

July 11, 2013 Meeting

MEETING SUMMARY

Meeting Attendees

Community Working Group members:

Mark Siegwarth – Boyce Thompson Arboretum
George Martin – JF Ranch
Lynn Martin – JF Ranch
Pam Bennett – Queen Valley HOA president
Nancy Vogler – LOST Trail (Pickett Post to tunnel)
Bill Vogler – LOST Trail
Roy Chavez – Concerned Citizens and Retired Miners Association
Pam Rabago – Superior Chamber of Commerce
Lynn Heglie – business community

Facilitators -Godec, Randall & Associates (GRA):

John Godec
Debra Duerr

Resolution Copper:

Vicky Peacey - senior manager of approvals, communities & environment
Bruce Richardson - manager of community & external relations
Ian Edgar – general manager, studies
Frank Deal – tailings manager

Verify Agreements from Last Meeting

After a welcome and introductions, John Godec explained the handouts distributed for inclusion in the notebook for this meeting. The group was asked for any further thoughts on the operating procedures and ground rules that were talked about at the last meeting; no one did. Updated copies were included in the packet. Godec asked for any comments on the meeting summary from last meeting, and asked the group to point out any summaries that might not reflect the meetings accurately.

NEPA Primer

Presenter: Vicky Peacey

Several CWG members attended a Resolution workshop on the National Environmental Policy Act of 1969 (NEPA) and said it was very valuable. Vicky Peacey gave a brief overview of NEPA and how it relates to the project.

The Pinto Valley site was evaluated as a tailings disposal site but that did not work out, nor, likely, does an area south of Gonzales Pass on State Land. Resolution still has a need to find suitable tailings location, and this may turn out to be one that is closer to populated areas. That's one of the reasons they asked an independent facilitator to help them in working with the community.

Peacey said that a plan of operations will be submitted to the Forest Service soon to allow for drilling and site characterization for a tailings location.

It was stated that there will be two NEPA Environmental Impact Statements (EIS) required before the project can be approved: one for the mine itself, with the Forest Service as lead agency, and one for impacts to washes and water resources, with the US Army Corps of Engineers as the lead federal agency. There is also an Environmental Assessment (EA) being conducted for site testing and drilling.

She outlined the federal agencies that will be involved in the EIS for the mine. These studies will include alternatives, regardless of whether the land exchange passes. These can take years to complete. The EIS discloses the impacts of the project as well as a set of mitigation measures to offset impacts. In addition to federal approvals, she showed a slide demonstrating how the state and local review processes will proceed together with the federal process.

CWG questions and comments, and Resolution answers:

- Is Florence Junction not an option any longer (State Land site)?
 - Yes, it may still be an option but Resolution doesn't own it and there are alternate plans for that land for residential development. Because it's State Trust Land, it is planned to be sold at auction for the best, and highest use.
- There used to be a Superstition Vistas study group. Is it still around?
 - Yes.

- How big a site do you need?
For tailings, the exact area varies depending on footprint versus height, but approximately 4.5 to 6 square miles
- Could we have a handout that better explains the idea of alternatives with and without the land exchange? Also, please provide the slide that describes the federal, state, and local review processes. The folks in Queen Valley seem to have misconceptions about whether NEPA will really be done, and think that the company is trying to circumvent the environmental review process.
 - Peacey promised that this is not the case, and that all necessary environmental studies will be done and all necessary approvals will be gained

NOTE: For reference, Resolution has provided a response to the issue of land status relative to NEPA requirements. It is attached to this meeting summary.

- Will the federal nexus for an EIS apply to the state land parcel? What about private land? Several members are skeptical that this is the case and aren't convinced that it's true.
 - Yes to state land and private land. (Please see the Attachment for further explanation. Any location would trigger an environmental evaluation (NEPA) by the Corps of Engineers for impacts to washes.. For alternatives that cross federal lands, that agency would come into play.
- Will you put this in writing, in the form of a promise?
 - Yes.
- Promises were made several years ago about water and well levels, and Resolution said that if there were any water problems they would fix them. But now there are dry wells and nothing's been done about it. This has created mistrust.
- Several members are concerned about water issues in the future; therefore, what's happened in the past has to be considered.
 - Peacey noted that there will be a community forum dedicated to water issues in the next couple of weeks.

- A member noted that there have been dry wells for quite a long time, and in other locations than Queen Valley.
- We should have a meeting of this group on water issues.
 - It was suggested that other agencies and experts could be invited, for example, AZ Department of Water Resources. The group wants to make sure Cecil Fendley and Leslie Brian are here for this, as they are locally knowledgeable.
- It was asked if it would be helpful to invite a Forest Service representative to talk about the application of NEPA, in general.
 - Some members thought this might be helpful.

Mine Tailing Presentation:

Presenter: Frank Deal

Frank Deal passed around samples of tailings, one containing a lot of sulfides (called cleaner tailings) and one without (called scavenger tailings). He then discussed some of the criteria that Resolution considers in finding a suitable tailings disposal location, noting that in the 1990s mining companies started to put more study and effort into tailings management and reclamation.

In a typical hardrock copper mine, ore comprises roughly 4% of the ore with the non-economic fraction (tailings) accounting for 96%. The physical properties of the tailings dictate how they need to be handled and how they can be used or placed. Physical factors to consider are chemical properties, and site factors like seismicity; this area is not prone to earthquakes.

Chemical property considerations include the sources such as minerals, reagents and water, the pathway to the environment such as water and air, and receptors like wells, habitat and sediments. We are designing the facility to be zero discharge where contact water is collected and returned to the process.

Acid rock drainage (ARD) is an outcome of oxygen+sulfide+water, and all factors need to be present to produce it. Because Resolution's ore and resulting tailings stream will contain sulfides, ARD is a risk if not managed properly. Thus the presence of sulfides has implications for the design of the facility and the way tailings is managed. Agencies

are stricter in their approval standards than they were in the past, and the mining industry now uses high international standards.

Climate also needs to be considered in tailings management. Typically, water would be diverted around the tailings facility. Water that does collect in the facility is removed and recycled back into the process, so it's a zero-discharge operation.

Prevailing wind direction may play a part in siting the tailings due to the potential to generate dust and proximity to communities.. Wildlife is a factor that must be considered, as well. Public and employee safety must be addressed.

Design options include Upstream design, including continuous reclamation as the pile grows. A local example is Tailings Site 3 & 4. Downstream design and Centerline design are built behind dams.

CWG questions and comments and Resolution answers included:

- What's the base or liner made of?
 - We try to work with natural liners rather than synthetic. Very tight clay or bedrock are good. We add to the natural liner through the use of downstream collection systems at the base of the tailings.
- Are you admitting that it's going to affect air quality?
 - Tailings, if not managed properly, has the potential to generate dust. We design for and use methods to control dust and air quality – environmental regulations under the federal Clean Air Act require it.
- Are you looking for a place, like a canyon, where you can contain it?
 - That would be ideal, but this situation doesn't occur in very many places. Especially for a site this size, there aren't many canyons that could be used.
- The size of this project is so large that most people don't understand what it means. Trying to compare it to Hayden or Miami won't be that helpful.
 - It is true, this is a big project. In terms of total copper produced on an annual basis, Resolution Copper is bigger than other surrounding mines. In terms of total disturbed footprint, it will be smaller than Ray, but will be bigger than Carlotta. The disturbed footprint of the tailings will range between 4.5 and 6 square miles. The total amount of land looked at for the State Trust Land

tailings option was larger because it included buffer land. The size of parcels that are being looked at for acquisition are very large, much larger than the pile itself.

Tailings Location Presentation

Presenter: Frank Deal

Deal said that the first critical question to be answered is where it's even possible to put 1.5 billion tons of tailings. Resolution looked at a 25-kilometer radius beyond the mine site to see what locations would fit the needed volume. There are about six general areas that could accommodate this volume, all located on Tonto National Forest land. He showed an aerial photograph with these general locations plotted on it.

CWG Questions, Comments and Resolution Answers:

- Did you look further south?
 - Ideally, we need one site that can accommodate the entire mine life, and these seemed most suitable for that purpose.
- Can't you break it up into more than one site?
 - It's conceivable that new technologies will come along in the future that allow this to happen in an economical way, but right now we're assuming one site.
- Can tailings be recycled or reused for anything? If not, why not? An example was given of slag reuse for road beds.
 - Smaller gold mines use tailings for backfill underground, but you can't really do anything with these volumes. It's not toxic, but there is no market for anything in these quantities.
- How would acquisition of any of these Forest Service parcels be handled?
 - Not discussed at the meeting.
 - **NOTE:** After the meeting, Resolution provided this information:
 - Before Resolution can obtain authorization to place tailings on Forest Service land, we must obtain an approved mine plan prior to operations. The Forest Service's decision to authorize the plan of operations, which includes the tailings, must comply with the National Environmental Policy Act in this case meaning that an Environmental Impact Statement and an alternatives analysis and mitigation must be

completed before the decision is made. Acquisition of these Forest Service lands is not necessary.

- There were a number of questions about specific locations relative to public and private lands. A member mentioned that he had met with Forest Service recently, to ask about tailings, and got a map of private patent/inholdings within the Forest.
 - Avoiding washes is a consideration, where possible.
 - There is a moratorium on patents now. Patenting means you will own the surface as well as the minerals.
- Is the issue with SRP and relocation of power lines related to overburden?
 - SRP obtained regulatory approval to relocate their power line on Resolution private property to allow storage of development rock that will come out of the shafts.
- Would the company be amenable to allowing somebody to come in and move the tailings out, if there was a use for it?
 - This would likely be too costly for anyone, since the cost doubles every time you move it more than three miles.
- How much water will be used? Is recovery and recycling planned?
 - Resolution hasn't designed the facility yet, but it will include state-of-the-art water management systems to optimize water recovery and recycling.

Tailings Siting Criteria & Issues

We were not able to address this topic at this meeting due to time constraints. It will be covered at the next meeting.

Public Comments

There were no public comments offered.

Open Discussion & Next Meeting Topics

The next meeting on Saturday July 20 is proposed as a field trip. The group agreed to meet at Resolution's office at 6:00 AM. It's expected to last about 4 hours. The tour will most likely include:

- East plant, up on top
- West plant, middle
- Area for alternative tailings sites

Facilitators will poll the group for RSVPs, to make sure we have appropriate transportation. Resolution offered to do another field trip again for people who can't make it on the 20th.

Future meeting topics that were requested by the group include:

- Groundwater, wells, and water issues - past & future – Consider inviting an independent expert, for example from AZ Department of Water Resources.
- Does NEPA apply to projects located (only) on private property? - Consider inviting an independent expert or Forest Service NEPA staff person.
- Tailings disposal facility siting criteria – Resolution and community suggestions

Please submit any clarifications and additions to:

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ATTACHMENT

Here is Resolution Copper's response to the issue of land status (public versus private) and how it relates to NEPA/EIS and alternatives for the project:

The project will impact federal lands administered by the Tonto National Forest and therefore must obtain an approved mine plan prior to operations. The Forest Service's decision on the plan of operations must comply with the National Environmental Policy Act or NEPA, which means that an Environmental Impact Statement must be completed before the decision is made. *This comprehensive environmental analysis is required whether the Congressional land exchange bill passes or not* because Resolution Copper's proposed mine plan will impact federal lands.

NEPA requires that appropriate environmental protection and mitigation measures be identified, considered and applied before a federal agency moves forward with a decision to allow a project. The NEPA process allows for considerable input from the public as well as other federal (i.e. EPA), state and county agencies. The "Citizen's Guide to NEPA" provides more information and can be found on the website for the Council on Environmental Quality (CEQ) within the Executive Office of the President: http://ceq.hss.doe.gov/nepa/Citizens_Guide_Dec07.pdf

A copy of this document was provided at the meeting.

NEPA ensures that Federal agency decision makers consider and disclose the potential environmental consequences of their decisions. NEPA governs Federal Decisions, regardless of land status, in the following three circumstances:

- Any part of the project is located on federal land.
- Any part of the project is federally funded.
- A federal permit is required for any aspect of the project.

For example, the US Army Corps of Engineers issues permits for placement of fill into waters of the United States on private, state and federal lands. Resolution will need a Clean Water Act Section 404 permit from the US Army Corps of Engineers and the Corps must comply with NEPA before issuing that authorization.

Complying with NEPA means that the appropriate level of environmental analysis must be completed. There are, essentially, three types of environmental review that

apply to different projects, depending on the severity of impacts that can be predicted:

- Categorical Exclusion (CE) – for mainly administrative or maintenance activities having no environmental effect
- Environmental Assessment (EA) – for activities that will have some environmental effects but not any considered to be “significant”
- Environmental Impact Statement (EIS) – for activities that can reasonably be expected to have significant environmental effects

Because the Resolution Copper Project can be expected to cause some impacts that would be considered “significant” under NEPA, Resolution will prepare an EIS, the highest and most thorough level of analysis.

The Resolution plan of operations for submittal to the Forest Service will include all project features (mine, concentrator, tailings, infrastructure, filter plant) on private, state and public lands. The assessment of project environmental impacts, cumulative environmental impacts and a range of reasonable alternatives is a requirement for EIS’s prepared under NEPA, regardless of land status. Per the Forest Service Handbook 1909.15, Chapter 20 – Environmental Impact Statements and Related Documents, 23.3-5 (pages 10 and 11), in the section under alternatives, it is stated that agencies shall include reasonable alternatives not within the jurisdiction of the lead agency. A copy of the handbook was provided at this meeting.