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Certified Mail - Return Receipt Requested

October 19, 2023

George H. Cushman
Headquarters, Department of the Army
Office of the DCS, G-9
Army Environmental Office, Room 5C140
600 Army Pentagon
Washington, DC 20310-0600

**RE: APPROVAL WITH MODIFICATIONS
FINAL NORTHERN AREA GROUNDWATER RCRA FACILITY INVESTIGATION REPORT
REVISION 3
FORT WINGATE DEPOT ACTIVITY
MCKINLEY COUNTY, NEW MEXICO
EPA ID# NM6213820974
HWB-FWDA-21-004**

Dear Mr. Cushman,

The New Mexico Environment Department (NMED) is in receipt of the Fort Wingate Depot Activity (FWDA or Permittee) *Final Northern Area Groundwater RCRA Facility Investigation Report Revision 3* (Report), dated June 30, 2022. NMED has reviewed the Report and hereby issues this Approval with Modifications with the following comments.

COMMENTS

1. Permittee's Response to NMED's Third Disapproval Comment 1, dated March 27, 2023

Permittee Statement: "As proposed in the Army's April 24, 2023, letter to NMED regarding outstanding documents, the Army plans to submit a Phase 2 Groundwater RFI Work Plan by March 15, 2024."

NMED Comment: The NMED's Third Disapproval Comment 1 directed the Permittee to (a) continue to collect groundwater samples from the new wells where TPH-DRO/GRO were detected for TPH-DRO/GRO, VOC, and SVOC analyses, as well as specific analyses required for each well during the upcoming groundwater periodic monitoring events, and (b) submit the proposed work plan for NMED review no later than **December 29, 2023**.

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Hazardous Waste Bureau - 2905 Rodeo Park Drive East, Building 1, Santa Fe, New Mexico 87505-6313
Telephone (505) 476-6000 - www.env.nm.gov

The Permittee only provided a response to NMED's direction item (b). The Permittee must also provide a response to NMED's direction item (a). In a response letter, acknowledge the provision to continue to collect groundwater samples from the new wells where TPH-DRO/GRO were detected for TPH-DRO/GRO, VOC, and SVOC analyses, as well as specific analyses required for each well during the upcoming groundwater periodic monitoring events.

Furthermore, the Permittee stated that the Phase 2 Groundwater RFI Work Plan would be submitted by October 30, 2023 in the Permittee's December 19, 2022 letter. It should be noted that the original submittal due date for the Phase 2 Groundwater RFI Work Plan was February 20, 2023. Neither the Permittee's December 19, 2022 letter, nor its April 24, 2023 letter are an approved document, and they do not constitute an extension request per the FWDA RCRA Permit Section I.M. However, the NMED's March 23, 2023 Third Disapproval granted the Permittee's submittal due date extension from February 20, 2023 to October 30, 2023. If the Permittee wishes to request that the submittal due date is to be further deferred to March 15, 2024, the Permittee must submit a formal extension request per Section I.M which is subject to NMED approval; otherwise, submit the required document no later than **December 29, 2023**, as stated.

2. Permittee's Response to NMED's Third Disapproval Comment 2, dated March 27, 2023

Permittee Statement: "Section ES-2.3, page ES-4, lines 17-18 and Section 5.3.5.1, page 5-11, were revised to remove statements that the detections were not due to diesel fuel contamination. Per the recommendation in Section 6.3.5, and consistent with the Army's response to NMED comment #1 above, the Army will propose to analyze samples with and without the use of silica gel cleanup for at least two consecutive sampling events in the Phase 2 Groundwater RFI Work Plan."

NMED Comment: The referenced sections of the Report are not responsive to the NMED's Third Disapproval Comment 2. Section 5.3.5.1, *Nature and Extent of Contamination* states, "[b]ased upon the evidence provided above, the TPH observed in the bedrock samples are assumed to be due in whole or in part to interference from naturally occurring organics in the bedrock samples analyzed for TPH-DRO." It is premature to assume that the TPH detections are caused by interference from naturally occurring organics. Revise Section 5.3.5.1 to clearly address the NMED's Second Disapproval Comment 1 that states, "it is premature to conclude that naturally occurring organic compounds are the sole source of the detections," and "[r]evise the Report to remove unproven assertions and propose the required analysis detailed above." Additionally, Section 6.3.5, *TPH Groundwater Plume* states, "[n]o additional investigative activities are recommended for TPH. However, for

those groundwater monitoring wells where TPH GRO and TPH DRO are reported, incorporation of a silica gel cleanup to the analytical protocol is recommended for comparative purposes. The silica gel cleanup removes naturally occurring organic matter to allow for a more representative result due solely to petroleum hydrocarbons. Any changes to the analytical methods will be submitted to the NMED for approval prior to use." The statement in Section 6.3.5 is not consistent with the Permittee's response that states, "the Army will propose to analyze samples with and without the use of silica gel cleanup for at least two consecutive sampling events in the Phase 2 Groundwater RFI Work Plan." Further investigation regarding the detections of TPH was already proposed and must be included in the Phase 2 Groundwater RFI Work Plan, as stated. Revise Section 6.3.5 of the Report to be consistent with the Permittee's response to NMED's Third Disapproval Comment 2.

3. Permittee's Response to NMED's Third Disapproval Comment 6, dated March 27, 2023

Permittee Statement: "TMW64 is located in the southern portion of the Study Area where the BR1 unit does not exist due to the steeply dipping beds. At this location, the screened interval is in the lower portion of the BR2 unit."

NMED Comment: The Permittee's response explains why the designation of well TMW64 was changed from BR1 to BR2; however, it does not explain why wells TMW51, TMW52, and TMW53 remain designated as BR1 wells. An explanation was required by NMED's Third Disapproval Comment 6 because the lithology observed in the TWM64 boring log was comparable to those of TMW51, TMW52, and TMW53. Further evaluation of groundwater elevations, groundwater quality parameters, and analytical data collected from wells TMW51 through TMW53 is warranted to confirm the designation of these wells (i.e., BR1 vs. BR2); compare groundwater elevations, groundwater quality parameters, and analytical data collected from wells TMW51 through TMW53 with those of nearby alluvial wells (e.g., TMW03, TMW04, TMW29, and TMW41), and nearby BR2 wells (e.g., TMW32, TMW58, and TMW63), and provide a discussion to confirm or change the designation of the wells TMW51 through TMW53 (i.e., BR1 or BR2) in the response letter. Change the designation of wells TMW51, TMW52, and TMW53 in the revised Report, as appropriate.

4. Permittee's Response to NMED's Third Disapproval Comment 9, dated March 27, 2023

Permittee Statement: "As proposed in the Army's April 24, 2023, letter to NMED regarding outstanding documents, the Army plans to submit a Phase 2 Groundwater RFI Work Plan by March 15, 2024."

NMED Comment: The Permittee's April 24, 2023 letter is not an approved document and does not explain why the submittal due date is to be delayed from October 30, 2023 to

March 15, 2024 for the submission of the work plan to investigate potential contamination associated with the aluminum release in the bedrock aquifer beneath the Administration Area. Submit a formal extension request for submittal of this document to NMED for approval; otherwise, submit the required document no later than **October 30, 2023**.

5. Permittee's Response to NMED's Third Disapproval Comment 11, dated March 27, 2023

Permittee Statement: "The extent of perchlorate contamination has not been fully defined for building 528 Complex. As proposed in the Army's April 24, 2023, letter to NMED regarding outstanding documents, the Army plans to submit a Work Plan to complete the RFI process for Parcel 22, including the investigation of perchlorate in soils, by 15 March 2024. Based on the results of the Parcel 22 RFI, the Army will proceed with the other studies noted in the comment above regarding perchlorate remediation."

NMED Comment: The Permittee's April 24, 2023 letter states, "[f]uture work for perchlorate could include corrective measures and a pilot study for remaining bedrock and groundwater perchlorate contamination. The Army plans to address these requirements through the upcoming Document Completion contract, though the requirement for additional work plans as described above will be addressed through the RFI process for the parcel where the potential contamination occurs." The NMED's Third Disapproval Comment 11 states, "[d]etermination of the extent of the [perchlorate] contamination where the soils can physically be removed must be the first step of the remedial plan." Therefore, it is unnecessary to include corrective measures such as bench scale treatability studies and/or field pilot studies at this time in the course of work as these measures may be proposed as second step of the remediation plan. The required work plan must only focus on delineation of the extent of perchlorate contamination in the vicinity of the building 528 Complex. Therefore, the extension request of the submittal due date for the work plan is not necessary and is not granted. Submit the required work plan upon receipt of this letter since the required date for submittal of the work plan of July 30, 2023 has already passed. The Permittee is out of compliance with the submittal requirement and may be subject to an enforcement action.

6. Permittee's Response to NMED's Third Disapproval Comment 14, dated March 27, 2023

Permittee Statement: "As proposed in the Army's April 24, 2023, letter to NMED regarding outstanding documents, the Army plans to submit a Phase 2 Groundwater RFI Work Plan by March 15, 2024."

NMED Comment: The Permittee's April 24, 2023 letter is not an approved document and does not explain why the submittal due date is to be deferred from July 30, 2023 to March 15, 2024 for the submission of the work plan to advance a soil boring to collect a soil sample at the nearest accessible location from well TMW57 for hexavalent chromium analysis. Submit a formal extension request detailing the reasons for an extension as required by Section I.M of the Permit and subject to NMED approval; otherwise, submit the required document upon receipt of this letter since the required date for submittal of the work plan of July 30, 2023 has already passed, which has resulted in the Permittee being out of compliance.

7. Permittee's Response to NMED's Third Disapproval Comment 16, dated March 27, 2023

Permittee Statement: "As proposed in the Army's April 24, 2023, letter to NMED regarding outstanding documents, the Army plans to submit a Phase 2 Groundwater RFI Work Plan by March 15, 2024."

NMED Comment: The Permittee's April 24, 2023 letter is not an approved document and does not explain why the submittal due date is to be deferred to March 15, 2024 for the submission of the work plan to install an additional well to delineate the western boundary of the RDX plume. Submit a formal extension request detailing the reasons for an extension as required by Section I.M of the Permit; otherwise, submit the required document upon receipt of this letter since the required date for submittal of the work plan of February 20, 2023 has already passed, and the Permittee is out of compliance.

8. Permittee's Response to NMED's Third Disapproval Comment 17, dated March 27, 2023

Permittee Statement: "As proposed in the Army's April 24, 2023, letter to NMED regarding outstanding documents, the Army plans to submit a Phase 2 Groundwater RFI Work Plan by March 15, 2024."

NMED Comment: The Permittee's April 24, 2023 letter is not an approved document and does not explain why the submittal due date is to be delayed until March 15, 2024 for the submission of the work plan to augment well TMW54 with an adjacent well that is constructed with a more appropriate screened interval or at an alternative nearby location. Submit a formal extension request detailing the reasons for an extension as required by Section I.M of the Permit; otherwise, submit the required document upon receipt of this letter since the required date for submittal of the work plan of February 20, 2023 has already passed, and the Permittee is out of compliance.

9. Permittee's Response to NMED's Third Disapproval Comment 18, dated March 27, 2023

Permittee Statement: "As proposed in the Army's April 24, 2023, letter to NMED regarding outstanding documents, the Army plans to submit a Phase 2 Groundwater RFI Work Plan by March 15, 2024, to address this requirement."

NMED Comment: The Permittee's April 24, 2023 letter is not an approved document and does not explain why the submittal due date is to be deferred to March 15, 2024 for the submission of the work plan to investigate the extent of the soil vapor plume, including the potential for vapor intrusion, in the vicinity of Building B006. Submit a formal extension request detailing the reasons for an extension as required by Section I.M of the Permit; otherwise, submit the required document upon receipt of this letter since the required date for submittal of the work plan of July 30, 2023 has already passed, which has resulted in the Permittee being out of compliance.

10. Permittee's Response to NMED's Third Disapproval Comment 19, dated March 27, 2023

Permittee Statement: "As proposed in the Army's April 24, 2023, letter to NMED regarding outstanding documents, the Army plans to submit a Phase 2 Groundwater RFI Work Plan by March 15, 2024, to address this requirement."

NMED Comment: The Permittee's April 24, 2023 letter is not an approved document and does not explain why the submittal due date is to be deferred to March 15, 2024 for the submission of the work plan to assess the locations and integrity of the sewer lines. Submit a formal extension request detailing the reasons for an extension as required by Section I.M of the Permit; otherwise, submit the required document upon receipt of this letter since the required date for submittal of the work plan of July 30, 2023 has already passed, which has resulted in the Permittee being out of compliance.

The Permittee must submit a revised Report that addresses all comments contained in this letter. Two hard copies and an electronic version of the revised Report must be submitted to the NMED. The Permittee must also include a redline-strikeout version in electronic format showing where all revisions to the Report have been made. The revised Report must be accompanied with a response letter that details where all revisions have been made to the Report, cross-referencing NMED's numbered comments. The revised Report must be submitted to NMED no later than **December 29, 2023**.

In addition, the Permittee's April 24, 2023 letter is not approved; therefore, the letter does not substitute for extension requests for submittal of the required work plans that are required to be prepared in accordance with Permit Section I.M. The work plan(s) required by Comments 1

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and 4 must be submitted no later than **December 29, 2023** or formal extension requests must be submitted. The work plan submittals referenced in Comments 5 through 10 are past due, placing the Permittee further out of compliance, and must be submitted upon receipt of this letter. Each investigation required by the comments above may be independently submitted in letter work plans, if the Permittee chooses to do so.

This approval is based on the information presented in the document as it relates to the objectives of the work identified by NMED at the time of review. Approval of this document does not constitute agreement with all information or every statement presented in the document.

Should you have any questions, please contact Michiya Suzuki of my staff at (505) 690-6930.

Sincerely,

**Ricardo
Maestas**

Digitally signed by Ricardo
Maestas
Date: 2023.10.19 10:39:42
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Ricardo Maestas
Acting Chief
Hazardous Waste Bureau

cc: N. Dhawan, NMED HWB
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File: FWDA 2023 and Reading

