

Freeman Christine D CNIN

From: Freeman Christine D CNIN
Sent: Tuesday, December 31, 2002 9:19 AM
To: 'Ramanauskas.Peter@epamail.epa.gov'
Cc: gateswh@efdsouth.navfac.navy.mil; dgriffin@dem.state.in.us; Peter Chevalier (E-mail 2)
Subject: RE: MFA Battery

Pete,

Responses to additional questions, as stated below, concerning the MFA Battery Site IMR are as follows:

1. Page 3-5 for the MFA Battery Site IMR has been revised and is attached as a pdf file. The Total Results column in Table 3-4 has been corrected to show the accurate data results. The correct sample results were originally included in Appendix D.
2. In making the comparison to the Base Wide Background Report, the field samples were not checked by a geologist to provide additional confirmation of the soil type. Only Figure 2-4 Surficial Geology, Depositional Environments, and Solid Waste Management Unit Location Map of the Base Wide Background Report was used to make the determination that the soil type was Pennsylvanian.



Battery Site
IMR.pdf

Please let me know if you have any additional questions or concerns.

Thanks,
Christine

-----Original Message-----

From: Ramanauskas.Peter@epamail.epa.gov
[\[mailto:Ramanauskas.Peter@epamail.epa.gov\]](mailto:Ramanauskas.Peter@epamail.epa.gov)
Sent: Thursday, December 26, 2002 10:18
To: Freeman Christine D CNIN
Cc: gateswh@efdsouth.navfac.navy.mil; dgriffin@dem.state.in.us
Subject: MFA Battery

Hi Christine (and everyone else),

Hope you all had a good Christmas. I'm trying to catch up with some of the smaller Crane documents and I took a look at the responses to comments (and revision pages) for MFA Battery. Still have some questions:

- 1) Table 3-4: The Total results and TCLP results shown are amazingly similar. Please provide additional explanation for this similarity.
- 2) In making the comparison to the Basewide Background report, were field samples checked by a geologist to provide additional confirmation of soil type (as per steps 3 and 4 on page 5-2 of the background study)?

Thanks!
Pete

All results in mg/kg	Soil Screening Levels		TCLP Value*	BATTERY AREA SAMPLES					
	EPA R9 PRGS			006	007	008	009	010	011
Parameter	Residential	Industrial							
Ignitability	NA	NA	NA	NI	NI	NI	NI	NI	NI
Corrosivity	NA	NA	NA	NC	NC	NC	NC	NC	NC
Reactivity	NA	NA	NA	NR	NR	NR	NR	NR	NR
Cobalt	4700	100,000	NA	13.5	25.7	15	13.5	14	17
Lithium	1600	41000	NA	6.6	7.2	5.8J	5.8	7.2	7.1
Manganese	1,800	32,000	NA	14900 ¹	34700 ¹	23200 ¹	17800 ¹	3470 ¹	7380 ¹
Nickel	1600	41,000	NA	30.7	40	35.6	31.9	30.6	35
Zinc	23000	100,000	NA	27800 ¹	65400 ¹	42700 ¹	67000 ¹	8020	19400
Arsenic ²	0.39	2.7	100	18	34.4	29.7	21.8	5.5	9.4
Barium	5400	100000	2000	176	651	141	484	165	277
Cadmium	37	810	20	47.2	82.1 ¹	51.8 ¹	59.1 ¹	8.5	31.4
Chromium	210	450	100	51.4	239 ¹	31.7	83.5	25.1	40.3
Lead	400	750	100	3720 ¹	2180 ¹	1560 ¹	5920 ¹	461 ¹	704 ¹
Mercury	23	510	4	0.92	0.88	7.3	0.42	0.77	0.69
Selenium	390	10,000	20	6	12.9	8	7	1.7	2.7
Silver	390	10,000	100	2.1	6.8	1.6	16.1	1.7	3.2

NA = not applicable

NI = not ignitable

NC = not corrosive

NR = not reactive

EPA Region 9 PRGs updated 1.24.01

* TCLP Values are the RCRA regulatory limits multiplied by 20. If the totals results listed exceed the TCLP Values, the sample could potentially exhibit toxic characteristics.

¹ = above Residential cleanup goals but below Industrial cleanup goals

² = above Industrial cleanup goals

3.3.3 Disposal Characterization

One composite sample was obtained from the Battery Area for waste characterization disposal purposes. The composite sample, identified as PES-012, was obtained by combining a grab sample from each of the six site characterization sample locations into one composite sample.

Since the total metals analysis for the six site characterization samples indicated that the levels of cadmium, chromium, lead, and mercury were potentially toxic, metals analysis was performed on a leached extract (in addition to totals analysis). Analytical results indicated that the sample did not exhibit toxic characteristics for metals. The totals and TCLP analytical results for the composite sample are listed in Table 34.

The analytical results from both the composite sample (PES-012) and PES-006 through 011 were submitted to Waste Management for disposal characterization approval.

Parameter	Total Results	TCLP Results
Arsenic	7.3	ND
Barium	147	1.6
Cadmium	18.9	0.39
Chromium	39.1	ND
Lead	552	1.3
Selenium	ND	0.022
Silver	1.7	ND
Mercury	0.49	ND

All results in ppm
ND not detectable