

ARSG MEETING SUMMARY

1/17/13

ATTENDEES: Peter Butler, Steve Fearn, Kirstin Brown, Steve Way, Kay Zillich, Dan Wall, Mike Holmes, Ty Churchwell, Ernie Kuhlman, Lisa Richardson, Scott Roberts, Darlene Marcus, Ray Ferguson, Craig Gander, Dale Rodenbaugh, Jennifer Beck, Larry Perino, Chuck Wanner, Bruce Stover

ANNOUNCEMENTS:

- The group briefly discussed an article by USGS authors in Environmental Science and Technology on how climate change is potentially increasing metal loading in mineralized areas. If people want an electronic copy, contact Peter.
- OSM treatment software – Kirstin let the group know that OSM has software available that estimates treatment costs for a high density sludge plant when one plugs in a number of water quality and flow parameters
- BHP-Billiton Community Fund proposal – ARSG applied for funding back in August from this potential source. Unfortunately, we did not receive any funding.
- MSI Mining and Water Conf. in Lake City on Apr. 18.- MSI and other partners are holding a third annual mining and water quality conference. Several ARSG members want to attend, so we will be moving the April monthly ARSG meeting from the 3rd Thursday of the month to Wednesday, Apr. 17th.
- Zinc TVS in San Juan Regs. – Although WQCC held a hearing on the San Juan Basin last Sept. in Durango, the zinc Table Value Standard equation was inadvertently not updated. The equation will most likely be updated sometime this spring. It is a very minor change.

Updates

1. Bullion King Mine Waste Remediation project – Bill discussed the 319 application for the project including budget tables that ARSG is submitting. The 319 application has become very cumbersome, and Bill put a lot of time into preparing it. If we get funding, we will not be able to start the project until 2014. This is the last priority mine waste site we have in Mineral Creek which is almost meeting most of its TMDL's
2. Innocentive website proposal – The technical work group continues to work on potential challenges for the Innocentive website. See notes below.
3. Good Samaritan memo from EPA – The group discussed draft comments on the EPA memo regarding Good Samaritan liability protection that the ARSG coordinating committee had drafted. The comments stated that it was very helpful for EPA to define what it can and cannot do in terms of liability protection, but that it does not appear that the memo provides enough protection, especially from citizens, for Good Samaritans to move forward with draining mine projects.
4. EPA/USGS Oct. sampling – The data is not ready for release yet from EPA, but it should be very shortly. We don't know how USGS is progressing with its modeling efforts. EPA was able to work with USGS to get two sipper samplers installed in the Animas Canyon for the winter – thanks to assistance from Lisa Richardson. The sippers sit in the river and collect daily water samples. They will be collected before spring runoff. Hopefully, all will go well and we will have some interesting winter data that we never have had before.

5. Potential additional River Watch Sampling (Mercury? and upper Cement Creek?) - The group discussed if it made sense to have River Watch do more sampling. Generally, the group felt that best way to sample for mercury was through fish tissue and that water sampling wouldn't give us a lot of useful information. The concentrations in the water column are generally too low to detect. There was some discussion about having River Watch site for monthly samples in upper Cement Creek, but people weren't sure if the data would be that useful. The discussion about upper Cement Creek sampling was tabled until next month so people could think about it some more.
6. Investigations and/or status for in situ treatment for Mogul – The owner of the Mogul wanted some assurances from CDPHE and EPA before allowing any investigations on his property. Nobody knows if he has received enough assurances or not at this time.

Main Topics

1. Draft EPA Screening-Level Ecological Risk Assessment – Dan Wall with EPA discussed the draft SLERA. It is a screening tool that uses conservative and not always very realistic assumptions about ecological risk to determine if a more complete Baseline Ecological Risk Assessment should be conducted. These studies are all necessary if BLM is to apply for funding from the Dept. of Interior's Haz-Mat fund to help with issues in upper Cement Creek. Dan had received comments from several stakeholders and felt he could adequately address them. Many of the comments had to do with acknowledging the role of natural metal loading and the significant metal loading in the Animas River above Cement Creek. The goal in the draft was to promote healthy aquatic communities in waterways affected by mining-related releases. Some people pointed out that certain drainages are affected by mining-related releases, but even with remediation, will not support aquatic life. Defining which segments should be targeted for supporting aquatic life is important.
2. EPA Red & Bonita update & ARSG input for tasks to perform – EPA, using personal from DRMS, is planning to explore the Red & Bonita in late June or July. The group discussed what information would be good to obtain from the exploration. Ideally, we would like to determine where the water comes from (including quality of different sources), if the workings intersect what we've been referring to as the Bonita fault system, and a map of the workings. Bruce Stover noted that DRMS had recently explored the Penn mine near Keystone which has a significant drainage. They found that only a portion of the drainage is really poor quality water and it can be isolated from the majority of flow which is pretty good water. There was also discussion that it may be beneficial to have someone in the exploratory party to be knowledgeable about how mining was conducted over a hundred years ago for safety reasons.
3. Blue Sky technology responses/questions – Bill said that both he and Todd Hennis had had more conversations with Blue Sky about their technology. Blue Sky has been more focused on treatment of contaminated groundwater and industrial discharge as opposed to mine drainage. Blue Sky is one of the technologies that we have interest in.

TECHNICAL WORKGROUP MEETING SUMMARY

1/10/13

ATTENDEES: Steve Fearn, Kay Zillich, Ty Churchwell, Jon Ferguson, Ray Ferguson, Darlene Marcus, Bill Simon, Jennifer Beck, Tasha Lewis, Peter Butler and on the phone; David Hinze, Craig Gander, and Jason Willis.

Peter had asked Innocentive some more clarifying questions since the last meeting. Intellectual Property (IP) is either transferred or licensed to the entity that puts up a challenge. Therefore, ARSG can potentially turn around and license the IP to other entities for use. We also discussed using San Juan RC & D as the potential entity to put up the challenges.

For a brainstorm or ideation challenge, payment of the reward must be made. Any of the ideas offered as solutions in those challenges can be used by the entity putting up the challenge, but that entity only gets contact information for the solvers who receive at least part of the reward. Under the theoretical or reduction to practice challenges, if no solver meets the criteria of the challenge, no reward has to be paid.

The group then discussed different potential challenges. Most people felt it was best to start with a brainstorm challenge since they are much less expensive and to better understand the process. We discussed running two challenges, one targeted towards treatment and the other towards developing a sealant to discourage leakage from mine pools. We have draft challenges for both which probably only need a little more work.

The group also felt we need to draft some other potential challenges. We already have one potential ideation challenge regarding treatment that is similar to the brainstorm treatment challenge. If we don't get a response that might take us towards a new technological approach, we decided to draft ideation challenges to improve some current treatment aspects. These challenges include improving efficiency of lime use, removal of water from sludge, increase speed of metal precipitation, and improve metal removal from sludge for reuse. Jennifer Beck with CH2M Hill offered to start drafting the first two and Steve and Peter will work on the second two.

Part of the reason for drafting these different potential challenges is that the group is approaching the National Mining Association and members for support in March. Having a set of options to present might improve our chances.