DOE/EIS-0238-SA-05

Supplement Analysis
Site-Wide Environmental Impact Statement for Continued Operation of Los Alamos National Laboratory

Proposed Horizontal Expansion of the Restricted Airspace up to 5,000 feet at Los Alamos National Laboratory

September 2004

Department of Energy
National Nuclear Security Administration
Los Alamos Site Office

Introduction

This Supplement Analysis (SA) has been prepared to determine if the *Site-Wide Environmental Impact Statement for Continued Operations of Los Alamos National Laboratory* (SWEIS) (DOE/EIS-0238) adequately addresses the environmental effects of modifying the horizontal restricted airspace boundaries at the Los Alamos National Laboratory (LANL), to include LANL's Technical Areas (TA) -33 and TA-54, or if the SWEIS needs to be supplemented. Council on Environmental Quality regulations at Title 40, Section 1502.9 (c) of the Code of Federal Regulations (40 CFR 1502.9[c]) require federal agencies to prepare a supplement to an EIS when an agency makes substantial changes in the Proposed Action that are relevant to environmental concerns or when there are new circumstances or information relevant to environmental concerns and bearing on the Proposed Action or its impacts. This SA is prepared in accordance with Section 10 CFR 1021.314(c) of the Department of Energy's (DOE's) regulations for National Environmental Policy Act (NEPA) implementation that state "When it is unclear whether or not an EIS supplement is required, DOE shall prepare a Supplement Analysis."

This SA specifically compares key impact assessment parameters of this proposal to the SWEIS impact analysis, and considers LANL operational accident analyses. The SA concludes with a finding of fact regarding whether the environmental effects of the Proposed Action are adequately bounded by the analyses of impacts projected by the 1999 *Site-wide Environmental Impact Statement for Continued Operation of the Los Alamos National Laboratory*, or whether a Supplemental EIS is required.

Background

The September 1999 Record of Decision (ROD) for the SWEIS documents DOE's decision to continue to operate LANL for the foreseeable future (defined as the next 10 years) and to expand the scope and level of its operations. Pursuant to the ROD, DOE implemented the selected Expanded Operations Alternative at LANL. This alternative expanded most operations at LANL, and, as the need arises, allows DOE to increase the level of existing LANL operations to their highest reasonably foreseeable levels analyzed in the SWEIS Expanded Operations Alternative, and to fully implement the mission elements assigned to the LANL site.

The 1999 SWEIS is currently undergoing review pursuant to DOE's NEPA Implementing Regulations (10 CFR 1021.330) that require site-wide NEPA documents to be evaluated every five years to determine whether the documents remain adequate or whether to prepare a new site-wide EIS or supplement the existing EIS. While this action is on-going, the current SWEIS remains valid for the site's operations. The 2002 Site-wide EIS Yearbook provided a review of the past 5-years of operations at LANL and operations at the two subject TAs have remained within the bounds of the SWEIS impact analyses; no projected changes to the description of operations have been identified for implementation at TAs 33 and 54 over the next five year period that are different from those identified and analyzed in the SWEIS. While the overall rate and amount of waste management and disposal conducted at TA-54 may change from that projected in the 1999 SWEIS, these differences aren't expected to result in a significant change to the

impacts analyzed in the 1999 SWEIS. The 1999 SWEIS analyses for the two subject TAs is expected to remain adequate.

Proposed Action

The DOE's National Nuclear Security Administration (NNSA) is now proposing to expand the horizontal dimensions of the existing 5,000-foot restricted airspace zone above LANL to include the southeast portion of TA-33 and the eastern portion of TA-54 in response to recent revised threat analyses (see Figure 1). Operations at TA-33 and TA-54 would continue to be the same as those that are currently ongoing. Rather, security considerations have changed since the events of 9/11/01 and DOE has identified the need to expand LANL's 5,000-foot restriction to aircraft flights horizontally to include these two operational areas.

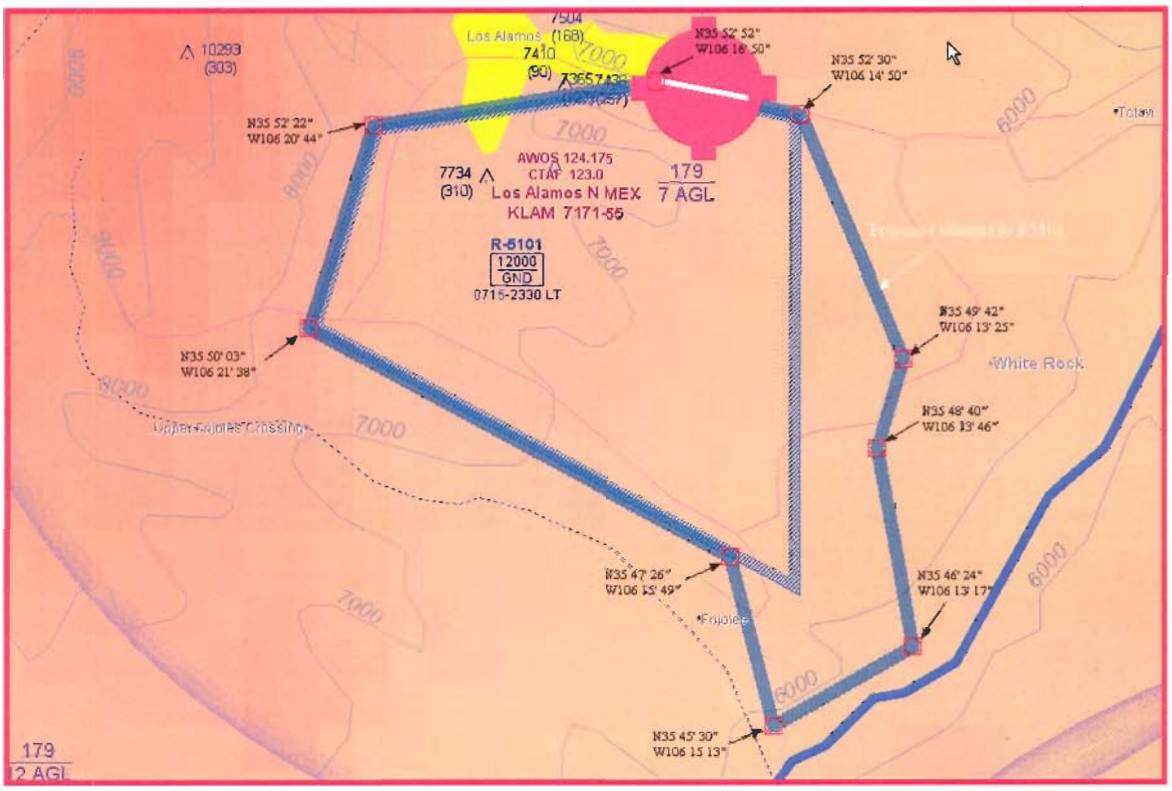

Figure 1. The 5000-foot Restricted Airspace Above LANL would be expanded to the East and Southeast of TA-33 and TA-54 Toward the Rio Grande

Potential Consequences of Proposed Action

No potential environmental effects from implementing the Proposed Action would be likely as summarized in Table 1. Environmental effects are identified and addressed based on the sliding scale approach discussed in DOE's NEPA guidance (DOE 1993); that is, certain aspects of a Proposed Action have a greater potential for creating environmental impacts than others.

NNSA held meetings with the Federal Aviation Administration (FAA), Albuquerque Center that controls air traffic in this region, and the FAA representative concurred with this proposed expansion of restricted LANL over flight airspace up to 5,000 feet, as it would have no impact on commercial air traffic. There is no commercial air traffic that make use of the airspace below 5,000 feet within the area of interest, nor is any anticipated. DOE/NNSA also met with the Los Alamos airport manager, and the community's Airport Committee and it was concluded that the proposed horizontal expansion of LANL restricted air space up to 5,000 feet to include the subject portions of TAs 33 and 54 would not impact private commuter air traffic. Commuter pilots flying in and out of Los Alamos have used the Rio Grande to demark the present LANL over flight exclusion zone and already fly to the east of the river to assure adequate separation. Given the strict adherence to take-off and landing directional requirements relative to the Los Alamos County Airport, small aircraft approaching or leaving the airport do not have a need to cross either TA-33 or TA-54. The LANL area is not well suited to balloon flights due to the area topography and wind patterns; no commercial or private balloonists use the area, nor is any such use by balloonists anticipated.

Table 1. Potential Effects of the Proposed Action

Resource Area	SWEIS/ROD	Proposed Action
Land Use	No changes projected	No changes projected.
Visual resources	Temporary and minor changes due to equipment associated with construction and environmental restoration activities	No changes projected.
Noise	Continued ambient noise at existing levels, temporary and minor noise associated with construction and explosives testing	No changes projected.
Geology	LANL activities are not expected to change geology in the area, trigger seismic events, or substantively change slope stability	No changes projected.
Soils	Minimal deposition of contaminants to soils and continued removal of existing contaminants under the Environmental Restoration project.	No changes projected.
Surface Water Quality	Outfall water quality should be similar to or better than in recent experience, so surface water quality on the site is not expected to change substantially as compared to existing quality	No changes projected.
Groundwater Quality	Mechanisms for recharge to groundwater are highly uncertain; thus, the potential for LANL operations to contaminate groundwater is highly uncertain	No changes projected.
Air Quality: Radioactive Air Emissions	21,700 curies emissions projected	No changes projected.
Public Health-Radiological	Air pathway dose: LANL maximally exposed individual: 5.4 mrem/year of operation	No change projected.
Environmental Justice	No disproportionately high or adverse impacts to minority or low-income populations identified	No changes projected.
Cultural resources	Negligible to minor potential for effects	No changes projected.
Transportation	No changes projected	No changes projected.

Appendix G of the SWEIS contains detailed discussions of the process used for screening, binning and selection of events for detailed analysis from all operations described in the SWEIS. The potential accidents analyzed in detail and described in the SWEIS are those that bound the accident risks of expanded operations at LANL, including possible accident scenarios initiated by air plane crashes at TA-54. The Proposed Action would further minimize the possibility of such crashes because it would enhance the flyover exclusion zone to include operational portions TA-54. Therefore, the accident analyses for LANL operations remain bounding of the Proposed Action.

Conclusion

This SA addresses the proposal to horizontally expand the 5,000-foot restricted airspace zone above LANL to include the southeast of TA-33 and to the east of TA-54 in response to recent revised threat analyses. The SA demonstrates that the proposed action is bounded by the analyses of LANL operations analyzed in the SWEIS. The Proposed Action would not result in any changes to operations or site conditions analyzed in the 1999 SWEIS, nor would it result in changes to the impacts from operations analyzed in the 1999 SWEIS. The Proposed Action is bounded by the accident analyses prepared to support the Expanded Operations (Preferred) Alternative selected in the SWEIS ROD.

FINDING:

The United States Department of Energy, National Nuclear Security Administration finds that the environmental effects of the Proposed Action are adequately bounded by the analyses of impacts projected by the 1999 *Site-wide Environmental Impact Statement for Continued Operation of the Los Alamos National Laboratory*, and no Supplemental EIS is required. The Department of Energy, National Nuclear Security Administration makes this Finding pursuant to the National Environmental Policy Act of 1969 [42 U.S.C. 4321 et seq.], the Council on Environmental Quality (CEQ) Regulations for Implementing the Procedural Provisions of the National Environmental Policy Act [40 CFR 1500] and the Department of Energy National Environmental Policy Act Implementing Procedures [10 CFR 1021].

Signed in Los Alamos, New Mexico this 21st day of September, 2004

Edwin L. Wilmot, Manager
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References

DOE 1993 United States Department of Energy, *Recommendations for the Preparation of Environmental Assessments and Environmental Impact Statements*, Office of NEPA Oversight, May 1993.

DOE 1999a United States Department of Energy, *Site-Wide Environmental Impact Statement for Continued Operation of the Los Alamos National Laboratory*, DOE/EIS-0238, Albuquerque, NM, January 1999.

DOE 1999b United States Department of Energy, *Record of Decision: Site-Wide Environmental Impact Statement for Continued Operation of the Los Alamos National Laboratory in the State of New Mexico*, 64 FR 50797, September 20, 1999.