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CERTIFIED MAIL - RETURN RECEIPT REQUESTED

August 5, 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: WIPP NITRATE SALT BEARING WASTE CONTAINER ISOLATION PLAN
WASTE ISOLATION PILOT PLANT
EPA I.D. NUMBER NM4890139088**

Dear Messrs. Franco and McQuinn:

On May 20, 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 Waste Isolation Pilot Plant ("WIPP") Nitrate Salt-Bearing Waste Container Isolation Plan ("Plan").

The Plan was received by NMED on May 30, 2014 and has been reviewed. NMED hereby approves the expedited initial closure portion of the Plan identified in Sections 3.2.2 and 3.4.1. However, NMED requires additional information before other portions of the Plan can be approved. In order to ensure the continued protection of human health and the environment, and in accord with Paragraph 22(b) of the Order, the Permittees shall address all of the items enumerated below, incorporate changes, and resubmit the Plan to NMED no later than September 30, 2014 for final review.

THE PLAN

1. The Plan shall describe the interdependence of the Plan and the Recovery Plan. Section 3.1 lists pre-requisites and key assumptions but does not describe or include the Recovery Plan. Some of the bulleted steps appear to be part of the Recovery Plan. For example, the second bullet on Page 8 reads “Determine the roof stability and radiological conditions in Panel 6.” The Plan shall identify what steps in the Recovery Plan must occur before the Plan can proceed. Since the activities are interdependent, the Recovery Plan shall be included as an attachment to the Plan.
2. Section 3.1, bullet 7 states “Release of the underground by the DOE Accident Investigation Board [AIB]. This will be a phased approach, with the release of all but Panel 7, Room 7 expected by June 20, 2014.” The Plan shall provide clarification regarding this statement. Specifically, it shall describe the phased approach provided by the AIB, how the exception for Panel 7, Room 7 will affect the Plan, when the underground was released and what the anticipated release date is for Panel 7, Room 7.
3. Section 3.2 of the Plan states that the Permittees have determined that the Closure Plan will involve three activities: 1) Continue HEPA Filtration of Underground Exhaust Air; 2) Expedited Closure of Panel 6 with Initial Closure; and, 3) Expedited Closure of Panel 6 with the Permanent Closure. The Plan does not describe the adequacy of each activity at meeting the Order’s requirement. The Order requires “A *detailed* proposal for the expedited closure of [underground Hazardous Waste Disposal Unit (HWDU)] Panel 6, *so that a potential release from any nitrate salt bearing waste containers in Panel 6 does not pose a threat to human health or the environment.*” (emphasis added).

It is not clear how the Permanent Closure will meet the Order requirements. The adequacy of the final panel closure shall be described, and design parameters and expectations necessary to meet the Order requirements should be identified. In support of the parameters, the Plan shall also include analysis of the “Heat Event.” The Plan shall state the upper limit for an energy release from a suspect drum, the assumptions used to determine this limit, and how the proposed closure is designed to contain this amount of energy. Any modeling performed shall be included with assumptions and input parameters.

4. The Plan appears to assume that the currently permitted panel closure design containing an explosion isolation wall is not necessary for either Panel 6 or Panel 7, Room 7 and that the panel closure design that is part of the March 18, 2013 Class 3 Permit Modification Request is adequate for closure of Panel 6. NMED issued a draft Permit and subsequently withdrew it on March 21, 2014 in light of the release incident. The Plan appears to assume no final closure is necessary for Panel 7, Room 7. If the Permittees believe this to be the case, the Plan should describe the adequacy as identified in Item 3 above. If not, the Plan (final designs) should also describe what kind of barriers, such as explosion isolation walls may be required at Panel 6 and each end of Panel 7, Room 7.

5. Section 3.5.1 Table titled "Prerequisite Activities for Panel 7 Room 7 Closure" on Page 15 lists "Establish waste conveyance hoist operability" with a duration of 40 days. Since this Plan was submitted, a concern that a significant amount of brine water may be accumulating in the sump of the waste hoist has developed. The Plan shall describe whether the 40 day duration took into account this issue. If not, the Plan shall describe what the new estimated duration to get the waste hoist operational is, taking into account the additional time needed to remove the sump brine.
6. Section 3.5.2 Table titled "Panel 7, Room 7 Closure Activities" on Page 15 lists "Identify contaminated equipment to be disposed of in Room 7 of Panel 7" as having a duration of 14 days that precedes installation of a barrier. That is, it does not describe whether a barrier will be placed between the waste face and the contaminated equipment and waste. The Plan shall either adequately describe why a barrier is not necessary or describe what kind of barrier will be installed. In addition, the Plan shall describe how much space the contaminated equipment will consume in Panel 7, Room 7, and if the Room is not filled, whether there are plans to install the barrier immediately adjacent to the new waste face or leave empty space in Room 7.
7. The Plan does not discuss whether the diesel-fueled salt haulers or other equipment need to be reconfigured, rebuilt or replaced. The Plan shall address this as well as state how many pieces of diesel equipment will need to operate simultaneously during each of the closure phases and what the anticipated minimum ventilation flow rate will be.
8. Section 3.6, Page 16 of the Plan references the Mine Safety and Health Administration ("MSHA") Regulations 30 CFR 57, Subpart G. The Plan states "Adequate ventilation is as defined in the regulations promulgated by MSHA (30 CFR 57 Subpart G) to protect underground workers and is related to the type and number of internal combustions engines being used for work activities." Subpart G appears to identify the ventilation plan requirements but does not identify the specific requirements related to the number of internal combustion engines being used for work activities. The Permittees shall clarify the citation and basis for the MSHA air requirements in the table on page 17.
9. The Plan shall include a list of any Phase I Release Event AIB Report Justification of Needs (JONs) that relate to the Plan. This shall also include a description of how the JONs will affect the Plan.
10. The Plan shall describe more fully the necessary ventilation upgrades for the permanent closure phase. It shall describe how the Permittees intend to meet the ventilation needs, including any permitting or regulatory considerations and whether the upgrades or modifications will be temporary or permanent.
11. NMED currently understands that the radiological release may likely have been a deflagration event with a fast release of a large amount of energy. The deflagration appears to have involved release of a combustible gas (Flam Gas). The Plan shall address

Flam Gas monitoring of Panel 6 and Panel 7, Room 7, including whether a Flam Gas monitoring system should or should not be installed.

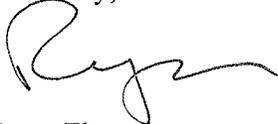
12. The Plan shall state the steps to be taken if any HSG sample from a parent or daughter isolated drum at LANL indicates the presence of hydrogen gas $\geq 35,000$ ppmv. NMED believes that hydrogen above this concentration (87.5% of the LFL) would require an additional level of isolation in addition to that which is already being conducted. If the Permittees do not agree that additional isolation is required in this case, the Plan shall include a detailed discussion as to the rationale.
13. The Plan does not provide monitoring container temperatures in Panel 7, Room 7 or in Panel 6. NMED is aware that containers with nitrate salt waste are being monitored for temperature changes at Los Alamos National Laboratory ("LANL") and Waste Control Specialists. The Plan shall describe any temperature monitoring of suspect containers and/or a justification for not monitoring temperature.
14. The Plan shall provide any updates to newly discovered information or completed activities that are relevant to this Plan since this Plan was submitted.
15. The Plan shall include copies of the corrected manifests for all the containers that have the assignment of EPA Hazardous Waste Number D001.
16. The Plan shall identify the specific location of the currently identified waste containers that have the assignment of EPA Hazardous Waste Number D001. The Plan shall be amended as the assignments change.

OTHER NITRATE SALT-BEARING WASTE STREAMS

17. The Plan shall provide updates regarding identification of other waste streams or drums that have or become identified by WIPP, LANL, NMED or any other regulatory agency as requiring isolation.

The daily updates identified in Paragraph 23 of the Order shall commence on October 4, 2014 in concert with submittal of the revised Plan. If you have any questions regarding this matter, please contact Trais Kliphuis at (505) 476-6051.

Sincerely,



Ryan Flynn
Secretary
New Mexico Environment Department

Messrs. Franco and McQuinn

August 5, 2014

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cc: T. Blaine, Director, NMED EHD
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