



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

REGION 6
1445 ROSS AVENUE, SUITE 1200
DALLAS, TX 75202-2733

January 3, 2003

Ms. Wendy Meyer Trimble
Geochemical Solutions
825 Walnut Hill Road
Lexington, KY 40515

Dear Ms. Trimble:

This letter is in response to your December 6, 2002, letter requesting amendments to the plans for monitoring ground water, surface water, and remedy integrity at the Cleveland Mill Superfund Site (the "Site") in Grant County, New Mexico. The Site Ground Water and Surface Water Monitoring Plan was originally included as Appendix D of the Removal Action Work Plan dated August 27, 1997. This plan was revised through an April 4, 2001, letter from the Environmental Protection Agency (EPA) to Scott Miller of Mining Remedial Recovery Company. The February 28, 2000, Site Operation and Maintenance Plan referenced the ground and surface water monitoring, and detailed the Site inspections that would be performed to ensure that the remedy remained effective.

The EPA, in consultation with the New Mexico Environment Department (NMED), approves of the primary change of scheduling the Site monitoring and inspections on an annual basis with some caveats. The responses to all the requested changes are enclosed. This letter and your December 6, 2002, letter are hereby incorporated into the plans, and the changes may take place immediately.

Should you have any questions, you may contact me at 214-665-8509.

Sincerely,

Kathleen A. Aisling *U*
Remedial Project Manager

Enclosure

cc: Chris Meehan
New Mexico Environment Department
Jeffrey Groy, Viacom, Inc.
Scott Miller, Bayard Mining
Norman Johnson
Mining Remedial Recovery Company

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**Cleveland Mill Superfund Site, Amendments to the Groundwater and Surface Water
Monitoring Plan, and the Operation and Maintenance Plan, January 2003**

1) Page 4, Section 1.3, Proposal 1: Annual Sampling of the Site Monitoring Wells

EPA approves the change in the frequency of sampling. Sampling shall be conducted in July of each year. EPA reserves the right to request additional sampling events in including, but not limited to, circumstances when the Site conditions change (for instance, if there is a large rainstorm at an unseasonable time), or if Site data indicates that concentrations of contaminants could be increasing.

2) Page 4, Section 1.3, Proposal 2: Discontinue Sampling for Certain Analytes

EPA approves reducing the list of analytes to pH, TDS, sulfate, alkalinity, acidity, arsenic, beryllium, cadmium, copper, lead and zinc. Note that this list continues to include beryllium because it was one of the elements that contributed to the Site risk, and because this element causes an unacceptable risk at low concentrations.

3) Page 5, Section 1.4, Proposal 3: Annual Site Inspection and Reporting

EPA approves the change in the frequency of Site inspection and reporting. Site inspection shall occur concurrently with the ground water monitoring. EPA reserves the right to request additional site inspections in including, but not limited to, circumstances when the Site conditions change.

4) Proposal 4: Discontinue Monitoring MW-7

The letter proposes that the monitoring of MW-7 be discontinued because it is dry. Since the Site has largely been under drought conditions since MW-7 was installed, and since it does not take much time to see if the well is dry, this well will continue to be checked. The well shall be sampled if it ever has enough water to sample.

5) Proposal 5: Discontinue Surface Water Monitoring

EPA approves discontinuing the surface water monitoring, however, EPA reserves the right to request that the monitoring be reinstated in including, but not limited to, circumstances when Site conditions change.

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Environmental Sampling, Remediation & Compliance

December 6, 2002

Ms. Kathleen Aisling
Remedial Project Manager
U.S. Environmental Protection Agency
Region VI, 6SF-LT
Allied Bank Tower at Fountain Place
1445 Ross Avenue
Dallas, Texas 75202-2733

RECEIVED
DEC 10 2002
U.S. ENVIRONMENTAL PROTECTION AGENCY
REGION VI, 6SF-LT

Re: Cleveland Mill Site – Request to Amend Site Monitoring

Dear Ms. Aisling:

On behalf of Bayard Mining Company, Mining Remedial Recovery Company and Viacom International Inc. Geochemical Solutions, LLC is submitting this letter to propose a change in current groundwater and surface water monitoring at the Cleveland Mill site. Current monitoring is conducted semi-annually in accordance with the Cleveland Mill Removal Action Work Plan, Appendix D, Cleveland Mill Sampling and Analysis Plan (August 27, 1997), the Cleveland Mill Removal Action Final Report, dated December 10, 1998 (the "RA Final Report") and the Request to Amend Site Monitoring (March 5, 2001). According to the RA Final Report, the US Environmental Protection Agency (US EPA) and New Mexico Environment Department (NMED) may modify the locations and frequency of water quality monitoring. The rationale for reducing the site monitoring from semi-annually to annually at the Cleveland Mill site follows.

If you have any questions or comments, please do not hesitate to call me. I can be reached at (859) 971-0971.

Sincerely,
Geochemical Solutions, LLC

Wendy Meyer Trimble
Principal Geochemist

cc: Chris Meehan, NMED (1 copy)
Jeffrey Groy, Viacom (1 copy)
Scott Miller, Bayard Mining (1 copy)
Norman Johnson, MRRC (1 copy)
File

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Letter to Ms. Aisling
December 6, 2002

Environmental Sampling, Remediation & Compliance

Request to Amend Site Monitoring

INTRODUCTION

The Cleveland Mill site, located in Grant County, New Mexico, is a former National Priorities List (NPL) site for which a comprehensive removal action has been completed. EPA delisted the Cleveland Mill site from the NPL in 2001. The site continues to be monitored according to the RA Final Report, December 10, 1998, and the Consent Decree (CERCLA Docket No. 06-14-97).

Water quality monitoring and site inspections at the Cleveland Mill site were conducted on a quarterly basis from June 1997 to March 2001 and on a semi-annual basis since that time. Water quality monitoring is currently conducted on four (4) groundwater wells and two surface water sampling locations and was last completed on July 17, 2002. The first five-year review of the Cleveland Mill site, was completed in August 2002. A sufficient database for the Cleveland Mill site exists to modify the monitoring program. Based on the data presented below, we propose to modify the water quality monitoring and site inspection program to reduce the frequency and parameters of water quality monitoring and the frequency of site inspections.

WATER QUALITY MONITORING

Summary data tables for groundwater and surface water sampling are provided in Table 1 and Table 2, respectively. Groundwater and surface water samples are currently analyzed for: acidity, alkalinity, conductivity, laboratory pH, total dissolved solids (TDS), sulfate, arsenic, beryllium, cadmium, copper, lead, mercury silver and zinc.

1.1 Groundwater Monitoring

1.1.1 Frequency

Groundwater is currently monitored around the disposal cell in monitoring wells MW-4, MW-5 and MW-6. Monitoring well MW-7, located at the base of the former west tailings pile is also monitored semi-annually and continues to be dry. Groundwater pH, TDS and sulfate data for monitoring wells MW-4, MW-5 and MW-6 are illustrated in Attachment 1, Groundwater data graphs. These graphs illustrate that the data for all wells does not appear to vary greatly due to the time of year for sampling, but concentrations of TDS are slightly higher during the summer months. In general, the data continue to be consistent with historic quarterly data; therefore, it is proposed that the groundwater sampling frequency be conducted annually during the summer months. Since concentrations tend to be the highest during the summer months, conducting annual monitoring in the summer will ensure that the data collected is the most conservative.

1.1.2 Analytes

Groundwater samples are sent to EPA approved ACZ Laboratories Inc. in Steamboat Springs, Colorado for analysis. The groundwater database provided in Table 1 illustrates that all wells have undetected concentrations of beryllium, mercury and silver for all samples. Since the data has been very consistent, we propose to no longer analyze any of the groundwater samples for beryllium, mercury and silver.

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Letter to Ms. Aisling

Environmental Sampling, Remediation & Compliance

December 6, 2002

Request to Amend Site Monitoring

1.2 Surface Water Monitoring

1.2.1 Frequency

Surface water is currently monitored at the toe of the former tailings area (SW-TT) and at the confluence of Little Walnut Creek (SW-LWC) and Picnic Creek (SW-PC). Surface water sampling locations have been dry since January 2001 for both the summer and winter monitoring.

The surface water monitoring samples, which have been collected, illustrate that surface water has improved since the removal action was completed. This is evident particularly in the surface water at the toe of the former tailings area, which showed an eighty-seven percent (87%) reduction in TDS from September 9, 1997 to January 4, 2001.

The surface water monitoring locations were intended to monitor the surface water downgradient from the former Cleveland Mill area. Since the removal action was completed in 1998, surface water in Little Walnut Creek is no longer in contact with mining-related materials.

Given that the surface water sampling locations have been dry, the measured reduction in TDS in the surface water, and the removal of mining-related materials from the Little Walnut Creek watershed, we propose to discontinue surface water monitoring.

1.2.2 Analytes

Surface water samples are sent to EPA approved ACZ Laboratories Inc. in Steamboat Springs, Colorado for analysis. The surface water database in Table 2 provides the surface water analytical data for current surface water sampling locations.

OPERATIONS 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 was revised by the approved Request to Amend Site Monitoring (March 5, 2001) to provide that the sediment control structures and reclaimed and revegetated areas are to be inspected on a biannual basis. Over time, vegetation has become established and there has been a decrease in material collected behind the sediment control structures. Consequently, the frequency of inspections of the sediment control structures can be safely reduced. It is proposed to conduct these inspections concurrently with the annual water quality sampling events.

PROPOSED REVISIONS TO WATER QUALITY MONITORING AND OPERATION AND MAINTENANCE PLAN

1.3 Proposed Water Sampling and Analysis Plan

The three wells located near the disposal cell when sampled annually will continue to provide adequate monitoring of any potential impact to groundwater from the disposal cell. We propose to continue analyzing water quality samples for the following: pH, TDS, sulfate, alkalinity, acidity, arsenic, cadmium, copper, lead and zinc. These analytes, when compared with historic data, provide a good indication of water quality at the site.

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Letter to Ms. Aisling

December 6, 2002

Request to Amend Site Monitoring

1.4 Proposed Operation and Maintenance Plan

We propose to conduct inspection and reporting activities covered under the O&MP concurrently with the annual water quality monitoring. Site inspections and reporting activities can safely be reduced.

Table 1. Groundwater Database for Currently Sampled Wells.

Well ID	Date EPA Method Number Time Sampled	pH M150	Calc M161	TDS M171	Metals Analyzed for every sample							Metals with Select Analysis																							
					Alkalinity M210B	As M310B	Barium M210B	Carbonate M310B	Copper M310B	Hydroxide M310B	Lead M310B	Mercury M310B	Nickel M310B	Selenium M310B	Silver M310B	Zinc M310B	Aluminum M310B	Antimony M310B	Barium M310B	Cadmium M310B	Chromium M310B	Cobalt M310B	Iron M310B	Magnesium M310B	Manganese M310B	Nickel M310B	Potassium M310B	Sulfate M310B	Sodium M310B	Thallium M310B	Vanadium M310B				
MW-4	06-Jan-97 1040	7.2	320	128	317	<0.01	U	0.004	U	0.01	U	0.05	U	0.002	U	0.01	U	0.02	U	0.03	U	0.05	U	0.05	U	0.05	U	0.05	U	0.05	U	0.05	U	0.05	U

Q = Data Quality U = Undetectable
 B = Between the PQL and MDL
 H = Holding time was exceeded
 ** = Secondary Standard
 *** = Irrigation Use Standard
 ** = As of 1/12/2006
 Italics = Dissolved metals, all other metal concentrations are total metals

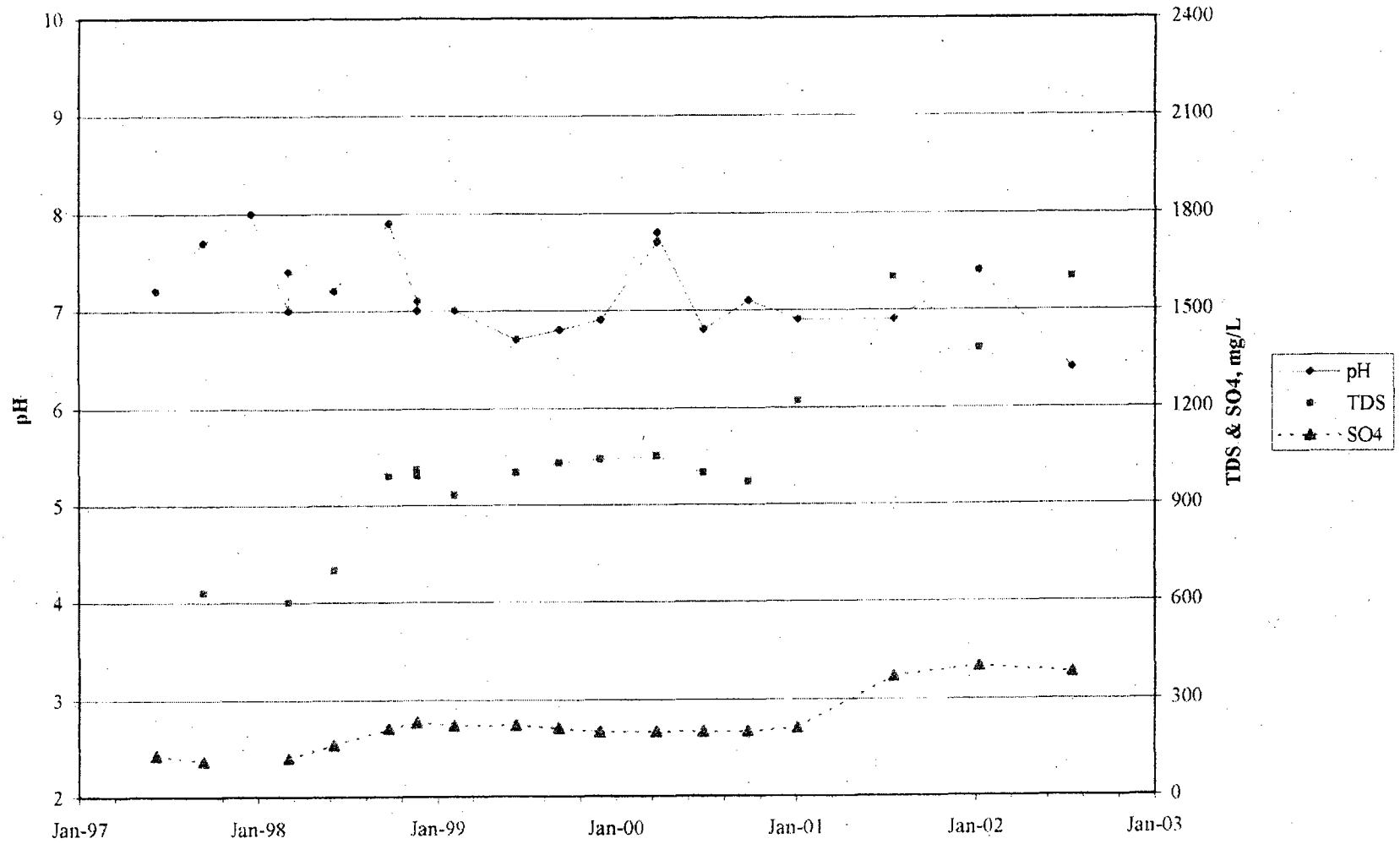
Attachment 1

Groundwater Data Graphs

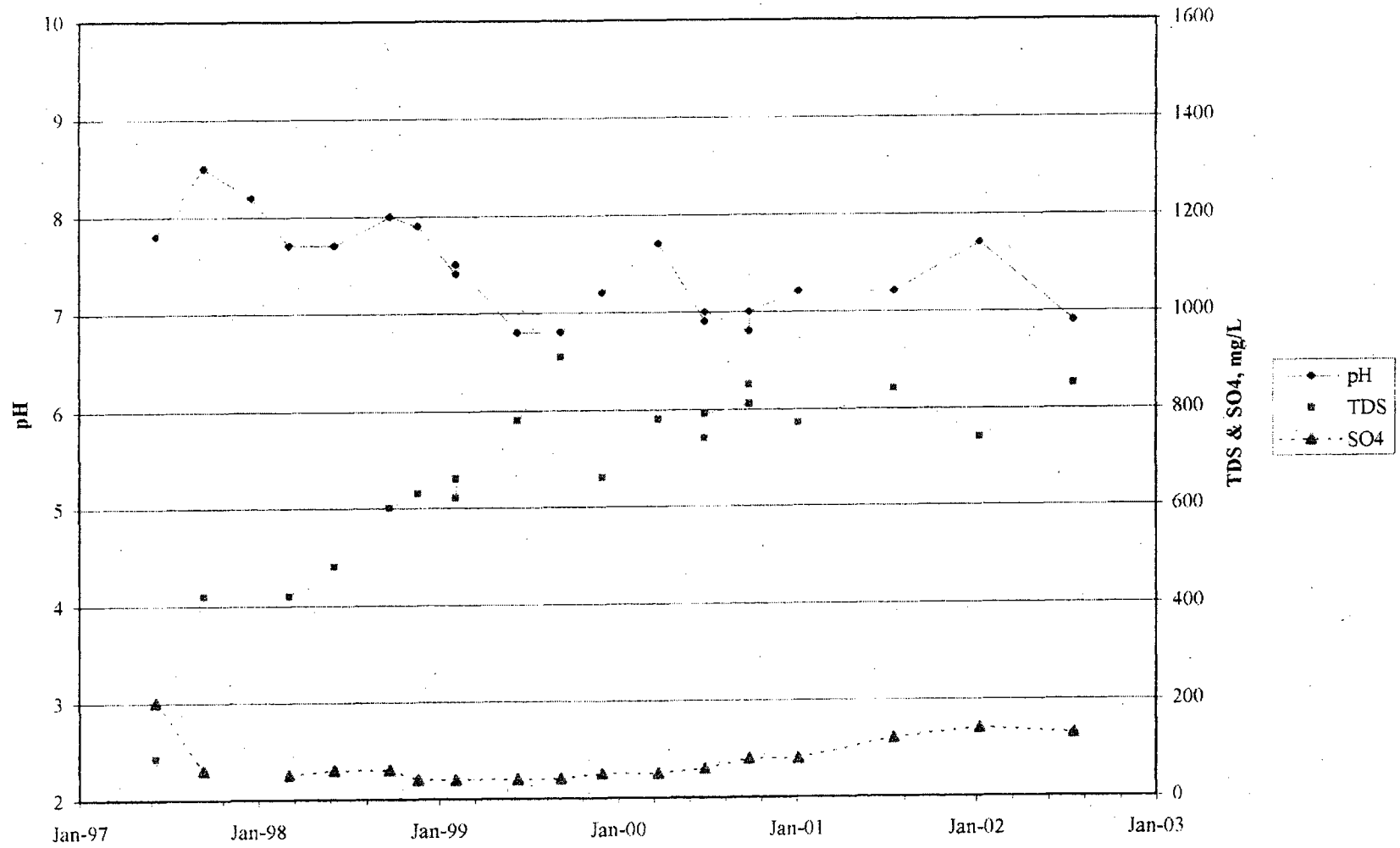
Cleveland Mill Site

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MW-4



MW-5



MW-6

