

SUSANA MARTINEZ Governor JOHN A. SANCHEZ Lieutenant Governor

State of New Mexico ENVIRONMENT DEPARTMENT

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RYAN FLYNN Cabinet Secretary BUTCH TONGATE Deputy Secretary

CERTIFIED MAIL - RETURN RECEIPT REQUESTED

December 2, 2014

Jose Franco, Manager Carlsbad Field Office Department of Energy P.O. Box 3090 Carlsbad, New Mexico 88221-3090 Robert L. McQuinn, Project Manager Nuclear Waste Partnership, LLC P.O. Box 2078 Carlsbad, New Mexico 88221-2078

RE: UNDERGROUND DERIVED WASTE STORAGE PLAN
WASTE ISOLATION PILOT PLANT
EPA I.D. NUMBER NM4890139088

Dear Messrs. Franco and McQuinn:

On May 12, 2014, the New Mexico Environment Department ("NMED") issued an Administrative Order ("Order") requiring the Department of Energy ("DOE") and Nuclear Waste Partnership, LLC ("NWP"; collectively, with DOE the "Permittees") to submit a draft Underground Compliance Plan for NMEDs review and comment (Order paragraph 17(a)), and an Underground Derived Waste Storage Plan for NMEDs approval (Order paragraph 17(b)). Both plans, dated June 25, 2014, were received by NMED on June 26, 2014 and have been reviewed. This letter specifically addresses the <u>Underground Derived Waste Storage Plan</u> ("UDWSP"). NMED will address the draft Underground Compliance Plan under separate cover. With this letter, NMED hereby approves the UDWSP. In order to ensure the continued protection of human health and the environment, the Permittees shall address all of the items enumerated below, incorporate changes and resubmit the UDWSP to NMED by January 6, 2015. The standard operating procedures ("SOPs") referenced in the items below shall be submitted to NMED by January 6, 2015 or within 30 days of issuance, including all subsequent revisions.

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COMMENTS ON THE UDWSP

- 1) Section 2 states, "[i]n order to minimize the amount of derived waste and to facilitate storage prior to disposal, the Permittees may manage some of the waste generated from decontamination activities as low-level waste. Low-level waste will be shipped to an off-site low-level hazardous waste disposal facility. Prior to transferring low-level waste to the surface for shipment off-site, it will be stored in the same areas in the underground as derived waste." Indicate how the Permittees will manage the separation of low-level waste from non-low-level waste and how will the waste be identified.
- 2) Section 3.1.1.1 states that "[1]ocation 1 is outside the regulated HWMU and is located at S-700 between E-140 and E-300. This location was selected based on access to the north end of E-300 (through vehicle doors) and provides a short travel distance from E-300." There is concern about having a storage area outside the regulated HWMU. Proposed Location 1 is also the storage area nearest the waste shaft. The Permittees should consider using Location 1 as a storage area for low-level waste only as the Permittees prepare the waste to be shipped off site. An alternative option is to designate another location further north than proposed Location 2 but still within the regulated HWMU.
- 3) Section 3.2.1 describes how sufficient ventilation flow will be achieved in select work areas in accordance with MSHA requirements, and how workers will be protected when entering storage areas by enforcing standards set forth by DOE Order and the American Conference of Governmental Industrial Hygienists ("ACGIH"). The Permittees shall submit copies of the SOPs that will be used to measure storage area ventilation flow rates when workers are present, and copies of procedures used to test the underground air for compliance with the ACGIH VOC exposure limits, and other chemical compounds required to be monitored by MSHA.
- 4) Section 3.2.1 states that "[e]missions of VOC from derived waste containers are expected to be minimal since the containers will be used to hold salt and non-waste debris that have become radiologically contaminated. There has been no indication of VOC chemical contamination associated with the release." The Permittees shall provide data that supports their claim above.
- 5) Section 3.3.1 states that "[i]mplementation of container management requirements in this Plan for the derived waste storage areas will be controlled by written standard operating procedures (SOPs) and will be conducted by individuals trained in the management of derived waste." The Permittees shall submit copies of the SOPs and training materials involved in the control of the derived waste storage areas.
- 6) Section 3.3.1.2 states that "[i]tems delivered to waste containers will be inspected in accordance with applicable SOPs [standard operating procedures] to unsure the absence of prohibited items. Prohibited items include chemicals that are not compatible with TRU mixed waste, the containers, the salt, or the backfill." The Permittees shall submit copies of the SOPs that will be used in this process.

- 7) Section 3.3.1.3 mentions training and SOPs. The Permittees shall submit copies of these documents.
- 8) Section 3.3.1.3 states that "[o]nce a container is filled and sealed, it will be related to a derived waste storage area within 72 hours or as otherwise specified in work control documents." The site Operating Record shall contain an entry describing circumstances whenever the relocation time is greater than 72 hours.
- 9) Section 3.3.1.4 states that "[i]f derived waste areas are not accessible due to maintenance activities (e.g., HEPA filter replacement) or work conditions (e.g, minimum ventilation is not available), the inspections will be completed once access to the area becomes available." NMED shall be informed if any derived waste storage area is not inspected for two or more consecutive weeks.
- 10) Section 3.3.1.5 states that "[l]iquid waste that may be generated as a result of decontamination activities (e.g., brine from collection system boreholes) will be solidified in accordance with SOPs." The Permittees shall submit copies of the SOPs that will be used in this process.
- 11) Section 3.3.1.6 states that "[i]tems delivered to waste containers will be inspected in accordance with SOPs to ensure the absence of prohibited items including ignitable, corrosive, or reactive waste." The Permittees shall submit copies of the SOPs related to these inspections.
- 12) Section 3.3.1.7 states that "[d]erived waste stored in an area that is not an approved disposal panel will be moved to an approved disposal panel when the storage area is no longer needed." Disposal of derived waste is not allowed until NMED has inspected and released the Facility for receipt of waste and has reviewed the derived waste container information submitted under the Administrative Order dated February 27, 2014, Paragraph 14(i) and the Administrative Order dated May 12, 2014, Paragraph 18(d).
- 13) Section 3.3.2 states that "[i]tems delivered to waste containers will be inspected to ensure the absence of prohibited items." The Permittees shall submit copies of the SOPs related to such inspections shall.
- 14) Section 3.4.1.1 states that "[c]ontainers will not be stacked any higher than three high in the storage areas." The Permittees shall submit copies of the SOPs related to derived waste handling.
- 15) Section 3.4.1.5 states that "[t]he flow of traffic in the underground during recovery will be managed to prevent the spread of radioactive contamination. Traffic routes will be specified in work control documents to achieve this goal." The Permittees shall submit copies of the SOPs used to establish vehicle contamination minimization areas (e.g.: transition areas).

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16) Attachment 1: Derived Waste Storage Areas. The Permittees shall provide nominal dimensions for these areas.

OTHER NMED COMMENTS

- 17) The Permittees shall indicate how the derived waste storage and disposal data will be entered in WDS and WWIS.
- 18) The Permittees shall indicate how the waste stream(s) will be determined (e.g.: Hazardous waste codes will be assigned to the waste and the codes be justified for assignment).

If you have any questions regarding this matter, please contact Ricardo Maestas at (505) 476-6050 or John Kieling at (505) 476-6035.

Sincerely,

Ryan Flynn Secretary

New Mexico Environment Department

cc: B. Tongate, Deputy Secretary NMED and Acting Director, NMED EHD

T. Kliphuis, Acting Director, NMED RPD

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