

FACILITY STATUS CHANGE FORM

Date Submitted: Jan 7, 2009 Originator: David Warren Phone: 554-9368	Area: 300 Area Facility ID: 328, 328A and 328BA Action Memorandum: #3 for the 300 Area	Control #: D4-300-015
--	--	---------------------------------

This form documents agreement among the parties listed below on the status of the facility D&D operations and the disposition of underlying soil in accordance with the applicable regulatory decision documents.

Section 1: Facility Status

- All D4 operations required by action memo complete.
- D4 operations required by action memo partially complete, remaining operations deferred.

Description of Completed Activities and Current Conditions:

Deactivation: Utility isolations were performed on the facility prior to beginning facility decontamination.

Decontamination and Decommissioning: The following hazardous materials were removed prior to facility demolition: oils, asbestos containing material, mercury, and Freon. Hazardous material removal and waste disposition was performed in accordance with *Removal Action Work Plan #3 for the 300 Area, DOE/RL-2004-77, Revision 1 (RAWP)*.

Demolition: Demolition of the above-grade structures was completed in November 2007. The building debris were removed and disposed of at ERDF. Due to the facility histories, the demolition was performed under radiological controls.

Description of Deferral (as applicable):

The 328, 328A, and 328BA building foundations and slabs, and any potential soil excavation will be deferred to the 300-46 remedial action. The foundations are being deferred due to their close proximity to live underground utilities on the south side of the foundation/slab. The utilities are being retained by PNNL for continued operation of the 325, 326, and 329 Buildings. Removal of the slabs could result in damage to these utilities.

Section 2: Underlying Soil Status

- No waste site(s) present. No additional actions anticipated.
- Documented waste site(s) present. Cleanup and closeout to be addressed under Record of Decision.
- Potential waste site discovered during D4 operations. Waste site identification number <to be> assigned.
Cleanup and closeout to be addressed under Record of Decision.

Description of Current/As-Left Conditions:

The 328 building foundations and slab remain in place and are currently posted URMA (Underground Radioactive Material Area). There are no IH postings associated with these structures.

Identification of Documented Waste Site(s) or Nature of Potential Waste Site Discovery (as applicable):

300-102 is an injection well, Building Steam Condensate #353, that is located on the north side of the 328 building. It is a rejected WIDS site that received steam condensate associated with the 328 Building. The drain will be removed with the slab.

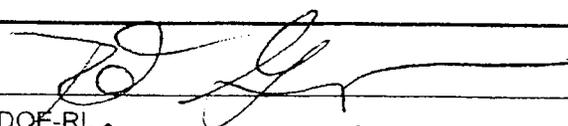
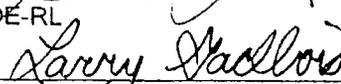
Section 3: List of Attachments

1. Facility information (building history and characterization)
2. Project photographs

RECEIVED
OCT 29 2009

EDMC

FACILITY STATUS CHANGE FORM

 _____ DOE-RL  _____	_____ Date 1/11/09 _____ Date 1-12-09 _____
Lead Regulator <input checked="" type="checkbox"/> EPA <input type="checkbox"/> Ecology	

DISTRIBUTION:

- EPA: Larry Gadbois, B1-46
- Ecology: Rick Bond, H0-57
- DOE: Rudy Guercia, A3-04
- Document Control, H0-30
- Administrative Record, H6-08

- SIS Coordinator: Linda Dietz, H4-22
- D4 EPL: Chris Strand, L1-07
- Sample Design/Cleanup Verification: Megan Proctor, H4-22
- FR Engineering: Rich Carlson, X4-08
- FR EPL: Darrin Faulk, L6-06

Attachment 1: Facility Information

Building History:

The 328 Engineering Services and Safety Shop was originally known as the Mechanical Development Building when it was constructed during the 1952-53 expansion of the 300 Area. It was a rectangular shaped building with a bolted steel frame, smooth steel exterior wall panels, and built up gable roof. The 328 shop was known for its fabrication of specialized development equipment, and providing craft and equipment services, for the laboratories located in Buildings 325, 326, 327, and 329. The 328 Building and its annex were constructed to replace the wartime 3717 Instrument Shop and the two 3722 Shops rendered obsolete in 1952 by the specialized needs of the radiochemistry, radiometallurgy and physics laboratories.

The boiler annex (BA) was a pre-engineered metal building on a concrete slab. The BA was built in the 1997 to 1998 timeframe. The 328BA was built to supply steam to the 328 Building. The facility used a natural gas powered package boiler to generate the steam.

Building Characterization:

Table 1 summarizes the industrial hygiene, radiological control, and asbestos samples collected in the 328, 328A, and 328BA Buildings. Table 2 summarizes the contaminants of concern for facility demolition and the associated determination of no impact to the soil.

Table 1. Summary of Samples Collected

Type	Quantity	Method Detection Limits	Results
Radiological Scoping surveys and Tritium Smears	509 Internal and External Surveys	Beta-gamma – 1,000 removable/ 5,000 fixed ^a Alpha – 20 removable/ 100 fixed ^a	All results were below method detection limits
	13 Tritium Smears	10,000 removable tritium ^a	
Industrial Hygiene Scoping Surveys for Beryllium (Air and Wipe Samples)	307 wipe samples	Beryllium – Wipe Samples- 0.01 $\mu\text{g}/100\text{cm}^2$	One Be wipe sample result was above the action level of of 0.2 $\mu\text{g}/100\text{cm}^2$ All air sample results were below the method's limit of detection
	4 Air Samples	Air Samples- 0.02 $\mu\text{g}/\text{sample}$	
Industrial Hygiene Post Decontamination Sampling for Beryllium (Bulk and Wipe Samples)	23	Beryllium – Bulk Samples- 0.02 $\mu\text{g}/\text{sample}$ Wipe Samples- 0.01 $\mu\text{g}/100\text{cm}^2$	All fifteen bulk samples were measured at levels below the local background release criterion of 1.81 $\mu\text{gram}/\text{gram}$. All eight wipe samples were measured to have surface levels less than the action level of 0.2 $\mu\text{g}/100\text{cm}^2$
Asbestos – Thermal System Insulation and Miscellaneous Material	77	<1% weight	58 - below detection limits 6 - less than 1% asbestos 13 - found to be at levels requiring removal

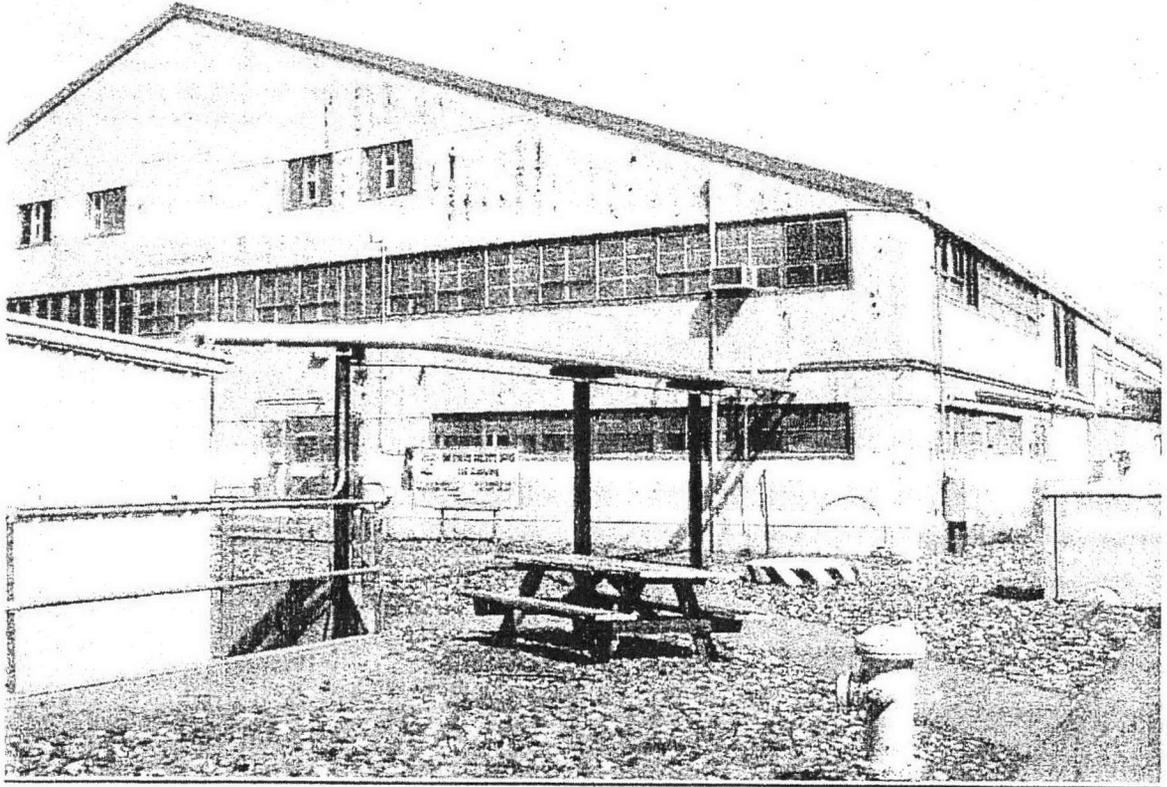
^a - dpm/100 cm²

Table 2. Contaminants of Concern for Facility Demolition

Contaminant of Concern	Determination of no impact to the soil
Radionuclides	Due to the facility history, the demolition was performed under radiological controls. After the building was demolished, the slab was surveyed and downposted to URMA (Underground Radioactive Material Area).
Class II non-friable Asbestos	Demolition was performed in accordance with 40 CFR 61.145 (c) and 40 CFR 61.150

Attachment 2: Project Photographs

328 Building Complex before Demolition



328 Building Complex Site after Demolition

