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CERTIFIED MAIL - RETURN RECEIPT REQUESTED

July 8, 2014

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Steve Smith
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RE: APPROVAL WITH MODIFICATIONS
FWDA FACILITY-WIDE GROUNDWATER
PERIODIC MONITORING REPORT, JANUARY THROUGH JUNE 2013
FORT WINGATE DEPOT ACTIVITY,
EPA ID # NM6213820974
FWDA-13-009

Dear Messrs. Patterson and Smith:

The New Mexico Environment Department (NMED) has completed its review of the U.S. Department of the Army's (the Permittee) *Fort Wingate Depot Activity (FWDA) Groundwater Periodic Monitoring Report, January through June 2013*, (Report) dated September 2013. This submittal is a requirement of Section V.A.2 of the *Fort Wingate Depot Activity RCRA Permit* (RCRA Permit). NMED hereby approves this Report with the following modifications. The Permittee must address the following comments in future reports as directed.

COMMENT 1

Reconstruct Figure 1-2 (Site Features – Northern Area) to better display northern area wells. Well FW31 can be shown as an inset to a larger map showing northern area wells in greater detail. Other significant features can be labeled on the map such as the administration and workshop areas. Some parcels are not labeled, such as Parcel 6, and other boundaries need to be defined such as between Parcel 11 and Parcel 21. These changes may require the submittal of a

larger map such as those provided with Off-Site Well Periodic Monitoring Reports.

COMMENT 2

In Table 4-1 Northern Area Groundwater Elevations (Wells Screened in Alluvial Sediments), well MW24 is reported with a difference of 8 feet in the readings from January 9, 2013 to April 1, 2013. Verify the accuracy of this data and, if accurate, explain the reason for the drop in elevation.

COMMENT 3

In Section 4.0, Figure 4-3, January 2013 Northern Area Bedrock Groundwater Contour Map, contours were not drawn for the western wells. Monitoring wells TMW32, TMW38, and TMW40D also appear miscontoured in this figure. TMW32 also appears incorrectly contoured in Figure 4-4 (April 2013 Northern Area Bedrock Groundwater Contour Map). Recontour Figure 4-3 and Figure 4-4 to correctly show groundwater elevations reported.

COMMENT 4

In Section 5.1.2 Nitrate and Nitrite of the groundwater analytical results section, the Report states that nitrate concentrations for this reporting period "...exceeded the EPA MCL of 10 mg/L in samples from 11 alluvial monitoring wells in the Northern Area." After reviewing the data in Table 5-2, 14 alluvial well exceedences were noted. Table 5-1 correctly reflects this also. For future reports ensure that the text reflects the data for the same reporting period.

COMMENT 5

In Section 5.1.4 Perchlorate, page 5-3, lines 13-16, the Report discusses that alluvial and bedrock groundwater perchlorate contamination coexist and suggests a perchlorate source area is "upgradient in a recharge area for the bedrock groundwater unit", but does not attempt to identify source area(s). The same situation exists for the nitrate bedrock plume. Source area identification is important for both defining contamination extent and successfully remediating a site. Include discussion about potential source areas in future Reports.

COMMENT 6

In Figure 5-2, April 2013 Northern Area Nitrate and Nitrite Concentrations in Bedrock Groundwater, the mapped shape of the nitrate plume conflicts with the groundwater elevation

maps in Figures 4-3 and 4-4. Additional wells are needed to further delineate the northern part of the bedrock nitrate plume north of TMW02(89 mg/L). Discuss these findings, and plans to further delineate this plume.

COMMENT 7

In Figure 5-4, April 2013 Northern Area Explosives and Perchlorate Concentrations in Bedrock Groundwater, the extent of the perchlorate plume must be further delineated. More wells are needed west and northwest of well TMW49 (1900 ug/L) and northwest of TMW40D (280 ug/L). Make recommendations to further delineate both perchlorate and nitrate plumes.

COMMENT 8

In Section 6.2, Recommendations, page 6-2, lines 17-18, the Report recommends to "Suspend groundwater-sampling activities at monitoring wells containing less than 1 foot of saturated well screen." List the specific wells where suspension of sampling is recommended. In describing the wells where sampling would be suspended, present information describing the anticipated effects on the ongoing investigation and monitoring programs. Recommend replacement of important wells with deeper wells to fill in significant data gaps.

COMMENT 9

Background monitoring well BGMW02 has consistently exceeded the regulatory limit of 10 mg/L for nitrate in the last four sampling events. Discuss this in the groundwater analytical results Section 5.1.2 Nitrate and Nitrite in the next report submittal.

If you have questions regarding this approval please contact Shannon Duran of my staff at 505-476-6058.

Sincerely,

John E. Kieling
Chief
Hazardous Waste Bureau

cc: Shannon Duran, NMED HWB
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