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RYAN FLYNN
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CERTIFIED MAIL - RETURN RECEIPT REQUESTED

September 9, 2015

Mark Patterson
FWDA-BRAC Coordinator
P.O. Box 93
Ravenna, OH 44266

Steve Smith
USACE FWDA Program Manager
CESWF-PEC-EF
819 Taylor Street, Room 3A12
Fort Worth, TX 76102

**RE: DISAPPROVAL
TECHNICAL MEMORANDUM
GROUNDWATER BACKGROUND EVALUATION FOR
FORT WINGATE DEPOT ACTIVITY, NEW MEXICO
EPA ID# NM6213820974
FWDA-14-007**

Dear Messrs. Patterson and Smith:

The New Mexico Environment Department (NMED) received the Department of the Army's (Permittee) *Final Version 1, Technical Memorandum, Groundwater Background Evaluation for Fort Wingate Depot Activity* (Memorandum); dated March 2015 and submitted pursuant to Section VII.L of the Fort Wingate Hazardous Waste Facility Permit. The NMED has reviewed the Memorandum and hereby issues this Disapproval. The Permittee must address the following comments.

Comment(s):

1. Permittee Statement: Section 1.0 Introduction, page 2, lines 6-9. "The background wells used in the analysis were selected by CH2M Hill and approved for use in the evaluation by the U.S. Army Corps of Engineers, Fort Worth District. The approved background wells are alluvial aquifer wells BGMW01, BGMW02, BGMW03, FW31, TMW25, TMW26, TMW27, and TMW28, (Figure 1) and bedrock wells TMW17 and TMW19 (Figure 2)."

NMED Comment:

In reviewing the *Groundwater Periodic Monitoring Report*, January through June 2014, it appears that monitoring wells BGW01, BGW02 and BGW03, TMW17 and TMW19 have already been impacted by site activities and must not be used for groundwater background evaluations. Also, TMW27 appears to be the only monitoring well with detections of arsenic higher than the EPA maximum contaminant level (MCL) of 0.010 mg/L, which may indicate impacts. The Permittee must demonstrate these wells are representative of groundwater not affected by site activities prior to using them to determine background groundwater concentrations. In addition, demonstrate that at least one of the monitoring wells is an up-gradient well that has not been impacted by site activities or that the contamination is from an alternative up-gradient source. Prior to evaluating the background data the Permittee must demonstrate the appropriateness of the selected groundwater background wells. Provide the well logs, well construction diagrams, geotechnical data, and a potentiometric surface map. In addition, the Permittee must conduct a nitrate isotopic analysis within the plume and up-gradient to see if they are related.

2. Permittee Statement: Section 5.0 Conclusions, page 5, lines 26-30.

“Groundwater analytical results were statistically evaluated to determine background concentrations following USEPA methodologies. The BTVs were calculated for dissolved metals, total metals, perchlorate, nitrate, nitrite, and polynuclear aromatic hydrocarbons (PAHs). The BTVs can be used to compare groundwater analytical results from FWDA monitoring wells to determine if anthropogenic contamination is present in the groundwater.

NMED Comment:

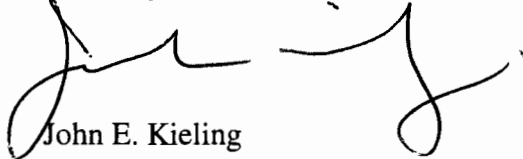
Based on the information furnished in the *Groundwater Background Evaluation*, this conclusion is premature. The Permittee must provide justification for calculating background for constituents other than metals. In addition, it is not appropriate to calculate background concentrations for PAHs.

The Permittee must submit a revised Memorandum to address all comments contained in this Disapproval. In addition, the Permittee must include a response letter that details where each comment was addressed, cross-referencing NMED's numbered comments. The Permittee must also submit an electronic redline-strikeout version of the revised Memorandum. The revised Memorandum must be submitted on or before **December 30, 2015**.

Messrs. Patterson and Smith
September 9, 2015
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If you have any questions regarding this letter, please contact Vicky Baca at (505) 476-6059.

Sincerely,



John E. Kieling
Chief
Hazardous Waste Bureau

cc: Kristen VanHorn, NMED HWB
Neelam Dhawan, NMED HWB
Dave Cobrain, NMED HWB
Christy Esler, USACE
Laurie King, U.S EPA Region 6
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