WCRC Minutes

June 2, 2004

Intro of members: Leigh Ann Vradenburg, Watershed Coordinator; JB Alexander, Creede; Don Dustin, Creede; Mark Walker, CDPHE; Marvin Reynolds, CSU Cooperative Extension; Bob Kirkham, Consultant; Les Dobson, USFS; Chuck Barnes, Creede; Erik Sandvik, Creede; Jim Mietz, SLV RC&D; Frank Satterlee, Powell Water Systems

Approval of minutes: Motion to approve the May minutes made by JB Alexander; second made by Don Dustin. Motion carried.

Additions/corrections to the agenda: No additions or corrections to the agenda were made.

In-Kind: Forms were provided in hard copy for volunteers to track time and other expenses. Leigh Ann encouraged monthly submission of these forms so that records could be kept current.

Coordinator's Report: Leigh Ann reported that Jim Herron had given her OSHA regulations that underground crews needed to be following. A few things that were of particular note were 1) there needs to be a phone system underground; 2) there needs to be a contact person outside of the mine; 3) there needs to be a check-in and check-out system; 4) there needs to be a rescue team within 30 minutes of the mine; and 5) the workers need to have self-rescuers at all times. Leigh Ann said that she would follow up with Jim, Ken, and Jerry about implementing these regulations as soon as possible.

Leigh Ann informed the committee that they had received a grant from the Virginia Christensen Trust in the amount of $1,000. This money was requested for outreach activities of the committee and would cover conference participation, brochure development, phone and email costs, etc.

The creek clean up day on May 27th was a success. Crews removed garbage and debris from a stretch of creek below the flume. County and city crews helped with heavy equipment and dumptrucks. JB estimated that they hauled 5 or 6 dumptruck loads to the dump. JB said that we need to do one or more additional clean ups once flows go down.

Leigh Ann will be presenting at the Community Involvement Conference in Denver on June 15th. She will be covering the history of Creede and the formation of the committee. Other EPA partners will be discussing the ways in which the committee has been able to do their characterization and clean up, and how the EPA has provided assistance.

The committee received a notice from the Division of Water Resources that the Army Corps wells needed either to be abandoned or permitted. The permit fee is $190 per well. The committee suggested that we talk to Mike Wireman before any decisions were made as to which wells to permit and which to abandon. It was suggested that Hecla might pay for the permitting fee since the wells were on their land.

Old Business:

Silver Moon Assessment Update: Leigh Ann said that she received a sampling and analysis plan for the assessment work that the EPA will be doing the week of June 21st. Sabrina Forrest is organizing the assessment and is requesting review of the SAP by next Monday. Leigh Ann told Mark that he was also going to be receiving a copy of the SAP to review. Leigh Ann asked who else might be interested in reviewing. JB and Don said that they would like to look through the plan. Leigh Ann said that she was able to get the map that indicated where the previous samples had been collected at the Silver Moon, and it appeared that they had all been taken from road/driveway areas. The committee wanted to make sure that the EPA assessment would take into account more areas, such as the yards.

Resonant Shock Proposal: Leigh Ann read the proposal by Resonant Shock for testing the feasibility of using the Emperious Tailings to produce cement-type products. Five 5-gallon buckets of material would be delivered to them to test leaching, compressive strength, and absorption ratios. The product, test data, and a report would be delivered to the committee afterward. The proposal indicated a cost of $15,540, which was itemized in an attachment. Mark suggested that their testing also include freeze-thaw analyses. He also indicated that we needed to discuss this with Hecla and make sure that they will grant permission for collecting the samples to be used. Mark suggested that this could have implications on any assessment of the property because the pile might not be a clean up issue if it can go away within 3 years. Frank suggested that a high end product with good tensile and compressive strength might have a good market. Leigh Ann said that we currently do not have any funds for this study. Mark suggested that two potential sources of funds for this feasibility study would be Mineral Impact Assistance and CDPHE. He emphasized that we should find out more about the market for a product. Frank agreed that we should identify our market as one of the first steps. Leigh Ann said that we need to determine whether the cost of this manufacturing process would be less than the cost of future treatment. Bob said that we need to find out what, if anything, we have to do with the pile in terms of clean up. Jim Mietz suggested that we request that Resonant Shock try to find some funds to cover this feasibility study if they are interested in getting their product out there. Don suggested that we should have Resonant Shock do what they call a Phase II first, which would be to find a market for the product. Mark said that we might be able to approach the business department at Adams State College to see if they would do a marketing study. Marvin said that CSU also has people that might be able to do that for us. Motion to 1) send letters to Resonant Shock and Hecla to see if they would put money toward a feasibility study, and 2) conduct a marketability study, whether through Resonant Shock or some other party made by Don Dustin; second made by Erik Sandvik. Motion carried.

Powell EC: At the TAC meeting, Frank Satterlee, a representative for Powell Water Systems, described how the Powell system uses electricity to treat water in a method called electrocoagulation. The electricity produced oxygen, which combined to form metal oxides that precipitated. He demonstrated this technique on a sample from Nelson Tunnel that had been collected that morning. The unit could use 1/8” aluminum or iron plates to transfer the electricity,

and Frank used both to determine which was more effective at treating Nelson Tunnel water. The samples were allowed to settle for one minute, and the water from the top of the container was filtered with 10 and 0.45 micron filters. These samples were labeled and will be submitted by the committee for metals analysis. Frank said that settling was rapid and that no polymers were generally necessary, although a facility in Denver did use flocculants to speed up their process. Frank said that there were several questions from the morning, such as voltage use and the fate of hydrogen, that he would have to get answers to later. He will also get better cost estimates given our predicted flow range and contamination levels. He said that a 30gpm unit costs about $67,000 and uses $125 per month in electricity. The metal plates were replaced every 60 days. Leigh Ann said that given our current budget for water samples, we need to decide on a minimum of metals to analyze for. Jim Herron had suggested zinc and manganese at the TAC meeting. Motion to analyze zinc, cadmium, and manganese in three water samples (original Nelson Tunnel, treated and filtered with 0.45 micron, treated and filtered with 10 micron) made by Mark Walker; second made by JB Alexander. Motion carried.

XRF: Leigh Ann said that she had spoken with John Parker about doing confirmatory sampling during his earthmoving work this summer. She had also spoken with Ted Kuester from Envirogroup, who will be doing the oversight on the construction work. The committee needs to determine where the funds will come from for the XRF machine. Leigh Ann said that Parker would contribute some money to the committee. Don asked if the Forest Service grant money could go toward buying a new radioactive source for the XRF. Les said that he believed that would be a legitimate expense. Motion to propose to Parker to provide XRF services during his construction work for a minimum of $2,000 made by Mark Walker; second made by Don Dustin. Motion carried.

Solomon Wetlands/ AOC Update: Bob said that he, Ron Cohen, and Leigh Ann had visited the wetlands on Tuesday afternoon. Bob explained the construction of the wetlands to Ron and they tried to core the bottom of the ponds. They found that the first cell, which had hay as the original substrate, still had a large amount of hay that was not broken down. There was little evidence of anaerobic activity. In the second cell, the original woodchips were still in place and little decomposition had occurred. In the third cell, which originally had mushroom compost, there was evidence of anaerobic activity and hydrogen sulfide production. Ron had suggested that at least the first two cells needed to be cleaned out and redesigned to increase metal removal efficiency. He suggested composted manure as a substrate which could provide the sulfate reducing bacteria with the nutrients they need to work efficiently. He also suggested a means by which flow into and between cells could be improved to deliver more water effectively into the substrate. At this point there were no decisions to be made because the committee has been unable to work out liability issues for rehabilitating the wetlands. Leigh Ann said that she had spoken with Mike Wireman and he had said that an Administrative Order on Consent was not going to work for the Solomon. Leigh Ann said that she did not have any further details, but that we would continue working toward another answer. In the mean time, we will continue communications with Ron and potentially come up with some ideas for funding the rehabilitation.

New Business:

Creek Clean Up: Leigh Ann said that this topic had been covered by her Coordinator's report and that they would revisit additional clean up at a later meeting.

Other:

The next meeting will be July 7, 2004.

Meeting Adjourned 4:30 PM

Respectfully Submitted,

Leigh Ann Vradenburg