

## NEPA REVIEW SCREENING FORM

Document ID Number:

DOE/CX-00142

### I. Project Title:

Radiological Survey Activities in the 600 Area of the Hanford Site Supporting Land Conveyance

### 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 U.S. Department of Energy, Richland Operations (DOE-RL) proposes to conduct radiological surveys of a portion of the 600 Area of the Hanford Site. The surveys are needed to identify the presence and levels of radiological contamination (if any) in order to determine if the land could be released from DOE's radiological control and ultimate conveyance to a non-DOE entity for commercial development.

The area considered in this categorical exclusion (CX) is located north of the City of Richland, with Horn Rapids Road being its southern boundary. It is adjacent to the 300 Area to the east and adjacent to the Hazardous Materials Management and Emergency Response (HAMMER) facility and the Hanford Patrol Area to the west. The Area of Potential Effect (APE) for this project is 518 hectares (1,279 acres), which addresses the access routes for the radiological sample points and ATV mobile gamma spectrometer (see attached figure).

The proposed activities associated with the radiological survey have been described in a survey plan (e-mail, dated June 2, 2014, J. Shoemake, MSA, to R. Krekel et al, DOE-RL, "Draft of S6A Survey Plan). The survey plan was prepared by DOE-RL's Mission Support Alliance (MSA) contractor and uses, to the degree appropriate, guidance found in the Multi-Agency Radiation Survey and Site Investigation Manual (MARSSIM). In addition to the MARSSIM guidance, there are radiological requirements for land conveyance found in 10 CFR 835, Occupational Radiation Protection, and in DOE Order 458.1, Radiation Protection of the Public and the Environment. The proposed activities would be conducted by the MSA; the project scope includes parallel, simultaneous activities conducted by a separate entity contracted by DOE-RL to provide independent verification.

The aforementioned survey plan addresses the collection of multiple surface soil samples at various locations and landscape features throughout the APE, as well as ground scanning with the use of an all-terrain vehicle (ATV)-mounted gamma spectrometer. The soil sampling methodology for this project includes collecting soil samples from over 150 locations throughout the project area. The sample locations have been selected using a non-parametric random sampling approach. Soil sample locations would be accessed by vehicles along approved access routes or by walking, depending on wildfire field work restrictions. Soil samples could reach a depth of approximately 15 centimeters (6 inches) and collect a volume of approximately 0.5 liters (1 pint) of soil. In addition to sample locations, landscape features such as holes in the ground and pipe protruding from the ground may be sampled for potential radiological contamination. The samples would be packaged and managed through chain-of-custody for transfer to onsite or offsite laboratory facility(s), as appropriate.

The ground scan surveys would be conducted using a gamma spectrometer fitted with two 10 by 10 by 40 centimeters (4 by 4 by 16 inches) sodium iodide detectors mounted on a rubber-tired ATV. The ATV may drive off road to conduct these mobile gamma spectrometer surveys.

The entire APE was surveyed for cultural materials. Five archaeological sites were identified during the survey for this project. One of the sites contained two prehistoric artifacts and the other four were historic debris scatters. The cultural resources review (HCR#2013-600-037) resulted in a "No Adverse Effect" determination issued by the State Historic Preservation Office (Letter, R. Whitlam, Washington Department of Archaeology and Historic Preservation, to M. Wright, DOE-RL, RE: Radiological Clearance in Support of the Land Conveyance HCRC # 2013-600--037, dated May 19, 2014) (also refer to Letter, MSA-1402552, A. Johnson, MSA, to J. Shoemake, MSA, "Ecological and Cultural Clearance for the Radiological Clearance in Support of the Land Conveyance in the 600 Area of the Hanford Site [HCRC # 2013-600-037 and ECR-2013-602], dated June 24, 2014).

An ecological resources review (ECR) was conducted for the project (ECR-2013-602). The ECR, with considerations for the potential to encounter nesting birds, resulted in a finding that no adverse impacts would be anticipated from the proposed action (Letter, MSA-1402552, A. Johnson, MSA, to J. Shoemake, MSA, "Ecological and Cultural Clearance for the Radiological Clearance in Support of the Land Conveyance in the 600 Area of the Hanford Site [HCRC # 2013-600-037 and ECR-2013-602], dated June 24, 2014).

**NEPA REVIEW SCREENING FORM (continued)**

The proposed action is addressed in 10 CFR 1021, Subpart D, Appendix B, Categorical Exclusion B3.1, "Site Characterization and Environmental Monitoring" (effective November 12, 2011). As described therein, this categorical exclusion has provisions for: site characterization and environmental monitoring (including, but not limited to, siting, construction, modification, operation, and dismantlement and removal or otherwise proper closure (such as of a well) of characterization and monitoring devices, and siting, construction, and associated operation of a small-scale laboratory building or renovation of a room in an existing building for sample analysis). Such activities would be designed in conformance with applicable requirements and use best management practices to limit the potential effects of any resultant ground disturbance. Covered activities include, but are not limited to, site characterization and environmental monitoring under CERCLA and RCRA. (This class of actions excludes activities in aquatic environments. See B3.16 of this appendix for such activities.) Specific activities include, but are not limited to: (a) Geological, geophysical (such as gravity, magnetic, electrical, seismic, radar, and temperature gradient), geochemical, and engineering surveys and mapping, and the establishment of survey marks. Seismic techniques would not include large-scale reflection or refraction testing; (b) Installation and operation of field instruments (such as stream-gauging stations or flow-measuring devices, telemetry systems, geochemical monitoring tools, and geophysical exploration tools); (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; (d) Aquifer and underground reservoir response testing; (e) Installation and operation of ambient air monitoring equipment; (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 boreholes); (g) Sampling and characterization of water effluents, air emissions, or solid waste streams; (h) Installation and operation of meteorological towers and associated activities (such as assessment of potential wind energy resources); (i) Sampling of flora or fauna; and (j) Archeological, historic, and cultural resource identification in compliance with 36 CFR part 800 and 43 CFR part 7.

In addition, the requirements for application of categorical exclusions to proposed actions found at 10 CFR 1021.410 and the conditions that are integral elements found at 10 CFR 1021, Subpart D, Appendix B, will be met. Actions performed under this Activity-Specific Categorical Exclusion will not individually or cumulatively have a significant effect on the human environment. There will be no extraordinary circumstances where normally excluded actions may have significant effects on the human environment.

This is an activity-specific application of NEPA categorical exclusions pursuant to 10 CFR 1021, Subpart D, Appendix B, for the limited purpose of conducting radiological surveys in support of potential future land conveyance. Similar, or expanded, proposed future actions will require separate NEPA review and approval by the DOE-RL NEPA Compliance Officer.

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

Biological Review Report #: ECR-2013-602; No Adverse Impacts

Cultural Review Report #: HCRC#2013-600-037; No Adverse Effect

**Additional Attachments:**

Figure showing sample locations, ATV scanning paths, access routes, and APE (from HCRC#2013-600-037/ECR-2013-602)

**IV. Existing NEPA Documentation**

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

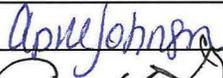
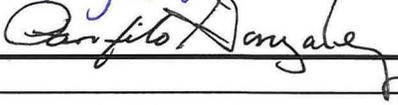
YES	NO
<input type="checkbox"/>	<input checked="" type="checkbox"/>

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

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.

<b>V. Categorical Exclusion</b>	YES	NO
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?	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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"/>
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"/>
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):		
B3.1, "Site Characterization and Environmental Monitoring"		

<b>Categorical Exclusion Integral Elements</b>	YES	NO
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?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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"/>
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"/>
Does the proposed action adversely affect environmentally sensitive resources?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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"/>
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.		

VI. Responsible Contractor Signatures			
	Name (Printed)	Signature	Date
Initiator	April Johnson		7-9-2014
Cognizant Environmental Compliance Officer	Panfilo Gonzalez		7-9-14

<b>VII. Approval/Determination</b>	
DOE NEPA Compliance Officer: <u>Diori L. Kreske, NEPA Compliance Officer (NCO)</u>	
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 - <input checked="" type="checkbox"/> CX <input type="checkbox"/> EA <input type="checkbox"/> EIS	
Signature: <u></u>	Date: <u>7/9/14</u>



**Legend**

- Sample Locations
- ▭ ATV Scanning Paths
- ▭ Access Routes (200 foot Corridor)
- ▭ Area of Potential Effect (APE)

Wooded Island, WA 7.5' USGS Quad  
 Township 11 N Range 28 E  
 Section 27, 28, 33, and 34  
 Township 10 N Range 28 E  
 Section 3 and 4

