



DEPARTMENT OF THE AIR FORCE

HEADQUARTERS 49TH FIGHTER WING (ACC)
HOLLOMAN AIR FORCE BASE, NEW MEXICO

U.S. AIR FORCE



1947 - 1997

MEMORANDUM FOR NEW MEXICO ENVIRONMENT DEPARTMENT

Attn: Mr. Benito Garcia
Chief, Hazardous & Radioactive Materials Bureau
P.O. Box 26110
Santa Fe NM 87502



FROM: 49 CES/CEV

550 Tabosa Avenue
Holloman AFB NM 88330-8458

SUBJECT: Response to Notice of Deficiency (NOD) for Voluntary Corrective Measures Work Plan for Solid Waste Management Unit (SWMU)136, Building 1119 Washrack Drainage Pit

1. In response to your 5 May 97 NOD, Atch 1 is the revised Final Construction Work Plan for SWMU 136, Building 1119, Washrack Drainage Pit Soil Bioventing System. The revised work plan has been modified to incorporate New Mexico Environment Department (NMED) comments. Certain comments (Items #2, #3, #8) were found either not to pertain to this specific site, or, required information outside the scope of this work plan and are discussed in the following text.
2. In response to Items #2 and #3, no surfactants were used at this site and therefore no Material Safety Data Sheet is attached. In regard to Item #8, bioventing systems commonly are capable of remediating total petroleum hydrocarbon (TPH)-contaminated soils to levels as low as 100 parts per million (ppm) over one to two years. Site SD-47, the POL Washrack Drainage Area, has a bioventing system which has been in place since April 1995. Only one soil sample, taken in October 1996, still had TPH concentrations greater than 1000 ppm (1300 ppm). No evidence has been found to indicate that the bioventing systems currently in-place on Holloman AFB will reach asymptotic levels prior to achieving the NMED 1000 ppm TPH soil clean up standard. In fact, degradation rates calculated for FT-31, the Fire Training Area, indicate that over 20,000 pounds of fuel have been biodegraded to date. However, every effort will be made to optimize bioventing system efficiencies in order to expedite remediation.
3. If you have any questions regarding the revised work plans, or require additional information, please contact Warren Neff at (505) 475-5395.


HOWARD E. MOFFITT
Deputy Base Civil Engineer

Attachment:
Final Construction Workplan for SWMU 136

COMMENTS ON SWMU 136 SOIL VENTING SYSTEM FINAL WORK PLAN

WARREN NEFF
49 CES/CEVR



Pg 1-4, Sec 1.2 Revise this section to state that “analytical data gathered during the RCRA Facility Investigation (RFI) performed on this site in 1994 indicated that no hazardous constituents were present at the site. The primary contaminant was total petroleum hydrocarbons (TPH) with maximum levels of 4000 to 9000 ppm in soil. Benzene and other volatile organic compounds were present only in the parts per billion (ppb) level. Therefore, a QAPP for hazardous waste activities is not required.”

Pg 4-3, Sec 4.3.1 This section needs to be revised to state that “the 1994 RFI delineated the nature and extent of contamination which was very limited. The contamination was limited to two discrete intervals in a single boring (B01), with maximum TPH concentrations of 9000 ppm. In addition, of the volatile and semi-volatile organic compounds that were detected, all were detected in the ppb level. Therefore, the need to characterize the hydrocarbon “plume” is not necessary since the potential for migration is non-existent.”

Pg 2-1, Sec 2.2 This section needs to be revised to state that “the 1994 RFI documented that the contamination at this site was limited to TPH at levels which do not pose a threat to groundwater. Also, the limited number of volatile and semi-volatile organic compounds detected in soil samples from the site are all in the ppb range and are adsorbed onto the soil. Therefore, the potential for groundwater contamination is negligible and the need to sample groundwater does not exist.”

Pg 4-5, Sec 4.3.6 The O&M Manual needs to be referenced in this section. We need to be sure that we discuss measurements to be taken, measurement of system efficiency, etc.

Pg 4-6, Sec 4.3 This section needs to be revised as follows: 1) Delete sentence “If bioventing continues beyond the first year, sampling will probably be conducted on a quarterly or biannual cycle until it can be confirmed that cleanup goals have been achieved.” 2) Add the following sentence-“As part of Holloman’s basewide long-term operation activities, soil borings will be taken on a biannual basis for TPH at SWMU 136. These biannual soil borings will be taken until we have confirmed that the NMED 1000 ppm TPH soil standard has been attained. At that time, a site closeout report will be forwarded to NMED with the appropriate analytical data required for closeout.”