Montana Department of
ENVIRONMENTAL QUALITY
Brian Schweitzer, Governor
P. O. Box 200901 Helena, MT 59620-0901 (406) 444-2544 Website: www.deq.mt.gov

March 26, 2009

TO: Prospective Solid Waste Management Facilities

Re: Solid Waste Management Facility Questionnaire for Disposal of Heavy Metal Contaminated Soil and Sediment from the Spring Meadow Lake Reclamation Project, Lewis & Clark County, Montana

The Montana Department of Environmental Quality Mine Waste Cleanup Bureau (DEQ/MWCB) is gathering additional information on solid waste management facilities interested in the disposal off up to 55,000 tons of contaminated soil and sediment from the Spring Meadow Lake Reclamation Project located in Lewis and Clark County, Montana. The Spring Meadow Lake Reclamation Project includes portions of Spring Meadow Lake State Park and portions of the Montana Wildlife Center (MWC). The information you provide on the enclosed questionnaire will be made available to prospective bidders interested in the Spring Meadow Lake Reclamation Project. Construction activities for this project are scheduled to take place in summer 2009.

The Spring Meadow Lake Reclamation Project waste originated from historic mineral processing activities and is contaminated with lead, arsenic, and manganese, with lead and arsenic being the primary contaminants of concern. Additional information on the Spring Meadow Lake Reclamation Project can be found at the following DEQ website: http://deq.mt.gov/AbandonedMines/priority.asp.

The waste analysis from previous investigations is attached for your review. Previous investigations revealed one sample that exceeded TCLP for cadmium. This sample was located within the MWC portion of the project. To define the extent of this waste, the DEQ/MWCB is currently collecting additional samples in this area for TCLP analysis. The DEQ/MWCB **will not** send wastes that exceed TCLP to your facility for disposal. This material will be disposed of at an approved Class C solid waste management facility.

If you are interested in accepting the Spring Meadow Lake Reclamation Project waste for disposal, complete the attached Solid Waste Management Facility Questionnaire, sign and date the form, and return it to the address listed below.

Mailed:
Department of Environmental Quality
Remediation Division
Attn: Pebbles Clark
P.O. Box 200901
Helena, MT 59620-0901

Hand Delivered:
Department of Environmental Quality
Remediation Division
Attn: Pebbles Clark
1100 N. Last Chance Gulch
Helena, MT

Completed Solid Waste Management Facility Questionnaires must be received by the DEQ/MWCB by 5:00 PM, April 10, 2009.

If you have any questions about the questionnaire or the Spring Meadow Lake Reclamation Project, please feel free to contact the DEQ/MWCB project officer at (406) 841-5028 or through email at pclark2@mt.gov. Thank you for your interest in the Spring Meadow Lake Reclamation Project.

Sincerely,

Pebbles Clark

Pebbles Clark
Reclamation Specialist/Project Officer
Mine Waste Cleanup Bureau

Enclosures: DEQ/MWCB Solid Waste Management Questionnaire
Analytical Data

Montana Department of Environmental Quality
Mine Waste Cleanup Bureau

Solid Waste Management Facility Questionnaire

Spring Meadow Lake Reclamation Project
Lewis & Clark County, Montana

Introduction:
The Montana Department of Environmental Quality Mine Waste Cleanup Bureau is gathering additional information on solid waste management facilities interested in the disposal of up to 55,000 tons of contaminated soil and sediment from the Spring Meadow Lake Reclamation Project located in Lewis and Clark County, Montana. This waste originated from historic mineral processing activities and is primarily contaminated with lead and arsenic. The waste analysis from previous investigations is attached. The information provided below will be made available to prospective bidders interested in the Spring Meadow Lake Reclamation Project.

Section 1: General Information

1) Who is the solid waste management facility contact person?
    a. Name: _____
    b. Phone: _____
    c. Email: _____
2) Is your solid waste management facility a licensed solid waste management facility? _____
3) What is your permit number? _____
4) What classes of waste are you licensed to dispose? _____
    _____
    _____
5) Does the waste analytical data meet your permit acceptance criteria, explain?
    _____
    _____
    _____
    _____
    _____

6) What criteria would exclude the solid waste management facility from accepting the waste (exceeds certain metal concentrations, exceeds TCLP, etc), explain?

_____

_____

_____

_____

_____

7) Has the solid waste management facility contacted the Department of Environmental Quality Solid Waste Permitting Section regarding the acceptance of this material and discussed any operating permit concerns?_____
   a. Who is the permitting officer? _____
   b. Explain any questions or concerns that arose. _____

_____

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Section II: Operational Information

1) What are the solid waste management facility hours and days of operation that the contractor could haul waste?

_____

_____

_____

2) What method(s)/capabilities does the solid waste management facility have for recording the volume/tonnage of waste disposed of at the facility?

_____

_____

_____

_____

3) Does the solid waste management facility collect screening/quality assurance samples of wastes being disposed at the facility (explain)? _____

_____

_____

If so, will this data be available to DEQ? _____

4) Does the solid waste management facility operate with a liner system? _____ If so, describe the liner system (include drawings as necessary).

_____

_____

_____

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_____

5) Describe any enforcement actions or violations against the solid waste management facility and corrective actions taken. _____

_____

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_____

6) Has the solid waste management facility had any historic liner failures or releases of leachate, explain?

_____
_____
_____
_____
_____
_____
_____

7) Has the solid waste management facility had any detections of metal in groundwater during routine monitoring and if so which metals, explain?

_____
_____
_____
_____
_____
_____
_____
_____
_____

8) Provide the distance to groundwater and seasonal fluxuations. _____

_____
_____
_____

Section III: Waste Handling

1) How does the solid waste management facility plan on handling and disposing of the waste (daily cover, encapsulating in a lined cell, etc), explain? Attach copy of site map showing the proposed disposal area, truck haul routes, stockpile locations, etc. _____

_____

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2) Describe what type of haul trucks the solid waste management facility will accept? _____

_____

_____

3) Describe how the solid waste management facility plans to handle the truck traffic and unloading of the waste material (adequate room for trucks to turn around, stockpiling of waste, etc)?

_____

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4) What special solid waste management facility operating requirements must the contractor adhere to (wind and hauling restrictions, load capacities, haul truck size, etc)? _____

_____

_____

_____

_____

5) Describe how the solid waste management facility plans on eliminating airborne dust resulting from this material.

_____

_____

_____

_____

_____

Section IV: Cost

1) Provide your proposed cost for disposal of this material. _____

_____

Section V: Certification

To the best of my knowledge, the above information is true and accurate.

Signature: _____

Print Name: _____

Title: _____

Date: _____

Completed Questionnaires must be <u>received</u> by the DEQ/MWCB by 5:00 PM, April 10, 2009!!

Spring Meadow Lake
July 2004 - February 2009 Data

Total Metal Concentrations as Determined by Laboratory Analysis (mg/kg)

Location	Sampler	Purpose	Sample #			Depth (in)	Date	Sb	As	Ba	Cd	Cr	Cu	Fe	Pb	Mn	Hg	Ni	Ag	Zn
Cleanup Level									**230**						**400**					
MWC	TT	HMI	SD	101		?	7/4/2004	< 5	13	29	< 2	36	14	39200	48	349	< 0.1	6	< 5	78
EA	TT	HMI	SD	102		?	7/4/2004	< 5	< 10	39	< 2	57	16	47700	79	293	< 0.1	9	< 5	88
SML	TT	HMI	SD	103		?	7/4/2004	< 5	< 10	46	< 2	56	< 10	48900	31	237	< 0.1	7	< 5	38
MWC	TT	HMI	TP	104	B	18	7/4/2004	73	**2640**	314	23	50	240	29900	**2320**	34400	0.7	10	26	3600
MWC	TT	HMI	TP	104	A	0-6	7/4/2004	60	**2910**	302	24	46	224	31600	**2410**	27300	0.9	11	25	3700
MWC	TT	HMI	TP	106	A	12	7/4/2004	99	**20700**	186	31	21	220	56200	**5220**	8290	1.2	11	< 25	4240
SML	TT	HMI	SD	106		?	7/4/2004	< 5	< 10	27	< 2	25	< 10	26400	16	136	< 0.1	< 5	< 5	25
MWC	TT	HMI	TP	107	C	60	7/4/2004	66	**1250**	1010	15	56	505	32000	**2730**	228000	3.1	< 5	53	7940
MWC	TT	HMI	TP	107	B	48	7/4/2004	347	**27700**	185	163	12	1390	69800	**39000**	21000	3.9	< 5	166	18000
SML	TT	HMI	SD	107		?	7/4/2004	< 5	10	31	< 2	8	24	11200	14	155	< 0.1	< 5	< 5	25
SML	TT	HMI	SD	108		?	7/4/2004	< 5	< 10	40	< 2	17	33	18100	39	193	< 0.1	< 5	< 5	37
MWC	TT	HMI	TP	109	C	144	7/4/2004	827	**57500**	10	326	< 2	3300	78500	**28600**	949	1.3	< 5	183	29700
SML	TT	HMI	SD	109		?	7/4/2004	6	136	108	3	13	112	9070	105	628	0.2	5	< 5	310
EA	TT	HMI	SD	110		?	7/4/2004	27	**2130**	270	14	40	156	18700	**1480**	48800	0.4	< 5	19	2280
MWC	TT	HMI	TP	111	A	24	7/4/2004	398	**34200**	20	115	< 2	905	55200	**23100**	1370	1.1	< 5	148	10900
SML	TT	HMI	SD	111		?	7/4/2004	< 5	12	42	< 2	16	15	16000	38	278	< 0.1	6	< 5	76
EA	TT	HMI	SD	112		?	7/4/2004	21	**726**	291	10	35	96	22200	**1030**	25000	0.2	6	10	1150
MWC	TT	HMI	TP	113	A	12	7/4/2004	11	**451**	159	17	31	175	36300	**819**	1410	0.3	13	< 5	4180
FLD	TT	HMI	TP	115	B	24	7/4/2004	148	**5890**	275	19	49	516	31000	**4260**	43700	0.5	5	46	2150
FLD	TT	HMI	TP	116	C	54	7/4/2004	14	**951**	207	6	40	83	25200	**915**	24500	0.2	6	7	1000
FLD	TT	HMI	TP	119	A	12	7/4/2004	106	**8980**	581	41	31	443	29400	**5840**	111000	1.7	< 5	66	6020
FLD	TT	HMI	TP	120	A	12	7/4/2004	51	**2920**	848	28	50	390	17800	**2480**	220000	1.2	< 5	70	5580
FLD	TT	HMI	TP	120	B	36	7/4/2004	66	222	1370	11	45	424	115700	**1970**	191000	1.2	< 5	73	4280
FLD	TT	HMI	TP	126	B	24	7/4/2004	38	**3280**	448	26	32	232	17500	**1920**	120000	1.2	< 5	40	4120
FLD	TT	HMI	TP	127	B	24	7/4/2004	14	**1240**	196	12	21	95	24300	**690**	16800	0.4	8	9	1710
FLD	TT	HMI	TP	127	C	48	7/4/2004	8	163	199	< 2	23	41	25900	95	1250	< 0.1	15	< 5	172
MWC	TT	HMI	SS	204	A	0-6	7/4/2004	13	**302**	159	7	28	108	24700	**468**	6180	1.5	14	< 5	1010
FLD	TT	HMI	SS	206	A	0-2	7/4/2004	44	**2430**	682	28	43	327	18800	**2160**	176000	1.1	< 5	56	5020
FLD	TT	HMI	SS	207	A	0-2	7/4/2004	46	**2200**	623	24	43	312	16700	**2120**	170000	0.8	< 5	51	4310
EA	TT	HMI	SS	216	A	0-6	7/4/2004	35	**1520**	434	12	44	210	27200	**1340**	70100	0.7	6	24	2640
FLD	TT	RI	TP	151		0-6	4/18/2005	< 5	219	112	2	12	29	18300	154	3750	< 0.5	6	< 5	356
FLD	TT	RI	TP	152		0-8	4/18/2005	< 5	54	56	< 10	74	17	94400	140	2240	< 0.5	9	< 25	81
FLD	TT	RI	TP	153	A	0-6	4/18/2005	< 5	**329**	102	3	26	45	33200	247	4620	< 0.5	8	< 5	345
FLD	TT	RI	TP	153	B	18-24	4/18/2005	< 5	< 50	71	< 10	52	18	62500	89	1490	< 0.5	7	< 25	106
EA	TT	RI	TP	154	A	8-18	4/18/2005	22	**879**	264	8	31	144	25000	**998**	41400	0.5	8	14	1460
EA	TT	RI	TP	154	B	60-66	4/18/2005	< 5	44	31	< 2	10	15	14200	72	446	< 0.5	< 5	< 5	77
EA	TT	RI	TP	155	A	0-4	4/18/2005	17	**434**	289	5	33	126	20000	**677**	41700	< 0.5	6	12	1260
EA	TT	RI	TP	155	B	18-24	4/18/2005	< 5	37	80	< 2	16	24	21100	75	425	< 0.5	10	< 5	87
FLD	TT	RI	TP	156	A	10-12	4/18/2005	< 5	101	85	< 2	11	35	17000	83	1070	< 0.5	8	< 5	116
FLD	TT	RI	TP	156	B	36-42	4/18/2005	9	**624**	224	6	12	77	18000	**572**	5340	0.6	8	< 5	908
FLD	TT	RI	TP	157	A	4-6	4/18/2005	< 5	180	149	3	11	37	16600	146	3030	< 0.5	10	< 5	530
FLD	TT	RI	TP	157	B	24-36	4/18/2005	< 5	45	133	< 2	13	20	17700	37	292	< 0.5	9	< 5	62
FLD	TT	RI	TP	158	A	6-9	4/18/2005	22	**1460**	422	17	35	218	15600	**1310**	111000	0.6	< 5	27	3380
FLD	TT	RI	TP	158	B	28-32	4/18/2005	< 5	62	75	< 2	14	24	17600	76	1420	< 0.5	7	< 5	109
FLD	TT	RI	TP	159	A	4-6	4/18/2005	15	**1290**	232	17	16	123	18000	**926**	29100	< 0.5	6	13	2260
FLD	TT	RI	TP	160	A	4-6	4/18/2005	61	**5400**	465	41	28	377	24000	**3330**	85500	0.9	< 5	50	5730
EA	TT	RI	TP	161	A	0-6	4/18/2005	13	**804**	106	8	14	74	17400	**614**	12100	< 0.5	< 5	6	841
EA	TT	RI	TP	162	A	0-2	4/18/2005	7	126	150	2	16	61	18600	269	15000	< 0.5	< 5	< 5	603
EA	TT	RI	TP	162	B	36-42	4/18/2005	< 5	100	161	< 2	19	73	24500	115	1730	0.6	15	< 5	187

Total Metal Concentrations as Determined by Laboratory Analysis (mg/kg)

Location	Sampler	Purpose	Sample #			Depth (in)	Date	Sb	As	Ba	Cd	Cr	Cu	Fe	Pb	Mn	Hg	Ni	Ag	Zn
Cleanup Level									**230**						**400**					
FLD	TT	RI	TP	163	A	0-6	4/18/2005	< 5	172	155	< 2	11	113	19400	189	5220	< 0.5	10	< 5	274
FLD	TT	RI	TP	164	A	0-4	4/18/2005	23	**754**	539	12	40	241	15200	**1220**	122000	0.5	< 5	30	2680
FLD	TT	RI	TP	164	B	16-24	4/18/2005	6	**461**	196	8	17	104	29700	373	4230	< 0.5	12	< 5	1260
FLD	TT	RI	TP	165	A	4-6	4/18/2005	6	**502**	136	4	18	66	22900	389	12200	< 0.5	6	< 5	566
EA	TT	RI	TP	166	A	0-4	4/18/2005	12	**570**	194	5	14	102	15800	**537**	27900	< 0.5	< 5	8	1130
EA	TT	RI	TP	166	B	12-18	4/18/2005	< 5	26	44	< 2	5	< 10	7840	20	347	< 0.5	< 5	< 5	36
EA	TT	RI	TP	167	A	14-20	4/18/2005	93	**10400**	494	13	18	265	22400	**6180**	53200	0.6	< 5	54	2490
EA	TT	RI	TP	167	B	22-24	4/18/2005	< 5	101	57	< 2	12	25	15600	82	1210	< 0.5	< 5	< 5	97
FLD	TT	RI	TP	168	A	2-6	4/18/2005	< 5	37	50	< 2	11	19	15600	37	338	< 0.5	8	< 5	62
FLD	TT	RI	TP	168	B	18-24	4/18/2005	< 5	21	58	< 2	8	12	13200	30	644	< 0.5	< 5	< 5	48
FLD	TT	RI	TP	168	C	26-60	4/18/2005	< 5	110	123	< 2	13	49	21500	108	1030	< 0.5	10	< 5	136
FLD	TT	RI	TP	169	A	0-6	4/18/2005	11	**781**	202	6	13	103	19100	**590**	24700	< 0.5	7	7	1050
FLD	TT	RI	TP	169	B	6-18	4/18/2005	10	**609**	200	5	15	92	21300	**496**	22800	< 0.5	7	5	911
MWC	TT	RI	TP	170	A	4-6	4/19/2005	< 5	< 10	46	< 2	13	19	16300	18	340	< 0.5	7	< 5	52
MWC	TT	RI	TP	170	B	20-28	4/19/2005	47	< 50	78	< 10	32	99	103000	**567**	952	< 0.5	22	< 25	78
MWC	TT	RI	TP	170	C	32-38	4/19/2005	< 5	61	140	< 2	10	29	14900	60	444	< 0.5	7	< 5	83
MWC	TT	RI	TP	171	C	30-36	4/19/2005	< 5	43	142	< 2	12	24	16400	31	305	< 0.5	9	< 5	53
MWC	TT	RI	TP	171	B	12-20	4/19/2005	< 5	59	98	< 10	21	46	71900	60	1260	< 0.5	17	< 25	92
MWC	TT	RI	TP	171	A	2-12	4/19/2005	280	**33700**	581	78	17	1290	61200	**16300**	60000	2.1	< 5	106	5940
MWC	TT	RI	TP	172	A	18-20	4/19/2005	< 5	30	64	< 2	10	21	15000	52	333	< 0.5	6	< 5	76
MWC	TT	RI	TP	173	C	22-24	4/19/2005	< 5	54	172	< 2	10	22	15000	27	448	< 0.5	9	< 5	93
MWC	TT	RI	TP	173	A	0-9	4/19/2005	9	158	773	14	48	350	18000	**1290**	224000	< 0.5	< 5	31	3370
MWC	TT	RI	TP	173	B	10-20	4/19/2005	21	**1240**	343	246	24	253	53100	**3010**	36900	0.7	11	15	48400
MWC	TT	RI	TP	174	C	18-20	4/19/2005	< 5	11	79	< 2	10	65	32600	84	396	< 0.5	12	< 5	69
MWC	TT	RI	TP	174	D	30-32	4/19/2005	< 5	39	127	< 2	13	22	18200	33	407	< 0.5	9	< 5	89
MWC	TT	RI	TP	174	B	14-16	4/19/2005	< 5	65	79	< 2	11	24	17800	55	391	< 0.5	8	< 5	80
MWC	TT	RI	TP	174	A	0-8	4/19/2005	< 5	76	180	4	17	53	19300	298	18000	< 0.5	9	< 5	1050
EA	TT	RI	SD	201		0-2	4/21/2005	< 5	95	77	< 2	8	25	10800	135	3650	< 0.5	< 5	< 5	198
EA	TT	RI	SD	202		0-2	4/21/2005	< 5	34	54	< 2	7	19	9550	53	384	< 0.5	< 5	< 5	83
EA	TT	RI	SD	203		0-2	4/21/2005	< 5	19	52	< 2	10	15	9840	64	159	< 0.5	< 5	< 5	82
EA	TT	RI	SD	204		0-2	4/21/2005	< 5	32	116	< 2	10	42	9560	163	586	< 0.5	< 5	< 5	218
EA	TT	RI	SD	205		0-2	4/21/2005	< 5	31	120	< 2	10	38	14300	130	323	< 0.5	7	< 5	185
EA	TT	RI	SD	206		0-2	4/21/2005	< 5	20	98	< 2	6	24	6420	70	173	< 0.5	< 5	< 5	93
SML	TT	RI	SD	207		0-2	4/21/2005	< 5	105	121	< 2	5	39	6940	70	814	< 0.5	< 5	< 5	314
SML	TT	RI	SD	208		0-2	4/21/2005	< 5	110	130	6	13	78	14800	319	1370	0.6	7	< 5	619
EA	DEQ	POST RI, TCLP	SD	301		0-3	11/8/2006	< 5	101	162	2.2	11.2	44.4	16400	141	7340	< 1	9	< 5	288
EA	DEQ	POST RI, TCLP	TP	302	C	>12	11/8/2006	< 5	96	53.1	1.8	< 5	35.2	6300	177	5920	< 1	< 5	< 5	256
EA	DEQ	POST RI, TCLP	TP	303	B	10-12	11/8/2006	17.9	**904**	570	11.7	5.3	239	24300	**1250**	76600	1.6	5.3	22	2670
FLD	DEQ	POST RI, TCLP	TP	304	B	1-5	11/8/2006	120	**33800**	112	4.5	< 5	128	40400	**10800**	3610	< 1	< 5	67.4	357
MWC	DEQ	POST RI, TCLP	TP	305	B	6-8	11/8/2006	17.9	**1870**	97.7	78.1	16.5	1120	64200	**1100**	3100	6.7	13.7	< 5	13100
MWC	DEQ	POST RI, TCLP	TP	306	D	>11	11/8/2006	491	**22200**	106	97.7	< 5	1600	68200	**36800**	2590	4.2	< 5	222	13100
SML	TT	POST RI	SS	301		0-6	11/7/2007	< 5	61.4	91.8	1.3	5.6	32.8	7140	90	703	< 0.5	< 5	< 5	193
SML	TT	POST RI	SS	302		0-6	11/7/2007	< 5	27.9	25.1	< 1	16.5	22.3	8240	24.4	337	< 0.5	< 5	< 5	62.4
EA	TT	POST RI	SS	303		0-6	11/7/2007	< 5	26	53.7	< 1	7.4	29	8180	107	1890	< 0.5	< 5	< 5	143
EA	TT	POST RI	SS	304		0-6	11/7/2007	< 5	26.7	66.7	< 1	8.8	21.3	7140	60.5	672	< 0.5	< 5	< 5	94.5
EA	TT	POST RI	SS	305		0-6	11/7/2007	< 5	32.5	37.2	< 1	7.2	12.7	8840	39.8	512	< 0.5	< 5	< 5	79.2
EA	TT	POST RI	SS	306		0-6	11/7/2007	< 5	13	37.4	< 1	7.9	12.8	11200	26.1	248	< 0.5	< 5	< 5	45.1
EA	TT	POST RI	SS	307		0-6	11/7/2007	< 5	9.6	30.8	< 1	< 5	11.2	6870	18.5	166	< 0.5	< 5	< 5	51.8
EA	TT	POST RI	SS	308		0-6	11/7/2007	< 5	9.2	35.2	< 1	8	12.2	10700	24.4	518	< 0.5	< 5	< 5	53.4
EA	TT	POST RI	SS	309		0-6	11/7/2007	< 5	141	30.8	< 1	5.3	14.6	8780	42.1	273	< 0.5	< 5	< 5	53.9
EA	TT	POST RI	SS	310		0-6	11/7/2007	< 5	63.6	59.4	1.3	< 5	24.1	6860	76.7	2180	< 0.5	< 5	< 5	191
EA	TT	POST RI	SS	311		0-6	11/7/2007	< 5	10.9	30.2	< 1	< 5	11.2	7090	17.2	180	< 0.5	< 5	< 5	31.8
EA	TT	POST RI	SS	312		0-6	11/7/2007	< 5	12.4	32.5	< 1	5.5	13.1	7400	26.4	290	< 0.5	< 5	< 5	45.6
EA	TT	POST RI	SS	313		0-6	11/7/2007	< 5	20.1	24.2	< 1	5.3	13.5	7800	31.6	472	< 0.5	< 5	< 5	38.7
EA	TT	POST RI	SS	314		0-6	11/7/2007	< 5	20.7	27.6	< 1	5.7	13.4	8560	30.3	254	< 0.5	< 5	< 5	47.4

Total Metal Concentrations as Determined by Laboratory Analysis (mg/kg)

Location	Sampler	Purpose	Sample #			Depth (in)	Date	Sb	As	Ba	Cd	Cr	Cu	Fe	Pb	Mn	Hg	Ni	Ag	Zn
Cleanup Level									**230**						**400**					
EA	TT	POST RI	SS	315		0-6	11/7/2007	< 5	19.8	71	< 1	5.8	28.6	6000	104	314	< 0.5	< 5	< 5	128
EA	TT	POST RI	SS	316		0-6	11/7/2007	< 5	9	84.6	< 1	7.3	23.5	7730	102	228	< 0.5	< 5	< 5	116
EA	TT	POST RI	SS	317		0-6	11/7/2007	< 5	5.1	33.8	< 1	6.9	14.3	8300	69	95.6	< 0.5	< 5	< 5	68.9
EA	TT	POST RI	SS	318		0-6	11/7/2007	< 5	19.1	52.2	< 1	6.6	21	6580	65.6	143	< 0.5	< 5	< 5	94.9
EA	TT	POST RI	SS	319		0-6	11/7/2007	< 5	11.6	40	< 1	< 5	12.2	6240	66.6	105	< 0.5	< 5	< 5	75.8
EA	TT	POST RI	SS	320		0-6	11/7/2007	< 5	19.1	23.5	< 1	5.9	12.6	7900	55.6	130	< 0.5	< 5	< 5	100
EA	DEQ	POST EEE/CA	SD	401		0-1	9/10/2008	22	**290**	160	3	12	140	14000	240	11000	< 0.5	6	7	490
EA	DEQ	POST EEE/CA	SD	402		0-1	9/10/2008	31	36	110	2	10	76	11000	310	1600	< 0.5	7	6	360
EA	DEQ	POST EEE/CA	SD	403		0-1	9/10/2008	42	25	46	< 2	21	35	21000	100	340	< 0.5	7	< 5	120
FLD	DEQ	POST EEE/CA, TCLP	TP	401	A	0-48	2/19/2009	6	**2290**	215	50	10	165	17900	**1330**	-	< 0.5	10	17	4490
FLD	DEQ	POST EEE/CA, TCLP	TP	401	B	12-16	2/19/2009	< 5	**385**	525	48	10	191	15000	**861**	-	0.62	10	21	14300
FLD	DEQ	POST EEE/CA, TCLP	TP	402	A	0-42	2/19/2009	< 5	50	175	< 1	14	33	17200	114	-	< 0.5	12	< 5	260
FLD	DEQ	POST EEE/CA, TCLP	TP	402	B	0-8	2/19/2009	8	**410**	689	3	13	283	27800	**1630**	-	1.6	13	30	4050
FLD	DEQ	POST EEE/CA, TCLP	TP	403	A	0-4	2/19/2009	< 5	70	58	< 1	8	23	12400	95	-	< 0.5	6	< 5	164
FLD	DEQ	POST EEE/CA, TCLP	TP	403	B	0-60	2/19/2009	< 5	98	51	< 1	9	19	13200	92	-	< 0.5	< 5	< 5	107

Notes:

Arsenic Clean-up Le		Lead Clean-up Levels	
> 230	mg/kg	**> 400**	mg/kg

Sb = Antimony; As = Arsenic; Ba = Barium; Cd = Cadmium; Cr = Chromium; Cu = Copper
Fe = Iron; Pb = Lead; Hg = Mercury; Ni = Nickel; Ag = Silver; Zn = Zinc

TP	Test Pit
SD	Sediment
NA	Not Analyzed For
ID	Identification
TP	Test Pit
SS	Surface Soil
No.	Number
XRF	X-ray Fluorescence
mg/kg	Milligrams per kilogram
<LOD	Less than Level of Detection
EA	East Arm, Spring Meadow Lake
FLD	Field located east of East Arm, Spring Meadow Lake
MWC	Montana Wildlife Center
SML	Spring Meadow Lake
HMI	Hazardous Material Inventory (July 2004)
RI	Remedial Investigation (April 2005)
POST RI, TCLP	Post Remedial Investigation Sample, Analyzed for Toxicity Characterisitc (TCLP) (Nov. 2006)
POST RI	Post Remedial Investigation Sample, Collected to further define extent of sediment waste (Nov. 2007)
POST EEE/CA	Post EEE/CA Sample, Characterize Discolored Soil/Sediment (Sept. 2008)
POST EEE/CA, TCLP	Post EEE/CA Sample, Analyzed for Toxicity Characteristic (TCLP) (Feb. 2009)

Spring Meadow Lake
July 2004 - February 2009 Data

Metal Concentrations as Determined by XRF Analysis

Location	Sampler	Purpose	Sample #			Depth (in)	Date	Sb	As	Ba	Cd	Cr	Cu	Fe	Pb	Mn	Hg	Ni	Ag	Zn
Cleanup Level									**230**						**400**					
EA	TT	HMI	TP	118		24	7/4/2004		81.8				56.3		68.4	386.4				127.6
EA	TT	HMI	TP	118		36	7/4/2004		74.9				< LOD		87.8	682.7				104.0
EA	TT	HMI	TP	122		12	7/4/2004		**361.1**				95.9		**766.7**	155267.5				2086.8
EA	TT	HMI	TP	122		24	7/4/2004		**683.7**				122.9		**873.1**	73422.8				1490.6
EA	TT	HMI	TP	122		36	7/4/2004		**306.0**				< LOD		**422.9**	23944.7				664.3
EA	TT	HMI	SS	210		0	7/4/2004		149.2				< LOD		137.6	4706.5				232.5
EA	TT	HMI	SS	214		0	7/4/2004		**1279.0**				117.2		**899.6**	24908.4				1275.1
EA	TT	HMI	SS	216		12	7/4/2004		**445.4**				65.7		291.8	11045.3				373.9
EA	TT	HMI	SS	216		24	7/4/2004		19.3				< LOD		48.9	2601.3				59.3
EA	TT	HMI	SS	217		0	7/4/2004		174.5				< LOD		183.2	1994.4				235.7
EA	TT	HMI	SS	218		12	7/4/2004		< LOD				44.8		43.4	878.8				81.5
EA	TT	HMI	SS	219		0	7/4/2004		38.1				43.7		99.4	2233.1				183.4
EA/SML	TT	HMI	SS	208		0	7/4/2004		35.4				< LOD		65.3	1696.5				105.8
EA/SML	TT	HMI	SS	209		0	7/4/2004		**352.3**				72.7		235.5	7413.0				398.2
FLD	TT	HMI	TP	115		24	7/4/2004		**316.3**				47.3		352.0	24188.8				525.1
FLD	TT	HMI	TP	115		36	7/4/2004		**289.8**				< LOD		308.4	23086.3				452.2
FLD	TT	HMI	TP	115		60	7/4/2004		121.5				< LOD		56.2	1035.8				109.0
FLD	TT	HMI	TP	116		12	7/4/2004		32.7				< LOD		63.7	666.0				61.1
FLD	TT	HMI	TP	116		24	7/4/2004		**232.5**				51.3		239.1	10046.2				290.0
FLD	TT	HMI	TP	117		12	7/4/2004		54.8				< LOD		77.1	1150.4				93.9
FLD	TT	HMI	TP	117		24	7/4/2004		34.6				< LOD		113.4	2580.1				110.4
FLD	TT	HMI	TP	117		36	7/4/2004		72.1				< LOD		47.6	859.6				89.8
FLD	TT	HMI	TP	119		24	7/4/2004		**1570.8**				160.1		**1624.8**	81317.8				3460.4
FLD	TT	HMI	TP	123		12	7/4/2004		62.8				40.0		69.8	521.0				120.4
FLD	TT	HMI	TP	123		24	7/4/2004		35.9				< LOD		32.6	454.6				83.1
FLD	TT	HMI	TP	123		36	7/4/2004		66.5				< LOD		69.0	885.9				128.5
FLD	TT	HMI	TP	124		24	7/4/2004		61.4				< LOD		71.9	746.8				102.1
FLD	TT	HMI	TP	124		36	7/4/2004		89.6				43.4		116.4	749.2				145.0
FLD	TT	HMI	TP	124		60	7/4/2004		48.4				< LOD		39.6	274.5				74.1
FLD	TT	HMI	TP	125		12	7/4/2004		**324.1**				59.4		176.4	4890.0				260.3
FLD	TT	HMI	TP	125		24	7/4/2004		121.6				< LOD		150.9	1252.6				169.4
FLD	TT	HMI	TP	125		36	7/4/2004		135.0				< LOD		102.2	1218.7				173.3
FLD	TT	HMI	TP	126		12	7/4/2004		48.3				< LOD		48.6	817.8				100.0
FLD	TT	HMI	TP	126		36	7/4/2004		47.2				< LOD		36.6	268.0				167.3
FLD	TT	HMI	TP	127		12	7/4/2004		**284.8**				50.3		206.1	6450.8				326.2
FLD	TT	HMI	TP	128		12	7/4/2004		**1157.8**				98.2		**811.9**	16542.9				1522.5
FLD	TT	HMI	TP	128		24	7/4/2004		**724.6**				226.9		**1583.4**	163287.0				4286.1
FLD	TT	HMI	TP	128		48	7/4/2004		31.3				< LOD		47.1	685.4				101.7
FLD	TT	HMI	SS	205		0	7/4/2004		28.2				< LOD		38.1	574.6				78.1
FLD	TT	HMI	SS	215		0	7/4/2004		**3345.9**				219.7		**2047.5**	77767.5				2837.5
MWC	TT	HMI	SS	222		0	7/4/2004		18.4				< LOD		54.0	306.2				94.0
MWC	TT	HMI	TP	106		60	7/4/2004		19.1				56.8		31.3	294.5				60.1
MWC	TT	HMI	TP	102		36	7/4/2004		20.0				< LOD		70.1	341.6				87.1
MWC	TT	HMI	TP	105		48	7/4/2004		20.3				< LOD		51.1	290.3				83.1
MWC	TT	HMI	SS	203		12	7/4/2004		22.2				< LOD		24.1	220.8				41.7
MWC	TT	HMI	TP	102		12	7/4/2004		23.9				< LOD		91.1	1241.3				170.1
MWC	TT	HMI	TP	129		12	7/4/2004		24.4				< LOD		73.3	538.8				108.6
MWC	TT	HMI	TP	104		36	7/4/2004		27.5				39.9		46.9	385.6				80.8
MWC	TT	HMI	TP	104		36	7/4/2004		37.4				< LOD		27.3	392.1				97.5
MWC	TT	HMI	TP	102		60	7/4/2004		39.7				60.3		200.1	3280.0				298.0
MWC	TT	HMI	TP	104		48	7/4/2004		42.4				< LOD		36.7	347.0				67.9
MWC	TT	HMI	TP	106		24	7/4/2004		45.7				79.5		81.5	2078.1				63.4

Metal Concentrations as Determined by XRF Analysis

Location	Sampler	Purpose	Sample #	Depth (in)	Date	Sb	As	Ba	Cd	Cr	Cu	Fe	Pb	Mn	Hg	Ni	Ag	Zn
Cleanup Level							**230**						**400**					
MWC	TT	HMI	TP 105	24	7/4/2004		52.0				48.3		50.9	469.0				76.4
MWC	TT	HMI	TP 121	12	7/4/2004		52.1				< LOD		45.5	529.2				75.6
MWC	TT	HMI	TP 114	12	7/4/2004		54.3				< LOD		37.6	228.4				102.9
MWC	TT	HMI	TP 121	36	7/4/2004		54.3				< LOD		42.1	408.8				71.5
MWC	TT	HMI	TP 121	60	7/4/2004		55.1				< LOD		59.4	373.9				56.6
MWC	TT	HMI	TP 130	12	7/4/2004		55.2				83.4		314.7	606.6				278.7
MWC	TT	HMI	TP 130	36	7/4/2004		56.6				68.6		214.9	649.9				160.4
MWC	TT	HMI	TP 108	24	7/4/2004		58.8				41.9		104.6	456.5				987.6
MWC	TT	HMI	TP 112	36	7/4/2004		61.2				< LOD		76.8	287.2				100.0
MWC	TT	HMI	TP 101	36	7/4/2004		72.4				51.1		220.8	1177.6				289.5
MWC	TT	HMI	TP 101	12	7/4/2004		81.8				72.7		145.0	831.0				160.0
MWC	TT	HMI	TP 105	60	7/4/2004		100.3				44.4		111.8	274.3				157.2
MWC	TT	HMI	TP 107	36	7/4/2004		100.9				55.3		114.9	869.7				148.9
MWC	TT	HMI	TP 113	24	7/4/2004		105.1				129.7		344.3	848.0				2992.8
MWC	TT	HMI	SS 224	0	7/4/2004		120.4				67.7		**472.7**	5811.2				688.8
MWC	TT	HMI	TP 108	24	7/4/2004		155.7				43.0		70.9	292.1				124.9
MWC	TT	HMI	SS 223	0	7/4/2004		171.7				102.0		**527.3**	3204.3				609.2
MWC	TT	HMI	TP 112	24	7/4/2004		177.5				187.6		192.2	458.0				621.2
MWC	TT	HMI	TP 114	24	7/4/2004		198.9				74.2		220.7	596.0				417.9
MWC	TT	HMI	TP 101	24	7/4/2004		**246.4**				61.1		155.4	1500.5				397.6
MWC	TT	HMI	TP 109	24	7/4/2004		**4330.2**				3562.3		**16887.1**	9548.6				9875.3
MWC	TT	HMI	TP 110	24	7/4/2004		**4573.8**				1872.3		**13016.8**	6798.0				6078.5
MWC	TT	HMI	TP 109	180	7/4/2004		**6419.1**				930.6		**6638.2**	5718.8				42657.6
MWC	TT	HMI	TP 109	60	7/4/2004		**13562.0**				769.3		**12528.9**	5520.4				13548.3
MWC	TT	HMI	SS 201	0	7/4/2004		**13996.8**				2218.6		**6853.7**	3246.8				23653.5
MWC	TT	HMI	TP 101	12	7/4/2004		< LOD				28041.2		181.4	439.5				338.6
MWC	TT	HMI	TP 101	48	7/4/2004		< LOD				28952.2		244.7	328.6				559.4
MWC	TT	HMI	TP 106	36	7/4/2004		< LOD				291.1		124.3	<LOD				123.3
MWC	TT	HMI	TP 129	36	7/4/2004		< LOD				< LOD		30.0	192.6				60.0
MWC	TT	HMI	SS 202	12	7/4/2004		< LOD				< <LOD		35.8	272.9				67.1

Notes:

Arsenic Clean-up Le		Lead Clean-up Levels	
> 230	mg/kg	**> 400**	mg/kg

Sb = Antimony; As = Arsenic; Ba = Barium; Cd = Cadmium; Cr = Chromium; Cu = Copper
Fe = Iron; Pb = Lead; Hg = Mercury; Ni = Nickel; Ag = Silver; Zn = Zinc

TP	Test Pit
SD	Sediment
NA	Not Analyzed For
ID	Identification
TP	Test Pit
SS	Surface Soil
No.	Number
XRF	X-ray Fluorescence
mg/kg	Milligrams per kilogram
<LOD	Less than Level of Detection
EA	East Arm, Spring Meadow Lake
FLD	Field located east of East Arm, Spring Meadow Lake
MWC	Montana Wildlife Center
SML	Spring Meadow Lake
HMI	Hazardous Material Inventory (July 2004)
RI	Remedial Investigation (April 2005)
POST RI, TCLP	Post Remedial Investigation Sample, Analyzed for Toxicity Characterisitc (TCLP) (Nov. 2006)
POST RI	Post Remedial Investigation Sample, Collected to further define extent of sediment waste (Nov. 2007)
POST EEE/CA	Post EEE/CA Sample, Characterize Discolored Soil/Sediment (Sept. 2008)
POST EEE/CA, TCLP	Post EEE/CA Sample, Analyzed for Toxicity Characteristic (TCLP) (Feb. 2009)

SUMMARY: TCLP Concentrations as Determined by Laboratory Analysis (mg/L)

Location	Sampler	Purpose	Sample #			Depth (in)	Date	Sb	As	Ba	Cd	Cr	Cu	Fe	Pb	Hg	Ni	Ag	Zn	Se
TCLP Regulatory Level								-	**5.0**	**100.0**	**1.0**	**5.0**	-	-	**5.0**	**0.2**		**5.0**		**1.0**
EA	DEQ	POST RI, TCLP	SD	301		0-3	Nov-06	-	< 0.5	< 10	< 0.1	< 0.5	-	-	< 0.5	< 0.02	-	< 0.5	-	< 0.1
EA	DEQ	POST RI, TCLP	TP	302	C	>12	Nov-06	-	< 0.5	< 10	< 0.1	< 0.5	-	-	< 0.5	< 0.02	-	< 0.5	-	< 0.1
EA	DEQ	POST RI, TCLP	TP	303	B	10-12	Nov-06	-	< 0.5	< 10	< 0.1	< 0.5	-	-	< 0.5	< 0.02	-	< 0.5	-	< 0.1
FLD	DEQ	POST RI, TCLP	TP	304	B	1-5	Nov-06	-	*0.6*	< 10	< 0.1	< 0.5	-	-	< 0.5	< 0.02	-	< 0.5	-	< 0.1
MWC	DEQ	POST RI, TCLP	TP	305	B	6-8	Nov-06	-	< 0.5	< 10	**3.5**	< 0.5	-	-	< 0.5	< 0.02	-	< 0.5	-	< 0.1
MWC	DEQ	POST RI, TCLP	TP	306	D	>11	Nov-06	-	< 0.5	< 10	*0.2*	< 0.5	-	-	*1.3*	< 0.02	-	< 0.5	-	< 0.1
FLD	DEQ	POST EEE/CA, TCLP	TP	401	A	12-16	2/19/2009	< 0.5	< 0.5	< 10	*0.6*	< 0.5	0.11	< 0.03	< 0.5	< 0.02	< 0.05	< 0.5	221	-
FLD	DEQ	POST EEE/CA, TCLP	TP	401	B	0-48	2/19/2008	< 0.5	< 0.5	< 10	*0.1*	< 0.5	0.02	< 0.03	< 0.5	< 0.02	< 0.05	< 0.5	12	-
FLD	DEQ	POST EEE/CA, TCLP	TP	402	A	0-8	2/19/2009	< 0.5	< 0.5	< 10	< 0.1	< 0.5	< 0.01	0.44	< 0.5	< 0.02	< 0.05	< 0.5	< 1	-
FLD	DEQ	POST EEE/CA, TCLP	TP	402	B	0-42	2/19/2008	< 0.5	< 0.5	< 10	< 0.1	< 0.5	< 0.01	< 0.03	< 0.5	< 0.02	< 0.05	< 0.5	< 1	-
FLD	DEQ	POST EEE/CA, TCLP	TP	403	A	0-4	2/19/2009	< 0.5	< 0.5	< 10	< 0.1	< 0.5	0.01	0.12	< 0.5	< 0.02	< 0.05	< 0.5	< 1	-
FLD	DEQ	POST EEE/CA, TCLP	TP	403	B	0-60	2/19/2009	< 0.5	*0.6*	< 10	< 0.1	< 0.5	0.05	< 0.03	< 0.5	< 0.02	< 0.05	< 0.5	< 1	-

Notes:

RCRA Metals: As = Arsenic; Ba = Barium; Cd = Cadmium; Cr = Chromium; Pb = Lead; Se = Selenium; Ag = Silver; Hg = Mercury

Contaminate detected

Exceeds TCLP for a RCRA Metal

TP	Test Pit
SD	Sediment
NA	Not Analyzed For
ID	Identification
TP	Test Pit
SS	Surface Soil
No.	Number
XRF	X-ray Fluorescence
mg/kg	Milligrams per kilogram
<LOD	Less than Level of Detection
EA	East Arm, Spring Meadow Lake
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