Finding of No Significant Impact
for the *Proposed Expansion of the Sanitary Effluent Reclamation Facility and Environmental Restoration of Reach S-2 of Sandia Canyon at Los Alamos National Laboratory, Los Alamos, New Mexico*
(DOE/EA-1736)

U. S. Department of Energy
National Nuclear Security Administration
Los Alamos Site Office
Los Alamos, New Mexico

August 24, 2010

FINDING OF NO SIGNIFICANT IMPACT
Proposed Expansion of the Sanitary Effluent Reclamation Facility
and
Environmental Restoration of Reach S-2 of Sandia Canyon
at Los Alamos National Laboratory,
Los Alamos, New Mexico

ENVIRONMENTAL ASSESSMENT: The Final *Environmental Assessment for the Expansion of the Sanitary Effluent Reclamation Facility and Environmental Restoration of Reach S-2 of Sandia Canyon at Los Alamos National Laboratory, Los Alamos, New Mexico* (DOE/EA-1736) provides sufficient evidence and analysis to determine that a Finding of No Significant Impact (FONSI) is appropriate for the proposed wastewater treatment facility footprint and operations expansion, and the environmental restoration action measures that may be required within the upper end of Sandia Canyon at Los Alamos National Laboratory (LANL). The EA, which includes a Mitigation Action Plan (MAP) and a Floodplain Assessment as appendices, is attached and incorporated by reference. A detailed description of the No Action Alternatives, and proposed action alternatives for the Sanitary Effluent Reclamation Facility (SERF) expansion and operations, and for representative possible environmental restoration action measures within reach S-2, together with a discussion of the associated environmental consequences, are presented in the attached EA. In accordance with the Department of Energy (DOE) *Compliance with Floodplain and Wetland Environmental Review Requirements (*codified at 10 CFR 1022.13 (b)), the NNSA is also issuing a Floodplain Statement of Findings (attached).

The EA provides background and analyses in the following Chapters: 1. Purpose and Need for Agency Action; 2. Description of Alternatives; 3.Affected Environment, 4. Environmental Consequences, and 5. Cumulative Effects. The floodplain assessment is the subject of Appendix A of the EA; and the MAP is the subject of Appendix B of the EA. The EA analyzes the effects on geology and soils, water resources, ecological resources, cultural resources, air quality, noise, human health, utilities and infrastructure, traffic and transportation, and environmental restoration and waste management. Environmental regulations and the environmental permit systems coupled with oversight by state and federal regulatory agencies will serve to lessen the potential for adverse environmental effects to the LANL natural and cultural resources present nearby and within upper Sandia Canyon. Additionally, the use of adaptive resource management practices applied to the implementation of specific resource mitigation commitments (as identified in the EA and MAP) will further serve to lessen the potential for adverse environmental effects on LANL natural and cultural resources present nearby and within reach S-2. There are also actions that are inherent to conducting the SERF project and the environmental restoration action measures (such as the use of dust suppression measures during soil disturbance activities, and the very nature of the Stabilization in Place in reach S-2) that will serve to reduce adverse environmental effects to resources present nearby and within upper Sandia Canyon. Analyses performed in the subject EA and commitments made to implement

mitigation actions allow the DOE, National Nuclear Security Administration (NNSA) to conclude that potential beneficial and adverse environmental effects of the subject potential SERF expansion action alternatives and the potential environmental restoration action measures, would, under normal conditions, be minimal and non-significant.

PREDECISIONAL DRAFT REVIEW & COMMENT: On July 9, 2010, the U.S. Department of Energy, National Nuclear Security Administration invited review and comment on the predecisional Draft EA and Draft FONSI from the State of New Mexico, nearby American Indian tribes: the Pueblos of Santa Clara, San Ildefonso, Jemez, Cochiti, and Acoma, and the Mescalero Apache Tribe. The National Nuclear Security Administration also made the predecisional Draft EA and Draft FONSI available to the general public at the same by placing it in the following Public Reading Rooms at: the Los Alamos National Laboratory Research Library, and the Mesa Public Library (both in Los Alamos, NM); the Española Public Library (in Española, NM); Santa Fe Public Library and the New Mexico State Library (both in Santa Fe, NM); and in the University of New Mexico's Zimmerman Library (in Albuquerque, NM). Additionally, more than 30 local stakeholder groups and individuals that have identified themselves as interested parties with respect to DOE activities at LANL were notified by letter of the availability of the predecisional Draft EA and FONSI on July 9, 2010. A notice of the availability of the predecisional Draft EA and Draft FONSI for review was published in local newspapers. Copies of the predecisional Draft EA and Draft FONSI were posted electronically on the Los Alamos Site Office Website: http://www.doeal.gov/laso/NEPADocuments.aspx. Also, copies of the predecisional Draft EA and Draft FONSI were provided to all interested parties for their review upon request. The review and comment period was 30 days long and ended August 10, 2010. A single public hearing on the Draft EA was held in Los Alamos, NM on July 27, 2010.

Three parties provided comments on the predecisional draft EA: The U.S. Army Corps of Engineers, Albuquerque District; the State of New Mexico, Environment Department; and the Pueblo of San Ildefonso, Environment Department. Comments received were addressed through changes to the Final EA, as appropriate. Copies of the FONSI and Final EA will be sent to each of the commentors.

AGENCY CONSULTATIONS: Informal consultation is required through the U.S. Fish and Wildlife Service under the provisions of Section 7 of the Endangered Species Act of 1973 (16 U.S.C. 1531 et seq.) for actions minimally determined to potentially affect, but not adversely affect threatened or endangered species or their critical habitats. A biological assessment for the subject actions was prepared and consultation was requested of the Service for concurrence with a finding of "may affect, not likely to adversely affect" the Mexican spotted owl; the Service reviewed the biological assessment and has concurred with this finding.

The LASO Cultural Resources Manager determined that the subject activities would not affect recorded historic or prehistoric resources through avoidance. The LANL Cultural Resources Management Plan as implemented at LANL serves to identify and protect historic and cultural resources, as well as provide a framework for consultation with and visitation of resources by

local tribes and pueblos. Per the provisions of this Management Plan, consultation with the New Mexico State Historic Preservation Officer (SHPO) pursuant to Section 106 requirements of the National Historic Preservation Act for actions that would result in no affect to a cultural resource site through avoidance is not required to be completed prior to implementing the subject actions.

Additionally, the Albuquerque District, Corps of Engineers, participated in the preparation of the EA as a Cooperating Agency (40 CFR 1501.6). Their participation satisfies their procedural and statutory requirements (33 CFR 325, App.B and Sec. 230.16).

FINDING: Based on the evaluation presented in the attached Final EA (which includes a Floodplain Assessment and a Mitigation Action Plan), the U.S. Department of Energy, National Nuclear Security Administration find there would be no significant impact from proceeding with either of the two action alternatives for the expansion of the SERF (namely, the Partial Reuse Alternative, and the Total Reuse Alternatives), or from proceeding with the environmental restoration action measures for Reach S-2 in Sandia Canyon (namely, the Stabilization in Place with Long-Term Monitoring Alternative, and the Removal and Off-Site Disposal Alternative). The basis of this finding is that there are no significant beneficial or adverse direct, indirect, or cumulative environmental effects that would likely result from these subject alternative actions, based on the analysis of relevant issues of environmental concern in the attached EA and the implementation of mitigation actions committed to in the appended MAP. A separate Statement of Floodplain Findings is also attached to this FONSI.

The U.S. Department of Energy, National Nuclear Security Administration therefore approves this FONSI with mitigation measures pursuant to the National Environmental Policy Act (NEPA) of 1969 [42 U.S.C. 4321 et seq.]; the Council on Environmental Quality Regulations for Implementing the Procedural Provisions of NEPA [40 CFR 1500]; the U.S. Department of Energy NEPA Implementing Procedures [10 CFR 1021]. No Environmental Impact Statement is required for this proposal.

Date 8/24/10

Roger E. Snyder
Acting Manager, Los Alamos Site Office

FOR FURTHER INFORMATION CONTACT: George Rael, U.S. Department of Energy, National Nuclear Security Administration, Los Alamos Site Office, 3747 West Jemez Road, TA-3, BUILDING 1410, MS-A316, Los Alamos, NM 87544; telephone (505) 606-0397; facsimile (505) 667- 5948; or electronic address: nepalaso@doeal.gov. For further information on General DOE Floodplain Environmental Review Requirements, contact: Carol M. Borgstrom, Director, Office of NEPA Policy and Compliance, EH-42, Department of Energy, 100 Independence Avenue, S.W., Washington DC 20585-0119; telephone (202) 586-4600 or (800) 472-2756; facsimile (202) 586-7031.

U.S. DEPARTMENT OF ENERGY

National Nuclear Security Administration
Office of Los Alamos Site Operations

Floodplain Statement of Findings
for the Expansion of the Sanitary Effluent Reclamation Facility
and Environmental Restoration of Reach S-2 of Sandia Canyon at
Los Alamos National Laboratory, Los Alamos, New Mexico

AGENCY: U.S. Department of Energy, National Nuclear Security Administration, Los Alamos Site Office

ACTION: Floodplain Statement of Findings.

SUMMARY DISCRIPTION OF PROPOSED ACTIONS: This Floodplain Statement of Findings relates to two individual activities that would take place within Los Alamos National Laboratory (LANL), within or near the upper end of Sandia Canyon. The subject portion of Sandia Canyon extends from permitted outfall 001 to the eastern end of reach S-2, which is an area of contaminated sediment that also encompasses a small, 3-acre wetland.

One activity is the proposed construction of an expanded footprint for an existing wastewater treatment facility, the Sanitary Effluent Reclamation Facility (SERF), which is located on the mesa top along the southern rim of Sandia Canyon. The expansion project would also include increases to the level of operations of that facility, along with the installation of water storage tanks, pumps, collection pipelines, and distribution pipelines. Post-treatment, the SERF effluent could be reused at LANL cooling tower facilities; however, depending upon the amount of wastewater reused (namely, selection of the Partial Reuse Alternative or the Total Reuse Alternative for implementation), the reuse of the effluent would either reduce or eliminate the amount of wastewater released into the environment within reach S-2.

The second activity considers possible environmental restoration action measures that may be necessary to prevent migration of legacy contamination located within the soils and sediments present in reach S-2 along the bottom of Sandia Canyon. One possible action measure would involve stabilizing the contaminated sediment in place with the installation of a grade control structure made of rock-filled gabions and possibly steel pilings (the Stabilization in Place with Long-Term Monitoring Alternative). Another possible action measure (which is bounding in terms of impacts) would involve the removal of contaminated soil and sediment and the transportation of this waste off-site for disposal (the Removal and Off-Site Disposal Alternative).

Construction actions for the SERF project would occur along a mesa top near the floodplains of Sandia Canyon; there would be no SERF project actions within either the floodplain or within an established, approximately 3-acre wetland area within Sandia Canyon. However, the indirect reduction (the Partial Reuse Alternative) or elimination of the wastewater effluent (the Total Reuse Alternative) could affect the wetland and canyon surface stream flow, and could result in either the reduction in size or elimination of the wetland (see Figure 1 attached).

Environmental restoration action measures taken within reach S-2 in Sandia Canyon would occur within the floodplains of that canyon reach, and could occur within the wetland area. Both of the environmental restoration action measure alternatives could directly affect the wetland and canyon surface stream flow by eliminating the wetland (the Removal and Off-Site Disposal Alternative), or causing a short term reduction in the wetland size and the long-term potential to increase the wetland size (the Stabilization in Place With Long-Term Monitoring Alternative.

SUPPLEMENTARY INFORMATION: In accordance with DOE regulations for compliance with floodplain and wetlands environmental review requirements (10 CFR Part 1022), NNSA prepared a floodplain assessment for these actions. The NNSA included the floodplain assessment document as part of an Environmental Assessment issued on July 9, 2010 by the NNSA. Three comments were received on the proposed floodplain actions.

ALTERNATIVES: The No Action alternatives were considered for each of the two activities under consideration. For the SERF project, the No Action Alternative would result in no changes to the volume of wastewater discharged into Sandia Canyon, but the effluent from the SERF would not meet more stringent waste water quality requirements by the permit required 2012 deadline. The No Action alternative for environmental restoration action measures analyzed in the EA could result in the eventual elimination of the wetland via ongoing erosion.

FLOODPLAIN IMPACTS: The possible environmental restoration action measures under consideration would have the potential for temporary impacts on the floodplain along the length of Sandia Canyon. Should a rain event occur during construction or soil removal activities, there may be some sediment movement down canyon because of the loosened condition of the soil from the active clearing and construction activities. DOE and NNSA will perform the environmental restoration action measures in a manner so as to minimize potential harm to or within the affected floodplain.

FLOODPLAIN MITIGATION: Placement of Best Management Practices (such as sediment fences, straw bales or wattles, or wooden or rock structures to slow down water runoff and run-on at cleared sites) at construction sites per the requirements of a Storm Water Pollution Prevention Plan, and post-construction reseeding and re-vegetation of these sites, would both minimize soil disturbance and reduce or prevent the potential for soil erosion into the Sandia Canyon floodplain within reach S-2. Upon completion of the construction activities, the downstream flow and function of the floodplain would not be impeded. No debris would be left at the work site. No vehicle maintenance or fueling within 100 feet of the floodplain would occur. Sediment movement from the site would be short-term and temporary as regards the mesa-top SERF project components. However, removal of some or almost all of the sediments and soils could be permanent with regard to the environmental restoration action measures that may be taken in Sandia Canyon reach S-2. A National Environmental Policy Act (NEPA) Mitigation Action Plan (MAP) would be implemented that focuses on the use of adaptive resource management practices and potential wetland mitigations should those become necessary. There is an annual public reporting requirement for the mitigation actions identified in the MAP, and inherent requirement for changing mitigation actions if some of them fail to accomplish the goals established for rendering the environmental impacts non-significant.

FOR FURTHER INFORMATION CONTACT: George Rael, U.S. Department of Energy, National Nuclear Security Administration, Los Alamos Site Office, 3747 West Jemez Road, TA-3, BUILDING 1410, MS-A316, Los Alamos, NM 87544; telephone (505) 606-0397; facsimile (505) 667- 5948; or electronic address: nepalaso@doeal.gov. For further information on General DOE Floodplain Environmental Review Requirements, contact: Carol M. Borgstrom, Director, Office of NEPA Policy

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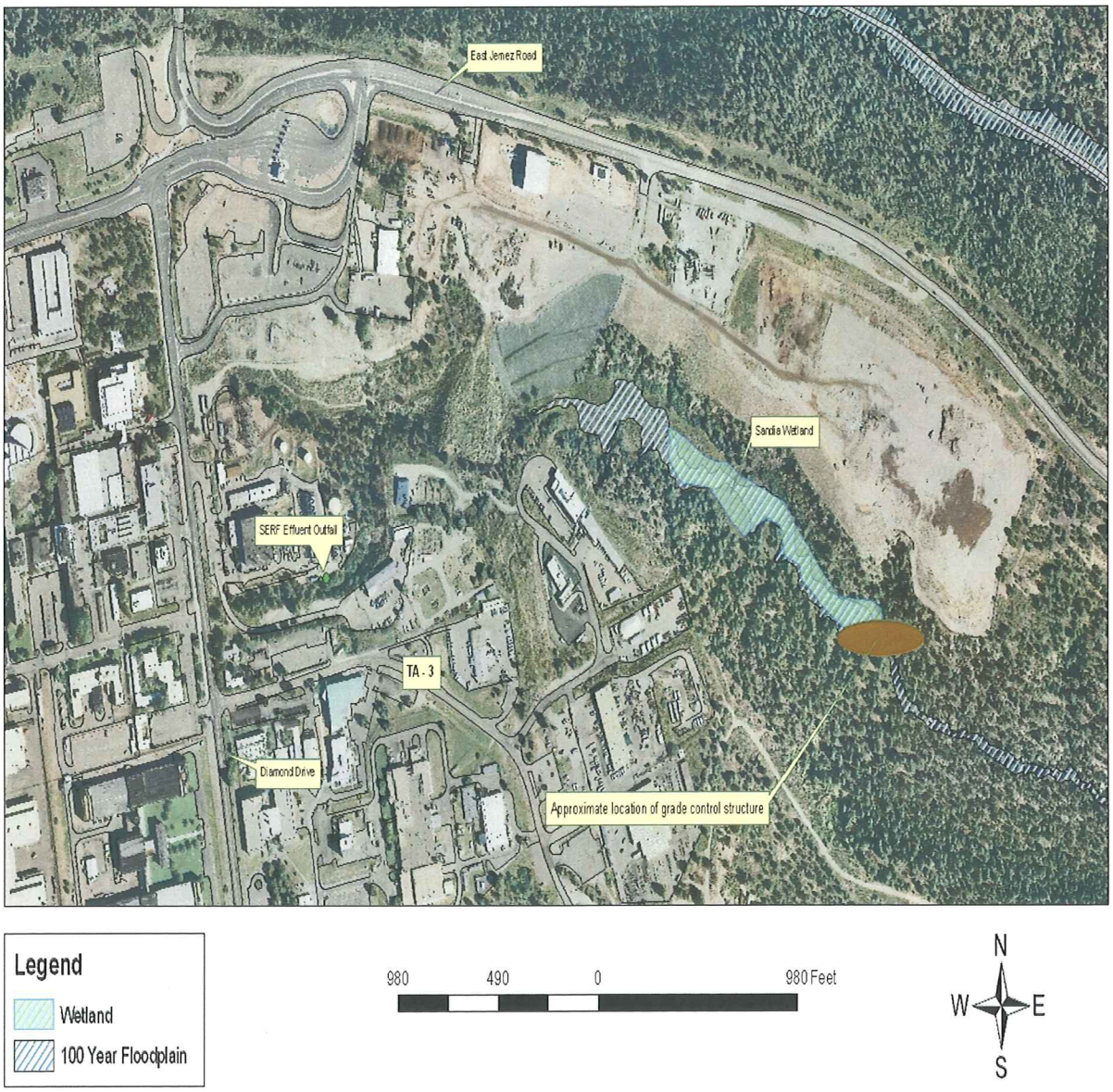
Map of the Upper Sandia Canyon Floodplain Area