

**NEPA REVIEW SCREENING FORM**

**Document ID Number:**

DOE/CX-00133

**I. Project Title:**

Activity-Specific Categorical Exclusion for Deep Borehole Drilling, Sampling, and Characterization for the Proposed Natural Gas Pipeline from Pasco, Washington to the Hanford Site 200 East Area.

**II. Project Description and Location (including Time Period over which proposed action will occur and Project Dimensions - e.g., acres displaced/disturbed, excavation length/depth, area/location/number of buildings, etc.):**

The Department of Energy, Richland Operations Office (DOE-RL), is preparing an Engineering Feasibility Study (EFS) and Environmental Impact Statement (EIS) to analyze alternatives for acquiring a pipeline and utility services to provide natural gas to support facilities in the Hanford Site 200 East Area. The EIS (DOE/EIS-0467) will analyze potential environmental impacts of constructing, operating, and maintaining roughly 30-miles of buried pipeline and ancillary equipment from an existing natural gas pipeline near the Tri-Cities Airport in Pasco, Washington; under the Columbia River near the Hanford Site 300 Area; and to the Hanford Site 200 East Area.

The pipeline will be installed under the Columbia River using horizontal directional drilling methods. This Activity-Specific Categorical Exclusion covers up to five deep vertical geotechnical soil borings (175 to 250 feet below grade surface) proposed to collect data on geologic unit depths, thicknesses, and material properties to support pipeline design and construction under the Columbia River; four on the east side of the Columbia River (in Franklin County) near the Esquatzel Canal and one on the west side in the southern part of the Hanford Site 300 Area (in Benton County). No soil borings will occur in the Columbia River. An area roughly 150-feet by 150-feet will be cleared at each soil boring location and will be accessible by truck-mounted drilling equipment.

Discussions with the Washington State Office of Regulatory Assistance, State of Washington Department of Ecology (Ecology), and the Franklin County Director of Planning/Building determined that the proposed soil borings are exempt from shoreline regulations; including construction storm water permits and other licenses. Therefore, a State Environmental Policy Act (SEPA) Checklist is not required. A Notice of Intent (NOI) will be filed with Ecology pursuant to WAC 173-160-151(2) to perform the soil borings. Since the NOI is not a permit, there is no official review process. Work will be performed in accordance with DOE-0344, Revision 3, "Hanford Site Excavating, Trenching, and Shoring Procedure" and WAC 173-160-400, "Minimum Standards for Resource Protection Wells and Geotechnical Soil Borings." Soil borings will be performed using sonic drilling methods that apply high-frequency energy, down pressure, and rotation to the top of the threaded drill string. Nearly continuous soil core samples will be obtained using a 4 to 8 inch inside diameter (6 to 12 inch outside diameter) core barrel.

DOE will screen and clear the drilling site in the southern part of the Hanford Site 300 Area for radiological hazards and provide dosimetry prior to start of field work, as needed. DOE will provide a full-time Radiological Control Technician (RCT) during drilling operations in the Hanford Site 300 Area to screen soil samples prior to handling. In the event radiological contamination is encountered, the RCT will provide proper material handling and establish appropriate controls. Neither the drilling crew, engineer/geologist, nor anyone else will handle the soil samples until authorized by the RCT. All soil samples collected within the Hanford Site 300 Area will remain onsite until properly dispositioned.

Waste generated from drilling operations will be handled in accordance with DOE/RL-2000-56, "Waste Management Plan for the 300-FF-5 Operable Unit" or other suitable means. Disposable items and leftover drilling spoils will be containerized in 55-gallon drums and transported to a DOE selected storage area for designation and disposal. All drums will be labeled in accordance with DOE/RL-2000-56. If needed, decontamination of equipment will be conducted in accordance with accepted Hanford Site protocols, practices, and procedures at authorized facilities on the Hanford Site.

A cultural resources review for the soil boring locations was conducted (HCRC-2012-600-031) and included a literature review, geomorphic discussion, historical research, and archaeological survey. No archaeological sites are known to exist at any of the soil boring locations. Previous archaeological surveys have been conducted at the four soil boring locations on the Franklin County side of the Columbia River with no adverse findings. The archaeological survey and shovel test probes conducted for the Cultural Resource Review under DOE/CX-00109 resulted in no adverse findings for any of the five soil boring locations. The single soil boring on the Benton County side of the Columbia River will be roughly 125-feet north of the EMSL Cemetery (45BN1426). As such, several actions will be taken including placement of boundary stakes for the access road and work area; project

**NEPA REVIEW SCREENING FORM (continued)**

personnel and equipment will remain within staked access road and work areas; ground disturbance will be minimized; a Cultural Resource Specialist will monitor the initial setup, inspect the ground surface, and monitor the area following completion of soil boring activities; findings of the cultural resource monitoring at the soil boring location on the Benton County side of the Columbia River will be provided in a report to DOE-RL via e-mail for transmittal to local Native American Tribes and the State Historic Preservation Office. Workers will be directed to watch for cultural materials (bones, stone tools, mussel shell, cans, bottles, etc.). If encountered, work near the discovery will stop until a Cultural Resource Specialist is contacted, the significance of the find assessed, appropriate Native American Tribes notified, and mitigation arranged, as needed. The protocol outlined in the "Hanford Cultural Resources Management Plan" (DOE-RL 98-10), Section 5.4.2, provides guidelines for inadvertent discovery of Native American cultural items and will be followed, as needed.

An ecological resources review for the five soil boring locations was conducted (Environmental Assessment Services, LLC, November 15, 2012). Site boring locations 1 through 4 are on the Franklin County side of the Columbia River; location 5 is on the Benton County side. No special-status plant or animal species were observed within 25-meters of any of the five soil boring locations. High-priority noxious weeds were only observed at locations 4 and 5; noxious weed areas will be avoided to prevent spread of seed. Bank swallow nesting cavities were observed less than 50-meters south of location 2 and are vulnerable to collapse if disturbed, but are otherwise unrestricted if nesting birds with eggs or nestlings in cavities are not present during project activities. Magpie nests were observed in trees just north of location 5 and will be avoided. Caution will be exercised during bird nesting season (mid-March to mid-July). If nesting birds, a pair of birds of the same species, or bird defensive behaviors are observed, an Ecological Resource Specialist will be contacted for further guidance.

The proposed soil boring activities are addressed by 10 CFR 1021, subpart D, appendix B, categorical exclusion (CX) B3.1, "Site Characterization and Environmental Monitoring." Specific activities include, but may not be limited to, the following provisions of CX B3.1:

- (a) Geological, geophysical, geochemical, and engineering surveys and mapping, and establishment of survey marks;
- (c) Drilling of wells for sampling or monitoring of groundwater or the vadose (unsaturated) zone, well logging, and installation of water-level recording devices in wells;
- (f) Sampling and characterization of water, soil, rock, or contaminants (such as drilling using truck- or mobile-scale equipment; and modification, use, and plugging of bore holes).

This is an Activity-Specific Categorical Exclusion for a project-specific, non-routine, and non-recurring action. Similar future actions will require separate review and approval by the DOE NEPA Compliance Officer.

**NEPA REVIEW SCREENING FORM (continued)**

Document ID Number:

DOE/CX-00133

**III. Reviews (if applicable):**

Biological Review Report #: Environmental Assessment Services, LLC, report dated November 15, 2012

Cultural Review Report #: HCRC-2012-600-031; DOE/CX-00109

Additional Attachments:

NOTE: DOE/CX-00109 approved on 11/20/12 by DOE NEPA Compliance Officer for shallow hand-shovel/hand-auger cultural resource investigations to support HCRC-2012-600-031

**IV. Existing NEPA Documentation**

YES	NO
<input type="checkbox"/>	<input checked="" type="checkbox"/>

Is the proposed action evaluated in a previous EA, EIS, or under CERCLA?

If "NO," proceed to Section V. If "YES," List EA, EIS, or CERCLA Document(s) Title and Number:

Not Applicable

And then complete Section VI. Provide electronic copy of Initiator/ECO signed NRSF to DOE NCO for information only. DOE NCO signature is not required.

**V. Categorical Exclusion**

YES	NO
<input checked="" type="checkbox"/>	<input type="checkbox"/>

Does the proposed action fall within a class of actions that is listed in Appendixes A or B to Subpart D of 10 CFR Part 1021?

Are there extraordinary circumstances related to the proposal that may affect the significance of the environmental effects of the proposal?

<input type="checkbox"/>	<input checked="" type="checkbox"/>
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Is the proposal connected to other actions with potentially significant impacts or result in cumulatively significant impacts (not precluded by 40 CFR 1506.1 or 10 CFR 1021.211)?

<input type="checkbox"/>	<input checked="" type="checkbox"/>
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List CX to be applied and complete Categorical Exclusion Integral Elements (where an action might fit within multiple CXs, use the CX that best fits the proposed action):

10 CFR 1021, subpart D, appendix B, CX B3.1, "Site Characterization and Env. Monitoring"

**Categorical Exclusion Integral Elements**

YES	NO
<input type="checkbox"/>	<input checked="" type="checkbox"/>

Does the proposed action threaten a violation of applicable statutory, regulatory, or permit requirements for environmental, safety, or health, including DOE and/or Executive Orders?

Does the proposed action require siting, construction, or major expansion of waste storage, disposal, recovery, or treatment facilities?

<input type="checkbox"/>	<input checked="" type="checkbox"/>
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Does the proposed action disturb hazardous substances, pollutants, contaminants, or CERCLA-excluded petroleum and natural gas products that pre-exist in the environment such that there would be uncontrolled or unpermitted releases?

<input type="checkbox"/>	<input checked="" type="checkbox"/>
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Does the proposed action adversely affect environmentally sensitive resources?

<input type="checkbox"/>	<input checked="" type="checkbox"/>
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Does the proposed action involve genetically engineered organisms, synthetic biology, governmentally designated noxious weeds, or invasive species such that the action is NOT contained or confined in a manner designed, operated, and conducted in accordance to applicable requirements to prevent unauthorized release into the environment?

<input type="checkbox"/>	<input checked="" type="checkbox"/>
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If "NO" to all Categorical Exclusion Integral Elements questions above, complete Section VI, and provide to DOE NCO for final Approval/Determination and signature in Section VII.

If "YES" to any of the Categorical Exclusion Integral Elements questions above, contact DOE NCO for additional NEPA Review.

### NEPA REVIEW SCREENING FORM (continued)

Document ID Number:

DOE/CX-00133

#### VI. Responsible Contractor Signatures

	Name (Printed)	Signature	Date
Initiator	Jerry W. Cammann, MSA NEPA-SME	<i>J.W. Cammann</i>	4/3/13
Cognizant Environmental Compliance Officer			

#### VII. Approval/Determination

DOE NEPA Compliance Officer: Cliff Clark

Based on my review of information conveyed to me and in my possession (or attached) concerning the proposed action, as NEPA Compliance Officer (as authorized under DOE Order 451.1B), I have determined that the proposed action fits within the specified class of action:

NCO Determination -  CX  EA  EIS

Signature: *Cliff Clark*

Date: 4/3/2013