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RON CURRY  
Secretary

JON GOLDSTEIN  
Deputy Secretary

CERTIFIED MAIL - RETURN RECEIPT REQUESTED

June 4, 2009

Colonel Stephen Clark  
27<sup>th</sup> Special Operations Wing  
100 South D.L. Ingram Boulevard  
Cannon Air Force Base, New Mexico 88103-5214

**RE: NOTICE OF DISAPPROVAL OF LONG-TERM MONITORING AND  
MAINTENANCE WORK PLAN FOR LANDFILL NO. 3 (LF-03/SWMU  
105), LANDFILL NO. 4 (LF-04-SWMU 104), LANDFILL NO. 25 (LF-  
25/SWMU 97) AND SEWAGE LAGOONS (SWMU 101), FINAL,  
DECEMBER 2008  
CANNON AIR FORCE BASE, EPA ID #NM7572124454  
HWB-CAFB-09-001**

Dear Col. Clark:

The New Mexico Environment Department (NMED) has received the Department of the Air Force's (Permittee) *Long-Term Monitoring and Maintenance Work Plan for Landfill No. 3 (LF-03/SWMU 105), Landfill No. 4 (LF-04-SWMU 104), Landfill No. 25 (LF-25/SWMU 97) and Sewage Lagoons (SWMU 101), Final, December 2008* (Work Plan). NMED has reviewed the Work Plan and hereby issues this Notice of Disapproval (NOD).

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**Comment 1: Sections 2.1, 2.2, 2.3 and 2.4**

The well construction history and well construction details are incomplete. The Work Plan must be a free standing document that contains all essential information and complete references to all cited supporting documents (i.e., document titles, dates, figure and table numbers, and page numbers). NMED had to review other, related documents to get complete information about the wells. For example; Section 2.1 indicates that groundwater Long Term Monitoring was initiated at LF-03 using well MW-O, but provides no information about the installation of well MW-O or its replacement with MW-Oa (shown in Figure 3). Section 2.2 indicates that groundwater Long Term Monitoring was initiated at LF-04 using well MW-N, but provides no information about the installation of well MW-N or its replacement with MW-Na (shown in Figure 3). Installation and construction details are similarly incomplete in Sections 2.3 and 2.4. Revise the sections to describe well construction histories, well abandonments and all installation details.

**Comment 2: Figure 3, Locations of Monitoring Wells**

Figure 3 indicates locations of monitoring wells Na (downgradient from Landfill No. 4), Oa (downgradient from Landfill No. 3), Pa and Ra (both downgradient from Landfill No. 25). Figure 3 does not indicate the locations of monitoring wells T, V, W or X that are associated with the former North and South Sewage Lagoons. As instructed in NMED's letter dated March 26, 2008, the Permittee must include a map depicting the locations of all groundwater monitoring wells used in the long term monitoring. Revise Figure 3 to include locations of all monitoring wells.

**Comment 3: Procedures, Maintenance**

The maintenance activities described are intended to ensure that all erosion control features and other protection measures are in effective operating condition. These activities include removing sediment or debris, filling in and contouring areas impacted by erosion. However, depressions in the soil cap are not addressed. Depressions are described as "limited areas of subsidence...associated with the waste burial trenches" in the *2008 Biennial Groundwater Monitoring and Annual Landfill Inspection Report Landfill No. 3 (LF-03/SWMU 105), Landfill No. 4 (LF-04/SWMU 104), and Landfill No. 25 (LF-25/SWMU 97) Cannon Air Force Base, New Mexico, Final, December 2008*. The Permittee must fill in depressions to prevent pooling of storm water that could percolate through the soil cap and buried debris and may result in migration of contaminants to the groundwater. Revise the Vegetative Cover Inspection and Maintenance procedures to include filling in depressions and appropriate grading to direct storm water off of the landfill covers.

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Existing depressions must be filled before the next inspection. After repairs are complete, the Permittee must provide photo documentation for NMED's approval.

**Comment 4: Section 4.4, Investigation-Derived Waste**

The Permittee proposes discharging waste water from well purging and equipment decontamination to the ground surface in the vicinity of the sampling location, based on historical analytical results of groundwater monitoring at the sites and waste characterization evaluated from comparison of groundwater data with applicable regulatory levels. NMED approves of discharging investigation-derived wastewater to the ground surface only after laboratory results are received and groundwater data have been compared to applicable regulatory levels. The Permittee must store investigation-derived waste water until monitoring results are received and it has been determined that it is appropriate to discharge it on the ground surface.

**Comment 5: Appendix A, Cover System Inspection Report**

Appendix A contains two Cover System Inspection Report Forms; one for Landfill No. 3 and Landfill No. 4 and the other for Landfill No. 25 and the Sewage Lagoons. If each of two sites on a single form has a different problem in the same category, descriptions of the problems will be difficult to complete by the observer and difficult to review. The Permittee must prepare and include a separate Cover System Inspection Report form for each Solid Waste Management Unit.

**Comment 6: Appendix C, Standard Operating Procedures**

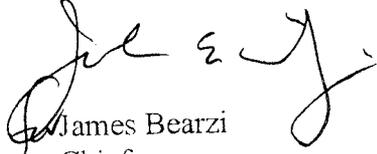
Appendix C contains Standard Operating Procedures (SOPs) for Non Low-Flow Well Purging, Low-Flow Purging with Dedicated Submersible Pumps and Low-Flow Purging with Non-Dedicated Submersible Piston Pumps. However, the monitoring wells were sampled with a Non-Dedicated Submersible Bladder Pump in December 2008. The SOPs do not describe procedures for Non-Dedicated Submersible Bladder Pumps. Revise the SOPs to include procedures for any and all foreseeable types of pumps that may be used to purge and sample the monitoring wells.

The Permittee must address each comment and submit a response to the NOD and a revised Work Plan by July 31, 2009. The Permittee must also submit a redline-strikeout version of the revised Work Plan (electronic copy) that includes all changes and edits to the Work Plan as part of the response.

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Please contact Pat Stewart at (505) 476-6059, should you have any questions.

Sincerely,



James Bearzi  
Chief  
Hazardous Waste Bureau

cc: J. Kieling, NMED HWB  
D. Cobrain, NMED HWB  
N. Dhawan, NMED HWB  
P. Stewart, NMED HWB  
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