

FACILITY STATUS CHANGE FORM

Date Submitted: August 21, 2014 Originator: Chris Strand Phone: 554-2720	Area: 300 Area Facility ID: 310 RTS, MO-745 Action Memorandum: Action Memorandum # 3	Control #: D4-300-099
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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:

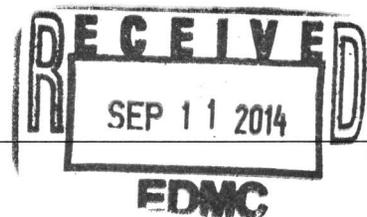
Deactivation: Utility isolations were performed on the facility prior to beginning facility decontamination.

The following hazardous materials were removed prior to facility demolition: batteries, Freon, oil, light ballasts, and miscellaneous construction materials. Hazardous material removal and waste disposition was performed in accordance with *Removal Action Work for 300 Area Facilities*, DOE/RL-2004-77, Revision 2 (RAWP).

Demolition: Above-grade demolition of the 310 Retention Transfer System (RTS) was completed in August of 2014. Below-grade demolition of the 310 RTS foundations (includes tanks 310-T-1, 310-T-2, 310-T-3, and 310S and 310V) were completed in August 2014. The building debris, including Mobile Office MO-745, were removed and disposed of at ERDF. In addition, the small portion of the 310 Building foundation originally deferred because of active utilities, was removed as well (Reference D4-300-073). The demolition was performed under Radiological and Industrial Hygiene controls.

Description of Deferral (as applicable):

None.



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 excavations were backfilled with clean fill following GPERS surveys. The excavation was evaluated before backfill, no anomalies noted. No postings remain following backfill and site completion.

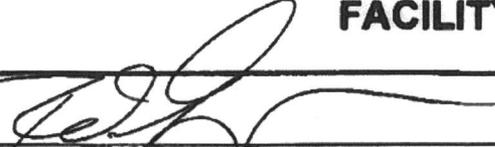
Identification of Documented Waste Site(s) or Nature of Potential Waste Site Discovery (as applicable):

300-15, Process Sewer - piping was removed to the limits of the excavation layback, but segments remain in the area.

Section 3: List of Attachments

1. Facility information (building history, characterization and identification of documented waste sites).
2. Project photographs.
3. GPERS Surveys

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		<u>8/21/2014</u>
DOE-RL 		Date <u>9-4-2014</u>
Lead Regulator	<input checked="" type="checkbox"/> EPA <input type="checkbox"/> Ecology	Date

DISTRIBUTION:

EPA: Dennis Faulk, B1-48

Ecology: Rick Bond, H0-57

DOE: Rudy Guercia, A3-04

Document Control, H0-30

Administrative Record, H6-08 (300-FF-2 OU)

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Sample Design/Cleanup Verification: Theresa Howell, H4-23

FR Engineering: Eric Ison, L4-39

FR EPL: Chris Strand, L5-45

Attachment 1: Facility Information

Facility History:

The 310 Retention Transfer System (RTS) consists of the 310S Truck Load-Out Facility, RTS tanks 310-T-1, 310-T-2, 310-T-3, 310V valve vault, and mobile office MO-745. The 310 RTS was originally part of the 310 Treated Effluent Disposal Facility (TEDF), constructed in 1994. In 2009, part of the 310 TEDF was converted to the 310 RTS and remaining portions of the TEDF were deactivated and demolished. The 310 RTS was a batch release operation that assured compliance with the radiological release limits prior to discharge of process sewer effluent to the City of Richland Publically Owned Works.

Because of the small potential for radiological contamination to enter process sewer wastewater from the 325 building and former 326 & 329 facilities, those effluent streams were first routed to the 310 RTS. Process sewer wastewater was collected in the 342 waste collection sump where each batch is sampled prior to transfer to, and temporary storage in, one of the three available RTS tanks. Upon receipt of acceptable analytical results, the stored water was returned to the 300 Area, becoming part of the combined process/sanitary sewer discharge. Provisions existed at the RTS for handling off-specification wastes via a tanker load-out station set up at the 310S facility.

The 310 RTS was deactivated in February of 2014.

Physical Description:

The 310 Retention Transfer System consists of the following structures:

310S, Truck Load-Out Facility had a metal roof-covered, open sided area with a curbed concrete floor and a surrounding security fence. The metal roof was supported by full-width I-beams on I-beam posts on concrete pillars.

310-T-1, RTS Tank 1 was a 462,000 gallon closed-top, flat-bottomed steel tank. The tank rested on a concrete outer support wall about one foot above grade. It had an outside spiral stairway and surrounding leak/spill containment curbing. Insulated, vertical fill and overflow lines on the outside of the tank were connected to remotely operated control valves in the 310V Vault.

310-T-2 and 310-T-3, RTS Tanks 2 and 3 were 864,000 gallon closed-top, flat-bottomed steel tanks. The tanks rested on a concrete outer support wall about one foot above grade. The tanks had an outside spiral stairway and surrounding leak/spill containment curbing. Insulated, vertical fill and overflow lines on the outside of the tanks were connected to remotely operated control valves in the 310V Vault.

310V, Valve Vault was a below-grade concrete vault containing motor operated valves for directing influent waste flows. The inside dimensions of the below-grade 310V concrete vault was 24 feet long by 12 feet wide and an internal height of 8 feet. The reinforced concrete walls and floor were 1 foot thick. The reinforced concrete roof was 8 in thick with the top 1 feet above grade. The process sewer line from the 342 Waste

Collection Sump/Lift Station entered the 310V Vault about 4 feet below grade. The vault had two metal trapdoors for access.

MO-745, Mobile Office was a double-wide trailer constructed with wood framing and a sheet metal exterior. The trailer provided office space in support of 310 RTS operations.

Building Characterization:

Table 1 summarizes the industrial hygiene, radiological control, and asbestos samples collected in the 310 RTS and MO-745.

Table 1. Summary of Characterization Surveys at the 310 RTS and MO-745.

Type	Date	Documented In	Results Summary
Pre-Demolition			
Asbestos	May 29, 2014	CCN 176224	No asbestos containing materials identified through inspection and testing.
IH Surveys and Beryllium Characterization	Jun 16, 2014	IHEA-310Cmplx-14-001	Facilities determined to be Be free, no other COCs identified.
Radiological Surveys	June 4, 2014 June 9, 2014	RSR-300PS-14-1874 RSR-300PS-14-1896	No radiological contamination identified.

Associated WIDs sites:

300-15: Process sewer was removed to the limits of the excavation layback.

Anomalies Discovered During Demolition.

No anomalies were discovered during the demolition of the 310 RTS. No soil staining was observed upon final inspection of the excavation prior to backfill.

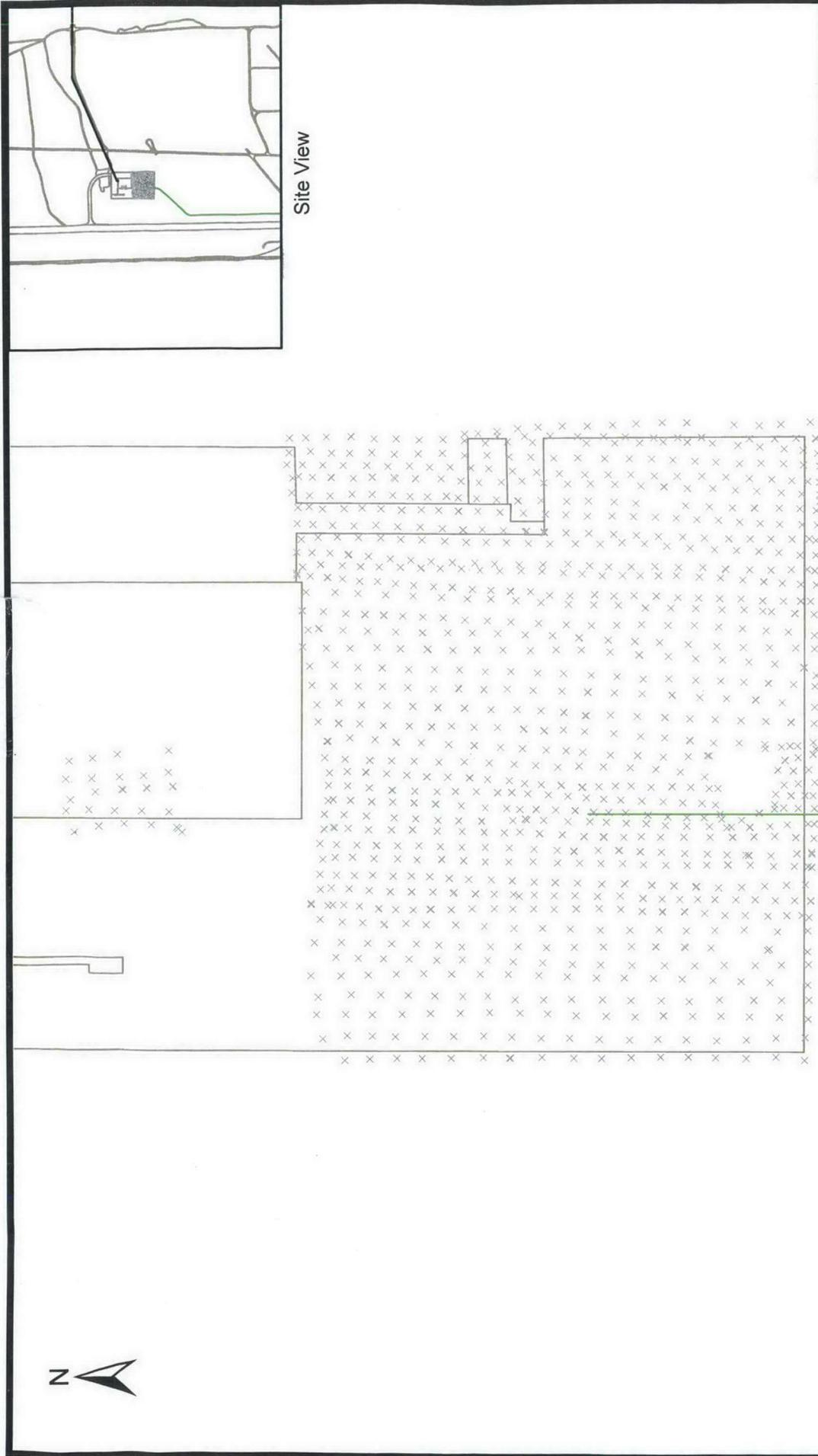
Attachment 2: Project Photographs

Photograph 1: Aerial view of the 310 RTS Structures, January 28, 2013.



**Photograph 2. Aerial view of 310 RTS during demolition, July 21, 2014.
(Intact tank, 310-T-2)**





Map Files
 ESRFRM140082
 ESRFRM140083



Survey Map Prepared By Bruce Coomer, ESI

300 D4 310 TEDF GPERs Radiological Survey Beta Track Map

Legend		Summary Statistics	
NET CPM		Number of Data Pnts:	1,264
X	<1.5	Type of Survey:	Beta
●	1.5x bkg	Max GCPM:	597
●	5000	Avg Bkg CPM:	303
●	10000	Area Surveyed:	7,960 m ²
●	25000	Project File:	310_TEDF
		Pdf File:	Cmp_310_TEDF_B

**Photograph 2. Aerial view of 310 RTS during demolition, July 21, 2014.
(Intact tank, 310-T-2)**



Photograph 3. 310 RTS site prior to backfill, looking south on August 18, 2014



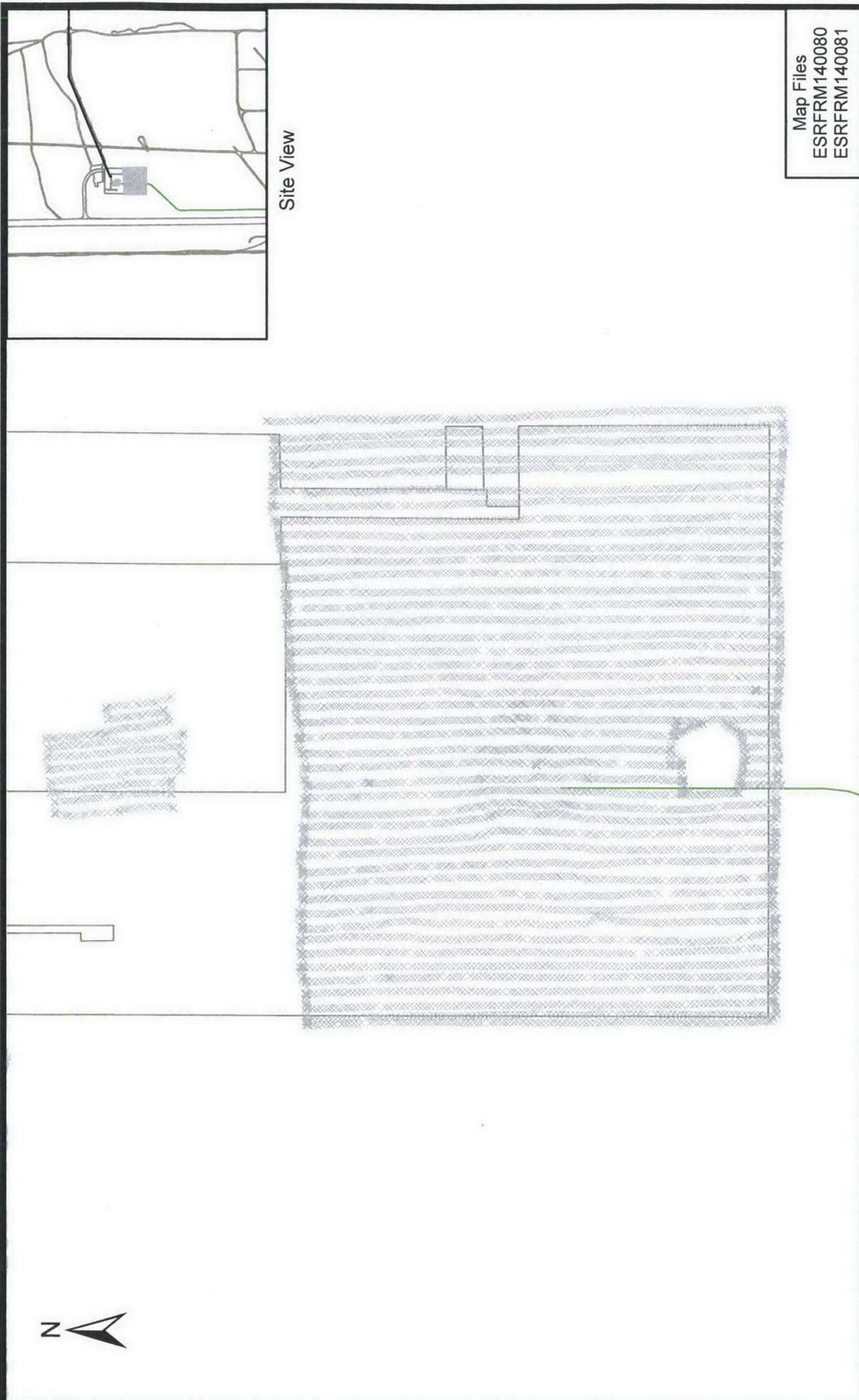
Photograph 4. Aerial of 310 RTS prior to backfill, on August 15, 2014.



Photograph 4. 310 RTS Site following backfill, looking south on August 25, 2014.



**Attachment 3: GPERS Surveys
(Beta and Gamma)**



Map Files
 ESRFRM140080
 ESRFRM140081



Survey Map Prepared By Bruce Coomer, ESI

300 D4 310 TEDF GPERs Radiological Survey Gamma Track Map

Legend		Summary Statistics	
NET CPM		Number of Data Pnts:	7,233
X	<1.5	Type of Survey:	Gamma
●	1.5x bkg - 5000	Max GCPM:	2004
●	5000 - 10000	Avg Bkg CPM:	1049
●	10000 - 25000	Area Surveyed:	8,015 m ²
●	25000	Project File:	310_TEDF
		Pdf File:	Cmp_310_TEDF_G