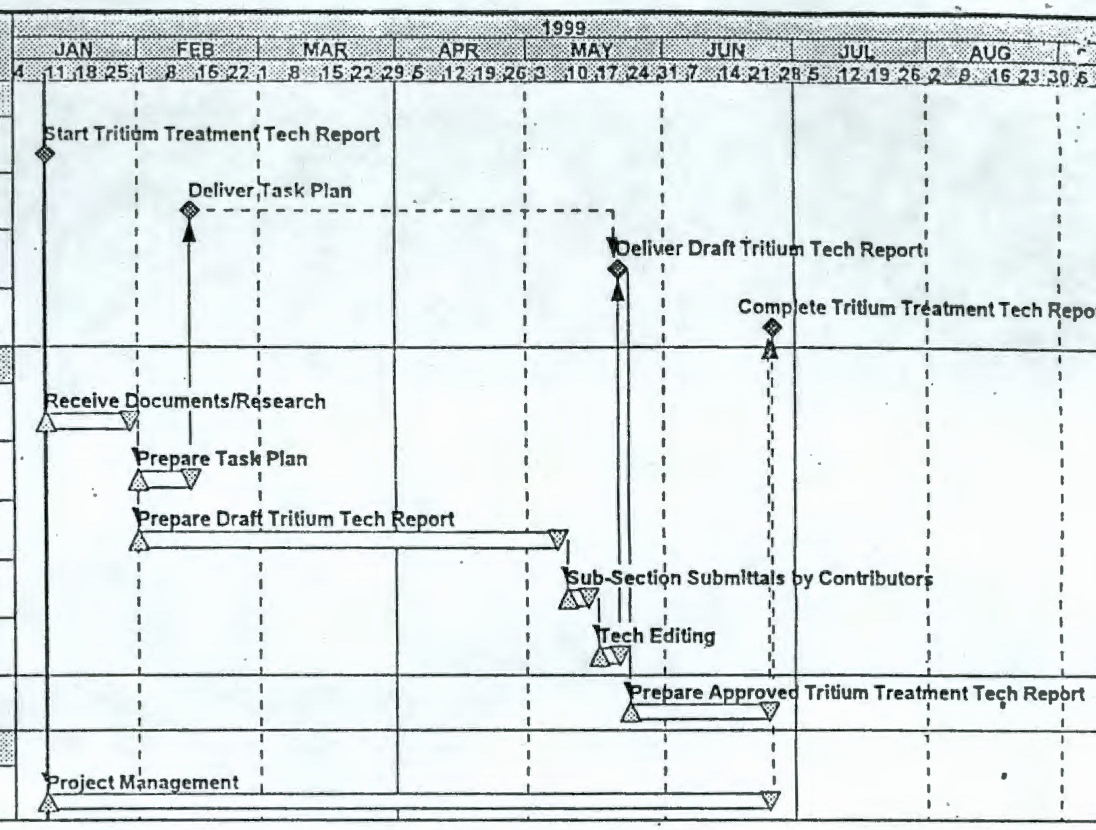
PRELIMINARY TREATMENT ALTERNATIVES IDENTIFIED FOR INCLUSION:

The treatment methods listed below are anticipated (based upon literature search information to date) to be updated for the 1999 report based upon additional information that became available in the last two years. Additional processes may be identified as the search continues and as additional contacts are made with national and international experts in technologies for removal of tritium from wastewaters.

Water Distillation
Cryogenic Distillation
Thermal Diffusion
Combined Electrolysis Catalytic Exchange
Water Electrolysis
Laser-Induced Tritium Separation
Polyamide Exchange

Attachment 2

Activity ID	Activity Description	Orig Dur	Early Start	Early Finish
0.0 Milestones				
0000	Start Tritium Treatment Tech Report	0	11JAN99	
0020	Deliver Task Plan	0		12FEB99
9000	Deliver Draft Tritium Tech Report	0		21MAY99
9999	Complete Tritium Treatment Tech Report	0		25JUN99*
1.0 Engineering				
0005	Receive Documents/Research	15	11JAN99	29JAN99
0010	Prepare Task Plan	10	01FEB99	12FEB99
0100	Prepare Draft Tritium Tech Report	69	01FEB99	07MAY99
0110	Sub-Section Submittals by Contributors	5	10MAY99	14MAY99
0120	Tech Editing	5	17MAY99	21MAY99
0200	Prepare Approved Tritium Treatment Tech	23	24MAY99	24JUN99
4.0 Project Management				
1000	Project Management	117	11JAN99	24JUN99



Project Start	11JAN99
Project Finish	25JUN99
Data Date	11JAN99
Run Date	11FEB99

Early Bar
Progress Bar
Critical Activity

TTTR

Sheet 1 of 1

COGEMA Engineering
Eval Technology for Tritium Removal
Baseline Schedule

Date	Revision	Checked	Approved