

ARSG MEETING SUMMARY

Jan. 27, 2015

ATTENDEES: (b) (6)

[REDACTED]

Updates:

1. Activities Regarding Bullion King – (b) (6) reported that DRMS is working on design parameters. Because of the road access, it is a challenging project, and they've gone back and forth on incorporating limestone in the waste pile versus using a liner. Limestone would take many more truckloads of material (perhaps 150 with small trucks needed for the difficult road) than the liner. However, there is little topsoil at the site to cover the liner.

As a side note, (b) (6) checked the ranking of mine waste sites that have the environmentally worst material according to leach tests on a spreadsheet that we have for about 160 mine waste piles in the basin. The top three sites are the Clipper, the more recent Brooklyn waste, and the Bullion King. This ranking is not of the potentially most damaging environmental sites because the size of the piles and the locations relative to streams is not taken into account.

The Clipper is high up in Eureka Gulch and Sunnyside Gold offered to put money into its remediation a couple of years ago. At that time, the group decided against remediation because a road would need to be constructed across an alpine wetland to access it, and to reclaim the road and keep OHV's off it could prove difficult. The site is some distance from any streams and a long ways from the Animas River. Overall, the group wasn't sure if the potential environmental costs would be worth the benefit.

The Brooklyn waste was removed from a steep slope with a drag-line by the Forest Service a number of years ago and was placed in a nearby repository.

2. Potential Testing of Agents to Solidify Mine Dumps – There was discussion on testing different agents to solidify the surface of mine dumps in place. The idea stemmed from a video of a treatment used to solidify dirt roads on the Navajo reservation into a rock hard surface. The group felt that draining mines are a much bigger problem in terms of water quality in the Animas Basin, and that ARSG's efforts would be better directed at drainage issues.
3. Activities Regarding Red & Bonita and Gold King – (b) (6) with EPA had sent an email saying that the design of a bulkhead for the Red & Bonita is underway and that they are discussing how best to approach the opening of the Gold King. He will have more details for a later ARSG meeting sometime this spring.

4. EPA Letter to Sunnyside Gold – EPA, BLM and CDPHE sent a joint letter to Sunnyside Gold requesting that Sunnyside develop remedial investigation plans for the American Tunnel and the Mayflower tailings ponds. EPA said they are committed towards a collaborative process and as part of the “game plan” which calls for collecting more data for designing solutions to improve water quality, more information is needed about the impacts of these two sites. Sunnyside knows more about these sites than anyone else. Sunnyside said they would have a response to the letter in about a month. (b) (6) (b) (6) with EPA noted there will probably need to be some discussions regarding liability issues between the agencies and Sunnyside that cannot be conducted in an open meeting such as ARSG’s. Overall there was little discussion of the letter by the group.
5. InnoCentive Awardees Contacts – (b) (6) discussed contacts with the four individuals who received InnoCentive Awards. His handout on their proposals is attached. (b) (6) met with (b) (6) in Albuquerque last summer during the EPA National Conference on Mining-Influenced Waters. ((b) (6) notes from the conference are attached.) (b) (6) met with (b) (6) in the fall in Silverton. (b) (6) is also in contact with (b) (6) (Peru) and (b) (6) (India) for the further development of their innovative technologies.

(b) (6) has been using drainable limestone beds for treating pH, iron and aluminum at Pennsylvania coal mines. His technology is the most developed of the four. (b) (6) has provided preliminary plans to build a bench-scale apparatus for his technology, and (b) (6) is interested in overseeing its further development. He is requesting assistance from anyone with a strong background in electronics. Thus far (b) (6) has helped with electronic component calculations and selection but will be unable to participate in testing and calibration. (b) (6)

(b) (6) In addition to these ideas, we have learned of several others at the EPA Conference and through other contacts. For example, (b) (6) mentioned a media treatment that is going from pilot to full scale treatment (~100 gpm) this summer in the San Juans at an inactive mine drainage nearby.

Topics:

6. Potential Use of Evelyn to Test Some Technologies from InnoCentive Process – As a continuation of the discussion above, (b) (6) asked the group if testing some technologies at the Evelyn where BLM constructed a concrete tank would be worthwhile. BLM has already tested several media for removing metals at the site. The drainable limestone bed in particular was one he had in mind. We have yet to identify any funding for such a test.

The group felt that if the drainable limestone bed was to be pilot tested, it would be better to carry that out at the American Tunnel which has the highest iron concentrations in the basin and is the most likely candidate for some type of alternative treatment to the traditional HDS system. At this time, no entity is willing to fund testing at the site until liability issues for it are worked out.

(b) (6) also noted that there are two innovative systems that are going to be built to full-scale at sites outside of the Animas Basin, but in the San Juans this summer. Would it be better to await the results of these treatment systems, instead of trying to pilot or bench-scale test our own? In addition, who, besides potentially (b) (6), would do the pilot or bench-testing work? Several people expressed that they felt ARSG should continue testing ideas at a small scale if it can be done inexpensively as well as waiting to see how other more-developed systems might perform.

7. Good Samaritan Legislation – (b) (6) noted that several members of the group were going to meet with (b) (6) with Congressman Tipton’s office and (b) (6) with Senator Bennett’s office to talk about introducing Good Samaritan legislation this year. We’ll have more information at later meetings.
8. Updates to ARSG Water Quality Database – (b) (6) said he’d pulled together all the water quality data he knew about, excluding EPA’s data, for 2012 through 2014 for the Animas River and put it all into ARSG’s format. He’ll work on EPA’s data next and then we can do some analyses this spring. The data won’t go on the ARSG website until after he has the EPA data, and we can scrutinize all of the data’s quality.