DOE-ID NEPA CX DETERMINATION
Idaho National Laboratory

CX Posting No.: DOE-ID-INL-14-011

SECTION A. Project Title: Shelley-New Sweden Parking Lot Flood Control

SECTION B. Project Description:

The Department of Energy-owned Shelley-New Sweden parking lot is currently unable to handle the storm water/snow melt runoff in the spring. The culvert to the north of the parking lot drains storm water/snow melt from the adjacent field under the highway and flows to the parking lot. In the spring, the parking lot pools up with storm water/snow melt causing portions of the lot to be unusable. The proposed project may use a variety of the following options to control future runoff:

1. Install a flood gate on the north end of the culvert that can be closed during peak runoff. This would distribute the water on the south end of the field, to the north of the highway below the highway embankment.
2. Excavate a ditch (approx. 500 ft long, 2-3 ft deep) along the south side of the field that would accumulate the water when the flood gate is closed.
3. Install a StormTech drainage system under the existing parking lot surface. The StormTech Chamber system would evenly distribute the storm water underground throughout the length of the chambers. The StormTech Chamber system has a drainage basin (manhole with enclosed bottom) that accumulates storm water and distributes water through piping to the chambers.

This project may implement all or a portion of these options and would be in consultation and agreement with the landowner and Department of Transportation.

After consultation with Gonzales-Stoller, a biological resource review will not be required for this project.

SECTION C. Environmental Aspects or Potential Sources of Impact:

Air Emission: Fugitive dust may be generated while digging the drainage ditch, blading the parking lot and excavating for the StormTech Chambers. All reasonable precautions would be taken to control fugitive dust. All reasonable precautions would be taken to prevent particulate from becoming airborne. If dust control methods are required, the date, time, location, and amount/type of suppressant used must be recorded in the project records. Personnel are responsible for working with the Program Environmental Lead to determine if any permitting requirements apply to generators and other equipment and, if necessary, obtaining the permit and maintaining a file of the documentation.

Mobile sources such as generators, welders, and compressors may be used temporarily (less than six months) by subcontractors at the construction site. These sources would be required to meet IDAPA 58.01.01.625 visible emission opacity requirements.

Discharging to Surface-, Storm-, or Ground Water: Storm water/snowmelt from the field to the north of the highway currently flows under the highway through an existing culvert and pools up in the parking lot. The proposed modifications would help prevent future storm water flow from flooding the existing parking lot. These flows would be diverted by the proposed head gate into a new ditch (approx. 500 ft long, 2-3 ft deep) on the north side of the highway and into the StormTech Chamber system (when the head gate is open) in the parking lot area. The StormTech Chamber system would be installed under the parking surface and would evenly distribute the storm water underground throughout the length of the chambers. The StormTech Chamber system has a drainage basin (manhole with enclosed bottom) that accumulates storm water and distributes water through piping to the chambers. The StormTech Chamber system would be considered a shallow injection well according to the current regulation (a subsurface fluid distribution system which is equal to or less than 18 ft in vertical depth below land surface) and would require registration with the Idaho Department of Water Resources (IDWR). A Shallow Injection Well Inventory Form is required to be submitted to the IDWR thirty (30) days prior to commencement of construction. The benefits of the StormTech system include volumetric reduction of stormwater through infiltration and better stormwater quality (reduction of TSS, Phosphorous, Hydrocarbons). The existing shallow injection well in the parking lot would remain in place and would not be disturbed during the project. The total excavation area would be less than an acre and would not require a storm water pollution prevention plan. Storm water would not be discharged to the City of Idaho Falls municipal separate storm sewer system (MS4).

Disturbing Cultural or Biological Resources: Cultural and Biological resources are not expected to be encountered during this activity. If objects of potential archaeological or historical significance (e.g., arrowheads, flints, bones, etc.) are encountered, the project would discontinue disturbance in the area and contact Environmental Support and Services [Jim Graham (526-7740), Jenifer Nordstrom (526-8119)] and/or the Cultural Resources Office [Brenda Pace (526-0916), Hollie Gilbert (526-2189), Julie Williams (526-0926)].

Generating and Managing Waste: Typical construction debris waste such as plastic, wood, packaging material, RCRA empty chemical containers, rags, etc., would be generated during the project. Hazardous waste is not anticipated. All waste would be characterized and dispositioned at the direction of Waste Generator Services.

Releasing Contaminants: Typical Construction chemicals such as fuels, lubricants, marking paint, etc., would be used on the project. The Subcontractor would submit all chemical inventory items and associated MSDS's in the vendor data system for approval. The Construction Chemical Coordinator would track these chemicals in the INL Comply Plus Chemical Management System. Chemical use has a potential for small amounts of air emission and spills. Any spills that occur from these chemicals would be reported to the Spill

Notification Team and would be cleaned up by the subcontractor. See above for air pollutants (fugitive dust) and storm water discharges.

Using, Reusing, and Conserving Natural Resources: The proposed changes to the existing storm water drainage system would have benefits that include volumetric reduction of stormwater through infiltration and better stormwater quality (reduction of TSS, Phosphorous, Hydrocarbons). The StormTech system can be used to achieve certain LEED credits. All materials would be reused and/or recycled where economically practicable and as accepted by the customer. All applicable waste would be diverted from disposal in the landfill where conditions allow. New equipment would meet either the Energy Star or Significant New Alternatives Policy (SNAP) requirements as appropriate (see http://www.sftool.gov/GreenProcurement/ProductCategory/14). In addition, the project would practice sustainable acquisition, as appropriate and practicable, by procuring construction materials that are energy efficient, water efficient, are bio-based in content, environmentally preferable, non-ozone depleting, have recycled content, or are non-toxic or less-toxic alternatives.

SECTION G. Determine the Recommended Level of Environmental Review (or Documentation) and Reference(s): Identify the applicable categorical exclusion from 10 CFR 1021, Appendix B, give the appropriate justification, and the approval date.

For Categorical Exclusions (CXs) the proposed action must not: 1) threaten a violation of applicable statutory, regulatory, or permit requirements for environmental, safety, and health, or similar requirements of DOE or Executive Orders; 2) require siting and construction or major expansion of waste storage, disposal, recovery, or treatment or facilities; 3) 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; 4) have the potential to cause significant impacts on environmentally sensitive resources (see 10 CFR 1021). In addition, no extraordinary circumstances related to the proposal exist which would affect the significance of the action, and the action is not “connected” nor “related” (40 CFR 1508.25(a)(1) and (2), respectively) to other actions with potentially or cumulatively significant impacts.

References: 10 CFR 1021, Appendix B to Subpart D item B2.5, "Facility safety and environmental improvements."

Justification: The proposed action is consistent with 10 CFR 1021, Appendix B to Subpart D categorical exclusion B2.5, "Safety and environmental improvements of a facility (including, but not limited to, replacement and upgrade of facility components) that do not result in a significant change in the expected useful life, design capacity, or function of the facility and during which operations may be suspended and then resumed. Improvements include, but are not limited to, replacement/upgrade of control valves, in-core monitoring devices, facility air filtration systems, or substation transformers or capacitors; addition of structural bracing to meet earthquake standards and/or sustain high wind loading; and replacement of aboveground or belowground tanks and related piping, provided that there is no evidence of leakage, based on testing in accordance with applicable requirements (such as 40 CFR part 265, "Interim Status Standards for Owners and Operators of Hazardous Waste Treatment, Storage, and Disposal Facilities" and 40 CFR part 280, "Technical Standards and Corrective Action Requirements for Owners and Operators of Underground Storage Tanks"). These actions do not include rebuilding or modifying substantial portions of a facility (such as replacing a reactor vessel)."

Is the project funded by the American Recovery and Reinvestment Act of 2009 (Recovery Act) ☐ Yes ☒ No

Approved by Jack Depperschmidt, DOE-ID NEPA Compliance Officer on: 5/22/2014