



U.S. Department of Energy
Office of River Protection

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

0098370

AUG 19 2011

11-ESQ-177

Mr. F. M. Russo, Project Director
Bechtel National, Inc.
2435 Stevens Center Place
Richland, Washington 99354

Dear Mr. Russo:

CONTRACT NO. DE-AC27-01RV14136 – SUBMITTAL OF U.S. DEPARTMENT OF ENERGY, OFFICE OF RIVER PROTECTION SURVEILLANCE, S-11-ESQ-RPPWTP-013, FOR THE WASTE TREATMENT AND IMMOBILIZATION PLANT (WTP) BALANCE OF FACILITIES (BOF) CORROSION PROTECTION

Reference: ORP letter from J. R. Eschenberg to W. S. Elkins, BNI, "Notification of Dangerous Waste Permit (DWP) Condition/Waste Management Surveillances," 06-ED-019, dated March 6, 2006.

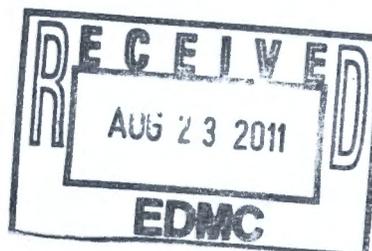
This letter transmits the WTP Surveillance for the Balance of Facilities Corrosion Protection. The purpose of the surveillance was to assess the corrosion protection of the pipelines from the tank farms into the Pretreatment Facility (FRP-PZ-01749-W62F-03, FRP-PZ-01750-W62F-03, and FRP-PZ-01751-W62F-03). If you have any questions, please contact me, or your staff may contact Gae M. Neath, Environmental Compliance Division, (509) 376-7828.

Sincerely,

Dale E. Knutson, Federal Project Director
Waste Treatment and Immobilization Plant

ESQ:GMN

cc: B. G. Erlandson, BNI
S. L. Dahl, Ecology
Administrative Record (H-0-8)
BNI Correspondence
Environmental Portal, LMSI



Attachment
11-ESQ-177
(4 Pages)

Balance of Facilities Corrosion Protection
Surveillance S-11-ESQ-RPPWTP-013

Balance of Facilities Corrosion Protection Surveillance



JUNE 2011

Office of Environmental Safety and Quality

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BALANCE OF FACILITIES CORROSION PROTECTION SURVEILLANCE (S-11-ESQ-RPPWTP-013)

Title of Surveillance:

Balance of Facilities Corrosion Protection Surveillance

Dates Surveillance Conducted:

June 13, 2011

Surveillance Team:

Surveillance: Gae Neath (Lead), Environmental Compliance Division (ECD), Mazen Al-Wazani, Waste Treatment and Immobilization Plant (WTP) Engineering Division, and Don Sommer, ECD Support Services.

Contractor Staff Interviewed:

Dan Robertson, Bechtel National, Inc. (BNI) Environmental.

Summary of Surveillance Activities:

The purpose of the surveillance was to assess the corrosion protection of the pipelines from the tank farms into the Pretreatment Facility (FRP-PZ-01749-W62F-03, FRP-PZ-01750-W62F-03, and FRP-PZ-01751-W62F-03). Washington Administrative Code (WAC) 173-303-640 requires that the design and installation of new tank systems or components have "sufficient structural integrity and is acceptable for the storing and treating of dangerous waste. The assessment must show that the foundation, structural support, seams, connections, and pressure controls (if applicable) are adequately designed and that the tank system has sufficient structural strength, compatibility with the waste(s) to be stored or treated, and corrosion protection to ensure that it will not collapse, rupture, or fail." The applicable Independent Qualified Registered Professional Engineer (IQRPE) reports were reviewed because the IQRPE was tasked with providing an independent review of the subject transfer lines. The IQRPE found that the Waste Feed Receipt Process transfer lines are furnished with additional external corrosion protection by adding an external waterproof barrier to the lines and this isolates them from moisture in the surrounding soils for corrosion protection in lieu of cathodic protection. Since the external waterproof barrier was being credited for protecting the subject transfer lines, the surveillance team also wanted to check that the protective coating was inspected and accepted by BNI. The surveillance team found that the pipeline coatings were adequately inspected by the contractor.

Documentation Reviewed for Surveillance:

- 24590-PTF-M6-PWD-P0057, Revision 2, (July 8, 2005), Piping & Instrumentation Diagram Plant Wash & Disposal System Underground Transfer Lines;
- WAC 173-303-640, Tank systems;
- 24590-PTF-PER-M-02-003, Revision 1, Underground Pipe Protection;

BALANCE OF FACILITIES CORROSION PROTECTION SURVEILLANCE (S-11-ESQ-RPPWTP-013)

- 24590-CM-HC4-HXYG-00138-01-015 Revision 00A, IQRPE Report: Pretreatment Facility Below Grade TWD WTP Transfer Lines Secondary Containment, Ancillary Equipment;
- 24590-CM-HC4-HXYG-00138-02-00056 Revision 00A, IQRPE Report: WTP Underground Transfer Lines and Ancillary Equipment; and
- 24590-BOF-CSSR-CON-08-0035, (10/28/08) WTP Project Coating and Shrink Sleeve Inspection Report.

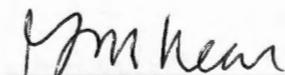
Findings and Observations:

No findings or observations were made.

ORP Management Debriefed:

Lori Huffman, Director ECD

Signature



Gae M. Neath
Surveillance Team Lead

08/16/2014

Date