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ANIMAS RIVER
DEMONSTRATION PROJECT:
1994 Status Report

by Gary Broetzman

Colorado Center for
Environmental
Management

January 1995

EXECUTIVE SUMMARY

BACKGROUND

In 1994, a collaborative effort of key interests (stakeholders) began within the Animas River Basin of southwestern Colorado. The Colorado Center for Environmental Management (CCEM) provided facilitative help. The purpose of this effort is to address the severe impacts to aquatic life due to heavy metals contamination throughout the upper basin, a highly mineralized area that has been mined extensively since the late 1800s. The effort is building upon the water quality data collected by the state's Water Quality Control Division (Division) during 1991 to 1993. Due to the widespread contamination and complex issues associated with potential cleanup, the Division recognized the need for broad public involvement in the decisions. It approached CCEM to head up a stakeholders process. CCEM was receptive because it provided an opportunity to demonstrate a stakeholder decision-making model being developed by CCEM under its Technology/Regulatory Integration Project funded by the Department of Energy's Office of Technology Development.

Process Followed

Beginning in February, a stakeholders group has been meeting, generally monthly. Prior to that meeting, CCEM met individually with an array diverse interests to assess local perspectives on water quality issues and willingness to participate in a collaborative process. Such interest existed, due in part to fear of possible independent state actions and of CERCLA. Much anxiety existed in the initial meetings which focused primarily on the Division's field information and desired outcome for cleanup. Adding further to local concerns was the decision by the state's water quality regulatory body, the Water Quality Control Commission (Commission), to review the basin's prevailing stream classifications and standards.

Despite that trying start, local interests showed a willingness to work with the state and others on this matter. A core group of about 30 diverse people have worked diligently at gaining an overall understanding of the state's water quality control system. They represent regulatory agencies, other federal and state agencies, mining industry, environmental and public interests, local government, and the Southern Ute Tribe. During the summer, the group prepared for a public hearing on the basin's stream classifications and standards which was held in September.

Customary of how community issues are addressed in this area, the group followed an informal operational structure relying on CCEM to facilitate meetings. Group continuity has been achieved by having generally the same people participate in most meetings. Because of the group interaction, the sense of distrust that existed initially appears to have subsided. As a result, the group has functioned more cohesively and has unified in its support of improved water quality for the basin.

Upcoming Activities

By late summer, the group began identifying approaches and tasks for pursuing overall cleanup of the upper basin. It identified five critical areas that are primary contributors of metals contamination. Feasibility studies will be conducted during 1995 and 1996 for each of those areas to provide the basis for prioritizing individual sites for cost-effectively attaining basin water quality goals. By the year's end, the Commission was moving towards selecting a set of target water quality goals for the collaborative process.

In addition, the group is developing a comprehensive monitoring plan for collecting additional data for cleanup decisions. It also began examining candidate funding sources which

will lead to a funding support strategy, a critical feature because of the absence of dedicated funds for mine waste cleanup. As a commitment for action, a pilot project has been selected for construction next summer; others are planned during the following construction season.

Summary

In summary, the prospects for a successful collaborative effort appears promising. The participants are demonstrating a strong commitment to work together for the benefit of improved water quality in the basin. Much has been learned through the activities to date.

ANIMAS RIVER DEMONSTRATION PROJECT

STATUS REPORT

BACKGROUND

Geographical/Socioeconomic

The Colorado Center for Environmental Management (CCEM) has been facilitating a joint initiative involving the Colorado Department of Public Health and Environment's Water Quality Control Division (WQCD), local governments, the mining industry, and other local interests within the Animas River Basin in southwestern Colorado near Silverton and Durango. This effort is the result of concerns related to heavy metals contamination in surface waters in the upper portion of the basin. The contamination is from mine-related and natural sources.

The upper Animas River Basin has a long history of extensive metal mining. Most of the mine-related sources are from abandoned sites that date back to the 1800s. Virtually the entire economy of San Juan County, which is the upper portion of the basin, has been tied to mining activities. Mining peaked in the 1950s and then began to wane; more recently, tourism has begun to grow in importance. By 1991, the last mining operation, the Sunnyside Mine, closed operations. Currently, that mine is the only large mining facility under a federal point source discharge permit. With mine reclamation nearing completion on that facility, discussions are underway between Sunnyside and WQCD to possibly inactivate its discharge permit.

Initiation of Collaborative Process

Because of the severity of heavy metals contamination impacts on aquatic life within the upper basin, WQCD conducted three years of widespread water quality stream monitoring and biological sampling during 1991 through 1993. As a result of the contamination and the complex issues associated with its potential cleanup, WQCD recognized a need for active, up-front public input into the investigative process for addressing the water quality problems of the area. Because of CCEM's independent status, in late 1993 WQCD asked it to form an oversight group to ensure representative stakeholder involvement in addressing the basin environmental management and cleanup efforts.

This gave CCEM an opportunity to include the Animas River Basin as a demonstration site to test the principles of its stakeholder decision-making model developed under the Technology/Regulatory Integration Project (TRIP). Funded by the Department of Energy's Office of Technology Development, CCEM had been developing its model for stakeholder involvement in decisions associated with the deployment of innovative technologies and was interested then in potential demonstrations of the model over an array of problem settings. The Animas presented an excellent opportunity to test the model at a site that contrasted with the more traditional DOE facilities and problems, and provided a basis for evaluating the breadth of the model's applicability. The prospects of the need for innovative technologies along with innovated processes also existed in the basin. As a result, CCEM accepted (and DOE supported) the offer from WQCD for stakeholder involvement leadership for the basin.

PROCESS FOLLOWED

Initial Interviews

Shortly after CCEM accepted the role as stakeholder facilitator, it conducted interviews with various individuals in Silverton and Durango to become familiar with the communities' perspectives on water quality and related socio-economic issues. Approximately thirty interviews were conducted in January 1994 with local officials, environmental and public interests, governmental officials (federal, state, and local), mining industry representatives, and residents. As a starting point, WQCD provided names of people they knew were interested in this topic because they helped with the state's water quality sampling efforts. This list of people fit the type of stakeholders one would expect in an area with a strong mining heritage. They in turn suggested others who were eventually interviewed.

The results of those interviews are summarized in Table 1. In general, it showed reservations towards the process, concern towards WQCD in view of its regulatory role and past regulatory actions of the Health Department towards the mining industry, fear over the federal CERCLA program, and apprehension towards CCEM because of its perceived alliance with the state. In spite of that, however, the local interests felt that they had no real choice but to participate in a potential cleanup process because of their belief that the state would proceed with or without their involvement.

Stakeholder Meetings

Because there was a desire by local residents to be involved in a process for addressing mine-related problems, CCEM convened the first meeting of basin interests for Silverton on February 10, 1994. Subsequent meetings of local interests (called stakeholders because of their stake in the outcome) generally proceeded on a monthly basis. The process built upon the information gained from the individual interviews, the need to guide the Group towards a collaborative process involving all relevant interests, and the need to focus on water quality issues related to historical mine wastes. At the introductory meetings held in February and March, members of WQCD told approximately one hundred attendees of the relationship of its three-year sampling efforts to the overall state water quality management activities and conveyed a desire to work with the Group on water quality issues. WQCD characterized its desired intent to proceed towards a "voluntary" approach for possible cleanup within the basin. An acrimonious mood prevailed during those early sessions -- there was a general distrust towards the state's intention, anxiety about CCEM's role, and a lack of harmony among local interests. CCEM presented the Group with the results of the individual interviews, which helped reduce the level of anxiety. The locals could see that CCEM had heard the concerns they raised.

Adding further to local concerns was the decision by the Colorado Water Quality Control Commission (WQCC) to conduct its triennial review of the basin's stream classifications and standards at a public hearing to be held in September, 1994. Many local interests expressed concerns over the timing of the state's proposed process for evaluating changes in the stream classifications for the Animas River Basin. In April, WQCC published a proposal for changes in the prevailing stream classifications and standards (prepared by its staff, WQCD) as a basis for public comment at the hearing. Even though WQCD explained the specifics of its proposal at the local meetings, local interests, were fearful of the implications, and expressed concern that WQCD's proposal was prepared without adequate local input and that the process was moving too fast. Despite those concerns, WQCC continued plans for its September hearing.

WQCC is a nine-member citizen board responsible for steam classifications and other water quality regulatory decisions within the state. The prospects of changes in the prevailing water quality standards put a more regulatory spin on the "voluntary" approach to the collaborative effort because such standards can restrict the allowable amount of metal releases contained in regulatory actions, including discharge permits. The regulatory spin was further amplified by pronouncements from EPA and WQCD that individual discharges from historical mine wastes are subject to both national discharge permit provisions and to the emerging storm-water permits under the national Clean Water Act.

TABLE 1

RESULTS OF INITIAL INTERVIEWS WITH LOCAL INTERESTS

Socio-economic

- Strong mining heritage in upper basin.
- Area in state of transition. Looking for ways to market area and expand economic development.
- Environmental regulations the reason for curtailment of mining.

Contamination Issues

- Mining-related contamination vs. natural background levels.
- Concern over possible cleanup activities directed primarily at improving fish habitat conditions.
- Difference of opinions/understanding regarding seriousness of water quality problems.
- Not aware of any health or safety impacts.
- Concern with stream aesthetics due to heavy metal loadings.
- River viewed as key factor in the quality of life in lower basin.

Legal/Regulatory Issues

- Who/what is driving the state's water quality activities in the Animas?
- What are the state's goals?

Technology Issues

- Leave opportunities for re-mining.
- Don't destroy the historical values (structures).
- Concern over adequacy of information to support cleanup decisions.
- Focus on long-term solutions; aware of some past solutions failing.

Process Issues

- Desire to help define the problem and solutions.
- Need a balance between economic reality and cleanup.
- Prioritize problems.
- Implement site-specific solutions basin-wide effort.

Group Participants and Dynamics

Even with this trying start, all participants showed a willingness to continue working together on this effort. Since the initial meeting, a core group of about thirty people representing diverse interests (Table 2) have worked diligently at gaining an overall understanding of the monitoring information, the state's water quality regulatory framework, and the stream classifications and standards structure. Due to the initial strain among group participants, the norms within the community for informally addressing problems, and the recognition by some influential members of the Group of the value in not dominating the process, the Group initially chose not to establish clear operational procedures and self-governance of the participants. Beginning at the March 31 meeting, CCEM introduced the need for operational protocol and formalization of the Group's decision-making in the interest of improving the Group's effectiveness. The Group resisted. They said that they did not want to pursue such formality or devote time to it at the meetings. Furthermore, they insisted that when the community faces a major issue, local residents simply meet to solve the issue without the formality of a structure and decision-making protocol.

As a result, the Group decided that those who were participating should be considered the "core group" and could speak collectively for the stakeholders. That core group, listed in Table 2, appears to be reasonably representative of the basin interests, particularly in the upper basin. As the project progresses, others are expected to be added related to specific issues raised, areas identified for cleanup, technologies identified for consideration, and emerging funding opportunities.

Throughout the year, the Stakeholders Group's progress became increasingly known because of outreach efforts by CCEM and the individual participants. Management representatives of various federal and state agencies met periodically during the year in Denver for status briefings on the project and to take specific actions of support. That group, which became known as the Upper Animas River Resources Group, declared its role as being supportive of the local process. It was instrumental in securing an EPA grant of \$75,000 awarded to the state in August for: 1) retaining a basin coordinator, 2) conducting a special USGS investigation for determining the natural background levels of metals loading to the area, and 3) preparing an annotated bibliography (by the USBM) of water quality information for the basin. By year end, the Resources Group had expanded to include participants from nine federal agencies (EPA, USGS, USBM, BLM, USFS, USBR, DOE, COE, and OSM) and three state agencies (WQCD, Division of Minerals and Geology, and the Division of Wildlife). Facilitated by CCEM, this group has been meeting about every three months.

Opinion Surveys

Two opinion surveys were used to obtain citizen input on water quality issues within the basin and to evaluate the process. The water quality survey was conducted in March by Dr. Adele Platter of Colorado University. She designed and distributed a series of 25 questions associated with the quality, impacts, credibility of various entities involved with the process, approaches for addressing the problems, and background information on the respondents. Questionnaires were mailed to households in San Juan (Silverton) and LaPlata (Durango) Counties. Results showed strong difference of opinions among those affiliated with the mining industry, environmental interests, and local governments, and between upstream and downstream residents. Fear of state and federal governments and of the prospects of water quality cleanup was particularly strong within the upper position of

Table 2

CORE PARTICIPANTS IN THE ANIMAS RIVER STAKEHOLDERS GROUP

NAME	ORGANIZATION
Stan Powers	U.S. Bureau of Reclamation
Larry Perino	Sunnyside Gold Corp.
Bill Goodhard	Sunnyside Gold Corp.
Paul Krabacher	CO Div. of Minerals and Geology
Win Wright	U.S. Geological Survey
Paul von Guerard	U.S. Geological Survey
Mike Black	Friends of the Animas
Peter Butler	Friends of the Animas
Jerry Swingle	FCAC/Western CO Congress
Stephen Fearn	Silver Wing Mining Co.
Bill Wilson	Gold King Mining Co.
Greg Parsons	CO Water Quality Contr Div
Bob Owen	CO Water Quality Contr Div
Bill Jones	Root and Norton
Richard Perino	San Juan County Commissioner
Bill Norman	San Juan County Administrator
Bill Simon	Alpine Environmental Services
Katherine Foster	U.S. Forest Service
Jerry Sandell	Howardsville Mill
Barbara Hite	U.S. Bureau of Mines
Chris Hayes	Echo Bay Mining
Nancy Grief	SWCWCD
Cindy Crist	Southern Ute Tribe
Gary Thrash	U.S. Bureau of Land Management
Kevin Patrick	K2 Enterprises
Carrol Russell	U.S. EPA
David Smuin	Oak Ridge Natl Lab/Grand Junction
Jim Herron	CO Div of Minerals and Geology
Dave Erickson	Silverton Town Manager
Jack Rogers	Durango City Water Utilities
Neil Eurick	Harding Lawson Associates
Brian Caruso	Colorado State University
Barbara Horn	Colorado Division of Wildlife
Don Bachman	Local citizen

the basin. These differences in attitudes were evident in the early meetings of the stakeholders group as well.

In July, CCEM contracted with the University of Denver to perform independent evaluations of the stakeholder processes underway in pilot projects being conducted under the TRIP project. Laura Belsten headed up that effort. By then, the strained relationships within the group had subsided and it was working with much greater effectiveness. Ms. Belsten developed a questionnaire (55 questions) related to the overall effectiveness of the process, including CCEM's role in facilitating the meetings. That questionnaire was distributed to the core group at the October 6 stakeholders meeting and was mailed to those who did not attend. Ms. Belsten also conducted individual interviews with approximately half of the group participants.

The results were mostly complementary of the process to date. Respondants were satisfied with the overall approach for involving the public, the Group's access to information, and with CCEM's facilitation of the process. They generally agreed that the process will lead to better decisions, that it is helping achieve higher levels of trust of those in positions of power and authority, and that the Group is likely to have a real impact on the eventual decisions made. Responses to the decision-making process itself, however, were somewhat mixed with some respondents unclear as to the expectations of the Group, the goals of the process, and the lack of structure in the Group's decision-making. In addition, concern was expressed over the lack of active participation by EPA (particularly the CERCLA program) which could ultimately overturn the achievements of the Group.

NEAR-TERM ISSUES

Stream Classification Proposal

During the first few meetings, the Group focused on gaining an understanding of the stream monitoring information collected by WQCD and on identifying the overall water quality-related problems in the upper basin. However, the Group soon began to concentrate on the stream classifications and standards for the Animas River Basin. That topic was introduced at the February 10 meeting. At that time, WQCD told the Group that WQCC was planning to schedule a September hearing on what is referred to as a triennial review (required under the federal Clean Water Act) of the basin standards.

WQCC was aware of the results of the basin monitoring and of the presence of brook trout in a few of the segments that had not been previously classified for aquatic life because of a perceived absence of fish life. Under federal law, WQCC evidently felt obliged to consider protecting the aquatic life found, which meant possibly upgrading the standards. It scheduled the issuance of a public notice for late April that was to include proposed revisions to the standards to be developed by WQCD. In describing this to the Stakeholders Group, WQCD committed to presenting an early version of its proposal for explanation and comment at the Group's March 31 meeting.

At the March meeting, WQCD presented a range of stream classification options that it had identified in developing its proposal for the WQCC. WQCD indicated its preference at that time for the most stringent of those options presented. Many concerns were raised by the Group relative to the regulatory and nonpoint implications of more stringent standards. Two categories of arguments emerged. One was to defer any actions until additional, supporting information was gathered. A second was for WQCD to submit a less imposing proposal.

At the April 23 meeting, WQCD explained its proposal that had just been submitted to WQCC (Attachment A). It included some adjustments to the option that WQCD initially supported in response to comments presented by the Group at the March meeting. WQCC retained its scheduled September hearing, but agreed to hold it in Silverton.

Group's Response to the State's Proposal

With WQCC's decision to proceed with the stream classifications and standards hearing, the Group felt compelled to focus on this topic throughout the spring and summer. At the May 25 meeting, it began identifying specific views of each stakeholder, particularly in relation to WQCD's proposal. The group began to define various options for proceeding. Furthermore, they arranged to hold a special meeting on June 9 of those interested in reviewing the technical basis of WQCD's proposal. At that meeting, 21 people met with a representative of WQCD to review the methodologies, analyses, and implications of prospective revisions to the stream standards. As an outcome of that meeting, the Group generally agreed with the basis for WQCD's proposal and did not have overall issues with the information presented.

At the June meeting, WQCD shared with the Group five specific goals that formed the foundation of its proposal. The group reviewed those goals in depth, were supportive of the general thrust of most of them, but could not reach a consensus position. On July 27, the Group revisited its position on those goals and concluded that it could not reach a unified position. It agreed to develop a statement for the September hearing that summarized the process followed and general results to date, a group agreement to pursue improvements in the basin's water quality, and a commitment to work together in defining and implementing specific actions.

At the September 12 hearing held in Silverton, the stakeholders group was given an opportunity to discuss the process followed for the basin initiative and to present its overall group statement. Eight entities, each active in the stakeholder process, were given party status and gave individual testimony. Several others associated with the Group presented testimony during the public comment period. Because the hearing lasted about eight hours, WQCC deliberations were delayed until November.

State's Decision

The WQCC struggled with its decision. At its November deliberations, it appeared to want to take action that was supportive of the local stakeholder process and to foster improvement in waster quality. WQCC adopted a preliminary position consisting of 1) no further degradation of water quality within the basin over the next three years and 2) deferred acceptance (for three years) of WQCD's proposal to serve as a target for the stakeholders cleanup strategy and activities.

The Stakeholders Group submitted a statement to WQCC on the preliminary position which reinforced the previous group's intent on moving ahead in concert with WQCC's eventual decision. In essence, WQCC had recognized the role and value of the stakeholder process and adopted a position that supported the ongoing activities of the Group.

LONGER-TERM FOCUS

General Approach for Addressing Cleanup

With the stream classifications activities generally completed, the Group began to emphasize longer-term cleanup actions at its July meeting. The Group focused on elements of future actions, particularly on feasibility studies of hot spots of pollutant loadings within the upper basin. The Group is proceeding with an approach for addressing cleanup based on a systematic sequence of steps, not necessarily embodied in any particular national remedial model such as CERCLA, RCRA, or UMTRA. The steps include (or will include):

- Problem definition in terms of the chemical and biological characteristics of the impacted environment (primarily surface water), uses impacted (primarily aquatic life), man-induced causes vs. natural contributions, and extent of impact.
- Goal setting generally related to the stream classifications and standards process, but also extending into stream substrate and habitat limitations. Local goals also

identified include protection of the historical setting of the area and maintaining opportunities for future mining activities.

- Strategy development consisting of identifying priority sites for cleanup actions to meet the goals (defined by WQCC) for the area in a cost-effective manner. If that analysis demonstrates that such goals are not economically or technically feasible (or that even higher quality of water quality can be readily attained), that information can be presented to WQCC for possible future changes to the goals.
- Collection of pertinent data for support of strategy decision consisting of a comprehensive monitoring system for supporting the selection of priority sites and evaluating the eventual beneficial effects in relation to the cleanup goals.
- Selection of appropriate technologies or management practices for each of the priority sites drawing from the experiences of the stakeholders and supplemented by outside expertise as desired.
- Establish an implementation plan that identifies cleanup actions, sets milestones, defines financial resources, responds to key issues, and addresses regulatory requirements and barriers. Key to this will be a management structure to assure that the cleanup actions proceed according to the provisions of the basin strategy.
- Follow-up monitoring of results to be defined later in the process.

Key issues

As the project progresses, several key issues have become apparent and challenging to the Group. They include:

- Uniqueness of historical mine-related problems. Unlike other types of environmental remediation problems, historical mines and mine wastes are unique in terms of their remoteness, ongoing duration, accessibility, immense volumes of materials, absence of financially responsible parties, absence of national attention, and many other factors.
- Cleanup levels are especially difficult to address. Most of the streams in the upper portion of the basin have not previously been classified for aquatic life because of a perceived absence of trout. The recent stream monitoring shows that trout are present in some of the upper segments, even though the stream quality often exceeds national quality criteria protective of trout. This indicates that fish can acclimate to conditions with elevated metals levels. In contrast, biological or habitat limitations (i.e., lack of food supply or sufficient water flows) may be limiting trout populations below Silverton rather than poor water quality. On a broader scale, the upper portion of the basin is an area with recognized high levels of natural metals loadings in the streams. The USGS special study is establishing a better understanding of natural background levels. All of this information shows how difficult it is to define the appropriate levels of water quality goals for cleanup.
- Lack of a national focus or program emphasizes the lack of a remedial support framework for a systematic process. The only applicable national process in existence is CERCLA. The Group fears the possibility of having CERCLA intervene because of the extensive common to that program, the perceived belief that such a process cannot work well for a dispersed set of problems such as the upper Animas Basin, and the significant problems of liability associated with CERCLA.
- Regulatory constraints and evolution raises serious questions about the Group's ability to implement an environmentally sound solution. Regulatory requirements under the federal Clean Water Act are evolving and confusing. In general, they cannot be implemented because of the lack of financially viable site owners. Imposition of discharge permits raises serious questions about the Group's efforts to

identify cost-effective sites for cleanup. Many issues remain related to the development of a regulatory structure that can support the implementation of a cost-effective cleanup plan for the area. Ultimately, the Group will need to work through these issues along with the inhibiting constraints of CERCLA liabilities for those who will take responsibility for cleaning up the priority sites selected.

- The need for a technical methodology for selecting priority sites with confidence will be a major challenge for the Group. Colorado State University has received a special grant under the EPA Headwaters Initiative to demonstrate such a technical methodology for the Cement Creek tributary area.
- Searching for financial support for project implementation has been identified as a major issue. The federal government has failed to provide financial help for cleanup of historical mines even though the national policy of opening up federal lands for mining under the 1872 Mining Act has been a primary contributor to the overall problem. The Group has begun to examine sources of potential funding and identified possible policies related to sharing of costs among basin participants. National and state regulatory constraints will need to be addressed in order to resolve some of these issues.

Critical areas

At the October 5 meeting, the Group began the process of identifying priority areas by identifying five critical areas within the upper basin. The areas were primarily selected through a review of the water quality monitoring information. They included:

- California Gulch in the upper reaches of the Animas
- the Kohler area in the upper reaches of North Mineral Creek (near Red Mountain Pass)
- the Middle Fork of Mineral Creek
- Prospect Gulch in the Cement Creek drainage
- Upper Cement Creek (specifically the headwaters of Cement Creek, the North Fork of Cement Creek, and the headwaters of the South Fork of Cement Creek)

At the October meeting, a feasibility studies working group was formed to provide guidance and unified direction for the feasibility studies. This subgroup has established a 12-step process leading to more in-depth analyses of each of the areas and, ultimately, the integration of the information into an overall basin list of priority sites. The feasibility studies are to be a cooperative effort coordinated by WQCD with technical support from the Colorado Division of Minerals and Geology and engineering help from BLM, USFS, and USBR. The Stakeholders Group will provide technical support also, especially the mining representatives.

Monitoring and Sampling

At the October 5 meeting, the Group also selected a monitoring and sampling working group with initial responsibilities of addressing ongoing monitoring of both surface quality and quantity associated with the upper drainages. That subgroup has since arranged for the reactivation of three USGS stream gauging stations near Silverton for the upper segments of the Animas drainage, Cement Creek, and Mineral Creek. The Southwest Colorado Water Conservation District is providing financial help. Arrangements have also been initiated with the Division of Wildlife, USBR, and the Waterwatch program (through the Silverton school) to collect samples at the stream gauging stations. That subgroup also began to expand its activities to coordinate all water quality data in the basin and to formulate a comprehensive plan for stream quality acquisition and management. WQCD, Sunnyside Mining, and USGS are taking lead for integrating the data. Also, an upcoming effort is underway to examine the

substrate and related habitat conditions along the Animas River immediately below Silverton to ascertain possible habitat limitations to aquatic life.

Project Funding

A third working group formed at the October meeting has responsibility for all aspects of project funding. This subgroup began its efforts in early December by identifying all possible sources of funding for both investigations and project implementation. This effort will identify leading sources of help and develop a funding strategy. This working group is also considering policies related to project funding including sharing of financial support, regulatory offsets, and management of the eventual project.

General Schedule of Activities

At the November meeting, the Group gave general support for building a pilot remedial project in the basin to be funded jointly by the state's 319 Nonpoint Source program and a site owner in the Placer Gulch drainage. That project will be constructed in the summer of 1995. WQCD has also received 319 grant support for its overview of the feasibility studies of the defined critical areas. Feasibility studies for two of the five areas are slated for the summer of 1995 with the remaining studies to be completed in 1996. Site inventory work was completed by the USBM for BLM land in 1994; site inventory work is scheduled to be completed for USFS lands in 1995. By the end of 1996, the Group is expected to have a draft of the basin strategy completed. At least one, and possibly more, pilot remedial projects are expected to be built during the 1996 construction season. By years end, the Group committed to develop an overall workplan for the remainder of the project which likely will continue into 1997.

Other Support, Coordination, and Demonstrations

Various interests began monitoring, supporting, and working with the Animas stakeholder process by mid-1994. They include:

- The Upper Animas River Resources Group as previously noted.
- The Mine Waste Working Group under the WGA/Federal agencies Develop On-Site Innovative Technologies (DOIT) Committee. The DOIT Working Group added the Animas project as a case study to its workplan.
- The CCEM four-site proposed project for networking and learning from four areas involved in basin-wide/area-wide mine waste activities. In addition to the Animas Basin, those areas include the Coeur d'Alene (ID) Basin, the Black Hills (SD) region, and the Prescott (AZ) area. This has also been added as a case study under the DOIT process.
- EPA Headwaters grant to the Animas Basin as previously noted.
- Regulatory support from the Colorado Department of Health and Environment and the Colorado Water Quality Control Commission.

LESSONS LEARNED

During the first year of this stakeholder process, several important lessons have been learned. They include:

- Regulatory agencies need to support and participate in the process and be receptive to its results.
- Early meetings with individual stakeholders are important to gain insight on the receptiveness of the process by various interests.
- Project facilitator needs to be independent of regulatory agencies.

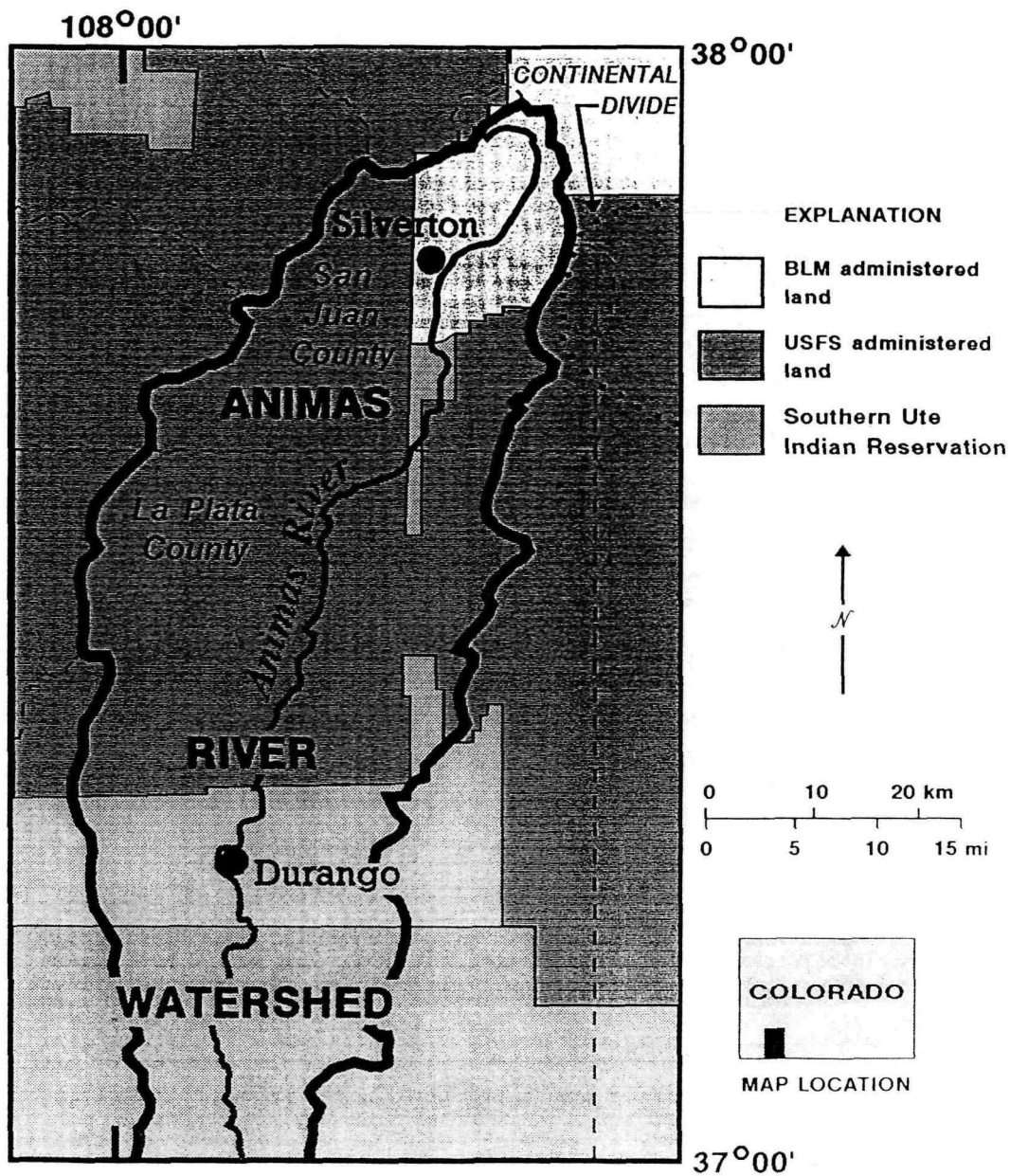
- Local interest increased because of distrust of the regulatory agencies and fear of CERCLA.
- Problem of distrust among Group participants can be overcome through the interaction of the Group.
- Early sharing of views by the Group members is critical.
- Meetings need to involve all interests and place the Group into a decision-making role whenever possible.
- Early, well-defined problem definition leads to better collaboration.
- Continual challenge to present complex information in "plain" English.
- Early effectiveness of the Group does not depend upon formalized process for group operation, but eventually such formalization needs to be established.

SUMMARY

Despite a trying start, local interests in the Animas River Basin have demonstrated a willingness to work with the state and other interests during 1994 in addressing environmental problems associated with metals contamination. Since the early meetings in February and March, a core group of about 30 interests have been meeting generally on a monthly basis. They have worked diligently at gaining an overall understanding of water quality issues and have reached agreement in the need to improve water quality, particularly in the vicinity of, and immediately downstream from, Silverton.

By the end of the year, the Group has focused on five critical areas that are the primary contributors of metals loadings. Over the next two years, the Group plans to conduct detailed investigations of individual sources within those five areas leading to the selection of priority sites for cleanup. The Group has also begun exploring viable funding sources in support of cleanup actions and will be working with the regulatory agencies in addressing a regulatory structure to support the cleanup strategy evolving from the process. Enthusiasm in the process remains high. Although several key challenges remain, the prospects for successful collaboration appears promising.

Attachment A



Location map of the Animas River Watershed, La Plata and San Juan Counties, Colorado.

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REGION VIII

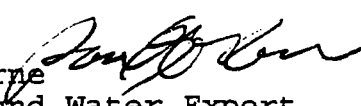
999 18th STREET - SUITE 500
DENVER, COLORADO 80202-2466

NOV 30 1994

Ref: 8WM-DW

MEMORANDUM

SUBJECT: Draft Reports Relating to Proposed Sunnyside Mine Closure

FROM: Paul S. Osborne 
Regional Ground Water Expert

TO: J. David Holm, Director
Water Quality Division
Colorado Department of Public
Health and Environment

and

Rob Walline, Chief
Mining Waste

As requested, I have reviewed the preliminary reports by Simon Hydrosearch relating to the proposed closure of the Sunnyside Mine. Generally, I am surprised that a Company would submit such poor reports in support of a proposal of this magnitude. The reports contain a great deal of anecdotal information and do not contain the level of information on site geologic and hydrologic conditions, mine workings, year round water quality data for potentially affected mines and springs, etc. Based on my review, I believe there is a large potential for flow out of the plugged mine into nearby mines, especially the Mogul Mine, through a combination of open workings and the vein and fractures in the area. I would anticipate significant flow of bad quality water. I have numerous questions and comments as a result of my review. The following two sections summarize these questions.

Preliminary Characterization of the Hydrology and Water Chemistry of the Sunnyside Mine and Vicinity1. Page 9, Last Paragraph

The report indicates that pyrite in propylitized rocks makes up between 0.1 and 2.0 percent of the rock volume. This is based on a general reference rather than site specific knowledge. It should be noted that a pyrite content in the host rock as high as 5 percent has been reported at



Summitville. If the amount of pyrite in the host volcanics is considered germane to the argument that plugging of the Sunnyside Mine is the best mechanism for closure of the mine, then information on the actual range of pyrite in the ore zone and the host country rock should be provided.

2. Page 12, Third Paragraph

This section provides information on the intergranular permeability of volcanic flows, based on a general reference. There is no actual site specific information on how the host rock at Sunnyside actually compares to the general estimate. Permeability tests on unfractured host rock might provide useful information.

3. Pages 12, 13, 14, and 15

This section discusses the importance of fracture flow in the vicinity of the Sunnyside Mine, especially at depth. The report provided anecdotal information on drilling out of the American tunnel which does demonstrate that some of the veins have significant permeability. The report does not, however, provide the necessary level of detail on the known fracture systems and their present relationship to the mine workings. In my opinion, a detailed analysis of the fracture systems and the mine working (which would include all of the potentially affected mines, such as the Mogul) is needed to evaluate the feasibility of plugging the Sunnyside and associated ground water monitoring that would be needed if plugging was approved. There is a large body of published and perhaps unpublished information on the fracture systems and mine workings in this area. This information should be reviewed and summarized as part of the process for demonstrating the viability of mine plugging.

4. Page 17, Last Paragraph

The usefulness of the estimates of the storage coefficient which are provided is unclear. What is the planned use of the estimates? Estimates of specific storage of the mine workings and the fractures in the mine vicinity would be more useful.

5. Page 18, Last Paragraph

This paragraph is unclear. Is there factual information to support the statement such as a sulfide/oxide ore contact?

6. Page 21, Second Paragraph

A map showing the seep locations is needed. How many seeps and springs are located in both Cement Creek and Eureka Gulch? Data on the actual flow (and associated quality) out of the Silver Lodge Mine and the Big Colorado Mine is not provided. This information is essential for a credible evaluation of the proposal.

7. Page 22, First Paragraph

This paragraph indicates that prior to mining the ground water would have contained an anomalous metal content because of the oxidation of sulfides along fractures. I seriously question this premise. This section raises several questions. What is the source of oxygen oxidation if the fracture systems are full (as they would be in premining conditions)? The extensive limonitic staining mentioned would be related to flow in and out of the upper portion of highly fractured mineralized zones. Is there unstated evidence to support an oxidation mechanism for deeper fracture flow? Although some of the surface fractures in sulfide rich areas fill and drain in response to precipitation events, most of the fracture systems would have been full of water most of the time. This would limit the oxidation of sulfides in contact with water in those fractures. Although the oxidation of sulfides connected to the drainable fractures would affect surface water quality, I question how significantly this would have affected deeper ground water.

8. Page 22, Second Paragraph

What is the basis of the statement that ground water from Fault #1 and Fault #2 has traversed a greater distance from the recharge area than the other faults? These faults could have intersected zones containing more mineralization. Information on the flow out of each of the measured zones should be provided to give a picture of the actual load which is a more meaningful criteria.

9. Page 25, Third Paragraph

Information on the flow from the bog near the Mogul Mine and on the flow out of the mine should be included to give a clearer picture of what is going on at the mine. The actual water quality at both points should also be provided.

10. Page 30, Second and Third Paragraphs

The data to support these statements are very weak. The conclusions seem to be based on data which is from a low flow period. Information during spring and mid-summer are needed to provide a clearer basis for conclusions.

11. Page 31, Second Paragraph

A map showing the extent of the mine workings is needed. This should include all of the mines which may be connected to the Sunnyside via workings or fractures.

12. Page 32, First and Second Paragraphs

What is the specific yield of the fractured rock mass? It would be helpful for the purpose of estimating mine fill-up to have some general estimate of the volume of the mine voids (range).

13. Page 33, Second Paragraph

Information on the water quality of water from the mentioned "valved" drill holes and on water flowing in that portion of the tunnel should be provided. This could provide relevant information on the nature of water quality changes within the apparently confined rock mass versus that for water moving into the tunnel's oxygenated environment.

14. Page 34, Second Paragraph

What is the discharge rate of the various tunnels during spring runoff? Information on the high flow range is needed to adequately evaluate any tunnel plugging proposal.

15. Page 43, Second Paragraph

This section references data showing that most of the metal loading enters the American Tunnel down gradient of the SJCMY property line, near the fracture zone at the steel sets. An unaddressed question is: where does the water exiting from the "steel sets" fracture originate? Given the evidence that there are fractures carrying significant flows above the tunnel, the flow entering the tunnel at the "steel sets" could originate in the Sunnyside mine mineral zone and move laterally via fractures until it reaches the "steel set" fracture. Although the report implies that the "steel Set" fracture is vertical, it may, in fact dip sufficiently to originate within the Sunnyside mineralized zone.

Evaluation of Hydraulic and Hydrochemical Aspects of Proposed Bulkhead - Sunnyside Mine

1. Page 14, First Paragraph

What is the basis of the assumption that rock in the mine vicinity has an average of 1% pyrite? Is the amount of pyrite relevant given the information that ground water flow is believed to be entirely within fracture?

2. Page 16

This section should indicate whether there are any ore zones at depth. If so, do these zones have major water flow through them? Figure 6 should be labeled to identify the major veins depicted on the figure.

3. Page 18

This report and the hydrology report suffers from the absence of a map and cross sections showing both tunnels and the mine workings. The fact that the water was 50 feet below the F level in 1959 means nothing without some good figures. Additionally, it is not clear how the authors determined that the 1959 static water level was deep enough that minor joints would be closed. The basis for such a claim at this location is unverified.

4. Page 22

It is proposed to place a bulkhead in the American Tunnel near the underground property line with the Gold King property. The report on hydrology indicates this will intercept all water which originates on the SGC property. Given the nature of fracture flow, the certainty of such a statement is questionable. Water could very well originate on the SGC property and enter the tunnel at some distance beyond the property line.

5. Page 24, Second Paragraph

This section refers to on-going reclamation work in the Sunnyside Basin which may reduce mine inflow. The nature of this work is not described.

6. Page 24, Second and Third Paragraphs

The report indicates that the water table may stabilize at 11,500 feet (provided that inflow from Lake Emma is stopped, which appears questionable). The report neglects, however,

to state where the lower American Tunnel bulkhead will be set. Based on the elevation of the portal (10,617 feet) the bulkhead could be around 10,750 feet. Thus, there will be 750 to 1,750 feet of head on the single bulkhead. It seems very unlikely, based on the limited information available on the condition of the ground underlying the Sunnyside Basin, that SGC will be successful in eliminating inflow from the Lake Emma area. This almost guarantees that the head on the plug will be much greater than 750 feet.

7. Page 24, Third Paragraph

The report discusses placement of three additional plugs to prevent movement of fluids via flooded working area of the Terry Tunnel or into the Mogul Mine. There is no discussion regarding potential movement into the Gold King properties via fractures or into the Mogul Mine via fractures. Shutting off flow along the Breneman Vein using two plugs may be a tall order. These reports contain insufficient information which would allow me to conclude that significant flow into adjacent mines via vein or fractured structures will be eliminated. A map showing all of the properties and the surface expression of all major faults and veins is needed.

8. Pages 31 and 32

I question the interpretation of the borehole discharge test results which are presented in this section. The straight line nature of the test results for Boreholes 709 and 781 indicate that flow is related to a single fracture system and not a fractured rock mass system. Thus, the resulting hydraulic conductivity values are suspect. A more appropriate method for developing velocity information would be to use a Hele-Shaw Parallel Plate Flow Model. This would result in a much higher conductivity value.

9. Section 8.0

This section attempts to calculate the approximate time for flow out of the mine to begin impacting the various streams in the area. I have doubts as to the validity of the various assumptions used to determine the flow time. The authors assumed that the borehole test data represents highly fractured media. I question this assumption. The data appears to represent flow through a limited fracture system. This is supported by the information indicating that boreholes were drilled into fractures overlying the American Tunnel level which had significant pressure heads. This would indicate that flow velocities in fractures connected to the various mine workings could be much higher than presently assumed.

10. Page 60, Section 9.2

The basis for the validity of the reference water is not well explained. It is not clear that the water moving out of the flooded mine workings will have much contact with the rock mass itself. Movement will occur largely through fractures which will have limited buffering capability. The quality of water moving out of the as yet unflooded mine zones is an unknown factor that does not appear to have been adequately dealt with by the model. In fact, the simulated Terry Tunnel water appears to be more representative of the water which will ultimately move out of the upper ore zone into the fracture system. An important issue which has not been addressed is the certainty that the upper mine workings will never be completely flooded. Thus, acid mine water and oxygen will continue to enter the system through the top.

FILE # _____

Contents of this Package

SDMS Document ID



1061337

1. Agenda for meeting on Wednesday, May 25, 1994
2. Meeting Minutes of April 23, 1994
3. Water Quality Control Division Classifications and Standards Proposal
submitted to the Water Quality Control Commission
4. New map identifying streams by segment numbers used in proposal
5. A guide to help interpret the table presented in the proposal



Animas Stakeholder Group Meeting
Wednesday, May 25, 1994
Visitors Center, Silverton
2:00 - 9:00 p.m. (Dinner Break 5-6)

AGENDA

Introductions

Review of Progress and Decisions to Date

Meeting Evaluations from 3/31 and 4/23

- Review comments received from attendees

Update on Regulatory Issues

- Distribute fact sheet and discuss (i.e., nonpoint source and mining, CERCLA and site listing, storm water regulations, federal land management site assessments)

Problem

- **The State's approach:** start with a water quality goal (Proposal and Sept. Hearing)
- **Other approaches:** i.e., start with more information first. Develop plan for approach.
- Party status?
- Discussion/questions regarding CDH proposal

DINNER BREAK

Membership Issues

Finalize size and make-up:

- What should be the size of the "core" group ?
- How can balance and representation of issues and stakeholder groups be achieved?
- How to select members?

Organization

Draft charter:

- How should a chairperson or "leader" be selected?
- Who will be the spokesperson for the group?
- How will the group make decisions? (Consensus, majority/minority, other)
- What should be the responsibilities and accountabilities of the "core" members?
- How will the core group communicate with rest of public to get their input?
- How will the meeting agendas be set?
- What should be the meeting frequency between now and September?

Wrap-Up

- Action items
- Needs
- Review first part of meeting with latecomers

Meeting Minutes
Animas Stakeholder Meeting
April 23, 1994
American Legion Hall
Silverton, Colorado

The following information was recorded by CCEM from flip chart notes created by the stakeholders at the meeting. Any interpretations or changes have been made by CCEM and are noted. If there are any discrepancies or misinterpretations, please call Lisa Hanson at 303-297-0180 ext. 115 or bring it to the next meeting.

1. The first part of the meeting focused on identifying issues dealing with the substance and scope of the project and problem(s). They began to identify the issues that might address the problem, such as economic, contamination, process, regulatory and legal, and goals and benefits to cleanup. See list attached.

PURPOSE: To begin explaining the problem and looking at the implications according to the stakeholders.

2. The group discussed benefits of a stakeholder collaborative effort and the preliminary goals of the Animas Stakeholder Group.

PURPOSE: The group agreed to move from issue identification and examine the broad-scale issues of cleanup with the focus on the Water Quality Control Commission Triennial Hearing in September.

Benefits:

- Local land owners in communities could receive assistance which may not have liability because of community-driven process and help of State's 319 Program
- Community has opportunity to define solution and to control reality
- Money will help develop and implement plan through local process

Goals:

- Keep CERCLA out
- Define a plan (Cleanup?)
- Self Destiny

3. The group discussed issues related to a plan.

PURPOSE: A plan is one product of a stakeholder group effort. This discussion lead the stakeholders to start thinking about how to approach the problem(s).

Issues:

- Could the stakeholders do some [early] site remediation?
- Identify data needs
- What is the goal for remediation?
 - (a) Short-term: (i.e. test hot spots, September hearing)
 - (b) Long-term (broad outlook, cleanup)

4. The group began discussing how to form a stakeholder group. CCEM encouraged the group to create a representative balance of individuals representing the major issues. The group did not prioritize the issues. However, there was a fair amount of opinion that the group "should get on with it" and began looking at membership possibilities.

PURPOSE: The purpose of this was to start developing a membership structure and selection process for the group and to identify what kinds of representatives were present at this meeting.

The following list, created by the group, lists types of individuals or organizations (FIRST COLUMN) who they believe should be represented as part of the Animas Stakeholder Group. Several people stated that interested people are the people who attend the meetings and these people should comprise the Animas Stakeholder Group. **Members of the group then identified themselves according to one or more categories they represented (SECOND COLUMN).** As a result, the numbers add up to more than the total number of people at the April 23rd meeting.

Public Relations skills (reporter, press release person)	3 (Dur. & Silverton)
Local Environmental Reps	1
Wildlife groups (i.e. Trout Unlimited, Elks Foundation)	0
Agricultural Reps	0
Sate Water Conservation Boards	1 (maybe)
City government - Durango	0
Residents/Citizens	6- Silverton, 2-Durango
Landowners	7
Water users (conservation districts)	2
Historical groups	1-Durango,2-Silverton
Southern Ute Indian Tribe	1
Technical People (scientists) (i.e. USGS, env. engineers, remediation experts)	8
Legal representatives	1
Government	1-San Juan County
Government agencies	3-Silverton
Land management agencies	3
Federal agencies (i.e. USFS, USBM, USGS, BOR)	2
State-WQCD, Division of Natural Resources (DNR), Division of Water Resources (DWR)	1
Business (i.e., mining industry, tourism, economic development)	7

5. To further refine the above exercise, people were asked to fill out a handwritten list to show what organization(s) they represent. The results of this second effort were somewhat contradictory from the first effort and are tallied in the list below.

PURPOSE: The group suggested that the attendees at this meeting form the "core" group. This list represents "types" of interests who would be on the "core" group. Members of the group then identified themselves according to categories they represented and this could include more than one.

Interest Type/Organization	Number of people at meeting who could represent this type/organization
Landowner	7
Resident (Silverton)	4

Industry	1
Engineer	1
Mining	6
Technical	7
Public Relations	1
Tourism	2
Historical	2
Local Government (Silverton)	3
Water Conservation	1
Federal Agency (Land Management: Forest Service, BLM)	2
State (Regulator)	1
Business	1
Environmental Interest	1
Water User	1
Federal Agency (other, i.e. USGS)	2
Legal	1
<hr/> TOTAL	<hr/> 44 *

*NOTE: Because some people represented multiple interests or organizations, this number represents more than the approximate 25 who attended the meeting.

The participants then decided that others who were not present at this meeting could still join the group if they attend the May meeting. The group did not reach a conclusion regarding how far the geographic boundary extends to include other interests. The participants encouraged CCEM to contact potential interests and let them know that they should attend the May meeting if they have an interest in joining the group.

In conclusion, the issue of representativeness, size and formal structure still remains unresolved. The question was raised as to whether people can represent more than one interest. The preliminary decision on this was OK. But, if this decision remains, the group will have members who represent more than one interest or "agenda" but limited to voting for only one when final decisions need to be made. The result is individuals may change which interest they represent in the middle of the process and the group could become unbalanced. This unbalance could happen to any of the stakeholder groups including the local governments, the mining reps, the federal agencies, etc.

ATTACHMENT

Issue Identification

(See first note in minutes)

[CCEM categorized the issues for organizational purposes. These categories were developed by CCEM and can be changed by the stakeholders if they don't accurately represent the issues. There also may be additional categories. The issues are taken directly from the flip charts which were created by the stakeholders.]

Economic Issues

- Value of fish over mining (economic needs)
- Concern about higher standards that could impose economic hardship before we understand what is achievable (economically)
- Favorable economic impact of clean water
- If standards are set too high, is that goal achievable?
- What are the real costs of water as it is now? What will they [stakeholders??] save if it is cleanup up? Cost to Durango of cleanup for tertiary treatment to get drinking water from Animas.
- Ability to keep up with the changes in the standards
- Potential immediate negative impacts to tourism during cleanups (primarily Silverton/SJC)
- Could have negative and positive impacts to the historic structures. Some times remediation activities include restoring old historic structure to make them safe.
- Cleanup should not create or duplicate trouble
- What are the incentives for agency and community to address problem?
- What are the risks/benefits for accepting local/federal grant money for studies? Could shift to federal focus.
- Federal agencies can provide different sources of information and support (\$)

Regulatory/Legal Issues

- Is reclassification necessary?
- Legally defensible data
- How would new standards in Upper Basin influence future standards in lower basin?
- What are the immediate negative and positive impacts to the Silverton sewage plant?
- Ability to keep up with the changes in the standards
- What are the positive and negative risks for temporary standards.
- What are the incentives for agency and community to address problem?
- No program for 12 years. Does this trigger a program? (CDH said "no".)
- Impact on Clean Water Act and Environmental Protection Agency
- What does EPA look at/for on this problem/issue? EPA is the final decision-maker.
- Many legal questions
- Who's responsible for non-point source contamination?
- Someone (state or federal) will review cleanup standards

Contamination

- What are the positive and negative impacts [of contamination] downstream on fish/wildlife, water users, agriculture
- Natural vs. manmade
- If its natural source of contamination new standard of cleanup may not be effective to get desired results
- Any cleanup is better than none
- Down streamers shouldn't have to live with up streamers pollution
- What were study results from CDH? Need more data.

Process Issues

- Superfund, CERCLA-driven vs. community-driven cleanup
- Need to do "real stuff" (site remediation, etc.)
- Clean water may come from other than standards such as site remediation, good research plan
- Localized control
- Objectively identify and solve problem
- Non-complementary efforts of agencies (need coordination)
- Cleanup first, then set standards (see what is achievable first)
- How do new standards affect the goal (cleanup)
- What is our goal? Regulatory deadline or clean water?
- Cleanup should not create or duplicate trouble
- Focus on: (a) how to get data; develop a plan; (c) cleanup
- What are the risks/benefits for accepting local/federal grant money for studies? Could shift to federal focus.

Stakeholder Issues

- Accurate public information on how to get clean water
- Issue broader than Upper Animas (Basin-wide)
- Broader participation (downstream). Southern Utes should participate
- Meetings should not be limited to Silverton/San Juan County
- How far downstream do you go? (What is the Region of Influence?)
- What are the incentives for agency and community to address problem?
- Need EPA at table: (a) resource and (b) participants (?)
- Federal agencies can provide different sources of information and support (\$)
- What is the water used for in lower basin?

Technology/Technical Issues

- Utilize ongoing cleanup efforts to show results
- Objective science
- How should data should be collected
- If standards are set too high, is that goal achievable?
- What are the immediate negative and positive impacts to the Silverton sewage plant?
- Ability to keep up with the changes in the standards
- Cleanup should not create or duplicate trouble

DRAFT COPY

NOTICE OF PUBLIC RULEMAKING HEARING BEFORE THE COLORADO WATER QUALITY CONTROL COMMISSION

SUBJECT:

For consideration of revisions to water quality classifications and standards for the Animas River, San Juan River Basin, 3.4.0 (5 CCR 1002-8). The revisions proposed by the Division staff, along with a proposed Statement of Basis, Specific Statutory Authority, and Purpose, are attached to this Notice as Exhibit 1. Any alternative proposals related to the revisions proposed in Exhibit 1 will also be considered.

The Commission requests that all interested persons submit to the Commission any available information that may be relevant in considering these proposals, including information relating to the factors listed in section 3.1.7(2) of the Basic Standards and Methodologies for Surface Water, 5 CCR 1002-8.

HEARING SCHEDULE:

DATE: September 12, 1994
TIME: 9:00 a.m.
PLACE: San Juan County Court House
District Court Room
1557 Greene St.
Silverton, Colorado

Oral testimony at the hearing will be limited. Direct testimony should primarily draw attention to written evidence. The hearing will emphasize Commission questioning of parties about their written prehearing submittals. Introduction of written material by parties at the hearing generally will not be permitted. Parties are prohibited from oral presentation of written material submitted to the Commission.

PARTY STATUS/MAILING LIST STATUS::

Participation as a "party" to this hearing or acquisition of "mailing list status," will require compliance with section 2.1.4(D) of the Procedural Rules, 2.1.0 (5 CCR 1002-1). Mailing list status will allow receipt of all party documents (except individual exhibits more than five pages in length). It is not necessary to acquire party status or mailing list status in order to testify or comment. Written party status or mailing list status requests are due in the Commission Office on or before:

DATE: Thursday, July 7, 1994
TIME: 5:00 p.m.

PREHEARING CONFERENCE:

DATE: August 10, 1994
TIME: 10:00 a.m.
PLACE: Florence Sabin Conference Room
Department of Health Building
4300 Cherry Creek Drive South
Denver, Colorado

Attendance at the prehearing conference is mandatory for all parties. An original and 13 copies of a prehearing statement, including any exhibits, written testimony, and alternative proposals of anyone seeking party status must be submitted to the Commission Office no later than July 28, 1994. In addition, copies of these documents must be mailed or hand-delivered by that date to all persons requesting party status or mailing list status, and to the Attorney General's Office representatives for the Commission and Division, in accordance with a list provided by the Commission Office following the party status/ mailing list status deadline.

Following the prehearing conference, written rebuttal statements may be submitted by August 24, 1994, with copies mailed or hand-delivered by that date directly to all persons identified in the preceding paragraph. No other documentation, exhibits, or other materials will be accepted after the prehearing conference except for good cause shown.

SPECIFIC STATUTORY AUTHORITY:

The provisions of C.R.S. 25-8-202(1)(a), (b) and (2); 25-8-203; 25-8-204; and 25-8-402; provide the specific statutory authority for consideration of the regulatory amendments proposed by this notice.

Should the Commission adopt the regulatory language as proposed in this notice or alternative amendments, it will also adopt, in compliance with section 24-4-103(4) C.R.S., an appropriate Statement of Basis, Specific Statutory Authority, and Purpose.

NOTIFICATION OF POTENTIAL MATERIAL INJURY TO WATER RIGHTS:

In accordance with C.R.S. 25-8-104(2)(d), any person who believes that the actions proposed in this notice have the potential to cause material injury to his or her water rights is requested to so indicate in the party status request submitted. In order for this potential to be considered fully by the Commission and the other agencies listed in the statute, persons must fully explain the basis for their claim in their prehearing statement which is due in the Commission Office on the date specified above. This explanation should identify and describe the water right(s), and explain how and to what degree the material injury will be incurred.

Dated this ____ day of May, 1994 at Denver, Colorado.

WATER QUALITY CONTROL COMMISSION

Paul D. Frohardt, Administrator

prmh.animas

STREAM CLASSIFICATIONS AND WATER QUALITY STANDARDS

REGION: 9 BASIN: ANIMAS AND FLORIDA RIVER	Desig	Classifications	NUMERIC STANDARDS					TEMPORARY MODIFICATIONS AND QUALIFIERS	
			PHYSICAL and BIOLOGICAL	INORGANIC mg/l	METALS ug/l				
Stream Segment Description									
1. All tributaries to the Animas River and Florida River, including all wetlands, lakes and reservoirs, which are within the Weminuche Wilderness Area.		Aq Life Cold 1 Recreation 1 Water Supply Agriculture	D.O. = 6.0 mg/l D.O. (sp)=7.0 mg/l pH = 6.5-9.0 F.Coll=200/100ml	NH ₃ (ac)=TVS NH ₃ (ch)=0.02 Cl ₂ (ac)=0.019 Cl ₂ (ch)=0.011 CN=0.005	S=0.002 B=0.75 NO ₂ =0.5 NO ₃ =10 Cl=250 SO ₄ =250	As(ac)=50(Trec) Cd(ac)=TVS(tr) Cd(ch)=TVS CrIII(ac)=50(Trec) CrVI(ac)=TVS CrVI(ac/ch)=50(Trec) Cu(ac/ch)=TVS	Fe(ch)=300(dis) Fe(ch)=1000(Trec) Pb(ac/ch)=TVS Mn(ch)=50(dis) Mn(ch)=1000(Trec) Hg(ch)=0.01(Trec)	Ni(ac/ch)=TVS Se(ch)=10(Trec) Ag(ac)=TVS Ag(ch)=TVS(tr) Zn(ac/ch)=TVS	
2. Mainstem of the Animas River, including all tributaries and wetlands, from the outlet of Denver Lake source to a point immediately above the confluence with Maggie Gulch Creek, except for specific listings in Segments 1 and 2 through 8a and 8b.	UP	Recreation 2 Agriculture	pH = 6.5-9.0 F.Coll=2000/100ml F.Coll=200/100ml			The concentration of dissolved aluminum, cadmium, copper, iron, lead, manganese, and zinc which will result from the application of Best Management Practices (BMP's) for nonpoint sources of natural and human induced metal loadings, the continuation of treatment levels for permitted point sources that were in place on the effective date of these standards.			
3a. Mainstem of the Animas River, including wetlands, from a point immediately below the confluence with Maggie Gulch to immediately above the confluence with Cement Creek.		Aq Life Cold 1 Recreation 2 Agriculture	D.O. = 6.0 mg/l D.O. (sp)=7.0 mg/l pH = 6.5-9.0 F.Coll=200/100ml	NH ₃ (ac)=TVS NH ₃ (ch)=0.02 Cl ₂ (ac)=0.019 Cl ₂ (ch)=0.011 CN=0.005	S=0.002 B=0.75	As(ac)=100(Trec) Cd(ac/ch)=3.7 CrIII(ac/ch)=TVS CrVI(ac/ch)=TVS Cu(ac/ch)=TVS	Pb(ac/ch)=TVS Mn(ch)=1000 Hg(ch)=0.01(Trec)	Ni(ac/ch)=TVS Ag(ac)=TVS Zn(ac/ch)=400	
3b4. Mainstem of the Animas River, including wetlands, from a point immediately above the confluence with Cement Creek Junction Creek to a point immediately above the confluence with Mineral Creek, La Colorado/New Mexico border.	UP	Aq Life Cold 1 Aq Life Cold 2 Recreation 2 Water Supply Agriculture	D.O. = 6.0 mg/l D.O. (sp)=7.0 mg/l pH = 6.5-9.0 F.Coll=2000/100ml F.Coll=200/100ml	NH ₃ (ac)=TVS NH ₃ (ch)=0.02 Cl ₂ (ac)=0.019 Cl ₂ (ch)=0.011 CN=0.005	S=0.002 B=0.75 NO ₂ =0.05 NO ₃ =10 Cl=250 SO ₄ =250	As(ac)=100(Trec) CrIII(ac/ch)=TVS CrVI(ac/ch)=TVS	Pb(ac/ch)=TVS Mn(ch)=1000 Hg(ch)=0.01(Trec) Fe(ch)=1000(dis)	Ni(ac/ch)=TVS Ag(ac)=TVS Zn(ac/ch)=510	26081 Temporary modification A1=1370 Cd=1 Cu=28 All metals are Trace unless otherwise noted.
4a. Mainstem of the Animas River, including wetlands, from a point immediately above the confluence with Mineral Creek to the confluence with Elk Creek.		Aq Life Cold 1 Recreation 2	D.O. = 6.0 mg/l D.O. (sp)=7.0 mg/l pH = 6.5-9.0 F.Coll=2000/100ml	NH ₃ (ac)=TVS NH ₃ (ch)=0.02 Cl ₂ (ac)=0.019 Cl ₂ (ch)=0.011 CN=0.005	S=0.002 B=0.75	As(ch)=100(Trec) Cd(ac/ch)=3.6 CrIII(ac/ch)=TVS CrVI(ac/ch)=TVS Cu(ac/ch)=TVS	Fe(ch)=440(dis) Pb(ac/ch)=TVS Mn(ch)=1000	Hg(ch)=0.01 Ni(ch)=TVS Se(ac/ch)=TVS Ag(ch)=TVS Zn(ch)=226	26081 Temporary modification Zn(ch)=380
4b. Mainstem of the Animas River, including wetlands, from the confluence with Elk Creek to the confluence with Junction Creek.		Aq Life Cold 1 Recreation 2 Water Supply Agriculture	D.O. = 6.0 mg/l D.O. (sp)=7.0 mg/l pH = 6.5-9.0 F.Coll=200/100ml F.Coll=200/100ml	NH ₃ (ac)=TVS NH ₃ (ch)=0.02 Cl ₂ (ac)=0.019 Cl ₂ (ch)=0.011 CN=0.005	S=0.002 B=0.75 NO ₂ =0.05 NO ₃ =10 Cl=250 SO ₄ =250	As(ch)=50 As(ch)=100(Trec) Cd(ch)=1 Cd(ac/ch)=TVS CrIII(ac)=50 CrIII(ac/ch)=TVS CrIII(ch)=25 CrVI(ac/ch)=TVS Cu(ch)=20 Cu(ac/ch)=TVS	Fe(ch)=200(dis) Fe(ch)=1160 Pb(ch)=11 Pb(ac/ch)=TVS Pb(ch)=50(Trec) Mn(ch)=1000	Hg(ch)=0.05 Hg(ch)=0.01 Ni(ch)=50 Ni(ch)=TVS Se(ch)=10 Se(ac/ch)=TVS Ag(ch)=1 Ag(ch)=TVS Zn(ch)=270 Zn(ch)=TVS	All metals are Trace unless otherwise noted.
5. Mainstem of the Animas River, including wetlands, from the confluence with Junction Creek to the Colorado/New Mexico border.		Aq Life Cold 1 Recreation 2 Water Supply Agriculture	D.O. = 6.0 mg/l D.O. (sp)=7.0 mg/l pH = 6.5-9.0 F.Coll=200/100ml	NH ₃ (ac)=TVS NH ₃ (ch)=0.02 Cl ₂ (ac)=0.019 Cl ₂ (ch)=0.011 CN=0.005	S=0.002 B=0.75 NO ₂ =0.05 NO ₃ =10 Cl=250 SO ₄ =250	As(ch)=50 Cd(ac/ch)=TVS CrIII(ac)=50(Trec) CrVI(ac)=30(Trec) Cu(ac/ch)=TVS	Fe(ch)=300(dis) Fe(ch)=1000(Trec) Pb(ac/ch)=TVS Mn(ch)=50(dis)	Hg(ch)=0.01 Ni(ch)=TVS Se(ac/ch)=TVS Ag(ac/ch)=TVS Zn(ac/ch)=TVS	

*SEE STATEMENT OF BASIS AND PURPOSE

65.	Mainstem, including all tributaries, wetlands, lakes and reservoirs, of Cinnamon Creek, Grouse Creek, Picayne Gulch, Minnie Gulch, Maggie Gulch, Cunningham Creek, Boulder Creek, Whitehead Gulch, and Molas Creek from their sources to their confluences with the Animas River. Mainstem of the Animas from the source to the outlet of Denver Lake.	Aq Life Cold 1 Recreation 2 Water Supply Agriculture	D.O. = 6.0 mg/l D.O. (sp)=7.0 mg/l pH = 6.5-9.0 F.Coll=2000/100ml F.Coll=200/100ml	NH ₃ (ac)=TVS NH ₃ (ch)=0.02 Cl ₂ (ac)=0.019 Cl ₂ (ch)=0.011 CN=0.005	S=0.002 B=0.75 NO ₂ =0.05 NO ₃ =10 Cl=250 SO ₄ =250	As(ac)=50(Trec) Cd(ac)=TVS(tr) Cd(ch)=TVS CrIII(ac)=50(Trec) CrVI(ac)=TVS CrVI(ch)=50(Trec) Cu(ac/ch)=TVS	Fe(ch)=300(dis) Fe(ch)=1000(Trec) Pb(ac/ch)=TVS Mn(ch)=50(dis) Mn(ch)=1000(Trec) Hg(ch)=0.01(Trec)	Ni(ac/ch)=TVS Se(ch)=10(Trec) Ag(ac)=TVS Ag(ch)=TVS(tr) Zn(ac/ch)=TVS	
76.	Mainstem of Cement Creek, including all tributaries, wetlands, lakes, and reservoirs, from the source to the confluence with the Animas River.	UP Recreation 2 Agriculture	pH = 6.5-9.0 pH = 4.5-9.0 F.Coll=2000/100ml F.Coll=200/100ml			The concentration of dissolved aluminum, cadmium, copper, iron, lead, manganese, and zinc which will result from the application of best management practices (BMPs) for nonpoint sources of natural and human induced metal loadings, the continuation of treatment levels for permitted point sources that were in place on the effective date of these standards.			
B2.	Mainstem of Mineral Creek, including all tributaries and wetlands, from the source to a point immediately above the confluence with South Mineral Creek except for the specific listing in Segment 9a.	UP Recreation 2 Agriculture	pH = 4.5-9.0 pH = 4.5-9.0 F.Coll=2000/100ml F.Coll=200/100ml	CN=0.2	B=0.75	The concentration of dissolved aluminum, cadmium, copper, iron, lead, manganese, and zinc which will result from the application of best management practices (BMPs) for nonpoint sources of natural and human induced metal loadings, the continuation of treatment levels for permitted point sources that were in place on the effective date of these standards.			All metals are Trec unless otherwise noted.
9a.	Mainstem of South Mineral Creek including all tributaries, wetlands, lakes and reservoirs from the source to a point immediately above the confluence with Mineral Creek; mainstem, including all tributaries, wetlands, lakes and reservoirs of Mill Creek and Bear Creek from sources to confluence with Mineral Creek; all lakes and reservoirs in the drainage areas described in Segments 7 through 9.	Aq Life Cold 1 Recreation 2 Water Supply Agriculture	D.O. = 6.0 mg/l D.O. (sp)=7.0 mg/l pH = 6.5-9.0 F.Coll=2000/100ml F.Coll=200/100ml	NH ₃ (ac)=TVS NH ₃ (ch)=0.02 Cl ₂ (ac)=0.019 Cl ₂ (ch)=0.011 CN=0.005	S=0.002 B=0.75 NO ₂ =0.05 NO ₃ =10 Cl=250 SO ₄ =250	As(ac)=50(Trec) Cd(ac)=TVS(tr) Cd(ch)=TVS CrIII(ac)=50(Trec) CrVI(ac)=TVS CrVI(ch)=50(Trec) Cu(ac/ch)=TVS	Fe(ch)=300(dis) Fe(ch)=1000(Trec) Pb(ac/ch)=TVS Mn(ch)=50(dis) Mn(ch)=1000(Trec) Hg(ch)=0.01(Trec)	Ni(ac/ch)=TVS Se(ch)=10(Trec) Ag(ac)=TVS Ag(ch)=TVS(tr) Zn(ac/ch)=TVS	
9aB.	Mainstem of South Mineral Creek, including all tributaries from a point immediately above the confluence with Clear Creek to the confluence with Mineral Creek and the Mainstem of Mineral Creek, including wetlands from immediately above the confluence with the South Fork to the confluence with the Animas River.	UP Aq Life Cold 1 Recreation 2 Agriculture	D.O. = 6.0 mg/l D.O. (sp)=7.0 mg/l pH = 6.5-9.0 F.Coll=2000/100ml F.Coll=200/100ml	NH ₃ (ac)=TVS NH ₃ (ch)=0.02 Cl ₂ (ac)=0.019 Cl ₂ (ch)=0.011 CN=0.005	S=0.002 B=0.75 NO ₂ =0.05	As(ch)=50(Trec) Cd(ch)=2 Cd(ac/ch)=TVS CrIII(ac/ch)=100 CrVI(ac/ch)=25 CrVI(ch)=25 Cu(ac/ch)=TVS Cu(ch)=5	Fe(ch)=1000 Pb(ch)=14 Pb(ac/ch)=TVS Mn(ch)=1000 Hg(ch)=0.01(Trec) Ni(ch)=25 Ni(ac/ch)=TVS	Se(ch)=20 Se(ac/ch)=TVS Ag(ch)=1 Ag(ac/ch)=TVS Zn(ch)=50 Zn(ac/ch)=TVS	Temporary Modification 18 Cu=16 Fe=3100(dis) Zn=370 All metals are Trec unless otherwise noted.

REGION: 9 BASIN: ANIMAS AND FLORIDA RIVER Stream Segment Description	Desig	Classifications	NUMERIC STANDARDS						TEMPORARY MODIFICATIONS AND QUALIFIERS
			PHYSICAL and BIOLOGICAL		INORGANIC		METALS		
			mg/l		mg/l		ug/l		
0 Mainstem of Clear Creek from the source to the confluence with South Mineral Creek	UP	Aq Life Cold 1 Recreation 2 Agriculture	D.O. = 6.0 mg/l D.O. (sp)=7.0 mg/l pH = 6.5-9.0 F.Coll=2000/100ml	NH ₃ (ac)=TVS NH ₃ (ch)=0.02 Cl ₂ (ac)=0.019 Cl ₂ (ch)=0.011 CN=0.005	S=0.002 B=0.75 NO ₂ =0.05	As(ch)=50 Cd(ch)=2 Cd(ac/ch)=TVS CrIII(ac/ch)=100 CrVI(ac/ch)=25 CrVI(ch)=25 Cu(ac/ch)=TVS Cu(ch)=5	Fe(ch)=6000 Pb(ch)=14 Mn(ch)=1000 Hg(ch)=0.01 Ni(ch)=25	Se(ch)=20 Ag(ch)=1 Zn(ch)=480	All metals are Trec unless otherwise noted.

**SEE STATEMENT OF BASIS AND PURPOSE

STREAM CLASSIFICATIONS and WATER QUALITY STANDARDS

10. Mainstem of the Florida River from the boundary of the Weminuche Wilderness Area to the Florida Farmers Canal Headgate, except for the specific listings in Segment 12b.		Aq Life Cold 1 Recreation 1 Water Supply Agriculture	D.O. = 6.0 mg/l D.O. = 7.0 mg/l pH = 6.5-9.0 F.Coll=200/100ml	NH ₃ (ac)=TVS NH ₃ (ch)=0.02 Cl ₂ (ac)=0.019 Cl ₂ (ch)=0.011 CN=0.005	S=0.002 B=0.75 NO ₂ =0.05 NO ₃ =10 Cl=250 SO ₄ =250	As(ac)=50(Trec) Cd(ac)=TVS(tr) Cd(ch)=TVS CrIII(ac)=50(Trec) CrVI(ac/ch)=TVS Cu(ac/cu)=TVS	Fe(ch)=300(dis) Fe(ch)=1000(Trec) Pb(ac/ch)=TVS Mn(ch)=50(dis) Mn(ch)=1000(Trec) Hg(ch)=0.01(Trec)	Ni(ac/ch)=TVS Se(ch)=10(Trec) Ag(ac)=TVS Ag(ch)=TVS(tr) Zn(ac/ch)=TVS	
11. Mainstem of the Florida River from the Florida Farmers Canal Headgate to the confluence with the Animas River.		Aq Life Cold 1 Recreation 1 Water Supply Agriculture	D.O. = 6.0 mg/l D.O. (sp)=7.0 mg/l pH = 6.5-9.0 F.Coll=200/100ml	NH ₃ (ac)=TVS NH ₃ (ch)=0.02 Cl ₂ (ac)=0.019 Cl ₂ (ch)=0.011 CN=0.005	S=0.002 B=0.75 NO ₂ =0.05 NO ₃ =10 Cl=250 SO ₄ =250	As(ac)=50(Trec) Cd(ac)=TVS(tr) Cd(ch)=TVS CrIII(ac)=50(Trec) CrVI(ac/ch)=TVS Cu(ac/ch)=TVS	Fe(ch)=300(dis) Fe(ch)=1000(Trec) Pb(ac/ch)=TVS Mn(ch)=50(dis) Mn(ch)=1000(Trec) Hg(ch)=0.01(Trec)	Ni(ac/ch)=TVS Se(ch)=10(Trec) Ag(ac)=TVS Ag(ch)=TVS(tr) Zn(ac/ch)=TVS	
12a. All tributaries to the Animas River, including all lakes and reservoirs from a point immediately above the confluence with Elk Cr. to a point immediately below the confluence with Hermosa Cr. except for specific listings in Segment 15. All tributaries to the Florida River including all lakes and reservoirs from the source to the outlet of Lemon Reservoir except the specific listing in Segment 1. Mainstems of Red and Shearer Creeks from their sources to their confluences with the Florida River.		Aq Life Cold 1 Recreation 1 Water Supply Agriculture	D.O. = 6.0 mg/l D.O. (sp)=7.0 mg/l pH = 6.5-9.0 F.Coll=200/100ml	NH ₃ (ac)=TVS NH ₃ (ch)=0.02 Cl ₂ (ac)=0.019 Cl ₂ (ch)=0.011 CN=0.005	S=0.002 B=0.75 NO ₂ =0.05 NO ₃ =10 Cl=250 SO ₄ =250	As(ac)=50(Trec) Cd(ac)=TVS(tr) Cd(ch)=TVS CrIII(ac)=50(Trec) CrVI(ac/ch)=TVS Cu(ac/ch)=TVS	Fe(ch)=300(dis) Fe(ch)=1000(Trec) Pb(ac/ch)=TVS Mn(ch)=50(dis) Mn(ch)=1000(Trec) Hg(ch)=0.01(Trec)	Ni(ac/ch)=TVS Se(ch)=10(Trec) Ag(ac)=TVS Ag(ch)=TVS(tr) Zn(ac/ch)=TVS	
12b. Lemon Reservoir.		Aq Life Cold 1 Recreation 1 Water Supply Agriculture	D.O. = 6.0 mg/l D.O. (sp)=7.0 mg/l pH = 6.5-9.0 F.Coll=200/100ml	NH ₃ (ac)=TVS NH ₃ (ch)=0.02 Cl ₂ (ac)=0.019 Cl ₂ (ch)=0.011 CN=0.005	S=0.002 B=0.75 NO ₂ =0.05 NO ₃ =10.02 Cl=250 SO ₄ =250	As(ac)=50(Trec) Cd(ac)=TVS(tr) Cd(ch)=TVS CrIII(ac)=50(Trec) CrVI(ac/ch)=TVS Cu(ac/ch)=TVS	Fe(ch)=300(dis) Fe(ch)=1000(Trec) Pb(ac/ch)=TVS Mn(ch)=50(dis) Mn(ch)=1000(Trec) Hg(ch)=0.01(Trec)	Ni(ac/ch)=TVS Se(ch)=10(Trec) Ag(ac)=TVS Ag(ch)=TVS(tr) Zn(ac/ch)=TVS	
13a. Mainstem of Junction Creek, and including all tributaries, from U.S. Forest Boundary to confluence with Animas River.	UP	Aq Life Cold 2 Recreation 2 Agriculture	D.O.=6.0 mg/l D.O. (sp)=7.0 mg/l pH = 6.5-9.0 F.Coll=2000/100ml	NH ₃ (ac)=TVS NH ₃ (ch)=0.02 Cl ₂ (ac)=0.019 Cl ₂ (ch)=0.011 CN=0.005	S=0.002 B=0.75 NO ₂ =0.05	As(ac/ch)=TVS Cd(ac)=TVS(tr) Cd(ch)=TVS CrIII(ac/ch)=TVS CrVI(ac/ch)=TVS Cu(ac/ch)=TVS	Fe(ch)=1000(Trec) Pb(ac/ch)=TVS Mn(ch)=1000(Trec) Hg(ch)=0.01(Trec) Ni(ac/ch)=TVS Se(ac/ch)=TVS	Ag(ac)=TVS Ag(ch)=TVS(tr) Zn(ac/ch)=TVS	
13b. All tributaries to the Animas River, including all lakes and reservoirs, from a point immediately below the confluence with Hermosa Creek to the Colorado/New Mexico border, except for the specific listings in Segments 10, 11, 12a, 12b, 13a and 14; all tributaries to the Florida River, including all lakes and reservoirs, from the outlet of Lemon Reservoir to the confluence with the Animas River, except for specific listings in Segment 12a.	UP	Aq Life Cold 2 Recreation 2 Agriculture	D.O. = 6.0 mg/l D.O. (sp)=7.0 mg/l pH = 6.5-9.0 F.Coll=2000/100ml						

REGION: 9 BASIN: ANIMAS AND FLORIDA RIVER Stream Segment Description	Desig	Classifications	NUMERIC STANDARDS						TEMPORARY MODIFICATIONS AND QUALIFIERS
			PHYSICAL and BIOLOGICAL	INORGANIC mg/l		METALS ug/l			
14. Mainstem of Lightner Creek from the source to the confluence with the Animas River.		Aq Life Cold 1 Recreation 1 Water Supply Agriculture	D.O. = 6.0 mg/l D.O. (sp)=7.0 mg/l pH = 6.5-9.0 F.Coll=200/100ml	NH ₃ (ac)=TVS NH ₃ (ch)=0.02 Cl ₂ (ac)=0.019 Cl ₂ (ch)=0.011 CN=0.005	S=0.002 B=0.75 NO ₂ =0.05 NO ₃ =10 Cl=250 SO ₄ =250	As(ac)=50(Trec) Cd(ac)=TVS(tr) Cd(ch)=TVS CrIII(ac)=50(Trec) CrVI(ac/ch)=TVS Cu(ac/ch)=TVS	Fe(ch)=300(dis) Fe(ch)=1000(Trec) Pb(ac/ch)=TVS Mn(ch)=50(dis) Mn(ch)=1000(Trec) Hg(ch)=0.01(Trec)	Ni(ac/ch)=TVS Se(ch)=10(Trec) Ag(ac)=TVS Ag(ch)=TVS(tr) Zn(ac/ch)=TVS	
15. Mainstem of Purgatory Creek from source to Cascade, Cascade Creek, Soulding Creek from the source to Elbert Creek, and Nary Draw from the source to Naviland Lake.	UP	Aq Life Cold 2 Recreation 2 Water Supply Agriculture	D.O.=6.0 mg/l D.O. (sp)=7.0 mg/l pH = 6.5-9.0 F.Coll=2000/100ml	CN=0.2 S=0.05 NO ₂ =1.0	NO ₂ =10 Cl=250 SO ₄ =250	As(ch)=50 Cd(ch)=10 CrIII(ch)=50 CrVI(ch)=50	Cu(ch)=1000 Fe(ch)=0.3(dis) Pb(ch)=50 Mn(ch)=50	Hg(ch)=2 Se(ch)=10 Ag(ch)=50 Zn(ch)=5000	All metals are to be unless otherwise noted.

EXHIBIT 1

WATER QUALITY CONTROL DIVISION PROPOSAL

The Division proposes the following revisions to the segmentation, classification, and standards for segments 2 through 9 of the Animas River basin:

- Divide segment 2, the Animas River from the source to Elk Creek into four sub-segments: 2, 3a, 3b, and 4a. Renumber existing segment 3 to 4b.
- Add the agriculture classification to renumbered segments 2, 3a and 7. Remove the water supply classification from renumbered segment 4b.
- Add the aquatic life cold 1 classification to renumbered segment 3a; add the aquatic life cold 2 classification to renumbered segment 3b as a goal; and add the aquatic life cold 1 classification to segment 4a as a goal.
- Adopt a narrative standard for segment 2 and renumbered segments 7 and 8 based on the application of best management practices for nonpoint sources and continuation of current treatment levels for point sources.
- Adopt TVS for metals for renumbered segment 3a, except cadmium and zinc which are based on the 85th percentile of available data.
- Adopt TVS for metals for renumbered segment 3b, except zinc which is based on the 85th percentile of available data (510 ug/l). Adopt temporary modifications for aluminum, cadmium, and copper to reflect ambient quality.
- Adopt TVS for metals for renumbered segment 4a, except zinc which will be based on the chronic toxic criterion for brown trout (225 ug/l). Adopt a temporary modification for zinc to reflect ambient quality (380 ug/l).
- Adopt TVS for metals for renumbered segment 5, the Animas River from Junction Creek to the stateline.
- Revise the segment descriptions for 8a, 8b, and 9 (renumbered as 9a) to include South Mineral Creek and all tributaries in renumbered segment 9a and Mineral Creek from the confluence with South Mineral to the Animas in new segment 9b. Old segment 9 is combined with the renumbered 9a.
- Adopt TVS for metals in segment 9b. Cadmium, copper, iron (dissolved), and zinc will be temporarily modified to reflect ambient quality.

- Adopt the fecal coliform standard of 200/100ml for segments 2 through 9, except retain the fecal coliform standard of 2000/100ml in segment 4a.
- Add the use protected designation to segments 2, 7, 8, and 9b. Remove the use protected designation from 4a and 5.
- Several other minor changes are proposed to make the standards consistent with the Basic Standards and to include wetlands in the segment descriptions.

3.4.15 STATEMENT OF BASIS, SPECIFIC STATUTORY AUTHORITY AND PURPOSE; SEPTEMBER 12, 1994 HEARING:

The provisions of 25-8-202(1)(a), (b) and (2); 25-8-203; 25-8-204; and 25-8-402 C.R.S. provide the specific statutory authority for adoption of these regulatory amendments. The Commission also adopted in compliance with 24-4-103(4), C.R.S., the following statement of basis and purpose.

BASIS AND PURPOSE

Between 1991 and 1993 the Water Quality Control Division, in cooperation with several federal, state, and private and local interests conducted an intensive water quality investigation of the Animas River and its tributaries from Elk Creek to the headwaters. The objectives of the study were to characterize the current chemical, biological, and physical conditions of the Animas River and selected tributaries above Elk Creek and to quantify the areas of highest metal loadings and determine the potential for water quality improvement sufficient to allow naturally reproducing trout populations; and to prioritize sites for remedial projects based on relative loading, environmental impact, feasibility, cost, and benefits.

The water quality of this area is extensively impacted by heavy metals which are attributed to both natural and anthropogenic factors. The results of the investigation have been used to identify the water quality classifications and standards that are currently being achieved or that may reasonably be achieved within a twenty year period through restoration of disturbed sites.

The upper Animas water quality study found that the Animas River and several tributaries above Maggie Gulch (segment 2), Cement Creek and its tributaries (segment 6), and Mineral Creek above the confluence with South Mineral Creek (segment 8) do not support diverse forms of aquatic life owing to poor water quality and limited physical habitat. The imposition of effluent limits required under the Federal Act for point sources and cost effective and reasonable best management practices (BMP's) for nonpoint sources are not likely to lead to the establishment of aquatic life in these segments. Therefore, an aquatic life classification is not being adopted for these segments, Attachment A. Downstream use classifications, however, depends on maintaining or improving the water quality in these segments. The Commission has therefore, determined that narrative standards for metals based based on the application of BMP's to nonpoint sources and the continuation of current treatment levels for existing point sources for these segments are appropriate.

The Commission has further determined that the Animas River between Maggie Gulch and Cement Creek (segment 3a) supports a population of brook trout that appears to be naturally reproducing in that it consists of multiple age classes. The segment also contains a diversity of macrobenthos and possesses physical habitat similar to other streams in the Southern Rocky Mountain ecoregion. Although the concentration of

several metals, especially cadmium and zinc, are higher than what is required to protect the most sensitive aquatic life species, they are lower than the chronic toxic criteria for brook trout, therefore a cold water aquatic life 1 classification is being established to protect the resident aquatic life found in this segment. Ambient standards for cadmium and zinc are adopted to ensure that downstream use classifications and standards are not jeopardized. The imposition of effluent limits required under the Federal Act for point sources and cost effective and reasonable best management practices for nonpoint sources are not likely to lead to the establishment of the most sensitive aquatic life species in this segment.

The water quality of the Animas River, renumbered segment 3b is degraded by Cement Creek which contributes aluminum, cadmium, copper, and zinc in concentrations that are toxic to aquatic life. There may be a potential to reduce the load of metals from Cement Creek, pending feasibility and cost/benefit analysis of several remediation sites in the basin, providing water quality suitable for limited aquatic life including brook trout. However, the imposition of effluent limits required under the Federal Act for point sources and cost effective and reasonable best management practices for nonpoint sources, however, are not likely to provide the quality suitable for the most sensitive aquatic life species (i.e. rainbow or cutthroat trout) in this segment. Because the overall habitat of segment 3b is less than that found in the segments immediately upstream and downstream, a goal of aquatic life cold 2 has been established for renumbered segment 3b. TVS for aquatic life are adopted except for cadmium, copper, and zinc. The cadmium and copper standards are based on chronic toxic criteria for brook trout. The ambient zinc concentration is lower than TVS for brook trout, but higher than TVS for other trout species. The zinc standard is based on ambient quality so as not to impair use classifications and standards in segment 4a. Temporary modifications for aluminum, cadmium, and copper based on ambient quality are adopted while the feasibility of achieving the aquatic life goal is being determined.

Mineral Creek between South Mineral Creek and the Animas River, renumbered segment 9b, was already classified for aquatic life with total recoverable table value standards. The upper Animas water quality study showed that aluminum, copper, iron, and zinc greatly exceed TVS in this segment and that both fish and macroinvertebrates are absent from the segment. The physical habitat assessment, however, found it comparable to other habitats within the Southern Rocky Mountain ecoregion. Because most of the aluminum, copper, iron, and zinc are contributed from two areas, there may be a potential to reduce loading from either or both of these areas. The Commission chose not to remove the aquatic life classification until it has been demonstrated that sources cannot be remedied within a twenty year period or would cause more environmental damage than to leave it in place. The Commission adopted TVS for segment 9b, together with temporary modifications for aluminum, copper, iron, and zinc based on ambient quality until the feasibility of remediation has been established.

The Animas River between Mineral Creek and Elk Creek, renumbered segment 4a, does not have an aquatic life classification. The upper Animas water quality study found that the water quality below Mineral Creek is suitable for brook trout and has physical habitat

similar to other aquatic life streams in the Southern Rocky Mountain ecoregion. Some reduction in the zinc concentration from Cement Creek, Mineral Creek, and/or the Upper Animas may enable the water quality of the segment to support brown trout, however, the imposition of effluent limits required under the Federal Act for point sources and cost effective and reasonable best management practices for nonpoint sources are not likely to lead to the establishment of aquatic life uses for the most sensitive species in this segment. The Commission adopted the aquatic life cold 1 classification as a goal and TVS for this segment, except for the zinc standard which is based on the chronic toxic criterion for brown trout. A temporary modification for zinc, based on the ambient quality, has been adopted until the feasibility for load reduction has been established.

GUIDE FOR USING THE WQCD STREAM CLASSIFICATIONS AND STANDARDS TABLE FOR THE ANIMAS RIVER BASIN

Background

The prevailing classifications and standards for the Animas River basin established in 1982 and last reviewed in 1991 were summarized in a standard set of tables used by the WQCC for all basins and segments across the State. That table for the Animas basin was used as the basis for the proposed changes offered by the Division in April 1994 and distributed to those participating in the Animas river initiative. The following is intended to help clarify that table. Shaded information is shown as additions to the base table; deletions are crossed out.

Column 1, Stream Segment Descriptions

Segments are defined by narrative descriptions. Additions are the results of refinements associated with proposed changes discussed in the "Statement of Basis, Statutory Authority, and Purpose".

Column 2, Designation

Notations shown here reflect either an upgrade (up) in the classification reflecting more stringent classifications and standards or no change from prevailing classifications.

Column 3, Classifications

These classifications follow the standard use-protected classifications contained in the Commission's regulation entitled: "The Basic Standards and Methodologies for Surface Water". That regulation defines a statewide system for classifying state waters to protect beneficial uses. The basic standards regulation sets the framework that is applied on a site-specific basis and includes a standard set of protected uses under the categories of: aquatic life (cold or warm water), recreation (primary or secondary contact), domestic water supply, and agriculture.

Column 4, Physical and Biological Parameters

The dissolved oxygen is important to sustain aquatic life and to maintain the aesthetics of water. It generally is not a problem in mountain streams. The pH influences chemical reactions that occur in water and is important for controlling the levels of dissolved metals, the form that is toxic to fish. Fecal coliform comes from intestines of warm blooded animals and is an indicator of the suitability of the waters for recreation usage.

Column 5, Inorganic Parameters

Inorganic constituents can be toxic to fish and humans (domestic water supplies use). Unionized ammonia and residual chlorine are particularly toxic to fish. Cyanide is toxic to both humans and aquatic life. Nitrates occur naturally and can be a problem for infants whereas nitrates usually are the results of municipal wastewater and can be toxic to fish. Boron can be problematic for crops, while chlorides and sulfates can make waters undesirable for domestic water supplies.

Column 6. Metals Parameters

Metals are important for protecting both aquatic life and drinking water. Generally, however, the levels for aquatic life are more restrictive (lower) than for drinking water. Exceptions are arsenic, iron, manganese, and selenium. The values shown represent a combination of ambient concentrations derived from the sampling conducted. Others shown are from the table values (national criteria) contained in the Commission's basic standards regulations. The values are a combination of the dissolved form of the metals and, in some cases, what is known as the total recoverable form. The latter is particularly important for protection of water supply and agricultural uses. Regarding aquatic life, low concentrations of several of these metals are more toxic in low hardness. Thus some of these values vary among segments depending upon hardness levels in those segments.

Cadmium, copper, lead, manganese, silver, and zinc tend to be high in the Colorado mineral belt due to both natural and mining-related activities. Mercury (Hg) is highly toxic which can occur under natural conditions. Chromium and nickel are rarely found in surface waters. Their presence would be likely due to industrial sources.

Column 7. Temporary Modifications and Qualifiers

Values shown in this column represent proposed temporary modifications for those parameters from the levels shown in the previous columns. They apply only to the segment shown and apply to any regulatory (i.e., permit) conditions defined for the duration of the temporary modification as determined by the Commission. All temporary modifications must be re-examined not less than every three years, most likely in conjunction with the triennial review of the basin.

Special note: For some segments, proposed narrative standards are shown instead of numerical standards for both inorganic and metals constituents. They reflect continuation of prevailing requirements for any point sources along with application of best management practices for metals reductions for mine waste sources within these segments.

**Preliminary "Core" Animas Stakeholder Group Sign-Up Sheet
April 23, 1994**

NAME	INTEREST TO REPRESENT	CITY	INTEREST IS LONG-TERM (L), SHORT-TERM (S) OR BOTH (B)*
Les Bergman	Land owner, Resident	Silverton	B
Lou Bergman	Land owner, Resident	Silverton	B
Larry Perino	Industry, Resident, Land Owner, Engineer	Silverton	B
Bill Goodhard	Mining, Technical	Silverton	B
Dennis Scheminske	Mining, Public Relations	Golden	B
Bill Jones	Tourism, Mining, Land Owner, Historical, Technical	Silverton	B
Steve Fearn	Mining, Land owner, Historical, Technical	Silverton	B
Janice Sheftel	Water Conservation District	Durango	S & B
Gary Noah	Local Government	Silverton	B
Kathy Foster	Federal Land Management Agency (FS), Technical	Durango	L
Greg Parsons	Water Quality Control Division (State)	Denver	B
Gerald Swanson	Mining, Business, Tourism	Silverton	B
Michael Black	Environmental Interest	Durango	B
Jerry Sandell	Mining, Water user, Land owner	Salida	B
Jerry Ellis	Resident	Silverton	B
Richard Perino	Local Government	Silverton	B
Gary Thrash	Federal Land Management Agency (BLM)	Durango	L
Errol Jensen	Technical, Federal Agency (USBR)	Durango	L
Paul von Guerard	Federal Agency (USGS), Technical	Grand Junction	L
Bill Simon	Technical	Durango	B
Kevin Padrick	Land owner, legal	Silverton	B
Wanda Miller	Local Government (Trustee)	Silverton	B

* The participants discussed that the focus of the Stakeholder Group would be twofold: (1) a short-term focus addressing the classifications and standards hearing in September, and (2) a long-term focus addressing the problems and solutions of future cleanup of the upper basin waters.

[30] From: MARC ALSTON at R8HWM1 4/18/94 1:43PM (826 bytes: 10 ln)
To: PAUL ARELL, PATRICIA G. SMITH, CAROL L. CAMPBELL, ROBERT J. DUPREY at
R8HWM2, DIANA SHANNON, CAROL RUSSELL at R8WM1
Subject: Silverton Mtg


1136120-R8 SDMS

----- Message Contents -----

CCEM (Lisa hanson) called to ask if EPA Superfund could come to a 4/23 (Sat 9-4) meeting in Silverton to form an Animas river working group. Her message said CCEM felt it was important for EPA SF "to be at the table".

I cannot go and should not be involved further due to my new duties. Should someone else go? Carol R.--are you going? Should we ask the CDH person from the site nearby (I blanked out the name). I have a flyer announcing the meeting.

Marc,

This is extremely short notice. Neither Pat or I can make it. Rick Brown told me about a month ago that a letter was forthcoming from CDH to Bob asking Superfund to stay out of Silverton. It has not yet arrived. If we decide to move ahead with the assessment work then a more productive time for us to interface with the public would be after we have some results to share. We are in no position resource wise to get involved in a non Superfund workgroup activity. Pat is working on about 150 sites now. This is one of many.

Paul



1191528

Mogul Mine

Steven Way to: mogul1882

04/05/2010 04:47 PM

From: Steven Way/R8/USEPA/US
To: mogul1882@yahoo.com
Bcc: Steven Way/R8/USEPA/US@EPA

Hello Todd,

It has been some time since we last communicated regarding the Gold King mine. However, I am contacting you regarding the Mogul and Grand Mogul mines. I would like to discuss with you our possibly working with you to address the waste rock dumps. I am working with the BLM on portions of the mine they may have responsibility for addressing. I have attempted contacting you by phone but I am not certain that the numbers are current. If you would please, call me at the numbers below so that we can discuss this or reply and let me know how I can reach you.

Thank you,

Steve Way

Federal On-Scene Coordinator
Emergency Response Program (8EPR-SA)
US EPA Region 8
1595 Wynkoop Street
Denver, CO 80202-1129

Office: 303-312-6723

Cell: 303-886-1640

**Upper Animas Mining District
Site Background and Activities**

April 8, 2010

(Updated October 28, 2010 by Sabrina Forrest)

Background

- The Animas River begins high in the San Juan Mountains, above Silverton, in southwest Colorado. The river flows south through Durango for almost eighty miles to the New Mexico border. It continues nearly thirty more miles, meeting the San Juan River in Farmington, New Mexico.
- The Upper Animas Mining District lies within San Juan County -13 major volcanic calderas – highly mineralized and extensively mined from 1874 to 1991. Three drainages: Mineral Creek, the Upper Animas, and Cement Creek, all of which flow to the Animas River.
- Many mine sources due to 1500 mine sites within 186 sq miles. The area had four railroads, three smelters, and over thirty mills.
- San Juan County - the smallest and one of the most economically challenged in Colorado; 150+ jobs lost in 1991 when the Sunnyside Mine closed.
- Approximately 85% of the land in the Upper Animas Basin is under public ownership. A large number of abandoned orphan mine sites are located on U.S. Forest Service (FS) or U.S Bureau of Land Management (BLM) property; however, there are many private patented claims interspersed throughout the basin.
- In 1997, the Department of Interior began an Abandoned Mined Lands Initiative (AML) to study two pilot areas; to better understand how to handle problems these sites may create. One BLM AML focus area is the Upper Animas Basin. BLM/USFS have had a significant role in the non-time critical removal actions over the years.
- Standard Metals Corp. (SMC), then Sunnyside Mining Corp. had several water quality-related and mine waste discharges, tailings releases, notices of violation, and eventually a Consent Decree with CDPHE WCQD. Sunnyside and WQCD agreed to pollution trading to deal with water quality issues. Sunnyside was released from the CD in 1999.
- There have been remediation efforts in Mineral Creek, the Upper Animas, and Cement Creek, but Cement Creek is still having a negative impact on the TMDL compliance point, known as A72.
- In the Cement Creek drainage, active water treatment began by SMC in 1970s and was updated over the years by Sunnyside. From 2001-2202, the American Tunnel had three bulkheads installed. Flow has decreased from 1,600 gpm to about 150 gpm. The Red & Bonita Mine, and other upgradient adits' and seeps discharges are now making up the difference in the American Tunnel flow. Gladstone's active water treatment stopped in 2005; settling ponds on the Herbert Placer were reclaimed in 2006.

Regulatory Involvement and Stakeholder Group Formation

- Eighteen months of negotiations between federal, state and private interests after EPA thought about watershed-wide NPL designation in the mid-1990s. Silverton citizenry and their relatives who were employed by the mining companies have always been against NPL listing or other regulatory involvement in the watershed.
- 1994 - The ARSG formed due to the mining district's numerous source areas, historic mine discharges and tailings releases, and more recent documented CWA and NPDES violations, which made the area ripe for regulation and enforcement actions.
- Formation was also in response to the Colorado Water Control Division's (WQCD) reevaluation and upgrading of water quality standards for the Upper Animas River Basin.
- The ARSG has developed a watershed plan, and Use Attainability Analysis (UAA), dated January 2001. The drainages have had TMDLs developed; Cement Creek has ambient standards, other areas have numeric standards.
- The ARSG studied 1,500 mines, focused on 173 draining mine adits and 157 mine waste sites, then identified about 33 adits and 32 waste sites to prioritize. These were judged to be the highest ranking contributors of metals in the Animas River. The ARSG prioritized their actions based on:
 - 1. Technology needed for remediation,
 - 2. Funds, and
 - 3. Property access.
- DRMS has been involved with regard to mined land permits and using available reclamation bonds.
- \$4 Million from ASARCO Silver Lake settlement in Trust; State lead, but the CDPHE and ARSG are working to identify where those funds could be used, e.g., active water treatment plant somewhere.
- SMC funds will likely be used by EPA and BLM on appropriate projects.

Stakeholders include:

- Animas River Stakeholder Group (ARSG)
- Bureau of Land Management (BLM)
- Colorado Department of Public Health and Environment, Hazardous Materials & Waste Management Division (HMWMD)
- Colorado Water Quality Control Commission (WQCC)
- Colorado Department of Public Health and Environment, Water Quality Control Division (WQCD)
- Colorado Division of Reclamation, Mining & Safety (DNR DRMS)
- Colorado Goldfields Inc.
- Gold King Mines Corp. (GKM)
- Salem Minerals Inc. (SMI)
- San Juan Corp. (SJC)
- San Juan County
- Silver Wing Company Inc. (SWC)

- Southwest Water Conservation District (SWCD)
- Sunnyside Gold Company (SGS)
- Trout Unlimited (TU)
- USDA Forest Service (USFS)
- U.S. Environmental Protection Agency (EPA)
- U.S. Geological Survey (USGS)

Stakeholder Successes - see <http://animasriverstakeholders.org/page6.php>

- By the late 1990s, ARSG-lead cleanups in the Animas and Mineral Creek have improved water quality and habitat near Silverton and downstream to the New Mexico state line. Salmon flies have been migrating upstream on the Animas River from New Mexico to the 32nd Str Bridge in Durango.
- Last fall (2009 I believe) CDOW did a fish survey in Maggie, Minnie, and Cunningham Gulches on the upper Animas drainage, which haven't been surveyed since the 80's. CDOW found a significant increase in population density and size classes. Also productivity was in the 50 to 95 lbs./acre in the three streams. These are upstream of Cement Creek.
- Ongoing support for ARSG by local community and local governments, Southwest Water Conservation District, and the maintenance of good monthly meeting participation.
- Development of a Good Sam web site and legislative efforts including lobbying in DC via ARSG and WQCC member Peter Butler and the SWCD.
- Commitment by ARSG and the BLM to a new water treatment plant constructed at Gladstone. This may be in the form of a demonstration facility.
- ARSG and DRMS completed the Silver Ledge stabilization and reclamation project in 2010 and are planning for another significant cleanup in the Mineral Creek drainage this year at the and Koehler Tunnel
- Through 2006, sources of funds to the Animas River Stakeholder process and mine waste cleanups consisted of:
 - 48% Federal Government
 - 42% Mining Industry
 - 6% State Government
 - 3% Public Interest Groups
 - 1% Local Government

Challenges/Ongoing Issues

- From ARSG perspective, they recognize there are ongoing water quality issues in Upper Cement Creek, but inability to address due to lack of Good Sam provisions that will protect from 3rd party CWA suits.
- Lack of water treatment in Gladstone is impacting the TMDL compliance point below Silverton at A72.
- Water quality flow and loads have been changing since the last bulkhead went into the American Tunnel (2002).
- The worst sources are the Gold King Mine 7 level; Red & Bonita Mine, American Tunnel, and the Mogul Mine (Grand Mogul to lesser degree).
- October 2010 electro-shocking by CDOW indicated there are declines in population and productivity downstream of Silverton. Additional macrobiotic sampling planned for Fall 2010.

EPA Involvement

- 1994 – 2004 Carol Russell represented EPA and EPR-EP in the ARSG and tracked many of the 319 projects. She fostered a non-adversarial relationship with the ARSG that, early on, was not without some significant challenges.
- In 1996, the Regional Administrator agreed to forego listing as long as the ARSG made progress in mine site remediation and water quality improvements. Since 1994, EPA has regularly attended the monthly Animas River Stakeholders Group meetings, had regular talks with the County Administrator, Town/County Planner, and community members. This has helped EPA (Carol Russell before me) find out how best to support the community.
- 2003 – 2004 – EPA's Max Dodson, Ron Cattany of DRMS (formerly CDMG) and Howard Roitman (CDPHE) created a Memorandum of Understanding for the San Juan Mountains Focus Area, a regional initiative to better coordinate federal and state programs where CWA, CERCLA, SDWA, and RCRA were involved.
- Internally, EPR management wanted One Face in a Watershed to support Land & Water Remediation, Reuse, Revitalization, and Restoration (LR⁴).
- 2005 – Present – In support of LR⁴,¹ have been involved as EPR Site Assessment Manager, watershed representative, and Brownfields Project Manager.

CERCLA/EPR Activities and Objectives:

- Keep a relationship with the Silverton, San Juan County, and ARSG going. From EPA perspective, the remaining upper Cement Creek areas that need addressed are likely NPL-caliber, but we need data and to gather more community support. EPA has taken the message to the ARSG several times that our regulatory mandate and responsibility to protect human and environmental health require us to do something to ensure that water quality does not continue to degrade and EPA wants to see movement toward water quality improvements in the short term.
 - EPA gave ARSG a Targeted NPL presentation in about 2008, but some members of the ARSG and community are still unreceptive to Superfund, they still see Summitville and Leadville as the examples for NPL. Some community members think Superfund would be good for the town/county and

is needed to address the complicated site conditions and issues.

- EPA management has allowed for ongoing R8 support to keep our relationship with ARSG members going:
 - Attend ARSG meetings
 - Share data
 - Be clear with ARSG and County regarding our objectives, ability to support (where and why), and our limitations.
 - Stay involved so that CERCLA can continue to be involved. It may take time for community to see the benefit of Superfund activities.

- 2005-2010 provided project and grant management for the successful Cleanup at the Rose Walsh Smelter – EPA provided Targeted Brownfields Assessment support followed by successful Cleanup Grant for affordable housing project. Leveraged HQ sustainability funds and NREL technical support. Cleanup is complete; infrastructure planned for 2011; home construction 2011-2012.
- Identify areas that still need work and where CERCLA may be the appropriate tool.
- Assist ARSG with water quality data collection in a significantly impacted portion of the watershed; upper Cement Creek. The mine sources of interest include American Tunnel, Gold King 7 Level, Red & Bonita, Mogul, and Grand Mogul mines. These have not had a lot of characterization done due to them being associated with areas of active mining until 1991 and NPDES, and mining permits
 - EPA Site Assessment developed a Sampling and Analysis Plan for water quality sampling because we had the technical ability, lab resources and staff, and wanted to be able to weigh in on how to characterize the environmental issues for EPA and the ARSG. .
 - Collecting monthly water samples and flow measurements; and assessing changes in water quality and metals loads over time, since flows and loads have not been consistently evaluated, esp. since bulkheads were installed and the WTP was removed.
- Presently, EPA’s regional team in the watershed consists of Site Assessment and Brownfields (Sabrina Forrest) and Removal (Steve Way), with technical and legal support as needed; primarily from Mike Wireman and Richard Sisk. We attend the monthly stakeholder meetings and stay in touch with locals about ongoing and new projects.
- Summer 2010 – Steve Way, BLM staff, and I conducted site recon for possible mixed ownership waste repositories; ID Red & Bonita as a possible short term project that could benefit the watershed and introduce Superfund “pluses” to locals.
- September 16, 2010 – EPA (David Ostrander, Martin Hestmark, Steve Way, and I attended ARSG mine site tour. Martin and David headed up conversations with ARSG leaders regarding the positives of Superfund involvement.
- Summer - Fall 2010 – EPA contractor recon of upper Cement Creek sites, preliminary investigation of Red & Bonita with Mike Wireman and DRMS

for to determine viability of bulkheading.

- October 25-30, 2010 – EPA contractor sampling sources, sediments/surface water in support of an HRS package.
- Planned draft analytical report and HRS package for spring 2011.
- October 2010 - Meeting with Enforcement regarding EPR strategy; EPA beginning PRP search.
 - Anticipate Spring 2011 draft PRP search documents
- Winter 2010/2011- EPA will task START to complete HRS package, using available data and the new data from October 2010 sampling effort.
 - Goal: September 2011 NPL Proposal
 - Would require that we have all the data we need to attribute Animas Impacts to Cement Creek sources.
 - Would require community input and state approval; Governor's letter likely due approximately June 30, 2011.

Other Activities:

- Planned PA/SI – KittiMac Tailings (privately owned) in the Animas drainage 5-6 miles upstream of Silverton. ARSG has indicated some interest in conducting the assessment and cleanup, but I don't know if they have enough 319 funding left for that work.
- Possible SI or removal action: Kendrick & Gelder Smelter – also in/near Cement Creek, but close to town at mouth of creek.
- Lackawanna Mill TBA may need Brownfields oversight or liaison work with CDPHE

Animas Site Update for Carol C.

9/22/11

- I. Take homes from last week's meetings in Silverton - Sabrina/Jennifer
- II. Update on Removal Activities and Schedule - Steve/Curtis
- III. Update from Enforcement and their planned actions - Mike/Richard
- IV. Next steps
- V. Site Name Issue

Briefing Document - 09/22/2011

Upper Cement Creek, San Juan County, Colorado

Sabrina Forrest, R8 NPL Coordinator & SAM – 312-6484

Jennifer Lane, CIC – 312-6813

Status:

- Draft HRS package still in process and will be submitted to EPA HQ by September 29, 2011 deadline. Community is aware that this process and PRP search will continue, although region and state recognizes from last week's meetings that NPL proposal by March 2012 unlikely. HRS package likely to remain draft until community support indicates remedial funding desired.
- Common threads to which EPA staff wants to respond. Where possible, take messages from other Superfund site examples:

- Some support EPA and anything that will improve water and get more jobs in the community
 - Others say stop studying and get to doing something
- Many are skeptical and sent messages EPA has heard before
- EPA is lumped with other agencies – other state (DRMS permitting) and federal agencies are moving slow or are non-responsive on other issues, we are also the bad guy
 - Metals in Cement Creek are from natural sources; skepticism of need to do anything
 - Economy/ Jobs – will locals get any, or will “Feds” contractors all get them?
 - Tourism will be ruined
 - Lack of control – who will govern the process? Aren't there other communities that need federal money worse than Silverton?
 - Who is EPA responding to? Question of Community and belief that regulators favor downstream groups and leave San Juan County negatively impacted.
 - Will funding for an ecological site come around, or would we list and do nothing?
 - Superfund Stigma
 - Superfund will not allow for investment in new mines or for mining interests to come to Silverton
 - Property values will be impacted
 - How will the area and community be impacted?
 - What will the remedy be; how can this be an unknown after so much study?
 - Where would work be done?
 - How much will it cost?
 - What happens if EPA and the State can't fund a treatment plant; how will San Juan County take it on?
 - Community and stakeholders want to first explore collaborative approach
 - County and Stakeholders want EPA and state to continue to help define the problem and changes in water quality since bulk heads installed and flows increased from higher adits/drainages

- Community and stakeholders wants all data shared with them – ongoing
- Will removals continue?
 - If so, the stakeholders want more sharing community input/involvement and want locals to be given chance to bid on projects (SAM could share the information with ARSG and County if OSC unavailable to do so).

Of Importance:

- State supports listing, but San Juan County and Local opposition is expected to the proposed listing.
- BLM has been supportive, but also wants to be clear about what they are responsible for – the American Tunnel. No sources are on USFS land; however, some USFS lands downstream of Cement Creek may be impacted. BLM state lead, Brent Lewis, has been updating USFS staff from Durango. Maintaining partnership with BLM will be key.
- Main PRP, Kinross Gold Corp. (Sunnyside's parent company) stated they are present and participating in the stakeholder's collaborative process – they don't want Superfund or enforcement, intimating they would fight it
 - SAM/NPL Coordinator emailed Kinross representative asking what their involvement in the collaborative process means
- BLM has EPA's draft MOU; EPA and BLM plan to meet October 26, to discuss strategy, especially with regard to PRPs.
- Gladstone, San Juan County, Silverton names should not be associated with Superfund site name. Upper Cement Creek, or Cement Creek are preferred site names.
- Ongoing community input needed, but some locals do want to see action, not more study
 - Seeing incremental improvements via Red & Bonita removal activities might be positive for EPA.

Next Steps:

- Development of Fact Sheet and Q & As to put in Silverton Standard
- EPA needs to respond to email received from J. Paul Brown, Colorado State Representative in House District 59 in support of Silverton resident's concerns
- State to fund County and some Town staff field trip to Creede and Crested Butte
- EPA and County to jointly coordinate and host an Upper Cement Creek Forum to bring expertise from other Superfund sites to discuss their experience with Silvertonians and other stakeholders
- Ongoing public meetings likely needed for 2012
- Colorado Public Radio has indicated desire to interview EPA staff
- Trout Unlimited may request EPA to come to Durango and give presentation

Fw: Animas Site Update

Daniel Heffernan to: Aaron Urdiales, Carol Campbell, Daniel Heffernan,
Kelcey Land, Martin Hestmark, Mike Rudy, Richard
Sisk, Sabrina Forrest, Steven Way, Curtis Kimbel,

09/21/2011 09:02 AM

From: Daniel Heffernan/R8/USEPA/US

To: Aaron Urdiales/R8/USEPA/US@EPA, Carol Campbell/R8/USEPA/US@EPA, Daniel
Heffernan/R8/USEPA/US@EPA, Kelcey Land/R8/USEPA/US@EPA, Martin
Hestmark/R8/USEPA/US@EPA, Mike Rudy/R8/USEPA/US@EPA, Richard

History: This message has been forwarded.

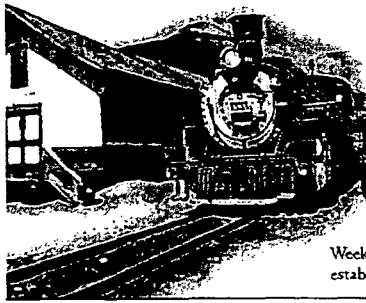
Greetings: Here's an agenda and some background for our Animas Site Update tomorrow. I hope most of you can make it.

Draft 9/22 3:15pm Animas Update Agenda:

1. Take homes from last week's meetings (see summary below) - Sabrina/Jennifer
2. Update on Removal Activities and Schedule - Steve/Curtis
3. Update from Enforcement and their planned actions - Mike/Richard
4. Next steps

draft hot topic: ***SIGNIFICANT LOCAL CONCERNS VOICED REGARDING POTENTIAL NPL LISTING OF UPPER CEMENT CREEK:** During the week of September 12 – 16 the R8 NPL Coordinator, Community Involvement Coordinator, and CDPHE Superfund program representatives attended the Silverton Town Board and San Juan County Commissioners' meetings to update them on recent EPA steps and activities related to possible inclusion of the Upper Cement Creek site on the NPL -the site is being considered for Listing based on impacts to Cement Creek and the Animas River from mine waste piles and uncontrolled mine discharges. EPA also conducted community input sessions, met with business owners and elected officials and attended Animas River Stakeholders Group (ARSG) and Upper Cement Creek technical workgroup meetings. Conversations throughout the week indicate that there are some who may support Listing; however, many Silverton and San Juan County residents and elected officials have unanswered questions and favor exploring a non-NPL approach. The idea of a March 2012 NPL Proposal was met with major concerns by local officials which may impact the state's willingness to provide a Governor's letter by the December 2011 deadline.

Some community members favor developing a collaborative approach to address the Upper Cement Creek water quality issues and want EPA to continue to be part of the process. Of note, a representative of the main potentially responsible party, Sunnyside Gold Corp, a wholly owned subsidiary of Canadian mining interest Kin Ross, indicated a willingness to participate in the collaborative process as long as Superfund Listing and enforcement are not involved. County and Town officials would like to visit nearby communities with Superfund sites in October 2011 (CDPHE will try to facilitate this) and conduct a forum with members from these Superfund communities in November 2011 or early 2012 (EPA is looking into invitational travel options for this). EPA is developing a factsheet/Q&A document for distribution and will hold additional public meetings throughout the fall.



Silverton STANDARD & the MINER

Weekly Miner
established 1875

SILVERTON'S PIONEER NEWSPAPER SINCE 1875

Silverton Standard
established 1889

IN BRIEF

Llama Fest Sept. 22-25

Learn about llamas at the 2011 Pack Llama Festival on Saturday, Sept. 24 at Kendall Mountain Recreation Area.

Get your hands on the animals and see what they can do. Then stay for the concert by the Andy Hackbarth Band. Tickets are only \$15!

The Andy Hackbarth Band, based out of Denver, will be performing at the 2011 Pack Llama Festival on Saturday night. Denver-area folks may have seen them perform at the Botanic Gardens' Garden Grapes and Hops event, the Rock Bottom Summer Concert Series, the Hard Rock's 40th Anniversary Celebration, Kenny Chesney's "Goin' Costal" Kickoff Party, at the finish line of the Denver Triathlon or at the Water for People Fundraiser this summer.

The band also performs frequently in Wyoming, Idaho, Utah and throughout Colorado. Visit <http://andyhackbarth.com/> for more information!

Tickets for the concert are \$15 and can be purchased in advance or at the door. Check out our website at <http://packllamafestival.rentallama.com> for more information.

Bordello Ball, Crawl to the Ball Oct. 1

Think about working up a big appetite Saturday night, Oct. 1. It's Crawl to the Bordello Ball time again.

At least 10 restaurants will be offering their best selections to complete a hearty meal before the annual Youth-Of-Silverton fundraiser at the Grand Imperial Hotel. And you'll be helping A Theatre Group too.

Aspens hike on Lower Engineer Trail Sept. 17

Learn about our beautiful aspen trees, the changing of the leaves, and more fall ecology on this gorgeous hike on the Lower Engineer Trail, led by Larry Eads.

Meet at the Durango Recreation Center in front of the ball fields on Saturday, Sept. 17 at 8:30 a.m. to carpool, and plan to be back there by 3:30 p.m.

The event is sponsored by San Juan Mountains Association and San Juan Public Lands. Registration requested. Contact Gabi Morey to register at 385-1256 or gabi@sjma.org.

San Juan Mountains Association promotes responsible care of natural and cultural resources through education and hands-on involvement that inspires respect and rever-

See BRIEFS, Page 4

Skepticism over Superfund

By Mark Esper

A brief Environmental Protection Agency presentation on the possibility of using Superfund to address water quality issues on Cement Creek was greeted with some skepticism at Town Hall on Monday night,

Some question the need for designation and possible negative impact on tourism

Sept. 12. Some attending the session during the Town Council meeting even questioned whether there was enough data

Field trip Friday; more input sought
Page 3

to support the conclusion that there was a serious problem. Sabrina Forrest, EPA site assessment manager from Denver, said

the agency wants to find a comprehensive solution to worsening water quality in the creek, attributed to run off from long-abandoned mines in the area.

Forrest said that CERCLA — the Comprehensive Environmental Response,

See EPA, Page 8

HERE IT COMES!



Snow appeared on the top of Sultan Mountain and other peaks surrounding Silverton Monday morning, indicating what is in store for the San Juan Mountains in coming months.

Anvil Mtn. plat OK'd by panel

The final plat for a 34-lot subdivision that could contain as many as 54 residential units won unanimous approval from the San Juan Regional Planning Commission on Tuesday, Sept. 13, setting the stage for water, sewer and roads to be installed in the county-owned 14-acre site.

The proposed Anvil Mountain subdivision is being developed at the former Martha Rose Walsh smelter site just southeast of Silverton. It is designed to address affordable housing needs of the local workforce, with five premium lots on the west side designated for sale by the county at market value to help subsidize the workforce homes.

County Administrator Willy Tookey said that at least 60 percent of the lots will be earmarked for county residents who earn 125 percent or less than the median income in the county. The median income for a family of three in San Juan County was \$50,800 in 2010 according to the Regional Housing Alliance of La Plata County, which has been helping the county bring the project to fruition.

The county was required to approve a final plat for the proposed subdivision by the end of this month or lose a \$400,000 grant from the state Department of Local Affairs to put in the streets, water and sewer systems.

The county has the bid documents ready to hire a contractor, and expects to advertise for bids soon.

The former Walsh Smelter site was acquired by the county six years ago from George Lancaster for \$280,000. It was paid for with a \$200,000 impact fee from Durango Mountain Resort as part of its development agreement which includes a large area in the southern San Juan County.

The discovery of contaminated soil left from the smelting operation resulted in a \$2 million cleanup of the site, largely funded with state and federal grants.

Tookey said the county now

See HOUSING, Page 5

OPINION



Official newspaper of the Town of Silverton and San Juan County. The *Silverton Standard & the Miner* is published every Thursday by the San Juan County Historical Society. Our mailing address is P.O. Box 8, Silverton, CO 81433

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Our goals
The *Silverton Standard & the Miner* is a weekly newspaper written for people interested in the issues and news of Silverton, Colo., and the surrounding San Juan Mountains region. The *Standard* voices a strong sense of community for Silverton and the San Juans as it brings you the issues, characters, landscapes, and the talent of the region. Stressing in-depth, balanced, and thoughtful writing, news, photography, and topical articles on key issues affecting the region, the *Standard* keeps the greater San Juan community informed, entertained, provoked, and engaged in dialogue about the community and its future.

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□ Best news content for a small weekly, 2007;
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• Best Business Story
• Best Education Story
• Best Headline Writing
• Best News Page Design
• Best Editorial Layout & Design
• Best Photo Essay
• Best Special Section
• Best Newspaper Promotion

Any ideas for Masonic bldg.?

By Don Stott

I picked up a copy of the *Silverton Standard & the Miner* at the Silverton Visitors Center's news dispenser on our way to Chama to ride the Cumbres & Toltec, and noted a great improvement in the paper.

If "Scoop" Duthie says it's good, that's enough for me, so put me back on the mail subscription list. Check for \$48 enclosed.

I stopped by Silverton on the way home, and had a long chat with my buddy Gerald Swanson, and he is also impressed with what I have been calling "the *Substandard*" for many years if not decades.

Good luck to you in the historical society.

Looked again at the Masonic Temple which badly needs me to restore it, but I can't think of a single use that could be made of it if I did buy it. Maybe a reader

GUEST OPINION

could think of one, because that historic building needs me, like the Grand Imperial, Wyman and Alma House did many years ago.

I am deeply disappointed with the way the railroad is being run, with outrageous fares charged. We rode the C&T in the parlor car for \$160 each, and this is a marvelous car, with the most comfortable of seats, an observation platform, lots of reading stuff, an attendant who will supply you with fruit, drinks, and about anything you want at no charge.

You also get a huge, delicious lunch at no additional charge at Osier. I rode the line in the 1960s from Alamosa to Durango, to Silverton and back to Alamosa several times, and it was a pleasure to renew my memories of that line, which hauled millions of tons to and from Silverton, which was the purpose of all

that track and grading in 1882.

To be truthful, I am prejudiced in favor of the Durango to Silverton, but the 4 percent grade, Windy Point, 2 Toltec Gorge and tunnel, Phantom Curve, Lava tank and loop, Cascade Trestle, etc., on the Cumbres & Toltec all brought back old and very pleasant memories.

Chama is full of closed buildings, closed businesses and shows the poor business conditions extant everywhere. None of the 490s are operating, but the 480s are purring along nicely. The Mud Hen is being reassembled now, and may be on the rails next season.

Lohato trestle has been rebuilt and looks great.

Damn! I must be getting old to remember all that stuff.

Don Stott, formerly of Silverton, now lives in Montrose.

FROM THE STANDARD MAIL CAR



'Caldera Coalition' asks: Who will pay for Cement Creek cleanup?

Editor:
When I see an ad like the one published for the past two weeks telling us to "Say NO to Superfund," I like to know who has run it and what his motivation is. Last week the ad was attributed to the "Gladstone Institute." So, I decided to do two minutes of research on the internet to learn something about this lofty sounding entity. It turns out, according to a 2007 Colorado Goldfields Inc. filing, that the owner and president of Gladstone Institute, described as an "education/mining company," and Gladstone Corp., a "souvenir company," is local mining claims owner, Todd Hennis.

In his ad Mr. Hennis tells us that, if some unstated party will "Drain the American Tunnel" and "Treat the Water," it will "End the Problem." The catch is that Mr. Hennis didn't say who would pay for all this if we "Say No to Superfund." I don't expect that his Gladstone Foundation will come forward to pick up the tab.

Mr. Hennis may, possibly, be on the hook for some of the cleanup costs if Superfund (short-hand for CERCLA — the Comprehensive Environmental Response, Compensation and Liability Act) does the cleanup. So, he is hardly a neutral party in this issue. I'm still trying to learn about the pros and cons of Superfund, but one could say in reply to Mr. Hennis' ad, in a slight variation of his text:

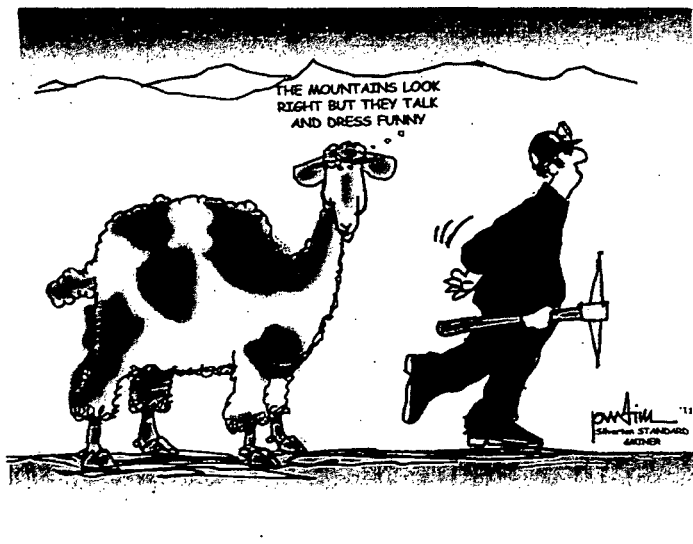
Say YES to CERCLA
Drain the American Tunnel
Treat the water
Get it paid for!
End the Problem
John Poole, Silverton
(Self-appointed president of the fictional Caldera Coalition.)

Neighbor asks: Who is impersonating Terry Rhoades?

Editor:
As a neighbor of Terry Rhoades, I am very concerned over the ad placed in last week's paper regarding Terry Rhoades living at 216 E. 18th St. I don't know who is attempting to impersonate him but whoever it is, is doing a very poor job. As concerned neighbors, we watch over each other's houses while they are unoccupied or on vacation.

Terry's house located at 216 E.

See *LETTERS*, Page 5



Change is in the air

By Freddie Canfield

Folks in this neck of the woods regularly ask the cooperative meteorological observer about the weather.

"When will winter get here?" was recently overheard. I explained that I don't make predictions — ever. Following that explanation your correspondent was asked a question of his own. "When do you think fall will get here?"

We are still in an ongoing and often non-productive stagnant late-season monsoon pattern. Since the 7th and 8th of August we haven't even had any nighttime temperatures below freezing.

However, our daytime temperatures are gradually falling off. Since Thursday we have been in the low 60s, with the exception of Saturday's high of 59.5 and Tuesday's 59.3. Significant rain occurred late Sunday night into Monday morning.

When thick valley fog cleared we gazed up at snow-dusted Thirteens surrounding our valley. That definitely got our attention!

Change is in the air.
Friday afternoon had the chilliest wind since May that I can remember — the kind of chill that reminds you it's time to get in some more firewood for the other season.

Or in my case, reminding me to have a fuller range of layers close at hand on the job site along with some denser, high-calorie edibles.

Perhaps after the weekend our realm might

WEATHER AND OBSERVATIONS

Date	High	Low	Precip., conditions
Sept. 7	69	34	Clear
Sept. 8	70	33	Overcast
Sept. 9	63	38	Slightly cloudy
Sept. 10	60	38	Overcast
Sept. 11	63	39	.28, valley fog
Sept. 12	61	39	Light overcast
Sept. 13	59	33	Valley fog

even dry out a bit. We shall see.

Sunday we had Carhartt yoga at the Silverton Movement Center. That's the way that Katey Shapiro's yoga class for men worked out first time around.

Our instructor is an absolute delight. Her approach is open and accessible for anyone interested in relaxing and releasing a summer's worth of accumulated stress and tension. No previous experience necessary.

Plenty for even long-time yogic practitioners like yours truly. Join us at our next class — 5 p.m. on Sunday, Sept. 25.

It is both free and freeing!
P.S. Today is Papa San's birthday (97), far, far away in his tropical paradise. What a wise teacher and deeply loving, loveable and truly human being. I love you so and choose to be like you when I grow up!

Write to us

The *Silverton Standard & the Miner* welcomes letters to the editor. Send letters via e-mail to editor@silvertonstandard.com, or via snail mail to, Editor, *Silverton Standard & the Miner*, P.O. Box 8, Silverton, CO 81433.

IN BRIEF

Field trip to remediated mine sites set for Friday

The Animas River Stakeholders Group is sponsoring a tour of remediated mine sites in the Mineral Creek and Cement Creek drainages on Friday, Sept. 16. "We will also look at some of the issues around Gladstone," said coordinator Peter Butler of Durango. "We plan to meet at the large pullout on the west side of the highway, south of Chattanooga near Red Mountain Pass at 8:30 a.m."

The tour will continue all day. "Please let me know if you are interested in participating so we have a head count, and we may order lunches," Butler said. He can be reached at (970) 259-0986.

"We will need 4-wheel drive vehicles, preferably with short wheelbases," Butler said. "We want to fill those 4-wheel drives to minimize the number of vehicles going on the tour."

Since 1994, the Animas River Stakeholders Group has worked to improve water quality in the Animas Basin through a collaborative approach involving all interested parties.

More input sought

on Cement Creek woes

The Environmental Protection Agency and the Colorado Department of Public Health and Environment are hosting a session Friday to accept informal public input on what should be done about mining impacts to portions of Upper Cement Creek.

Staff from EPA and CDPHE will be on hand to listen to ideas and to answer questions about cleanup options, including the Superfund program.

"We want to hear from you," said Jennifer Lane, EPA community involvement coordinator. Stop by at Stellar Bakery & Pizzeria to share your thoughts following a tour of Upper Cement Creek on Friday, Sept. 16, from 4 to 6 p.m. That event follows a field trip sponsored by the Animas River Stakeholders Group. Complimentary refreshments will be provided by Stellar Bakery & Pizzeria.

Call, e-mail or write with your thoughts and ideas for addressing the watershed: Jennifer Lane, EPA

Community Involvement Coordinator, U.S. EPA, 1595 Wynkoop Street (80C) Denver, CO 80202-1129

Or call (303) 312-6813 (direct) (800) 227-8917, ext. 312-6813 (toll-free), or e-mail lane.jennifer@epa.gov

ATV staging area OK'd for permanent use

The Silverton Town Council on Monday unanimously approved the first reading of an ordinance that will allow the ATV access to a staging area at Silverton Lakes Campgrounds on a permanent basis.

The town this summer had allowed the staging area to be operated on a temporary basis and the consensus was it has been a success in providing more convenient access to town for ATV operators.

ATVs are banned from town streets except for the short stretches on the north end of town that access the staging area.

Mary Thornton of San Juan Backcountry said her company, which rents ATVs and Jeeps, used the staging area 35 times in June, 325 times in July and 180 times in August.

"I believe this is a wonderful service for people to be able to come into town and town and do shopping," she said.

Town Trustee Karla Safranski said she feels the staging area has been a great success.

She said she'd like to work out a plan whereby the two campgrounds at the south end of town could also gain access, perhaps in conjunction with a trails plan being worked on by Mountain Studies Institute. That trail plan hit a dead end when the State

Public Utilities Commission demanded an overpass over the railroad.

Penny Moore named alternate town judge

The Silverton Town Council has appointed Penny Moore to serve in the capacity of alternate municipal judge for the town.

Municipal Judge Lyndon Skinner requested the appointment in a letter to the Town Council. He noted that Janet O'Leary had served in that capacity prior to her serving on the Town Council.

"Since losing Janet approximately two years ago I have been unable to fill the position," Skinner said. He said that he asked Moore to serve and she expressed willingness to do so.

"Penny is highly qualified for the work," Skinner said. "She held the position of Clerk of the County and District Courts for two decades or so and has firsthand real-life experience in literally thousands of court cases."

Skinner said Moore will probably be needed for only 10 or so hours per year.

Montanya Sept 24th
DISTILLERS 4:00pm-Close

Raise the Roof!

party at Montanya

Live Music with
The Bob Scott Band

Oktoberfest Celebration!
SILVERTON BREWERY
Saturday Sept 24th
Jack Ten High
Playing live 8:30

2011 Statewide Ballot Issue

A YES vote on any ballot issue is a vote in favor of changing current law or existing circumstances, and a NO vote on any ballot issue is a vote against changing current law or existing circumstances.

1. Michael Mauer, Director of Research of the Colorado Legislative Council of the General Assembly of the State of Colorado, do hereby certify that the following is a true copy of the measures that will be voted upon by the registered electors of the state of Colorado at the statewide election to be held on November 1, 2011.

PROPOSITION 103

SHALL STATE TAXES BE INCREASED \$536.1 MILLION ANNUALLY IN THE FIRST FULL FISCAL YEAR AND BY SUCH AMOUNTS AS ARE RAISED ANNUALLY THEREAFTER BY AMENDMENTS TO THE COLORADO REVISED STATUTES CONCERNING A TEMPORARY INCREASE IN CERTAIN STATE TAXES FOR ADDITIONAL PUBLIC EDUCATION FUNDING, AND, IN CONNECTION THEREWITH, INCREASING THE RATE OF THE STATE INCOME TAX IMPOSED ON ALL TAXPAYERS FROM 4.63% TO 5% FOR THE 2012 THROUGH 2016 INCOME TAX YEARS; INCREASING THE RATE OF THE STATE SALES AND USE TAX FROM 2.9% TO 3% FOR A PERIOD OF FIVE YEARS COMMENCING ON JANUARY 1, 2012; REQUIRING THAT THE ADDITIONAL REVENUES RESULTING FROM THESE INCREASED TAX RATES BE SPENT ONLY TO FUND PUBLIC EDUCATION FROM PRESCHOOL THROUGH TWELFTH GRADE AND PUBLIC POSTSECONDARY EDUCATION; SPECIFYING THAT THE APPROPRIATION OF THE ADDITIONAL TAX REVENUES BE IN ADDITION TO AND NOT SUBSTITUTED FOR MONEYS OTHERWISE APPROPRIATED FOR PUBLIC EDUCATION FROM PRESCHOOL THROUGH TWELFTH GRADE AND PUBLIC POSTSECONDARY EDUCATION FOR THE 2011-12 FISCAL YEAR; AND ALLOWING THE ADDITIONAL TAX REVENUES TO BE COLLECTED, KEPT, AND SPENT NOTWITHSTANDING ANY LIMITATIONS PROVIDED BY LAW?

Text of Proposal:

Be It Enacted by the People of the State of Colorado:
SECTION 1. Part 1 of article 77 of title 24, Colorado Revised Statutes, is amended by THE ADDITION OF A NEW SECTION to read:

24-77-103.3. Voter approved revenue change - use of revenues. THE REVENUES RAISED BY THE INCREASE IN TAXES IMPOSED PURSUANT TO THIS MEASURE, AS SPECIFIED IN SECTIONS 39-22-104 (1.9), 39-22-301 (1)(d)(i)(j), 39-26-106 (1)(c), AND 39-26-202 (2.5), C.R.S., SHALL CONSTITUTE A VOTER-APPROVED REVENUE CHANGE AND MAY BE COLLECTED, KEPT, AND SPENT NOTWITHSTANDING ANY OTHER LIMITS IN THE STATE CONSTITUTION OR OTHER LAW. ALL REVENUES RAISED BY THE INCREASE IN TAXES IMPOSED PURSUANT TO THIS MEASURE, AS SPECIFIED IN SECTIONS 39-22-104 (1.9), 39-22-301 (1)(d)(i)(j), 39-26-106 (1)(c), AND 39-26-202 (2.5), C.R.S., SHALL BE APPROPRIATED BY THE GENERAL ASSEMBLY ONLY FOR THE COSTS OF PUBLIC EDUCATION FROM PRESCHOOL THROUGH TWELFTH GRADE AND PUBLIC POSTSECONDARY EDUCATION AND SHALL BE IN ADDITION TO AND NOT A SUBSTITUTE FOR MONEYS OTHERWISE APPROPRIATED BY THE GENERAL ASSEMBLY FOR THE COSTS OF PUBLIC EDUCATION FROM

PRESCHOOL THROUGH TWELFTH GRADE AND PUBLIC POSTSECONDARY EDUCATION THE AMOUNT OF WHICH APPROPRIATION SHALL BE NOT LESS THAN THE AMOUNT APPROPRIATED FOR SUCH PURPOSES FOR FISCAL YEAR 2011-12.

SECTION 2. 39-22-104 (2), Colorado Revised Statutes, is amended, and the said 39-22-104 is further amended BY THE ADDITION OF A NEW SUBSECTION, to read: 39-22-104. Income tax imposed on individuals, estates, and trusts - single rate - definitions - repeal. (1.9) SUBJECT TO SUBSECTION (2) OF THIS SECTION, WITH RESPECT TO TAXABLE YEARS COMMENCING ON OR AFTER JANUARY 1, 2012, BUT PRIOR TO JANUARY 1, 2017, A TAX OF FIVE PERCENT IS IMPOSED ON THE FEDERAL TAXABLE INCOME, AS DETERMINED PURSUANT TO SECTION 63 OF THE INTERNAL REVENUE CODE, OF EVERY INDIVIDUAL, ESTATE, AND TRUST.

(2) Prior to the application of the rate of tax prescribed in subsection (1), (1.5), or (1.7), OR (1.9) of this section, the federal taxable income shall be modified as provided in subsections (3) and (4) of this section.

SECTION 3. 39-22-301 (1)(d)(i)(j), Colorado Revised Statutes, is amended, and the said 39-22-301 (1)(d)(i)(j) is further amended BY THE ADDITION OF A NEW SUBSUBPARAGRAPH, to read:

39-22-301. Corporate Tax Imposed. (1)(d)(f) A tax is imposed upon each domestic C corporation and foreign C corporation doing business in Colorado annually in an amount of the net income of such C corporation during the year derived from sources within Colorado as set forth in the following schedule of rates:

(i) Except as otherwise provided in section 39-22-627, for income tax years commencing on or after January 1, 2000, BUT PRIOR TO JANUARY 1, 2012, AND COMMENCING ON OR AFTER JANUARY 1, 2017, four and sixty-three one hundredths percent of the Colorado net income.

(j) FOR INCOME TAX YEARS COMMENCING ON OR AFTER JANUARY 1, 2012, BUT PRIOR TO JANUARY 1, 2017, FIVE PERCENT OF THE COLORADO NET INCOME.

SECTION 4. 39-26-106 (1), Colorado Revised Statutes, is amended BY THE ADDITION OF A NEW PARAGRAPH to read:

39-26-106. Schedule of Sales Tax. (1)(c) NOTWITHSTANDING THE TWO AND NINETY ONE-HUNDREDTHS PERCENT RATE PROVISIONS OF SUBPARAGRAPH (ii) OF PARAGRAPH (a) OF THIS SUBSECTION (1), FOR THE PERIOD JANUARY 1, 2012, THROUGH DECEMBER 31, 2016, THE RATE OF THE TAX IMPOSED PURSUANT TO THIS SUBSECTION (1) SHALL BE THREE PERCENT.

SECTION 5. 39-26-202, Colorado Revised Statutes, is amended BY THE ADDITION OF A NEW SUBSECTION to read:

39-26-202. Authorization of tax. (2.5) NOTWITHSTANDING THE TWO AND NINETY ONE-HUNDREDTHS PERCENT RATE PROVISIONS OF PARAGRAPH (b) OF SUBSECTION (1) OF THIS SECTION, FOR THE PERIOD JANUARY 1, 2012, THROUGH DECEMBER 31, 2016, THE RATE OF THE TAX IMPOSED PURSUANT TO THIS SECTION SHALL BE THREE PERCENT.

SECTION 6. Effective date. This act shall take effect January 1, 2012.

YES _____ NO _____

Mother Kluckers
Will be closed
Sept 14th-17th
.....
Open for
SUNDAY BRUNCH
at 9:00 am
.....
**Oktoberfest
Specials!**
Sept 18th-Oct 2nd

116 S. 12th St
(next to the bank)
970-387-5585

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Silverton Sports Swap
under the big tent at Kendall Mountain
Silverton, Colorado
Entrance to Swap is FREE
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10am - 5pm buy & sell gear
Sellers: \$20/table - 2 items 10% of sales
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Callouts
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Amazing Deals on Skis & Snowboards
Loads of Great Kids Equipment
Questions?
Call 970-387-5671 or see www.SilvertonSwap.com

SUPERFUND, from Page 1

Compensation and Liability Act of 1980 (commonly referred to as Superfund) — is one of the largest funding sources available to deal with a wide range of contamination issues.

An assessment conducted by the EPA in recent months found that a cluster of mines on upper Cement Creek are causing problems serious enough to justify Superfund listing.

But for that to happen, Forrest said, community support is needed and the governor must request such listing.

Town Trustee David Zanoni questioned how "community support" is being defined, alleging that "a lot of people in La Plata County want to dictate what goes on in our county."

And Silverton resident Barbara Renowden asked how the EPA could determine what metals could be attributed to mine

drainage, given that there is a lot of natural mineralization of runoff occurring in the San Juans.

Forrest said the EPA conducted intensive sampling last fall, and also has at its disposal at least 15 years of sampling results from the Animas River Stakeholders Group and other sources. She said the difference between water quality upstream from the mines and below the mine drainage points clearly shows metals coming from those sources.

"We have a lot of data," Forrest said.

Doug Jamison, Superfund and Voluntary Cleanup Unit leader for the Colorado Department of Health and the Environment said that while there is a lot of "natural background contamination," data "consistently shows contamination from mine drainage. We have a ton of supporting data."

Jamison also addressed concerns that a Superfund designation could harm the town's

"Responsible mining is a good thing. The EPA is not against mining."

Sabrina Forrest,
EPA site assessment
manager

tourism-based economy. Critics of Superfund have pointed to the experience of Leadville.

The town is now 98 percent cleaned up and the Superfund designation is about to expire. The town has made major efforts to improve its economy by encouraging tourism and emphasizing its history and opportunities for outdoor recreation.

"We've learned to be a lot more sensitive to community concerns," Jamison said.

Jamison said that while a number of mistakes were made at Leadville, the EPA and CDPHE now have "a fabulous relationship" with the town.

"It doesn't seem to affect tourism there," Jamison said. "Property values are up."

Silverton resident Larry Raab suggested an alternative preferable to Superfund would be to have a mining company come in and resume operations while addressing the water quality issues.

"It certainly would be better to have some kind of production allowed that could mitigate that," Raab said.

And Forrest said the EPA doesn't object to that approach either. "Responsible mining is a good thing," Forrest said. "The EPA is not against mining."

Then on Wednesday morning, Sept. 14, EPA officials met with the San Juan County Board of Commissioners.

Forrest explained to the commissioners that at this point the EPA doesn't claim to have all the answers on how to address the Cement Creek problems.

"We need more input," Forrest said. She said that despite the talk of the need for a large-scale treatment plant, that ultimately may not be the way to go.

"We don't have presumed remedies in place," Forrest said.

Barbara Nabors, project manager for the Colorado Department of Public Health and the Environment, said that agency would likely be charged with operating a water treatment plant if that route is taken. That would be financed by state solid waste tipping fees.

"We feel it is our job to address these problems," she said.

County Board Chairman Ernie Kuhlman told the state and federal officials that he needs more details on what the cleanup plan involves before he can give it his blessing.

And Commissioner Terry Rhoades, hearing that one idea under consideration involves more bulkheads of mine portals above Gladstone, worried that such a move would foreclose on any possible future mining there.

"There would be no chance of any mining if you bulkhead that whole mountain off," Rhoades said. He suggested a suitable site for a treatment plant could be found on Cement Creek just a mile or so above Silverton.

John Ferguson of Silverton, operations manager for Colorado Goldfields, a Denver-based firm hoping to bring mining back to the area, said his biggest concern is that "outside investment will not come to an area with a Superfund designation. It's a great, giant stop sign."

Melody Skinner, a Silverton resident who resides along Cement Creek, said what the county really needs is jobs, and Superfund could provide that, along with "improving the lives for everybody downriver from us."

Steve Fearn of Silverton, a coordinator for the Animas River Stakeholders Group, said that entity is setting up a workgroup to give some "shape and definition" to possible solutions to the Cement Creek water quality issue.

But he expressed concern that with Superfund, "in the end the EPA makes the final decisions. Period."

But Fearn also expressed optimism that a cooperative approach can be developed.

Commissioner Pete McKay said the status quo is unacceptable. And if the Superfund option is not exercised, some other viable alternative must be found.

EPA officials encouraged the county to take the lead in gathering community input, perhaps by visiting other Superfund sites and hosting a forum on the matter.

The commissioners agreed with that approach.

And County Administrator Willy Tooke said the county should also "bring people to the table" who have resources that can be brought to bear on the problem, including state and federal agencies and mining companies associated with the properties involved.

"The problem is the same with or without Superfund," Tooke said. He said other routes of financing the Cement Creek cleanup effort should be explored.

"We might have to push the envelope and be creative," Tooke said.

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OPINION



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Katey Fetchenhier: Advertising

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• Best Education Story
• Best Headline Writing
• Best News Page Design
• Best Editorial Layout & Design
• Best Photo Essay
• Best Special Section
• Best Newspaper Promotion

Sheep dogs put us at risk

By Scan Fetchenhier

Last week there was a meeting with the San Juan County commissioners regarding sheep ranchers' use of large attack dogs that protect the various sheep herds grazing in the county.

There have been an increasing number of incidents involving threats and attacks upon hikers and bicyclists by these large dogs. A number of people have had to defend themselves against the attacks, some have been bitten and their family dogs mauled. Many backcountry enthusiasts have said that they are afraid to go anywhere that the sheep are grazing because of the danger from the attack dogs.

Instead of using the smaller less aggressive herding dogs the ranchers advocate the use of larger "livestock guardian dogs" to protect their herds because they are no longer allowed to use poison or traps to kill off predators. The dogs have been bred to protect their herds from any animal that appears to pose

GUEST OPINION

a threat, including the perceived threat from humans.

Anyone nearing a herd is seen as an attacker and will be treated accordingly. It is only a matter of time before there is an incident like the one that happened in the Vail area where a woman was pulled off her bicycle and severely mauled by two Great Pyrenees. What if a family with small children is confronted by these dogs? Will the dogs see the children as a threat also?

We are potentially in a "put the traffic light in after the accident" scenario. Putting up signs warning hikers about the dogs is a poor solution. It is time to ask the ranchers to use a less aggressive type of dog so that a terrible accident does not occur in the backcountry. Better yet, maybe it is time to seriously question why sheep are being allowed to graze the fragile environment of the backcountry in the first place.

Realistically, the use of the backcountry in the San Juans has changed immensely in the

last fifty years. Years ago, mining was the county's largest industry and employed several hundred people.

Large sheep herds, numbering in the tens of thousand were allowed to graze in just about every gulch in the county. With the shutting down of the Sunnyside mine in 1991 and the layoffs accompanying it, the county's predominate industry became tourism.

Tourists are coming here in ever greater numbers to enjoy the backcountry through a wide variety of uses including four wheeling, dirt biking, hiking, fishing, and backpacking. One of the most common complaints I hear from them is about the sheep grazing in the backcountry and their impact upon visitor's enjoyment of the backcountry.

I have spent over thirty years hiking, four-wheeling and dirt biking in the San Juans. Every year, several hikes were spoiled by the herd of sheep that had

See **FETCH**, Page 3

GUEST OPINION

Cement Creek problem largely natural

By "Zeke" Zanoni

After reading page after page of hype in the *Silverton Standard* and the *Durango Herald* papers concerning Superfund that is being pushed at Gladstone, I could feel my frustration turning to anger. Almost everything written was either half-truths or scrambled with statements not even pertaining to the issue.

I feel someone needs to give at least one viewpoint to the other side of the story. Here's mine:

Yes, there is some heavy metals loading from the mines, but if the EPA were to be honest they would admit that there is also a higher percentage of natural metals loading into Cement Creek *not* coming from the abandoned mines in the area. Much of this is from the many iron-bogs found throughout the Cement Creek drainage, natural springs as well as drainage from the east side of the Red Mountain District. All one has to do is drive up the Cement Creek road and look at the banks of the creek and you will know why the first settlers named it Cement Creek.

Although I don't have a copy

See **ZEKE**, Page 8



Nature's ode to joy

By Freddie Carfield

The air is crisp and clear, leaves are turning, frost is thick and ice is on the dog's dish.

Nature is picking up the pace as fall arrives — now on schedule.

This past weather week began with a great deluge. Actually, lat Tuesday it began and continued until Saturday afternoon. We received more water from the sky than at any time this year, since the third week of April.

We also had the coldest give days since the third week of May. For those of us who were her for it May was decidedly a winter month this year. Daytime temperatures were in the 50s with the skies falling. Sunday warmed up to 59.5 degrees and then blue skies, cool breezes and warm sun on Monday, perhaps the most perfect day I can recently remember!

Tuesday brought a few snow showers higher up. Snow did fall — a few flakes only — in town this week. On high the peaks have been repeatedly whitened down into the upper 11,000-foot range.

This time of year the spring in your step and the smile on your face become one with the beauty of life in its seasonal magnificence. Work hard and be happy.

We already miss the brass band on the corner every Sunday evening. This does not mean that the music is over for the season. Hardly. Music moved inside to the First Congregational Church Saturday and Sunday where the acoustics are about as good as acoustics get.

WEATHER AND OBSERVATIONS

Date	High	Low	Precip., conditions
Sept. 14	55	33	.38, foggy overcast
Sept. 15	56	36	.39, foggy overcast
Sept. 16	54	37	.27, foggy overcast
Sept. 17	53	31	.33, ground fog
Sept. 18	60	29	Clear
Sept. 19	65	28	Clear
Sept. 20	67	28	Clear

When you care enough, wonderful things can happen.

T.J. Black has a dream. That is to create a chamber music workshop and concert weekend in the fall of the year, right here in Silverton. This he initiated this past weekend. T.J. began with a modest and simple intention. We who shared this initial experience were wonderfully rewarded for doing so. There will be more to come. May you be there to share.

Acoustics makes a very tangible difference in shared musical experience. There are other equally significant factors — some less obvious, some less tangible. Sacred music, played in a sacred place in a sacred manner may be a train of thought that some may not be able to follow.

The joyful reverberation of music played reverentially, however, is not lost on our experience on deeper levels. This is the nature of attention to

See **WEATHER**, Page 6

FROM THE STANDARD MAIL CAR



Don't forget to get in on drawing for quilt

Editor,
We enjoy sitting and reading the *Silverton Standard* every week. Our summer feels like it is over and fall is in the air, so we're still able to do a little Jeeping and hiking.

A couple of weeks ago while we were Jeeping in Silverton we stopped at the museum to say hi to Lynn, who was working that day, and I saw where the quilt that was donated to the museum for a drawing Oct. 6.

So just a reminder if you still want to get a ticket to be the lucky winner for the quilt, there

See **LETTERS**, Page 5

Write to us

The *Silverton Standard & the Miner* welcomes letters to the editor. Send letters via e-mail to editor@silvertonstandard.com, or via snail mail to, Editor, *Silverton Standard & the Miner*, P.O. Box 8, Silverton, CO 81433.

Town of Silverton economic indicators: Mixed

month collected / received	History	Last Year				Current Year				Year-Over-Year		
	2002-2010 average	2010 county 4%	2010 town 1%	2010 monthly total	2010 cumulative	2011 county 4%	2011 town 1%	2011 monthly total	2011 cumulative	2011 cumulative BUDGET	2010-2011 monthly change	2010-2011 cumulative change
Nov/Jan	11,437	10,679	2,579	13,258	13,258	12,823	2,995	15,818	15,818	12,820	19.3%	19.3%
Dec/Feb	18,105	18,717	4,030	22,747	36,004	15,464	3,774	19,238	35,056	32,050	-15.4%	-2.6%
Jan/Mar	15,506	16,254	3,597	19,851	55,856	19,422	4,902	24,324	59,381	51,280	22.5%	6.3%
Feb/Apr	14,795	19,769	5,186	24,955	80,810	17,990	4,551	22,541	81,922	70,510	-9.7%	1.4%
Mar/May	15,970	18,447	4,595	23,042	103,852	27,842	6,667	34,509	116,431	89,740	49.8%	12.1%
Apr/Jun	12,744	12,885	3,497	16,382	120,234	12,389	2,746	15,134	131,565	102,560	-7.6%	9.4%
May/Jul	34,480	28,331	7,309	35,640	155,874	29,376	7,475	36,851	168,416	147,430	3.4%	8.0%
Jun/Aug	74,269	69,976	17,289	87,265	243,139	69,555	18,503	88,058	256,474	237,170	0.9%	5.5%
Jul/Sep	110,725	113,063	27,745	140,808	383,947	111,612	28,480	140,092	396,565	371,780	-0.5%	3.3%
Aug/Oct	86,694	79,448	19,294	98,742	482,689					480,750		
Sep/Nov	86,875	85,397	21,743	107,140	589,829					589,720		
Oct/Dec	39,663	36,907	9,059	45,966	635,795					641,000		
TOTAL	521,262	509,872	125,923	635,795	2,901,288	316,472	80,094	396,565				

The latest sales tax figures provided by the town show an increase of 3.3 percent for the year (through July). But figures for the month of July alone show a decline of 0.5 percent. The town's lodging fee collections, meanwhile, are down some 8 percent for the year to date, according to Town Clerk Brian Carlson. "It's mid-month, so it's a bit of a guess, and there are timing issues (some late filers), but I show we're down 8 percent," Carlson said. "The time frame I'm looking at is Jan. 1 through mid-September." In 2010 the town collected \$25,300 in that time frame, compared to \$23,300 this year. "I'll have a clearer idea and comparison after the third week of October," Carlson said. "At that time, I'll have all of September accounted for. And all of the leaf-peepers will be factored in." The town collects a \$2 per night fee for each hotel room occupied, and a \$1 fee for each campsite.

LETTERS, from Page 2

is still time before the Oct. 6 drawing.

Lorraine Whittington, Montrose

Let your voice be heard on high alpine rules

Editor,
On Sept. 27, at 7 p.m. the San Juan Regional Planning Commission will be asking for public comment on limiting development in the backcountry. This is a very important meeting for all concerned citizens to attend and give their opinions as to whether there should be any or limited development in the high alpine backcountry.

With a moratorium in place on development in the tundra we have just a little bit of room to breathe and get even stronger regulations in place before development pressures are upon us again.

This is one of our last chances to have our say on what we want to see happen in the backcountry. Do we want to preserve our views that we so enjoy or do we want to see those vistas cluttered with cabins and homes? Those views are going to change unless we act now to preserve them.

We can't let our county go the route of San Miguel or even parts of Ouray County.

This is our last chance to really limit development in the tundra. We have the right to ask our commissioners and planning commission to respect our wishes for the backcountry. We have only this small window of opportunity to act.

The decisions that we make now will affect generations of San Juan County residents and visitors alike. We have to think about the long term benefits of preserving the backcountry views for future generations.

If we don't act now those views will be lost.

Scott Fetchenhier, Silverton

EPA should work on cleaning up its own act

Editor,
Well I now see that the EPA is raising its ugly head again. They

are once more bound to repeat the mistakes that they made last time in the 1990s when they came with their "Superfund."

This so-called Superfund was a boondoggle of epic proportions. They plugged the main drift of the American Tunnel after disposing of the water treatment plant that was doing a very good job. With the 25-foot plug in lace the water inside the workings filled the mine with water about 1,000 feet high and guess what? The water found its way to all the other mines in the area (a surprise to all connected.)

Water flowed out of the other mines and totally destroyed the ecology above the American Tunnel in the upper Cement Creek drainage. I drove up there the other day. The entire valley looks like hell on Earth. I call it the "Red Death." Travel up and take a look. Good job, EPA!

My solution to this boondoggle is to tell the EPA to get the hell back to where they came from and stay out of our country.

Everything this monster touches is bad news for everyone involved. They should be disbanded and defunded as soon as possible. They have already destroyed our economy, leaving us with only tourism, which is shaky with the current economy.

The EPA should be prosecuted in the courts for malfeasance, which is a felony last time I looked.

Sincerely, Wiley Carmack, 53 years in business in Silverton.

Chamber Music Fest an exceptional event

Editor,
I attended the Silverton Fall Color Chamber Music Festival on Sept. 17.

Congratulations and thanks to Tim Black for attracting talented musicians from as far away as Phoenix. His hard work and dedication to sharing his love of music with us made this event possible. The music was exceptional.

I hope that this becomes an annual event.
Carol Chance, Silverton

Snoopy doing great!

Editor,
Snoopy's new owners, Sean and Sarah Burshok of Grand Junction, report:

Snoopy is doing great! We took her camping to the Grand Mesa on Saturday and she liked that!

We have been trying to get her used to being in the car, but she still gets car sick sometimes. She met our vet, and is scheduled to be spayed at the end of this month. All of her puppy teeth are gone and the adult teeth are growing in nicely! She has learned to "shake", "lay-down", "roll-over", and we're still working on her manners, like not jumping on people or biting.

Margot Early, Silverton



Clarification regarding the Gear Exchange

Editor,
We have received quiet a few calls about what our plans are with liquidating the Gear Exchange.

The Gear Exchange was owned by our son, Jimmy. The Wyman Hotel bought most of that inventory from Jimmy last year and this liquidation is the last of the equipment affiliated with the Gear Exchange that the Wyman Hotel isn't going to use.

We will be selling more than 100 sets of downhill skis and boots, which is about half of the inventory that Jimmy had. A lot of this equipment was ski and board sets that we donated for use to the Silverton School, last year. We'll also be selling a large inventory of Mountain Boy Sleds, gloves, socks and much more. We won't be selling much, if any, of our Nordic or backcountry equipment.

The Wyman Hotel will still offer ski rentals and equipment sales but will no longer be located at the Kendall Mountain Lodge. All rentals and sales will be done from the Wyman Hotel & Inn. We will still offer Nordic equip-

ment, backcountry equipment, skis, snowboards, snowshoes, sleds, helmets, beacons and much more. We will open in late December or early January, depending on the snow conditions.

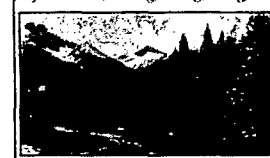
For this year, we will not be donating any ski equipment to the school but are still going to

pay for all of the Silverton kids ski passes (those under the age of 18 and living in Silverton), whether they go to school in Silverton or not. To get your free passes you will need to contact Town Hall, not the school.

Sorry for any confusion.
Rodger & Tana Wrublik, Silverton

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Energy Outreach Colorado (EOC) has awarded San Juan County with a \$10,000 grant. This grant is to help cover costs of coal, electric, firewood, natural gas, oil, propane, and solid fuel pellets.

You must meet the eligibility criteria to be considered for

this program, which includes applying for LEAP first. Anyone interested in this program can come by the Social Services office or call Deanna Jaramillo at 387-5631 to get an application.

"We have approximately \$4,000 left to spend by the end of October 2011," Jaramillo said.

ZEKE, from Page 2

of their report to give quotes, this was proven by a U.S. Geological Survey study and report submitted in the late 1990s. I'm sure the EPA is quite aware of this study, but never mentions it.

The EPA is a typical federal bureaucracy in the sense that it tells the public only what it wants them to hear — not really lying, but twisting the facts or leaving out things that should be in their reports and explained to the public. Let me comment on some of that come to mind.

Assuming this treatment plant were to be built, there would be a large accumulation of sludge in its settling ponds over time. This would amount to hundreds of tons of material that would have to be pumped out every month or two and transported. Who will pay these costs and where would it be deposited?

Has the general public, who

are not familiar with water treatment plants, been informed that the small amount of clean water (in comparison) coming from the plant will be dumped back into an already naturally polluted river? By the time Cement Creek dumps into the Animas River there will be little difference from what we have now.

Has the EPA mentioned that Cement Creek (or do they know themselves) runs red for days after heavy rains on the Ohio Peak area, with mudslides running entirely down to the creek with heavy mineral contamination?

Does the general public (particularly those in Durango) know that Cement Creek is the east side drainage for the Red Mountains? And as beautiful as they may appear, they are highly contaminated with iron and other heavy metals.

Has the public been informed

that if this Superfund catastrophe were to take place the bulldozers would roll and abolish all remaining mine dumps within its boundaries, cover the sites with topsoil and plant grass? Not only would this eliminate any chance of these mines reopening, but it would also wipe out a good part of our mining heritage. A very disgraceful example of this is what the EPA has done to the Leadville mining district.

Has it been calculated what the stigma of a Superfund would do to our tourism industry?

Then there is the fish thing, implying that the mines have killed everything in the river. Being a fly fisherman myself, I would love to see gold medal fishing in the upper Animas, but I'm also a realist. Although the high lakes are normally good fishing, most all of the rivers — including the Animas — have proven otherwise, from day one.

Let me give one historical example:

The San Juan County Historical Society has a diary written by George Howard (whom Howardsville is named after) from 1872. This was two years before the Town of Silverton was founded. There is a page where he had written that he and a group decided to travel to the "western mountains" (Telluride area) on a prospecting trip. Returning several weeks later, they stopped at a lake (probably Trout Lake) to do some fishing. There they caught about 250 fish which they packed back to the Silverton area. Once back, the fish sold for \$1.50 a dozen. To put this story in perspective, wages at the time were \$3 a day. It doesn't take a rocket scientist to figure what this diary implies.

It should be pointed out to the non-historians that this was a period of time when the mines were in their prospecting stage, with little production, and there were NO mills that would have been depositing waste tailings into the rivers.

The whole thing makes one wonder if the EPA is qualified, or should even be allowed, to make the sole final judgment on a program that will cost the taxpayers millions upon millions of dollars, with no end in sight and nothing in return.

They tell us that this Superfund will be paid for with monies submitted by the oil industry. Even if the initial costs are from this source, it is not a bottomless pit of money. Treating water is a forever thing. This always eventually falls back on the taxpayer.

Then there are those who think throwing money at the problem solves the problem. Come on, give us a break!

Having the EPA and its subgroups evaluating the so-called polluted Cement Creek drainage with their biased attitude is like asking the fox if he would guard the chicken coop.

There is much more that could be written on the subject, but to sum it up, the last thing this county needs is the EPA and their Superfund.

I would think the county commissioners would take a strong stand against this Superfund and start asking some questions themselves. It's one more thing slipping away from them.

"Zeke" Zunoni is a resident of Silverton.

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Animas

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American Tunnel

Umphres, Ann

to:

Richard Sisk, Carol Campbell

09/29/2011 02:14 PM

Cc:

Sabrina Forrest, "Lewis, Brent R", "Zillich, Cathleen", "Dunkelberger, William A"

Hide Details

From: "Umphres, Ann" <ann.umphres@sol.doi.gov>

To: Richard Sisk/R8/USEPA/US@EPA, Carol Campbell/R8/USEPA/US@EPA

Cc: Sabrina Forrest/R8/USEPA/US@EPA, "Lewis, Brent R" <bllewis@blm.gov>, "Zillich, Cathleen" <czillich@fs.fed.us>, "Dunkelberger, William A" <bdunkelb@blm.gov>

*Called
CO BLM Dir +
told her not
true. NE
are still committed
to MOU process
all
9/29/11*

Dear Richard and Carol,

BLM AML lead Brent Lewis informed me this morning that he had just learned after a phone call from Sabrina Forrest that EPA intends to issue a 104(e) letter to BLM regarding the American Tunnel. I must admit that we were completely surprised by this development. BLM has a very long history of more than a decade of working in partnership with EPA at this mixed ownership site to present a fairly united front to the community as federal partners attempting to achieve improvement to the water quality in the Animas watershed. Most recently EPA and BLM are in the process of jointly developing a mixed ownership MOU for this area.

For EPA now to take a legal posture utilizing 104(e) authority towards the BLM is completely surprising and unnecessary. BLM has already shared all of the information it has regarding this site with EPA through its working partnership. If there is something more EPA believes it needs, we are happy to work with you to provide it in a coordinated cooperative way. A 104(e) letter has legal implications that are not helpful to BLM's relationship at this site with EPA. There is a possibility that BLM may not comply with such a request if placed in the form of a 104(e) letter, which I'm sure would not be EPA's desired outcome. You may be aware that the American Tunnel adit only came to be located on federal public land in the 1970's after a catastrophic breach of Lake Emma due to drilling the American Tunnel by a private company resulting in the tunnel opening being involuntarily relocated to federal public land due to the force of the release. If EPA is somehow considering that incident to confer PRP status to BLM, I would urge EPA to review the opinion in U.S. v. Friedland, 152 F. Supp. 2d 1234 (D. Colo. 2001). Further, BLM has been exercising its own CERCLA authorities which are delegated to it through Presidential Executive Order 12580 and 13016 at the American Tunnel site.

The implications from EPA's exercise of its 104(e) authorities to the working relationship of the EPA and BLM staff on the ground that have been forged with the community are also very much at stake here. Therefore, we

would urge EPA to reconsider the use of 104(e) investigation authority, or to at least postpone it until there is a further opportunity to discuss it. Due to my schedule, I will be out of the country from October 1-14. If at all possible, we would like to meet with you later in October or early November when I have returned to the office. There is already a BLM/EPA working group meeting set for October 26 and perhaps this matter could be discussed at that meeting. Or we can arrange another time that is convenient for all.

I would appreciate hearing from you as soon as possible regarding this message.

Regards,

Ann C. Umphres
Attorney-Advisor
U.S. Department of the Interior
Office of the Solicitor, Rocky Mtn. Region
755 Parfet St., Suite 151
Lakewood, CO 80215
TEL: 303.231.5353 x343
FAX: 303.231.5363

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United States Department of the Interior

BUREAU OF LAND MANAGEMENT
Colorado State Office
2850 Youngfield Street
Lakewood, Colorado 80215-7210
www.co.blm.gov



In Reply Refer To:
1620 (CO921)

FEB 12 2013

Regional Director, Region 8
US Environmental Protection Agency
1595 Wynkoop Street
Denver, CO 80202-1129

Re: Upper Mining District Memorandum of Understanding

Mr. Martin:

Please find enclosed the final Memorandum of Understanding for the Upper Animus Mining District that I executed today. We look forward to working with the EPA regarding mutual CERCLA concerns in the upper Animus watershed.

Please contact Lonny Bagley at (303)239-3923 or Brent Lewis at (303)239-3711 on my staff if you have question or need further information.

Sincerely,

Helen M. Hankins
State Director

MEMORANDUM OF UNDERSTANDING
Between
ENVIRONMENTAL PROTECTION AGENCY REGION 8
And
DEPARTMENT OF INTERIOR BUREAU OF LAND MANAGEMENT
Concerning
THE UPPER ANIMAS MINING DISTRICT MIXED OWNERSHIP SITE

I. BACKGROUND

A. The purpose of this Memorandum of Understanding (MOU) is to provide a framework for the U.S. Environmental Protection Agency (EPA), Region 8 and the United States Department of the Interior (DOI or Interior) Bureau of Land Management (BLM) to coordinate response actions pursuant to the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA), 42 U.S.C. §§ 9601 et seq. at the Upper Animas Mining District Site in San Juan County, Colorado (Site).

B. This MOU is intended to implement, and to be consistent with the 2007 "Statement of Principles for Collaborative Decision Making at Mixed Ownership Sites" executed by the EPA, the United States Department of Agriculture (USDA), and the DOI. In that Statement of Principles, the parties recognized that, to expeditiously and efficiently implement the necessary response actions at mixed ownership sites, they should coordinate their respective authorities under CERCLA. The parties agree to make every effort to harmonize this MOU with the Statement of Principles, however, in the case of a conflict this MOU controls. This MOU also provides a process for resolving disputes between the EPA and BLM that may arise during such response actions. This MOU is not intended to address coordination regarding natural resource damage issues.

C. Pursuant to CERCLA, the President has authority to respond to releases of pollutants or contaminants and hazardous substances when response is necessary to protect the public health or welfare or the environment.

D. Pursuant to Executive Order 12580, as amended by Executive Order 13016, the President delegated authority to conduct various activities under CERCLA, including investigations and response activities (42 U.S.C. § 9604), abatement actions (42 U.S.C. § 9606), cost recovery (42 U.S.C. § 9607), and entering into agreements with potentially responsible parties (PRPs) to perform work (42 U.S.C. § 9622), to the heads of several executive departments and agencies, including the EPA and the DOI.

E. The Secretary of the Interior has re-delegated certain of these authorities to the Director of BLM with respect to land and facilities under BLM jurisdiction, custody or control (hereinafter referred to as BLM lands). The Director of BLM has re-delegated most of these authorities to BLM State Directors. The Secretary of Interior has re-delegated CERCLA settlement authority to the Solicitor.

F. The BLM administers BLM lands on behalf of the public. The BLM is, with certain limitations, delegated the President's CERCLA authority where a release of a pollutant or contaminant or a hazardous substance is on or the sole source of the release is from a facility under the jurisdiction, custody or control of BLM. See Executive Order 12580, §§ 2(e)(1), and 4(b)(1). Executive Order 13016 amended Executive Order 12580 to authorize the Secretary of the Interior to use CERCLA Section 106, 42 U.S.C. § 9606, to address releases or threats of releases affecting lands and natural resources under the BLM's jurisdiction, custody or control subject to the concurrence of the EPA's Administrator. See Executive Order 13016, § 2.

Subject to the delegations of authority to DOI and other agencies in Executive Order 12580, as amended, the President's CERCLA authority generally is delegated to the EPA. Concerning lands under the jurisdiction, custody, or control of DOI, the EPA is delegated authority under CERCLA to address emergency removals on those lands and to select remedial action on those lands only at sites which are on the National Priorities List (NPL). The EPA has assessed the Site for potential listing on the NPL and is coordinating its technical investigations and field sampling work with the efforts of the Animas River Stakeholders Group (ARSG). The ARSG is a community stakeholder group, locally organized and managed that is working to improve water quality and habitats in the Animas River through a collaborative process designed to encourage participation from all interested parties.

The Site is a mixed-ownership site located in San Juan County, Colorado, at which releases and threatened releases of hazardous substances, pollutants, or contaminants are located partially on, or the source of the release is partially from, both private lands and BLM lands. The BLM lands portion of the Site is administered by the BLM Southwest District, Tres Rios Field Office. The Site, for purposes of this MOU, generally corresponds to the Upper Animas Mining District Site identified in the CERCLA Information System (CERCLIS), USEPA ID# CO0001411347.

G. The Upper Animas Mining District was listed on CERCLIS in 1996. Since that time the EPA and BLM have conducted several response actions at the Site, consistent with CERCLA, the National Oil and Hazardous Substances Pollution Contingency Plan (NCP), 40 C.F.R. Part 300, and Executive Order 12580.

H. The parties have determined that additional response actions may be needed to further investigate the release or threatened release or to address the threat to human health and/or the environment at the Site. The EPA and BLM plan to address these releases/threats of releases of hazardous substances into the environment through the coordinated exercise of their respective CERCLA authorities.

I. All response actions covered by this MOU shall be not inconsistent with the NCP, including assurances of state consultation by the EPA if the Site is listed on the NPL.

II. COORDINATION AND COOPERATION

A. The EPA and the BLM have designated the following persons to be involved in the day-to-day coordination, communications and decisions regarding the exercise of the agencies'

respective authorities at the Site. Each agency will notify and consult with the other as soon as practical regarding plans to change persons or positions.

The BLM Remedial Project Managers or On-Scene Coordinators (referred to as the Project Coordinators for purposes of this MOU) (BLM PC)

Cathleen (Kay) Zillich
BLM Tres Rios Field Office
15 Burnett Ct
Durango, CO 81301
970-385-1239
czillich@blm.gov

Brent Lewis
BLM Colorado State Office
2850 Youngfield Street
Lakewood, CO 80215
303-239-3711
brent_lewis@blm.gov

The EPA Project Coordinators (EPA PC)

Mike Holmes
U.S. EPA Region 8
1595 Wynkoop Street
Denver, CO 80202
303-312-6607
Holmes.michael@epa.gov

Steve Way
U.S. EPA Region 8
1595 Wynkoop Street
Denver, CO 80202
303-312-6723
way.steven@epa.gov

Consistent with the NCP, 40 C.F.R. part 300, the EPA will be the lead agency for response actions involving a parcel, project or operable unit located on the private portion of the Site, and BLM will be the lead for response actions involving a parcel, project or operable unit located on BLM lands. Nevertheless, the parties also acknowledge that it may be appropriate, in some cases, to designate jointly a single agency to take principal responsibility for some or all activities Site-wide.

B. When undertaking clean up actions pursuant to this MOU, the parties intend to discuss and reach agreement on an allocation of costs associated with the response actions. Subject to Sections IV. B and C of the MOU, each party intends to seek funding as determined by future agreements on allocation of costs for their agreed upon share, if any. Neither party waives, and each specifically reserves any and all rights, causes of action or defenses.

C. The EPA PC and the BLM PC resolve to coordinate with each other to implement response actions at the Site. This coordination should include reasonable prior notice of, and an opportunity to participate in, any scheduled meetings related to activities at the Site, and an opportunity to participate in any scheduled meetings with contractor(s), the State of Colorado, other Federal, State and Tribal Natural Resource Trustees, and ARSG or any significant on-Site activities. In the event that a meeting needs to be scheduled on shorter notice, the BLM PC or the EPA PC resolve to contact his/her counterpart and shall determine the counterpart's availability prior to scheduling the meeting.

D. The EPA and the BLM intend to establish a schedule of activities for the Site to be used for planning purposes. The EPA and the BLM intend that the schedule of activities will use as

its base the ongoing collaborative process hosted by the ARSG .The schedule shall be updated periodically by the PCs to reflect actual progress on work at the Site and current projections.

E. The EPA and BLM intend to provide to each other copies of non-privileged documents related to Site work upon request. Such documents shall include, but not be limited to, project proposals, sampling and analysis plans and work plans. The EPA PC and BLM PC also intend to provide each other with copies of documents needed to fulfill the purposes of this MOU. The EPA PC and BLM PC resolve to cooperatively determine which documents related to the Site are to be copied and provided to the other agency, either directly by the agencies or by third parties.

F. Where the EPA plans and conducts response actions on the private portion of the Site and BLM plans and conducts response actions on the public portion of the Site, the EPA and BLM intend to coordinate on major decision points and documents, as set forth below. Where, pursuant to section II.A. the parties mutually agree that one agency shall be principally responsible for some or all activities Site-wide, the parties intend to reach concurrence on the major decision points and documents, as set forth below:

- (1) The scope of work to be performed and estimated costs;
- (2) Project management procedures and contracts;
- (3) Project design and construction specifications;
- (4) Enforcement activities against potentially responsible parties;
- (5) Engineering evaluations/cost analyses and remedial investigation/feasibility studies;
- (6) Establishment of new water quality goals or TMDs, if necessary.
- (7) Draft and final risk assessments;
- (8) Action memoranda, proposed plans, and records of decision and any amendments or ESDs, including the establishment, where appropriate, of a repository to manage remediation wastes;
- (9) Community relations activities, including response to public comments;
- (10) Certifications of completion issued for response actions at the Site;
- (11) Long term operations and maintenance/post removal site control; and
- (12) Future response actions in the event of a remedy failure.

G. For purposes of coordination and concurrence on major decision points and documents as set forth above, the parties resolve to provide comments within 30 calendar days of their receipt

of the deliverables relating to those decision points and documents. If additional time is needed, the parties will discuss the need for a reasonable amount of additional time. If the project coordinators cannot agree on a review period, the issue will be subject to dispute resolution.

H. The BLM PC should advise the EPA PC regarding any issues and concerns of special interest to the BLM. Similarly, the EPA PC should advise BLM PC of any issues and concerns of special interest to the EPA. PCs from both agencies intend to assist each other to seek out and communicate with community members knowledgeable about the Site. PCs intend to also coordinate with each other regarding any community relations or community outreach activities that either the EPA or BLM proposes to undertake regarding the site.

I. BLM consents to the EPA and their authorized representatives entering and having access to BLM land within the Site for the purposes of conducting response actions. To the extent practicable, the EPA shall provide advance notice to BLM of at least seven days (7) prior to entering BLM lands.

J. Legal counsel for the EPA and DOI intend to coordinate on legal issues including investigation of, contact with and enforcement actions against any PRPs for the Site.

III. DISPUTE RESOLUTION

A. Consultation between the EPA PC and BLM PC should resolve the vast majority, if not all, technical issues between the EPA and BLM.

B. If the EPA PC and BLM PC do not reach agreement on a disputed item arising from activities at the Site, the issue should be elevated to the appropriate senior management at BLM and the EPA for further discussion and resolution.

C. In reaching a final decision, when the EPA and BLM do not agree, BLM will have the responsibility, consistent with the NCP, for making decisions on federal lands and the EPA will have the responsibility for decisions on private property. All decisions must be consistent with CERCLA and the NCP. If either the EPA or BLM determines that a final decision has been made that is inconsistent with CERCLA or the NCP, that agency has the option of withdrawing from this MOU.

IV. LIMITATIONS AND DURATION OF AGREEMENT

A. The BLM and the EPA reserve their rights and authorities under CERCLA, as well as other laws, the NCP, and applicable Executive Orders. No provision of this MOU in any way limits those rights and authorities.

B. Nothing in this MOU shall be considered as obligating the EPA or the BLM to expend funds, or as involving the United States, in any contract or other obligation for the future payment of money. The parties recognize that each must operate within the requirements of the federal budget process and legal restrictions concerning obligations of funds. No provision of this

MOU shall be construed to require the parties to obligate or pay funds in contravention of the Anti-Deficiency Act, 31 U.S.C. § 1341.

C. This MOU is neither a fiscal nor a funds obligation document. Any endeavor involving reimbursement, contribution of funds, or transfer of anything of value between the parties to this MOU will be handled in accordance with applicable laws, regulations, and procedures including those for Government procurement. Such endeavors will be outlined in separate agreements that shall be made in writing by representatives of the parties and shall be independently authorized by appropriate statutory authority.

D. This MOU is not intended to, and does not, create any right, benefit or trust obligation, substantive or procedural, enforceable at law or in equity by any party against the United States, its departments, agencies, instrumentalities or entities, its officers, employees or agents, or any other person.

E. Nothing in this MOU shall restrict the BLM or the EPA from participating in similar activities with other public or private agencies, organizations, and individuals.

F. This MOU may be executed in counterparts by each of the signatories. Each of the counterpart documents shall be deemed an original, but together shall constitute one and the same instrument.

G. After giving sixty (60) days written notice, either party may terminate or withdraw from this MOU. This MOU may be amended at any time by agreement of the parties in writing.

H. This MOU is effective upon the date signed by the last of the parties and may be amended by written concurrence of both parties.

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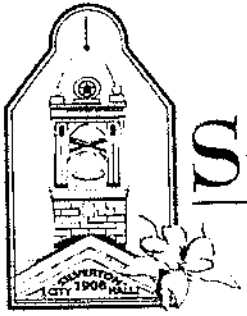
ENVIRONMENTAL PROTECTION AGENCY, REGION 8

By: Martin Hestmark Date: 12/18/12
Martin Hestmark
Assistant Regional Administrator
Office of Ecosystem Protection and Remediation
U.S. Environmental Protection Agency
Region 8

DEPARTMENT OF INTERIOR BUREAU OF LAND MANAGEMENT

By: Helen M. Hankins Date: 2-12-2013
Helen M. Hankins
State Director
BLM Colorado

APR 14 2015



Town of
Silverton

PO Box 250
Silverton, CO 81433
970-387-5522



SAN JUAN COUNTY

PO Box 466
Silverton, CO 81433
970-387-5766

April 13, 2014

Martin Hestmark
United States Environmental Protection Agency
1595 Wynkoop St.
Denver, CO 80202-1129

Dear Martin;

The Town of Silverton Board of Trustees and the San Juan County Commissioners would like to express our concerns with the EPA's recent request for soil testing. The request itself could have been done in a manner that was more sensitive to the concerns of the Town and County as previously stated to the EPA. The Town Board was somewhat blindsided by your request. A short memo explaining to the Board what EPA hoped to accomplish and why this action was necessary would have gone a long ways in allowing for a much more productive discussion. It could have been even more productive had the EPA worked with Town staff prior to the meeting so that staff would have been prepared to comment and make recommendations to the Board. The County Commissioner were not even informed that the EPA would be addressing the Town. While the County recognizes that the request was totally within the Town's jurisdiction we find it odd that the County, after working with EPA for so many years, would be left out of this important conversation. However, the biggest flaw in the process was bringing the School District into the discussion without talking directly with the School Superintendent. The Superintendent spent the next day on damage control informing the community that an environmental review of the school grounds had been completed and nothing was found that would raise health concerns.

We also question EPA's justification for requesting the soil tests. A couple of samples from 15 years ago that apparently didn't raise any significant red flags with the Colorado Department of Public Health and Environment or with EPA when they were initially analyzed. We are unaware of any medical studies or individual cases where the soils have had an adverse impact on a child or adult's health. We have generation after generation after generation that have lived most or all of their lives in Silverton without suffering any health related issues from their long term exposure to the mineralized soils. Despite the minimum justification EPA managed to maximize the fears in parents as well as raise concerns for property owners.

As many of us have previously expressed to the EPA, the negative publicity of contaminated soils and possible Superfund listing could be devastating to our tourist economy and further diminish property values. Silverton's economy is a tourism based industry. Without the sales tax that is generated from tourists the Town would not be able to continue to provide basic services. More importantly, the vast majority of our businesses are tourist related. Even a slight decrease in visitors could be devastating to many business owners and would cause some to permanently close their doors. Additionally, these tourist oriented businesses are often dependent upon short

term loans to purchase merchandise and to get them through the slow season. Getting financing in Silverton can be difficult. Citizens State Bank of Ouray has a branch office located in Silverton but we don't have a real

"local" bank that is invested in the Town and willing to invest in local businesses. We are concerned that being listed as a Superfund site could make financing for businesses and individuals even more difficult. We are also concerned that the Federal Housing Authority would not provide mortgage insurance for housing located within a superfund site. We also wonder what the impact will be to obtain affordable property insurance if the Town were to be listed.

With the potential listing we also fear that property values will continue to decline. With the downturn in the economy San Juan County has suffered through several years of declining property values. While other economies around the state and nation have been rebounding we have not been so fortunate. Any further reduction in property values will cause the County to decrease basic services.

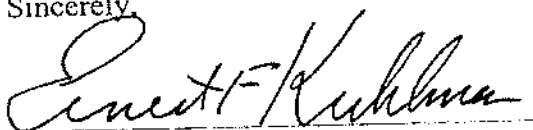
Before this process moves any further we would like to meet with EPA to develop a much better understanding of what would be done, why it needs to be done and what will be the consequences of those actions and maybe more importantly what are the unintended consequences of those actions. The following is a brief list of questions that we would like answer.

1. What would be the EPA's protocol for soil testing
2. What is the numerical value for each heavy metal tested that would result in remediation
3. Who would be responsible for that remediation
4. How immediate would the remediation be
5. Could remediation occur without superfund listing
6. What would cause an expansion of testing soil testing program
7. What would trigger the Town to be placed on the National Priorities List
8. If the Town were to be listed how long do you estimate we would be listed and what would be required to be removed from the listing.
9. What could EPA do directly or indirectly to minimize the adverse impacts of negative publicity, lower property values, business financing, maintaining affordable property insurance, and obtaining mortgage insurance

The Town and County have no intention of putting our heads in the sand and hoping this will all go away. However, we do not believe that you have provided adequate evidence to support a concern that the soils are a substantial health risk. It was suggested by EPA staff that ASARCO and Sunnyside funding might be available to cover remediation expenditures. If that money is used in Silverton it would not be available for work in Cement Creek which has been the primary environmental concern for more than 20 years. If we are going to work cooperatively on environmental issues throughout San Juan County it is critical that we improve our communications. Your staff has spent numerous days in Silverton discussing these issues with several members of the community. We have to wonder if they were really listening to our concerns, if they were listening but they did not understand how critical those concerns are, or did they listen to our concerns but determined that the EPA knows what is better for Silverton and San Juan County than we do.

We look forward to meeting with you and your staff to better clarify your position and we can further clarify our concerns and issues.

Sincerely,



Ernest F. Kuhlman, Chairman
San Juan County Commissioners



Christine M. Tookey, Mayor
Town of Silverton

cc: Congressman Scott Tipton
Senator Michael Bennet
Senator Cory Gardner
Governor John Hickenlooper



**U.S. Environmental Protection
Agency, Region 8**
1595 Wynkoop Street
Denver, CO 80202-1129



**Colorado Department of
Health & Environment**
4300 Cherry Creek Drive South
Denver, CO 80246



**U.S. Department of the Interior
BLM Colorado State Office**
2850 Youngfield Street
Lakewood, CO 80215-7210

January 5, 2015

Ref: 8EPR

Mr. Greg Etter, President
Sunnyside Gold Corporation
5075 South Syracuse Street, Suite 800
Denver, Colorado 80237

Re: Implementation of Step 1 of the April 21, 2014, Proposed Game Plan

Dear Mr. Etter:

The U.S. Environmental Protection Agency (EPA), the U.S. Bureau of Land Management (BLM) and the Colorado Department of Public Health and Environment (CDPHE) (hereafter collectively referred to as "the Agencies") appreciate the collaborative efforts of all stakeholders in working to improve water quality in the Animas River. In an effort to continue to work collaboratively, the Agencies request that Sunnyside Gold Corporation (Sunnyside) assist in characterizing the extent, magnitude, causes of contamination, and potential remediation alternatives for the Mayflower Mill and Tailings area and the American Tunnel at Gladstone. We believe this work is consistent with Step 1 of Sunnyside's proposed "Game Plan" spelled out in Sunnyside's April 21, 2014, letter to the Animas River Stakeholders Group (ARSG).

Step 1 of Sunnyside's Game Plan is to "continue to gather the requisite knowledge to understand the problem" and the Agencies agree that additional information is needed to define and understand the sources and causes of the impaired water quality in the Animas River. To date, the ARSG, BLM, U.S. Forest Service and the EPA all have expended substantial efforts and resources in defining the problems in Upper Cement Creek and in the Animas River below gaging station A-68. In addition, the EPA has decided to use its Superfund removal authority and resources to install a flow-control structure (i.e., concrete bulkhead) in the Red & Bonita Mine to reduce mine drainage into Cement Creek. The EPA anticipates completing the design and construction of the bulkhead in 2015. Furthermore, the Agencies are continuing to commit resources to characterize the extent and magnitude of contamination in other parts of the Upper Animas River Watershed. Recent work has included the ongoing ecological risk assessment and the U.S. Geological Survey water quality modeling study using the One-Dimensional Transport w/Equilibrium Chemistry model.

The area above the confluence of the Animas River with Cement Creek is one area where additional investigation is necessary. In particular, more information is needed on the Mayflower Mill and Tailings area and its potential contribution to impaired water quality in the reach of the Animas River between gaging station A-68 and the gaging station at Howardsville. Given Sunnyside's experience with, and knowledge of the Mayflower Mill and Tailings area, the Agencies request that Sunnyside develop a draft Remedial Investigation (RI) work plan for this area for review and discussion, and then implement the agreed upon RI work plan.

Some of the provisions we believe should be included in such an RI work plan are: 1) an in-depth investigation of the historical uses and disposal practices in the Mayflower Mill and Tailings area; 2) groundwater chemistry of the tailings and other on-site sources; 3) groundwater flux and discharge of the tailings with a loading analysis to the Animas River; 4) an evaluation of the cap material and detailed cross-sections of the constructed tailings impoundments; 5) the location of the disposal area for the sludge from the Gladstone water treatment plant; and 6) detailed information including performance data about the reactive barrier wall that Sunnyside constructed at the Mayflower Mill and Tailings area.

In addition, the Agencies request that Sunnyside develop a draft Remedial Investigation and Feasibility Study (RI/FS) work plan for the American Tunnel at Gladstone for review and discussion, and then implement the agreed upon work plan. The purpose of an RI/FS will be to provide the Agencies, as well as other stakeholders, with a comprehensive understanding of the impacts of the American Tunnel on the water quality in Cement Creek and the Animas River at Silverton and possible remedial alternatives.


We believe the work plan for the American Tunnel should include: 1) an in-depth investigation of the tunnel's history and construction; 2) the locations of fractures, faulting and mineralization influenced by the tunnel and the associated mine pool and the effects of these features on groundwater flow and surface water chemistry; 3) groundwater pathways and hydraulic influence of the three bulkheads; and 4) an evaluation of treatment and disposal options capable of mitigating the metal loading from the American Tunnel to adjacent streams and seeps.

Both the Mayflower Mill and Tailings area RI work plan and the American Tunnel RI/FS work plan should also include a project management plan addressing schedules, roles and responsibilities, and a review process that includes local stakeholders' input. All work plans must include appropriate quality assurance project plans that comply with EPA requirements for all data collection activities.

We would like to hear from you by the end of February, 2015 in order to allow sufficient time to draft and finalize plans for gathering data during the 2015 field season.

Please feel free to contact Martin Hestmark if you would like to meet and discuss this request. Mr. Hestmark can be reached at 303-312-6776.

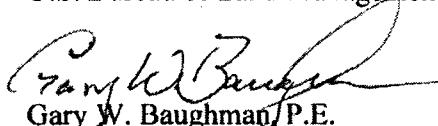
Sincerely,



Martin Hestmark
Assistant Regional Administrator for
Ecosystem Protection and Remediation
Region 8
U.S. Environmental Protection Agency



Ruth Welch
Colorado State Director
U.S. Bureau of Land Management



Gary W. Baughman, P.E.
Director Hazardous Materials and Waste
Management Division
Colorado Department of Public Health and
Environment

cc: San Juan County Board of Commissioners
City of Silverton Mayor and Town Trustees