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ENTERED



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**CERTIFIED MAIL - RETURN RECEIPT REQUESTED**

October 12, 2011

Colonel David C. Piech  
27<sup>th</sup> Special Operations Mission Support Group  
110 E. Sextant Avenue, Building 600, Suite 1098  
Cannon Air Force Base, New Mexico 88103

**RE: NOTICE OF DISAPPROVAL  
GROUND WATER MONITORING PROJECT  
WORK PLAN, MAY 2011  
MELROSE AIR FORCE RANGE  
EPA ID # NM5572124456  
HWB-MELR-11-002**

Dear Col. Piech:

The New Mexico Environment Department (NMED) has received the Melrose Air Force Range (Permittee) *Ground Water Monitoring Project Work Plan* (GWMWP) dated May 2011. NMED has reviewed the GWMWP and hereby issues this Notice of Disapproval (NOD) with the following comments.

**Comment 1:**

Sections 2.1 (Project Organization and Responsibilities) through 2.1.8 (Personnel Organization and Contact Information), 3.0 (Quality Assurance Project Plan), 4.0 (Site Safety and Health Plan), and Appendices A (Laboratory Quality Assurance Manuals) through E (MSDS Sheets) were not reviewed by NMED. Remove these sections and appendices from the revised GWMWP and format the GWMWP according to the NMED online guidance document *General Reporting Requirements for Routine Groundwater Monitoring at RCRA Sites*, dated February 2003 found at

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[http://www.nmenv.state.nm.us/hwb/data/General\\_Reporting\\_Requirements\\_for%20Routine\\_GW\\_Monitoring.pdf](http://www.nmenv.state.nm.us/hwb/data/General_Reporting_Requirements_for%20Routine_GW_Monitoring.pdf) for all future GWMWP submittals to NMED.

**Comment 2, Section 1.9 (Project Schedule), page 1-23:**

The Permittee provides a bulleted list of scheduled field activities and reporting for the GWMWP. In the revised GWMWP, remove items listed under bullets 6 and 7 and replace text under bullet 6 with "A '*Final Annual Ground Water Monitoring Report for Melrose AFR*' will be submitted to the New Mexico Environment Department for review by February 1 of each year, commencing with the report of the 2011 activities."

**Comment 3, Section 2.0 (Field Sampling Activities), page 2-1:**

In Section 2.0, the Permittee provides descriptions of personnel and project organization, in Sections 2.1 (Project Organization and Responsibilities) through 2.1.8 (Personnel Organization and Contact Information). These sections were not reviewed because they do not pertain to the conducted groundwater monitoring. Remove Section 2.1 through 2.1.8 from the revised GWMWP and start Section 2.1 at Non-measurement Data Acquisition (currently Section 2.2) in the revised GWMWP.

**Comment 4, Section 2.2 (Non-measurement Date Acquisition), page 2-6:**

Section 2.2, bullet 3 states, "[n]umerous wells are located on Melrose [Air Force Range (AFR)] about which minimal well construction details are known. As additional data is discovered or made available it will be included in summary tables and utilized for the purposes of discussion." NMED's March 11, 2011 NOD Comment 3 "noted some discrepancies in some reported well diameters and well construction materials data presented in [Table 1 – Well Construction Summary] compared to data in the 2009 Baseline Report." The Permittee responded that "during the fall 2010 Semiannual sampling event TRINITY personnel visited each well to collect ground water elevation, observe the condition of the well, and record well construction details. The discrepancies appear to be in the 2009 Baseline Report and not the current [Annual Groundwater Monitoring Report, December 2010]...[d]uring the spring 2011 Semiannual and Annual sampling event, TRINITY will have more time on-site and will continue to refine/correct any discrepancies between the historical table and our table to confirm the well construction details." The Permittee must submit a complete and accurate table with the well construction details for the 2011 Annual Groundwater Monitoring Report.

**Comment 5, Section 2.3.1 (Water Level and Total Depth Measurements), page 2-6:**

The Permittee states that "[t]he depth to ground water will be measured from the top of well casing to the nearest 0.01 foot and always from the same reference point or survey mark on the wells casing. If there is no reference mark, the measurement will be from the north side of the

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casing.” The Permittee must collect all measurements from the highest point on the well casing rather than the north side if there is no reference mark. Revise the GWMWP accordingly.

**Comment 6, Section 2.3.3.2 (Sample Collection), page 2-8 through 2-9:**

The Permittee states, “[t]here are several wells within the Annual Ground Water Monitoring Network that are used for cattle stock water supply that have dedicated submersible pumps with associated equipment installed within subsurface vaults. The majority of these wells have pressure tanks (approximately 20 gallons) to aid in providing a constant supply of water for the cattle...[P]rior to ‘low-flow’ pumping the spigot closest to the pump will be opened and allowed to flow at maximum flow to purge a sufficient volume from the pressure tanks.” The Permittee did not provide enough information to determine the purge volume of the cattle stock wells. The Permittee must submit well construction details, including the pressure tank volumes for the stock wells, for all wells to determine the appropriate purge volume for each well (*see* Comment 4). For the 2011 sampling events, the Permittee must purge three well volumes from each cattle stock well to ensure that formation water is sampled. Revise the GWMWP accordingly.

**Comment 7, Section 2.3.3.5 (Decontamination Procedures):**

The Permittee states, “[a]ll reusable equipment that comes in contact with potentially contaminated water or other material will be decontaminated prior to use at each sampling location. All equipment will be thoroughly decontaminated before use and between sampling locations. [Standard operating procedures (SOPs)] for equipment and personnel decontamination were developed in general accordance with guidance provided by NMED and are detailed in SOP No. 3 (Appendix C).” NMED does not review SOPs. The Permittee must fully describe the proposed decontamination procedures in the appropriate section of the revised GWMWP.

**Comment 8, Section 2.3.4 (Well Abandonment), pages 2-14 through 2-15:**

In Section 2.3.4, the Permittee proposes to abandon six monitoring wells, M117MW001, M117MW002, M117MW003, M117MW004, MAO2MW001S, and MAO3MW001. The Permittee must submit a work plan to NMED and the New Mexico Office of the State Engineer describing the proposed activities for abandoning the monitoring wells. The monitoring wells must be abandoned in accordance with 19.27.4 NMAC (*Rules and Regulations Governing Well Driller Licensing Construction, Repair, and Plugging of Wells*). The Permittee must receive approval from both NMED and the New Mexico Office of the State Engineer prior to abandoning the wells.

**Comment 9, Section 2.6 (Investigation-Derived Wastes), pages 2-20 through 2-22:**

In Section 2.6, the Permittee describes the waste management procedures for the groundwater sampling events. The Permittee must continue to store the groundwater until the Annual Groundwater Monitoring Report has been reviewed and NMED approves the analytical results from the report. Once NMED approves the analytical results, the Permittee will be directed by NMED how to dispose of the purged wastewater. Alternately, the Permittee may dispose of purge water generated from wells where contaminants were not detected during the previous four sampling events as proposed.

**Comment 10, Figure 1-5 (Median Ground Water Flow Direction, 2002 to 2003 (USGS)):**

Figure 1-5 depicts groundwater flow directions from water level measurements collected between 2002 through 2003 by USGS. However, Figures 8 (Ground Water Flow Map, 1-14-2009 to 1-16-2009) and 9 (Ground Water Flow Map, 10-24-2010 to 11-3-2010) from the Annual Ground Water Monitoring Report dated December 2010 depict current groundwater flow direction. Combine the information from Figures 8 and 9 to provide a figure with current water level measurements that depicts the current direction of groundwater flow in the revised GWMWP.

**Comment 11, Figure 1-6 (Annual Ground Water Monitoring Well Network Locations):**

Figure 1-6 depicts the monitoring well locations for the annual monitoring well network. The symbols that define the monitoring wells are yellow and gray. The gray symbols define "water levels only or scheduled for abandonment" and the yellow symbols define "monitoring wells." Revise the GWMWP figure to distinguish between monitoring wells as "water levels only," "water levels only and scheduled for abandonment," and "monitoring and sampling wells."

**Comment 12, Figure 4-1 (Hospital Route Map) and Table 4-2 (Project Emergency Contact Information):**

Figure 4-1 and Table 4-2 are associated with Section 4.0 (Site Safety and Health Plan). NMED does not review Site Safety and Health Plans; remove these items from the revised GWMWP.

**Comment 13, Table 2-2 (Well Construction Details):**

Table 2-2 summarizes the well construction details for the monitoring wells at the Melrose Air Force Range. Under the footnotes section of the Table, it states that "[w]ells in gray scale are not sampled as part of the Annual or Semiannual Ground Water Quality Network. These wells are utilized for ground water levels or are scheduled for abandonment." Revise Table 2-2 to distinguish between monitoring wells utilized for groundwater level measurements and those that are scheduled for abandonment.

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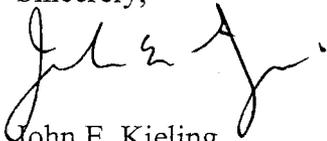
**Comment 14, Table 2-9 (TCLP Regulatory Limits):**

Table 2-9 provides the TCLP regulatory screening levels listed in a table but there is no footnote to reference the screening levels. Provide a reference for the information in the table in the revised GWMWP.

The Permittee must address all comments contained in this NOD and submit a revised Work Plan no later than **January 12, 2012**. The revised Work Plan must include a response letter that details where all revisions have been made, cross-referencing NMED's numbered comments. In addition, an electronic version of the revised Work Plan must be submitted that identifies where all changes have been made in red-line strikeout format.

If you have questions regarding this letter please contact Leona Tsinnajinnie of my staff at 505-476-6057.

Sincerely,



John E. Kieling  
Acting Chief  
Hazardous Waste Bureau

cc: D. Cobrain, NMED HWB  
L. Tsinnajinnie, NMED HWB  
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File: Reading and MELR 2011 and HWB-MELR-11-002