U.S. Department of Energy
Office of River Protection
P.O. Box 450
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02-EMD-105

JUL 3 1 2002

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Addressees:

SEMI-ANNUAL COMPLIANCE REPORT FOR THE WASTE TREATMENT AND IMMOBILIZATION PLANT (WTP) FOR FEBRUARY 2002 THROUGH JULY 2002

This letter transmits the U.S. Department of Energy (DOE), Office of River Protection (ORP) Semi-Annual Report required by interim Milestone M-62-01 for the period from February 2002 through July 2002. This report provides the following information:

- A concise description of project accomplishments and issues including those encountered during the previous year and those expected in the near term (Section 3).
- When applicable, a description of any actions initiated or otherwise taken to recover any agreement schedule slippage (Section 4).
- A budget and cost schedule which is included in the attachment, with a brief narrative (Section 5).
- A statement documenting whether or not DOE and DOE's contractors have performed sufficient work to assure with reasonable certainty that DOE will accomplish series M-62 major and interim milestone requirements. This information is provided for each milestone where appropriate (milestones identified with "To Be Determined" do not include this information [Section 8]).

All M-62-00 Critical Path Milestones occurring during the period covered by this report have been met. The Resource Conservation and Recovery Act/Dangerous Waste Permit revised application was submitted to the State of Washington Department of Ecology (Ecology) in December 2001. After a public comment period that ended July 1, 2002, Ecology issued a temporary authorization to proceed with construction. Key air permit applications were also submitted during the time period covered by this report to include the Prevention of Significant Deterioration and the Non-Radiological Air Emissions Notice of Construction.

JUL 3 1 20

After regulatory review and expiration of applicable public comment periods both permits were issued on July 8, 2002. The authorization to proceed with Start of Construction was received from DOE Headquarters on July 9, 2002. The first concrete for the WTP was poured on July 10, 2002, approximately six months ahead of schedule.

If you have any questions, please contact Woody Russell, of my staff, (509) 373-5227, or William Taylor, Assistant Manager for Project Delivery, (509) 372-3864.

Sincerely,

James E. Rasmussen, Director
Environmental Management Division

EMD:WR

Attachment

cc w/attach:
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R. R. Miera, CHG
R. Gay, CTUIR
D. Bartus, Ecology
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R. Jim, YN
Administrative Record

U.S. Department of Energy, Office of River Protection
Environmental Management Division

SEMI-ANNUAL PROJECT COMPLIANCE REPORT FOR THE WASTE TREATMENT AND IMMOBILIZATION PLANT

Office of River Protection

FEBRUARY 01, 2002 THROUGH JULY 31, 2002

ORP MISSION

Retrieve and Treat Hanford's Tank Waste and Close the Tank Farms to Protect the Columbia River.

River Protection Project – Waste Treatment and Immobilization Plant Semi-Annual Compliance Report

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River Protection Project – Waste Treatment and Immobilization Plant Semi-Annual Compliance Report

1.0 INTRODUCTION

This report is submitted semi-annually in accordance with Hanford Federal Facility Agreement and Consent Order (HFFACO) Milestone M-62-01E, for the reporting period of February 1, 2002, through July 31, 2002. As detailed in M-62-01, this report provides information regarding issues, activities, and progress relative to those milestones. The report includes information pertaining to the status of progress to date, progress made during the reporting period, and activities expected in the foreseeable future.

2.0 WASTE TREATMENT AND IMMOBILIZATION PLANT (WTP) COMPLEX DESCRIPTION

Hanford Site Background: Hanford tank waste consists of approximately 190 million curies in 54 million gallons of highly radioactive and mixed hazardous waste stored in underground storage tanks at the Hanford Site. The tank waste includes solids (sludge), liquids (supernatant), and salt cake (dried salts that will dissolve in water, forming supernatant). The tank waste will be remediated through treatment and immobilization to protect the environment and meet regulatory requirements.

After considering several alternatives, and in conjunction with the State of Washington Department of Ecology (Ecology) as co-preparer, the U.S. Department of Energy (DOE) determined in the "Tank Waste Remediation System Environmental Impact Statement Record of Decision" that the preferred alternative to remediate the Hanford tank waste was to:

- Pretreat the waste to prepare it for processing and vitrification;
- Immobilize the Low-Activity Waste (LAW) for on-site disposal; and
- Immobilize the High-Level Waste (HLW) for ultimate disposal in the national repository.[1]

WTP Complex Description: The River Protection Project (RPP) – WTP is a treatment and storage complex being designed, constructed, and commissioned by Bechtel National, Inc. (BNI) in accordance with DOE Contract No. DE-AC27-01RV14136. The WTP will be designed, constructed, and permitted to store and treat radioactively contaminated dangerous waste, called mixed waste, at the Hanford Site in Richland, Washington.

The WTP will receive waste from Hanford's double-shell tank system, operated by CH2M HILL Hanford Group, Inc., in batches composed of either LAW or HLW feed. The LAW and HLW feed will be transferred by pipeline to the WTP for pretreatment and vitrification. The vitrification process will combine the pretreated tank waste with glass-forming materials and melt the mixture into a liquid that is poured into stainless steel containers. The hot glass cools and hardens and each container will be closed in preparation for storage and permanent disposal.

[1] U.S. Department of Energy, Contract No. DE-AC27-01RV14136, Section C.1, December 2000

The dangerous waste and radioactive constituents will be destroyed, removed, or immobilized in this durable glass matrix through the vitrification process.

3.0 PROJECT ACCOMPLISHMENTS AND ISSUES

3.1 Progress To Date

The ORP has completed two of the t12welve M-62-00 series Milestones. M-62-02, "Submittal of Hanford Tank Waste Alternatives Report," was completed March 1, 2000; and M-62-06, "Start of Construction – Phase I Treatment Complex," initiating first placement of structural concrete at one of the treatment complex principal facilities (e.g., Pretreatment, LAW Vitrification, or HLW Vitrification facilities) was completed July 10, 2002.

WTP Design and Construction Activities:

Limited Construction Site Preparation: Environmental permits and approvals were authorized by the requisite regulatory authorities, and the DOE Office of River Protection (ORP) authorization to proceed with Phase A Limited Construction Authorization Request (LCAR) activities was issued to BNI, allowing limited construction activities for the WTP plant site to begin October 1, 2001. Limited construction activities included initial site preparation (clearing and grubbing of the WTP plant site), the completion of the North parking lot, and initiation of excavation activities for the HLW and LAW vitrification facilities. Authorization to proceed with LCAR Phase B activities was issued by ORP November 16, 2001. These activities included the installation of mud mats for the LAW and HLW facilities, underground piping for various utilities (compressed air, sanitary sewer, fire water, electrical duct bank, raw water, gas lines [oxygen, acetylene and propane]), as well as direct buried electrical and communication cable, and electrical duct bank. In addition, the LCAR work involved the installation of several construction support facilities (construction office building, change houses, warehouse, and construction shops). Lastly, the LCAR scope includes installation of Forms, Rebar and Embeds (FRE) for the LAW and HLW basemats.

3.2 Project Progress This Period

BNI achieved a major milestone in receiving authorization to proceed with partial construction activities from DOE on July 9, 2002, close to six months ahead of the scheduled Recovery Plan M 62-06 Milestone date of December 31, 2002. Pursuant to this authorization, BNI is authorized to proceed with placement of concrete for basemats of the LAW and HLW vitrification facilities. In addition, this authorization also provides for the installation of FRE and structural concrete for the LAW and HLW facility walls from the –21 foot elevation to grade.

BNI also achieved a major safety milestone during the month of April 2002, reaching 3.2 million man-hours worked without a lost time accident; this total includes direct non-manual hours, craft, and subcontractors.

A full listing of BNI performance against contract deliverables to-date is included in Table 3B-1, "WTP Progress Against Contract Deliverables," provided below.

Table 3B-1: WTP Progress Against Contract Deliverables, February 1, 2002, through July 31, 2002

Contract Deliverable	Description	Baseline Schedule Date	Actual Delivery Date
1.2	Project Execution Plan	15-Apr-02	17-May-02
1.5	WTP Project Baseline	15-Apr-02	17-May-02
1.6	WTP Risk Assessment	1-July-01 w/ quarterly updates	15-Mar-02, 15-July-02
1.7	Monthly Project Status Report	Bi-monthly	Mar, May, July 02
1.8	Occurrence Reporting	As Required	Ongoing
1.9	ES&H Reporting	As Required	N/A
1.10	Quarterly Critical Analysis	Quarterly	Feb, May 02
1.11	Project Reviews	Bi-Monthly	Mar, May, July 02
I.19	Incurred Cost Submission	15-Jun-02	15-Jun-02
C.9.1	Interface Control Documents	Bi-Annual (ICDs grouped for Quarterly submittals)	Feb, May 02
7.1	Safety Requirements Document (Construction Revision - LAW)	29-Mar-02	14-Jan-02
7.1	Safety Requirements Document (Construction Revision - HLW/BOF)	29-Mar-02	19-Feb-02
7.1	Safety Requirements Document (Construction Revision - PT)	29-Mar-02	1-May-02
7.1	Preliminary Safety Analysis Report (PSAR) - LAW	29-Mar-02	1-Feb-02
7.1	Preliminary Safety Analysis Report (PSAR) - HLW/BOF	29-Mar-02	15-Feb-02
7.1	Preliminary Safety Analysis Report (PSAR) - PT	29-Mar-02	1-May-02
7.1	Technical Safety Requirements LAW - Draft	29-Mar-02	31-Jan-02
7.1	Technical Safety Requirements HLW/BOF - Draft	29-Mar-02	19-Feb-02
7.1	Technical Safety Requirements PT - Draft	29-Mar-02	1-May-02
7.1	Hazardous Analysis Report (Construction Revision) - LAW	29-Mar-02	1-Jan-02
7.1	Hazardous Analysis Report (Construction Revision) - HLW/BOF	29-Mar-02	19-Feb-02

Contract Deliverable	Description	Baseline Schedule Date	Actual Delivery Date
7.1	Hazardous Analysis Report (Construction Revision) - PT/BOF	29-Mar-02	1-May-02
7.1	CAR for LAW	29-Mar-02	1-Feb-02
7.1	CAR for HLW/BOF	29-Mar-02	19-Feb-02
7.1	CAR for PT/BOF	29-Mar-02	1-May-02
7.1	Operating Authorization Request (OAR) Outline	29-Mar-02	25-Jan-02
7.1	Emergency Response Plan - Draft	29-Mar-02	25-Jan-02
7.1	Unreviewed Safety Question Plan - Draft	29-Mar-02	25-Jan-02
7.1	Environmental Radiological Protection Program - Draft	29-Mar-02	14-Jan-02
7.1	Deactivation Safety Assessment (Construction Outline)	29-Mar-02	25-Jan-02
7.7	Notice of Construction (NOC)	14-Feb-02	14-Feb-02
/I.105	ES&H Risk Management Summary	31-May-02	31-May-02
/I.51	Toxic Chemical Release Reporting	1-Jul-02	1-Jul-02
6.1	Products and Secondary Wastes Plan	15-Apr-02	15-Apr-02
6.6	ILAW Qualification Documentation	1-Feb-02	1-Jun-02
6.11	QA Provisions Document	13-Jul-02	13-Jul-02
/I.22	Utilization of Small Business Concerns	30-Apr-02	30-Apr-02
/H.4 & I.24	Small Business Subcontracting Plan	30-Apr-02	30-Apr-02
4.4	Construction and Acceptance Test Plan	N/A	3-Jun-02

3.3 Current Project Activities

3.3.1 ORP – Project Management

The ORP has focused management attention during the last several months on the following:

- Critical Decisions (CD) - These decisions are for construction authorizations and must be obtained from DOE Headquarters (HQ) in accordance with DOE orders. External Independent Reviews are required and generally involve considerable preparation and planning. CD-3a (limited construction authorization) was obtained in October 2001, CD-3b (construction authorization to pour structural concrete in the LAW and HLW facilities) was obtained in May 2002, and CD-3c (full construction authorization) is scheduled for September 2002.

- Environmental Permits - Permit applications were reviewed and submitted in a timely fashion so as to meet all technical requirements and public comment review periods. As a result of this work and considerable cooperation on the part of the various agencies,

partial construction authorization was granted on July 9, 2002, allowing construction to start with placement of structural concrete in LAW and HLW facilities.

- Defense Nuclear Facilities Safety Board (DNFSB) - The DNFSB is an independent nuclear safety oversight organization that provides valued technical expertise and recommendations to DOE regarding nuclear waste processing facilities. ORP maintains regular and open dialog with DNFSB regarding the design and construction of the WTP.

- Office of Safety Regulation (OSR) Construction Authorizations - OSR provides nuclear process safety oversight of the WTP design and construction evolution. This office ensures the establishment and maintenance of the WTP Safety Basis and authorizes phases of construction once appropriate safety evaluation has been made of the WTP design. LCAR and Partial Construction Authorization Requests have been processed. Full Construction Authorization Requests (CAR) are in process.

3.3.2 BNI – WTP Complex Design And Construction

The BNI team is fully engaged in preparing for and completing readiness activities to support the placement of structural concrete in the LAW and HLW vitrification facilities. Significant progress is being made toward completing installation of LAW and HLW basemat rebar and formwork; embed and electrical conduit installation is proceeding.

Highlights of current project activities include the following:

- The CAR for the Pretreatment Facility and the final Balance of Facilities (BOF) licensing documents were completed and approved for submittal to DOE. This represents the final major nuclear safety submittals required to support construction of the WTP facilities (except for the Analytical Laboratory).

- Authorizations allowing BNI to initiate start of construction for the LAW and HLW vitrification facilities were received from Ecology in June 2002 for the Prevention of Significant Deterioration (PSD) Air Permit, the Non-Radioactive Air Permit, and the Dangerous Waste Permit. The State of Washington Department of Health (WDOH) also granted Phase I of the Radioactive Air Emissions License in June 2002, authorizing construction of the basemat and walls to grade for the LAW and HLW vitrification facilities, clearing the way to begin pouring structural concrete in July 2002.

- Completed performance testing of the Sanitary Waste Drainfield with the WDOH in attendance. The test was successfully completed, meeting all of the requirements identified by the WTP specifications and the WDOH.

- Energized the 13.8 Kv feed to three temporary electrical sub-stations. Facilities currently energized include: the T-1 Main Construction Office, T-11 BOF Area Office, and the Concrete Batch Plant.

- Modeled over 1,131,163 feet of piping, 97,244 feet of conduit cable tray, and 11,000 feet of High Voltage Alternating Current duct for the LAW and HLW vitrification facilities.

- Awarded the Aspen Technology Product License order, which will establish the process modeling license base for the next five years for a cost savings of approximately 15 percent.

- BNI received DOE authorization to begin LAW and HLW concrete preparations in April 2002.

- Pretreatment engineering activities included completion of the Preliminary Seismic Loads, the Design Standard Support Criteria, the General Arrangements for Elevation 0 feet and below, the Elevation 28 feet Steel Modeling, and the revised Conceptual Design for the Pretreatment Annex.

3.4 Issues This Period

3.4.1 ORP – Project Management

Key critical path activities were primarily focused on permitting activities to ensure start of construction for the WTP. ORP worked with Ecology and other regulators to address the permitting needs of all parties on the compressed timeframe to support Start of Construction by July 1, 2002. Ecology issued the Temporary Authorization July 1, 2002. A final permit decision (a permit modification to the Hanford Facility Dangerous Waste Permit - WA7890008967) will be issued upon completion and issuance of the responsiveness summary. The remaining air permits –PSD permit and the non-radiological emissions NOC were issued July 8, 2002.

The authorization to place structural concrete was received from DOE HQ on July 9, 2002. The placement of the first structural concrete in the LAW facility was completed on July 10, 2002, thus completing M-62-06 approximately six months ahead of schedule.

3.4.2 BNI – WTP Complex Design And Construction

- **Permitting:** The potential Project critical path issue associated with the Radioactive Air Emissions License was resolved by WDOH approval for a phased approval, authorizing at DOE risk, construction of the basemat and walls to grade for the LAW and HLW vitrification facilities.

- **Pretreatment Facility:** The design, construction, and commissioning of the Pretreatment Facility remains on a critical path for the Project in order to attain the Hot Commissioning Milestone of December 11, 2007, as outlined in the WTP - BNI Contract. Pretreatment Facility design continues to recover from a slight schedule slip caused by implementing the revised configuration optimization effort. Development of Stage C piping and instrumentation drawings, which were running behind schedule, was completed in May 2002. The Project continues to forecast that it will achieve the November 4, 2004, first concrete placement schedule milestone for the Pretreatment Facility.

3.5 Near Term Issues

3.5.1 ORP – Project Management

Modification to air permits will be necessary as work progresses on the construction of the WTP. As additional data is received and design work nears the 30 percent completion point, applications will be submitted to obtain additional authorizations necessary to continue with construction activities. ORP continues to use the Consolidated Action Report System to track all key project activities as well as the Project Management Plan and Baseline schedules.

3.5.2 BNI - WTP Complex Design And Construction

Issue 1 – Seismic Standards: The Project may potentially be required to change from uniform building code to the National Earthquake Hazards Reduction Program in Federal Emergency Management Agency 302 for the Category 2 Structures seismic analysis. Imposition of these new requirements potentially represent major cost and schedule impacts for design and construction activities.

Planned Mitigation – WTP Engineering is reviewing the potential technical impact of the proposed criteria change. Potential cost and schedule impacts to the Project will be assessed and communicated to ORP upon completion of this technical evaluation.

4.0 ACTIONS TAKEN OR INITIATED TO RECOVER ANY SCHEDULE SLIPPAGE

ORP has worked with Ecology and other regulators to address the permitting needs of all parties on the compressed timeframe to support Start of Construction by July 1, 2002. Ecology issued the Temporary Authorization July 1, 2002. A final permit decision (a permit modification to the Hanford Facility Dangerous Waste Permit - WA7890008967) will be issued upon completion and issuance of the responsiveness summary. The remaining air permits –PSD permit and the non-radiological emissions NOC were issued July 8, 2002.

The authorization to place structural concrete was received from DOE HQ on July 9, 2002. The placement of the first structural concrete in the LAW facility was completed on July 10, 2002, thus completing M-62-06 approximately six months ahead of schedule.

5.0 BUDGET AND COST STATUS

The current budget and cost information, shown in Enclosure 1, reflects BNI costs for Fiscal Year (FY) 2002.

6.0 DOE/DOE CONTRACTOR COMPLIANCE

ORP is on schedule to start Hot Commissioning by December 31, 2007 (M-62-09), and complete Hot Commissioning of the Phase I Treatment Complex by January 31, 2011 (M-62-10). These

milestones reflect critical commitments that are technically achievable and defensible, consistent with mission requirements.

7.0 AREAS OF NON-COMPLIANCE

Although ORP missed the July 31, 2001, Start of Construction date, DOE and Ecology negotiated a new Start of Construction Milestone in the Recovery Plan submitted in response to the Notice of Penalty Incurred and Due, No. 01NWPHQ-3131. In accordance with those negotiations, HFFACO Change Control Forms for M-20-01-01, M-62-01-03, and M-90-01-03 were submitted for public comment and executed for inclusion into the HFFACO in June 2002.

8.0 STATUS OF HFFACO MILESTONES

8.1 M-62-00 – Complete Pretreatment Processing and Vitrification of Hanford High Level (HLW) and Low Activity (LAW) Tank Wastes

Milestone Date: December 28, 2028
Description: "Compliance with the work schedules set forth in this M-62 series is defined as the performance of sufficient work to assure with reasonable certainty that DOE will accomplish series M-62 major and interim milestone requirements."

Status: On schedule. DOE and its contractors are diligently working, with start of construction commencing approximately six months ahead of schedule, to ensure with reasonable certainty that this Milestone will be attained as currently defined in the HFFACO. With a milestone 26 years in the future there are key assumptions with respect to funding, technical achievability, and single-shell tanks retrieval, which could impact this date. New information will be evaluated based on those fundamental assumptions.

8.2 M-62-00A – Complete Pretreatment, Processing and Vitrification of Hanford HLW and LAW Phase I Tank Wastes

Milestone Date: February 28, 2018
Description: "Phase I tank waste processing shall pretreat and vitrify no less than 10% of Hanford's tank waste by mass[2] and 25% by activity."

Status: On schedule. As committed to in the BNI contract and explained in Section 6 of this report, DOE is on schedule to complete the first 10 percent of waste processing measured by mass and 25 percent of waste processing measured by radioactivity by February 28, 2018.

[2] "In meeting this requirement DOE will pretreat and vitrify no less than 6000 metric tons of sodium([in the instance of LAW feed) and 800 metric tons of waste oxides (in the instance of HLW feed)." Source - Ecology Director's Determination, March 29, 2000.

8.3 M-62-01 – Submit Semi-Annual Project Compliance Report

Milestone Date: Semi-Annual - Beginning July 31, 2000
Description: "DOE's Manager, Office of River Protection (ORP), will submit a 'Project Compliance Report' to Ecology semi-annually (a copy of this report will also be provided to EPA's Region 10 Office of Waste and Chemicals Management). This report will document DOE compliance with agreement requirements and shall be sequentially updated by information documenting work performed and issues encountered during the previous report period. The ORP Project Compliance Report will be provided as part of the parties' Inter Agency Management Integration Team (IAMIT) meetings, and shall document the status of progress to date, progress made during the report period, and activities expected in the foreseeable future."

Status: Ongoing. Report(s) to meet HFFACO Milestones M-62-01A through M-62-01C were submitted on schedule. The report corresponding to HFFACO Milestone M-62-01D was deferred in lieu of the ORP Recovery Plan submitted to Ecology in March 2002.

Note: The M-62-01 Milestone reoccurs on a semi-annual basis, and therefore each report is identified in the HFFACO by a unique alpha character included with the M-62-01 Milestone.

8.4 M-62-02 – Submittal of Hanford Tank Waste Alternatives Report

Milestone Date: March 1, 2000
Description: "DOE will submit a report that describes the alternatives (technical, financial, and contractual) to treat Hanford tank waste. The report will 1.) identify and describe credible alternatives to the current privatization approach that meets DOE commitments to achieve hot operations by December 2007, and to treat no less than 10% of the tank waste by mass and 25% of the tank waste by activity by February 2018; 2.) serve as a basis to amend the fiscal year 2001 budget request for authority to implement a contingency option (authority to use privatization set-aside funds); and 3.) be released concurrently to Ecology, EPA, and the public."

Status: Completed

8.5 M-62-03 – Submit DOE petition for RCRA delisting of vitrified HLW

Milestone Date: December 31, 2006
Description: "DOE will submit its petition for delisting of the immobilized high-level waste (HLW) from the Phase I waste treatment plant from RCRA and the Washington State HWMA (delisting petition) in accordance with 40 CFR 260.22 and WAC 173-303-072."

Status: On schedule

8.6 M-62-04T – Readiness to Proceed – Support to Phase I Treatment

Milestone Date: May 1, 2000
Description: "DOE and its Hanford tank farm operations contractor will complete all necessary work and achieve readiness to proceed in support of Part B-2, Phase I."

Status: Completed

8.7 M-62-05 – Issuance of DOE Authorization to Proceed – Phase I Treatment

Milestone Date: August 31, 2000
Description: "DOE will authorize Part B-2, Phase I of Contract DE-AC06-96RL13308 (the contract phase to design, construct, commission, and provide services for Hanford tank waste pretreatment, low-activity waste vitrification, and high-level waste vitrification). The parties will revise or confirm start of construction and construction progress milestone due dates (see milestones M-62-06 and M-62-07) within six (6) months of authorization to proceed. Revision, if necessary, shall be consistent with hot commissioning by December 2007, commercial operations by December 2009, and completion of Phase I treatment by February 2018."

Status: M-62-05 was deleted from the HFFACO. No further reports will be provided.

8.8 M-62-06 – Start of Construction – Phase I Treatment Complex

Milestone Date: December 31, 2002
Description: "First placement of structural concrete at one of the treatment complex principle facilities (i.e., Pretreatment, Low-Activity Waste Vitrification, or High-Level Waste Vitrification facilities)."

Status: Completed. The Recovery Plan changed this Milestone from July 31, 2001, to December 31, 2002. The Milestone was completed when structural concrete was poured in subject facilities on July 10, 2002. No further reports will be provided.

8.9 M-62-07 – Construction Progress Milestones (2) – Phase I Treatment Complex

Milestone Date: To Be Determined (TBD)
Description: "DOE shall complete two construction progress milestones during the period between start of construction and start of commercial operations; these milestones will be established within 60 days of issuance of the DOE authorization to proceed with Phase I treatment."

Status: M-62-07 was deleted from the HFFACO. No further reports will be provided.

8.10 M-62-07 – Initial Erection of LAW Vitrification Facility Elevation-21 Feet Structural Steel Columns, Beams, and Q Deck Elevation +3 (BNI Baseline Schedule Activity 4DL131B000 As Part of DOE Contract No. DE-AC27-01RV14136

Milestone Date: October 30, 2003
Description: "This milestone represents the placement of the first structural steel columns as part of initiation of BNI Baseline Schedule activity 4DL131B000-LAW-Elev-21 SS Columns, Beams & Q Deck at +3 (Contract No. DE-AC27-01RV14136). In addition, activity 4DL121B100 LAW-Elev-21 Place Basemat Concrete shall be substantially completed and activities 4DL121D000 LAW-Elev-21 Perimeter Walls FREP and 4DL121F000 LAW-Elev-21, Interior Walls FREP shall have been initiated."

"Completion of this milestone will be met when the first structural steel column is installed at the –21foot elevation in the LAW facility. This milestone demonstrates a significant progress in

design and engineering as well as construction of the LW facility because basemat concrete will have been poured and construction of walls will have been started. In addition, procurements will have been made, not only for this facility, but also for the other major facilities. Erection of structural steel in the LAW facility will also provide a lessons learned opportunity because it will be the first facility to begin this aspect of construction."

Status: On schedule.

8.11 M-62-07B – Complete Assembly of Low Activity Waste Vitrification Facility Melter #1 So that it is Ready for Transport and Installation in the LAW Vitrification Building (BNI Baseline Schedule Activity 4DL321A300 as Part of DOE Contract No. DE-AC27-01RV14136).

Milestone Date: November 30, 2005
Description: "This milestone represents the assembly of LAW Melter #1 to the point it is ready for refractory as part of BNI Baseline activities 3EL3212A00 Specifications and Analysis, 4DL321A000 LAW- Procure Material &Equipment for Melters and 4DL321A200 LAW Assemble Melter #1 (Contract No. DE-AC27-01RV14136). In addition, activities 4DL121U100 LAW – Elev +3 South Melter FREP and 4DL131D000 LAW – Elev +28 Columns, Beams &Q-Decking at +48 shall be substantially completed."

"Completion of this milestone will be met when LAW melter #1 will have been fully fabricated, assembled and ready for refractory material to be installed. Assembly of the melter is scheduled to occur near the end of LAW construction when the facility is most ready to have the assembled melter moved into the LAW cell where the refractory material will be installed. Meeting this milestone therefore represents significant accomplishment of the engineering, design and construction of the LAW facility. Furthermore, assembly of the first melter prov8des significant opportunity for lessons learned that can be applied in the assembly of the other two LAW melters as well as the HLW melter."

Status: On schedule

8.12 M-62-08 – Submittal of Hanford Tank Waste Phase II Treatment Alternatives Report

Milestone Date: July 31, 2005
Description: "DOE will submit a preliminary report that describes the technical, financial, and contractual alternatives to treat the tank wastes remaining after completion of Phase I treatment. The report will identify credible alternatives to complete treatment of the remaining wastes by 2028, and aid in budget planning for future budget authority submittal. The report will be updated every two years until the tank waste treatment phase II plan is finalized."

Status: On schedule

8.13 M-63-09 – Start (Hot) Commissioning – Phase I Treatment Complex

Milestone Date: December 31, 2007

Description: "DOE will start hot commissioning of its tank waste treatment complex (defined as first principal facility receipt of radioactive tank waste for treatment)."

Status: On Schedule

8.14 M-62-10 – Complete Hot Commissioning – Phase I Treatment Complex

Milestone Date: January 31, 2011
Description: "DOE will achieve sustained throughput of pretreatment, low-activity waste vitrification and high-level waste vitrification processes, and demonstrated treatment complex availability to complete treatment of no less than 10% of the tank waste by mass and 25% of the tank waste by activity by December 2018."

Status: On schedule

8.15 M-62-11 – Submittal of Hanford Tank Waste Treatment Phase II Plan

Milestone Date: January 31, 2014
Description: "DOE will submit to Ecology a detailed plan and proposal for the processing of the remainder of DOE's LAW and HLW wastes (Phase II wastes). This plan and proposal will be accompanied by a draft negotiation agreement in principle (AIP), and draft agreement change request containing sufficient enforceable milestones and associated agreement requirements to effectively drive Phase II work to completion in accordance with agreement requirements. Phase II agreement negotiations will be completed within six (6) months of AIP finalization."

Status: On schedule

8.16 M-62-12 – Issuance of DOE Authorization to Proceed – Phase II Treatment

Milestone Date: TBD (by negotiations provided for at M-62-11)
Description: "DOE will authorize the contract phase to design, construct, commission, and provide services for Hanford tank waste pretreatment, low-activity waste vitrification, and high-level waste vitrification of all remaining Hanford tank waste, consistent with completion of treatment by December 2028."

Status: TBD - This milestone will be negotiated in the 2014 timeframe.

9.0 GANTT CHART OF MILESTONES

The RPP Integrated Baseline consists of three entities: the ORP baseline, the Tank Farm Contractor baseline, and the WTP Contractor baseline. The WTP Contractor baseline is updated and submitted annually to the ORP. Following review and acceptance by the ORP, it is incorporated as the WTP Contractor baseline in the Integrated Baseline. For the FY 2002 Integrated Baseline effort, ORP has not yet accepted the WTP Forecast. Therefore, the information contained in the Integrated Baseline documents is pending acceptance or changes

M-62-00 series Milestones and the schedule critical paths to achieve HFFACO Major Milestone M-62-00 for both LAW and HLW are captured in the RPP Integrated Baseline and illustrated on the Expanded Management Summary Schedule (a graphical output of the Integrated Baseline). Upon acceptance of the WTP Forecast, by ORP, the Expanded Management Summary Schedule will be provided to Ecology for review.