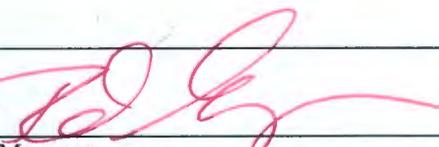
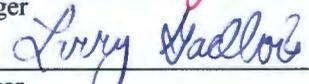
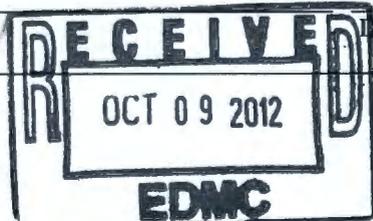


**TRI-PARTY AGREEMENT**

Change Notice Number TPA-CN- 538	TPA CHANGE NOTICE FORM	Date: <b>9/26/12</b>
Document Number, Title, and Revision: DOE/RL-2001-47, Remedial Design Report/Remedial Action Work Plan for the 300 Area, Rev. 3 <b>0084502</b>		Date Document Last Issued: December 2009
Originator: R. F. Guercia (U.S. Department of Energy, Richland Operations Office [DOE])		Phone: (509)376-5494
<p><b>Description of Change:</b> Modify the <i>Remedial Design Report/Remedial Action Work Plan for the 300 Area</i> (DOE/RL-2001-47, Rev. 3) to add Section 3.7, Waste Sites Affected by 300 Area Retained Facilities and Utilities</p>		
<p>R. F. Guercia <u>DOE</u> and <u>Larry Gadbois</u> <u>Lead Regulatory Agency</u> agree that the proposed change modifies an approved workplan/document required by 300-FF-2 Record of Decision and will be processed in accordance with the Tri-Party Agreement Action Plan, Section 9.0, <i>Documentation and Records</i>, and not Chapter 12.0, <i>Changes to the Agreement</i>.</p> <p>The following are authorized changes to the <i>Remedial Design Report/Remedial Action Work Plan for the 300 Area</i> (RDR), (DOE/RL-2001-47, Rev. 3)</p> <ul style="list-style-type: none"> <li>• Add Section 3.7, "Waste Sites Affected by 300 Area Retained Facilities and Utilities" – page 3-18 (attachment 1)</li> <li>• Add Table 3-2, "300 Area Waste Sites Affected by Retained Facilities" (attachment 1)</li> <li>• Add Table 3-3, "300 Area Operating Facilities Interfering With Waste Site Remediation" (attachment 1)</li> <li>• Add Table 3-4, "300 Area Piping Systems" (attachment 1)</li> <li>• Add Figure 3-2, "Interferences from 300 Area Retained Facilities and Utilities" (attachment 1)</li> </ul>		
<p><b>Justification and Impacts of Change:</b></p> <p>The Department of Energy has determined certain buildings and utilities within the 300 Area need to be retained to support the ongoing mission of the Pacific Northwest National Laboratory and the Hanford Site. Some existing waste sites are located under or directly abutting facilities and utility corridors that will be retained, thus delaying remediation. Tri-Party Agreement Change Request M-016-07-04 revised milestones to allow buildings and utility corridors to remain long term, while retaining the requirement to remediate the waste sites in accordance with an approved work plan. The waste sites associated with these facilities are mainly process sewer lines that have been flushed, drained and capped, or repaired to allow continued operations.</p> <p>This change notice provides a methodology for addressing waste site remediation of sites affected by retained facilities and utilities. Additional detail and schedules will be provided in future revisions to the Remedial Design Report/Remedial Action Work Plan for the 300 Area.</p>		
<p><b>Approvals:</b></p> <p>R. F. Guercia  <u>9/25/2012</u> <input checked="" type="checkbox"/> Approved <input type="checkbox"/> Disapproved DOE Project Manager Date</p> <p>Larry Gadbois  <u>Sept 26 2012</u> <input checked="" type="checkbox"/> Approved <input type="checkbox"/> Disapproved EPA Project Manager Date</p> <p>N/A <input type="checkbox"/> Approved <input type="checkbox"/> Disapproved</p> <p>Ecology Project Manager _____ Date _____</p>		



## Attachment 1

Section 3.7 is being added as shown below using double underline to indicate text additions:

### 3.7 Waste Sites affected by 300 Area Retained Facilities and Utilities

The Tri-Party Agreement M-16-00B milestone recognizes that waste sites that interfere with retained 300 Area facilities and the utility corridors will not be remediated by the September 30, 2018 completion date. The milestone states that completion of interim remedial actions for waste sites associated with the retained 300 Area facilities and their utilities will be subject to approved Remedial Design Report/Remedial Action Work Plans. The purpose of this section is to describe how interim actions for sites affected by 300 Area retained facilities and utilities will be completed.

The Department of Energy has determined certain buildings and utilities within the 300 Area need to be retained to support the ongoing mission of the Pacific Northwest National Laboratory and the Hanford Site. Some existing waste sites are located under or directly abutting facilities and utility corridors that will be retained, thus delaying remediation. Tri-Party Agreement Change Request M-016-07-04 revised milestones to allow buildings and utility corridors to remain long term, while retaining the requirement to remediate the waste sites in accordance with an approved work plan.

For the purposes of this Remedial Design Report/Remedial Action Work Plan, the 324 Complex must be retained temporarily (interim retained) in order to safely remediate the 300-296 waste site that was discovered below the 324 B-cell. Remediation of the waste site using the existing 324 hot cells and building is currently planned in order to reduce the potential for airborne release of the radioactive material and also to minimize water intrusion that could cause contaminant migration. As a result, the 324 Complex will be retained until after the highly contaminated soil has been remotely remediated from below B-cell. Demolition of the 324 facility will be completed per the Removal Action Work Plan

The affected waste sites and piping systems (listed in Table 3-2) are identified because of their proximity to the retained facilities (listed in Table 3-3) or retained utility corridors. Efforts taken to minimize the potential for contaminant mobilization and transport from the waste sites during continued site operations include the following: waste sites are generally buried below buildings or pavement; some 300 Area utilities have been upgraded to minimize any potential for water leakage from buried pipelines that could mobilize and transport buried contaminants; certain segments of waste site piping will be stabilized (e.g., grout filled) to immobilize contaminants.

#### 3.7.1 Waste Sites

Ability to remediate certain non-pipeline waste sites (listed in Table 3-2) is impeded by retained facilities/utility corridors. Remediation of the below listed waste sites will be performed with removal of the interfering facility or utility.

- 300-4, Substation Soil Contamination at 351
- 300-5, Fire Station Fuel Tanks
- 300-296, Soil Contamination under the 324 Building B-Cell
- 300-WTF, Waste Treatment Facility
- 331-I.SLT-1, 331 Life Sciences Laboratory Trench 1
- 331-I.SLT-2, 331 Life Sciences Laboratory Trench 2
- UPR-300-10, Unplanned Release beneath the northwest corner of the 325 Building.

- UPR-300-12, Unplanned Release under the floor on the east side of the 325A Building
- UPR-300-17, Unplanned Release: (The site has been approved as interim closed by DOE and EPA and will backfilled and revegetated with 300-15 in support of Tri-Party Agreement Milestone M-16-139.
- UPR-300-48, Unplanned Release from radioactive liquid that leaked from the process sewer drain pipe at 325.

### **3.7.2 Pipeline System Segments**

Piping systems, listed in Table 3-2 were used to transfer and manage radiologically and chemically contaminated liquid wastes from 300 Area facilities. The piping systems fit into one of four categories: (1) inactive segments of piping that are available for remediation per TPA milestone M-016-069 and M-016-075, which will be remediated in support of current Tri-Party Agreement Milestones; (2) inactive piping segments that are not available for remediation per TPA milestone M-016-069 and M-016-075 because of interference with 300 Area retained facilities/utilities, which will be stabilized using standard industry void fill materials, as appropriate, to mitigate the potential for radiological or chemical contaminant migration; (3) active piping segments, which will be remediated with the retained facilities and utilities approximately the same time frame as the M-016-00 TPA milestone; and (4) inactive and active segments that will be remediated after the removal of the 324 Complex. Demolition schedule for 324 will be developed in parallel with the development of a new M-89-00 milestone. The approximate lengths and planned disposition for each of the piping systems is listed in table 3-4.

Figure 3-2 shows the location of piping/utility corridors that are expected to remain in order to support continuing site needs. However, based on field conditions, additional piping may either need to stay in place or be available for remediation. The as left conditions will be addressed in the approved closure documentation. A description of the piping systems is provided below:

**300-15, Process Sewer Located North of Apple Street:** The inactive 300-15 piping located north of Apple Street will be remediated, backfilled, and revegetated by March 31, 2013, in support of Tri-Party Agreement Milestone M-16-139.

**300-15, Process Sewer Located South of Apple Street:** Remediation of accessible piping will be performed in support of Tri-Party Agreement Milestone M-16-69, remediated of 300 Area waste sites by September 30, 2015.

**300-214, Retention Process Sewer:** Remediation of accessible piping will be performed in support of Tri-Party Agreement Milestone M-16-69, by September 30, 2015.

**300-265, Pipe Trench Between 324 and 325:** Remediation of accessible piping will be performed in support of Tri-Party Agreement Milestone M-16-69, by September 30, 2015. The remainder will be remediated with the 324 Complex and 325 Complex.

**300 Radioactive Liquid Waste System:** Remediation of accessible piping will be performed in support of Tri-Party Agreement Milestone M-16-69 by September 30, 2015. The remainder will be remediated with the retained facilities and utilities.

**300 Retired Radioactive Liquid Waste System:** Remediation of accessible piping will be performed in support of Tri-Party Agreement Milestone M-16-69, by September 30, 2015. The remainder will be remediated with the retained facilities and utilities.

**600-352 Retention Transfer System:** This pipeline running between 342 and the 310 tank formerly was managed as a portion of 300-15. 600-352 is an active system for the operation of the 325 facility. This pipeline will be remediated with the retained facilities and utilities.

**Table 3-2. 300 Area Waste Sites Affected by Retained Facilities**

<u>Waste Site</u>	<u>Interference</u>
<b>Waste Site</b>	
<u>300-4, Substation Soil Contamination</u>	<u>351B</u>
<u>300-5, Fire Station Fuel Tanks</u>	<u>3709A and 3709B</u>
<u>300-296, Soil Contamination below the 324 Building</u>	<u>324 Complex</u>
<u>325 WTF, Waste Storage</u>	<u>325 Complex</u>
<u>331-LSLT-1, Life Sciences Lab Trench 1</u>	<u>331 Complex</u>
<u>331-LSLT-2, Life Sciences Lab Trench 2</u>	<u>331 Complex</u>
<u>UPR-300-10, Unplanned Release</u>	<u>325 Complex</u>
<u>UPR-300-12, Unplanned Release</u>	<u>325 Complex</u>
<u>UPR-300-48, Unplanned Release</u>	<u>325 Complex</u>
<b>Pipeline System Segments</b>	
<u>300-15, Process Sewer System</u>	<u>300 Area Retained Facilities</u>
<u>300-214, Retention Process Sewer</u>	<u>300 Area Retained Facilities</u>
<u>300-265, Pipe Trench between 324 and 325</u>	<u>325 Complex</u>
<u>300-RLWS, Radioactive Liquid Waste Sewer</u>	<u>300 Area Retained Facilities</u>
<u>300-RRLWS, Retired Radioactive Liquid Waste Sewer</u>	<u>300 Area Retained Facilities</u>
<u>600-352, Retention Transfer System</u>	<u>300 Area Retained Facilities</u>

**Table 3-3. 300 Area Operating Facilities Interfering with Waste Site Remediation**

<u>310 Retention Transfer System Complex Operation</u>
<u>318 Radiological Calibrations Complex</u>
<u>324 Chemical and Materials Engineering Laboratory Complex</u>
<u>325 Radiochemical Processing Laboratory Complex</u>
<u>331 Life Sciences Complex</u>
<u>342 Waste Collection System</u>
<u>350 Plant Operations Complex</u>
<u>351A/351B Electrical Substation support</u>
<u>3709A /3709B Fire Station</u>

**Table 3-4. 300 Area Piping Systems**

<u>Pipeline</u>	<u>Known Length (LF)</u>	<u>Inactive Planned for Removal (LF)</u>	<u>Inactive Planned to be Left in Place (LF)</u>	<u>Interim Retained for 324 Planned for Removal (LF)</u>	<u>Active Planned for Continued Operations (LF)</u>
<u>300-15 and 600-352</u>	<u>42,400</u>	<u>11,650</u>	<u>12,200</u>	<u>650</u>	<u>17,900</u>
<u>300 RLWS</u>	<u>5,150</u>	<u>2,850</u>	<u>1,500</u>	<u>800</u>	<u>0</u>
<u>300 RRLWS</u>	<u>3,400</u>	<u>1,250</u>	<u>1,500</u>	<u>650</u>	<u>0</u>
<u>300-214</u>	<u>5,550</u>	<u>1,000</u>	<u>1,850</u>	<u>700</u>	<u>2,000</u>
<u>300-257</u>	<u>3,900</u>	<u>2,250</u>	<u>1,650</u>	<u>0</u>	<u>0</u>
<u>300-265</u>	<u>2,350</u>	<u>600</u>	<u>1,550</u>	<u>200</u>	<u>0</u>

<u>Total</u>	<u>62,750</u>	<u>19,600</u>	<u>20,250</u>	<u>3,000</u>	<u>19,900</u>
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### **3.7.3 Affected Removal Actions**

Removal of the 324 Complex is captured within the scope of the M-094-00 milestone, with portions of the facility under a directed closure required by TPA milestone M-89-00. As discussed in WCH-403 "Remediation Alternatives Evaluation for Contaminated Soil Beneath the 324 Building", remediation of the 300-296 waste site, under B cell of 324, requires unique remediation technologies. The 324 building and its B cell are planned to be used as part of the protective environment during remediation of the 300-296 waste site. This building and its service utilities impede access to portions of pipeline waste sites. The impacted segments of pipeline are listing in table 3-4 as "Interim Retained for 324 Planned for Removal."

In addition to the facilities listed in Table 3-3, RL maintains a number of facilities with an open ended use date (e.g. 3212 and 3220 Records Storage Facilities, 339A HLAN support facilities). As these facilities are determined to be surplus, they will be removed per the Removal Action Work Plan for the 300 Area, The Removal Action Work Plan for River Corridor General Decommissioning activities, or as directed by other NEPA/CERCLA documentation.

