PROJECT/ACTIVITY TITLE: Middle Mortandad Watershed Enhancement Supplemental Environmental Project

Accession No: 22202 PRID No: 16P-0254 Date: April 23, 2018

PURPOSE: Compliance with the 2016 Settlement Agreement between New Mexico Environment Department (NMED) and the Department of Energy (DOE) that stipulated the identification and completion of Supplemental Environmental Projects (SEPs) at Los Alamos National Laboratory (LANL).

Location: See map below

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NATIONAL ENVIRONMENTAL POLICY ACT (NEPA) COVERAGE: Department of Energy National Environmental Policy Act Implementing Procedures 10 Code of Federal Regulations Part 1021, Appendix B to Subpart D of Part 1021-Categorical Exclusions Applicable to Specific Agency Action:

81.3 Routine maintenance

Routine maintenance activities and custodial services for buildings, structures, rights-of-way, infrastructures (including, but not limited to, pathways, roads, and railroads), vehicles and equipment, and localized vegetation and pest control, during which operations may be suspended and resumed, provided that the activities would be conducted in a manner in accordance with applicable requirements.

Routine maintenance activities include, but are not limited to:

(k) Erosion control and soil stabilization measures (such as reseeding, gabions, grading, and revegetation).

81.33 Stormwater runoff control

Design, construction, and operation of control practices to reduce stormwater runoff and maintain natural hydrology. Activities include, but are not limited to, those that reduce impervious surfaces (such as vegetative practices and use of porous pavements), best management practices (such as siltfences, straw wattles, and fiber rolls), and use of green infrastructure or other low impact development practices (such as cisterns and green roofs).

BACKGROUND

In 2014, the NMED Hazardous Waste Bureau (HWB) issued compliance orders HWB-14-20 and HWB-14-21 for violations of the New Mexico Hazardous Waste Act. These violations stemmed from improper packaging of transuranic waste from LANL and disposed of at the DOE Waste Isolation Pilot Plant in Carlsbad, New Mexico. The resulting 2016 Settlement Agreement¹ between NMED and DOE stipulates that Supplemental Environmental Projects (SEPs) shall be completed.

Hydrological modification and resultant non•point source pollution are storm water management challenges that LANL faces today. All major drainages receiving waters within LANL boundaries are listed as impaired by the state of New Mexico for one or more pollutants. Much of the Laboratory was built well before modern storm water pollution regulations were enacted and associated technologies developed. This a project is located in Effluent Canyon, a small

¹ Settlement Agreement and Stipulated Final Order resolving Compliance Order NO. HWB-14-20 (CO), the February 14th incident al the DOE-owned Waste Isolation Pilot Plant. Accessed April 2017 at https://www.e.nm.gov/OOTS/documents/LANLSASFOFIN ALI 22 16.pdf.

tributary to middle Mortandad Canyon. The channel in the Effluent Canyon reach is a delineated wetland that receives stormwater runoff from Technical Areas (TAs) 48, 55, and 35 (Figure 1). Treated effluent from the Radioactive liquid Waste Treatment Facility outfall² and TA-50 stormwater discharges below the project area (Figure 2).

DESCRIPTION OF PROPOSED ACTION

The DOE, National Nuclear Security Administration (NNSA), Los Alamos Field Office (Field Office) proposes to capture stormwater from the detention pond, before the active erosion area, and route it through an aboveground pipeline to a stormwater control (energy dissipating structure and riprap rundown). This water would then be routed into the wetland area immediately upstream of the proposed grade control structure (Figure 2). This would prevent further erosion and downstream sediment transport by avoiding the unstable eroding area. The project includes, but is not limited to, installation of a reinforced concrete headwall to collect water from the detention pond, an aboveground, high-density polyethylene pipeline with supports and anchorages, a pipe support system across an existing drainage feature, a reinforced concrete baffle structure (energy dissipater), a riprap rundown, and a gabion grade control structure with a spillway (Figure 2). The proposed work area requires clearing and grubbing of brush and trees (approximately 14 ponderosa pine trees in addition to invasive Russian olives and other shrubs), harvesting of willows for revegetation projects, and some grading to accommodate construction access. All areas disturbed by construction activities shall be stabilized during and after construction.

¹ This outfall has not discharged since 2010. Treated water from the Radioactive Liquid Waste Treatment Facility is evaporated. NMED is considering an updated discharge permit to potentially discharge 10 the outfall.

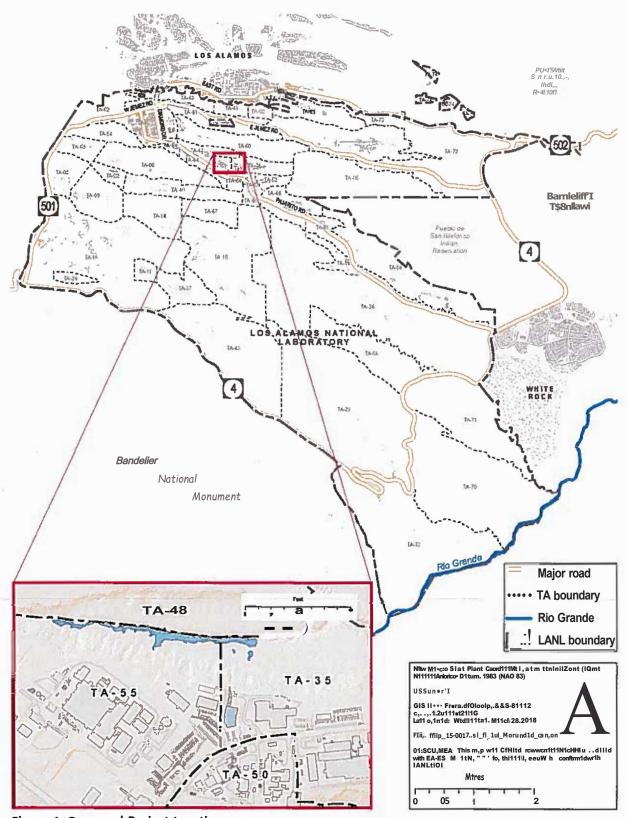


Figure 1: Proposed Project Location

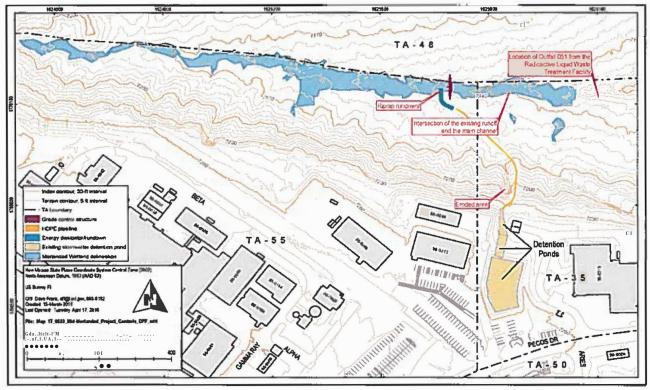


Figure 2. Middle Mortandad Watershed Enhancement Project controls

IMPACT ASSESSMENT

By design the Proposed Action is to mitigate and prevent long-term adverse environmental impacts. See Table 1 below for an assessment of potential impacts.

Table 1. Environmental Factors Checklist

| Environmental Factor | Analysis |
|--|--|
| Land Use | No change to current conditions. |
| Visual | No effect - the pipeline would not be visible from any publicly accessible location. |
| Geology and Soils (geologic hazards, soil productivity, capability, erodibility, and mass failure) | N/A |
| Non - radiological Air Quality | N/A |
| Radiological Air Quality | N/A |
| Noise | Equipment would be used for construction/installation activities. Noise impacts would be temporary and outside of owl breeding season. |

| Environmental Factor | Analysis |
|--|--|
| Ecological (floodplains, wetlands, threatened or endangered species and habitat, migratory birds, exotic organisms) | Activities could result in ecological improvement. There will be no negative effect. A New Mexico Section 401 Water Quality Certification and an Army Corps of Engineers 404 Dredge and Fill Permit will be required for this project. |
| Human Health - Radiological Impacts on the Public | N/A |
| Human Health - Chemical Impacts on the Public | N/A |
| Human Health - Worker Health | All work in this area would be conducted in accordance with LANL worker health and safety and radiation protection requirements for working in an area of concern. ³ The potential impacts to worker health are bounded by the 2008 Site-Wide Environmental Impact Statement. |
| Cultural Resources (archeological and historical) | Cultural resources north of the proposed work area will be marked for avoidance. There will be no effect to cultural resources. |
| Socioeconomics | No effect |
| Infrastructure (roads, utility corridors, communications systems, energy & fuels, distribution systems, and water) | No effect |
| Waste Management | No effect |
| Transportation | No effect |
| Environmental Justice | N/A |
| Facility Accidents | N/A |

Other SEPs are under consideration as independent actions. No SEP is dependent on the completion of any other SEP. However, to the extent practical all proposed SEPs have been reviewed in consideration of connected and cumulative actions that could have individually insignificant but cumulatively significant impacts. No cumulative and significant impacts have been identified. It is important to note that all proposed SEPs are intended, and will be designed, to decrease long-term environmental impacts and have not and will not be segmented to meet the definition a categorical exclusion.

CONCLUSION

Based on this NEPA determination analysis, there are no extraordinary circumstances related to the proposed action that may affect the significance of the environmental effects or threaten a violation of applicable statutory, regulatory, or permit requirements for environment, safety, and health, or similar requirements of DOE or Executive Orders. Consequently, no further NEPA analysis is necessary or required.

³ LANL Procedure PIOI-17 Excavation/Fill/Soil Disturbance, December 2017.

NEPA Determination

Based on my review of the Proposed Action, as the National Nuclear Security Administration's Los Alamos Field Office (NA-LA) NEPA Compliance Officer (as authorized under DOE Policy 451.1), I have determined that the Proposed Action as described herein, falls within the DOE NEPA Implementing Procedures listed in 10 CFR Part 1021, Subpart D, Appendix B 10 CFR Part 1021, Appendix B to Subpart D of Part 1021-Categorical Exclusions Applicable to Specific Agency Actions: The categorical exclusion that applies are 81.3 Routine maintenance and B1.33 Stormwater runoff control.

There are no extraordinary circumstances related to the proposed action that may affect the significance of the environmental effects or threaten a violation of applicable statutory, regulatory, or permit requirements for environment, safety, and health, or similar requirements of DOE or executive orders. If changes are made to the scope of the action so that it is no longer bounded by the enclosed description, or the project is changed to encompass other actions, NEPA requirements for the action will need to be reassessed at that time and further analysis may be required.

NA-LA NEPA Compliance Officer:

Date

4/25/18

Signature: