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CERTIFIED MAIL - RETURN RECEIPT REQUESTED

June 22, 2010

Ronald Lancaster  
27 SOCES/CEA  
506 N. DL Ingram Blvd.  
Cannon AFB, New Mexico 88103-5003

**RE: REVIEW OF CORRECTIVE MEASURES STUDY AT SWMUS 31, 48A, 77 AND 127, JUNE 2000 AND FINAL LETTER REPORT, REVISION 01, VOLUNTARY CORRECTIVE ACTION AGE MAINTENANCE FACILITY SHOP PAD (SWMU 31) AND POL WASH PAD (SWMU 127) JULY 2008, CANNON AIR FORCE BASE, NEW MEXICO  
EPA ID #NM7572124454  
HWB-CAFB-06-004 AND HWB-CAFB-08-003**

Dear Mr. Lancaster:

The New Mexico Environment Department (NMED) has reviewed Cannon Air Force Base's (Permittee) *Corrective Measures Study at SWMUS 31, 48a, 77 and 127, June 2000* (CMS Report) and *Final Letter Report Revision 01, Voluntary Corrective Action AGE Maintenance Facility Shop Pad (SWMU 31) and POL Wash Pad (SWMU 127), July 2008* (Letter Report). The CMS Report was approved with modifications March 26, 2008. The Letter Report was approved December 12, 2008. NMED provides comments presented below.

Solid Waste Management Unit (SWMU) 127 was a 135 gallon concrete sand trap and leach field that received wash water from a refueling truck wash rack. Potential contaminants are JP-4 fuel, grease, and motor oil.

A new Oil-Water Separator (OWS) was installed in May 1991 and the original leach field was bypassed to a new leach field approximately 20 feet to the northeast. The SWMU does not include the new OWS. The OWS was inspected in 1993 and no evidence of leakage or spillage was detected. The sand trap, OWS and bypass conduit were removed on April 13, 2003 (statement made via telephone communication by Hugh Hanson on May 25, 2010).

A RCRA Facility Investigation (RFI) was conducted in September 1993 that included eight soil borings: two through the concrete wash pad to 10 feet below ground surface (bgs); three in the original leach field to 60 feet bgs; and three in the new leach field to 60 feet bgs. Volatile organic compounds (VOCs) were detected in soil samples collected from the borings and at various depths, mostly in surface and near surface soil, but all detections were below NMED Residential Soil Screening Levels (SSLs). Semivolatile organic compounds (SVOCs) were also detected in some of the soil samples collected at various depths, mostly in surface and near surface soil. Three SVOCs were detected at concentrations slightly above 2009 Residential SSLs; benzo(a)anthracene, benzo(a)pyrene and benzo(b)fluoranthene. Several metals were detected at concentrations above background, but none of the detected concentrations were above Residential SSLs. Total Petroleum Hydrocarbon (TPH) was detected at concentrations above NMED TPH Screening Guidelines (October, 2006) Residential Exposure to Unknown Oil (200 mg/kg). All TPH detections were from samples collected at intervals within 20 feet bgs.

A Baseline Risk Assessment (RA), conducted in February 1994 for both human health and ecological receptors, indicated no unacceptable risk. However, the RA did not consider future residential receptors.

SWMU 127 was sampled again in December 1994: two soil borings were drilled to depths of 10 feet through the concrete wash pad; three borings were advanced in the original leach field to depths of 60 feet bgs; and three borings were advanced in the new leach field to depths of 60 feet bgs. VOCs were detected in soil samples collected from the borings and at various depths, again mostly in surface and near surface soil, but all of the detections were below Residential SSLs. SVOCs were also detected in soil samples collected from various depths, mostly in surface and near surface soil. One SVOC was detected in shallow soils at a concentration slightly above 2009 Residential SSLs; benzo(a)pyrene. Several metals were detected at concentrations above background, but less than Residential SSLs. TPH was detected in 30 of 134 samples. Five of the 30 detected concentrations were above Residential Exposure to Unknown Oil (200 mg/kg) based on NMED TPH Screening Guidelines, October 2006. There were detections of TPH at 30, 40 and 50 feet bgs in the old and new leach field borings with no trends of TPH in shallower samples of the same borings.

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NMED's Notice of Disapproval (NOD) [dated December 26, 2006] of the CMS Report was responded to satisfactorily except for issues regarding VOCs and vapor intrusion. NMED ran the SL-Screen-Feb04.xls J&E model in back-calculation mode and determined that maximum concentrations of ethylbenzene, benzene, toluene and xylenes exceed target concentrations protective from indoor air exposures. NMED issued a second NOD [dated July 18, 2007] for the CMS Report addressing concerns for the VOCs and the lack of considerations for the vapor intrusion pathway. The Permittee responded [dated October 12, 2007] as follows.

"Only the BTEX concentrations associated with [one sample from one boring] exceed the target concentrations based on the J&E model. This sample was collected from surface soil (collected at 0 to 0.5 feet immediately beneath concrete). BTEX compounds were not detected in the 5 feet or 10 feet samples, indicating there is not a significant source of BTEX in the subsurface.

The maximum detected VOC concentrations were located immediately beneath the wash rack and as such, existing conditions are not relevant to the enclosed building parameters or to the residential exposure assumptions presently used in the J&E vapor intrusion model.

It should also be noted that a project which includes additional characterization of SWMU 127, potentially followed by a removal action, is currently in the planning phase."

NMED responded with an Approval with Modifications [dated March 26, 2008] with the statements;

"...SWMU 127 has detections of several VOCs and while most of the concentrations are low, it can not be determined if overall risk would be impacted by including an analysis of exposure to indoor air.

The Permittee in the Response proposed additional characterization and potential removal of soil at SWMU 127. NMED will reevaluate SWMU 127 once confirmation sampling and, if necessary, risk analysis (accounting for vapor intrusion pathway) is performed to determine overall risk after excavation."

The site was sampled again in February 2008: three borings were drilled to 2.5 or 3 feet bgs through the wash pad; seven borings were advanced to 2.5 or 3 feet bgs near the wash pad; seven borings to 3 feet bgs were drilled in and near the old leach field; and one boring was advanced to 3 feet bgs in the new leach field. The soil samples were analyzed for PAHs and TPH, but were not analyzed for VOCs. None of the detected PAHs or TPH was above Residential SSLs. A Tier 1 Risk Screening analysis (including only PAH results from the 2008 samples) indicated no hazard. No soil was removed and VOCs were not addressed. The Permittee concluded that SWMU 127 should be considered for clean closure and proposed for NFA. NMED approved the Letter Report on December 23, 2008.

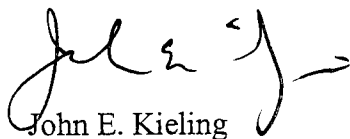
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NMED has no documentation indicating if the wash pad is still in use and, if so, where the wash water is discharged.

VOCs were detected at the site in 1993 and 1994 RFIs. The Baseline RA was conducted using only 1993 data and did not include future residential receptors. A final risk screening should be revised to include all historical detections (1993, 1994, 2008) of all metals and organics determined to be constituents of potential concern and consider both industrial and residential cleanup scenarios. In addition, the final risk screening must include a discussion of the potential for exposure via inhalation. NMED will make the determination of eligibility for Corrective Action Complete with or without Controls upon review of the final risk assessment.

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

Sincerely,



John E. Kieling  
Program Manager  
Permits Management Program  
Hazardous Waste Bureau

cc: D. Cobrain, NMED HWB  
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