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Water Protection Advisory Board
c/o ABCWUA
P.O. Box 568
Albuquerque, NM 87103

February 24, 2014

Mr. Tom Blaine, Director
Environmental Health Division
New Mexico Environment Department
PO Box 5469
Santa Fe, NM 87502-5469

Re: Five-Year Reporting for Sandia National Laboratories Mixed Waste Landfill

Dear Mr. Blaine:

The Water Protection Advisory Board (WPAB) was established via joint ordinances adopted by the Albuquerque Bernalillo County Water Utility Authority, the City of Albuquerque, and Bernalillo County. The purpose of the WPAB is to study and advise the Authority, City, and County on surface and ground water protection concerns; to oversee implementation of the Ground Water Protection Policy and Action Plan; to promote consistency in Authority, City and County actions to protect surface and ground water quality; and to advocate effective protection of surface and ground water quality.

In keeping with the WPAB's purpose, the WPAB has been following activities related to the management of Sandia National Laboratories' Mixed Waste Landfill (MWL) located in the Sandia National Laboratories' Technical Area III. In March 2001, after considerable deliberation, the WPAB (then called the Ground-Water Protection Advisory Board or GPAB) issued a resolution with set of six recommendations concerning the MWL, including the need for 5-year re-evaluations and reporting (see attached). In February 2013, consistent with input from members of the public, the WPAB reviewed the recommendations and added a seventh one regarding the need for transparency of process and data. In addition, in February 2013, at the request of Albuquerque City Councilor Rey Garduño and the Albuquerque-Bernalillo County Water Utility Authority, the WPAB hosted a forum for public comment on the Long Term Monitoring and Maintenance Plan (LTMMP) for the MWL.

The Final Order for the MWL RCRA permit modification request, issued by the Secretary of the New Mexico Environment Department (NMED) in May 2005, incorporates many of the WPAB's original recommendations. In particular, Condition 1 of the Final Order stipulates that "the remedy shall be a vegetative cover with biointrusion barrier." Further, Condition 5 of the Final Order stipulates "Sandia shall prepare a report every 5 years, re-evaluating the feasibility of excavation and analyzing the continued effectiveness of the selected remedy. The report shall include a review of the documents, monitoring reports and any other pertinent data, and anything additional required by NMED. In each 5-year report, Sandia shall update the fate and transport model for the site with current data, and re-evaluate any likelihood of contaminants reaching groundwater. Additionally, the report shall detail all efforts to ensure any future releases or movement of contaminants are detected and addressed well before any effect on groundwater or increased risk to public health or the environment. Sandia shall make the report and supporting information readily available to the

public, before it is approved by NMED. NMED shall provide a process whereby members of the public may comment on the report and its conclusions, and shall respond to those comments in its final approval of the report.”

Sandia, DOE/NNSA, and NMED apparently have taken the position that the five-year clock does not start on this re-evaluation and reporting requirement until the LTMMP has been finalized and approved. However, given the remedy stipulated in the Final Order, the potential for groundwater contamination of a serious nature (low probability but high consequence), and the agreed-upon need for continued vigilance, monitoring, modeling, and periodic re-evaluation, a legitimate case can be made that the clock on the five-year reports should have started when the Final Order was issued in 2005, which would have required the first five-year report in 2010. In any case, nearly five years have now passed since the cover was installed in 2009. **It is the position of the WPAB that a five-year report, including the supporting data collection, modeling, and analysis, should be produced in 2014.** The WPAB urges the NMED to require the DOE/SNL to complete this report by the end of this year.

The WPAB recognizes that the required analysis and reporting is non-trivial and that Sandia cannot produce such reports without sufficient funding. The WPAB requests that NMED instruct DOE/NNSA and Sandia take the steps required to secure the necessary appropriation for Sandia to carry out this work. The WPAB, in its role as an agent for groundwater protection and interagency collaboration, stands ready to assist in this endeavor by advocating support of relevant legislative and/or administrative entities as appropriate.

Best regards,



Steve Glass, Chairman

cc: Mayor Richard J. Berry, City of Albuquerque
Mr. Robert J. Perry, CAO, City of Albuquerque
Councilor Klarissa J. Pena, Chair, Albuquerque Bernalillo County Water Utility Authority Governing Board
Mr. Mark Sanchez, Executive Director, Albuquerque Bernalillo County Water Utility Authority
Councilor Ken Sanchez, President, City of Albuquerque Council
Commissioner Debbie O'Malley, Chair, Bernalillo County Commission
Mr. Tom Zdunek, Manager, Bernalillo County
Mr. Geoffrey L. Beausoleil, Manager, U.S. DOE NNSA/ SNL Field Office

Attachment: WPAB 2001 Mixed Waste Landfill Resolution

**Groundwater Protection Advisory Board
Mixed Waste Landfill Resolution
April 12, 2001
As amended February, 2013**

Background:

The City of Albuquerque/Bernalillo County Ground-Water Protection Policy and Action Plan (GPPAP) identifies three goals: 1) protect the ground-water resource, 2) find and clean up contaminated ground water, and 3) promote the coordinated protection and prudent use of the ground-water resource through the region. One of the specific recommendations of the GPPAP was formation of a Ground-Water Protection Advisory Board (GPAB), which was formally constituted in December 1998. Part of the GPAB's role is to promote and facilitate region-wide ground water protection. To fulfill this mission, the GPAB held five meetings to discuss ground water protection activities at Sandia National Laboratories and Kirtland Air Force Base. The principal focus of these meetings was to discuss potential threats posed by the Mixed Waste Landfill (MWL), a facility that contains both hazardous and radioactive wastes.

Findings:

At its meeting on March 8, 2001, the GPAB agreed to the following findings:

1. The current concentrations of chemical and radioactive contaminants in ground water beneath the MWL do not pose an immediate threat to human health and the environment.
2. The risk of radiation exposure to cleanup personnel and the public associated with removal of the waste at this time would be excessively high.
3. There is a need to exercise continued vigilance of the MWL so that problems are identified and addressed before additional contamination occurs.

Recommendations:

Based on the information presented to the GPAB and after much deliberation, the Board made the following recommendations:

1. The MWL should be covered to prevent airborne transport of contaminants, limit infiltration of water into the landfill, prevent intrusion, and prevent erosion at the site.
2. Sandia National Laboratories (SNL) and the Department of Energy (DOE) should continue monitoring efforts at the MWL until remediation activities are completed. The monitoring frequency and the parameters to be measured should be negotiated with staff from the New Mexico Environment Department (NMED), the City of Albuquerque, and Bernalillo County. Current efforts by SNL and DOE to identify technologies for improved monitoring of contaminants in the environment and for waste recovery and/or stabilization of contaminated sites should be continued.
3. The NMED should place a condition in SNL's Resource, Conservation and Recovery Act (RCRA) permit that remediation of the MWL will be evaluated every 5 years, or when a change of property ownership occurs, or when monitoring indicates a change of conditions within the MWL such as accelerated contaminant migration through the vadose zone. This

evaluation will include an assessment of the risks posed by the MWL to the community, identification of remediation and waste disposal alternatives, the cost of remediation and disposal, and determination of the risks associated with remediation and waste disposal activities that employees and the community would be exposed to. The GRAB will be provided a copy of this evaluation for their formal review.

4. The MWL should be excavated and the materials properly stabilized and disposed of when either: 1) radiation levels decrease to levels acceptable for remediation activities, or 2) the waste is determined to present an unacceptable risk to human health and the environment.
5. Sandia National Laboratories and the DOE should identify a mechanism by which financial assurance can be provided to the City of Albuquerque, Bernalillo County, and the State of New Mexico to maintain adequate institutional control over the MWL as long as waste is present at the site. This financial assurance would include a provision for adequate technical and fiscal resources necessary to complete waste removal, disposal, and remediation activities at the site.
6. The City of Albuquerque and Bernalillo County should develop land use constraints for the MWL that will prevent inappropriate development near the site.
7. Transparency should be maintained except where precluded by classified information. In addition to the five-year reports, the public should be provided with easy and timely access to technical data regarding (a) what materials are in the landfill and in what form; (b) what remediation, protective, or maintenance measures have been or are being undertaken; and (c) any monitoring done, including soil and groundwater testing.