



U.S. DEPARTMENT OF ENERGY
OFFICE OF RIVER PROTECTION

NEPA REVIEW SCREENING FORM

I. Project Title:
Phase II, Determination of uranium in groundwater

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, etc.):

The objective of this project is to design, build, deploy and test a field deployable instrument that can perform near-real time, fully autonomous measurements of uranium in contaminated groundwater plumes. The approximate dimensions of the deployable uranium analyzer are 2 x 2 x 4 feet. The system periodically samples water from existing aquifer tubes, and the samples are analyzed for uranium concentration using a colorimetric chelation system. Analytical results are sent wirelessly to a remote user. This activity is being funded by DOE as part of a technology development project.

PNNL proposes to test the device at the integrated field-scale subsurface research challenge site, located north of the 300 Area near the footprint of the south process pond. It involves placement of a uranium detector next to an existing site trailer near the location of an existing cluster of aquifer tubes C6341, C6342, & C6343. A small enclosed pump box (booster pump) will be placed near the aquifer tubes so water can be "pushed" uphill via tubing routed through a conduit. The pump box will sit on the ground surface in the cobble beach. It will have a footprint of approximately 24 x 18 inches. Access to this pump location will be by previously established trails. No excavation is expected to be required.

The project will run an outdoor extension cord from the power source in the existing trailer to the instrument and ¼ inch tubing will run from the aquifer tubes to the instrument.

The project will be funded for approximately 2 years. However, it is possible that DOE will continue funding the work in order to continue remote monitoring of the uranium concentration fluctuations in the aquifer tubes.

III. Reviews (if applicable)

Biological Review Report # 2010-300-038

Cultural Review Report # 2010-300-038

NPCE Determination: YES NO

IV. Existing NEPA Documentation (see Provisions 6.2.3 and 6.2.4 of NEPA Determination Procedure) 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:

**TITLE: NATIONAL ENVIRONMENTAL POLICY ACT
DETERMINATIONS**

and then complete Section VII and provide electronic copy of Initiator/ECO signed NRSF to DOE NCO for information (see Section 6.2.6 of NEPA Determination Procedure)

V. Sitewide Categorical Exclusion (see Provision 6.2.5 of NEPA Determination Procedure)

YES NO

Does the proposed action fall within the scope of a Hanford Sitewide Categorical Exclusion?

List Sitewide Categorical Exclusion to be applied and complete Sitewide Categorical Exclusion Criteria: _____

Sitewide Categorical Exclusion Criteria

YES NO

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

Is the action connected to other actions with potentially significant impacts (see 40 CFR 1508.25(a)(1)) or result in cumulatively significant impacts (see 40 CFR 1508.25(a)(2))?

Does the proposed action impact sensitive species or their habitats?

Does the action involve or disturb the Hanford Reach National Monument, Rattlesnake Mountain, Gable Mountain, Gable Butte or other Traditional Cultural Properties or properties of historic, archaeological or architectural significance, or occur within one-fourth mile of the Columbia River?

If "no" to all Sitewide Categorical Exclusion Criteria questions above, complete Section VII and provide electronic copy of Initiator/ECO signed NRSF to DOE NCO for information (see Provision 6.2.6 of NEPA Determination Procedure).

If "yes" to any of the Sitewide Categorical Exclusion Criteria questions above, attach appropriate explanatory information and provide NRSF to DOE NCO; DOE initiates DOE NEPA Review Screening Process—Step 1 (see Provision 6.3 of NEPA Determination Procedure) by completing Sections VI and VIII, as appropriate.

VI. Categorical Exclusion

YES NO

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

If "yes," list CX to be applied and complete Categorical Exclusion Criteria (based on Attachment B, Eligibility Criteria of the NEPA Determination Procedure):
B3.8 _____

Categorical Exclusion Criteria

YES NO

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

**TITLE: NATIONAL ENVIRONMENTAL POLICY ACT
DETERMINATIONS**

Page: 3 of 4


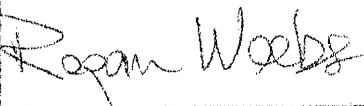
Executive Orders?

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"/>
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"/>
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"/>

If "no" to all Categorical Exclusion Criteria questions above, DOE NCO completes Section VIII, provides electronic copy of signed NRSF to contractor, and otherwise complies with Provision 6.3.4 of the NEPA Determination Procedure.

If "yes" to any of the Categorical Exclusion Criteria questions above, DOE NCO complies with Provision 6.3.5 of NEPA Determination Procedure, and initiates DOE NEPA Review Screening Process—Step 2 (see Provision 6.4 of NEPA Determination Procedure).

VII. Approvals/Determination

	Name (Printed)	Signature	Date
Initiator	Matt O'Hara		9/28/2010
Cognizant Environmental Compliance Officer	Regan Weeks		9/28/2010

VIII. Approval/Determination

DOE NEPA Compliance Officer:
Woody Russell

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: Woody Russell Date: 9/28/10

**TITLE: NATIONAL ENVIRONMENTAL POLICY ACT
DETERMINATIONS**

Page: 4 of 4

ATTACHMENT B

ELIGIBILITY CRITERIA

Would the Proposed Action:

Comment or Explanation:

Threaten a violation of applicable statutory, regulatory, or permit requirements for environment, safety, and health, including requirements of DOE and/or Executive Orders?

No applicable laws, regulations, or orders would be violated by the proposed action.

Require siting and construction or major expansion of waste storage, disposal, recovery, or treatment facilities (including incinerators), but the proposal may include categorically excluded waste storage, disposal, recovery, or treatment actions?

Wastes generated during the proposed action would not require expansion/modification of existing waste management facilities.

Disturb hazardous substances, pollutants, contaminants, or CERCLA-excluded petroleum and natural gas products that preexist in the environment such that there would be uncontrolled or unpermitted releases?

No. There would be no uncontrolled or unpermitted releases.

Adversely affect environmentally sensitive resources? An action may be categorically excluded if, although sensitive resources are present on a site, the action would not adversely affect those resources (e.g., construction of a building with its foundation well above a sole-source aquifer or upland surface soil removal on a site that has wetlands). Environmentally sensitive resources include, but are not limited to:

None of the environmentally sensitive resources listed (i through vii) will be adversely affected.

- (i) Property (e.g., sites, buildings, structures, objects) of historic, archeological, or architectural significance designated by Federal, state, or local governments or property eligible for listing on the National Register of Historic Places
- (ii) Federally-listed threatened or endangered species or their habitat (including critical habitat), Federally-proposed or candidate species or their habitat, or state-listed endangered or threatened species or their habitat
- (iii) Wetlands regulated under the Clean Water Act (33 U.S.C. 1344) and floodplains
- (iv) Areas having a special designation such as Federally- and state-designated wilderness areas, national parks, national natural landmarks, wild and scenic rivers, state and Federal wildlife refuges, and marine sanctuaries
- (v) Prime agricultural lands
- (vi) Special sources of water (such as sole-source aquifers, wellhead protection areas, and other water sources that are vital in a region), and
- (vii) Tundra, coral reefs, or rain forests.