EXHIBIT 1

NEW MEXICO
ENVIRONMENT DEPARTMENT

Resource Protection Division

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NM0028355
Permit Modification

CERTIFIED MAIL – RETURN RECEIPT REQUESTED

November 18, 2011

RECEIVED
NOV 21 2011
SURFACE WATER
QUALITY BUREAU

Anthony R. Grieggs, Group Leader
Environmental Protection Division
Water Quality & RCRA (ENV-RCRA)
P.O. Box 1663, Mail Stop K490
Los Alamos, NM 87545

RE: Response to Notice of Intent to Discharge and Discharge Permit Required for Zero Liquid Discharge Tanks, AI 856: PRD20070004 and Updated Application Submittal Required for the Radioactive Liquid Waste Treatment Facility (RLWTF), DP-1132

Dear Mr. Grieggs:

The Ground Water Quality Bureau of the New Mexico Environment Department (NMED) received a Notice of Intent from Los Alamos National Laboratory (LANL) on November 8, 2007 for the facility referenced above. NMED responded in writing with a request for additional information which required LANL to submit 60% plans and specifications for the proposed structure, information pertaining to ground water which may be impacted should a release occur, operation and maintenance procedures for the tanks, information on the potential concentration of the wastestream due to evaporation, and seismic studies for the area in which the tanks are to be constructed. NMED received a response to the requested information from LANL on September 15, 2008 which provided most of the requested information and stated that plans and specifications would be submitted once available. NMED received the plans and specifications for the evaporative tanks on August 19, 2011 along with an addendum dated October 19, 2011. The notice describes LANL's intent to discharge up to 3.6 million gallons annually of treated effluent from the RLWTF to two evaporative concrete tanks equipped with synthetic liners and leak detection systems. The total operating volume of the tanks is approximately 754,036 gallons (100,800 cubic feet). The notice, along with the subsequent information submitted upon NMED's request, satisfies the requirements of Subsection A of 20.6.2.1201 New Mexico Administrative Code (NMAC) of the New Mexico Water Quality Control Commission (WQCC) Regulations, 20.6.2 NMAC. The proposed discharge is located within the boundaries of Los Alamos National Laboratory at

35°51'37"N, 106°16'57"W, approximately 2.5 miles southeast of Los Alamos in Section 23, Township 19N, Range 06E, Los Alamos County.

NMED has reviewed the information provided in accordance with Subsection D of 20.6.2.1201 NMAC and because the proposed evaporative tanks contain an effluent or leachate which may move directly or indirectly into ground water, NMED has determined that **a Discharge Permit is required for the proposed discharge.** NMED considers the proposed evaporative tanks to be a component of the RLWTF, therefore they must be included in the Discharge Permit for this facility.

Any appeal of this determination that a Discharge Permit is required must be made to the New Mexico WQCC within 30 days of receipt of this letter, in accordance with Subsection B of 20.6.2.3112 NMAC. A copy of the WQCC Regulations, 20.6.2 NMAC, is available at http://www.nmcpr.state.nm.us/nmac/_title20/T20C006.htm.

Upon further review of the file for the RLWTF, NMED has noted the following:

- An application for a Discharge Permit was submitted to NMED on April 16, 1996 for the discharge of 41,770 gallons per day of treated low level radioactive wastewater from the RLWTF to a tributary of Mortandad Canyon (referred to as Effluent Canyon).
- The application identified potential upgrades to the system which were to enhance the treatment process and provide alternate discharge capabilities for the facility.
- The treated effluent from the RLWTF is currently authorized to be discharged to an outfall (Outfall 051) under a United States Environmental Protection Agency (EPA) National Pollutant Discharge Elimination System (NPDES) Permit (NM0028355) last issued on August 1, 2007, and subsequently modified on July 17, 2007, May 13, 2011, and October 11, 2011.
- Numerous Notices of Planned Changes have been submitted to EPA for treatment system upgrades and facility changes under the NPDES Permit for Outfall 051. Copies of these notices were submitted to NMED on the following dates: April 21, 1998, March 18, 1999, April 3, 2000, June 13, 2000, May 7, 2002, March 14, 2003, April 18, 2003, January 12, 2004, May 14, 2007, May 6, 2008, August 19, 2010, September 16, 2010, and February 23, 2011.
- In addition to the Notices of Planned Changes, numerous notices concerning minor modifications to the facility have been submitted to NMED as addendums to the original Discharge Permit application. NMED received copies of these submissions which were dated March 23, 1999, December 8, 2000, November 8, 2007, August 25, 2010, September 27, 2010, December 15, 2010, and March 22, 2011.
- NMED has engaged in numerous meetings, inspections and written correspondence regarding the RLWTF in order to compile accurate information on the facility in preparation for drafting a Discharge Permit that will accurately reflect the activities conducted at the RLWTF.
- In September 2003, a draft of Discharge Permit DP-1132 was sent to LANL which was subsequently Public Noticed on April 18, 2005, beginning a 30-day comment period.
- On April 27, 2005, in response to multiple requests from interested parties, a second public comment period was granted on the proposed Discharge Permit (extending the comment period for approximately 90 days, until August 4, 2005).

- NMED received comments and requests for a public hearing regarding the draft Discharge Permit from both interested parties and LANL.
- Through continued discussions with LANL, correspondence, site inspections and the above referenced Notice of Intent, it has become apparent that the facility has significantly modified treatment processes, discharge volumes and locations of the discharge when compared to the original application submitted to NMED on August 16, 1996.
- As it pertains to any future Discharge Permits to be issued by the NMED Ground Water Quality Bureau (GWQB), this *facility* has been determined to include the central influent collection lines leading to the RLWTF, all components which are part of the wastewater treatment process and all locations where the treated wastewater is disposed, including all surface discharges as well as non-surface discharges such as evaporative tanks (as described in the above referenced Notice of Intent). This determination by the NMED-GWQB is based on information provided in the original application for a Discharge Permit along with subsequent information provided to NMED by LANL.

Given the extensive and fractured exchange of information concerning this facility, along with changes at the RLWTF that have occurred during the lengthy permitting process and planned future changes, NMED views LANL's August 16, 1996 Discharge Permit application to be inconsistent with the current and planned discharge activities associated with the RLWTF. **Therefore, NMED requires that LANL submit a comprehensive and up-to-date Discharge Permit application for the RLWTF within 90 days of the date of this letter (by February 16, 2011).**

When submitted, the application (copy enclosed) should be completed in its entirety and specifically address the following:

- The estimated volumes, sources (technical area and building) and wastestream characteristics of all influent wastewater that LANL receives, or intends to receive, at the RLWTF.
- A description of the conveyance methods used to transport wastewater to the RLWTF for each source.
- A description of waste characterization and metering systems used to determine influent wastestream characteristics and volumes entering the RLWTF.
- A description of the review and amendment process for LANL's internal Waste Acceptance Criteria (WAC) for all incoming wastewater received at the RLWTF. This should include LANL's process for ensuring the WAC relates to the current treatment technologies and processes.
- A description of operational procedures for receiving wastes from each generator.
- A schematic of the treatment process in its entirety for each wastestream (from collection to final disposal).
- Descriptions, locations, construction materials and sizing for each component of the treatment processes for each type of wastestream being treated at the RLWTF.
- Descriptions, locations and designs for all secondary storage and auxillary emergency units intended to receive, treat or store wastewater received at the facility.
- Proposed processes for the operation, inspection and maintenance for the facility as it pertains to the collection lines, treatment units and effluent storage disposal units.
- Procedures and corrective actions for addressing acute failures at the facility.
- Procedures and corrective actions for addressing long-term maintenance issues at the facility.

- Record drawings for all components of the facility, if available.
- Construction plans and specifications for all components of the facility which are under construction or are proposed for construction.
- A proposed effluent monitoring plan, identifying analytes and sample locations/frequency. The proposal should consider discharge frequencies, incoming waste characteristics and the constituents listed under 20.6.2.3103 NMAC and Subsection WW of 20.6.2.7 NMAC.
- Proposed flow and metering systems used to determine effluent discharge volumes for each of the discharge locations.
- Proposed ground water monitoring locations for ground water sources most likely to be impacted by intentional and unintentional discharges from the RLWTF. The proposal should identify geohydrology of the potentially impacted areas, existing monitoring well locations and construction.
- Actions which LANL would implement should partial or full closure of the facility occur.
- A scaled facility plan showing the facility's components including influent collection lines, storage units, major treatment units and disposal units.
- All other information sought in NMED's application for Discharge Permit Sections A through C. Please note that for the purposes of public notification, the "discharge site" as it relates to this facility encompasses the central collection system lines, the treatment and storage facilities and all discharge locations for the treated effluent.

When submitting the comprehensive and up-to-date Discharge Permit application, you must complete and submit three copies along with the $100 filing fee.

If you have any questions, please contact either Jennifer Fullam at (505) 827-2909 or Clint Marshall, Acting Program Manager of the Ground Water Pollution Prevention Section, at (505) 827-0027.

Sincerely,

James H. Davis, Ph.D.
Director, Resource Protection Division

JD:JF

Enc: Applying for a Discharge Permit: General Information
Discharge Permit Application

cc: Robert Italiano, District Manager, NMED District II (w/o enclosures)
NMED Santa Fe Field Office (w/o enclosures)
DP Required File (w/o enclosures)
James Bearzi, NMED SWQB (w/o enclosures)
Richard Powell, NMED SWQB (w/o enclosures)
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