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CERTIFIED MAIL - RETURN RECEIPT REQUESTED

March 1, 2012

Mr. David Scruggs, Chief
Environmental Restoration Program
49 CES/CEVR
550 Tabosa Ave.
Holloman AFB, NM 88330-8458

**SUBJECT: CORRECTION
APPROVED BASEWIDE BACKGROUND LEVELS
HOLLOMAN AIR FORCE BASE, EPA ID# NM6572124422
HWB-HAFB-09-004**

Dear Mr. Scruggs:

The New Mexico Environment Department (NMED) conditionally approved the United States Air Force's (Permittee's) *Basewide Background Study Report*, for Holloman Air Force Base (HAFB) on December 28, 2011. Tables of approved background levels for soil and groundwater were included with the aforementioned letter. Since this approval was issued, in an exchange of e-mails with Mr. Frank Gardner, Bhate (contractor for HAFB), it was decided that the original background levels for uranium-234, uranium 238, and uranium 235/236 should be adjusted using a different approach. The result is that the calculated background values for U-234 and U-235/236 would be slightly higher than those listed in Table 2 of the December 28, 2011 letter. NMED agrees to make these changes.

Additionally, the unit shown for alkalinity, chloride, sulfate, and sulfide on Table 2 of NMED's letter of December 28 is incorrect. The correct unit for each constituent should be mg/L, not µg/L. Table 2 of this letter shows the re-adjusted background levels for U-234, U-238, and U-235/236, and the corrected unit for alkalinity, chloride, sulfate, and sulfide. There are no corrections to Tables 1 and 3; these tables are included in this letter for completeness.

Approved Background Levels for Soil

The background levels approved for soil apply to all depths, regardless of whether soil is

saturated or unsaturated with groundwater, and are found in Table 1 of this letter.

Table 1 – Approved Background Levels for Constituents in Soil

Soil Constituent	Approved Background Level	Unit	Remarks
Aluminum	13,722	mg/kg	
Antimony	1.6	mg/kg	
Arsenic	3.7	mg/kg	
Barium	169.3	mg/kg	
Beryllium	1.6	mg/kg	
Cadmium	0.3	mg/kg	
Calcium	317,332	mg/kg	
Chromium	25	mg/kg	
Cobalt	7.7	mg/kg	
Copper	13	mg/kg	
Iron	23,049	mg/kg	
Lead	10.9	mg/kg	
Magnesium	16,991	mg/kg	
Manganese	393	mg/kg	
Mercury	10.8	µg/kg	
Nickel	17.4	mg/kg	
Potassium	5,077	mg/kg	
Selenium	1.4	mg/kg	
Silver	1.1	mg/kg	
Sodium	5,196	mg/kg	
Thallium	1.3	mg/kg	
Tin	2.1	mg/kg	
Vanadium	42.6	mg/kg	
Zinc	54.6	mg/kg	
Carbon-14	0.84	pCi/g	
Radium-226	1.35	pCi/g	
Radium-228	0.95	pCi/g	
Lead-210	1.04	pCi/g	
Thorium-228	1.35	pCi/g	
Thorium-230	1.55	pCi/g	
Thorium-232	1.33	pCi/g	
Uranium-234	1.43	pCi/g	
Uranium-235/236	0.08	pCi/g	
Uranium-238	0.75	pCi/g	
Total Uranium	2.5	µg/g	

Approved Background Levels for Constituents in Groundwater

The approved background levels for groundwater constituents are found in Tables 2 and 3 of this letter, for unfiltered (total) and filtered (dissolved) constituents in groundwater, respectively.

Table 2 – Approved Background Levels for Unfiltered (Total) Constituents in Groundwater

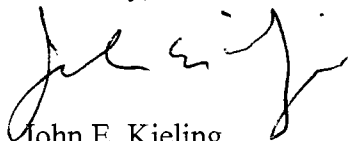
Groundwater Constituent	Approved Background Level	Unit	Remarks
Aluminum	1043	µg/L	
Antimony	6	µg/L	Set at MCL
Arsenic	10	µg/L	Set at MCL
Barium	38	µg/L	
Beryllium	4	µg/L	Set at MCL
Cadmium	5	µg/L	Set at MCL
Calcium	1136664	µg/L	
Chromium	12	µg/L	
Cobalt	36	µg/L	
Copper	9.8	µg/L	
Iron	300	µg/L	Set at MCL
Lead	9	µg/L	
Magnesium	3692782	µg/L	
Manganese	50	µg/L	Set at MCL
Mercury	0.5	µg/L	
Nickel	22	µg/L	
Potassium	212144	µg/L	
Selenium	50	µg/L	Set at MCL
Silver	10	µg/L	
Sodium	20989585	µg/L	
Thallium	2	µg/L	Set at MCL
Tin	58	µg/L	Set at maximum MDL
Vanadium	90	µg/L	
Zinc	17	µg/L	
Carbon-14	8.6	pCi/L	
Radium-226	2.62	pCi/L	
Radium-228	3.99	pCi/L	
Lead-210	3.10	pCi/L	
Thorium-228	0.99	pCi/L	
Thorium-230	0.37	pCi/L	
Thorium-232	0.061	pCi/L	
Uranium-234	21.09	pCi/L	Adjusted for WQCC standard and EPA MCL
Uranium-235/236	0.53	pCi/L	Adjusted for WQCC standard and EPA MCL
Uranium-238	10.01	pCi/L	Adjusted for WQCC standard and EPA MCL
Total Uranium	30	µg/L	Set at MCL
Alkalinity	387	mg/L	
Chloride	35040	mg/L	BG exceeds MCL and WQCC standard in all samples
Sulfate	17419	mg/L	BG exceeds MCL and WQCC standard in all samples
Sulfide	1	mg/L	

Table 3 – Approved Background Levels for Filtered (Dissolved) Constituents in Groundwater

Groundwater Constituent	Approved Background Level	Unit	Remarks
Aluminum	54	µg/L	
Antimony	6	µg/L	Set at MCL
Arsenic	10	µg/L	Set at MCL
Barium	30.2	µg/L	
Beryllium	1	µg/L	
Cadmium	2.5	µg/L	
Calcium	1151302	µg/L	
Chromium	2.5	µg/L	
Cobalt	2.6	µg/L	
Copper	22	µg/L	Set to maximum of sample population
Iron	65.6	µg/L	
Lead	9	µg/L	
Magnesium	3630927	µg/L	
Manganese	50	µg/L	Set to MCL
Mercury	0.2	µg/L	
Nickel	15.9	µg/L	
Potassium	120480	µg/L	
Selenium	25.3	µg/L	
Silver	10	µg/L	
Sodium	19972499	µg/L	
Thallium	2	µg/L	Set at MCL
Tin	58	µg/L	Set at maximum MDL
Vanadium	73.8	µg/L	
Zinc	23	µg/L	Set to maximum of sample population

If you have any questions regarding this matter, please contact Mr. William Moats of my staff at (505) 222-9551.

Sincerely,



John E. Kieling
Acting Chief
Hazardous Waste Bureau

Mr. David Scruggs
March 1, 2012
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File: HAFB 2012 and Reading