

**STATE OF NEW MEXICO
BEFORE THE SECRETARY OF ENVIRONMENT**



IN THE MATTER OF:

**PROPOSED PERMIT MODIFICATION FOR)
SANDIA NATIONAL LABORATORIES)
EPA ID NO: NM5890110518)
TO DETERMINE CORRECTIVE)
ACTION COMPLETE WITH CONTROLS)
AT THE MIXED WASTE LANDFILL)**

NO. HWB 15-18 (P)

FINAL ORDER

BACKGROUND

This matter comes before the Secretary of the New Mexico Environment Department following a hearing before the Hearing Officer on July 8-11, 2015 in Albuquerque, New Mexico.

This matter concerns the proposed modification of permit number NM5890110518 (“Permit”) issued for Sandia National Laboratories. Sandia National Laboratories (“SNL”), the United States Department of Energy (“DOE”), owners of the facility, and Sandia Corporation, operator of the facility (collectively referred to as “Applicant”), seek a determination from the New Mexico Environment Department (“NMED”) of corrective action complete (“CAC”) with controls status for the Mixed Waste Landfill (“MWL”) located at the facility.

NMED has determined: (1) the MWL is a Solid Waste Management Unit (SWMU) and has been characterized and remediated in accordance with 40 CFR § 264.101, the NMED Compliance Order on Consent (April 2004) (“Consent Order”), and the May 2005 Final Order; and (2) data indicates contaminant concentrations pose acceptable levels of risk to human health and the environment under current and projected future land use. NMED

Ex. 5 at 20:19-23. Accordingly, NMED supports a determination of corrective action complete with controls status for the MWL.

Citizen Action New Mexico (“CANM”), Southwest Research and Information Center (“SRIC”) and Herbert Ericksen Nuttall, Ph.D. (“Dr. Nuttall”) (collectively, “Intervenors”) oppose the proposed modification to the Permit. Intervenors request the Secretary to deny the proposed modification to the Permit; reverse the Final Order issued by then-Secretary Ron Curry on May 26, 2005 (“2005 Final Order”), which selected an evapotranspiration cover (ET cover) with biointrusion barrier as the final remedy for closing the MWL; and, order the Applicant to excavate the MWL and appropriately dispose of its wastes.

The Hearing Officer’s Report issued on October 13, 2015 recommends approval of the proposed modification to the Permit as provided in NMED Exhibit 1. For the reasons set forth below, the recommendation of the Hearing Officer is hereby adopted with modifications.

DISCUSSION

A. Minor Modifications to the Hearing Officer’s Report Based on Comments Submitted by the Parties

Applicant and NMED both submitted timely, specific comments on the Hearing Officer’s Report. CANM and Dr. Nuttall also submitted comments; however, their comments were untimely. Even though the comments submitted by CANM and Dr. Nuttall were untimely, they were nonetheless considered.

After consideration of all of the comments submitted by the parties, the following minor modifications to the Hearing Officer’s Report are determined to be necessary and appropriate:

- NMED’s Comment Nos. 1-3 are accepted;
- NMED Comment No. 4 is accepted; however, the change shall be applied to Paragraph 6 of the Hearing Officer’s Report;

- NMED Comment Nos. 5-8 are accepted;
- NMED Comment No. 9 is accepted and page 6, paragraph 23 of the Hearing Officer's Report shall be adjusted as follows: "The final Hearing Officer's Report from the 2004 hearing included the following conclusions";
- NMED Comment Nos. 10-16 are accepted;
- NMED Comment No. 17 is rejected in favor of Applicant's proposal to delete the first sentence of paragraph 48;
- NMED Comment No. 18 is accepted;
- NMED Comment No. 19 is accepted and page 12, paragraph 51 of the Hearing Officer's Report shall be replaced with the following language: "There is no evidence of groundwater contamination based on extensive site characterization and 25 years of groundwater monitoring at the MWL. Recent sporadic detections of PCE in groundwater were below the EPA Maximum Contaminant Level (MCL) and unlikely to exceed the MCL in the future. Copland Direct at 112:23-113:2; NMED exhibit 5, pp. 31-34;
- NMED Comment Nos. 20-34 are accepted; and,
- NMED Comment No. 35 is accepted and the Hearing Officer shall supplement the record by furnishing the parties a copy of the Recommended Final Order prepared for the Secretary.

All other comments on the Hearing Officer's Report that were submitted by the parties were considered and ultimately rejected.

B. Major Modifications to the Hearing Officer's Report Requested by Intervenors

1) Intervenors' Request to Reverse the 2005 Final Order

Intervenors have actively sought to have the waste in the MWL excavated, treated and appropriately disposed since 2004, a remedy commonly referred to as “clean closure.” In 2005, then-Secretary Ron Curry rejected Intervenors’ request for clean closure and determined the MWL should be closed as a landfill, which entails leaving the waste in place, installing a landfill cap and requiring post-closure monitoring and maintenance. The 2005 Final Order requires Applicant to prepare a report every five years (“Feasibility Report”) to re-evaluate the feasibility of clean closure and analyze the continued effectiveness of the selected remedy (ET cover with biointrusion barrier and post-closure monitoring and controls). Pursuant to the 2005 Final Order, the first Feasibility Report is due five years after the Environment Department approves the Long-Term Maintenance and Monitoring Plan (“LTMMMP”), which was also required under the 2005 Final Order. The LTMMMP establishes the monitoring, maintenance, physical and institutional controls, and reporting at the MWL that NMED determined were necessary to evaluate the continued efficacy of the ET cover with biointrusion barrier.

A number of different lawsuits were filed following the entry of the 2005 Final Order. CANM filed a series of unsuccessful legal challenges to various aspects of the 2005 Final Order. The lawsuits substantially delayed the implementation of the final remedy at the MWL, which in turn delayed the submission of the LTMMMP and the submission of the first Feasibility Report. NMED approved the first LTMMMP associated with the final remedy at the MWL on January 8, 2014. Therefore, under the 2005 Final Order, the first Feasibility Report is not scheduled to be submitted until 2019.

NMED filed an ill-conceived lawsuit in 2007 against CANM (*New Mexico Environment Department v. Citizen Action New Mexico*, New Mexico District Court, First Judicial District, D-1-1-CV200702626) seeking to prevent CANM from obtaining certain public records relating to

the MWL. Relying on a specious interpretation of the Inspection of Public Records Act, NMED spent nearly two years trying to suppress the public's right to information about the MWL. The lawsuit not only constituted an affront to transparency and open government, but it also amounted to an enormous waste of state taxpayer dollars as NMED expended a tremendous amount of resources to pursuing this unsuccessful lawsuit before ultimately being ordered to pay CANM \$22,791.57 in attorney's fees and costs. This case provides important context for some of the allegations made in the "Facts and Conclusions of Law with Recommendations" submitted recently by CANM and Dr. Nuttall, which repeatedly expressed a heightened sense of distrust regarding the way in which NMED previously handled this matter.

While the subject of this Order focuses on whether the Applicants have successfully implemented the remedy selected in the 2005 Final Order, Intervenors' focus in this proceeding is different. Intervenors seek to overturn the final remedy selected in 2005. Intervenors' frustration over both the 2005 Final Order and subsequent lawsuit that sought to deny access to public information is understandable; however, the record in the present matter unequivocally demonstrates NMED, Applicants and the Hearing Officer have handled this matter professionally and with integrity. Since 2011, Intervenors have not been denied access to any information in NMED's possession regarding the MWL and the record of this hearing demonstrates the Hearing Officer took great lengths to ensure all of the parties were able to fully participate. Unfortunately, the lingering sentiment of frustration over the history of this proceeding has clouded the matter. This conduct is noteworthy only because it ultimately detracts from some of the important points being raised by Dr. Nuttall, a credible expert providing valuable testimony in this matter. The essence of Dr. Nuttall's testimony is that NMED still does not definitively understand what was buried in the MWL and therefore the final

remedy selected in 2005 is not protective of human health and the environment, and should be overturned.

2) Denial of Request to Modify 2005 Final Order

The MWL began accepting radioactive and hazardous waste in 1959, an era predating environmental oversight, and continued accepting waste until the end of 1988. The MWL is located just outside of New Mexico's largest metropolitan area and does not meet modern environmental standards for disposing of hazardous waste. Specifically, even though the MWL is routinely referred to as a landfill, it does not utilize a RCRA Subtitle C liner system (a double composite liner with leak detection). Instead, the waste at the MWL is buried in unlined pits. While there is no evidence of groundwater contamination at the MWL, the final remedy selected in 2005 (ET cover with biointrusion barrier) may not be the most appropriate long-term solution for this site. Absent complete excavation and off-site disposal, installation of a RCRA Subtitle C liner system would be the most protective, modern design for a mixed waste landfill.

Although the 2005 Final Order may not have provided the most appropriate remedy for this site, the record clearly demonstrates that the 2005 remedy (ET cover with a biointrusion barrier) has been successfully implemented by the Applicant. This remedy provides a comprehensive set of safeguards and controls, such as: groundwater monitoring, maintenance, physical, and institutional controls. These monitoring and maintenance systems serve as early warning systems to assure that the remedy selected in 2005 continues to protect public health and the environment. Additionally, the ET cover is designed to divert precipitation from the landfill so that moisture does not infiltrate the landfill and come into contact with the waste. While the final remedy selected in 2005 may not have been the most appropriate long-term solution for this site, a modification of the final remedy at this point in time requires a fresh calculus, namely, the

consideration of the overall risk of excavating the MWL versus the potential risk of leaving the control systems and waste in place as configured by the 2005 Final Order, which is now fully implemented. In other words, the remedy selected in 2005 must now be evaluated through the prism of the work that has been accomplished at the MWL since 2005. In order to excavate the contents of the landfill to either install a RCRA Subtitle C liner system or dispose of the contents off-site, the Applicant will have to excavate and stage the waste on-site until the new liner system is constructed or until the waste is packaged for safe shipment to an off-site disposal facility. Given the known and unknown contents of the MWL, site workers would need to wear the highest level of personal protective equipment (PPE) and work in negative pressure domes to fully excavate the MWL while reducing the potential risk for accidents and containing them should they occur. Given the MWL's proximity to New Mexico's largest metropolitan area and the technology currently available to perform this type of work, excavation of the MWL at this point in time and under these circumstances imposes an unacceptable risk to workers and the public.

Although the remedy selected in the 2005 Final Order was not the most conservative, long-term solution for the MWL, the risk to workers and the public created by a remedy involving excavation is now greater than the potential risk of groundwater contamination as a result of releases from the MWL. The monitoring and maintenance systems currently required by the LTMMP are sentinels that ensure the continued protection of human health and the environment by providing early warning of potential groundwater contamination so that prompt interim measures can be employed to deter contamination of groundwater. Therefore, in light of all of the information currently available, the safest course of action at this point in time is to leave the final remedy selected in 2005 intact.

The final remedy selected in 2005 will continue to be evaluated every five years via the submission of the Feasibility Report and, if this remedy proves to be insufficient over time, then it will ultimately be replaced. However, with this Order, the scope of the five-year review and Feasibility Report is now expanded to require the evaluation of the installation of a RCRA Subtitle C liner system in addition to the evaluation of excavation, removal and disposal of all of the waste in the MWL.

3) Disclosure of Information Regarding the Contents of the MWL

The public has a right to know what is buried in the MWL. The lawsuit NMED filed in 2007 against CANM continues to cloud this matter as Intervenors understandably harbor feelings of distrust toward both NMED and DOE. While NMED has provided all of the records regarding the contents of the MWL in its possession, custody or control to CANM, the issue regarding the material disposed in the MWL needs to be unequivocally addressed once and for all. Although DOE has responded to numerous requests for information about this matter, the Freedom of Information Act, which governs requests to federal agencies, allows more information to be withheld than New Mexico's Inspection of Public Records Act. In the interest of providing the maximum degree of transparency, Applicant is required to provide NMED and Intervenors with all of the records in their possession, custody or control that in any way describe the materials buried in the MWL. Specifically, Applicant must provide all historical records that describe material that was placed in the MWL, including but not limited to internally generated waste manifests, waste stream descriptions, chemical analyses for compatibility issues, waste volumes, maps of waste disposition, interviews with workers who were involved with the generation or disposal of waste, and any other record of any kind that is not specifically listed above. If any records responsive to this Order are withheld for any reason, then Applicants must provide a

privilege log describing the nature of the document (letter, memo, e-mail, etc.), the identity of the person who created the record (to the extent this information is available), the date the record was created (to the extent this information is available), the legal justification for withholding the record and the identities of all of the people involved in making the determination that the record should be withheld. If Applicants determine that all historical records describing the material placed in the MWL were already disclosed, then Applicants shall affirmatively state this in writing and include the dates the records were disclosed and the identity of the person or entity who received the records. Prior disclosure of any records required to be disclosed under this Order shall not relieve the Applicants from providing the privilege log described above.

CONCLUSION

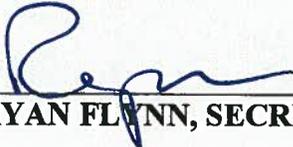
Having considered the administrative record in its entirety, including the Hearing Officer's Report and the post-report submittals; and being otherwise fully advised regarding this matter;

THE SECRETARY HEREBY ADOPTS THE HEARING OFFICER'S REPORT WITH THE FOLLOWING MODIFICATIONS:

- 1) The Hearing Officer's Report shall be modified to incorporate the minor modifications specified in Part A (above); and,
- 2) The 2005 Final Order shall be modified as follows:
 - a. The Feasibility Report due in 2019 shall evaluate the following two remedies; (1) excavation, removal and appropriate disposal of all of the waste in the MWL; and (2) construction and installation of a modern landfill, which shall at a minimum include a RCRA Subtitle C liner system, an ET cover with biointrusion barrier, and appropriate post-closure monitoring and controls.

3) Applicants must provide all historical records that describe material placed in the MWL, including but not limited to internally generated waste manifests, waste stream descriptions, chemical analyses for compatibility issues, waste volumes, maps of waste disposition, interviews with workers who were involved with the generation or disposal of waste, and any other record of any kind that is not specifically listed above. If any records responsive to this Order are withheld for any reason, then Applicants must provide a privilege log describing the nature of the document (letter, memo, e-mail, etc.), the identity of the person who created the record (to the extent this information is available), the date the record was created (to the extent this information is available), the legal justification for withholding the record and the identities of all of the people involved in making the determination that the record should be withheld. If Applicants determine that all historical records describing the material placed in the MWL has already been disclosed, then Applicants shall affirmatively state this in writing and include the dates the records were disclosed and the identity of who received the records.

AND IT IS THEREFORE ORDERED the request for a determination that the Permit be modified to reflect that the MWL is corrective action complete with controls is **APPROVED**.



RYAN FLYNN, SECRETARY

NOTICE OF PROCEDURE FOR APPELLATE REVIEW

Any aggrieved party may seek appellate review in the Court of Appeals, pursuant to NMSA 1978, §74-9-30 and Rules of Appellate Procedure, 12-601 NMRA. Direct appeals from orders shall be taken by filing a notice of appeal with the appellate court clerk within thirty (30) days from the date of the Order.

CERTIFICATE OF SERVICE

I hereby certify that a copy of the Final Order was served on all parties of record in this matter via the following methods on February 12, 2016:

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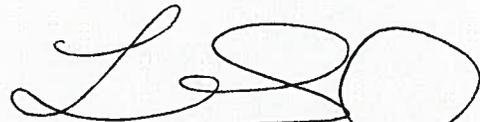
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