

NEPA REVIEW SCREENING FORM 3A
Actions Likely to be Categorically Excluded

Document ID #:
DOE/CX-00178

I. Project Title:

Soil Stabilization Test at Pit 6

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 if doing so will assist in DOE's evaluation. 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.

CH2M HILL Plateau Remediation Company (CHPRC) proposes permeation grout testing on its 324 Building Disposition Project located in the northern portion of Pit 6, to validate soil stabilization supporting the 300-296 waste site remediation. The process injects grout into the soil to create a solid mass that, in this case, would be used to hold back adjacent soils while excavating a portion of the 300-296 waste site. The initial phase of remediation would be performed by remote excavation below the floor of B-Cell in the 324 Facility. The required soil stabilization testing cannot be performed at the 324 Facility because it is not possible to excavate around the grout to verify correct installation. Also, core testing at 324 is not an option because water could cause contamination migration at the waste site. Testing and disposal would occur between July and November 2018.

The northern portion of Pit 6 is an ideal location for the testing for the following reasons:

- Soils are similar to 324 Facility.
- The area is already excavated to approximately negative 12 ft, an ideal depth for testing.
- Soil disturbance and material removal is already approved and ongoing. Prior to Pit 6 testing, a Memorandum of Agreement between CHPRC and pit landlord Mission Support Alliance will be established to set the parameters under which CHPRC will work, including the end state requirements.

The three phases include vertical and horizontal permeation grout tests and testing material removal and disposal.

Vertical and Horizontal Permeation Grout Test

The following actions and activities will be performed during the testing phases:

- Test Area: Two each, approximately 20-30 by 6-9 by 14-15 ft area at or near the 324REC Basement elevation (approximately negative 12 feet). For the horizontal permeation grout test, a staging area approximately 10 by 40 ft may be required along one end to enable the horizontal installation of grout inject piping in a manner similar to that required at the 324 Building
- Installation for Vertical Permeation Grout Test: A series of vertical pipes (2-3 in. diameter) would be drilled or hammered into place (approximately 2.5 ft apart) prior to injecting pressurized grout to fill and stabilize cohesionless soils into a low composite strength soilcrete (grout plus soil). The process for the horizontal permeation grout test would be similar, with the pipes being placed horizontally.
- Visual Test: Post grout-and-cure, the face of soil stabilization would be excavated and exposed to determine visually the extent and overlap of permeation grouting at full height and between adjacent grout injection points.
- Soil Core Samples: Post grout-and-cure, a series of vertical soil core samples would be taken to determine strength of permeated soil within the vertical grouted column.

Final Disposal

After the completion of required testing, permeation grout soil stabilization materials and final test results would be removed from the site and properly disposed at ERDF. The nonhazardous waste stream will consist of permeation grout tubes and grout/soil mixture.

III. Existing Evaluations (Attach them):

Ecological Review Report No. and Title:

ECR-2018-616 ECOLOGICAL AND CULTURAL CLEARANCE FOR CONTINUED USE OF BORROW PIT 6 WEST OF THE 300 AREA, HANFORD SITE, BENTON COUNTY, WASHINGTON

Cultural Review Report No. and Title:

HCRC-2012-300-007 and 2012-300-010 ECOLOGICAL AND CULTURAL CLEARANCE FOR CONTINUED USE OF BORROW

NEPA REVIEW SCREENING FORM 3A
Actions Likely to be Categorically Excluded (Continued)

Document ID #:
 DOE/CX-00178

Cultural Review Report No. and Title:
 PIT 6 WEST OF THE 300 AREA, HANFORD SITE, BENTON COUNTY, WASHINGTON

Maps:

Other Attachments:

IV. Integral Elements and Extraordinary Circumstances	Yes	No
Does the proposed action fall within one or more of the actions listed in Appendixes A or B to Subpart D of 10 CFR 1021 and is thus categorically excluded (CX)? List applicable CX(s):	<input checked="" type="radio"/>	<input type="radio"/>
B3.1 Site Characterization and Environmental Monitoring		
Are there extraordinary circumstances that may affect the significance of the environmental effects of the proposal, such as those set forth in 10 CFR 1021.410(2)? If yes, describe them.	<input type="radio"/>	<input checked="" type="radio"/>
Is the proposal connected to other actions with potentially significant impacts, or that could result in cumulatively significant impacts? If yes, describe them.	<input type="radio"/>	<input checked="" type="radio"/>
Would the proposed action threaten a violation of applicable statutory, regulatory, or permit requirements related to the environment, safety, health, or similar requirements of DOE or Executive Orders?	<input type="radio"/>	<input checked="" type="radio"/>
Would the proposed action require siting, construction, or major expansion of waste storage, disposal, recovery, or treatment facilities?	<input type="radio"/>	<input checked="" type="radio"/>
Would the proposed action disturb hazardous substances, pollutants, contaminants, or natural gas products already in the environment such that there might be uncontrolled or unpermitted releases?	<input type="radio"/>	<input checked="" type="radio"/>
Would the proposed action have the potential to cause significant impacts on environmentally sensitive resources? See examples in Appendix B(4) to Subpart D of 10 CFR 1021.	<input type="radio"/>	<input checked="" type="radio"/>
Would 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 with applicable requirements to prevent unauthorized release into the environment?	<input type="radio"/>	<input checked="" type="radio"/>

If "No" to all questions above, complete Section V, and provide NRSF to DOE NCO for review.
 If "Yes" to any of the questions above, contact DOE NCO for additional NEPA review.

V. Responsible Organization's Signatures:

Initiator:

Noah Cruz

Print First and Last Name

Signature

7-11-18

Date

Cognizant Program/Project Representative:

Benjamin Vannah

Print First and Last Name

Signature

7/17/18

Date

VI. DOE NEPA Compliance Officer Approval/Determination:

Based on my review of information conveyed to me concerning the proposed action, the proposed action fits within the specified CX(s): Yes No

Diori Kreske

Print First and Last Name

Signature

7/18/18

Date

NCO Comments: