

**October 10, 2018**  
**MEETING SUMMARY**

**Meeting Attendees**

*Community Working Group members present:*

Bruce Wittig – Queen Valley Fire Department  
Hank Gutierrez - Superior Copper Alliance  
Pam Bennett – Queen Valley Community Liaison  
Sylvia Werre – Top of the World  
Jeff Bunklemann – Central Arizona College  
Pamela Rabago – Superior Chamber of Commerce  
Anthony Huerta – Town of Superior  
Richard Matthews – Queen Valley Fire Department  
Arlynn Godinez – Superior Unified School District Board / Maricopa County  
Tiffany Rowell – Superior community  
Fernando Shipley – Cobre Valley Regional Medical Center Board  
Rick Cartier – Superior Chamber of Commerce alternate  
Todd Pryor – Town of Superior  
Jim Schenck – Rebuild Superior  
JoAnn Besich – Superior Optimist Club

*Community Working Group members not present:*

Karen Kitchayan Jones – San Carlos Apache Tribe  
Fred Gaudet – Arizona Trail Association  
Cecil Fendley – Queen Valley Water Board  
Tweedy Armitage – Superior Historical Society (Prospective CWG member)  
Lynn Martin – JF, JI Ranch  
George Martin – JF, JI Ranch  
Roy Chavez - Concerned Citizens and Retired Miners

*Resolution Copper Company:*

Filomena Cornelio – Communities Manager  
Kami Ballard – Permitting & Environment  
Scott Brown – Maintenance Manager

*Facilitators – Godec, Randall & Associates (GRA):*

John Godec, Debra Duerr

*Speakers:*

Casey McKeon – Resolution Copper  
Brent Musslewhite – BHP  
Steve Rakowski – Haley + Aldrich  
Jeff Parker - BHP

*Public Guests:*

Mila Besich-Lira – Mayor, Town of Superior  
Zach Larson – community  
Carolyn Larsen - community

## **Introductions & Housekeeping**

CWG members introduced themselves. In local news, it was reported that the Arizona Trail Festival took place last weekend. Several other events are planned. The Cobre Valley regional hospital is having a Health Fair in Globe this weekend.

Fernando Shipley and Hank Gutierrez have been invited by the Forest Service to present a session at the International Mining Symposium on October 29, as they have done for the past several years. The attendee group is also coming to visit Superior and meet with community leaders in the Auditorium on the 30<sup>th</sup>. The Mayor said that this is the third year they have done this, and they always have very interesting questions about ways that life and the mining industry are different in America from other countries. Hank noted that they are always very interested in the CWG and how it works.

John Godec updated the group on the search for new CWG members. He confirmed that Tweedy Armitage of the Superior Historical Society has agreed to become a member although she could not be here tonight.

Godec noted that the skyline of Superior has changed in the last month with demolition of buildings at the West Plant site, and Casey McKeon will update the CWG tonight.

## **Update on West Plant Reclamation, Demolition, and Air Quality Controls**

Casey McKeon & Kami Ballard - Resolution

Casey McKeon reported that the major structures have been torn down. A schedule has been prepared for demolition of the smelter stack, with November 2 as the currently-planned date. She emphasized that this will depend on the weather and having all necessary controls in place.

Debris is being disposed in Tailings Pond 6, which will be leveled, and a cover will be placed over it. This work will be completed by 2020.

Air quality is being continuously monitored. McKeon described the PM<sub>10</sub> (dust) monitoring stations, e.g. on the south side of the property, and their function. Monitoring is also performed for personnel, visual dust (opacity), and weather data using stationary and hand-held monitors. Dust controls include use of water trucks, hand held hoses, vehicle washing on leaving the work area, low driving speed limits, obtaining dust control permits from Pinal County, and stopping work during high wind events. E-mail notifications are made to the community when wind speeds are high.

In monitoring exposure of personnel, 5 mg/cubic meter is the dust limit for exposure, but Resolution uses half that standard for worker protection. Equipment is also sampled on a random basis to limit worker exposure.

A CWG member asked if there are monitors offsite as well. McKeon said they haven't been installed specifically for this project, but there are several permanent monitors, for example, the West Met Station near Hewitt Station and particulate monitoring stations at the East and West Plants.

Planned dust control measures for the stack demolition include wrapping the stack in a geofabric and mesh and installing a soil cushion for the fall zone. There will also be water available from misters (Dust Boss) and water cannons. Wind speed and direction are of paramount importance in this task, as wind can't be too fast or too stagnant; west and northwest are the preferred directions for the wind to blow at the time of demolition.

CWG Members had the following questions and comments:

- Will the demolition be live-streamed?
  - No
- Will Main Street be shut down?
  - Yes
- Why the delay in demolition, which was initially planned for September?
  - Crew availability
- The target date is November 2, most likely in the late morning when the wind tends to shift to the north. There would be a few hours' notice, most likely, during the time to get the site ready. Resolution will try to post updates on social media.
- A CWG member observed that he's never seen the wind blowing straight south. Is that correct?
  - Yes, that's true, but Resolution wants to be completely safe and prepared.
- How will the bricks be cleared away?
  - They will be mixed with soil and hauled in trucks to the tailings site.
- Is some of the dust coming from facilities off site?
  - We think so, but we can't control what they do, although it might affect the data.
- Is the steel being recycled?
  - Yes
- Will the town set up a viewing area?
  - Resolution will be setting one up for workers and media, and a place for drones near the Lone Tree Gate.
- The Mayor noted that there had been discussions about a public viewing area with seating and shade, which would be handled by Resolution. She wants to make sure that people know what to do and where to go.
  - Kami Ballard said she thinks this is something Resolution has been working on; Hesston Klenk would have more details, but he is out of town at the moment. Staff will consult with him when he returns on the status of this effort.
- Are contaminants also monitored as well as dust? A CWG member noted that many of the air quality exceedances have occurred after work hours. If the components of the dust are analyzed it would help to determine where the dust is coming from, e.g. the site or the off-site desert.
  - We can do that, but right now it's only set up for particulates. Metals monitoring was done years ago, but the levels were so low that that hasn't been continued. This can be done again for stack demolition.

- A member noted that the Queen Valley station does monitor for metals in dust. Resolution will follow up with Kami Ballard on this.
- What is the dust in the settling ponds composed of?
  - Calcium carbonate, mainly
- Does the demolition site need to be completely covered with some type of fabric or mesh for the several months that it will take to clean the site?
  - Resolution thinks that contaminants in the dust itself are not a concern, as levels are so low.
  - A person who managed the San Manuel stack demolition said that this was not a problem. He also noted that if this is going to be publicly advertised, the town needs to be prepared for people to come, which they will certainly do; they had 10,000 visitors at San Manuel.

Ballard offered to do a fuller presentation on air quality at the future CWG meeting, which members thought would be helpful.

### **Presentation on BHP Soil Sampling Program in Superior**

Brent Musslewhite – BHP Closed Sites Manager

Steve Rutkowski – Haley and Aldrich

Jeff Parker - BHP

Brent Musslewhite told the group that his background is in environmental work, and he's been with BHP for about 15 years, in Arizona since 2014. He is responsible for BHP properties in Globe/Miami, San Manuel, other Arizona properties, and in Superior. BHP does not have any more active mining properties in Superior, but they are still involved in town endeavors and are a partner with Rio Tinto in Resolution Copper Mining, which is a non-operating joint venture.

He will talk about the current Superior Soil Study. This is a voluntary remediation effort. The initial work is designed to determine if more detailed study is needed in specific areas. Brent outlined the history of BHP's involvement in Superior. The company purchased Magma in 1996, which is how they came to Arizona. At that time, they became responsible for a voluntary remediation program through the State of Arizona Department of Environmental Quality (ADEQ). BHP divested the majority share of Magma to Rio Tinto in 2004. The Northwest Study Area remediation program was completed in 2012, established around a tailing release that had occurred in the past. To answer continuing questions about whether historic mining had contaminated areas surrounding the mine property, BHP undertook the Superior Soil Study in 2015 under the state's Voluntary Remediation Program.

Steve Rutkowski distributed copies of a communication survey to CWG members, asking them to complete them and pass them out to friends if desired; the survey asks how people would prefer to gain information about the soil study. Todd Pryor offered to put some of these at Town Hall as well. Rutkowski told the group that he is a chemical engineer with Haley and Aldrich. He showed a map of locations around town that have been sampled in the past since 1990. He reviewed the Northwest Study Area from 2004, which was undertaken because of a tailings release. The current conceptual site model of 2017 includes off-site areas in town that

could potentially be affected by contaminants. For the most part, this study will focus on readily-accessible property, e.g. owned by BHP, Pinal County. They also wanted to look at relatively undisturbed properties to see if aerial deposition in the top six inches of soil was still evident. This eliminated some Pinal County properties near Queen Creek, paved properties, and those too far away from historical activities. For this study the town of Superior was divided into regions: Northeast (9 properties), Central (4), and Southwest regions. BHP determined that the Central area was not subject to predominant wind directions, however.

The sampling protocol followed ADEQ's sampling criteria. Sampling was conducted for 18 metals. Each property was subdivided into at least 3 sample areas, with 10 samples taken from each sampling area from up to 6 inches deep. Discreet samples were blended together for each sampling area for analysis.

Initial study results showed that arsenic levels (mg/kg) were higher in the Northeast area than in the Southwest or Central areas. Arsenic is the primary metal of concern. In comparing results of this study with the previous Northwest Study (pre-remediation), arsenic levels are much lower for these areas of town.

CWG members asked:

- These results indicate what's there, but what's allowed?
  - Although none of the 22 properties are currently occupied, some are public property like parks. To be cautious, BHP looked at a hypothetical residential scenario for properties. The contamination results are within the cancer and non-cancer limits for residential use.
- Have you done sampling to eliminate naturally-occurring background levels?
  - No. This may be done later, but the purpose of this study was to evaluate existing levels of contamination overall.
- From a statistical standpoint, a member wondered whether the numbers of properties sampled were comparable, e.g. only 9 properties sampled on the Northeast area.
- Members were concerned about the design of this study, suggesting that the study area should have been expanded long ago, since it was clear that much of the contamination was not due to water released from the old tailings accident, but possibly because of air deposition, people using tailings as soil in their yards, etc. There was frustration that this was not done long ago, when the community asked for a comprehensive study. It was suggested that starting this all over now may make people upset all over again.
  - BHP noted that working with ADEQ has become much easier, timely, and more coordinated than in the past.
- Are you specifically looking for sites that we know used tailings as fill, e.g. the old fire station, the old dump?
  - That's a great suggestion. This is why communication with the community is important.
- Wouldn't blending the samples together reduce/water down the results?
  - We used ADEQ sampling procedures, which makes sense since people move around any site rather than remaining in a specific place; exposures are a function of how long you spend in any given place. If there are 'hot spots', measures will be taken to protect human health.

- What is the normal baseline level for natural arsenic?
  - We don't know yet. They are doing studies to identify areas/rocks that they would expect to have background arsenic.
- What direction did you get from BHP when you started these studies?
  - They were given free reign. There were no constraints imposed, and the message was to identify any problems and fix them.
- How would I find out if my property was remediated or is contaminated?
  - BHP can provide a map by parcel number of remediated properties and those where sampling was refused. This is public information, but they will try to provide it to the CWG in an easy-to-understand format.
- A visitor said he hoped that any issues identified will be dealt with in a speedy manner so people aren't left hanging trying to sell property.
- A visitor recommended that attics in houses be tested as well as doing soil sampling.
  - This was done for many properties. Biomonitoring of residents was also performed. Lead-based paint was discovered in many cases, but mining-related contamination was not an issue.
- How do people get exposed to arsenic? Eat it, absorbed through skin?
  - It's usually ingested, especially with children.

Observations from this study to date that have been used to develop the 2018 Conceptual Site Model for ADEQ are:

- Aerial deposition does not appear to be a significant transport mechanism.
- Historical flows of storm water may have reached limited areas east of Pinal Avenue.
- Study area boundaries will take into account sampling data and surface topography.
- Mountain-front areas likely represent naturally occurring background mineralization.

The work plan for the future will include a literature review, some confirmatory sampling, and refining the study area. For example, the highest levels are closest to the Northwest Study Area, i.e. northwest of Main Street.

Jeff Parker told the group that he has been with BHP for 27 years and has experience with Magma and in Superior. The work plan for the additional sampling will be submitted to ADEQ this month. The difference in this study is that BHP is letting the data dictate where sampling will take place; this will continue until they find areas where exposure stops. The main intent is to protect public health. They are reasonably sure that the smelter did not contaminate the whole town, but they need to identify how the materials got where they are and how they are going to deal with it.

There will be community meetings after the new work plan is approved. BHP will need permissions from property owners for some sites. Refer to the communication survey that was handed out as an example of how BHP will work with the community.

CWG members suggested that we are now "opening up Pandora's Box again". The Mayor asked how BHP is going to help the town in supporting economic development efforts and real estate transactions. She wondered what the ramifications might be for those properties that are not sampled and cleaned up. Parker does not believe there is a widespread problem; there may be

some specific areas near the Northwest Study Area that could require treatment, but he noted that this could even be due to naturally-occurring background levels. He assured the group the BHP is committed to doing this thoroughly and doing it the right way.

Pam Rabago suggested that a map be provided showing clearly the properties in the Northwest Study Area and their disposition. BHP said this is public information, and they will provide it. The Town Manager had suggestions for BHP to provide grant or financial assistance with completing U.S. Environmental Protection Agency (EPA) Phase II studies to people for free, for selected properties if requested. This would avoid the problem of people being left in limbo and not knowing what to do.

### **Update on Cultural Heritage Project**

Jim Schenck told the group that Resolution had committed on social media to funding a major project. Filomena clarified that the commitment is for the order-of-magnitude feasibility study, not for any specific project at this time. Members felt that this message should be made clear.

### **Subcommittee Updates**

The Recreation User Group (RUG) will be meeting next Wednesday in Town Hall to review discussions between Resolution and the Tonto National Forest about mitigation.

The Community Monitoring group reported that improvements have been made in sampling procedures, including a fence around the gallery well and a generator for the Castleberry well. A further suggestion is to use a step ladder for the truck tailgate, as it is hard to step up on.

### **Discussion of CWG Operating Policies**

Godec told the group that the CWG Operating Policy has been modified according to member recommendations at the last meeting. The revised policy is included in the group's packets. Main changes include removing the prohibition on elected representatives serving on the CWG and allowing membership at large rather than only from specific organizations.

### **Public Comments**

There were no additional public comments beyond those noted above.

### **Future Meeting Planning & Next Meeting**

The facilitators had prepared a suggested schedule of topics for CWG meetings over the next year, which was reviewed by the group. While generally in agreement with these ideas, the Mayor asked if the CWG would like to hear more about what the Town of Superior is doing and planning, so that work and expectations are better coordinated. Particularly in the area of socioeconomic effects, things are moving quickly and initiatives are beginning to plan for future

growth and impacts in the areas of housing, infrastructure, and economic development. This is separate from the cultural heritage project. She suggested November would be good a time to discuss this. She observed that the town has to deal with these issues on a business basis, and there are “limited ponds to jump into”. There are different funding options and different expectations that need to be managed. She wants to pull all the various pieces (and rumors) together into a realistic plan for discussion. She said the current administration is taking what hasn’t been done for 20 years and trying to condense it into six months because there are serious deadlines for some actions. This needs to be an open discussion, focusing on big needs rather than small or individual problems.

The CWG would like to hold this discussion, and thanked the Town for offering it. Godec will consult with Resolution to see if it will be possible to reschedule the tailings discussion to December.

The next meeting is scheduled for:

*Wednesday, **November 14**, 2018*  
*Superior Chamber of Commerce*  
*6:00pm*