

ENTERED



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5 January 1994

Ms. Sheri Bone
Directorate of Environment
U. S. Army Air Defense Artillery Center and Ft. Bliss
ATZC-ISE-E
Building 515B
Ft. Bliss, TX 79916-0058

File Red 94

RE: OB/OD Treatment Unit, Part B Permit Application, NMED

Dear Ms. Bone:

Mr. Cornelius Amindyas of the New Mexico Environment Department has requested that detection limits and the following analytes be added to our permit application:

Strontium	Zinc
Antimony	Iron
Potassium	Copper

After discussing this with you, we have prepared the appropriate tables (attached) and transmitted them to Mr. Amindyas with this letter.

Very truly yours,

ROY F. WESTON, INC.

Thomas W. Hoskings, Ph.D., P.E.
Project Director

TWH/lcd

Attachments

cc: Cornelius Amindyas
State of New Mexico Environment Department
P. O. Box 26110
Santa Fe, New Mexico 87502

TABLE 4
SOIL SAMPLE ANALYSES
EXPLOSIVES ORDNANCE DEMOLITION AREA
FORT BLISS, MCGREGOR RANGE
OTERO COUNTY, NEW MEXICO

ANALYTE	ANALYTICAL METHOD¹	SAMPLE VOLUME	PQL²
<u>INORGANICS:</u>			
Free Liquids	SW846 9095	100g	NA ³
Ignitability	SW846 1010	10g	NA ³
pH	SW846 9040	10g	0.1 SU
Reactivity	GAP Test - Appendix III	10g	NA ³
Reactivity	Deflagration/Detonation Test - Appendix III	20g	NA ³
Nitrate/Nitrite (as N)	EPA 353.3	10g	1 mg/kg
<u>METALS:</u>			
Arsenic	SW846 7060	100-500g	0.2 mg/kg
Antimony	SW846 6010	100-500g	10 mg/kg
Barium	SW846 6010	100-500g	5 mg/kg
Beryllium	SW846 6010	100-500g	0.5 mg/kg
Cadmium	SW846 6010	100-500g	1 mg/kg
Chromium	SW846 6010	100-500g	2 mg/kg
Copper	SW846 6010	100-500g	2 mg/kg
Iron	SW846 6010	100-500g	3 mg/kg
Lead	SW846 6010	100-500g	5 mg/kg
Mercury	SW846 7471	100-500g	0.1 mg/kg
Potassium	SW846 6010	100-500g	200 mg/kg
Selenium	SW846 7740	100-500g	0.2 mg/kg
Silver	SW846 6010	100-500g	3 mg/kg
Strontium	SW846 6010	100-500g	10 mg/kg
Zinc	SW846 6010	100-500g	1 mg/kg
<u>ORGANICS:</u>			
Picric Acid	SW846 8270	100-500g	660 µg/kg
HMX	SW846 8330	100-500g	2.2 mg/kg
RDX	SW846 8330	100-500g	1.0 mg/kg
2,4,6-Trinitrotoluene	SW846 8330	100-500g	0.25 mg/kg
2,4-Dinitrotoluene	SW846 8330	100-500g	0.25 mg/kg
2,6-Dinitrotoluene	SW846 8330	100-500g	0.26 mg/kg
Nitroglycerine	SW846 8330	100-500g	0.5 mg/kg

¹ SW846 = "Test Methods for Evaluating Solid Waste - Physical/Chemical Methods," Environmental Protection Agency, SW846.

EPA = "Methods for Chemical Analyses of Water and Wastes," Environmental Protection Agency, 1979, Revised 1983.

² PQL = Practical Quantitation Limit. PQL's are highly matrix-dependent and actual achievable PQL's may vary from those listed.

³ NA = Not Applicable.

SECTION 6

ANALYTICAL METHODS

Analytical methods will be performed in accordance with those listed in Table 6-1 below:

TABLE 6-1

**SOIL SAMPLE ANALYSES
EXPLOSIVES ORDNANCE DEMOLITION AREA
FORT BLISS, MCGREGOR RANGE
OTERO COUNTY, NEW MEXICO**

ANALYTE	ANALYTICAL METHOD¹	SAMPLE VOLUME	PQL²
<u>METALS:</u>			
Arsenic	SW846 7060	100-500g	0.2 mg/kg
Antimony	SW846 6010	100-500g	10 mg/kg
Barium	SW846 6010	100-500g	5 mg/kg
Beryllium	SW846 6010	100-500g	0.5 mg/kg
Cadmium	SW846 6010	100-500g	1 mg/kg
Chromium	SW846 6010	100-500g	2 mg/kg
Copper	SW846 6010	100-500g	2 mg/kg
Iron	SW846 6010	100-500g	3 mg/kg
Lead	SW846 6010	100-500g	5 mg/kg
Mercury	SW846 7471	100-500g	0.1 mg/kg
Potassium	SW846 6010	100-500g	200 mg/kg
Selenium	SW846 7740	100-500g	0.2 mg/kg
Silver	SW846 6010	100-500g	3 mg/kg
Strontium	SW846 6010	100-500g	10 mg/kg
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<u>ORGANICS:</u>			
Picric Acid	SW846 8270	100-500g	660 µg/kg
HMX	SW846 8330	100-500g	2.2 mg/kg
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2,6-Dinitrotoluene	SW846 8330	100-500g	0.26 mg/kg
Nitroglycerine	SW846 8330	100-500g	0.5 mg/kg
<u>INORGANICS:</u>			
Nitrate/Nitrite (as N)	EPA 353.3	10	1 mg/kg

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**TABLE II.C-1
SOIL SAMPLE ANALYSES
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FORT BLISS, MCGREGOR RANGE
OTERO COUNTY, NEW MEXICO**

ANALYTE	ANALYTICAL METHOD¹	SAMPLE VOLUME	PQL²
pH	SW846 9040	10g	0.1 SU
Reactivity	GAP Test - Appendix III	10g	NA ³
Reactivity	Deflagration/Detonation Test - Appendix III	20g	NA ³
Nitrate/Nitrite (as N)	EPA 353.3	10g	1 mg/kg
<u>METALS:</u>			
Arsenic	SW846 7060	100-500g	0.2 mg/kg
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Chromium	SW846 6010	100-500g	2 mg/kg
Copper	SW846 6010	100-500g	2 mg/kg
Iron	SW846 6010	100-500g	3 mg/kg
Lead	SW846 6010	100-500g	5 mg/kg
Mercury	SW846 7471	100-500g	0.1 mg/kg
Potassium	SW846 6010	100-500g	200 mg/kg
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