



DEPARTMENT OF THE ARMY
U.S. ARMY GARRISON WHITE SANDS
100 Headquarters Avenue
WHITE SANDS MISSILE RANGE, NEW MEXICO 88002-5000

ENTERED



REPLY TO
ATTENTION OF

FEB 29 2012

Directorate of Public Works

Mr. John Kieling, Acting Chief
New Mexico Environment Department
Hazardous Waste Bureau
2905 Rodeo Park Drive East, Building 1
Santa Fe, New Mexico 87505-6303

SUBJECT: Administratively Incomplete Determination on the Petition to Perform Class III Permit Modifications to Change the Status of Solid Waste Management Units 19, 47, 48, 63, 64, 108, 157, 158, 159, 164, 167, 168 and 198 from Corrective Action Required to Corrective Action Complete or Corrective Action Complete with Controls

Dear Mr. Kieling,

White Sands Missile Range (WSMR) requests an extension of time to submit a revised Petition to Perform Class III Permit Modifications to Change the Status of the above referenced sites. In a letter dated October 11, 2011 the New Mexico Environment Department (NMED) issued an Administratively Incomplete Determination for the above-referenced sites (WSMR-11-015) and requested a revised petition is submitted by February 13, 2012. A conference call was held between representatives of the NMED and WSMR on January 19, 2012 to discuss this determination. Our responses to NMED's comments are based, in part, on information exchanged during that call. However, due to the nature of the changes, before submitting the revised petition WSMR is submitting a response to comments within this letter in order to confirm consensus between the NMED and WSMR on which Solid Waste Management Units (SWMUs) should be included in the petition and how the petition should be revised. A revised petition will be submitted within 60 days from the date of receiving confirmation of the proposed changes and approval of the time extension.

For the purpose of clarity, the NMED's comments are provided below. Each comment is followed by WSMR's response.

NMED Comment 1

The Permittee included risk assessments with the Permit Modification. Risk assessments must be reviewed and approved by NMED prior to submittal of petitions for Permit modifications. The Permittee must submit the risk assessments for NMED review as a separate document(s). Once the risk assessments have been approved by NMED, revise the Permit

Modification to include summaries and references to the risk assessments, but do not provide the risk assessments themselves.

WSMR Response

A risk assessment was included for SWMU 19. This SWMU will be removed from the petition. A risk assessment document for SWMU 19 will be submitted to the NMED under separate cover.

NMED Comment 2

Petitions for corrective action complete determinations generally require the following:

- (1) A summary of the site history and use.
- (2) A summary of site investigations and the results.
- (3) A summary of monitoring results showing trends in contaminant concentrations.
- (4) A summary of any remedial actions and the verification of remedy completion e.g., remedy completion report or remediation sampling verification reports including summaries of any sampling showing locations and levels of residual contamination.
- (5) A summary of risk assessment results (if conducted, otherwise use the proper numeric cleanup standards including cumulative risk calculations, as necessary, for comparison).

The summaries must reference the corresponding documents (including page table or figure numbers) that have been submitted, reviewed, and approved by NMED. Revise the Permit Modification to include the information listed above.

WSMR Response

The revised petitions will include the requested information and will reference the corresponding documents.

NMED Comment 3

If the Permittee submitted documents previously and the documents have been reviewed and approved by NMED, there is no need to include them in the Permit Modification. Additionally, there is no need to include correspondence, laboratory reports, health and safety plans or any other documentation related to historical reports (or the historical reports themselves). These documents must have been previously reviewed and approved by NMED and be part of the NMED's administrative record for WSMR to be considered for use to determine the status of a site. Remove the documents from the Permit Modification, but include references to the specific documents to facilitate NMED's review (*see also* Comment 2).

WSMR Response

Copies of documents previously submitted to the NMED will be removed from the petitions and referenced appropriately. However, based on NMED's comment No. 5 (below); it appears that the NMED may not have access to correspondence that specifically records the NMED's historical determinations of no further action or corrective action complete. These documents will be included in the petition.

NMED Comment 4

Both of the binders containing the Permit Modification were broken, because the document is too large for the binders. Additionally, the pdf provided is over 1400 pages long and "secured" so that NMED cannot copy quotes from the document. If, after revising the Permit Modification, it is still oversized, break the document into volumes that fit the binders to avoid damage and provide a pdf version from which access is allowed to copy portions, as necessary. Also, include the figures and tables as separate pdf files.

WSMR Response

The revised petitions will be submitted in a sufficient number of binders to avoid damage to the documents. The revised petitions will be provided in a format that allows the NMED to copy portions of the document. Figures and tables will be provided as separate pdf files in the electronic copy.

NMED Comment 5

The 2009 Resource Conservation and Recovery Act (RCRA) Permit (permit) requires release assessments for SWMUs 47, 48, 108, 167, and 168 (*see* Table 8-2 (SWMUs and AOCs Requiring Corrective Action)). Since these SWMUs require additional work, NMED cannot evaluate them for corrective action complete status. Revise the Permit Modification to exclude SWMUs 47, 48, 108, 167, and 168. The Permittee may submit Permit modification requests once all of the required work is completed and approved by NMED at these sites. See Permit Table 8-2 for the submittal dates for the release assessments.

WSMR Response

This comment was discussed in detail during the conference call on January 19, 2012. As WSMR pointed out during the call, all of the sites listed in Comment No. 5 have undergone investigations and/or corrective action. Furthermore, in each case, the administrative record contains correspondence to demonstrate that the NMED already approved no further action or concluded that the SWMU was eligible for Corrective Action Complete. Based on discussions during the call, these historical activities meet the requirements of a release assessment and will be clearly stated in the revised petition. These sites will not be removed from the petitions. In

addition, WSMR points out that Section VI.F of the Permit, pertaining to release assessments, refers to *newly discovered* SWMUs. None of these sites represent newly discovered SWMUs.

NMED Comment 6

The Permittee submitted groundwater data for SWMU 164 (AMRAD) as part of the Permit Modification. NMED required submittal of this data in its April 29, 2010 letter *Review of Calendar Year 2007 Groundwater Monitoring at Launch Complex 38 Diesel Spill (SWMU 198)*. The Permittee must submit this data as a separate report for NMED's review and approval. Until NMED reviews the groundwater data, the SWMU cannot be considered for corrective action complete determination. Revise the Permit Modification to remove SWMU 164. This does not include data or information not previously submitted to NMED in any Permit modification requests.

WSMR Response

Comment No. 6 contains references to both SWMU 164 (AMRAD UST Site) and SWMU 198 (LC-38 Diesel Spill Release Site). SWMU 164 does not include groundwater monitoring because impacts are limited to the upper ten feet of soil and the depth to groundwater is estimated to be between 200 and 250 feet below ground surface. This information is discussed in detail in the petition. Therefore, SWMU 164 will be included in the revised petition. SWMU 198 which has ongoing groundwater monitoring, will be removed from the revised submittal. Groundwater monitoring data was provided in separate reports for SWMU 198.

NMED Comment 7

Section 7 discusses SWMUs 157, 158, and 159. SWMU 158 (Former Oscura Range Landfill) is listed as "Clean Closure Complete" in Permit Table 4-4 (Hazardous Waste Management Units) and does not require a Permit modification. Remove SWMU 158 from the Permit Modification request.

WSMR Response

References to SWMU 158 will be removed from the petition.

NMED Comment 8

The Permittee references EPA Region 9 preliminary remediation goals (PRGs) in several sections (e.g., Section 2, Section 4, and Section 5). WSMR is located in EPA Region 6 and the Permittee must follow the soil screening guidance as described in Permit Section 3.2 (Soil Cleanup Levels). The EPA region-specific Human Health Media Specific Screening Levels have been replaced by the EPA Regional Screening Levels (RSLs). Revise the Permit Modification text and tables to reference the correct EPA Region and the correct soil and groundwater cleanup levels. Throughout the Permit Modification, the Permittee must use current soil and groundwater screening levels, revise all data tables to reflect the most up-to-date standards (see NMED's

guidance documents which are available at <http://www.nmenv.state.nm.us/hwb/guidance.html>). Add the correct soil and groundwater cleanup levels to all summary tables. If a table does not have the levels listed, then add them to the tables. Additionally, add the depths where soils samples and confirmation samples were collected to summary tables if depths are not listed. Also ensure that the laboratory detection limits are not greater than the applicable soil or groundwater screening levels. If the detection limits exceed the corresponding clean-up levels, those occurrences must be discussed in the Permit Modification. Revise the Permit Modification as necessary.

WSMR Response

With the exception of SWMUs 19 and 198 (both of which will not be included in the revised petition) and SWMU 164, all of the sites have a very long history of investigation and/or corrective action and the administrative record includes concurrence from the NMED that no further action is required and/or that the site is eligible for corrective action complete. Data from these sites were compared with appropriate standards applicable at the time of the investigations. Based on their histories, WSMR does not feel that it is appropriate or warranted to re-evaluate the data from these SWMUs against current standards. During the January 19 conference call, the NMED agreed that, for sites where the NMED already agreed that no further action was required, the data does not need to be re-evaluated against current standards.

The only site to be included in the revised petition that has not already received confirmation from the NMED that no further action is required is the AMRAD UST Site (SWMU 164). Therefore, historical data from this site was evaluated against the current NMED standards: TPH was screened using the NMED's 2006 TPH Screening Standards and all other constituents were screened against NMED's 2009 Soil Screening Levels.

NMED Comment 9

The Permit Modification contains repetitive information. For example, in Sections 5.4.5.1 (Non-sampling Data Collection) and 5.4.5.2 (Sampling Data Collection) - both regarding SWMU 64 (Main Post Landfill 2A) - the Permittee discusses a geophysical survey conducted in 1998 to identify and delineate waste and the advancement of soil borings in both sections using the same language. Throughout the Permit Modification, revise the text to remove repetitive information.

WSMR Response

WSMR will remove repetitive information.

NMED Comment 10

The Permittee collected "background" soil samples for several SWMUs (for example SWMUs 47 and 48 Former North Oscura Peak Landfills) and SWMUs 157 and 159 (Former Oscura Range Center Landfills A and C). The soil samples cannot be considered "background" samples, because a work plan for background soil sampling was not approved by NMED and the

"background studies" did not conform to EPA protocol. The samples may indicate a background range for constituents, but cannot be considered as representative of true background and cannot be used for comparison. Revise the Permit Modification accordingly.

WSMR Response

WSMR will revise the petition to address this comment.

NMED Comment 11

The Permittee asserts that SWMU 19 (Steam Wash Pad and Oil/Water Separator) qualifies for a corrective action complete determination; however, the SWMU is an active unit. If NMED determines that corrective action is complete, monitoring of the SWMU will likely be necessary and, in the future, the Permittee may be required to conduct further corrective action at the SWMU when it is no longer in service. No revision is necessary.

WSMR Response

As discussed in the response to Comment No. 1, SWMU 19 will not be included in the revised petition.

NMED Comment 12

The current Oil/Water Separator (OWS) replaced an older, smaller OWS at SWMU 19. From the text, it is not clear where the old OWS was located and whether or not the current OWS is in the same location as the old OWS. Discuss the location of the old OWS in relation to the current OWS. Indicate the location of the old OWS on a figure. If the old OWS is in a location that has not been investigated, the Permittee must propose to conduct additional sampling in a separate work plan and the site cannot be considered for corrective action complete status.

WSMR Response

SMWU 19 will be removed from the petition in order to provide the NMED opportunity to review the Risk Assessment (refer to response to Comment 1). This comment will be addressed in future submittals.

NMED Comment 13

Figure 2-2 depicts SWMU 19 (Steam Wash Pad and Oil/Water Separator), the location of the pipes between the drain in the wash pad to the oil/water separator are not shown. Revise the figure to show the location of the piping and drains.

WSMR Response

SMWU 19 will be removed from the petition in order to provide the NMED opportunity to review the Risk Assessment (refer to response to Comment 1). This comment will be addressed in future submittals.

NMED Comment 14

SWMU 47 (Former North Oscura Peak Landfill) contained septage from activities associated with Oscura Peak. It appears that soil samples were not analyzed for constituents such as nitrate or chlorides which are associated with septic waste and are constituents of potential concern (COPCs) for the site. Since the Permit requires a release assessment for this SWMU, discuss information regarding nitrate and chlorides in the release assessment (*see* Permit Section VI.F and Comment 5).

WSMR Response

As stated in the response to Comment 5, this SWMU has already met the requirements of a release assessment. The information in the petition for SMWU 47 will be revised to reflect that the requirements for a Release Assessment have been met. All wastes were removed from SWMU 47 during implementation of voluntary corrective measures. The removal action and subsequent sampling were conducted in accordance with an NMED-approved Corrective Measures Implementation Plan. In a letter dated June 18, 2006, the NMED approved the Voluntary Corrective Measures Implementation Report and stated that SWMUs 47, 48, and 49 were eligible for a "No Further Action Determination". Based on the administrative record, WSMR does not believe that additional characterization of SWMU 47 is required.

NMED Comment 15

Table 4-1 (Groundwater Analytical Results from SWMU 63 (Landfill 1) Phase I RFI) contains numbers that are offset from their columns. The same issue occurs in Table 4-4. Revise the tables to place the numbers are in the proper columns. See also Comment 8 regarding tables.

WSMR Response

The formatting issues will be corrected in the revised submittal. With the exception of the tables for SWMU 164, no other tables will be revised to include current standards, as stated in the response to Comment 8.

NMED Comment 16

At SWMUs 63 and 64 (Former Main Post Landfills 1A and 1B), samples were collected near the buildings (1648 and 1747 respectively), but not beneath the buildings to determine if they were built directly over the former landfills. Additional sampling may be warranted if and when the main post is decommissioned. If possible, include the aerial photographs that were used to determine the potential locations of the landfills and the geophysical survey results or reference the report in which they were presented.

WSMR Response

Aerial photographs were provided for SWMUs 63 and SWMU 64 in Sections 6.13 and 6.14, respectively, of the report, *Phase-II RCRA Facility Investigation, Appendix I, II, III, and IV Sites, White Sands Missile Range, New Mexico (Sverdrup, 1994)*. Geophysical surveys were conducted at the locations identified as Landfills 1A and 2A and reported on in Section 3 of the reports, *RCRA Facility Investigation, Former Main Post Landfill 1A, and RCRA Facility Investigation, Former Main Post Landfill 2A, WSMR 40 (SWMU-64), respectively*. WSMR has located additional historical aerial photographs and as-built drawings for these areas. This information will be summarized in the revised submittal.

NMED Comment 17

SWMU 159 (Former Oscura Range Center Landfill-C) contained spent rocket parts; however, it is not clear from the text and tables whether or not soils were sampled for propellants and hydrazine. Discuss the reasons why propellants and fuels were not included as COPCs for this SWMU. Further characterization may be necessary. Additionally, include the depth of confirmation samples to the summary tables.

WSMR Response

All characterization and confirmation sampling was conducted in accordance with NMED-approved plans and reports. Confirmation samples were analyzed for volatile organic compounds (VOCs), semi-volatile organic compounds (SVOCs), polychlorinated biphenyls (PCBs), perchlorate, and total Resource Conservation and Recovery Act (RCRA) metals. The specific depths of the confirmation samples were not provided in the *Accelerated Corrective Action Completion Report: Oscura Range Center WSMR-05 Landfill A (SWMU 157) and Landfill C (SWMU 159)*, but it was reported that the final depth of the trench at SWMU 159 ranged from 10 to 20 feet after the debris was removed. After the debris was removed, confirmation samples were taken every 10 to 20 feet along the base and sidewalls of the trench and one sample was collected from each of the east and west ends of the trench sidewalls. The NMED approved the clean closure of SWMUs 157 and 159 in a letter dated October 24, 2007. The tables in the petition were taken directly from the approved corrective action completion report. No changes will be made to the summary tables in the petition.

NMED Comment 18

If the dates of use for SWMUs 157 and 159 are known, add that data to the revised Permit Modification.

WSMR Response

There is no information available on the dates of operation for SWMU 157. Based on interviews with site personnel, the trench identified as SWMU 159 was constructed in February 1987 and received debris until sometime later in 1987, when it was backfilled and covered with soil from the original excavation. This information will be added to the petition.

We appreciate your consideration of this request. Should you have any questions regarding this matter, please contact Mr. Benito Avalos of our Environmental Compliance Branch at (575) 678-2225.

I am forwarding a copy of this letter to Ms Kristen Van Horn, NMED-HWB; Dave Cobrain, NMED-HWB; Mr. Paul Torcoletti, EPA Region 6; and Ms. Laurie Rodriguez, ARCADIS-US, Inc.

Sincerely,



Thomas A. Ladd
Director, Public Works