FILE: HSWA/CAFB/APPENDIX II & III
TRACK: CAFB/2-15-96/2-20-96/GARCIA/NELEIGH/APPENDIX II & III CONSTRUCTION WORK PLAN/LIST OF DEFICIENCIES

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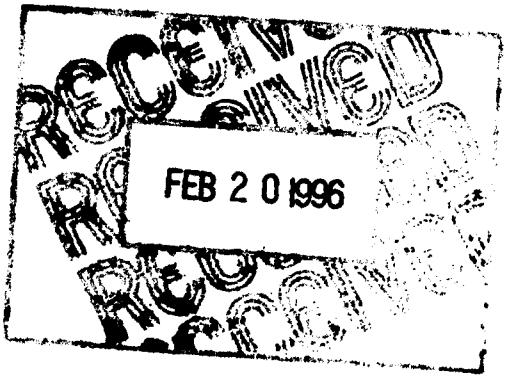
FEB 15 1996



ENTERED

Mr. Benito Garcia, Chief
Hazardous and Radioactive Materials Bureau
New Mexico Environment Department
2044A Galisteo
Santa Fe, NM 87505

Re: List Of Deficiencies Construction Work Plan Appendix II and III Cannon Air Force Base N.M. NM7572124454

Dear Mr. Garcia:

We have completed our review of the Construction Work Plan for Appendix II and III SWMU's at Cannon Air Force Base dated September 1995. The document was reviewed by the Federal Facilities RCRA Permits Group and the Risk Assessment Group.

EPA believes the enclosed comments should be addressed to the satisfaction of the regulatory agencies. We suggest that the New Mexico Environment Department combine the responses from both agencies into a single Notice of Deficiency for submittal to Cannon Air Force Base.

If you have any questions, please contact Mr. Bob Sturdivant of my staff at (214) 665-7440.

Sincerely,

David Neleigh, Chief
New Mexico and Federal
Facilities Section

Enclosure

cc: Mr. Steve Pullen
New Mexico Environment Department

LIST OF DEFICIENCIES
CONSTRUCTION WORK PLAN
APPENDIX II AND III
CANNON AIR FORCE BASE
CLOVIS, N.M.
NM7572124454

GENERAL COMMENTS

1. The usages of Removal Action Levels and Cleanup Levels need to be differentiated. Removal action levels are used for project sites which pose immediate threats to human health and the environment. Cleanup levels from confirmation tests should be met, not Removal Action Levels.

2. The analyte parameters; TRPH and BTEX can be used for screening purposes but not for cleanup purposes, because the toxicities of individual compounds in these parameters are varied. The % of benzene in TRPH and BTEX should be verified.

   The NMED's cleanup levels for BTEX, 50 ppm and benzene, 10 ppm appear too high to protect human health.
   Although EPA does not have cleanup standards for TRPH and BTEX, the risk-based cleanup criteria(RBC) is 3.2 ppm for benzene(See, Region 9 Preliminary Remediation Goals, February 1, 1995). This is the level calculated using the industrial land use scenario, and assuming that no contaminated soil has impacted the ground water.

3. EPA recommends that the individual VOCs and SVOCs be analyzed and the cleanup levels for detected compounds should be established based on risk-based concentrations(RBCs), background values, or sample quantitation limits, but not the TCLP levels indicated in Table 1 of the Work Plan.

4. All measured chromium values should be assumed to be in a hexavalent state for the Risk Assessment. An alternative approach would be to analyze samples for valence specific chromium.

5. Cell #1 shall be used to landfill soils associated with UST removal operations, and Cell #2 shall be used to landfill soils associated with OWS, sand traps, leach well, drain, and associated piping removal operations. A Storage Cell (#3 ?) for storage of soil prior to remediation shall be constructed adjacent to landfarm Cells 1 and 2. It is not clear if soils intended for Cells 1 and 2 may be mixed in this Storage Cell. Metals concentrations from OWS type units may be higher than those from the UST type units.

Dilution of metals concentrations by mixing the soils from two sources in Storage Cell 3 is a regulatory concern.

6. In summary, the following are soil cleanup levels for an industrial land use scenario recommended by EPA for Cannon AFB.

Analyte	Cleanup level,ppm	Rationale
TRPH	100	NMED level
BTEX	10	EPA recommended
Benzene	3.2	Region 9 RBC
VOCs	depends on analytes	RBC
SVOCs	depends on analytes	RBC or background
Arsenic	around 6	site background
Barium	1,000	Region 9 RBC ceiling
Cadmium	100	Table 1
Chromium, hexa	230	Region 9 RBC
Lead	500	Table 1
Mercury	20	Table 1
Selenium	100	Table 1
Silver	500	Table 1
Antimony	6.75	Table 1
Beryllium	0.73	Table 1
Cobalt	4.5	Table 1
Copper	5.4	Table 1
Manganese	164	Table 1
Nickel	9	Table 1
Thallium	0.5	Table 1
Zinc	21.9	Table 1

SPECIFIC COMMENTS

1. Table 1 page 5: Removal Action Levels and Cleanup Levels for VOC's, SVOC's, and 8 metals were determined by using EPA Methods 1311. TCLP levels are used to determine hazardous wastes. EPA does not set cleanup levels for this suite of constituents. EPA Method 1311 is not necessary for sample analysis.

2. Drawing #1 (SWMU Layout) does not show SWMU # 92.

3. Section 2.0 (Existing Site Conditions) text refers to SWMU's 32 and 33, however, Drawing #1 shows SWMU'S 32A and 33B.

4. Section 3.6.1. page 18 line 27 and 28. Field screening of the concrete or asphalt pavement waste materials before disposal should be added to this plan.

5. Documentation Requirements. The procedures describing how field measurements are reviewed and validated should be specified. This should include formulas used to calculate results, and procedures used to verify that field measurements are correct.

6. Section 4.0 Sampling and Analysis Plan. The following information should be included in the plan:

    1. Data quality objectives.

    2. Detection limits.

    3. Name of analytical laboratory.

    4. Sample preservation and holding times.

    5. Criteria for data acceptance and rejection.