

F B O L

ENTERED

/o=State of New Mexico/ou=First Administrative Group/cn=Recipients/cn=john.kieling

**From:** Mckernan, Pat [patricia.mckernan@us.army.mil]  
**Sent:** Wednesday, August 30, 2006 7:46 AM  
**To:** Kieling, John, NMENV  
**Subject:** Fort Bliss permit mod and Closure Certification Report  
**Attachments:** Metals Summary Aug06.xls

John and Tammy: In response to your letters of August 16, 2006, we have some questions and comments.

- 1) The last time you approved a Class I permit modification for Fort Bliss (July 2005), we sent notification to everyone on the mailing list you provided. Are we required to send notification about the permit mod approved in August 2006, which specifies that Fort Bliss will use residential New Mexico SSLs as closure standards and which extends the date for a revised Closure Certification Report to November 7, 2006?
- 2) We revised the results table for metals (attached) to include risk and hazard calculations. Even using the 2006 SSLs for barium (15,600) and cadmium (39), the cumulative hazard is .997, according to our calculations. We do, however, plan to use the 2005 SSLs for our Closure Certification Report.
- 3) If you agree, we will add the attached table to the Closure Certification Report, along with a brief explanation of the cumulative risk and hazard. We will also revise the Report to delete any reference to using background values as closure standards.

Thank you for your help with establishing the cumulative risk and hazard. If you have any other ideas, requirements, etc., for the Closure Certification Report, please call me at 915 568-2688 or send an email.

Pat McKernan  
Environmental Protection Specialist  
Directorate of Environment  
Fort Bliss

Metals <sup>1</sup>	Table ??? Estimation of Cumulative Risk and Hazard										
	Minimum Concentration (ppm)		Maximum Concentration (ppm)		95% UCL Value (ppm) <sup>2</sup>	NMED Res SSL (ppm)	C/NC	Risk (Max)	Risk (95% UCL)	Hazard	2006 SSLs
Antimony	1.01	UM	0.974	JM	---	31.3	C			0.031118	0.031118
Arsenic - Pre Response Action	0.602	J	20.3		4.83	3.9	C	5.21E-05	1.24E-05		
Arsenic - Post Response Action	0.602	J	6.37		3.66	3.9	NC	1.63E-05	9.38E-06		
Barium	15		139		---	5,450	NC			0.025505	0.008910
Beryllium	0.242		0.677		---	156	NC			0.004340	0.004340
Cadmium	0.097	J	6.48		---	74	NC			0.087568	0.166154
Chromium	1.35		13.5		---	100,000	NC			0.000135	0.000135
Cobalt	1.03	U	48.1		---	1,520	NC			0.031645	0.031645
Copper	2.46		443		---	3,130	NC			0.141534	0.141534
Iron	7,920		13,900		---	23,500	NC			0.591489	0.591489
Lead	1.58	M	44.3		---	400					
Mercury	0.02	U	0.032		---	23.5	NC			0.001362	0.001362
Potassium	707		5,920		---	NE					
Selenium	1	U	0.638	JM	---	391	NC			0.001632	0.001632
Silver	0.505	U	1.35		---	391	NC			0.003453	0.003453
Strontium	71.8		376		---	46,900	NC			0.008017	0.008017
Zinc	6.86		179		---	23,500	NC			0.007617	0.007617
										0.935413	0.997406

**Notes:**

<sup>1</sup> Subsurface soil samples from the deep soil boring and background samples excluded from this summary presentation.

Results from the Site Characterization Event, as documented in the Site Characterization Report (Dec 2005).

<sup>2</sup> UCL value calculated only for those constituents where the maximum detected value exceeds the NMED Residential SSL.

ppm = parts per million

J = Analyte estimated below the sample quantitation limit or estimated above the sample quantitation limit due to QA/QC issues.

M = Value estimated due to potential matrix affects.

U = Analyte not detected above the sample quantitation limit shown.

NE = Not Established

C/NC = Carcinogen/Non-Carcinogen