



SUSANA MARTINEZ
Governor
JOHN A. SANCHEZ
Lieutenant Governor

State of New Mexico  **ENTERED**
ENVIRONMENT DEPARTMENT
Hazardous Waste Bureau

2905 Rodeo Park Drive East, Building 1
Santa Fe, New Mexico 87505-6313
Phone (505) 476-6000 Fax (505) 476-6030
www.env.nm.gov



BUTCH TONGATE
Cabinet Secretary
J. C. BORREGO
Deputy Secretary

CERTIFIED MAIL – RETURN RECEIPT REQUESTED

November 8, 2017

Mark Patterson
BRAC Environmental Coordinator
Fort Wingate Depot Activity
13497 Elton Road
North Lima, OH 44452

Steve Smith
USACE
CESWF-PER-DD
819 Taylor Street, Room 3B06
Fort Worth, TX 76102

**RE: APPROVAL WITH MODIFICATIONS
GROUNDWATER PERIODIC MONITORING REPORT
JANUARY THROUGH JUNE 2017
FORT WINGATE DEPOT ACTIVITY
MCKINLEY COUNTY, NEW MEXICO
EPA ID# NM6213820974
HWB-FWDA-17-006**

Dear Messrs. Patterson and Smith:

The New Mexico Environment Department (NMED) is in receipt of the Fort Wingate Depot Activity (Permittee) *Final Groundwater Periodic Monitoring Report, January through June 2017* (June 2017 Report), dated September 2017. NMED has reviewed the June 2017 Report and hereby issues this Approval with Modifications. The Permittee must address the following comments.

GENERAL COMMENT

1. The June 2017 Report was written and submitted before receipt of NMED's comments regarding the *Final Groundwater Periodic Monitoring Report, July through December 2016* (December 2016 Report). Many of the comments from the December 2016 Report carry over to the June 2017 Report. Ensure that all future reports incorporate the changes made to address the comments concerning both the December 2016 Report and this Report.

SPECIFIC COMMENTS

2. Section 4.1.1, Northern Area Alluvial Groundwater System, lines 32-33, page 4-1

Permittee Statement: “However, the groundwater mound is still observed in the water level data for monitoring well MW02 and may be the result of leakage from the artesian Water Supply Well 69 (no longer active).”

NMED Comment: Refer to Comment 4 in NMED’s August 7, 2017 *Disapproval Letter for Groundwater Periodic Monitoring Report January through June 2016*. Provide all available construction details for the water supply well (e.g., total depth, screened interval). Provide the information in the submission of the upcoming *July – December 2017 Groundwater Monitoring Report*.

3. Section 4.1.2, Northern Area Bedrock Groundwater System, lines 3-8, page 4-2

Permittee Statement: “Steep horizontal gradients from east to west (in particular, between monitoring wells TMW38 and TMW40D and between monitoring wells TMW17 and TWM37) indicate that a geologic structural feature impedes groundwater flow. Vertical offset of the sandstone layers in the bedrock aquifer by a fault or fracture zones may be present in this area and impede groundwater flow. Contaminant transport of perchlorate to the north (rather than to the west) also provides evidence supporting the conceptual site model of a structural impediment to westerly groundwater flow in bedrock beneath the Workshop Area.”

NMED Comment: Refer to Comment 5 in NMED’s August 7, 2017 *Disapproval Letter for Groundwater Periodic Monitoring Report January through June 2016*. For future reports, revise the statement to include the fact that the groundwater flow direction has not been fully characterized in the bedrock aquifer beneath the Workshop Area.

4. Figure 5-1, Spring 2017 Northern Area Nitrate and Nitrite Concentrations in Alluvial Groundwater

NMED Comment: Although TMW06 and TMW07 are in close proximity to each other, the nitrate concentrations in the wells have been consistently different; the nitrate concentration in the groundwater samples collected from well TMW06 has consistently exceeded the regulatory limit, while the nitrate in the groundwater samples collected from well TMW07 has been detected at low concentrations or has not been detected. See the NMED Comment 6 on the November 3, 2017 *Approval with Modifications Letter for the December 2016 Report*. Discuss the causes of the nitrate exceedance in well TMW06 and non-detect/low-level detection in well TMW07 in the *July-December 2017 Groundwater Monitoring Report*.

5. Table 5-5, Summary of Volatile Organic Compound Analytical Detections

NMED Comment: The laboratory data output in Appendix C was not accurately transferred to Table 5-5. For example, the concentrations of 1,2,3-trichlorobenzene, 1,2,4-trichlorobenzene, acetone, and n-butylbenzene in the groundwater sample collected from well SMW01 are recorded as 0.66 J, 0.89 J, 2.0, and 0.38 J ug/L, respectively, in Appendix C, while these concentrations were reported as non-detect in Table 5-5. The detected compounds 1,2,4-trichlorobenzene and n-butylbenzene are not included as detected analytes in the table. See the NMED Comment 7 on the November 3, 2017 *Approval with Modifications Letter for the December 2016 Report*. Ensure that all laboratory data are accurately transferred to the tables in future reports.

6. Section 5.1.7, Metals, lines 4-6, page 5-5

Permittee Statement: "Installation of additional background monitoring wells is planned and will be included in a revised Northern Area background evaluation. The revised work plan for the Supplemental RFI will be submitted to NMED in August 2017 (Sundance, 2017)."

NMED Comment: NMED received the Permittee's *Final Groundwater Supplemental RCRA Facility Investigation Work Plan, Revision 2* (Work Plan) on September 18, 2017 and is currently reviewing the Work Plan; however, it appears that the installation of background wells is not proposed. No revisions to the June 2017 Report are necessary.

7. Section 6.1, Summary, lines 8-11, page 6-1

Permittee Statement: "Groundwater in the bedrock appears to flow radially to a potentiometric low south of monitoring well TMW32 in the eastern portion of the Workshop Area and to the west in the western portion of the Workshop Area, with an interpreted geologic feature impeding flow between the two areas."

NMED Comment: Refer to Comment 10 in NMED's August 7, 2017 *Disapproval Letter for Groundwater Periodic Monitoring Report January through June 2016*. The Permittee's September 2017 *Final Groundwater Supplemental RCRA Facility Investigation Work Plan, Revision 2* is currently under review and may address the comment.

8. Section 6.1, Summary, lines 21-22, page 6-1

Permittee Statements: "The extent of the alluvial nitrate plume is not defined west of the Administration Area."

NMED Comment: Refer to Comment 11 in NMED's August 7, 2017 *Disapproval Letter for Groundwater Periodic Monitoring Report January through June 2016*. The Permittee's

September 2017 *Final Groundwater Supplemental RCRA Facility Investigation Work Plan, Revision 2* is currently under review and may address the comment.

9. Section 6.1, Summary, lines 25-26, page 6-1

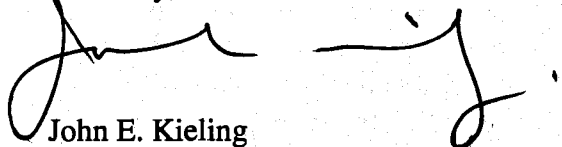
Permittee Statement: "The highest perchlorate concentrations were detected in groundwater samples from the bedrock groundwater unit in the Workshop Area. The northern boundary of the bedrock perchlorate plume has not been defined."

NMED Comment: Refer to Comment 13 in NMED's August 7, 2017 *Disapproval Letter for Groundwater Periodic Monitoring Report January through June 2016*. The Permittee's September 2017 *Final Groundwater Supplemental RCRA Facility Investigation Work Plan, Revision 2* is currently under review and may address the comment.

The Permittee must address all comments contained in this Approval with Modifications in the future reports and work plans.

Should you have any questions, please contact Michiya Suzuki of my staff at (505) 476-6059.

Sincerely,



John E. Kieling
Chief
Hazardous Waste Bureau

cc: D. Cobrain, NMED HWB
B. Wear, NMED HWB
M. Suzuki, NMED HWB
C. Hendrickson, U.S. EPA Region 6
L. Rodgers, Navajo Nation
S. Begay-Platero, Navajo Nation
M. Harrington, Pueblo of Zuni
C. Seoutewa, Southwest Region BIA
R. Duwyenie, Navajo BIA
J. Wilson, BIA
B. Howerton, BIA
R. White, BIA
C. Esler, Sundance Consulting, Inc.

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