PROJECT/ACTIVITY TITLE: Supplemental Environmental Projects: tmprovements to Transportation Routes Used for Transportation of Transuranic Waste to the Waste Isolation Pilot Plant	Accession No: 23701 PRID No: N/A	Date: March 8, 2018

PURPOSE: Compliance with the 2016 Settlement Agreement between New Mexico Environment Department (NMED), Department of Energy (DOE), and Los Alamos National Security, LLC (LANS) that stipulated the identification and completion of Supplemental Environmental Projects (SEPs) at Los Alamos National Laboratory (LANL).1 Roadway maintenance for improving New Mexico Department of Transportation (NMDOT) LANL routes used for the transportation of transuranic waste to the Waste Isolation Pilot Plant is one of the identified SEPs categories.

Location: See Figure 1: Road Improvement Locations below	Project Contact: Kerry Horner USARMY CESPA, (SOS) 667-9353 Kerry.L.Horner@usace.army.mil and Jaime Navarro, NNSA (SOS) 667-1517 Jaime.Navarro@nnsa.doe.gov

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:

B1.3 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. Custodial services are activities to preserve facility appearance, working conditions, and sanitation (such as cleaning, window washing, lawn· mowing, trash collection, painting, and snow removal). Routine maintenance activities, corrective (that is, repair), preventive, and predictive, are required to maintain and preserve buildings, structures, infrastructures, and equipment in a condition suitable for a facility to be used for its designated purpose. Such maintenance may occur as a result of severe weather (such as hurricanes, floods, and tornados), wildfires, and other such events. Routine maintenance may result in replacement to the extent that replacement is in-kind and is not a substantial upgrade or improvement. In-kind replacement includes installation of new components to replace outmoded components, provided that the replacement does not result in a significant change in the expected useful life, design capacity, or function of the facility. Routine maintenance does not include replacement of a major component that significantly extends the originally intended useful life of a facility (for example, it does not include the replacement of a reactor vessel near the end of its useful life). Routine maintenance activities include, but are not limited to:

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(h) Repair of road embankments;

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(j) Road and parking area resurfacing, including construction of temporary access to facilitate resurfacing, and scraping and grading of unpaved surfaces;

[1]Settlement Agreement Number HWB-14-20. This is the agreement between the Hazardous Waste Bureau of the New Mexico Environmental Department and the U.S. Department of Energy and Los Alamos National Security, LLC. The agreement settles and completely resolves the alleged violations contained in the December 6, 2014 Los Alamos National Laboratory Order, and any future claims, penalties, fines, liabilities or other sanctions against the Respondents and their officers, directors, employees, agents, constituent agencies, c;ontractors, subsidiaries, successors, assigns, trustees, receivers, and other affiliates arising from or related to the February 14, 2014 incident at the Waste Isolation Pilot Plant.
https://www.env.nm.gov/OOTS/documents/LANLSA5FOFINAL1_22_16.pdf.

...

B1.32 Traffic flow adjustments

Traffic flow adjustments to existing roads (including, but not limited to, top sign or traffic light installation, adjusting direction of traffic flow, and adding turning lanes), and road adjustments (including, but not limited to, widening and realignment) that are within an existing right-of-way and consistent with approved land use or transportation improvement plans.

These classes of action would not:

(4) Have the potential to cause significant impacts on environmentally sensitive resources. An environmentally sensitive resource is typically a resource that has been identified as needing protection through Executive Order, statute, or regulation by Federal, state, or local government, or a Federally recognized Indian tribe. An action may be categorically excluded if, although sensitive resources are present, the action would not have the potential to cause significant impacts on those resources (such as 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:

(i) Property (such as sites, buildings, structures, and objects) of historic, archeological, or architectural significance designated by a Federal, state, or local government, Federally recognized Indian tribe, or Native Hawaiian organization, or property determined to be eligible for listing on the National Register of Historic Places;

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 Agreement between NMED and DOE stipulates that SEPs shall be completed. Road improvements are an identified requirement of the Settlement Agreement.

DESCRIPTION OF PROPOSED ACTION

The DOE, National Nuclear Security Administration (NNSA), Los Alamos Field Office (Field Office) proposes to perform a serious of road improvements at three locations - see Figure 1. The work will be executed in accordance with NMDOT standards and will be performed through an Interagency Agreement with the U.S. Army Corps of Engineers. The final construction scope and schedule would be based on an engineering design and construction estimate. Work is expected to occur during the spring/summer 2018 construction season. Road segments and improvements include:

East Jemez Road: The existing asphalt on East Jemez Road is aged and areas have deteriorated as illustrated by cracking, pot holes and uneven surfaces. Resurfacing is necessary to improve driving conditions and safety. Therefore, the asphalt on East Jemez Road from the expansion joint at the south end of Omega Bridge proceeding east for approximately 3.5 miles will be replaced. Road work will consist of milling from the existing road surface to a depth of approximately 2.5 inches and installing new asphalt. Work may include the installation and repair of guardrails at various sections along the designated section of road improvement.

New Mexico (NM) 502 Improvement: The existing asphalt on NM 502 between mile marker 5.6 to mile marker .6, which includes a NMDOT right of way through Pueblo de San Ildefonso lands, is aged and has

deteriorated areas due to reflective[2] and fatigue cracking. Pot holes and uneven surfacing are present resulting in rough and difficult driving conditions. Resurfacing is necessary to improve driving conditions and safety. General road improvement work will consist of milling the existing road surface to a depth of approximately 2.5 inches and installing new asphalt. The NM 502 road improvement project segment on Pueblo lands will take place entirely within the existing roadway of NM 502 and the current NMDOT right of way. At one location, mile marker 7.5 within the Pueblo de San Ildefonso there would be a full depth reconstruction to improve the roadway safety. A full depth reconstruction will consist of the removal of the base course and excavation of approximately 3-5 feet of sub-grade material. New subgrade material would be installed and compacted. New base course and asphalt would then be applied. The work included the removal and replacement of the centerline concrete barrier and guardrail on both east and west bound lanes. Standard traffic control measures would be in place that are protective of the public and roadway workers. There will be no changes to drainage structures or the road alignment. To prevent disturbance to road sides by project equipment and vehicles, all project activities are restricted to the constructed roadway (bar ditch to bar ditch) and all equipment and materials will remain on the paved road. There will be no staging, temporary lanes or other work occurring outside of the existing roadway on Pueblo lands.

NM 4 Road Improvement: The existing asphalt is aged and has deteriorated areas due to reflective and fatigue cracking. Pot holes and uneven surfacing are present resulting in rough and difficult driving conditions. Resurfacing is necessary to improve driving conditions and safety. Road surface improvements to State Road (SR) 4 would begin at the north end of East Jemez Road and the NM 4 intersection and continue north/northeast along NM 4 and include the NM 502/NM 4 interchange (the White Rock *"Y"*). The work will consist of milling the existing road surface to a depth of approximately 2.5 inches and installing new asphalt.

2 Reflective cracks occur due to breaks or cracks in underlying layers because of movement at the original crack. Reflective cracks can occur in cracked asphalt pavements or asphalt pavements on stabilized bases. Subsequently, water seeps Into the pavement weakening the structure and contributing to premature deterioration of the overlay.

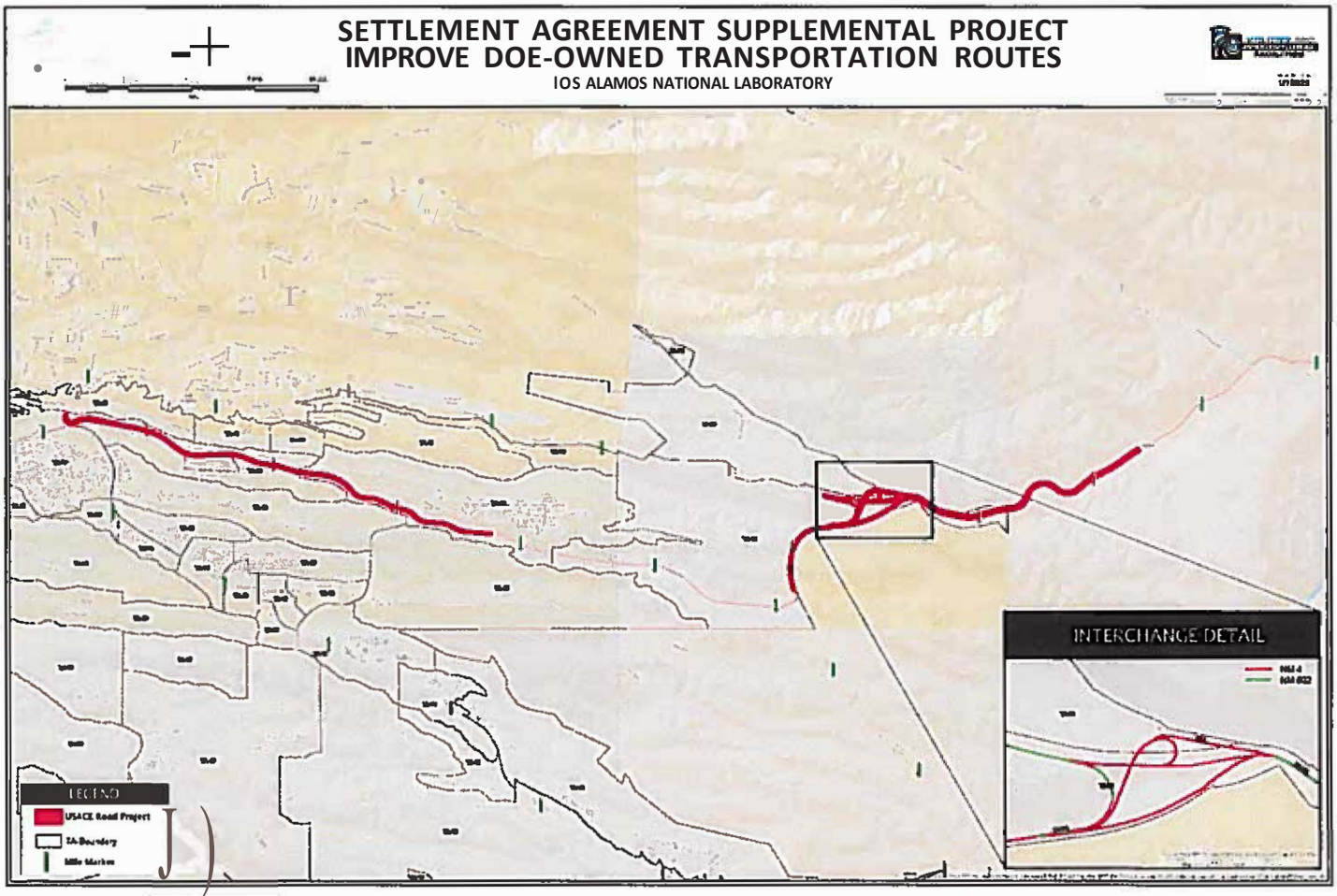

Figure 1: Road Improvement Locations

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	Minor and temporary change to the viewshed from road milling and resurfacing construction activities.
Geology and Soils (geologic hazards, soil productivity, capability, erodibility, and mass failure)	No change to current conditions
Non - radiological Air Quality	Minor generation of dust and engine exhaust during construction activities.
Radiological Air Quality	N/A

Environmental Factor	Analysis
Noise	Heavy equipment would be used for road improvement activities. Noise impacts would be localized and temporary. There are no sensitive receptors in the area.
Ecological (floodplains, wetlands, threatened or endangered species and habitat, migratory birds, exotic organisms)	No change to current conditions.
Human Health - Radiological Impacts on the Public	N/A
Human Health - Chemical Impacts on the Public	N/A
Human Health - Worker Health	NM DOT construction and transportation safety standards will be in effect during construction activities.
Cultural Resources (archeological and historical)	No effect to cultural resources from road improvement construction. *NM 502:* The New Mexico Cultural Resource Information System map server shows seven archaeological sites along the project route and within a 100 foot buffer of NM 502 between mile marker ~.6 and 8.6 on Pueblo land. In accordance with Section 106 of the National Historic Preservation Act of 1966, as amended, the NNSA Field Office has determined the NM 502 SEP road improvement project on Pueblo lands will have no effect on historic properties that have undetermined eligibility, that are eligible for listing, or that are listed in the National Register of Historic Places. This determination is based upon all project activities being restricted to the existing roadway, all equipment and materials remain on the paved road, and that there is no staging, temporary lanes, or other work outside the existing roadway. Additionally, given the history of the road having major reconstruction in the 1990s and the extent of cultural resource management efforts at that time, the NNSA Field Office recommends that the current level of survey coverage is sufficient for identifying historic properties that could be affected by this undertaking. The proposed SEP road improvement was briefed to the Pueblo de San Ildefonso on October 16, 2017. Department of Environmental and Cultural Preservation (DECP) Director Raymond Martinez, at this meeting and in a following email dated November 30, 2017, stated that the DECP had no issues with the proposed road improvement project. On December 19, 2017 "Concurrence with a determination that the NM 502 SEP road improvement project on Pueblo lands will have no effect to historic properties that have undetermined eligibility, that are eligible for listing, or that are listed in the National Register of Historic Places "was received and signed by the Pueblo de San Ildefonso Tribal Historic Preservation Officer Dr. Bradley Vierra on March 1, 2018.
Socioeconomics	Minor benefits from the employment of the construction workforce.

Environmental Factor	Analysis
Infrastructure	Road construction activities would result in road improvement and transportation safety.
Waste Management	Road millings will be stockpiled and reused by both Los Alamos County and LANL. The road improvement contractor will be responsible for disposal or beneficial reuse of surplus millings.
Transportation	Traffic controls would be in place during the road improvement activities.
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 Jong-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.

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 Order 451.lB), 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 exclusions that apply are ***B1.3 Routine maintenance*** and ***B1.32 Trafficflow adjustments***

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: Jane Summerson **Signatu ,,.lllli u...-----** 1 Nc c)	**Date:** 3/9/18