DOE/EIS-0238-SA-03

Supplement Analysis to the 1999 Site-Wide Environmental Impact Statement for Continued Operation of Los Alamos National Laboratory for of the Proposed Disposition of Certain Large Containment Vessels

February 12, 2004

Department of Energy
National Nuclear Security Administration
Los Alamos Site Office

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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) (DOE 1999a) adequately addresses the environmental effects of introducing a proposed project for the clean-out and decontamination (DECON) of certain large containment vessels into the Chemistry and Metallurgy Research (CMR) Building located at Los Alamos National Laboratory (LANL) Technical Area (TA) 3, or if the SWEIS needs to be supplemented. After undergoing the clean-out and DECON steps, the subject containment vessels would be disposed of at LANL's TA-54 low-level waste[1] (LLW) disposal site or, as appropriate, at a DOE or commercial offsite permitted LLW-regulated landfill; after actinides[2] were recovered from the DECON solution within the CMR Building, they would be moved to LANL's TA-55 Plutonium Facility and undergo subsequent processing at that facility for reuse.

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 environmental impact statement (EIS) when an agency makes substantial changes in the proposed action that are relevant to environmental concerns, or there are changed circumstances or new or changed information relevant to 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 states: "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 the proposed project action with the LANL operations capabilities evaluated in the 1999 SWEIS in support DOE's long-term hydrodynamic testing program at LANL, as well as the waste disposal capabilities evaluated in the SWEIS in support of LANL operations. It also provides an explanation of any differences between the proposed action and activities described in the SWEIS analysis. The SWEIS analyzed the impacts of performing plutonium (Pu) and actinide activities, including hydrodynamic testing support activity, at the Plutonium Facility and at the CMR Building.

Background

The DOE must maintain its capability to perform dynamic experiments[3] to assess the condition and behavior of its nuclear weapons. Historically, dynamic experiments have

[1] LLW is radioactive waste that is not high-level waste, spent nuclear fuel, TRU waste, byproduct material (as defined in Section 11e (2) of the *Atomic Energy Act of 1954*, as amended), or naturally occurring radioactive material (DOE Order 435.1).

[2] Actinides are a series of radioactive elements with atomic numbers between 89 and 103. The Actinide Series consists of the following elements: actinium, thorium, protactinium, uranium, neptunium, plutonium, americium, curium, berkelium, californium, einsteinium, fermium, mendelevium, nobelium, and lawrencium.

[3] Dynamic experiments are experiments conducted to provide information regarding changes in materials under conditions caused by the detonation of high explosives.

been required to support the DOE's mission and stewardship of the nuclear weapons stockpile. Dynamic experiments remain an essential element of the Stockpile Stewardship and Management Program and assist in the understanding and evaluation of nuclear weapon performance. These experiments are used to gain information on the physical properties and dynamic behavior of materials used in nuclear weapons, including potential changes due to aging effects.

Various different dynamic experiments require the use of different sizes of experiment containment vessels; LANL has used at least four different sizes of containment vessels in past dynamic experiments. Containment vessels have previously always been cleaned out, decontaminated, and then disposed of after a single experimental use. Reusable containment vessels are being planned for future dynamic experimental needs.

The subject large-sized vessels were transported to the LANL Plutonium Facility at TA-55 over ten years ago for clean-out and DECON before disposal as LLW. Due to other essential LANL mission support work being conducted at the Plutonium Facility, these containment vessels have not been processed yet. Given the anticipated high priority workload at the Plutonium Facility for the foreseeable future, it has been recognized that it would now be more expedient to relocate, manage, and dispose of these used dynamic experiment containment vessels using capabilities present at the TA-3 CMR Building instead of the TA-55 Plutonium Facility.

Proposed Action

The Proposed Action would provide for the disposition of nine certain large containment vessels used to contain dynamic experimental explosive shots involving Pu and other actinides. The proposed project would begin in 2004 and it could take up to about 4 years to complete the disposal of these nine subject vessels. The proposed project expects to process (clean-out and DECON) a minimum of two vessels per year and a maximum of four vessels per year. The project setup could be used for future dynamic experiment large vessel disposition support, if needed. All actinide types associated with the proposed project are already used in work that is currently performed at the CMR Building, as well as at the Plutonium Facility; actinide chemistry and materials characterization capabilities of the CMR Building operations have been on-going there for more than 50 years.

The proposed project's vessel clean-out and DECON steps, along with the chemical precipitation of radioactive material, would occur in Room 9141, Wing 9 of the CMR Building where an enclosure suitable for this project is located. Room 9141 is approximately 1,600 square feet; the enclosure with its airlock occupies about 750 square feet, or less than half of the available floor space in Room 9141. The enclosure is double filtered with high-efficiency particulate air (HEPA) filters; its internal pressure is maintained at a negative room pressure with respect to the surrounding Wing 9 air pressure. No major modifications to the enclosure would be required to accommodate the Proposed Action.

As described in detail later in this text, each of the subject large containment vessels stored at TA-55 would be picked up using a crane, placed on a heavy-duty tractor-trailer unit, and then individually transported from TA-55 to the CMR Building. Once at the

CMR Building, the containment vessel would be removed from the transport vehicle using a crane already in place at the CMR Building. The large containment vessel would then be placed on a special moveable cradle, also known as a vessel-handling fixture. The clean-out and DECON processes would be initiated once the vessel had been moved via the vessel-handling fixture into the Room 9141 enclosure.

The proposed project's operations within the Room 9141 enclosure would consist of two distinct phases: first, the clean-out (removal) of large-sized debris from the inside of an individual vessel; and second, the DECON of the inside of the vessel to remove any residual fine, particle-sized nuclear material. The used vessels contain residual actinides in a matrix of metal, powdered silica (sand), graphite, electrical wires, and other hardware debris. The radioactive material would be reclaimed to the extent practicable dependant upon the quantity, quality and desirability of the actinides removed from the inside of the vessel, while the waste removed from inside the vessels through these two phases would be either disposed of as transuranic[4] (TRU) waste or as LLW. The final disposition of the used vessels themselves would be as LLW.

The clean-out of each of the subject nine large vessels could generate about 25 to 35 55-gallon (gal.) (208.5-liter [l] drums (300 to 400 pounds [135 to 180 kilograms]) of solid[5] TRU waste. Each drum would be only about 20 percent full, or less, due to the constraints placed on the amount of radioactivity that a drum can accommodate and still meet the waste acceptance criteria (WAC) established for TRU waste disposal. The waste would be designated TRU because of the actinide content, although most of the waste volume would actually consist of silica (sand). A certified drum assay would be performed through the CMR Building's Segmented Gamma Drum Assay System to ensure compliance with the Waste Isolation Pilot Plant (WIPP) WAC before transfer of the waste drums to TA-54 for management. In addition to the TRU waste generated by the vessel clean-out, there may be up to an additional 5 gal. (18.95 l) of chemical solution required to DECON the vessel so that the vessel itself would meet the LLW designation criteria. The disposition path for the DECON solution would depend on the type of actinide used in the experiment and potentially, whether it would be recovered from the solution. If the DECON solution were to be disposed of as waste without first precipitating out the actinide, it would be solidified[6] and placed in a 55-gal. (208.5-l) drum, then disposed of as either LLW or TRU waste. If the DECON solution were to be processed, the nuclear material would first be precipitated out of the solution within the Wing 9 setup at the CMR Building; the radioactive material would then be packaged and sent to TA-55 for processing and reuse. The remaining solution (after precipitation)

[4] TRU waste is radioactive waste containing more than 100 nanocuries (3,700 becquerels) of alpha-emitting TRU isotopes per gram of waste, with half-lives greater than 20 years, except for (1) high-level radioactive waste; (2) waste that the Secretary of Energy has determined, with the concurrence of the Administrator of the Environmental Protection Agency, does not need the degree of isolation required by the 40 CFR Part 191 disposal regulations; or (3) waste that the Nuclear Regulatory Commission has approved for disposal on a case-by-case basis in accordance with 10 CFR Part 61 (DOE Order 435.1).

[5] The term "solid" in this context refers to the physical state of matter, rather than to any legal or regulatory definition of the term.

[6] "Solidification" in this case would be performed by using an absorptive material to absorb the liquid chemical solution; the resulting waste would then be packaged and disposed of as a solid state waste item.

would be solidified and disposed of as either LLW or TRU waste, as appropriate, since the solution would still contain some residual radioactive constituents.

After the clean-out and DECON procedure, the cleaned vessel would be moved (still using the vessel-handling fixture) out of the Room 9141 enclosure into place so that it could be picked up by crane and placed onto a transport vehicle. The used containment vessel would be transported for disposal as LLW to TA-54, Area G, or, as appropriate, to an offsite DOE or commercial permitted LLW-regulated landfill. In accordance with LANL waste minimization requirements, the waste vessels could be filled with other LLW items; then the waste vessel and its contents would be disposed of together.

Step-by-Step Description of Operations

Step 1: The subject containment vessels would be transported from their current storage location at TA-55, one at a time, to the CMR Building by truck. An individual vessel would be off-loaded from the transport truck at the CMR Building by overhead crane and placed onto a vessel-handling fixture (Figure 1), which would be used to both move and manipulate the vessel.

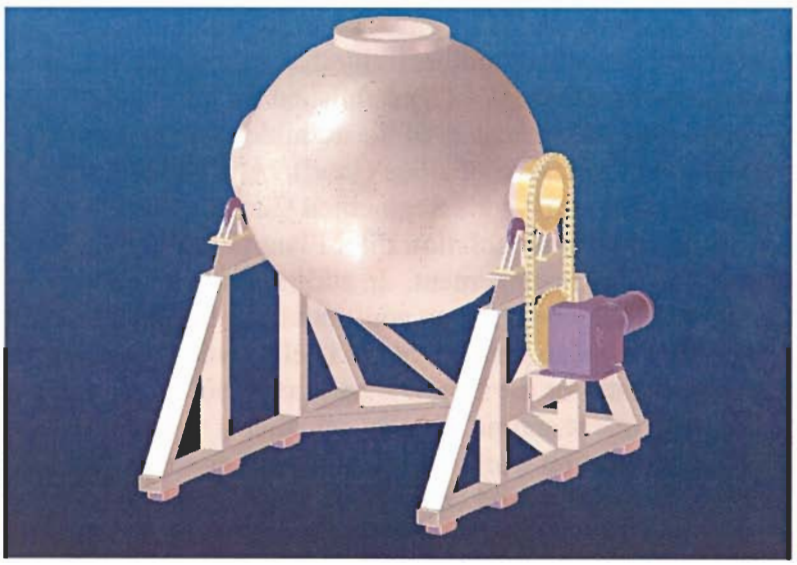

Figure 1. Vessel-handling fixture.

Step 2: The vessel-handling fixture would be used to move the vessel into Room 9141, into the enclosure airlock, and then subsequently into the enclosure interior via a winch and cable.

Step 3: The large port cover would be removed from the vessel using a crane located inside the enclosure. A portable clean-out workstation located on a support stand would be attached to the large vessel port. This workstation would then move with the vessel.

Step 4: A small side port cover would be removed from the smaller side port located at right angles to the workstation, and a robotic arm would be attached to the vessel through the smaller side port. Workers would control the robotic arm remotely from a station located outside the enclosure; the robotic arm would have its own lighting and video

cameras attached to it. The robotic arm would be used to aid the workstation operator in handling large-sized debris, as well as handling various pieces of equipment (such as a vacuum hose and radiation meter).

Step 5: To begin the clean-out operation, debris large enough to be handled would be removed first from inside the vessel with the aid of the robotic arm and its ancillary equipment. Debris would consist of such items as pieces of metal from equipment racks, electrical wires, and metal plates.

Step 6: Most of the residual nuclear material contained in the vessel would be found in the loose silica (sand) and as a powder located in the bottom of the vessel and adhering to the interior surface of the vessel. A vacuum cleaner inside the workstation would be used to vacuum out the loose waste particles. The vessel would be maintained at a negative pressure with respect to the inside of the enclosure; the enclosure would be maintained at a negative pressure with respect to the outside room. All ventilation systems would be exhausted through a double HEPA filter.

Step 7: The waste removed from the vessel would be bagged-out through the bottom of the workstation into 30-gal. (113.7 l) (or smaller) containers depending on the amount of residual actinides. A gamma detector would be used to monitor the drum-filling process. This is a so-called "Go-No Go" real-time assay performed during drum loading so that the maximum drum loading of 6.757 ounces (oz) (200 grams [g] of plutonium [Pu] or Pu-activity equivalent) would not be exceeded. The 6.757-oz (200-g) Pu limit is the radioactive criticality[7] limit set by the WIPP WAC.

Step 8: Each filled 30-gal. (113.7-l) drum would then be placed into a 55-gal. (208.5-l) drum and transported to the CMR Building's Segmented Gamma Drum Assay System for a certified drum assay. This measurement would verify that the 6.757-oz (200-g) Pu WAC limit for each drum had not been exceeded. The waste drums would then be packaged and moved to TA-54 by truck to Area G for management before being moved offsite for disposal as TRU waste.

Step 9: The empty vessel would then undergo verification to determine if it would meet LLW and non-hazardous WAC for disposal at TA-54 (less than 100 nanocuries [100E-09] per gram) without the need to undergo further DECON activities. If the vessel were determined to meet the LLW and non-hazardous WAC, it would be moved out of Wing 9 of the CMR Building, placed on a transport truck by crane, and then moved to TA-54 for management and disposal as LLW.

Step 10: If the empty vessel did not meet the low-level WAC for TA-54, a DECON operation would be initiated within the Room 9141 enclosure by removing the clean-out workstation and attaching a chemical workstation to the vessel through the large port. The chemical workstation would have specialized chemical cleaning equipment and attachments, including circulating chemical sprayer with a retrieval line connected through the workstation to a specially lined reservoir for holding the selected DECON chemical solutions. The robotic arm would be removed from the small side port to prevent chemical damage to the arm's mechanism; the side port cover would be replaced.

[7] A criticality is a self-sustaining nuclear chain reaction; critical mass is the minimum mass of a fissionable material that will initiate an uncontrolled chain reaction.

Step 11: The DECON operation would be performed using routine DECON techniques that include the use of weak acid etching solutions with inhibited fluorides; abrasive attack; and, infrequently, the use of electrolytic solutions.

Step 12: The disposition of the used DECON solution(s) after the DECON operation was completed would depend upon the actinides present in the solution. If the DECON solution were to be disposed of as waste, the DECON solution reservoir would be brought into an open front ventilation hood present within the Room 9141 enclosure where the DECON solution would then be pumped from the reservoir into absorptive material for solidification. The solidified waste would be placed into a 55- gal. (208.5-l) drum prior to processing for appropriate disposal through LANL's waste management program.

If the DECON solution were to be processed for actinide recovery, the DECON solution reservoir would be brought into an open front ventilation hood within the Room 9141 enclosure where the solution would be pumped from the reservoir and introduced into a chemical nuclear material recovery process by which the actinides would be precipitated out of solution. Once the precipitation process was complete, the recovered actinides would be packaged and transported from the CMR Building to TA-55 for further processing and reuse. The solution remaining after precipitation of the actinide portion would be solidified and disposed of through LANL's waste management program.

Step 13: After DECON activities were completed, the DECONed vessel would undergo verification to determine if the empty vessel would meet the TA-54 LLW and non-hazardous WAC. If necessary, the DECON procedure would be repeated as previously described, although this is unlikely, until the vessel meets the TA-54 LLW and non-hazardous WAC. When the WAC is verified for the vessel, the DECON operation would be complete and the vessel could then be processed for disposal.

Step 14: LANL personnel equipped with respirators would remove the chemical workstation and re-attach the large port cover.

Step 15: Smear samples of the exterior of the vessel surface would be taken to verify that the exterior surface was free of contamination. If required, the exterior surface of the vessel would undergo decontamination. Once verified as having a non-contaminated exterior, the vessel would then be transferred through the enclosure airlock and, subsequently, into the Wing 9 High Bay area via a winch and cable.

Step 16: Finally, a truck bed would be backed into Wing 9 and the DECONed vessel would be loaded for shipment to TA-54, Area G for disposal as LLW.

Discussion of SWEIS and ROD for the Continued Operation of LANL

The objective of the SWEIS was to evaluate the environmental impacts of the ongoing operations and the potential impacts of operations into the future for four different alternatives. The SWEIS developed scenarios of levels of operations to project environmental parameters (such as type and quantity of hazardous and radioactive material, air, wastewater, and solid waste). In the SWEIS ROD, DOE made the determination to proceed with the Preferred Alternative, which is the Expanded Operations Alternative analyzed in the SWEIS with the exception of the level of nuclear weapon's pit manufacture. Thus, DOE complied with NEPA, through its analysis in the

SWEIS, for ongoing or proposed operations and capabilities for operations at LANL over the foreseeable future (defined as being about 10 years) as envisioned in 1999.

Under the Preferred Alternative in the SWEIS, DOE analyzed the impacts of Actinide Materials and Science Processing, Research and Development, including support for dynamic experiments at TA-55 and support to hydrodynamic testing and tritium separation activities at the CMR Building. In addition, the SWEIS analyzed environmental impacts of operations at 13 other key facilities. Under the SWEIS ROD, DOE projected that annual operations of the CMR Building would generate up to 988 cubic feet (ft^3) (36.8 cubic yards [yd^3] or 28 cubic meters [m^3]) of TRU waste and up to 13,738 ft^3 (2,395 yd^3 [1,820 m^3]) of LLW (LANL 2001).

Potential Consequences of Proposed Action

This section addresses the potential environmental effects of the Proposed Action and compares them to the projected operations levels of LANL as described for the Preferred Alternative analyzed in the SWEIS. 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 the Proposed Action have a greater potential for creating environmental impacts than others. Therefore, they are discussed in greater detail in this SA than those aspects of the action that have little potential for effect. For instance, waste generation and waste disposal resources would be affected by the Proposed Action, while it is not expected that land use would be affected. Table 1 lists the potential environmental consequences and identifies those that are not likely to be affected by the Proposed Action.

The resource identified in Table 1 that would be affected by the Proposed Action is waste management, specifically, TRU and LLW generation. The following paragraphs discuss these potential effects and describe whether these effects are bounded by the projected total effects analyses provided in the SWEIS. Comparison of operations of the proposed project with the SWEIS ROD impact projections is shown in Table 2. The projected waste generation volumes are bounding estimates based on the supposition that 35 drums of TRU waste would be generated for each containment vessel processed. Clean-out and DECON operations are actually estimated to produce between 25 and 35 drums of TRU waste from each containment vessel. Each of the waste drums would be only about 20 percent full because of the 6.757-oz (200-g) Pu or Pu-equivalent limit set by the WIPP WAC. A 55-gal. (208.5-l) drum could contain approximately 0.27 yd^3 (0.206 m^3) of waste, if filled completely. Therefore, 35 drums, each 20 percent full, would be equivalent to 7 full drums, and would contain about 1.91 yd^3 (1.449 m^3) of TRU waste.

Waste Management: It is not expected that any RCRA-regulated hazardous waste would be generated by the Proposed Action. All waste generated by the clean-out and DECON phases of this project would be solidified LLW or TRU waste and would be sent to TA-54 for eventual disposition there at Area G, or, as appropriate, at a DOE or commercial offsite permitted LLW-regulated landfill, or at WIPP. The maximum TRU waste generated in one year is estimated to be 7.63 yd^3 (5.8 m^3). This volume, 7.63 yd^3 (5.8 m^3), added to the annual CMR Building TRU waste generation for a representative year (LANL 2003), 13.4 yd^3 (10.2 m^3), would yield a total of 21.05 yd^3 (16 m^3), which would be well under the SWEIS projected 36.8 yd^3 (28 m^3) TRU waste generation for

Table 1. Potential Effects of the Proposed Action

Resource Area	SWEIS ROD Preferred Alternative	Proposed Action
Waste Management Annual LLW (Includes low-level mixed) Annual TRU waste (includes Mixed TRU)	 16,938 yd^3 (12,873 m^3) 718 yd^3 (546 m^3)	 12.1 to 24.1 yd^3 (9.2 to 18.3 m^3) 3.8 to 7.6 yd^3 (2.9 to 5.8 m^3) - see additional discussion below
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 changes 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
Traditional Cultural Properties	Unknown due to lack of information on specific traditional cultural properties	No changes projected

Table 2. Comparison of Environmental Effects of Operations of the Proposed Action with the SWEIS ROD Projection for CMR Building Operations

Waste Type	SWEIS ROD Projection For CMR Building	2002 Operations	Projected Annual Operational Volume (2 to 4 Vessels)	Projected Total Operational Volume (9 Vessels)
LLW	2,395 yd^3/yr (1,820 m^3/yr)	511.8 yd^3/yr (389 m^3/yr)	12.1 to 24.1 yd^3/yr (9.2 to 18.3 m^3/yr)	54.5 yd^3 (71.6 m^3)
TRU	36.8 yd^3/yr (28 m^3/yr)	13.4 yd^3/yr (10.2 m^3/yr)	3.8 to 7.6 yd^3/yr (2.9 to 5.8 m^3/yr)	17.1 yd^3 (22.5 m^3)
Chemical	10,800 (10^3 kg/yr)	707 (10^3 kg/yr)	None expected	None expected
Total Actinide Air Emissions	7.60E-04 Ci/yr	2.7E-05 Ci/yr	None expected	None expected

LANL operations per year. The total projected operational volume of TRU waste generated by the proposed project (clean-out and DECON of nine large containment vessels over a time span of four years) would be about 17.1 yd^3 (22.5 m^3). The vessels themselves would be disposed of as LLW at Area G, or, as appropriate, at a DOE or commercial offsite permitted LLW-regulated landfill. Four vessels processed per year would be a maximum of 24.1 yd^3 (18.3 m^3) of LLW generated per year that, when added to the annual CMR Building LLW generation for a representative year (LANL 2003) of 511.8 yd^3 (389 m^3), would yield a total of 535.9 yd^3 (407.3 m^3), which would be well under the projected annual volume of 2,395 yd^3 (1,820 m^3) LLW generation per year for LANL operations. The total projected operational volume of LLW generated by the proposed project (clean-out and DECON of nine large containment vessels over a time span of four years) would be about 54.5 yd^3 (71.6 m^3).

Total Actinide Air Emissions: It is not expected that the proposed project would contribute to any CMR Building actinide air emissions. There are no known air emissions (including iodine, tritium, or fission gases) that should result from this process. In addition, the Room 9141 enclosure that would house this project has an air ventilation system that is double HEPA filtered.

Accidents: 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 accidents analyzed in detail and described in the SWEIS are those that bound the accident risks at LANL. Accidents RAD-15 and RAD-16 in the SWEIS describe a Pu release from a wing fire at the CMR Building and an aircraft crash with explosion or fire at the CMR Building, respectively (DOE 1999a). The Unreviewed Safety Question Determination analysis for the Proposed Action resulted in a negative finding, so the proposed Project would be within the envelope of the CMR Building safety documentation. Thus, the results of any accident involving the proposed large containment vessel disposition project would be bounded by the effects analyzed in the SWEIS accident analysis.

Conclusion

The SWEIS analyzed four different alternatives for continuing to operate LANL and evaluated the environmental effects of operations under these alternatives. In its ROD for the SWEIS, DOE announced its decision to continue to operate LANL under the preferred alternative, which was the expanded operations alternative with a modification to certain weapons related activities. The SWEIS provides the NEPA analysis for the projected activities of LANL facilities under this preferred alternative; capabilities at the operations levels analyzed in the SWEIS would not require further NEPA analysis.

This supplement analysis review addresses the proposal to locate a proposal to disposition certain large containment vessels for dynamic experiments and any associated actinide precipitation activities in the CMR Building. Under the Preferred Alternative, the SWEIS analyzed the environmental impacts of several Pu and actinide operations, including hydrodynamic testing support, tritium separation activities, and actinide research, development, and processing activities, to be performed at TA-55 and the CMR Building.

DOE found that the potential environmental effects of the proposed relocation of the cleanout and DECON of certain large containment vessels, and the associated actinide precipitation capability, to the CMR Building from the Plutonium Facility are bounded by the effects of CMR Building operations as analyzed in the SWEIS ROD. There would be no increase to the total radioactive air emissions. The amounts of TRU waste and LLW projected for this Proposed Action combined with the annual TRU waste and LLW from other CMR Building operations are below those projected by the SWEIS ROD for the CMR Building. No additional NEPA compliance is necessary for the proposed action and it is not necessary to prepare a Supplemental SWEIS.

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 12th day of February, 2004

Ralph E. Erickson, Manager
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References

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40 CFR 1500-1508 — Council on Environmental Quality, "Regulations for Implementing the Procedural Provisions of the National Environmental Policy Act," *Code of Federal Regulations*, Washington, D.C. Revised as of July 1, 2001.

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LANL 2001 — Los Alamos National Laboratory, *SWEIS Yearbook-2000*, LA-UR-01-2965, Los Alamos, NM. July 2001.