NEPA REVIEW SCREENING FORM
for Actions Included in CXs

Document ID #: DOE/CX-00164

I. Project Title:

Interim stabilization of PUREX Tunnel 1 using engineered grout

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), area/location/number of buildings. Attach maps and drawings, as applicable. 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.

On the morning of Tuesday, May 9, 2017, a partial collapse of PUREX Tunnel 1 was discovered. A portion of the roof had collapsed into the tunnel, creating a hole resulting in a hole approximately 19 feet wide and 17 feet long. The tunnel's structure consists of timbers covered with several feet of soil. It was built in the 1950s and contains eight rail cars loaded with highly radioactive equipment and materials from the PUREX facility. The tunnel was filled to capacity in 1965 and sealed. To prevent the release of radiation, the breach was filled with clean soil and the tunnel covered with a protective cover. As some of the radioactive materials contain hazardous waste, the tunnel is regulated by the State of Washington under RCRA. The state issued an Administrative Order on May 10 requiring that DOE: (1) submit a structural integrity evaluation of the tunnel by July 1, 2017; (2) submit a draft report by August 1, 2017, detailing corrective actions needed to ensure the continued safe storage of the materials in the tunnel; and(3)submit a draft modification to Hanford's RCRA permit addressing interim stabilization of the tunnel and its eventual closure.

DOE submitted its structural integrity analysis of Tunnel 1, which found there was a significant risk of additional collapses, and proposed using engineered grout to stabilize the tunnel. Washington approved this interim action on June 10. The grout will stabilize the tunnel while not precluding any options regarding additional interim actions or final closure. The grout will provide additional radiological protection. Hanford has used engineered grout in a several applications to provide interim shielding and containment of radioactive waste. Grouting will maintain the status quo prior to the the partial collapse while DOE explores options for closure of the tunnel. The grout fill will be pumped into the tunnel at the site of the collapse from trucks. The grouting would be completed by the end of 2017. Additional work activities in support of the tunnel response work may include the installation of mobile offices and associated utilities, grading, graveling, dust suppression, etc.

III. Applicable Reviews (attach to NRSF):

Biological Review Report #: _____

Cultural Review Report #: _____

Additional Attachments:

Tunnel 1 is located in a highly disturbed industrial area.

IV: Existing Documentation:

Are the impacts of the proposed action evaluated in a previous EA, EIS, or CERCLA document? ☐ Yes ☒ No

NEPA REVIEW SCREENING FORM for Actions Included in CXs (Continued)	Document ID #:

If "YES", use Site Form A-6006-948, *Actions Adequately Evaluated in NEPA or CERCLA Document*

V. Categorical Exclusion:

Does the proposed action fall within a category of actions that is listed in Appendixes A or B to Subpart D of 10 CFR 1021? If extraordinary circumstances or integral elements would preclude the use of a CX, check "No".	☒ Yes	☐ No
Are there extraordinary circumstances related to the proposal that may affect the significance of the environmental effects of the proposal?	☐ Yes	☒ No
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)?	☐ Yes	☒ No

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):
B2.5 Facility Safety and Environmental Improvements

Categorical Exclusion Integral Elements:

Would the proposed action threaten a violation of applicable statutory, regulatory, or permit requirements for environmental, safety, or health, including DOE and/or Executive Orders?	☐ Yes	☒ No
Would the proposed action require siting, construction, or major expansion of waste storage, disposal, recovery, or treatment facilities?	☐ Yes	☒ No
Would 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?	☐ Yes	☒ No
Would the proposed action adversely affect environmentally sensitive resources?	☐ Yes	☒ No
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?	☐ Yes	☒ No

If "NO" to all Integral Elements questions above, complete Section VI, and provide NRSF to DOE NCO for review.
If "YES" to any of the Categorical Exclusion Integral Elements questions above, contact DOE NCO for additional NEPA Review.

VI. Responsible Contractor Signatures:

Initiator:

R.P. Detwiler — Name (Print) — Signature — 8/15/2017 — Date

Cognizant Environmental Compliance Officer:

R.P. Detwiler — Name (Print) — Signature — 8/15/2017 — Date

VII. DOE Approval/Determination

DOE NEPA Compliance Officer: R.P. Detwiler

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), the proposed action fits within the specified class of action:

NCO Determination: ☒ CX *NCO Recommendation: ☐ EA ☐ EIS

Signature — 8/15/2017 — Date

*NRSF A-6006-950 would be completed by responsible contractor