



U.S. Department of Energy  
**Office of River Protection**

P.O. Box 450, MSIN H6-60  
Richland, Washington 99352

0094061

JAN 27 2011

11-TPD-008

Ms. Jane A. Hedges, Program Manager  
Nuclear Waste Program  
Washington State  
Department of Ecology  
3100 Port of Benton Blvd.  
Richland, Washington 99354

Mr. Dennis E. Faulk  
U.S. Environmental Protection Agency  
Hanford, INL Project Office  
309 Bradley Blvd. Ste 115  
Richland, Washington 99352

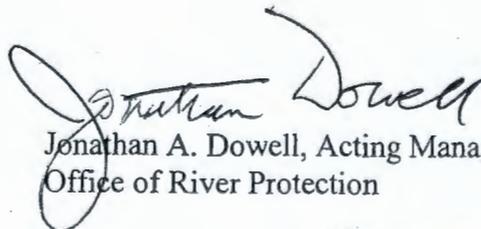
Addressees:

HANFORD FEDERAL FACILITY AGREEMENT AND CONSENT ORDER (HFFACO)  
(ALSO KNOWN AS TRI-PARTY AGREEMENT) INTERIM MILESTONE M-062-01,  
"SEMI-ANNUAL PROJECT COMPLIANCE REPORT" FOR JULY 1, 2010 THROUGH  
DECEMBER 31, 2010

This letter transmits the U.S. Department of Energy, Semi-Annual Project Compliance Report  
(Attachment) required by Interim Milestone M-062-01 for the period of July 1, 2010 through December  
31, 2010. As stipulated in the M-062-01 milestone, this report includes project summaries of  
accomplishments, issues, and actions being taken.

If you have any questions, please contact me, or your staff may contact Dale E. Knutson, Federal Project  
Director, Waste Treatment and Immobilization Plant Project, (509) 376-6727, or Thomas W. Fletcher,  
Acting Manager for Tank Farms Project, (509) 376-3434.

Sincerely,

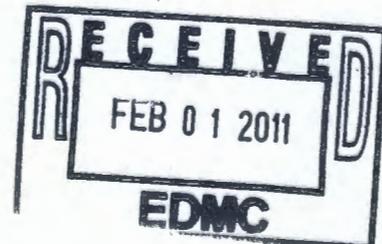
  
Jonathan A. Dowell, Acting Manager  
Office of River Protection

TPD:GDT

Attachment

cc: See Page 2

M-062-01  
S-24



Addressees  
11-TPD-008

-2-

JAN 27 2011

cc w/attach:

F. Russo, BNI  
B. G. Erlandson, BNI  
J. Cox, CTUIR  
S. Harris, CTUIR  
S. L. Dahl, Ecology  
J. J. Lyon, Ecology  
D. McDonald, Ecology  
J. B. Price, Ecology  
C. Whalen, Ecology  
K.G. Picha, EM-2  
S. L. Leckband, HAB  
J. F. Ollero, MSA  
R. E. Piippo, MSA  
J. G. Vance, MSA  
G. Bohnee, NPT  
K. Niles, ODOE  
C. Burrows, WRPS  
J. W. Donnelly, WRPS  
C. G. Spencer, WRPS  
R. Jim, YN

**Administrative Record**

BNI Correspondence  
Environmental Portal, LMSI  
TPA Administrative Record (S-2-4)  
WRPS Correspondence

cc w/o attach:

M. Anderson-Moore, Ecology  
G. P. Davis, Ecology

Attachment  
11-TPD-008

U.S. DEPARTMENT OF ENERGY, OFFICE OF RIVER PROTECTION RIVER  
PROTECTION PROJECT – SEMI-ANNUAL PROJECT COMPLIANCE  
REPORT PER HANFORD FEDERAL FACILITY AGREEMENT AND  
CONSENT ORDER MILESTONE M-062-01

July 1, 2010 – December 31, 2010

Consisting of 7 pages, including coversheet

**U.S. DEPARTMENT OF ENERGY, OFFICE OF RIVER  
PROTECTION RIVER PROTECTION PROJECT – SEMI-  
ANNUAL PROJECT COMPLIANCE REPORT PER HANFORD  
FEDERAL FACILITY AGREEMENT AND CONSENT ORDER  
MILESTONE M-062-01**

**July 1, 2010 – December 31, 2010**



**U.S. DEPARTMENT OF ENERGY  
OFFICE OF RIVER PROTECTION  
2440 Stevens Center Place  
Richland, Washington 99354**

---

## TABLE OF CONTENTS

1.0	INTRODUCTION.....	4
2.0	TPA MILESTONES .....	4
2.1	M-062-20 .....	4
2.2	M-062-40 .....	4
3.0	WASTE TREATMENT AND IMMOBILIZATION PLANT (WTP).....	5
3.1	WTP Project Overview .....	5
3.2	Budget/Cost Status.....	5
4.0	TANK FARMS.....	5
4.1	Tank Farms Project Overview .....	5
4.2	Budget/Cost Status.....	6
5.0	SCHEDULE MITIGATION.....	6

## LIST OF ACRONYMS

BNI	Bechtel National, Inc.
DOE	U.S. Department of Energy
Ecology	Washington State Department of Ecology
FY	Fiscal Year
HFFACO	Hanford Federal Facility Agreement and Consent Order
LOAM	Low Order Accumulation Model
ORP	Office of River Protection
PT	Pretreatment Facility
TPA	Tri-Party Agreement
WTP	Waste Treatment and Immobilization Plant

## **1.0 INTRODUCTION**

The U.S. Department of Energy (DOE) is submitting this Semi-Annual Project Compliance Report (M-062-01V) to satisfy the requirements of the Hanford Federal Facility Agreement and Consent Order (HFFACO), commonly referred to as the Tri-Party Agreement (TPA), Milestone M-062-01. As detailed in M-062-01, this report documents ORP's compliance with the TPA Milestone M-062-00 series requirements for the period from July 1, 2010, through December 31, 2010, provides updates, progress and issues relative to those milestones, and identifies activities expected in the near future.

DOE and DOE's Contractors remain in compliance with TPA Milestone M-062-00 series requirements and have completed sufficient work to allow achievement of the requirements.

This compliance report discusses each of the M-062-00 milestones due during the reporting period. The budget and cost information in the report is based on the period of May through October 2010.

## **2.0 TPA MILESTONES**

### **2.1 M-062-20**

During the period, Bechtel National, Inc. (BNI) closed the last of 28 flowsheet issues raised by the "Comprehensive External Review of the Hanford Waste Treatment Plant Flowsheet and Throughput." This issue dealt with mixing in Pretreatment Facility (PT) vessels. The closure activities were jointly reviewed by BNI and DOE and some resultant follow-on actions remain. Further testing will be performed to validate the use of a Low Order Accumulation Model (LOAM) and early preparations are being made to perform a large scale vessel mixing testing project. This work supports the completion of the HFFACO M-062-20 milestone.

The BNI/Office of River Protection (ORP) Technical Steering Group formally closed the M3 technical issue on August 20, 2010. The closure package contains required follow-on actions that include benchmarking the LOAM for application to the five non-Newtonian vessels, which have configurations and contents that differ from the previously tested Newtonian vessels. Benchmark testing the LOAM for application to the five non-Newtonian vessels was completed in December 2010.

Resolutions of the major technical issues have been included in Forecast Update 4. DOE completed a review of Forecast Update 4 in October 2010. Scoping details, including impacts to the project cost and schedule, have been developed and were implemented into the project baseline in November 2010.

### **2.2 M-062-40**

Embedded within M-062-40 and identified as M-062-40A is the requirement that every three years starting October 31, 2010, the Washington State Department of Ecology (Ecology) and DOE will each have the right to select a minimum of three scenarios that will be analyzed in the upcoming System Plan. On October 27, 2010, Ecology and DOE agreed to the scenarios to be analyzed. DOE Letter 10-TPD-148, dated October 28, 2010, discussed the selected scenarios and was signed by both DOE-ORP and Ecology.

## 3.0 WASTE TREATMENT AND IMMOBILIZATION PLANT (WTP)

### 3.1 WTP Project Overview

Design, procurement, and construction activities continue for all of the facilities. Design/Engineering for the WTP Project is 82 percent complete, procurement is 59 percent complete, construction is 54 percent complete, and the overall WTP Project is 57 percent complete. Currently, BNI employs about 3,400 personnel, with an average of about 1,700 personnel (1,000 craft, 250 subcontractor, and 500 non-manual staff) working at the construction site. Accomplishments during the reporting period position the project to be on track for all milestones in the TPA.

During the period, the Contractor closed the last of 28 flowsheet issues raised by the "Comprehensive External Review of the Hanford Waste Treatment Plant Flowsheet and Throughput." This issue dealt with mixing in PT vessels. The closure activities were jointly reviewed by BNI and DOE and some resultant follow-on actions remain. Further testing will be performed to validate the use of a LOAM and early preparations are being made to perform a large scale vessel mixing campaign. This work supports the completion of the M-062-20 milestone.

### 3.2 Budget/Cost Status

**Budget:** Total funding available for the WTP Project in fiscal year (FY) 2010 is \$1.009 Billion, which includes \$690 Million new budget authority, and \$319 Million of FY 2009 carryover funds. To date, the WTP Project has received \$6.296 Billion of funding.

**Spend:** For FY 2010, the WTP Project spent \$790.5 Million through September 2010. Through FY 2010 to date, the total WTP Project spend is \$6.351 Billion. FY 2010 carryover is \$219 Million.

## 4.0 TANK FARMS

### 4.1 Tank Farms Project Overview

Throughout the period, Washington River Protection Solutions LLC, Ecology and DOE-ORP personnel developed the scenarios to be analyzed in System Plan Revision 6. On October 27, 2010, Ecology and DOE agreed to these scenarios. This met the M-062-40A requirement (for 2010) that every three years starting October 31, 2010, Ecology and DOE will each have the right to select a minimum of three scenarios that will be analyzed in the upcoming System Plan. DOE Letter 10-TPD-148, dated October 28, 2010, discussed ten selected scenarios and was signed by both DOE-ORP and Ecology.

In December 2010, Ecology, DOE and contractor staff completed a review of the detailed assumptions for System Plan Revision 6. A detailed work schedule was drafted and the contractor initiated modeling of new systems and facilities required by many of the ten scenarios. Ongoing work related to System Plan Revision 6 includes model modifications, performance of modeling runs, and data verification and validation. Ecology, DOE and DOE's contractors continue to work together to complete System Plan Revision 6 in order to meet the M-062-40, October 31, 2011, deliverable to issue the System Plan.

#### **4.2 Budget/Cost Status**

**Budget:** Total funding available for the Tank Farm Project in FY 2010 was \$443 Million, which includes \$408 Million new budget authority, and \$35 Million of FY 2009 carryover funds.

**Spend:** For FY 2010, the Tank Farm Project spent \$326 Million through September 2010. FY 2010 carryover is \$29 Million.

#### **5.0 SCHEDULE MITIGATION**

All M-062-00 milestones are on schedule. No schedule mitigation has been necessary during the reporting period.