

## U.S. Department of Energy Categorical Exclusion Determination Form



Program of Field Office: Sandia Site Office

Project Title: CINT Installation and Operation of XRD Instrument

<u>Location:</u> Sandia National Laboratories - New Mexico

## Proposed Action or Project Description:

## American Recovery and Reinvestment Act: **x**

Sandia National Laboratories/New Mexico (SNL/NM) proposes to install an X-ray diffractometer (XRD) instrument, in the Center for Integrated Nanotechnologies (CINT) Core Facility,. The high-resolution X-ray diffractometer would have a range of easily interchangeable (modular) accessories for the analysis of various nanomaterial properties. This system was included in the original tools that were planned for the CINT Core Facility, and was included in the analysis of the "Environmental Assessment for the Center for Integrated Nanotechnologies at Sandia National Laboratories/New Mexico."

Facility Operations	Site Characterization, Monitoring and General Research
□ B1.1 - Rate increases < inflation (not power marketing) □ B1.2 - Training exercises and simulation □ B1.3 - Routine maintenance and custodial services □ B1.4 - Air conditioning installation for existing equipment □ B1.5 - Cooling water system improvements in existing structures □ B1.6 - Installation of runoff/spill control retention tanks and basins □ B1.7 - Communication system and data processing equipment acquisition, installation, operation, removal □ B1.8 - Screened water intake/outflow structure mods, within permits □ B1.9 - Placing airway safety markings and painting on existing power lines and antennas □ B1.10 - Routine onsite storage of activated material at existing facility □ B1.11 - Fence installation, no adverse effect on wildlife or water flow □ B1.12 - Detonation/burning of failed/damaged high explosives or propellants in designated areas, within permits □ B1.13 - On-site pathway or short access road construction/acquisition □ B1.14 - Refueling of a nuclear reactor □ B1.15 - Support building or structure, non-waste storage, const/oper	Site Characterization, Monitoring and General Research  B3.1 - Site characterization/environmental monitoring B3.2 - Aviation activities for survey/monitoring/security B3.3 - Research related to conservation of fish and wildlife B3.4 - Transport packaging tests for radioactive/hazardous material B3.5 - Tank car tests B3.6 - Siting/construction/operation/decomm of facilities for R&D, conventional laboratory operations and pilot projects B3.7 - New infill exploratory, experimental oil/gas/geothermal construction/operation B3.8 - Outdoor ecological/environmental research in small area B3.9 - Certain CCT demonstration activities, emissions unchanged
	<ul> <li>□ B3.10 - Siting/construction/operation/decommissioning of particle accelerators</li> <li>□ B3.11 - Outdoor tests, experiments on materials and equipment components, no source, special nuclear, or by-product materials</li> <li>□ B3.12 - Siting/construction/operation/decommission of microbiological or biomedical facilities</li> <li>□ B3.13 - Magnetic fusion experiments, no tritium fuel use</li> </ul>
<ul> <li>☐ B1.16 - Removal of asbestos in accordance with regulations</li> <li>☐ B1.17 - Removal of PCB items from aboveground structures</li> <li>☐ B1.18 - Water supply well const/oper, from existing field, no degradation</li> </ul>	Conservation, Fossil, and Renewable Energy Activities  B5.1 - Actions to conserve energy, no indoor air quality degradation
<ul> <li>□ B1.19 - Siting/construction/operation of microwave/radio communication towers</li> <li>□ B1.20 - Protect/restore/improve fish and wildlife habitat</li> <li>□ B1.21 - Noise abatement</li> <li>□ B1.22 - Building relocation to developed area/demolition/disposal</li> <li>□ B1.23 - Demolition/disposal of buildings, equipment, and structures</li> <li>□ B1.24 - Transfer, disposition, or acquisition of uncontaminated structures or equipment, environmental quality maintained</li> <li>□ B1.25 - Transfer, disposition, or acquisition of uncontaminated land for habitat preservation/wildlife management</li> </ul>	<ul> <li>□ B5.2 - Modification to oil/gas/geothermal pumps and piping, no flow changes, or air emission effects</li> <li>□ B5.3 - Modification (not expansion)/abandonment of oil storage access/ brine injection/gas/geothermal wells; no site closure</li> <li>□ B5.4 - Repair/replacement of pipeline sections within maintenance provisions of a Section 404 permit</li> <li>□ B5.5 - Short crude oil/gas/steam/geothermal pipeline const/oper within a single industrial complex/existing right-of-way</li> <li>□ B5.6 - Oil spill cleanup operations</li> </ul>
treatment facilities	Environmental Restoration/Waste Management Activities  B6.1 - Cleanup actions: small-scale, short-term
<ul> <li>□ B1.27 - Disconnection of utilities</li> <li>□ B1.28 - Placement of unused facilities in environmentally safe condition</li> <li>□ B1.29 - Small on-site const/demolition waste disposal facility const/oper/decom</li> <li>□ B1.30 - Transfer/transportation actions, quantities incidental to amounts at receiving site</li> <li>□ B1.31 - Relocation/operation of machinery or equipment, similar use</li> <li>□ B1.32 - Traffic flow adjustments, existing roads.</li> </ul>	□ B6.2 - Siting/construction/operation of temporary pilot-scale waste collection/treatment/stabilization/containment facilities □ B6.3 - Environmental control system improvements in existing structures, recycle/release/disposal within permitted facility □ B6.4 - Packaged hazardous waste storage facility const/oper/decom □ B6.5 - Const/oper/decom of on-site facility for characterizing/sorting or over packing previously packaged waste (not high-level or spent nuclear fuel; no unpacking)
Safety and Health  □ B2.1 - Modifications to enhance workplace habitability □ B2.2 - Installation/improvement of building/equipment instrumentation □ B2.3 - Installation of equipment for personnel safety and health □ B2.4 - Equipment Qualifications Program □ B2.5 - Facility safety and environmental improvements, replacement or of facility components □ B2.6 - Packaging/transportation/storage of radioactive sources from public domain upon request	□ B6.6 - Modification of facility for storing, packaging, or repacking waste
r	<u> </u>

This action would not (1) violate applicable ES&H requirements, (2) require siting of waste Treatment, Storage, Disposal or Recovery facilities, (3) disturb hazardous substances (excluding naturally occurring petroleum and natural gas), thus producing uncontrolled or unpermitted releases, and (4) adversely affect environmentally sensitive resources. Furthermore, this action (1) would not present any extraordinary circumstances such that the action might have a significant impact upon the human environment, (2) is not connected to other actions with potentially significant impacts, and (3) is not related to other actions with cumulatively significant impacts. Therefore, the proposed action may be categorically excluded from further review.

Date Determined: 04/06/2010

NEPA Compliance Officer or Program Officer: LACY, SUSAN DOYLENE

Comments:

<sup>\*-</sup>For a Detailed Listing of DOE's Appendix A/B Subpart D of 1021: Click Here