



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



DAVE MARTIN
Cabinet Secretary

BUTCH TONGATE
Deputy Secretary

CERTIFIED MAIL - RETURN RECEIPT REQUESTED

May 29, 2012

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
QUALITY PROGRAM PLANS, FINAL - REVISION 3
REMEDIAL ACTION - CONSTRUCTION AT SITE FT-08 (SWMU 107)
CANNON AIR FORCE BASE, NEW MEXICO
EPA ID # NM7572124454
HWB-CAFB-11-007**

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 (Work Plan). NMED hereby issues this Approval with the following modifications.

COMMENTS:

Comment 1

Section 3.0 Problem Background and definition, page 1, last paragraph, the Permittee states "...approximately 30 cubic yards of Arsenic contaminated soil, which is currently stockpiled on Cannon AFB, will be disposed of. The source of the Arsenic contaminated soil is unknown at this time." **Appendix 2, Section 1.2.2 Summary of Sampling Analysis Program, Table 1-6 (Soil Analysis and Quantity of Samples – Cannon AFB RA)** indicates that "multiple samples" will be taken from the arsenic contaminated stockpiled soils for waste characterization via "TCLP –Arsenic". In the Work Plan no information is given regarding prior characterization of this stockpiled soil and the source of this soil is apparently unknown. The Permittee must

demonstrate that this soil is not characteristic hazardous waste in accordance with 40 CFR 261 Subpart C and make a hazardous waste determination in accordance with 40 CFR 262.11(c). The Permittee must also comply with the sampling requirements for waste acceptance at the disposal facility. A minimum of two samples must be collected from the stockpile for characterization purposes, from one to two feet below the surface of the stockpile. All copies of sampling results, waste manifests and disposal facility acceptance criteria must be included in the report.

Comment 2

Section 4.3 Soil Assessment, page 6, top of page:

The Permittee states that soil samples will be "...analyzed for volatile organic compounds (VOCs) using United States Environmental Protection Agency (EPA) Method 8260B and TPH [total petroleum hydrocarbons] using EPA Method 8015B." The Permittee must analyze all soil samples for the full range of TPH; gasoline range organics (GRO), diesel range organics (DRO) and residual range organics (RRO) using EPA Method 8015B and analyze the most contaminated soil sample for perchlorate using EPA Method 6860.

Comment 3

The soil screening levels provided in **Section 4.4 Excavation Plan, bottom of page 6, Section 4.11 Remediation Management, page 9, last bullet**, and in **Appendix 1, Section 1.1.4.2 Specific Data Quality Objectives** are incorrect and do not appear to be either from the EPA Regional Screening Levels either the 2009 or 2012 NMED guidance. Use NMED's updated soil screening levels (SSLs) provided in Table A-1 (NMED Soil Screening Levels) of the NMED *Risk Assessment Guidance for Site Investigations and Remediation* February 2012. A copy of this document can be found on NMED's website:

<http://www.nmenv.state.nm.us/HWB/guidance.html>

Changes to the soil screening guidance (SSG) include updated soil SSLs using new toxicity data and adding mutagenicity. In addition, the Total Petroleum Hydrocarbon (TPH) and the Polychlorinated Biphenyl (PCB) guidance are now combined with the SSG, which replaces the individual documents. The most recent version of the SSG must now be used in the evaluation of site data instead of any previous version.

Comment 4

Section 4.3 Soil Assessment, page 6, second paragraph:

The Permittee states "EMR will summarize the assessment data and provide recommendations for soil excavation to AFCEE [Air Force Center for Engineering and the Environment], the Cannon AFB [Air Force Base] POC [point of contact], and NMED." NMED requires a status report on soil assessment activities which must include (but is not limited to) a detailed description of field activities performed, including investigation and sampling methods, results of field screening and analytical analyses, and figures which include soil boring locations as well as the estimated contaminant plume boundary. The status report must provide a discussion of proposed excavation activities to be performed as a result of the assessment. Written approval from NMED for the status report is required before commencement of soil excavation activities.

Comment 5

Section 4.10 Transportation and Disposal, page 9, last paragraph:

The Permittee states “[c]opies of these manifests will be provided to the AFCEE and Cannon AFB.” Copies of the manifests must also be included in the report submitted to NMED.

Comment 6

Appendix 1: Health and Safety Plan:

The Permittee must remove Appendix 1, Health and Safety Plan from the Work Plan. The Permittee is reminded that while a Health and Safety Plan is required, NMED does not review or approve health and safety plans. In all future submittals to NMED the Permittee must not include, nor reference, previously submitted health and safety plans. Approval of this Work Plan does not constitute approval of the Health and Safety Plan.

Comment 7

Appendix 2, Sampling and Analysis Plan, Section 1.1 Quality Assurance Project Plan

(QAPP) The Permittee is reminded that NMED does not review or approve QAPPs. Approval of this Work Plan does not constitute approval of the QAPP. In future submittals to NMED, all directly related information contained in the QAPP must be included in the appropriate sections of submitted work plans and reports.

Comment 8

Appendix 2, Section 1.2.2 Summary of Sampling Analysis Program, last paragraph:

The Permittee states “[s]oil screening will be broken down into the following sampling protocols.” Initial soil assessment activities are not on the bulleted list. No response is necessary.

Comment 9

Appendix 2, Section 1.2.2 Summary of Sampling Analysis Program, Table 1-6 (Water Analysis and Quantity of Samples – Cannon AFB RA) and Appendix 2, Section 1.2.4.2 Characterization of Decontamination Water:

The Permittee states “[a]ppropriate samples will be collected to characterize collected liquids for disposal along with decontamination water.” The Work Plan does not specify what liquids will be collected other than decontamination water. Specify all types of liquids that were collected in the report.

Comment 10

Appendix 2, Section 1.2.3 Design of Data Collection Operations, Sample Locations and Frequency, second paragraph,

the Permittee states “[a] fully calibrated PID [photo ionization detector] will be utilized to aid in the field screening of soils and help refine the vertical and horizontal limits to excavation.” In **Appendix 2, Section 1.2.4.1 Characterization of Contaminated Soils, first paragraph**, the Permittee states “[e]xcavated soils will not be directly loaded onto trucks but will be segregated into two stockpiles (contaminated and clean) based on previous analytical data and field screening. A fully calibrated PID will be utilized to aid in the

field screening of soils and help refine the vertical and horizontal limits to excavate.” DRO is not a significant volatile fraction of TPH, the Permittee is advised of the limited effectiveness of using a PID to field screen for DRO.

Comment 11

Appendix 2, Section 1.2.3 Design of Data Collection Operations, Sample Locations and Frequency, second paragraph:

The Permittee states “...confirmation samples will be collected from the floor of each section and every 20 ft of excavation well. From 8 to 12 wall samples and 4 to 8 floor samples are anticipated.” The Permittee is advised to take an adequate number of confirmation soil samples; a minimum of one per excavation section side wall and one per 150 sq ft on floor of excavation.

Comment 12

Appendix 2, Section 1.2.3 Sample Identification, second paragraph:

“The Permittee states “[c]ollected samples will be thoroughly homogenized (unless noted by the laboratory) and transferred to the appropriate sampling containers without chemical preservation.” The Permittee is reminded that for data to be valid, samples to be analyzed for volatile organic compounds (VOCs) such benzene, ethylbenzene, toluene and xylenes (BTEX) must be collected directly from undisturbed soil samples (ex: split spoon, excavation floor or wall) and immediately placed in containers with proper preservation to prevent volatilization of sample material.

Comment 13

Appendix 2, Section 1.2.4.3 Air Monitoring and Field Headspace Analysis:

The Permittee states “[a] PID calibrated to “benzene equivalent will be used during field activities.” When reporting results of field activities the Permittee must state the actual span gas that was used to calibrate the PID.

Comment 14

Standard Operating Procedures (SOPs), Appendix 3, Field Operating Procedures and Appendix 4, Laboratory Standard Operating Procedures:

The Permittee must remove Appendices 3 and 4 and all references to SOPs in all future Work Plans submitted to NMED. The Permittee is reminded that NMED does not review SOPs and did not review these appendices. In all future work plans the Permittee must provide descriptions of proposed procedures, specific field methods and specific equipment to be used in the execution of the work plan, including copies of field forms that will be used, in the appropriate section(s) of the work plans. The Permittee must also fully describe all site specific procedures, specific field methods and specific field equipment as executed and used during field activities in the appropriate sections of the report.

Colonel David C. Piech
May 29, 2012
Page 5 of 5

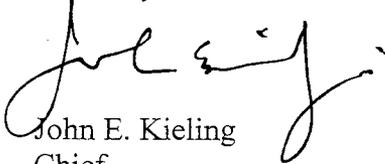
Comment 15

Appendix 5, Sloping and Benching Definitions and Slope Configurations:

The information provided in Appendix 5 is reference material of a general nature and not site specific. The Permittee is reminded that NMED does not review reference materials and did not review Appendix 6. In all future work plans the Permittee must provide site specific descriptions of proposed excavation field activities, field methods and equipment to be used in the execution of the work plan, including copies of field forms that will be used, in the appropriate section(s) of the work plans. The Permittee must also fully describe all site specific excavation procedures, field methods and specific field equipment as executed and used during field activities in the appropriate sections of the associated report.

No response to this letter is necessary. If you have questions regarding this Approval with Modifications please contact Lane Andress of my staff at (505) 476-6059.

Sincerely,



John E. Kieling
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
L. King, EPA 6PD-N

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