

**Allen, Pam, NMENV**

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**From:** Cobrain, Dave, NMENV  
**Sent:** Thursday, July 25, 2019 3:47 PM  
**To:** Allen, Pam, NMENV  
**Subject:** FW: [EXT] MWL 2d Comment Set & Request for Extension  
**Attachments:** CA.Comments.Second.Set..docx

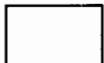
**From:** dave mccooy <dave@radfreenm.org>  
**Sent:** Saturday, July 20, 2019 7:31 PM  
**To:** Kenney, James, NMENV <James.Kenney@state.nm.us>; Stringer, Stephanie, NMENV <Stephanie.Stringer@state.nm.us>; Kieling, John, NMENV <john.kieling@state.nm.us>; Cobrain, Dave, NMENV <dave.cobrain@state.nm.us>  
**Cc:** Verheul, John, NMENV <John.Verheul@state.nm.us>  
**Subject:** [EXT] MWL 2d Comment Set & Request for Extension

Dear Secretary Kenny, Ms. Stringer, Mr. Kieling and Mr. Cobrain

Please see attached 2d Comment Set for the MWL and request for time extension for Comment Period due to ongoing failure of SNL/DOE/NNSA to provide information regarding material disposed of in the MWL as required by the 2016 Final Order.

Thank you.

Dave McCoy  
Citizen Action NM  
818 448-9981



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**Citizen Action New Mexico Comments for the Sandia National  
Laboratories' (SNL) Mixed Waste Landfill (MWL) 5-Year Review and the  
Feasibility of Excavation and Offsite Disposal  
Second Set of Comments Re: Failure to Provide Records**

**July 23, 2019**

**By David McCoy, J.D., Executive Director for Citizen Action New Mexico**

This Second Set of Comments for the above captioned matter stresses that SNL and the Department of Energy (DOE) through its National Nuclear Security Administration (NNSA) have not complied with the 2016 Final Order for provision of complete information about materials buried in the MWL. As shown below, the SNL/DOE/NNSA has relevant materials and records but has failed to provide them to Citizen Action New Mexico (CANM) for over two and one-half years so that the information can be utilized for the MWL 5-Year Review. CANM therefore requests an extension from the closing date for the Comment period (July 23, 2019) until SNL/DOE/NNSA has provided the requested records and materials as described below for consideration in the above captioned matter. That the records and materials under control of SNL/DOE/NNSA have not been provided in a timely fashion to CANM in accord with the Freedom of Information Act (FOIA) is an indication that the SNL/DOE/NNSA has not described documents that are being withheld in this matter and has failed to provide a true and correct privilege log as required by the 2016 Final Order. The NMED was informed of the CANM FOIA request by a Public Records Request (November 1, 2018) and did not to the best of CANM's knowledge make any further independent request for the information from SNL/DOE/NNSA although CANM suggested that it do so by email of CANM to Mascareñas November 2, 2018.

The 2016 Final Order (Flynn) in its Discussion describes as follows (pages 6-7):

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.

The 2016 Final Order directs that Sandia National Laboratories must (pages 8-9):

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.

SNL/DOE/NNSA has failed to timely provide the following information regarding the materials buried in the MWL that were requested by two Freedom of Information Act (FOIA) records requests made by Citizen Action New Mexico (CANM) on December 10, 2016 and May 16, 2017.

On December 12, 2017, wrote an email to Karen Laney, Senior FOIA Specialist/Quality Assurance Manager, DOE/NNSA, Office of the General Counsel that the response to both FOIA requests was long overdue and addressing confusion about the numbering of the two FOIAs. On December 15, 2017, Karen Laney stated that

“SNL has completed their search for records and is reviewing/marking potentially responsive records for FOIA 17-00143-K. They did not indicate if they were ahead of their projected completion date as noted in the attached document. We will contact you when we have further information.

“The ‘Sodium Disposal MWL’ is NNSA Control No. FOIA 17-00044-R (DOE Control Np. HQ-2017-00263-F. The specialist working that request is Roberto Marquez. Mr. Marquez will contact you regarding the status of that request.”

Robert Marquez, Government Information Specialist, Office of the General Counsel of the National Nuclear Security Administration has made repeated representations to CANM as recently on June 25, 2019 that:

**Records responsive** to your request are currently being finalized in preparation for **shipment via FEDEX**, ... Estimated Shipment Date: July 8, 2019. (Emphasis in the original).

On July 16, Mr. Marquez again represented to CANM by email that:

We have prepared your Final Response and associated responsive records. I await final signature, upon receipt I will be able to dispatch and send you a copy of a FEDEX Tracking #. Thank you for your patience, I look forward to sending the package to your physical address.

The representations of Mr. Marquez demonstrate that responsive records requested by CANM exist regarding materials disposed of in the MWL but have not yet been provided. Thus, the 2016 Final Order to provide all the records under SNL/DOE/NNSA control has not been complied with.

**The records that were requested and should be provided are as follow in the two FOIA requests:**

**The records requested by the December 10, 2016 FOIA are as follows:**

Please provide:

1. Documents that identify all reactors used for the severe accident (“meltdown”) experiments.
2. Documents that identity each of the severe accident (“meltdown”) experiments and the location and reactor where they were performed. Provide the number of fuel elements and their origin/supplier that were used in each experiment.
3. Documents for the process and the location of the process used to extract the contents of the canisters from the different experiments. Show all canisters opened and those not opened for each experiment.
4. Provide photos of canisters that were cut up or disposed of without cutting them up before their disposal in the MWL.
5. Documents showing the number of canisters and/or containers that were disposed of in the small diameter holes in the trenches of the MWL. Show all canisters or containers that were emptied and those not emptied that were disposed of in the MWL.
6. Documents from each identified experiment that show where the waste from each experiment was disposed of.
7. Provide the drilling records and logs with dates associated with the disposal of canisters in the small diameter boreholes at the MWL. (See 2/20/97 Peace email.)
8. Provide DOE responses or memoranda to the four 1997-98 emails and other documents or communiques in relation to the MWL disposal of waste.
9. Provide all documents related to the sodium loading facility that was used by SNL in conjunction with activities for tests and experiments at SNL; the amount of sodium that was received by the facility; the dates of operation of the sodium facility and the closure and/or decommissioning of the sodium facility. If the facility still operates provide all documents regarding the operations. If the facility was decommissioned provide those documents.

10. Provide documents showing the amount of metallic sodium used by SNL for each of the nuclear reactor severe accident (“meltdown”) tests. Provide documents showing how much sodium was loaded into each experimental canister.
11. Provide documents showing the full life cycle for the metallic sodium that was received by SNL.
12. Provide documents that identify the locations where the metallic sodium for each of the nuclear reactor meltdown tests and other activities was disposed of at SNL or offsite.
13. Provide documents showing the identification and quantities of disposal of all flammable and explosive chemicals and radionuclides in the MWL and the type of container for each of those.
14. Provide documents that identify all fires at the MWL or for deliveries of waste to the MWL, the time of occurrence, the cause(s), the measures used to extinguish the fires, and the locations of all fires in the MWL. Provide documents showing the monitoring or identification of radionuclides released from the MWL during fires at the MWL.
15. Provide documents that identify the minimum amount of metallic sodium, lithium, uranium and other flammable or explosive chemicals and radionuclides could be flammable and/or explosive in the MWL.
16. In Appendix G to the MWL Corrective Measures Study the following is stated:

**1.2.3 Historical Radioactive and Mixed Waste Disposal Request Validation and Disposal Project (HDRV), Sandia National Laboratories, Albuquerque, New Mexico**

A remote robotic system was developed, deployed, and operated to perform drilling, cutting, and manipulation tasks on 34 unknown radioactive contaminated cylindrical objects. A fully integrated robotic system was developed and deployed. The system consisted of robot manipulator, a tool rack, and a workbench. Site operations were conducted for approximately 11 days, followed by removal of the system over a two-day period.

During site operations, individual cylindrical objects were robotically retrieved and placed in the vise. A hole was drilled into the end of the object, and Tritium, O<sub>2</sub>, and lower explosive level (LEL) sensors were utilized by the robotic system to characterize the contents. In Addition, the robotic system was used to consolidate the contents of the cylinders into a single 5-gallon container.

- a. Provide all documents for the HDRV project including the year for the HDRV project and the location site for the retrieval of each of the 34 cylindrical objects.
- b. Provide documents showing the identity and properties of what the 34 cylindrical objects were.
- c. Provide the source of the 34 cylindrical objects.
- d. Provide the location for where the cylindrical objects were disposed after their excavation.
- e. Provide documents regarding the current status of the robotic equipment used for the HRVD project and if the equipment was disposed of, describe where it was disposed of and the radioactivity of the equipment when it was disposed of.
- f. Provide all photos of the robotic system and for each of the cylindrical objects.

**The records requested by the May 16, 2017 FOIA are as follows:**

**Please provide:**

1. List 15c at p. 61 of the 1984 document entitled *Excess Special Nuclear Materials* states the following:

**List 15C**

**Irradiated Material**

“This is a list of PBE experimental packages which need to be disassembled. All of the experiments except AC-1 contain a UO<sub>2</sub> fuel pin with metallic sodium, AC-1 is a uranium carbide pin. I do not believe that it is economically justified to perform the disassembly and to reclaim the UO<sub>2</sub> and/or UC. However, I also understand that it is no longer possible to bury packages containing metallic sodium. Hence we are between a rock and a hard place). It is suggested that this be further investigated with DOE/AL and Environmental Protection and “b6” (redacted name) and Hazardous Waste Management.  
All work should be done in the hot cell.”

- a. **Provide documents regarding the “packages containing metallic sodium.”**
  - i. Include all memoranda, email, letters, notes or other documents of personnel from DOE/AL and Environmental Protection, b6, and Hazardous Waste Management regarding the disposal of the packages of metallic sodium.
  - ii. Provide documents describing what the “PBE” experiments and other experiments that used metallic sodium were. Explain the meaning of “PBE” and the acronyms for any other experiments.
  - iii. Provide documents about the facilities where the packages containing metallic sodium were assembled or produced, what else was contained in the packages, and the purpose of the metallic sodium used in the various packages.
  - iv. Provide documents identifying each experiment that contained metallic sodium that was disassembled or not disassembled.
  - v. Provide documents that show the pathway[s] for the disposal of each experimental package that was with or without metallic sodium.
  - vi. Provide documents that show any process that was available at SNL to remove metallic sodium from “packages” after the use of the metallic sodium in experiments.
  - vii. Provide documents that describe the composition of the “packages” of metallic sodium that were disposed of in the MWL from the

experiments either previous or subsequent to 1984. Provide photos of the “packages.”

- viii. Provide documents describing the containment material used for the packages of metallic sodium. Provide photos or written description of the containment, canisters, cans (or other terminology used) for the metallic sodium packages before and after their use.
- ix. Provide documents for the number of primary and secondary canisters, made in TA-V or obtained elsewhere, used for the severe accident nuclear reactor meltdown experiments, and the disposal record for each canister.
- x. Provide documents regarding the dates of burial of metallic sodium at the MWL or other location at SNL.
- xi. Provide documents about any other chemical or radionuclide material that was in the packages of metallic sodium in addition to the metallic sodium.
- xii. Provide documents as to the location of all metallic sodium packages disposed of by burial at MWL in pits and in trenches.
- xiii. Provide documents as to the volume of metallic sodium in each package buried in the MWL or elsewhere at SNL.
- xiv. Provide documents about any packages of metallic sodium that were excavated subsequent to their burial and where and how those packages were excavated and disposed.
- xv. Include information as to the disposition of packages of metallic sodium that were not disposed of by burial and where and how those packages were disposed of, stored, or shipped offsite from SNL.
- xvi. Provide documents that describe the process for disassembly of the packages of metallic sodium and any facility where the packages of metallic sodium were disassembled.
- xvii. Provide documents regarding the quantity of MWL disposal for metallic sodium that was used by the military and the Technical Area[s] that it came from.
- xviii. Provide documents regarding the quantity of MWL disposal for metallic sodium from Technical Area[s] that were non-military.
- xix. Provide all documents that DOE/SNL has provided to the New Mexico Environment Department regarding the disposal of packages of metallic sodium in the MWL. Provide all documents the NMED has sent to DOE/SNL regarding packages of metallic sodium or any metallic sodium disposal at the MWL.
- xx. Provide the mass balance for metallic sodium used at Sandia.

**2. Provide documents regarding metallic sodium, uranium, lithium, lead azide, chlorine trifluoride fire or other chemical fire or explosion that has ever occurred at the MWL.**

- a. Provide a list of each flammable and/or explosive chemical that has been disposed of in the MWL giving details as to location, quantity and containment.**

**3. Documents that identify the location, time and curies for disposal, in the Mixed Waste Landfill or elsewhere at SNL, of any nuclear reactors, such as the Sandia Engineering Reactor (SER), including experimental reactors.**

- a. Documents that provide the number of fuel elements that were contained in each reactor at the time of the disposal of the reactor in the MWL.
- b. Provide documents for the process and the location of the process used to extract the contents of the nuclear reactors. Provide the disposal pathway for the spent fuel from each of the nuclear reactors.
- c. Provide photos of the nuclear reactors at the time of their disposal in the MWL or elsewhere at SNL.

**4. Documents that describe the disposal of "bombs" in the MWL or elsewhere at SNL.**

The document as identified pasted below shows the disposal of "chemicals, bombs and reactor exp up to 10 Rem/hour." The document was furnished to Citizen Action at an earlier date as FOIA response #112.

ER/1289 076 MEE LLW/MIN/87  
Knowlton, Bob  
Straw  
1/9/95  
5/17/89  
112

- a. Provide documents for the disposal and/or excavation of "bombs" at the MWL.
- b. Provide documents showing the disposal of "reactor exp up to 10 Rem/hour." Does the term "exp" refer to severe accident reactor experiments? Provide documents that explain the term and the disposal of the specific reactor experiment[s] ("reactor exp.")

Respectfully submitted,

David B. McCoy, Executive Director, Citizen Action NM  
(818) 448-9981