

Meeting Minutes Transmittal/Approval
Tri-Party Agreement Milestone Review Meeting
 EPA Conference Room
 Richland, Washington
 July 21, 1993

From/ Appvl.: *SHW* Date: 8/19/93
 Steven H. Wisness, RL (A5-19)
 Hanford Project Manager

Appvl.: *Doug Sherwood* Date: 8/19/93
 Doug Sherwood, EPA (B5-01)
 Acting Project Manager

Appvl.: *Roger Stanley* Date: 8/19/93
 Roger Stanley, Ecology
 Hanford Project Manager

Prepared by Appvl.: *Frank T. Calapristi* Date: Aug 19, 1993
 Frank T. Calapristi
 Westinghouse Hanford Company

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Nylander, D	ECO	Kenn.*	Wisness, SH	RL	A5-15
Patterson, JK	WHC	H6-27	EDMC	WHC	H6-08*

* Did not attend



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**Tri-Party Agreement Milestone Review
Meeting Minutes Transmittal/Approval
July 21, 1993 (sheet 2 of 3)**

1. M-17-00, Treatment Facilities Upgrades

The presentation was made by D. Bryson of DOE (Attachment 1).

Under the 300 Area "Accomplishments" discussion, EPA questioned DOE about the July 1, 1993 Bob Cook letter to John Wagoner (Attachment 2), regarding the L-045 and C-018 projects. EPA stated the concerns that must be addressed are the start of construction on a potential archeological site (L-045) and the discharge of tritiated waste water from the C-018H facility. DOE reported both of these concerns present a potential impact to the project construction schedules. DOE is preparing a response to the Bob Cook letter.

Under the "Issues" discussion, DOE restated their concern that they are preceding "at risk" with the 200 Area Effluent Treatment Facility construction. Ecology reported they are preparing a response to the June 3 DOE letter, and it should be issued by July 30, 1993.

Other potential impacts to schedules were also identified by DOE:

- Inability to hire experienced operations people to meet the aggressive operations schedules (M-17-14 and M-17-14D)
- The 200 Area BAT/AKART Implementation project was approved by DOE-HQ; however, congressional notification has not occurred, which is required prior to proceeding with the project. Potential TPA milestone impacts include M-17-00A, M-17-08B, M-17-17, M-17-19, M-17-38, M-17-41, M-17-42 and M-17-43. To minimize any schedule impacts, DOE is reviewing work-around alternatives. However, if impacts materialize, DOE will provide notification to the regulators or issue a change request.
- The SEPA permit application must be approved by Ecology before the disposal contract is signed in September, 1993. Otherwise DOE must decide to process "at risk" or delay the contract award.

2. M-26-03/04, LERF

LERF was discussed and DOE reported both milestones were on schedule.

There were no issues or action items identified.

3. Past Practice Milestones (M-12, 13, 15, 16, 27, 28, 29, 30)

The presentation was made by J. Erickson (Attachment 3).

M-12-00: DOE noted the 100-NR-1 and 100-NR-2 schedules are currently in dispute resolution and will continue to cause an underrun of resources until the dispute is resolved.

M-27-00: DOE reported all 10 Aggregate Area Management Study reports will be transmitted to the regulators. This completes all follow-on activity to the completed M-27-00 milestone.

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Tri-Party Agreement Milestone Review
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M-28-00": Under "Planned Actions," EPA questioned DOE's plan to compile additional data to develop a soil and groundwater background report. Specifically, there is a difference of opinion between EPA and DOE on the technical approach requirements for background determination. DOE and EPA will hold additional meetings to resolve the question. EPA will also issue a letter to DOE within a few days defining the regulatory approach to background determination.

M-15-00: Under "Planned Actions," EPA stated a reduction in the eighth round of the 200-BP-1 groundwater sampling may be feasible. The DOE and EPA Unit managers will meet to redefine the groundwater sampling requirements.

M-16-00: Under "Accomplishments," DOE reported they submitted a draft of the North Slope ERA proposal but also suggested a re-evaluation of the alternatives.

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AGENDA

TRI-PARTY AGREEMENT MAJOR MILESTONE MANAGEMENT REVIEW

WEDNESDAY, JULY 21, 1993

EPA CONFERENCE ROOM
MEDICAL/DENTAL CENTER

<u>TIME</u>	<u>MILESTONE</u>	<u>TITLE</u>	<u>RL DIVISION DIRECTOR</u>	<u>LEVEL 2/3 MANAGER</u>	<u>PRESENTER</u>
9:00 am	M-17-00	Treatment Facilities/ Upgrades	J. M. Hennig	D. E. Kelley	D. C. Bryson
	M-26-03	Cease 242-A discharges to LERF	J. M. Hennig	D. E. Kelley	D. C. Bryson
	M-26-04	Remove Residues / 242-A LERF	J. M. Hennig	D. E. Kelley	D. C. Bryson
10:00 am	BREAK				
10:15 am	M-12-00*	Work Plans / 15 Operable Units	R. D. Freeberg	R. D. Wojtasek	J. K. Erickson
	M-13-00	Six (6) RI/FS Work Plans/Year	R. D. Freeberg	R. D. Wojtasek	J. K. Erickson
	M-27-00*	200 Area AAMSR to EPA/Ecology	R. D. Freeberg	R. D. Wojtasek	J. K. Erickson
	M-28-00*	Soil/Groundwater Documents	R. D. Freeberg	R. D. Wojtasek	J. K. Erickson
	M-29-00*	Risk Assessment Methodology	R. D. Freeberg	R. D. Wojtasek	J. K. Erickson
	M-30-00	100 Area General Investigation	R. D. Freeberg	R. D. Wojtasek	J. K. Erickson
	M-15-00	RI/FS Process Completion	R. D. Freeberg	R. D. Wojtasek	J. K. Erickson
	M-16-00	Complete Remedial Actions	R. D. Freeberg	R. D. Wojtasek	J. K. Erickson
11:00 am	ADJOURN				

* Completed Milestones with on-going activity

ATTENDEES

TPA MILESTONE MANAGEMENT REVIEW

JULY 21, 1993

EPA CONFERENCE ROOM
MEDICAL DENTAL CENTER

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<u>NAME</u>	<u>ORGANIZATION</u>	<u>MAILSTOP</u>
<u>F. T. CALAPRISTI</u>	<u>WHC/TPA</u>	<u>B2-35</u>
<u>D. E. KELLEY</u>	<u>WNC/PROG</u>	<u>R3-46</u>
<u>J. Bornerman</u>	<u>WHC/TPA</u>	<u>B2-35</u>
<u>[Faded Name]</u>	<u>[Faded]</u>	<u>[Faded]</u>
<u>[Faded Name]</u>	<u>DOE-RL</u>	<u>[Faded]</u>
<u>Steve Wisness</u>	<u>DOE-RL</u>	<u>A5-15</u>
<u>Jim Rasmussen</u>	<u>DOE-RL</u>	<u>A5-15</u>
<u>K. Michael Thompson</u>	<u>DOE-RL</u>	<u>A5-19</u>
<u>Doug Sherman</u>	<u>EPA</u>	<u>B5-C1</u>
<u>BECKY AUSTIN</u>	<u>WHC/TPA</u>	<u>B2-35</u>
<u>[Faded Name]</u>	<u>[Faded]</u>	<u>[Faded]</u>
<u>[Faded Name]</u>	<u>WHC/TPA</u>	<u>[Faded]</u>
<u>Jim Patterson</u>	<u>WHC/ER Program Office</u>	<u>H6-27</u>
<u>G. THOMAS TEBB</u>	<u>Ecology</u>	<u>7601 W. Clamawater Klamath Falls, OR</u>

**Complete Liquid Effluent Treatment
Facilities/Upgrades
For All Phase I & Phase II Streams**

Milestone M-17-00

D. C. Bryson

Liquid Effluent Programs

July 21, 1993

Milestone Description

- o M-17-00A** **Complete liquid effluent treatment facilities/upgrades for all Phase I effluent streams. Interim milestones for Phase I streams include the development and implementation of:**

 - o An impact assessment methodology**
 - o Sampling and analysis plans**
 - o Treatment system design & construction commitments**
 - o Interim flow restrictions and dates for ceasing discharges.**

- o Deliverable(s)** **Deliverables include the completion and submittal of sampling and analysis plans to the EPA and Ecology for approval. Also, interim operation restrictions, in particular flow restrictions and flow measurement, are included for priority effluent streams. Implementation of treatment facilities/upgrades for Phase I effluent streams is the ultimate deliverable.**

- o Baseline Schedule** **Complete treatment facilities/upgrades for Phase I Effluent Streams by June 1995.**

Milestone Description

- o M-17-00B** **Complete implementation of BAT/AKART for all Phase II Liquid Effluent Streams. Interim milestones for Phase II streams include the development and implementation of:**

 - o An impact assessment methodology**
 - o Sampling and analysis plans**
 - o BAT/AKART analysis**
 - o Interim flow restrictions and dates for ceasing discharge**

- o Deliverable(s)** **Deliverables include the completion and submittal of sampling and analysis plans to the EPA and Ecology for approval. Also, interim operating restrictions, applied to some Phase II Effluent Streams. BAT/AKART analysis are scheduled for completion and submittal to the EPA and Ecology for approval, with ultimate implementation of the recommended treatment technologies.**

- o Baseline Schedule** **Implement BAT/AKART for all Phase II Streams by 10/97.**

Accomplishments (last three months)

- M17 interim milestones completed ahead of schedule

<u>Interim Milestone</u>	<u>Description</u>	<u>Due Date</u>
M-17-09A	Complete definitive design of 300 Area Treated Effluent Disposal Facility (Project L-045H) and submit design documentation to the EPA and Ecology as a primary document	7/31/93 Completed 3/19/93

Accomplishments (last three months cont'd)

- **200 Area Liquid Effluent Treatment & Disposal Facility (Project C-018H) on schedule:**
 - **Construction continues on the facility.**
 - **Submitted 80% design on the disposal system to regulators.**
 - **Submitted 80% design on the disposal system to EPA-HQ in support of the delisting petition.**

- **300 Area Treated Effluent Disposal Facility (Project L-045) on schedule:**
 - **Facility construction contract awarded and construction underway with a 360 day construction window. Ground breaking ceremony held on June 24, 1993.**
 - **Shoreline Permit Application approved by Benton County.**
 - **State Environmental Protection Act checklist approved by Ecology.**
 - **Hydraulic Projects Permit approved by Washington State Fisheries Department.**

Accomplishments (last three months cont'd)

- **300 Area Treated Effluent Disposal Facility (Project L-045) on schedule: (cont'd)**
 - **Wild & Scenic Rivers Act documentation completed with National Park Service.**

- **Phase II Treated Effluent Disposal Facility (Project W-252) on schedule:**
 - **Conceptual Design Report approved by RL on June 24, 1993.**
 - **The project Validation Review was held on May 4, 1993, and the Validation Report indicating the project was validated and issued on May 20, 1993.**
 - **The WHC/RL response to the Ecology Notice of Deficiency (NOD) on the 240 Engineering Report was submitted to Ecology on May 27, 1993.**

Accomplishments (last three months - cont'd)

- **200 Area Treated Effluent Disposal System (TEDF) (Project W-049H) on schedule:**
 - **Bids were received for the 200 Area TEDF Collection System Construction contract on April 8, 1993. The contract was awarded to Apollo Sheet Metal on May 20, 1993.**
 - **Collection System construction, utilizing KEH Construction Forces (CF), was initiated on April 15, 1993, and the No. 1 pump station sump. Both of the sumps for the two pump stations and 16 pipe sleeve installations for the Collection System piping road and railroad crossings were completed by KEH CF by June 22, 1993.**
 - **Resolved Ecology comments on the Collection System eighty percent design report.**
 - **The WHC/RL responses to the Ecology comments on the Disposal Site thirty percent design report were submitted to Ecology on June 1, 1993.**
 - **The Disposal System eighty percent design report was submitted to EPA and Ecology by RL on May 25, 1993.**

Accomplishments (last three months - cont'd)

- **An Engineering Change Notice for changes to improve the post Best Available Technology/All Known and Reasonable Treatment (BAT/AKART) water quality and to reduce the post BAT/AKART water quantity to be discharged to the 200 Area TEDF was transmitted to Ecology in early July 1993.**
- **200 Area Best Available Technology/All Known and Reasonable Treatment Implementation (Project W-291H)**
 - **Performed Advanced Conceptual Design work to maintain progress while awaiting authorization of capital funding.**
 - **Project validated as a Hanford Environmental Compliance (HEC) Line Item FY93 Subproject and as an FY95 Line Item in May 1993.**
 - **Obtained approval of the project to be a HEC Line Item FY93 Subproject on June 21, 1993.**

Accomplishments (last three months - cont'd)

- **Interim Compliance**
 - **Completed and submitted the Groundwater Impact Assessment for the U-17 Crib on June 30, 1993.**
 - **Prepared and submitted the Groundwater Impact Assessment Plan for the S-26 Crib on June 30, 1993.**
 - **Collected nine sets of effluent characterization samples including all required samples for the UO3 facility. This completes UO3 sampling.**

- **Miscellaneous Streams**
 - **An inventory questionnaire was developed and presented to all effluent stream owners that could be identified. As of June 30, 1993, all questionnaires had been returned except one. 308 streams have been identified thus far.**

Planned Actions (next six months)

- **7/93 Initiate T Plant, UO3/U Plant, 284-W Power Plant and 2101-M Laboratory waste streams BAT/AKART definitive design (W-291)**
- **7/93 Complete the 200 Area TEDF disposal system definitive design.**
- **8/93 Submit 200 Area ETF (C-018H) 216 Permit Application for wastewater disposal.**
- **8/93 Submit 200 Area ETF (C-018H) 240 Engineering Report Addendum for the site characterization work plan.**
- **8/93 Submit 200 Area ETF (C-018H) RCRA Part B Permit Application (M-20-50).**
- **8/93 Submit 200 Area ETF (C-018H) final documentation for the Delisting Petition.**
- **8/93 Begin negotiations with the City of Richland for pursuing treatment of 300 Area Process Sewers at the Richland Publicly Owned Treatment Works.**
- **9/93 Issue the 200 Area Effluent Treatment Facility (C-018H) Disposal System contract.**

Planned Actions (next six months cont'd)

- **10/93 Complete 200 Area TEDF (W-049H) disposal site characterization report.**
- **11/93 Submit the 200 Area TEDF (W-049H) disposal site characterization report to Ecology.**
- **12/93 Complete and submit to Ecology the 216 Permit Applications for interim discharge of the Phase II Streams to 100-D Pond and to B Pond.**

Milestone Assessment

- **Schedule**
 - **Milestones on schedule - See Issues**

Milestone Assessment (cont'd)

- Budget vs. Cost (\$ in Millions)

Cumulative	April	May	June	July	Aug	Sept
FYTD Budget	27.5	34.7	41.3	48.2	55.9	65.3
FYTD Cost	25.3	30.1	35.0			
Spending Variance	2.2	4.7	6.3			

Variance Explanation: Cost underruns are the result of (1) treatability testing at C-018H deferred to FY94 due to availability of feed from LERF; (2) changes in elevations and foundations caused problems with design and fabrication of rebar for C-018H construction project resulting in return of rebar to manufacturer; (3) field engineering started behind schedule for C-018H construction; in addition, field engineering, travel and contract management costs less than anticipated; (4) procedures and training behind schedule in L-045H; steps are being taken to recover in FY 1993;

Schedule impacts due to delay in expenditure of funds are being evaluated on an ongoing basis. Presently feel that schedule delays can be made up.

Issues

- Ecology and EPA outlined the terms and conditions under which they would approve continued discharge of the 300 Area Process Sewer to the 300 Area Process Trenches. RL has prepared a TPA change request and is undergoing negotiations to formalize the agreements.
- The 200 Area Effluent Treatment Facility construction is proceeding at risk until Ecology develops the discharge criteria, and point of compliance, approves the BAT/AKART document and approves the Toxic Air Pollutants permit. A letter requesting resolution was sent to Ecology on June 3, 1993.
- The 200 Area BAT/AKART Implementation project was approved by DOE-HQ June 21, 1993. However, congressional approval has not been received to proceed with project.
 - Potentially impacts TPA Milestones M-17-00A, M-17-08B, M-17-17, M-17-19, M-17-38, M-17-41, M-17-42, and M-17-43.
 - Actual impact depends on final approval date. Design Team is being held together to minimize schedule impacts.

Issues - (con't)

- **The inability to hire experienced operations people and the contractors ability to maintain the aggressive construction schedule are starting to impact the 200 Area Effluent Treatment schedule. Various work around plans are being looked at, but TPA Milestones M-17-14 and M-17-14D are now at risk.**
- **SEPA must be in place before the disposal contract is signed in September 1993. The SEPA permit application was forwarded to Ecology on February 8, 1993. A letter was issued March 26, 1993, stating that SEPA determination was required by June 30, 1993, to assure that construction contracts could be issued on schedule.**

Land Disposal Restrictions

- | | | |
|----------------|---|--------------------|
| M-26-03 | Cease discharge of 242-A Evaporator process condensate effluent to LERF units by December 1994 | On Schedule |
| M-26-04 | Remove all hazardous waste residues from the 242-A Evaporator LERF units by June 1995 | On Schedule |



Confederated Tribes and Bands
of the Yakima Indian Nation

discuss w/ Doug

Established by the
Treaty of June 9, 1855

COPY RECEIVED

JUL 08 1993

July 1, 1993

Mr. John Wagoner, Manager
Richland Operations Office
Department of Energy
P.O. Box 550
Richland, WA 99352

**OFFICE OF
REGIONAL ADMINISTRATOR**

Subject: WASTE WATER TREATMENT FACILITIES (LO45H AND CO18H) AT HANFORD; DESIGN CHANGES TO PROVIDE FOR RECYCLING THE "CLEAN" WASTE WATER STREAMS RATHER THAN DISCHARGE TO SURFACE OR GROUND WATER SYSTEMS; REQUEST FOR INCORPORATION INTO FACILITY DESIGNS; REQUEST FOR DESIGN EVALUATIONS CONCERNING RECYCLING--

Dear Mr. Wagoner:

In discussion with Mr Bryson of your staff yesterday we indicated the Yakima Indian Nation's (YIN) concern about plans for the disposition of waste water discharges to the environment after treatment in the subject facilities. In particular we indicated concern about the following:

1) Plans to discharge tritiated waste waters to currently uncontaminated ground water resources near the 200 West area from the CO18H facility.

2) Creation of the discharge piping (several 1000 feet) across a significant prehistoric archaeological site and potential Indian burial ground to the Columbia River as part of the 300 Area LO45H facility.

In both cases we suggest the option of reusing the waste water for industrial purposes, thereby reducing the need to obtain discharge permits from the EPA, eliminating undesirable contamination of ground water resources and generally complying with DOE policy to recycle resources and minimize the use of new resources. Other beneficial features of this suggestion would be the elimination of costly environmental monitoring of discharge sites in the long-term evaluation of natural resource injuries and other regulatory costs associated with discharge permits.

It is noted that recent publicity concerning these facilities emphasized to the media the cleanliness of the effluent streams. Given this state of cleanliness there should be no concern with using the effluent streams for other industrial purposes at Hanford.

Even the CO18H effluent tritium concentration, which is estimated to be a maximum of about 1000 times the drinking water standard

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(20,000 pCi/L), should not inhibit the use of this stream in industrial applications involving the processing or management of wastes already containing tritium. (It is noted that we would not recommend use of tritiated water in applications that would only dilute the activity or result in it ending up in another waste water stream not already contaminated with tritium.)

REQUEST FOR INFORMATION:

We requested from Mr. Bryson design information relative to the recycling option. This would include any environmental assessments accomplished as well as any engineering analyses performed in connection with design of the subject facilities.

This letter confirms these requests for information and our recommendation to incorporate recycling provisions into these facilities and eliminate the current design features involving treated, but not clean, waste water discharge to the environment.

Sincerely,



F. R. Cook, Technical Analyst
Environmental Restoration/Waste Management Program
Yakima Indian Nation
1933 Jadwin Avenue
Suite 110
Richland, WA 99352

cc. John Tseng, DOE/EM (fax)
Jim Warner, DOE/EM (fax)
Thomas Grumbly, DOE/EM
Jill Lytle, DOE/EM
K. Clarke, DOE/RL
Jim Peterson, DOE/RL (5YP)
P. Saget, DOE/RL
D. Bryson, DOE/RL
R. Jim ER/WM, YIN (fax)
M. Dick Squeochs, YIN
Carroll Palmer, YIN
Mike Bauer, YIN
C. Sanchey, YIN
Washington Gov., M. Lowry
U. S. Congressman, J. Inslee
U. S. Senator, P. Murray
Joe Stohr, WA Dept of Ecology
David Berick
Michael Campbell
John Straub, DFNSB Richland (fax)

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Quarterly Briefing
Past Practices Activities

Julie K. Erickson

July 21, 1993

Milestone Description

Milestone M-12-00 requires 15 Operable Unit Work Plans be submitted to EPA and Ecology by June 1992

**M-12-00 Submit RI/FS or RFI/CMS Work Plans for 15 Operable Units -
June 1992**

**M-12-05a Submit rescoped RI/FS or RFI/CMS Work Plans for Operable
to Units, in accordance with the final "Hanford Past Practices
M-12-14a Strategy Document"**

100-HR-1	September 1991	100-KR-1	October 1991
100-HR-3	September 1991	100-KR-4	October 1991
100-DR-1	September 1991	100-FR-1	November 1991
100-BC-1	September 1991	100-FR-3	November 1991
100-BC-5	September 1991	100-NR-1	December 1991
		100-NR-2	December 1991

**M-12-15 Submit 200-UP-2 Operable Unit Work Plan (source and
groundwater), or an agreed upon alternate Work Plan based on
results of the U-Plant Aggregate Area Management Study -
August 1992 (moved from June per TPA Change # M-12-92-1)**

Accomplishments

- **Completed disposition of regulator comments on the 200-UP-2 Work Plan and sent it out for public review.**

Planned Actions

- **Approve the 200-UP-2 Work Plan and commence field activities.**

Issue

- **Continued Resolution of 100-NR-1 and 100-NR-2 schedule dispute. The dispute is over the Work Plan schedules and N-Reactor decommissioning.**

Milestone Assessment

M-12-00 -- Variance Explanation/Status

	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
FYTD Budget	53	155	257	325	265	299	359	404	380	400	467	535
FYTD Cost	1	40	45	122	153	168	234	260	306			
Spending	52	115	212	203	112	131	125	144	74			
Variance												

Variance Explanation

- **100-NR-1 and 100-NR-2 Work Plans are currently in dispute. Limited resources will be expended until resolution of dispute.**

Milestone Description

Milestone M-13-00 requires 6 RI/FS or RFI/CMS Work Plans be submitted each year to EPA and Ecology starting for CY 1993

Accomplishments

	Milestone	Op Unit #	Submittal Dates
Complete	M-13-01	100-BC-2	05/21/93
Complete	M-13-02	200-UP-1	04/30/93
Complete	M-13-03	100-HR-2	06/30/93
	M-13-04	200-ZP-1	08/31/93
	M-13-05	100-DR-2	10/31/93
	M-13-06	200-BP-5	12/31/93

Accomplishments (Continued)

- **Submitted the 100-BC-2 OU Work Plan to the regulators, completing TPA milestone M-13-01.**
- **Submitted the 200-UP-1 OU Draft A Work Plan to the regulators completing TPA milestone M-13-02.**
- **Submitted the 100-HR-2 Work Plan to the regulators completing TPA milestone M-13-03.**
- **Prepared a TPA change request to integrate 200-BP-11 (CERCLA)OU and 216-B-3 (RCRA-B-Pond closure).**
- **Received regulator approval of a TPA change request redefining OU boundaries for 200-ZP-1 and 200-ZP-2 OUs.**

Planned Actions

- **Submit the 200-ZP-1 Work Plan to the regulators for review on 8/31/93. (Scope being revised and the milestone is to be changed to 9/30/93)**
- **Submit the 100-DR-2 Work Plan to the regulators for review on 10/31/93.**
- **Receive Project Manager approval on a TPA change request revising the scope of work and deliverable for the 200-ZP-1, 200-UP-1, and 200-BP-5 OUs.**

Milestone Assessment

M-13-00 -- Variance Explanation/Status

	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
FYTD Budget	141	337	407	531	421	505	558	698	799	955	1133	1374
FYTD Cost	1	1	84	131	225	377	510	607	695			
Spending Variance	140	336	323	400	196	128	48	91	104			

Variance Explanation

- The 100-HR-2 OU Work Plan was prepared in-house by WHC personnel as opposed to offsite sub-contractor. Additionally the work plan references existing approved work plans, which required less document preparation.

Milestone Description

Milestone M-27-00 requires all Aggregate Area Management Study Reports (AAMSRs) for the 200 Areas be submitted to EPA and Ecology by September 1992

- M-27-00** **Submit all AAMSRs for the 200 Area to EPA and Ecology as secondary documents. These documents shall be prepared in accordance with the objectives of the "Hanford Past Practices Strategy" and the outline provided in the "200 AAMS Guidelines," both of which are included in Appendix F - September 1992.**
- M-27-01** **Submit methodology and format for the AAMSRs (to be included as Chapter 1 of each AAMSR) to EPA and Ecology as a secondary document - June 1991.**
- M-27-02** **Submit AAMSR for the 200 Area Waste Management Areas to**
M-27-09 **(for all source term Operable Units within the waste management areas) - January-August 1992.**

Milestone M-27-00 (Continued)

M-27-10 **Submit AAMSR for 200 Area Groundwater Aggregate Areas,**
and **including all groundwater impacted by the source term Operable**
M-27-11 **Units - September 1992.**

Accomplishments

Over the past 3 months,

- **Finalized Semi Works, and 200 North AAMS Reports and submitted it to RL for transmittal to the regulators. This completes the preparation and finalization of the 10 AAMS Reports.**

Planned Actions

- **All activities completed.**

Milestone Description

Milestone M-28-00 requires documentation of soils and groundwater backgrounds be submitted to EPA and Ecology by April 1992

- M-28-00 Submit all soils and groundwater background determination documents to EPA and Ecology - April 1992.**
- M-28-01 Submit soils background sampling and analysis plan and quality assurance project plan - June 1991.**
- M-28-02 Submit background methodology description document for soils and groundwater (secondary document) - July 1991.**
- M-28-03 Submit soils study report (primary document) establishing background values for soil at the Hanford Site, and include report in Appendix F - April 1992.**
- M-28-04 Submit evaluation report on existing groundwater data (primary document) establishing background values for groundwater at the Hanford Site, and include in Appendix F - April 1992.**

Accomplishments

During the past 3 months,

- **Issued the final Soil Site Wide Background document to the regulators May 26, 1993.**
- **Discussions on scope and schedule are underway with the regulators for the submittal of the Provisional Groundwater Background Report.**

Planned Actions

- **Compilation of existing data to discern the need for new data requirements and development of initial Radiological Soil Provisional Background status report.**
- **Negotiation with the regulators for the future groundwater scope of work continues.**

Milestone Description

Milestone M-29-00 requires documentation describing the Hanford Risk Assessment Methodology be submitted to EPA and Ecology by March 1992

- M-29-00 Develop and submit documentation to EPA and Ecology describing Hanford Risk Assessment Methodology - March 1992.**

- M-29-01 Identify and submit descriptions of codes and models (secondary document) to be used in Risk Assessment - September 1991.**

- M-29-02 Submit a plan for development of area wide groundwater models to support risk assessment and to evaluate impacts of changing groundwater flow fields (secondary document) - December 1991.**

- M-29-03 Submit Risk Assessment Methodology document (primary document), and include in Appendix F - March 1992.**

Accomplishments

During the past 3 months, the Risk Assessment Team continues work on Site wide issues:

- **Regulators approved HSBRAM, Revision 2 which will be included in Appendix F of the Tri-Party Agreement.**
- **Completed the Draft of the Hanford Site Risk-Based Remedial Alternatives Evaluation Methodology.**

Planned Actions

- **Submit Hanford Site Risk-Based Remedial Alternatives Evaluation Methodology to the regulators.**

Milestone Description

Milestone M-30-00 requires the integrated general studies of the 100 Areas be completed by September 1993

- M-30-00 Complete integrated general investigations and studies for the 100 Area - September 1993.**

- M-30-01 Submit a report (secondary document) to EPA and Ecology evaluating the impact to the Columbia River from contaminated springs and seeps, as described in the Operable Unit Work Plans listed in M-30-03 - February 1992.**

- M-30-02 Submit a plan (primary document) to EPA and Ecology to determine cumulative health and environmental impacts to the Columbia River, incorporating results obtained under M-30-01 - May 1992.**

Milestone M-30-00 (Continued)

- M-30-03** Complete all non-intrusive field work as identified in draft Work Plans for the following Operable Units: 100-HR-1, 100-HR-3, 100-DR-1, 100-BC-1, 100-BC-5, 100-KR-1, 100-KR-4, 100-NR-1, 100-NR-2, and 100-FR-1 - September 1992.
- M-30-04** Submit a report (secondary document) to EPA and Ecology evaluating the interaction of the Columbia River and the unconfined aquifer for aquifer hydraulic parameters September 1992.
- M-30-05** Install all field instrumentation and initiate monitoring activities necessary to perform long term evaluation of Columbia River and unconfined aquifer interaction, in accordance with the tasks defined in the Operable Unit Work Plan listed in M-30-03 - September 1993.

Accomplishment

Over the past 3 months, the general studies have been completed

- **Completed the transfer of approximately 23 automated water level recorders from the 300 Area to various 100 Areas. Each of the reactor areas now has an operating, core network of recorders. This partially satisfies TPA milestone M-30-05.**

Planned Actions

- **Analyze the two year's of data from existing recorders at 100-B, 100-H, and 100-F. Prepare plan to describe future monitoring activities. This with the installation of groundwater monitoring equipment will satisfy TPA milestone M-30-05.**

Milestone Assessment M-30-00 -- Variance Explanation/Status

	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
FYTD Budget	236	449	668	868	1033	1195	1345	1522	1514	1736	2032	3472
FYTD Cost	54	291	660	803	960	1077	1193	1313	1507			
Spending Variance	182	158	8	65	73	118	152	209	7			

Variance Explanation

- **Nothing significant to report.**

Milestone Description

Milestone M-15-00 requires RI/FSs for all Operable Units to be completed by September 2005

- M-15-00 Complete the RI/FS (or RFI/CMS) process for all Operable Units September 2005.**
- M-15-01b/c Submit combined RI Phase 2 and FS Phase 3 reports for 1100-EM-1 Operable Unit to EPA and Ecology December 1992.**
- M-15-02d Submit FS Phase I,II, and III report for 200-BP-1 to EPA and Ecology June 1993.**
- M-15-02e Submit draft barrier constructability report to EPA and Ecology January 1994.**

Milestone M-15-00 (Continued)

- M-15-03a** **Submit FS Phase I & II report for 300-FF-1 to EPA and Ecology
September 1992.**

- M-15-03b** **Submit Soil Washing Treatability Test report for 300-FF-1 to
EPA and Ecology December 1993.**

- M-15-03c** **Submit FS Phase III report for 300-FF-1 to EPA and Ecology
August 1994.**

- M-15-04a** **Submit FS Phase I & II report for 300-FF-5 to EPA and Ecology
July 1993.**

- M-15-04b** **Submit RI Phase II report for 300-FF-5 to EPA and Ecology
August 1994.**

- M-15-04c** **Submit FS Phase III report for 300-FF-5 to EPA and Ecology
June 1995.**

Milestone M-15-00 (Continued)

- M-15-05A** **Submit 100-HR-1 OU Limited Field Investigation Report to EPA and Ecology - August 1993.**

- M-15-05B** **Complete 100-HR-1 OU Treatability Study Activities November 1993.**

- M-15-05C** **Submit 100-HR-1 OU Focused Feasibility Study Report to Ecology and EPA - September 1994.**

- M-15-05D** **Submit the 100-HR-1 OU Interim Remedial Measures Proposed Plan to Ecology and EPA - September 1994.**

- M-15-06A** **Submit 100-HR-3 OU Limited Field Investigation Report to Ecology and EPA - October 1993.**

- M-15-06B** **Complete 100-HR-3 OU Treatability Study Activities November 1993.**

Milestone M-15-00 (Continued)

- M-15-06D** Submit 100-HR-3 OU Interim Remedial Measures Proposed Plan to EPA and Ecology - September 1994.
- M-15-07A** Submit the 100-DR-1 OU Limited Field Investigation Report to Ecology and EPA - August 9, 1993.
- M-15-07B** Complete 100-DR-1 OU Treatability Study Activities. August 31, 1994. The milestone date will allow for a soil washing pilot scale test activity.
- M-15-07C** Submit the 100-DR-1 OU Focused Feasibility Study Report to Ecology and EPA - September 30, 1994.
- M-15-07D** Submit the 100-DR-1 OU Interim Remedial Measure Proposed Plan to Ecology and EPA - September 30, 1994.
- M-15-08A** Submit validated data of all sampling activities associated with Section 5.1.1.2, "Source Investigations," and Section 5.1.1.5 "Vadose Zone Investigations" for 100-BC-1 OU to Ecology and EPA - October 9, 1992.

Milestone M-15-00 (Continued)

- M-15-08B** **Submit 100-BC-1 OU Limited Field Investigation Report to Ecology and EPA - July 1993.**
- M-15-08C** **Submit 100-BC-1 OU Treatability Study Report to Ecology and Epa - January 1994.**
- M-15-08D** **Submit the 100-BC-1 OU Focused Feasibility Study Report to Ecology and EPA - November 1994.**
- M-15-09B** **Submit 100-BC-5 OU Limited Field Investigation Report to Ecology and EPA - August 1993.**
- M-15-09C** **Submit 100-BC-5 OU Focused Feasibility Study Report to Ecology and EPA - October 1993.**
- M-15-09D** **Submit 100-BC-5 OU IRM Proposed Plan to EPA and Ecology - October 1994.**

Milestone M-15-00 (Continued)

- M-15-10A** Submit validated data of all sampling activities associated with "Source Investigation," and "Vadose Zone Investigation" for 100-KR-1 OU to Ecology and EPA - October 1993.
- M-15-10B** Submit 100-KR-1 OU Limited Field Investigation Report to Ecology and EPA - October 1994.
- M-15-10C** Submit the 100-KR-1 OU Focused Feasibility Study Report and 100-KR-1 OU IRM Proposed Plan to Ecology and EPA April 1995.
- M-15-11B** Submit 100-KR-4 OU Limited Field Investigation Report to Ecology and EPA - January 1994.
- M-15-11C** Submit 100-KR-4 OU Focused Feasibility Study Report to Ecology and EPA - October 1994.
- M-15-11D** Submit 100-KR-4 OU IRM Proposed Plan to Ecology and EPA - October 1994.

Milestone M-15-00 (Continued)

- M-15-13B** Submit 100-FR-1 OU Limited Field Investigation Report to Ecology and EPA - September 1994.
- M-15-13A** Submit validated data of all sampling activities associated with "Source Investigation," and "Vadose Zone Investigation" for 100-FR-1 OU to Ecology and EPA - November 1993.
- M-15-13C** Submit 100-FR-1 OU Focused Feasibility Study Report to Ecology and EPA - May 1995.
- M-15-13D** Submit 100-FR-1 OU IRM Proposed Plan to Ecology and EPA - May 1995.
- M-15-13E** Submit validated data of all sampling activities associated with "Groundwater Investigation", for 100-FR-3 OU to Ecology and EPA - June 1993.
- M-15-13F** Submit 100-FR-3 OU Limited Field Investigation Report to Ecology and EPA - April 1994.

Milestone M-15-00 (Continued)

- M-15-13G Submit 100-HR-3 OU Focused Feasibility Study Report to Ecology and EPA - December 1994.**

- M-15-13H Submit 100-FR-3 OU IRM Proposed Plan to Ecology and EPA - December 1994.**

Accomplishments

Significant RI/FS activities were accomplished during the past 3 months

1100 Area

- **Provided the 1100 Area final RI/FS report to the public on May 24, 1993 for review.**
- **Initiated Cultural Resource Review on the 1100-IU-1 OU.**
- **Held the 1100 Area Public Meeting on the Proposed Plan.**

Accomplishments (Continued)

300 Area

- **Submitted the 300-FF-5 OU FS Phase I and II report to the regulators for review. Completing TPA milestone M-15-04A.**
- **Submitted Round 4 groundwater data validation reports for 300-FF-5 OU to the regulators.**
- **Submitted the 300-FF-5 OU RI Phase I report to the regulators for review meeting TPA milestone M-15-04-T1.**
- **Completed the first soil washing test for the 300-FF-1 OU.**
- **The GAO dismissed venter protests for the 300-FF-1 OU soil washing treatability test enabling DOE to proceed with contract award.**

Accomplishments (Continued)

200 Area

- **Completed the definitive design of the Hanford Prototype Barrier for 200-BP-1.**
- **Submitted the 200-BP-1 FS Phase I, II and III, to the regulators for review meeting TPA Milestone M-15-02D.**
- **Transmitted the Treatability Test Plan for the 216-B-57 prototype barrier to EPA and Ecology.**
- **Received regulator approval on the Description of Work (DOW's) for Aquifer Testing and Ecological sampling in the 200 Area.**
- **Received Tri-Party Unit Manager approval on an Agreement-In-Principal to accelerate treatability testing in the groundwater OUs in the 200 Area.**
- **Submitted test pit sampling Descriptions of Work (DOW's) at 200-UP-2 for review and comment by the regulators.**

Accomplishments (Continued)

100 Area

- **Received regulator approval of TPA change request M-15-92-6 "100-DR-1 RI/FS Interim Milestones" establishing four TPA interim milestones for the 100-DR-1 OU.**
- **Submitted validated data for the third round of groundwater sampling for 100-BC-5 OU to the regulators.**
- **Submitted the first round of groundwater validation reports for 100-FR-3 OU to the regulators satisfying TPA milestone M-15-13E.**
- **Completed excavation of four test pits at the 100-FR-1 OU.**
- **Agreement-in-Principal was reached with the unit managers on the scope of work for the 100-DR-2 Work Plan.**
- **Completed surface sampling at the 100-NR-1 OU.**

Accomplishments (Continued)

- **Submitted 100-HR-3 first and second round groundwater data validation reports to the regulators.**

General

- **Submitted EII 4.3 Draft to the Tri-Parties for concurrence. (Controls disposition and/or disposal of Investigation Derived Wastes.)**
- **Completed the cone penetrometer tests conducted at the McGee Ranch.**

Planned Actions

1100 Area

- **Characterization of the 1100-IU-1 is to commence by the end of September.**
- **Complete the ROD by the end of September.**
- **Disposition all public review comments on the Proposed Plan.**
- **Prepare Responsiveness Summary for public review comments on the Proposed Plan by the end of July 1993.**

Planned Actions (Continued)

300 Area

- **Evaluate data from the initial soil washing test at 300-FF-1.**
- **Disposition regulator comments on 300-FF-5 RI Phase I and FS Phase I and II reports.**
- **Award 300-FF-1 OU soil washing Vendor contract.**

Planned Actions (Continued)

200 Area

- **Negotiations with the regulators on the methodology of implementing the Past Practice Strategy in the 200 Areas will continue.**
- **Final design will continue for construction of a prototype barrier at the B-57 crib in the 200-BP-1 OU.**
- **Complete 200-BP-1 8th round of groundwater sampling.**
- **Receive regulator approval of change request C-93-06 making 200-BP-5 a GW only OU containing the groundwater in the northern portion of the 200 East area.**
- **Complete aquifer testing in 5 boreholes in the 200-UP-1 OU to determine vertical extent of uranium and Technetium contamination.**

Planned Actions (Continued)

100 Area

- **Complete the quarterly round of groundwater sampling at 100 Area groundwater OU's.**
- **Submit validated data packages for 100-KR-4, 100-HR-3, 100-BC-5, and 100-KR-1.**
- **Complete LFI/QRA Reports for 100-BC-1, 100-HR-1, 100-DR-1, 100-HR-3, and 100-BC-5 and submit to the regulators.**
- **Complete Intrusive investigations at 100-FR-1.**
- **Initiation of 100-BC-2 & 100-DR-2 intrusive investigations.**

General

- **Continue 325 Facility Upgrades; Standards Lab and Sample Receiving Facility.**

Milestone Assessment M-15-00 -- Variance Explanation/Status

	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
FYTD												
Budget	4649	11025	16985	24670	29940	38474	44769	52238	57618	65112	74658	90953
FYTD												
Cost	2286	9081	14137	21243	27153	34733	41468	48089	52812			
Spending												
Variance	2363	1944	2848	3427	2787	3741	3301	4149	4806			

Variance Explanation

- Delay in receiving final billing for equipment (i.e., vapor extraction, mobile lab) that supports M-15-00 workscope.
- Delay in the initiation of the remedial design for the 1100-EM-1 OU until a Record of Decision is reached.

Variance Explanations (Continued)

- **Delay in receipt of contractor billings is out of phase with the baseline schedule and has resulted in a temporary cost variance.**
- **The 300-FF-5 Phase II work plan is on hold until such time as the Phase I RI report is discussed with the regulators in July.**
- **Reduced the number of groundwater wells sampled at the 100-HR-3 OU.**
- **Labor resource was not utilized when planned due to lengthy negotiations with the regulators on scope of work for aquifer testing, ecological sampling and the 200-BP-5 Work Plan.**

Milestone Description

Milestone M-16-00 completes the Remedial Actions for all Operable Units.

Accomplishments

- **At the carbon tetrachloride site, four existing wells were perforated, one new well completed, and two new wells initiated for inclusion in the extraction well network. This amounts to a total of 34 wells drilled/modified to date for vapor extraction purposes.**
- **FYTD 7,393 total pounds of carbon tetrachloride was removed from the ERA site for a grand total of 9,504 pounds. Completed root cause analysis of the overheating and preparation is underway for restart.**
- **Submitted Draft A, of the White Bluffs Pickling Acid Crib ERA Proposal for 100-IU-5 OU to RL and the regulators for concurrent review.**
- **Submitted a draft of the North Slope ERA Proposal to the regulators for concurrent review with RL.**

Accomplishments (Continued)

- **Completed removal of approximately 5000 crushed drums from the Sodium Dichromate burial ground.**
- **Submitted the Riverland ERA proposal to the regulators and received the Action Memorandum.**

Planned Actions

- **Submit the N-Springs ERA proposal to the regulators.**
- **Complete remediation of the Riverland Rail site by September 1993.**
- **Complete disposal of remaining drums (4) from Sodium Dichromate that are considered Hazardous Waste.**
- **Reseeding/vegetation will take place this fall at the Sodium Dichromate ERA.**
- **Restart vapor extraction activities at the carbon tetrachloride ERA.**
- **Submit 618-11 ERA Proposal to the regulators.**

Milestone Assessment M-16-00 -- Variance Explanation/Status

	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
FYTD Budget	581	1554	2460	3614	4326	5409	6179	8029	8399	9464	9846	11996
FYTD Cost	294	1448	1883	2784	3797	5009	5956	7141	8019			
Spending Variance	287	106	577	830	529	400	223	888	380			

Variance Explanation

- **Drilling and associated activities at the CCl₄ ERA did not commence until March.**
- **Delay in receipt of subcontractor charges for development of the N-Springs' EE/CA; in addition, the N-Springs project safety documentation is being performed at reduced cost.**