



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION 6
445 ROSS AVENUE, SUITE 1200
DALLAS, TX 75202-2733

April 4, 2001

Mr. Scott Miller
Mining Remedial Recovery Company
340 Hardscrabble Road
Helper, UT 84526

Dear Mr. Miller:

The purpose of this letter is to give Environmental Protection Agency (EPA) approval of the March 5, 2001, Request to Amend Site Monitoring under the February 2000, Operations and Maintenance Plan for the Cleveland Mill Superfund Site. In the course of reviewing the drafts of these modifications, the EPA consulted with the New Mexico Environment Department.

Please continue to keep EPA and NMED informed about the dates of the sampling so that representatives of these agencies may attend the sampling events.

Sincerely,

Kathleen Aisling
Remedial Project Manager ✓

cc: Chris Meehan
New Mexico Environment Department
Jeffrey B. Groy
Viacom International

908427



MRRC

Mining Remedial Recovery Company

March 5, 2001

Ms. Kathleen Aisling
Remedial Project Manager
U.S. Environmental Protection Agency
Region VI 6SF-LT
1445 Ross Avenue
Dallas, TX 75202-2733

Re: Cleveland Mill Site- Request to Amend Site Monitoring

Dear Ms. Aisling:

Ground and surface water locations are currently monitored quarterly at the Cleveland Mill site pursuant to the Consent Decree (CERCLA Docket No. 06-14-97). According to the approved Final Report (December 10, 1998), EPA and NMED may modify the locations and frequency of water quality monitoring. With the exception of small and expected seasonal, laboratory and statistical variation, water quality has been demonstrated to be of good and/or consistent quality at the Cleveland Mill site. Therefore, on behalf of the Bayard Mining Corp., Mining Remedial Recovery Company and Viacom International Inc., we propose reducing the monitoring scope and schedule for the site.

In addition, the Operation and Maintenance Plan, dated November 15, 1999 (O&MP), provides for modifications to the frequency and scope of inspections based on previous inspection results. Pursuant to that provision we are proposing modifications to the O&MP.

Attached please find a brief presentation of the rationale for these changes as well as a description of the terms and conditions of the proposed revised monitoring programs. If you have any questions or comments, please do not hesitate to call Norm Johnson or me at (435) 472-3385.

Sincerely,
MINING REMEDIAL RECOVERY COMPANY.

Scott Miller /

907963



VIACOM INTERNATIONAL INC.

Jeffrey B. Groy with permission
Norman S. Fisher

Jeffrey B. Groy

BAYARD MINING COMPANY.

Gary L. Barker

Enclosure Cleveland Mill Site- Request to Amend Site Monitoring.

cc: C. Meehan, NMED
N. Johnson, MRRC
G. Barker, BMC
J. Groy, Viacom

Cleveland Mill Site

Request to Amend Site Monitoring

1 INTRODUCTION

Water quality monitoring has been conducted on a quarterly basis and operation and maintenance activities monthly at the Cleveland Mill site since June 1997. A sufficient database now exists to allow a review of the monitoring program. Based on the data presented, amendments to the monitoring program are proposed that will result in a reduction in the frequency of monitoring and a reduction in the total number of water sample locations. In addition, site conditions existing when the Operation and Maintenance Plan (O&MP) was written have improved and stabilized, allowing a review of activities under this plan as well.

2 WATER QUALITY MONITORING

Summary data tables for surface and groundwater are provided as Table 1 and Table 2, respectively. All surface water and groundwater samples are currently analyzed for the following: pH, total dissolved solids (TDS), sulfate (SO₄), alkalinity, acidity, arsenic, beryllium, cadmium, copper, lead, mercury, silver and zinc. One surface water sample and one groundwater sample per quarter on a rotating basis are also analyzed for the following additional analytes: aluminum, antimony, barium, calcium, chromium, cobalt, iron, magnesium, manganese, nickel, potassium, selenium, sodium, thallium and vanadium. Water quality data for each sampling location is discussed below.

2.1 Surface Water

2.1.1 Former Toe of Tailings Area (SW-TT)

Over time, water quality at the former toe of the tailings has improved significantly and reached a general steady state. This trend is documented in Table 1 and illustrated in Attachment One. Concentrations of all parameters at this site have decreased significantly since remediation of the mill area was performed.

Due to the reasonably steady state in metal concentrations at this location, biannual sampling will reasonably monitor the water quality at this location. We propose January and July as a sampling schedule to allow sampling in both wet and dry periods of the year.

2.1.2 Gypsum Spring (SW-GYP)

Water quality at the gypsum spring is relatively stable as illustrated in Attachment One. Concentrations did not vary throughout the remedial action and do not appear to reflect site activities. A spike in several metal concentrations was noted during sampling for the first quarter 2000 and, as indicated in the progress report for that period, was due to extremely low water conditions and the difficulty of sampling without collecting suspended solids. All beryllium and mercury concentrations have been below the detection limits as reported in Table 1.

Because SW-GYP has been consistent throughout the duration of the water quality monitoring, we propose that SW-GYP be eliminated from the monitoring program.

2.1.3 Upper Sediment Pond (SW-USP)

The upper sediment pond surface water (SW-USP) has returned erratic results as illustrated in Attachment One. Because of the low water conditions similar to SW-GYP it is difficult to avoid entrainment of suspended solids during sampling, and as such, samples from this location are of limited value.

Because the sample point for the former toe of the tailing (SW-TT) is in close proximity to SW-USP and will continue to be sampled and given the difficult sampling conditions associated with SW-USP, we propose that monitoring at SW-USP be discontinued.

2.1.4 Little Walnut Creek at the Confluence (SW-LWC)

Following the remedial action, the concentration of metals in surface water at SW-LWC has dropped significantly and remained steady. Concentrations are generally at analytical detection limits. This sample point provides a broad watershed analysis. Therefore, we propose to continue sampling this location or SW-PC on a biannual basis provided water is present at the time of sampling.

2.1.5 Picnic Creek below Confluence (SW-PC)

As seen in the data from SW-LWC following the remedial action, concentration of metals in have dropped and remained steady. As stated above, we propose to continue sampling at this location or SW-LWC as these locations provide a good location to monitor the watershed down stream from all remedial activity and will provide an indicator to determine if sampling should be reinstated at any of the former locations.

2.2 Groundwater

2.2.1 Background Well at the Continental Divide (MW-3)

Water quality data beyond what has been compiled to date for MW-3 is no longer necessary and monitoring should be discontinued at this location.

2.2.2 Disposal Cell Wells (Wells MW-4, MW-5 and MW-6)

These three wells directly monitor performance of the Disposal Cell. Therefore, we propose to continue monitoring on a biannual basis. January and July are proposed as a timetable to allow sampling in both wet and dry periods of the year.

2.2.3 Former Mill Area Well (MW-7)

The former mill area well (MW-7) has been dry since it was drilled in 1998. We propose to take water level measurements during the biannual sampling and report any change in status.

The Hughes Wells (MW-2 and GW-HU)

The Hughes' have recently denied access to their property, consequently these locations can no longer be monitored. Therefore, we propose discontinuing this sampling.

2.2.4 The Hood Residence Well (GW-HO)

Water quality at the Hood residence has been consistent in major constituents and has not shown any signs of change due to remedial activities. Due to consistent data and distance from the site we propose to discontinue monitoring at this location.

3 OPERATION AND MAINTENANCE PLAN

The Cleveland Mill Site Operation and Maintenance Plan (O&MP) describes activities for the maintenance of the sediment control structures within Little Walnut Creek and the reclaimed and revegetated surfaces. The sediment control structures were built to prevent transport of material from the site. The O&MP states that the sediment control structures and reclaimed and revegetated areas will be inspected monthly. Over time as vegetation has become established a noticeable decrease in material collecting behind the sediment control structures has been seen. Consequently the frequency of inspections can be safely reduced. It is proposed to conduct these inspections concurrently with the water quality sampling events on a biannual basis.

4 PROPOSED REVISIONS TO WATER MONITORING AND OPERATION AND MAINTENANCE PLAN

4.1 Proposed Water Sampling Plan.

The three wells located near the disposal cell (MW-4, MW-5 and MW-6) will provide adequate monitoring of any potential impact to groundwater arising from the cell. In addition surface water samples at the former toe of the tailings (SW-TT) and Little Walnut Creek (SW-LWC) near the confluence with Picnic Creek will provide indication if there is any fundamental change to the current state of the area's water quality. We propose to continue monitoring these five locations for pH, total dissolved solids (TDS), sulfate (SO₄), alkalinity, acidity, arsenic, beryllium, cadmium, copper, lead, mercury, silver and zinc.

Biannual water sampling will provide an accurate ongoing data profile. We propose that sampling be scheduled to monitor the wettest and driest times of the year. Therefore, January and July are proposed as the periods during which monitoring will occur. We will notify EPA if there are heavy storm events (defined in the O&M Plan as 1 inch in a 24 hour period) via telephone which will allow EPA and NMED to determine whether or not a need for an inspection exists).

4.2 Proposed Operation and Maintenance Plan Activities.

Conducting inspection and reporting activities covered under the Operation and Maintenance Plan are proposed to be completed concurrently with water quality monitoring on a biannual basis.

Quarterly Surface Water Database

SAMPLE ID	Date sampled	Time	Lab TDS * SO4 * y (CaCO3)	Aluminum mg/L	Antimony mg/L	Arsenic mg/L	Barium mg/L	Beryllium mg/L	Cadmium mg/L	Calcium mg/L	Chromium mg/L	Cobalt mg/L	Copper mg/L	Iron mg/L	Lead mg/L	Magnesium mg/L	Manganese mg/L	Mercury mg/L	Nickel mg/L	Potassium mg/L	Selenium mg/L	Silver mg/L	Sodium mg/L	Thallium mg/L	Vanadium mg/L	Zinc mg/L			
																											6-9 1000 600	mg/L	mg/L
Renewer (CMRASW001)	9-Sep-97	1500	8.4 420 150	152																									
SW-TT	12-Jun-97	1630	2.3 51,298 32,171	23,650	369	<0.04	0.069	0.02	<0.003	475	0.5	7.58	115	7111	0.043	978	728	<0.002	3.14	455	<0.003	<0.01	52.7	0.036	0.41	729			
SW-TT (CMRASW001)	9-Sep-97	1130	2.2 53,400 38,160	<2.0	578	<0.04	0.06	<0.3	15.3	323	1	10	278	10,100	0.05	1180	856	<0.002	4	<30	0.002	1.2	40	<0.04	1.0	3710			
SW-TT (SWTT-2)	15-Dec-97	1445																								2070			
SW-TT (SWTT-3)	3-Mar-98	1400	2.3 46,300 29,600	<2.0																						2400			
SW-TT (SWTT-3)	3-Mar-98	1400	1.3 47,300 29,800	<2.0																						2400			
SW-TT	3-Jun-98	730	3.2 21,400 13,500	<2.0	4,620																					1390			
SW-TT-5	25-Sep-98	815	3.7 7,730 5,050	<2.0	30																					421			
SW-TT	18-Nov-98	1630	3.1 7,630 4,730	<2.0	1,160																					415			
SW-D6 (Dupe of SW-TT)	18-Nov-98	1200	3.0 7,590 4,150	<2.0	1,220																					394			
SW-TT	4-Feb-99	1025	3.4 9040 5810	<2.0	1580	33	<0.002	<0.001	<0.02	7.7	397	<0.05	1.91	11.3	327	0.03	614	277	<0.002	0.76	<2.0	<0.001	<0.003	124	<0.002	<0.05	357		
SW-TT	10-Jun-99	1030	3.1 10700 7210	<2.0	2640																					247			
SW-TT	6-Sep-99	1040	4.6 4210 3000	<3.0	316																					612			
SW-TT	29-Nov-99	1040	3.6 5500 3960	668																						139			
SW-TT	24-Mar-00	1235	3.3 7900 5660	<2.0	1020																					443			
SW-TT	26-Jun-00	1038	3.1 7880 5350	<2.0	1150																					364			
SW-TT	4-Jun-01	1190	3.3 6820 4870	<2.0	846																					382			
Cypres Sprng (CMRASW004)	12-Jun-97	1615	6.9 4,478 2,798	609																						38.2			
Cypres Sprng (SWGS-2)	9-Sep-97	1140	8.3 4,270 3,110	602	<1.0	<0.05	<0.04	<0.001	<0.01	<0.004	0.019	546	<0.01	<0.01	0.02	0.05	<0.005	269	<0.005	<0.001	0.15	1.51	<0.005	<0.01	174	<0.002	<0.01	38.2	
Cypres Sprng (SWGS-3)	15-Dec-97	1430	7.3	421																						34.9			
SW-GS	3-Mar-98	1315	7.9 4,410 2,620	604																						23.9			
SW-GS-5	3-Jun-98	810	6.9 4,320 2,340	596	<2.0																					37.1			
SW-GS-5	25-Sep-98	850	7.8 4,490 2,590	378	<2.0																					25.2			
SW-GYP (Dupe of SW-D-2)	11-Jun-98	1100	7.8 4,490 2,720	377	<2.0																					23.9			
SW-GYP	19-Nov-98	1545	7.2 4,360 2,520	609																						29.3			
SW-GYP	4-Feb-99	1045	7.0 4,360 2,450	606	<2.0																					29.6			
SW-GYP	10-Jun-99	925 Dry																											
SW-GYP	6-Sep-99	1100	Too low to sample																										
SW-GYP	29-Nov-99	1250	7 4260 2640	560	<2.0	<0.02	<0.002	0.001	<0.02	<0.002	<0.003	360	<0.01	<0.05	<0.01	<0.05	<0.001	312	0.03	<0.0002	0.14	2	0.004	0.03	175	<0.002	<0.03	25.9	
SW-GYP	24-Mar-00	1225	7.4 4510 2750	777	<2.0	45.3	0.01	0.008	0.22	<0.01	0.013	410	<0.01	2.3	61.5	1312	457	<0.001	0.69	<1.0	<0.003	0.69	<1.0	0.026	<0.15	190	<0.001	0.20	24.6
SW-GYP	16-Jun-00	1103	6.7 4440 2670	580	<2.0	1.0	0.002	0.013	<0.02	<0.01	0.04	566	<0.05	<0.05	<0.05	2.67	0.017	353	0.40	<0.002	0.14	2	0.003	<0.03	190	<0.05	<0.03	31.2	
SW-GYP	25-Sep-00	1038	6.6 4460 2860	568	<2.0																					30.4			
SW-GYP	4-Jun-01	1045	6.9 4430 2940	532	<2.0																					32.1			
SW-USP	11-Jun-97	800	2.7 15,144 9,543	6,009	88.6	<0.04	0.009	0.01	0.016	3.03	349	0.08	1.99	48.8	1177	<0.005	348	136	<0.001	0.59	6.86	<0.005	<0.01	97.1	<0.002	0.02	511		
SW-USP (TOTAL Metals)	9-Sep-97	800	2.7 15,144 9,543	6,009	88.6	<0.04	0.009	0.01	0.015	3.03	410	<0.01	2.3	61.5	1312	457	<0.001	0.69	<1.0	<0.003	0.69	<1.0	0.026	<0.15	190	<0.001	0.20	24.6	
SW-USP (CMRASW002)	9-Sep-97	1115	3.2 1,710 1,110	<2.0																						60.4			
SW-USP (CMRASW003)dup	9-Sep-97	1115	3.3 1,700 1,080	<2.0																						61.6			
SW-USP (SWUSP-2)	15-Dec-97	1455	2.7		118	<0.004	0.18	0.03	0.2	3.88	280	<0.05	2.33	94.7	1990	0.002	292	160	<0.002	0.57	<4.0	0.003	<0.03	56	<0.002	<0.1	889		
SW-USP (SWUSP-3)	3-Mar-98	1430	2.6 15,900 10,100	<2.0																						723			
SW-USP	3-Jun-98	1250	2.7 10,500 4,880	<2.0	1,680																					319			
SW-USP	25-Sep-98	940	5.1 5,120 3,270	4	366																					180			
SW-USP	18-Nov-98	1600	5.8 5,950 2,500	27		6.5	<0.002	<0.001	<0.02	<0.01	0.83	387	<0.05	0.62	3.05	49.6	0.005	271	92.9	<0.002	0.28	2	0.003	<0.03	99	<0.002	<0.03	176	
SW-USP	4-Feb-99	1115	6.7 2680 1810	107	98																					91.4			
SW-D-8 (Dupe of SW-USP)	4-Feb-99	800	6.6 2700 1760	107	96																					91.3			
SW-USP	10-Jun-99	943 Dry																											
SW-USP	4-Sep-99	1135	4.9 4230 2940	3	284																					135			
SW-USP	26-Jun-00	1130	3.1 10500 7320	<2.0	1240																					387			
SW-BSCS-1	12-Jun-97	1715	2.7 15,470 9,703	6,206	119	<0.04	0.008	<0.01	0.02	3.1	466	0.06	1.99	54.8	1711	0.005	345	169	<0.002	0.76	<2.0	<0.005	<0.01	108	<0.002	<0.01	788		
LWC-B-PC	13-Jun-97	1100	8.0 508 185	277	<1.0	0.2	<0.04	<0.005	0.03	<0.004	0.002	132	<0.01	<0.01	0.04	<0.02	<0.005	36	0.042	<0.001	<0.01	1.53	<0.005	<0.01	18.6	<0.001	<0.01	0.39	
LWC-B-PC (CMRASW006)	9-Sep-97	730	6.2 1,660 940	16																							22.8		
LWC-B-PC (SW-LWC-2)	16-Dec-97	1405	6.0	10																							27.5		
LWC-B-PC (SW-LWC-2)dup	16-Dec-97	1405	5.1	5																							28.1		
LWC-B-PC (SW-LWC-3)	3-Mar-98	1140	6.2 480 690	25	208	<0.001	0.012	<0.002	0.064	170	<0.01	0.05	0.8	0.08	0.002	46.7	4.41	<0.002	0.03	0.7	<0.001	<0.005	21.2	<0.002	<0.005	28.4			
SW-LWC	25-Sep-98	1430	8.5 640 150																										

