

NEPA REVIEW SCREENING FORM

I. Project Title:

Probabilistic Seismic Hazard Analysis of the Hanford Site and the Hanford Reach National Monument.

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 (DOE) is required to assess the safety of its facilities including the Waste Treatment Plant (WTP), underground storage tanks and other buildings from ground motions generated by earthquakes. A probabilistic seismic hazard analysis (PSHA) is underway to provide input to this assessment. The proposed project includes site characterization using man-made seismic waves to estimate the likelihood that various levels of earthquake-caused ground motions will be exceeded at a given location in a given future time period in 10 locations throughout the Hanford Site and Hanford Reach National Monument.

The vibration used to generate the signal in this study is created by a steel plate mounted to a large truck. The plate is lowered onto the ground surface and vibrated using hydraulic pistons. The study is designed so that the truck does not leave existing roads. Vibrations generated by the equipment are similar to a passing truck and can be felt by humans at a distance up to 30.5 meters (100 feet) away. The recording devices are small geophones that will be set on the ground surface along existing roads. The duration of wave generation will be between 2 and 30 minutes. The geophones will be placed on the ground surface by project personnel walking on foot. The geophones will be placed at various intervals up to 305 meters (1000 feet) away from the source of the waves.

The project will not have a significant effect on the National Monument or the Hanford Site. A biological resource review was conducted on November 2, 2012. Mission Support Alliance ecological compliance staff accompanied PNNL project staff on a tour and walk down of the selected test sites. Locations inspected included H3A, just south of the 300 Area; Sites W1BB and W1A north of the 300 Area; H4A, adjacent to the 400 Area, HAWA near the NIKE missile control center on ALE; H2E in 200E area; H2W - two sites in the 200W area, H1K on the south side of the 100K area and H1B, inside the 100BC area. In all cases the vibrator truck would be located on established roads, and the detection equipment would be placed by hand either on the road or in adjacent areas accessed by foot. The 400 Area, 100B, 100K, 200E, and 200W sites have relatively little native vegetation present. The ALE site, and the sites around the 300 area have native steppe and shrub steppe areas that could be affected by minor pedestrian traffic, but these impacts are not likely to be significant. None of these sites are in locations where federally listed threatened, endangered, or candidate species are likely to be found. Because of the proposed locations, and low-impact nature of the proposed work, the proposed activities are not likely to adversely affect any Washington State listed species, or significant, sensitive, or rare habitats. If the activities are conducted between March 1st and July 31, there is the potential to affect ground-nesting birds. If nesting birds are suspected in the project area (i.e. one or more birds that refuse to leave the area, and/or display defensive or distracting behaviors), project staff will stop work and notify a qualified biologist. A cultural resource review was conducted by MSA and submitted to SHPO on February 15, 2013. The review resulted in a 'no adverse effect' finding for this proposed project.

The proposed action fits in 10 CFR 1021, subpart D, Appendix B, Categorical Exclusion (CX) B3.1: "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

RL-721
REV 4

NEPA REVIEW SCREENING FORM (continued)

Document ID Number:

DOE/CX-00131

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.

This is an Activity-Specific CX for a project-specific, non-routine, and non-recurring action. Similar future actions would require a separate NEPA review.

III. Reviews (if applicable):

Biological Review Report #: ECR#2013-600-010

Cultural Review Report #: HCRC#2013-600-010

Additional Attachments:

IV. Existing NEPA Documentation

YES NO

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:

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

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?

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)?

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"

Categorical Exclusion Integral Elements

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?

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

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?

Does the proposed action adversely affect environmentally sensitive resources?

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?

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.

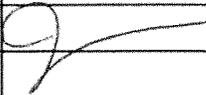
RL-721
REV 4

NEPA REVIEW SCREENING FORM (continued)

Document ID Number:

DOE/CX-00131

VI. Responsible Contractor Signatures

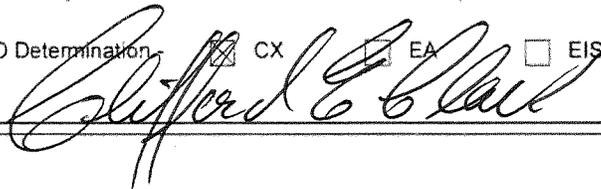
	Name (Printed)	Signature	Date
Initiator	Amanda Stegen		3/14/2013
Cognizant Environmental Compliance Officer			

VII. Approval/Determination

DOE NEPA Compliance Officer: Cliff Clark (acting)

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: 

Date: 3/18/2013

PNNL NEPA Program Information Clearance

Date 02/05/2013

A. Document Number

B. Title

Probabilistic Seismic Hazard Analysis of the Hanford Site and the Hanford Reach National Monument

C. Electronic Prep and Risk Number

D. Required Information

- | | |
|--|--|
| <p>1. Is document potentially Classified? <input checked="" type="radio"/> No <input type="radio"/> Yes</p> <p>2. Official Use Only <input checked="" type="radio"/> No <input type="radio"/> Yes Exemption No.</p> <p>3. Export Controlled Information <input checked="" type="radio"/> No <input type="radio"/> Yes OOU Exemption No. 3</p> <p>4. UCNI <input checked="" type="radio"/> No <input type="radio"/> Yes</p> <p>5. Other (Specify)</p> | <p>6. Does Information Contain the Following:</p> <p>a. New or Novel (Patentable) Subject Matter? <input checked="" type="radio"/> No <input type="radio"/> Yes
If "Yes", OOU Exemption No. 3
If "Yes", Disclosure No.:</p> <p>b. Commercial Proprietary Information Received in Confidence, Such as Proprietary and/or Inventions?
<input checked="" type="radio"/> No <input type="radio"/> Yes If "Yes", OOU Exemption No. 4</p> <p>c. Corporate Privileged Information? <input checked="" type="radio"/> No <input type="radio"/> Yes</p> <p>d. Government Privileged Information? <input checked="" type="radio"/> No <input type="radio"/> Yes
If "Yes", Exemption No. 5</p> |
|--|--|

E. Information Owner/Author/Requestor

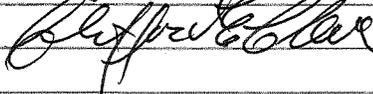


Amanda Stegen

3/7/2013

Sign	Print	Date

F. Reviewers

Reviewers	Print	Sign	Date
Authorized Derivative Classifier	Buzz Hammer		3/7/2013
NCO	Clifford E. Clark		3/18/2013

G. Comments