
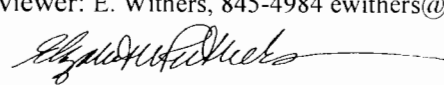


**NEPA REVIEW**  
LASO 10-001

Project/Activity Title: Photovoltaic Array Reuse of Los Alamos County Landfill Location		Accession No: LASO-10-001	Date: February 25, 2010
Location: TA-61		Schedule: FY10-11	Cost: N/A
DOE Program Office: Los Alamos Site Office		Non-DOE Sponsor: Incorporated County of Los Alamos	
Project Contact: Wayne Evelo, 845-5501, wevelo@doeal.gov			
Preparer/Contact: B. Jones, 667-1274 wjones@doeal.gov Signature: 		NEPA Reviewer: E. Withers, 845-4984 ewithers@doeal.gov Signature: 	

**DESCRIPTION OF PROPOSED ACTION:**

In an effort to beneficially reuse the LANL TA-61 'brownfield' landfill site, the County is proposing to lease and use approximately 15 acres of the 46 acres of land it operated as a landfill for the installation of up to 2.5 mega watt (MW) of Photovoltaics (PV) to generate electric power. (see map) The system would be connected to a 7 MWhr battery storage system, which, in turn, would be connected to the Los Alamos Power Pool (Power Pool) infrastructure. The battery energy storage would include sealed sodium sulfur cells mounted in a factory built enclosure, and sealed lead-acid cells located in a structure to be built to conform to all required County building codes.

The Incorporated County of Los Alamos (the County) has requested a long-term (50 year) lease agreement with NNSA for the existing 'brownfield' site formerly used as a solid waste landfill located within TA-61 at LANL. The solid waste landfill, operated over the last several decades by the County under a DOE Special Use Permit, is no longer receiving wastes, and the County is in the process of executing a project to close and cap the landfill site in accordance with direction from the State of New Mexico Environment Department. The County will then be responsible for a 30-year post closure monitoring and maintenance program at the former landfill site, and will continue to operate its existing solid waste transfer station on an adjacent area covered by the DOE Special Use Permit.

The Los Alamos County Power Pool provides up to 88.5 MW of generation resources and an additional 20 MW of power purchases administered through the Electric Coordination Agreement (ECA) between NNSA, and the Los Alamos County Department of Public Utilities for the purpose of providing electric power to LANL and County customers. Federal and State mandates require the increased use of renewable energy through the purchase of Renewable Energy Credits (RECs) or the on-site generation of renewable energy, with on-site generation preferred. To meet this mandate, the County is proposing to use about 15 acres of land for a permanently mounted PV power station that would not penetrate the landfill cap. Appropriate surface mounting structures (stanchions) would be used to prevent equipment from penetrating the capped landfill. Conduits and cabling that interconnect the panels, and power conditioning equipment would also be installed in a manner that does not penetrate the cap. The PV power station would generate no emissions, would not require herbicide or rodenticide applications (rock cover), there are no Threatened or Endangered Species concerns, the operating plant would create no sound, the plant would not be visible to nearby residential area (Royal Crest Mobile (See Continuation Sheet)

**NEPA DETERMINATION BASED ON ABOVE DESCRIPTION:**

- Covered by prior NEPA review:
- Requires EIS:
- Recommended CX: 10 CFR 1021, Appendix A7 and B5.1
- CX exception - Prepare EA (refer to appropriate sections of 10 CFR 1021 for full definition (check all that apply) :
  - extraordinary circumstances (410(b)(2): \_\_\_\_\_
  - threaten violation of regulation (Subpart D, Appendix B (1)):
  - uncontrolled release of hazardous substance (Subpart D, Appendix B (3))
  - connected action (410(b)(3): \_\_\_\_\_
  - siting or expansion of waste TSD facility (Subpart D, Appendix B (2))
  - adverse effect sensitive resource (Subpart D, Appendix B (4))
- None of the above: Prepare EA. [If applicable :10 CFR 1021, Subpart D, Appendix C ]
- Other:



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Continuation Sheet:

Home Park) due to existing trees, and storm water run-on and run-off would be controlled through the use of Best Management Practices prescribed in the closure and cover plan. Also, since this is a "brownfield" site there are no cultural resources present and no other environmentally sensitive resources are present or would be affected adversely. Additionally, the PV power station on a closed landfill would eliminate the need to use a green field site for the PV power station.

**NCO CLASSIFICATION/DETERMINATION:**

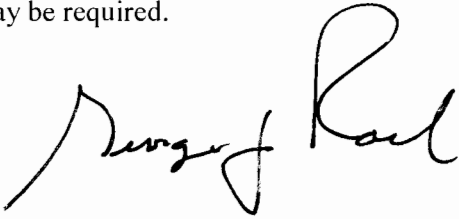
This proposed lease of land and the subsequent PV installation and operation actions are covered by the DOE's categorical exclusions provided by 10 CFR 1021 at Subpart D in Appendices A7 and B5.1. In this case, NNSA's lease of the 15 acres of land to the County would allow it continue to function as a closed/covered/monitored landfill site with the PV array integrated into the landfill cover such that the type and magnitude of impacts would remain essentially the same as provided for in the Appendix A7 description of action; the installation of the PV array and its operation could independently be categorically excluded under the provisions described in Appendix B5.1.

A7 "Transfer, lease, disposition or acquisition of interests in personal property (e.g., equipment and materials) or real property (e.g. permanent structure and land), if property use is to remain unchanged; i.e. the type and magnitude of impacts would remain essentially the same."

B5.1 "Actions to conserve energy, demonstrate potential energy conservation, and promote energy-efficiency that do not increase the indoor concentrations of potentially harmful substances. These action may involve financial and technical assistance to individuals (such as builders, owners, consultants, designers), organizations (such as utilities), and state and local governments. Covered actions include, but are not limited to: programmed lowering of thermostat settings, placement of timers on hot water heaters, installation of solar hot water systems, installation of efficient lighting, improvements in generator efficiency and appliance efficiency ratings, development of energy-efficient manufacturing or industrial practices, and small-scale conservation and renewable energy research and development and pilot projects. The actions could involve building renovations or new structures in commercial, residential, agricultural, or industrial sectors. These actions do not include rulemakings, standard-settings, or proposed DOE legislation."

If changes are made to the scope of action so that it is no longer bounded by the action described in this memo, or it 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.

Signature:



Date: *March 4, 2010*

George J. Rael, LASO NEPA Compliance Officer