



SUSANA MARTINEZ
Governor

JOHN A. SANCHEZ
Lieutenant Governor

NEW MEXICO
ENVIRONMENT DEPARTMENT

ENTERED



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

DAVE MARTIN
Cabinet Secretary

BUTCH TONGATE
Deputy Secretary

CERTIFIED MAIL - RETURN RECEIPT REQUESTED

December 9, 2011

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

**RE: APPROVAL WITH MODIFICATIONS
FACILITY-WIDE LONG TERM GROUNDWATER MONITORING
PLAN CANNON AIR FORCE BASE, NEW MEXICO, JANUARY 2011
EPA ID #NM7572124454
HWB-CAFB-10-003**

Dear Col. Piech:

The New Mexico Environment Department (NMED) has reviewed Cannon Air Force Base's (Permittee's) *Facility-Wide Long Term Groundwater Monitoring Plan for Cannon Air Force Base, New Mexico* dated January 2011 (Plan). NMED hereby issues this Approval with the following modifications.

GENERAL COMMENTS:

Comment 1

The following sections of the Work Plan on pages 1-9 through 1-11, Section 1.3.1 Landfill 25 (SWMU 97) second paragraph, Section 1.3.2 sewage Lagoons (SWMU 101) second paragraph, Section 1.3.3 Landfill 4 (SWMU 104) second paragraph, and Section 1.3.4 Landfill 3 (SWMU 105) fourth paragraph, all state "CAFB proposed that the SWMU[s] be granted the status of Corrective Action Complete with Controls in the document titled Corrective Action Complete Proposals, Cannon Air Force Base, Clovis, New Mexico dated July 2008. NMED approved the proposal November 25, 2009." On page 2, first paragraph of the NMED letter "*Partial Approval Corrective Action Complete Proposals (July, 2008)*" dated November 25, 2009, NMED states

“[c]ontrols have been successfully implemented and no further corrective action is currently required for these...SWMUs. The Permittee may submit a Class 3 Permit Modification request for these...SWMUs.” The November 24, 2009 NMED letter also states “[t]he requirements to submit a Class 3 permit modification are at 20.4.1.900 NMAC, incorporating 40 CFR 270.42(c).” The status of these SWMUs had not been changed to Corrective Action Complete with Controls because the Permittee has not completed the requirements of CFR.270.42(c) regarding public notice. Because NMED has conducted a review of the Permittee’s Class 3 permit modification request and Corrective Action Complete Proposals dated July 14, 2008, the Permittee does not need to resubmit the Class 3 permit modification request, however, the Permittee must submit proof that the requirements of CFR.270.42(c) have been met before NMED can proceed with the permit modification.

Comment 2

On page 1-1, second paragraph, the Permittee states “[o]nce approved, the Plan will constitute the agreed upon Basewide Monitoring Plan for CAFB. As regulatory status of SWMUs change, amendments to this Plan may be required to accommodate change in status.” The Permittee is advised that this Plan must be updated biennially to reflect the latest sampling and landfill inspection conditions at CAFB. If no changes to the Work Plan are anticipated, the Permittee must send NMED a letter stating that no changes to this Work Plan are necessary including a justification. All future changes/modifications to this approved Work Plan as well as any letters stating no changes are necessary to the Work Plan must be approved by NMED prior to each biennial basewide groundwater monitoring event.

Comment 3

All groundwater sampling and landfill management conducted annually under this approved Work Plan must be summarized in a letter report and submitted to NMED no later than March 31 of the subsequent year. In addition, all data and information collected over the two-year monitoring period must also be included in the Biennial Facility Wide Monitoring Report.

Comment 4

On page 2-5, Section 2.8 Quality Assurance Project Plan the Permittee states “[a]ll environmental monitoring activities will be conducted in accordance with the *Long Term Monitoring Work Plan, Sampling and Analysis Plan, and Site Safety and Health Plan, Landfill No. 3 (SWMU 105), Landfill No. 4 (SWMU 104), and Landfill No. 25 (SWMU 97)* (Bhate, 2002) and the Department of Defense Quality Systems Manual for Laboratories, version 3 (DOD, 2006).” The Permittee may not reference previously submitted work plans, the Permittee must include proposed site specific procedures for environmental monitoring activities in each newly submitted work plan (please refer to comment 7).

Comment 5

On page 2-5, Section 2.8 Quality Assurance Project Plan, the Permittee states “[a]ll environmental monitoring activities will be conducted in accordance with the *Long Term Monitoring Work Plan, Sampling and Analysis Plan, and Site Safety and Health Plan, Landfill No. 3 (SWMU 105), Landfill No. 4 (SWMU 104) and Landfill No. 25 (SWMU 97)* (Bhate, 2002) and the Department of Defense Quality Systems Manual for Laboratories, version 3 (DOD, 2006).” NMED does not review or approve health and safety plans. Approval of this Work Plan does not constitute an approval of the referenced health and safety plan. In all future submittals to NMED the Permittee must neither include, nor reference previously submitted, health and safety plans.

Comment 6

On page 2-5, Section 2.8 Quality Assurance Project Plan, the Permittee states “[a]ll environmental monitoring activities will be conducted in accordance with the *Long Term Monitoring Work Plan, Sampling and Analysis Plan, and Site Safety and Health Plan, Landfill No. 3 (SWMU105), Landfill No. 4 (SWMU 104) and Landfill No. 25 (SWMU 97)* (Bhate, 2002) and the “*Department of Defense Quality Systems Manual for Laboratories, version 3 (DOD, 2006).*” The referenced document “*Department of Defense Quality Systems Manual for Laboratories, version 3 (DOD, 2006)*” is not in NMED’s administrative record and NMED would not review or approve internal DOD documents. Remove references to documents not in NMEDs administrative record in all future submittals.

Comment 7

On page 2-2, Section 2.3 Groundwater Sampling Procedures the Permittee states “[t]he following subsections provide detailed groundwater sampling procedures. SOPs and field forms are provided in Appendix B and C, respectively.” Appendix B Standard Operating Procedures (SOPs) contains information that is generalized and/or is contradictory to other text in the Work Plan (see comments 14 and 15). In addition, Appendix B refers to SOP 3 which is not included in the Work Plan. NMED does not review SOPs, which are subject to change without notice. In all future work plans the Permittee must describe all proposed site specific procedures, specific field methods and specific equipment to be utilized in the execution of the work plan, in the appropriate work plan sections. The Permittee must also fully describe all site specific procedures, specific field methods and specific field equipment as executed and used in field in the appropriate sections of all future facility wide ground water monitoring reports.

Comment 8

On page 4-1, Section 4 Reporting Requirements, Figures, the Permittee outlines the figures to be included in the Report: “[a] site vicinity map, including topography; [a] site plan showing monitoring well locations; [a] potentiometric surface map indicating the groundwater flow

direction; and [f]igures and trend analyses presenting the historical and most recent groundwater analytical data.” The Permittee must add at least two additional figures to the Report; one figure must focus on the Landfill 5 area showing monitoring well locations and one figure must focus on the Landfill 3, Landfill 4, Landfill 25 and the Sewage Lagoon area showing monitoring well locations. The figures are to include potentiometric surface contours and inset boxes presenting analytical results (detections only) for each monitoring well.

Comment 9

On page 2-5, Section 2.6 Field Documentation, the Permittee states “[a]ll field activities will be recorded in field log books.” On page 4-1, Section 4 Reporting Requirements, last paragraph the Permittee states “[a]ppendices will include the field forms completed by crews during the sampling event.” Copies of field log books, in addition to field forms, must be included in all report submittals to NMED.

Comment 10

For guidance on the formats for future report and work plan submittals to NMED the Permittee is referred to Appendix 7 of the White Sands Missile Range RCRA Permit. This may be found on page 62 at: http://www.nmenv.state.nm.us/hwb/documents/FINAL_WSMR_APPENDICES_12-2009.pdf

SPECIFIC COMMENTS:

Comment 11

On page 5-2, seventh line of the “2010 Biennial Groundwater Monitoring and Annual Landfill Inspection Report” dated December 2010, the Permittee states “[w]ell MW-Ra had insufficient water to support sampling.” On page 4-2 of that report, in the last sentence, the Permittee states “[t]he remaining saturated thickness in well MW-Ra is estimated to be approximately 6 ft.” and Table 3, Projected Remaining Well Life, of the same report indicates 5.99 feet of saturated screen interval was remaining in MW-Ra prior to sampling. In the Work Plan on page 1-10, first paragraph, the Permittee states “Well Rb is scheduled to be installed to replace well Ra, which is going dry. Groundwater monitoring well MW-Ra or replacement groundwater monitoring well MW-Rb must be gauged and sampled during the next biennial facility wide groundwater monitoring event and the data must be included in the subsequent report.

Comment 12

During the next facility wide groundwater monitoring event analyses for Full Range Total Petroleum Hydrocarbons (TPH) (Gasoline, Diesel and Residual Range organics by EPA Method 8015) must be added to the analytical suite for all wells sampled as a screening evaluation for potential Semi Volatile Organic Compounds (SVOC) contamination.

Comment 13

On page 2-2, Section 2.2.1 Water level Measurements, the Work Plan states “an electric water level tape” will be used to take groundwater level measurements in each well. A groundwater level indicator capable of providing measurements to within 0.01 foot must be used.

Comment 14

On page 2-4, Section 2.3.2 Well Sampling, fifth bullet, the Permittee states “[i]f air bubbles are observed in the sample vial, discard the sample vial and repeat the procedure until no air bubbles appear.” In Appendix B, Sample Collection, third bullet, the Permittee states “[i]f bubbles appear the vial will be refilled.” When collecting samples, the Permittee must follow the text of the Work Plan and use a new sample vial to collect samples to replace samples containing air bubbles to avoid loss of preservative.

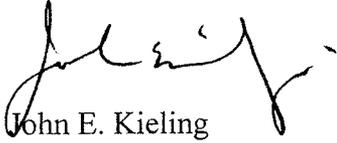
Comment 15

On page 2-3, section 2.3.1 Well Purging and Stabilization (Field Measurements, Calibration and Quality) last bullet, the Permittee states that pumps will be set near top one-third of screened interval. In Appendix B Monitoring Well Purge Procedures, Low-Flow Purging with Dedicated Submersible Pumps, first bullet, the Permittee states “[t]he pump intake shall be set at the bottom of the screened interval of each well where the depth to water (DTW) is within the screened interval. Where DTW is above the screened interval, pump intake shall be set at the top of the screened interval.” The text of the Work Plan does not indicate which type of pumps will be used for groundwater sampling. The Permittee must ensure that pump intakes are set no more than three feet below the water table, where Light Non-Aqueous Phase Liquids (LNAPLs) have the potential to be present.

Colonel David C. Piech
December 9, 2011
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No response to this letter is necessary. If you have questions regarding this Approval with Modifications please contact Lane Address of my staff at (505) 476-6059.

Sincerely,



John E. Kieling
Acting Chief
Hazardous Waste Bureau

cc: D. Cobrain, NMED HWB
N. Dhawan, NMED HWB
L. Andress, NMED HWB
R. Lancaster, CAFB
M. Higginbotham, CAFB
A. Lafuente, CAFB

File: CAFB 2011 and Reading
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