

Meeting #28
December 10, 2014
MEETING SUMMARY

Meeting Attendees

Community Working Group members present:

Nancy Vogler – LOST Trail
Fred Gaudet – Arizona Trail Association alternate
Rick Cartier – Superior Chamber of Commerce alternate
Pamela Rabago – Superior Chamber of Commerce
Pam Bennett – Queen Valley Homeowners Association
Roy Chavez - Concerned Citizens and Retired Miners
Bill Vogler – Superior Copper Alliance
Bruce Wittig – Queen Valley Water Board
Cecil Fendley – Queen Valley Water Board
Michael Lira – Central Arizona College
Anthony Huerta – Town of Superior
Jeff Bunkelmann – Central Arizona College
George Martin – JF Ranch
Lynn Martin – JF Ranch
JoAnn Besich – Superior Optimist Club

Community Working Group members not present:

Mark Nipp – Town of Superior
Dominic Perea – Superior Junior-Senior High School
Steven Byrd – Superior Junior-Senior High School
Mark Siegwarth – Boyce Thompson Arboretum
Matt Nelson – Arizona Trail Association
Neal Jensen – Cobre Valley Regional Medical Center
Evelyn Vargas – Cobre Valley Medical Center
Kiki Peralta – Superior Rotary Club
Nina Crowder – Superior Rotary Club alternate
Patrick O'Donnell – Superior Unified School District #15

Resolution Copper Company:

Vicky Peacey - Senior Manager of Approvals, Communities & Environment
Ian Edgar – studies manager
Kami Ballard – environmental permitting
Melissa Rabago – community advisor
Rick Borden – corporate environmental general manager

Facilitator – Godec, Randall & Associates (GRA)

John Godec
Debra Duerr

Public Guests:

Hank Gutierrez – interested superior resident
Deb Townsend – Superior Chamber of Commerce

Introductions & Housekeeping

John Godec noted that this will be the final meeting of 2014. He introduced the guest speaker, Mr. Rich Borden from Rio Tinto Copper Group in Salt Lake City, and asked group members to introduce themselves. Housekeeping items included checking with the group to see if they'd like to continue meeting on the second Wednesday of the month; everyone agreed that this is a good time.

Godec said that we are planning on doing a field trip around the tailings site, in response to the group's request, probably in January. The group thought that visiting the area on a weekday is best to avoid weekend recreation users. We will need off-road vehicles for this trip; Resolution Copper Company offered to provide about 4 vehicles, and some members said they may also drive. Lynn Martin suggested that we should go to the same places as the Hewitt Station residents had previously toured. A member asked if she could bring a guest, and the group agreed to this. It was decided that, tentatively, the tailings site field trip would take place on the regular meeting date, the second Wednesday (January 14, 2015), and there will be dinner and a short meeting afterward. Participants should meet at the Chamber of Commerce at 2:00 PM. Some members who prefer not to drive into Superior will wait at the Hewitt Station Road turnoff.

Godec reported that he's been working with independent water experts to arrange for them to visit with the group. Two of the state's leading water quantity people have agreed to come; they are Dave Brown, rural water attorney, and Grady Gammage, Jr. of Arizona State University Morrison Institute. A member suggested that a Resolution representative should also attend this meeting(s) to explain the current information about water needs and uses.

Godec asked members if they would be interested in setting up a web site for this group, where we could maintain a library of information for the project including all the materials from all the meetings. This would most likely be a public website, but we could investigate making a portion of it password-protected for members only. No one had concerns about doing this. It was pointed out that if we include member information on the website, the information should be reviewed for accuracy.

A member asked why the memo from the Town of Superior was in the packets for this meeting. Pamela Rabago said that the entire package of information was not copied (due to a misunderstanding by the facilitator), but it is information that she requested through a public records request. It outlines the Town's requests for financial assistance from Resolution Copper Company, and is something like a "wish list". It was noted that most mining towns in the area are having financial problems, as well as Superior.

Tailings Geochemistry

Presenter: Rich Borden – Resolution Copper Corporate Environmental General Manager

Rich Borden introduced himself by describing his history with Rio Tinto. He noted that most mines have had problems with acid rock drainage and in some cases with salinity; that is the focus of his presentation.

Rio Tinto's goal is to proactively manage acid drainage so it does not even begin to form. He explained how oxygen and water interact with pyrite (minus calcite, a neutralizing agent) to form acid. Acid rock drainage is primarily associated with mining but does occur naturally as well. Common minerals in copper ore include copper sulfides, pyrite, carbonate minerals like calcite, quartz, and minerals containing silica and aluminum. When exposed to air, sulfides will oxidize. Minerals are often leached out of ore to recover the copper; Resolution will not use this process but will use a concentrator instead.

Potential impacts of sulfide oxidation include increasing salinity of soils, which can prevent plant growth. Water flowing over contaminated rock can carry acidity away from the site as well.

Rio Tinto practices proactive acid rock drainage (ARD) management by predicting how rocks will behave when they are disturbed or exposed by mining. This approach seeks to prevent ARD, and to minimize it should it begin to form. Control strategies depend on bedrock conditions, and management options include removing oxygen through encapsulation, removing water through diversion or covers, removing pyrite, adding limestone, or covering with a growth medium or soil amendment.

Borden described several examples of other mines that have had various control technologies employed to successfully mitigate ARD impacts. One of these is the Flambeau mine in Wisconsin, which used below-water disposal for oxygen control. A member mentioned that there had been litigation over this mine. At Barney's Canyon in Utah, pyrite removal and water control were used. Rock containing pyrite was separated from non-pyrite rock during the mining process there, and a special containment facility was constructed to isolate the pyrite tailings. At Daivik diamond mine in Alaska, which is in the middle of a very pure lake, permafrost is being used for containment. The Ridgeway gold mine used oxygen control and limestone additions. Borden showed 'before-and-after' photos of the old tailings pond in Superior, with the vegetative treatments being done here.

He explained that for the Resolution Copper Project there will be two kinds of tailings, containing pyrite or not. The pyrite tailings will be kept in a separate disposal area from 'clean' tailings, in the center of the pile to isolate them from oxygen and water. The bedrock at this site will also act as an aquatard to protect the groundwater. For closure of the site, all water sources will be removed and a 'store-and-release' cover will be installed.

Members had the following questions and comments:

- Will soil be removed from the tailing disposal site first, before placement?
 - Soil may be scraped off to place tailings on the bedrock, but Resolution won't dig a pit.
- Does the closure plan account for a 1000-year rainstorm? What is the design standard?
 - A well-designed cover needs to be installed to handle a very wet year, while perhaps not for a 1000-year storm. The minimum Arizona Department of Environmental Quality (ADEQ) aquifer protection permit requirement is for the 100-year/24-hour storm. Resolution will design for a 200-year storm and the 30-year Probable Maximum Flood (PMF). The U.S. Environmental Protection Agency (EPA) also focuses especially on closure plans. These analyses will be included in the Environmental Impact Statement.
- Who monitors the site when it's completed?
 - Resolution will have a closure plan to return the site to beneficial use. Resolution will need to post a financial assurance bond, and commit to a post-closure monitoring period that could be any number of years, e.g. 20, 40.
- A member suggested that this presentation would be beneficial for Queen Valley residents to see.
 - Vicky Peacey suggested that the community may also want to do independent monitoring of the tailings site for themselves.
- Another major concern about the tailings site is continued access for recreation use, and disruption of roads and trails.
- A member observed that the tailings site will have other effects such as impacts on property values. There were differing opinions among the group about how it might affect property values. Roy Chavez offered to provide information about property values in mining communities around the region. Pamela Rabago, a realtor, explained that prices have gone up around Superior this year, which hasn't happened in many years. Some noted recent economic development projects and investments like the new hotel as a positive situation.
 - Godec asked the group if they'd be interested in exploring this topic further by finding knowledgeable representatives to talk with the group. No decision was made on this.
- A member asked Resolution to verify the assumption that the bedrock will not leak drainage from the tailings pile.
 - All rock can 'leak' to some extent. This rock is very impermeable, similar to an engineered synthetic liner. Drainage collection systems will also be installed to capture flow through the rock, and monitoring wells will be used to evaluate these flows and the quality of the water associated with them. Contingency plans that must be approved could include things like pump-back wells. The field program of site characterization is very important in determining the structure and character of the bedrock and subsurface conditions including water flows.
- Roy Chavez offered to show a video of the Mt. Pauley spill that was discussed at the last meeting, showing that it's still leaking.

Open Discussion

Vicky Peacey reported that the Mining Plan of Operations has been deemed complete by the Forest Service. Once a Forest Service project manager has been put in place and 'pre-NEPA' studies have been done, the Environmental Impact Statement can begin.

All members were aware that last week the Federal Land Exchange bill was approved by the House of Representatives, as a 'Lands Omnibus' attachment to the defense spending bill. Senate approval is expected very shortly. Vicky Peacey explained that the House Resources Committee and the Senate Energy Committee agreed on the content, which added several concessions to address community concerns since previous versions. These include:

- Deferred title is included, so the land exchange will not take place until a final EIS is completed.
- A subsidence management plan is required.
- Additional tribal government-to-government consultation is included in the land exchange.
- Surface land and mineral title to Apache Leap will be given up (110 acres) in transfer to the federal government, and a management plan will need to be prepared.
- Resolution has agreed to maintain access as long as possible at Oak Flat.
- The Oak Flat campsite will be maintained as long as possible, but since it is in the withdrawal area, another campsite will need to be found.
- Certain lands are specified to be transferred to the Town of Superior

Group discussion on this topic included the following observations:

- A CWG member familiar with the history of this effort explained that when bill was first drafted there was no language about benefits to the town; specifically, there was no mutual benefits agreement in place. The town was working on acquiring the cemetery and the airport properties, which belong to the Forest Service. These are the lands that can be transferred to the town under this bill. Fair market value must be paid. Resolution noted that they have talked with the town about including the acquisition cost in a mutual benefits agreement, through financial mechanisms such as low-interest loans or others.
- Groups and individuals opposed to the Resolution Copper Project think this is a "lot of whitewash". Remaining concerns include:
 - A 90-day comment period is required on the Final EIS, but lands can be transferred in 60 days after completion of the document.
 - Many still believe that if the land is privatized, the full National Environmental Policy Act (NEPA) analysis will be circumvented.
 - Transparency is questionable on this, as it took place 'in the middle of the night', and there was a lot of 'horse trading' involved. The only reason this is being considered is because it is attached to the defense funding allocation.

- Cloture on the bill is to take place tomorrow (December 11), so the Senate can start discussing and voting on this, for about 30 hours, in order to conclude it before the end of this session. No amendments will be allowed.

Public Questions & Comments

A visitor suggested that the conversation about Apache Leap should be extended beyond the San Carlos Apache Tribe to include Superior and Queen Valley, particularly if the land exchange bill goes through.

Future Meeting Planning

Godec verified with the group that they'd like to continue to meet on the second Wednesday of each month during 2015, and they agreed that this is a good time. The next meeting will be a field trip to the tailings site, followed by dinner and a short meeting.

Next Meeting:

2:00 PM

Wednesday, January 14, 2015

Meet at Superior Chamber of Commerce

Return around 5:00 PM for dinner