



SUSANA MARTINEZ  
Governor

JOHN A. SANCHEZ  
Lieutenant Governor

**NEW MEXICO  
ENVIRONMENT DEPARTMENT**

***Hazardous Waste Bureau***

2905 Rodeo Park Drive East, Building 1  
Santa Fe, New Mexico 87505-6303  
Phone (505) 476-6000 Fax (505) 476-6030  
[www.nmenv.state.nm.us](http://www.nmenv.state.nm.us)



DAVE MARTIN  
Secretary

RAJ SOLOMON, P.E.  
Deputy Secretary

**CERTIFIED MAIL - RETURN RECEIPT REQUESTED**

February 18, 2011

Mark Patterson  
BRAC Coordinator  
Ravenna Army Ammunition Plan  
Building 1037  
8451 State Route 5  
Ravenna, OH 44266

Steve Smith  
USACE FWDA Program Manager  
CESWF-PER-DD  
819 Taylor Street, Room 3B06  
PO Box 17300  
Fort Worth, TX 76102-0300

**RE: NOTICE OF DISAPPROVAL  
MONITORING WELL INSTALLATION  
AND ABANDONMENT PROPOSAL  
FORT WINGATE DEPOT ACTIVITY  
EPA ID# NM6213820974  
FWDA-10-010**

Dear Messrs. Patterson and Smith:

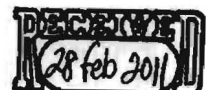
The New Mexico Environment Department (NMED) received the Department of the Army's (the Permittee) *Monitoring Well Installation and Abandonment Proposal*, (Proposal) dated December 15, 2010, submitted pursuant to Section VII.H of the Fort Wingate Hazardous Waste Facility Permit. NMED has reviewed the Work Plan and hereby issues this Notice of Disapproval (NOD). The Permittee must address the following comments.

**COMMENT 1**

In Section 1.0 (Introduction), the Permittee does not discuss the rationale for the proposed well abandonments, but mentions it with respect to regulations. It is further discussed in Section 4.0 (Well Abandonment). The Permittee should consider including and discussing the reasons for well abandonment in Section 1.0.

**Scanned**

By: *kb*  
Date: *3-10-11*



#### **COMMENT 2**

The Permittee addresses four issues in this Proposal: background well installation, sentinel monitoring well installation, well installation to delineate ground water plumes, and well abandonment; but fails to discuss reasons for background and sentinel monitoring well installation in detail. For ease of review, organize the proposal so each issue is discussed in a separate section of the proposal. Also, references to the figures are not sequential. Revise the Proposal to address these issues.

#### **COMMENT 3**

In Section 3.0 (Well Locations and Specifications), page 3-1, second paragraph, the Permittee generally describes well installation and construction. The Permittee states, “[s]creens in the alluvium monitoring wells will be placed from 5 feet above the zone of saturation to 10 feet below the zone of saturation, if practical.” Clarify if the Permittee meant screens will be placed from 5 feet above the zone of saturation to 10 feet below the water table. Describe the selection of screen length and placement and provide the rationale for the selection for different types of wells. This is likely dependent on the location and type of well to be installed (e.g. sentinel well, plume monitoring well). Please clarify and revise the Proposal.

#### **COMMENT 4**

The description of proposed well construction lacks sufficient detail. Include a generalized well construction diagram and describe all aspects of well installation including surveying, development, logging and sampling, and the actions to be taken at proposed well locations where saturated conditions are not encountered. Revise the Proposal accordingly.

#### **COMMENT 5**

Wells TMW43 and TMW47 are mislabeled in Figure 2 (Existing and Proposed Northern Area Monitoring Well Locations), and BGMW01 is mislabeled in Figure 3 (Proposed Background and Sentinel Well Locations). TMW48 appears to be mislabeled in Figure 5 (Proposed Perchlorate Plume Monitoring Well Locations) and might be TMW38. TMW48 is not listed in Table 1 (Well Installation Sequence) nor is it referred to in the text. Well TMW38 is listed in Table 1 as a perchlorate bedrock monitoring well, and is also discussed in the text of the Proposal. Section 3.0 (Well Locations and Specifications), page 3-1, last section, summarizes proposed monitoring wells, but does not reference Table 1. Make the appropriate corrections in the revised Proposal.

#### **COMMENT 6**

In Section 3.2 (Background Wells), page 3-2, the Permittee states, “[f]our alluvial background wells (BGMW01, BGMW02, BGMW03, and BGMW04) are proposed for installation... on [the]

northwest side of FWDA, east and north of Igloo Block A (Figure 3).” These proposed well locations are west and north of Igloo Block A. Revise the text in the Proposal.

Provide a description and rationale in the text to better explain Figure 3 (Proposed Background and Sentinel Well Locations). As discussed with NMED, BGMW01 and BGMW02 should be placed on the east side of FWDA to obtain results upgradient of historic operations. In general, provide stronger justification for all proposed new well locations, considering FWDA historic operations.

#### **COMMENT 7**

The Permittee includes Table 1 (Well Installation Sequence), on page 3-4, but does not include text discussing this table. Also, include the correct sequence of well installation. Per telephone call between the Permittee and NMED on January 5, 2010, the Permittee stated that sentinel monitoring wells would be installed first, yet they are listed as 14 and 15 in the table. Revise the table to correct the sequence of well installation and include estimated dates for the well installations.

In Table 1, there is an error in the notes column for sequence 16. Wells TMW42 and TMW43 are cited when it should be TMW41 and TMW42, as stated in the text following Table 1. Revise Table 1 to make the corrections and include map footnotes.

#### **COMMENT 8**

Propose and describe initial sampling and analysis for all newly installed wells, including measurement of water levels and field water quality parameters. Revise the Proposal accordingly.

#### **COMMENT 9**

In section 4.0 (Well Abandonment), page 4-1, the Permittee includes Table 2 (Proposed Monitoring Well Abandonment), but does not list OB/OD wells (such as CMW20 and CMW21) that are proposed to be abandoned. Include all wells that are proposed for abandonment, including proposed dates for well abandonment. The Permittee may state “to be determined” or “TBD” for OB/OD wells that will be addressed in OB/OD related Work Plans.

#### **COMMENT 10**

Revise the maps in the Proposal to include groundwater elevations from the most recent Facility-Wide Groundwater Periodic Monitoring Report. Groundwater elevations may be included on the figures depicting the proposed well locations. Include contaminant concentrations on Figure 4 (Proposed RDX and Nitrate Plume Monitoring Well Locations) and Figure 5 (Proposed Perchlorate Plume Monitoring Well Locations).

The Permittee must address all comments contained in this letter and submit a revised Proposal. The cover page must indicate that the submittal is a revision and was prepared for NMED. The

Messrs. Patterson and Smith  
February 18, 2011  
Page 4

revised Proposal must be accompanied with a response letter that details where all revisions have been made, cross-referencing NMED's numbered comments. The revised Proposal must be submitted to NMED no later than April 15, 2011.

If you have any questions regarding this letter, please contact Shannon Duran at (505)-476-6058.

Sincerely,



James P. Bearzi  
Chief  
Hazardous Waste Bureau

cc: Raj Solomon, Acting Director, NMED WWMD  
Shannon Duran, NMED HWB  
Dave Cobrain, NMED HWB  
John Kieling, NMED HWB  
Laurie King, U.S EPA Region 6  
Chuck Hendrickson, U.S. EPA Region 6  
Sharlene Begay-Platero, Navajo Nation  
Eugenia Quintana, Navajo Nation  
Steve Beran, Zuni Pueblo  
Edward Wemytewa, Zuni Pueblo  
Clayton Seoutewa, Southwest Region BIA  
Charles Long, Navajo Nation  
Rose Duwyenie, Navajo BIA  
Judith Wilson, BIA  
Eldine Stevens, BIA  
Ben Burshia, BIA

File: FWDA 2011 & Reading File  
HWB-FWDA-10-010