

**NEPA REVIEW SCREENING FORM (NRSF) 3A  
Categorically Excluded Actions**

**Document ID#:  
DOE/CX-00211**

**I. Project Title:**

Project L-838, Water Feeds to the 622R Meteorological Station, 6608 Biosolids Handling Facility, and 200 West Area Evaporative Sewage Lagoon

**II. Describe the proposed action, including location, time period over which proposed action will occur, project dimension (e.g., acres displaced/disturbed, excavation length/depth), and area/location/number of buildings. Attach narratives, maps and drawings of proposed action. Describe existing environmental conditions and potential for environmental impacts from the proposed action. If the proposed action is not a project, describe the action or plan.**

The U.S. Department of Energy (DOE), Richland Operations Officer (RL), Infrastructure and Services Division (ISD) proposes pipeline routing modifications to the export, sanitary, and raw water systems in 200 West Area of the Hanford Site (Project L-838). The project would convert the fire protection water supply to the 622R Meteorological Station from the export water system to the raw water system. In addition, permanent raw water and sanitary water pipelines would be installed to the 6608 Biosolids Handling Facility, which is located at the 200 West Area Evaporative Sewage Lagoon. Removal of the 622R Meteorological Station from the export water system would reduce operating pressure and flow demand, and eliminate cross-connection control issues while minimizing maintenance costs and extending the life of pumps and pipelines. Installation of permanent raw water and sanitary water pipelines to the 6608 Biosolids Handling Facility would eliminate use of temporary aboveground pipelines, which are subject to freezing and damage, and support the startup of biosolids treatment and processing operations.

The existing export water system would be modified by cutting and capping the pipeline to the 622R Meteorological Station at the main water line near the service connection. This pipeline would be abandoned in-place.

The project would install 9,200 feet of raw water pipeline (12-inch minimum) from a tie-in point on the existing pipeline, which is southwest of T-Plant and south of 23rd Street. An optional pipeline route from the 282WC Building would provide construction flexibility if a tie-in to the existing pipeline cannot be made due to the age and condition of the pipeline. The proposed pipeline would be connected to the 622R Meteorological Station fire suppression system. A raw water line would be installed from the 622R Meteorological Station to the 200 West Area Sewage Lagoon and 6608 Biosolids Handling Facility. This pipeline would be sized based on the raw water demand and fire protection requirements at the 6608 Biosolids Handling Facility (assumed to be 12-inch minimum) and would be connected to the 622R Meteorological Station fire suppression system and fire hydrant(s). If required, a fire hydrant may be installed with appropriate pipeline connections for fire suppression at the 200 West Area Evaporative Sewage Lagoon and 6608 Biosolids Handling Facility.

The project would also install 3,600 feet of sanitary water pipeline (4-inch minimum) from the existing sanitary water pipeline at the 622R Meteorological Station (or alternate tie-in location within the project area) to the 200 West Area Evaporative Sewage Lagoon and 6608 Biosolids Handling Facility. Sanitary water connections would be made for a safety shower and other domestic uses at the 6608 Biosolids Handling Facility. A Washington Administrative Code (WAC) compliant air gap and backflow preventer would be installed on the sanitary water supply pipeline to satisfy requirements applicable at the facility boundary or other location approved by the Washington State Department of Health (WDOH). Figure 1 depicts the proposed routes for the raw and sanitary water pipelines.

When possible, access to the project area would be from existing roads and other previously disturbed areas. New roads may be required to support construction and maintenance of the pipelines due to the final alignment. For example, if it becomes necessary to use the optional pipeline route from the 282WC Building, then new roads would be required to construct and maintain the pipeline. Access road construction would require blading and grading to a maximum depth of 6 inches below existing grade and would measure 15 feet wide. Road maintenance may include blading and grading, mechanical and chemical vegetation control, and placement of gravel. Excavations for raw and sanitary water pipeline construction would not exceed 6 feet deep and 20 feet wide.

Existing pipeline would be reused when practical (e.g., at existing system or building tie-in points) and isolation valves, tees, and blind flanges would be installed to provide operational flexibility for future raw or sanitary water connections. The design would comply with applicable fire protection system requirements (including fire hydrants) and DOE Order 420.1C, Change 1, "Facility Safety." A project report would be prepared and submitted to WDOH, as required. The

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design would comply with applicable WDOH regulations (e.g., DOH 331-123, "Water System Design Manual") and WAC requirements for raw and sanitary water systems (e.g., WAC 246-290, "Group A Public Water Supplies").

ECOLOGICAL RESOURCES (ECR-2020-209). DOE-RL Ecological Compliance surveyed the project area on March 2, 2020. The project area is adjacent to paved roads that travel through high quality shrub-steppe habitats, as well as a highly disturbed industrial areas that include patches of vegetation. The Hanford Site Biological Resources Management Plan (BRMP, DOE/RL-96-32, Rev. 2), which is the primary implementation document for managing and protecting ecological resources on the Hanford Site, ranks wildlife species and habitats based on the level of concern for each resource (Levels 0-5). The patches of vegetation within the project area boundary contain BRMP Level 4, Level 2, Level 1, and Level 0 habitats. Figure 2 depicts the BRMP habitat levels within the project area.

BRMP Level 4 Habitats. The project area contains 28.86 acres of high quality BRMP Level 4 habitat. However, this habitat would not be affected by the proposed pipeline routes and would be avoided if changes to the pipeline alignment become necessary because of unanticipated field conditions. BRMP Level 4 habitat is categorized as a native climax shrub overstory with a native grass understory. Shrub-nesting birds and mammals were observed in the project area including several Washington State candidate species. The management goal for BRMP Level 4 habitats is preservation and the preferred action is avoidance and/or minimization. Compensatory mitigation would be required for impacts to BRMP Level 4 habitats that exceed 1.2 acres at a replacement ratio of 5:1.

Project management would direct workers to avoid impacts to BRMP Level 4 habitats. Access roads, staging areas, laydown areas, and spoil piles would be planned to avoid impacts to BRMP Level 4 habitats. If impacts cannot be avoided, then they would be minimized. Fragmentation of BRMP Level 4 habitats would be avoided (e.g., pipelines would be routed close to existing roads or in previously disturbed areas rather than crossing undisturbed patches of shrub-steppe habitat). Whenever possible, impacts to BRMP Level 4 habitats would be diverted to lower-quality habitats.

BRMP Level 2 Habitats. The BRMP Level 2 habitats within the project area are classified as a successional shrub overstory with a predominantly non-native understory. These vegetative communities are common in areas that were disturbed in the past, but have been relatively undisturbed for at least several years. The management goal for BRMP Level 2 habitats is conservation and the preferred action is to avoid and/or minimize impacts. Compensatory mitigation would be required for impacts to BRMP Level 2 habitats exceeding 1.2 acres at a replacement ratio of 1:1. The total area of BRMP Level 2 habitats in the project area is 19.27 acres. However, the proposed pipeline routes would have minimal impacts to these areas. Project management would direct workers to minimize impacts to BRMP Level 2 habitats and project impacts would be diverted to lower-quality habitats.

BRMP Level 1 and Level 0 Habitats. The remaining areas within the project area consist of non-native dominated grassy areas (BRMP Level 1 habitats) and graveled or paved surfaces (BRMP Level 0 habitats). The primary management goal for BRMP Level 1 and Level 0 habitats is to support waste management, environmental restoration, and technology development missions on the Hanford Site. Compensatory mitigation measures are not required for impacts to BRMP Level 1 and Level 0 habitats.

Birds can nest within the project area on the ground, buildings, or equipment. Project management would instruct workers to watch for nesting birds. If any nesting birds are encountered or suspected, or bird defensive behaviors are observed within the project area, then project management would contact DOE-RL Ecological Compliance to evaluate the situation. DOE-RL Ecological Compliance would perform a bird survey within the project area during the nesting season (mid-March to mid-July) prior to all vegetation clearing or other ground disturbing activities.

All land areas disturbed by the project that are not needed for continued project use, access, or safety considerations would be replanted using locally derived, native plant species. The Hanford Site Revegetation Manual (DOE/RL-2011-116 Rev. 1) provides guidance regarding species mix, planting rates, and methods.

Project management would contact DOE-RL Ecological Compliance within two weeks of project

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completion to perform a post-construction ecological survey to assess project impacts for potential compensatory mitigation actions. No adverse impacts to ecological resources are anticipated.

CULTURAL RESOURCES (HCRC#2020-200-001). DOE-RL Cultural and Historic Resources Program (CHRP) conducted a Cultural Resources Review (CRR) of the proposed project. DOE-RL sent an Area of Potential Effects (APE) notification to the Washington State Historic Preservation Office (SHPO) and regional Tribes on November 18, 2019. CHRP conducted a cultural resources survey on December 4 and 5, 2019. A portion of the Hanford Site Plant Railroad (45EN1107) was observed within the APE, but no new cultural resources were identified during the survey. DOE-RL transmitted a CRR, with a finding of No Historic Properties Affected, to the SHPO and local Native American Tribes for a 30-day comment period on January 21, 2020. The SHPO concurred with the findings of the CRR on January 21, 2020. DOE-RL provided a notice of compliance with Section 106 of the National Historic Preservation Act for this project on March 12, 2020.

Project management would direct all workers to watch for cultural materials (mussel shell, bone, stone artifacts, burned rocks, charcoal, cans, bottles, or agricultural equipment) during construction activities. If any cultural materials were encountered, work near the discovery would stop until a CHRP archaeologist is notified to assess the significance of the find, appropriate Native American Tribes are contacted, and arrangements are made for mitigation of the find, as needed. No adverse impacts to cultural resources are anticipated.

CONCLUSION. 10 CFR 1021, Subpart D, Appendix B, Categorical Exclusion B5.5, "Short Pipeline Segments," provides NEPA coverage for the proposed project. This CX addresses construction and operation of short pipeline segments (less than 20 miles), which convey water between existing source and receiving facilities within previously disturbed or developed rights-of-way. Any changes to the proposed project would require review and approval by the DOE-RL NEPA Compliance Officer.

**III. Existing Evaluations (Provide with NRSF to DOE NCO):**

**Ecological Review Report No. and Title:**

MSA-2001019, A. L. Johnson (Manager, Ecological Monitoring and Compliance) to D. C. Shaw (Environmental Compliance/Sustainability), "Ecological Clearance for Project L-838; Water Feeds to the 622R and the 6608 Facilities, Hanford Site, (ECR-2020-209)," dated March 9, 2020, Mission Support Alliance, Richland, Washington.

**Cultural Review Report No. and Title:**

MSA-2001138, A. G. Fergusson (Manager, Cultural & Historic Resources Protection) to D. C. Shaw (Environmental Compliance/Sustainability), "Cultural Resource Clearance for L-838, Installation of Water Feeds to 622R, the 6608 Facility, and to the 200W Sewage Lagoons in the 200 West Area of the Hanford Site, Benton County, Washington (HCRC#2020-200-001)," dated March 17, 2020, Mission Support Alliance, Richland, Washington.

**Maps:**

N/A

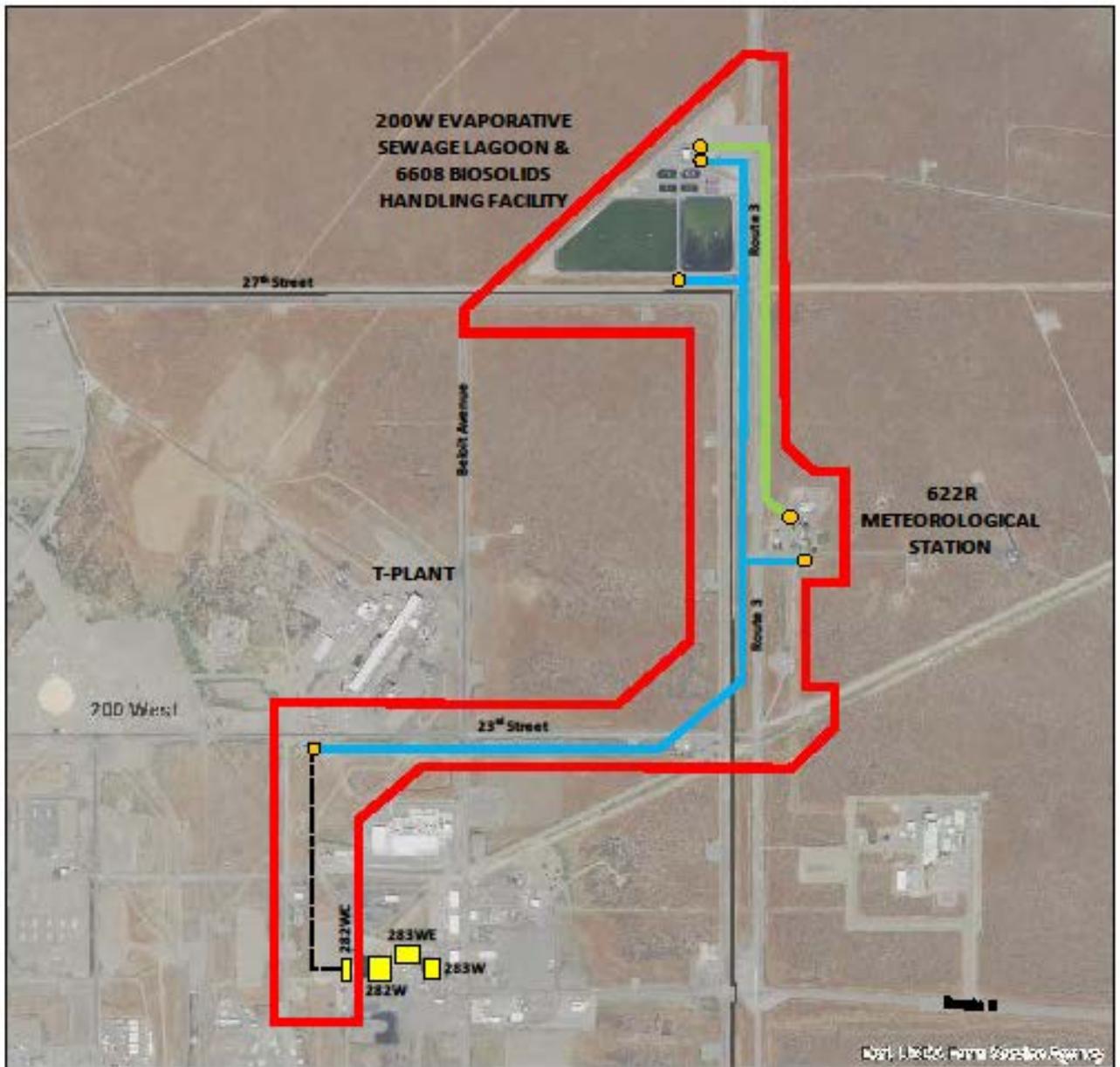
**Other Attachments:**

Figure 1 - Project Area/Area of Potential Effects for Proposed Raw and Sanitary Water Pipeline Routes.

Figure 2 - BRMP Habitat Levels within Project Area/Area of Potential Effects.



Figure 1 – Project Area/Area of Potential Effects for Proposed Raw and Sanitary Water Pipeline Routes



**LEGEND**

- Area of Potential Effects (APE)
- Hanford Operational Areas
- 200W Water Treatment Facilities
- Proposed Sanitary Water Pipeline
- Proposed Raw Water Pipeline
- Optional Raw Water Pipeline from 282WC Building
- Pipeline Tie-In Locations



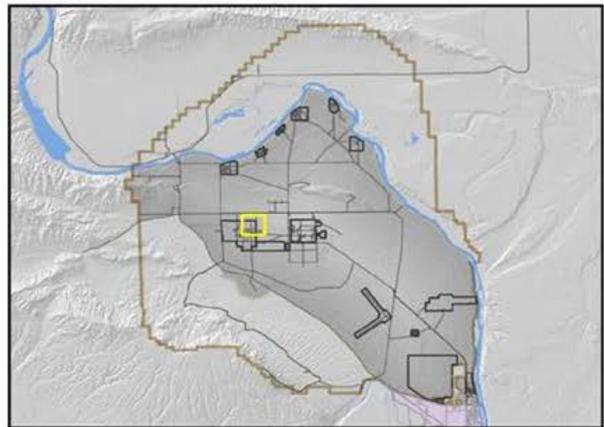
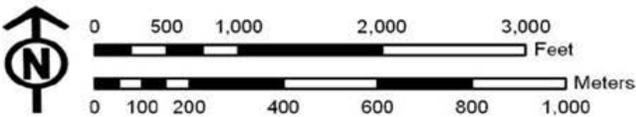
**Detail of Area of Potential Effect (APE)**  
 IOP-CP-20-006-00  
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Figure 2 – BRMP Habitat Levels within Project Area/Area of Potential Effects



**LEGEND**

- Project Area
- Proposed Pipeline Routes
- BRMP Level 4 Habitat
- BRMP Level 2 Habitat
- BRMP Level 1 Habitat
- BRMP Level 0 Habitat
- 282WC Building
- Optional Raw Water Pipeline from 282WC Building



**Project Area**

ECR-2020-209 | L-838 Water Feeds to 622R & 6608  
Hanford Site, Benton County, WA