RESOLUTION COPPER PROJECT AND LAND EXCHANGE EIS PUBLIC MEETING

Held at:

Queen Valley Recreation Hall

1478 East Queen Valley

Queen Valley, Arizona

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5:00 - 7:30 p.m. (MDT)

Comments taken by:

Alisa Smith, AZ CR 50712

MS. ROZELLE: So as I said at the beginning, we want to keep it informal. And so first we'd like to take questions, and then if you have comments, we could follow up with those, or if you want to slip into your comment, that's fine too.

But we've got two note-takers. Jill is going to take notes, and they're going to be projected up on the screen, so she's going to work at getting the questions for sure, because we want to make sure those get turned into the Web site eventually and add to the questions and answers that are there. She'll also take down the key issues that she's hearing.

Then we have Alisa over here who will be taking notes. And then if you want to make A formal comment tonight, the way to do that is to go into the kitchen area and visit with Charlotte who is our court reporter, and you can make a formal comment for the record tonight. There's all the ways there are to make comments as Mark said, but that's how we're going to sort of manage this tonight.

So with -- here's how I want to run the questions. I'm going to kind of take you section by section, and I would like about two or three folks

to come on up. A couple of seats up here I put the yellow paper on so you can sit down and wait. I just always like to have somebody on deck so we don't take time moving around too much.

If you aren't able to get up, just let us know, and Chris will bring the microphone to you, but we'd like to take your questions from the microphone.

So ask your question. Mark will either answer it or have the right person answer it. And I'll say, do you have a follow-up, and do that. And then we'll just go around the room until all the questions that people have asked for the first time get asked. If you have one and it's your second turn, that's fine too.

If you do want to slip into comments and make comments, let me know, because I would like for you to just keep it to about three minutes. And I've got a little sign here that says, you've got 30 seconds left and you're done. Okay. So, again, I want to kind of keep it loose and informal.

We are going to go for 45 to 60 minutes on questions, but we can go longer if you want to. We do want -- I hope you will want to take some time to talk to some of the individuals around, the

specialists, and look at the boards and that sort of thing.

All right. So just the first half over here, does anybody have questions starting over here? All right. Yes, sir. Those -- you two and I need one more to come on up. Does one more person have a question over here? All right. If you don't mind, come on up here and have a seat. Have a seat, and one of you can just go first.

AUDIENCE MEMBER: First of all, I want to give you credit for a good presentation here in regards to giving us an overview of the project.

My name is Jim Craig. I have property at 1097 North Sherwood Way here in Queen Valley. And, obviously, Neil and the gang, you've got a big task in front of you and a lot of challenges.

I just wrote down a few of my concerns that I have here. It talked about block mining, and I thought there's other types of mining available to you.

Can we -- do we have the opportunity to say -- and block mining is most environmentally -- has the most environmental impact on the property, and that's well known.

Is there another alternative to block

mining that we could throw to Resolution Copper and say, this is what we want you to do?

Granted, they have the right to do the block mining in that area, but also we have the right to look at it and say, we cannot accept the environmental impact and all the tailings that go into block mining because we're going to have a thousand foot hole in Superior, we're going to have 4,000 acres dump just -- just east of Queen Valley, and the air and the water quality are going to be a major concern for us.

MS. ROZELLE: So your question in that is, are alternatives to block mining going to be studied?

AUDIENCE MEMBER: That's right. And the next question -- I got to throw it out there, Mark, because it was -- you know, you said we have to -- approval of the proposed --

MS. ROZELLE: Let me just do that one, and that will be -- you're going to follow-up.

MR. NELSON: Yeah, thanks. It's nice to meet you in person. We've spoken on the phone a time or two. Nice to meet you in person.

AUDIENCE MEMBER: By the way, you probably spoke with my brother. He's in the back

here, so --

MR. NELSON: You're Jim?

AUDIENCE MEMBER: Yes, I'm Jim, and John is in the back.

MR. NELSON: I spoke with John, yes. Excuse me. Nice. Thank you.

We will look at alternatives to block caving in the Environmental Impact Statement. The NEPA process requires us to look at alternatives even if they're beyond our regulatory authority to require, so we will look at alternatives to block caving.

However, based on the National Defense Authorization Act, the Oak Flat parcel will become private property 60 days after the final EIS is published. And at that time, the Forest Service will no longer have any regulatory jurisdiction for mining activities on that parcel.

So we'll look at alternatives and, you know, if we can identify an alternative that would work and that would have reasonable economics, it's possible that we can work through negotiations with Resolution to -- to try and get them to voluntarily implement that. But we won't have any regulatory -- regulatory authority for the Oak Flat parcel at the

time mining would begin.

AUDIENCE MEMBER: Doesn't the NEPA purchase, though, require them to look at the most feasible mining process that would have the least economic or least environmental impact on the ground?

MR. NELSON: We will -- we will definitely look at that in the NEPA process, but remember that -- that one thing we talked about was that NEPA doesn't provide any authority in and of itself.

It's just law about -- about analysis and disclosure of the environmental effects of federal actions. And so the authority that we have to regulate mining activities only applies to Forest Service lands.

AUDIENCE MEMBER: Okay.

MS. ROZELLE: So, Jim, I know you had another question. I'm going to ask you if you will wait until we've gone all the way around again.

AUDIENCE MEMBER: Sure.

MS. ROZELLE: Thank you. Yes, sir.

AUDIENCE MEMBER: I know that my questions probably can't be answered at this meeting from the sounds of the way we started the meeting.

My big question is, is what kind of protections does the U.S. Forest Service give us in Queen Valley on this proposed project?

MS. ROZELLE: What kinds of protections?

AUDIENCE MEMBER: Yes.

MS. ROZELLE: Could you be a little more specific?

AUDIENCE MEMBER: Environmental protection.

MS. ROZELLE: Environmental protections.

MR. NELSON: Not specifically related to Queen Valley but an important aspect of -- of the Forest Service Mining Regulations -- it's 228.8. Our mining regs are 36 CFR 228.

At 228.8 are the requirements for environmental protection. And one of the things that that says is that mining operations must be conducted in compliance with all other environmental laws.

And so, for example, they -- they would have to comply with the Clean Air Act. They would have to comply with the Clean Water Act. They would have to comply with groundwater quality regulations,

which are state laws in Arizona.

So in order to be in compliance with the Forest Service mining regulations, they would have to comply with all those other environmental laws.

And so from an environmental perspective, there's really quite a large regulatory framework that we can apply to address things like dust blowing from the tailings, potential discharge of process water or other mining-affected waters from their proposed tailings facility.

AUDIENCE MEMBER: And so would that be after we find out during the process of mining, or is that something we can figure out before they start mining?

MR. NELSON: Our Environmental Impact Statement team, the 19 folks that Raul is leading, plus those folks on the ID teams, as well as our technical specialists on the SWCA team, we're going to work like crazy to assess those issues and try and make the best estimates, the best predictions that we can make in terms of, you know, likely environmental compliance of the mine.

But, you know, one thing that I certainly learned throughout my career and I think

that all of us are aware of is that you can't always predict everything.

And so there's several things that -- that are done to address that. Commonly for large scale mines, there's very robust environmental monitoring.

There would -- there would need to be air quality monitoring stations that would actually measure dust in the air to -- to monitor whether or not they were complying with the Clean Air Act.

There would be likely dozens and dozens of groundwater monitoring wells that would be set up and sampled regularly to detect groundwater contamination if it occurred.

In any event that some unforeseen environmental issue like that arises during the course of a mining project on Forest Service lands, then Neil has the authority to require them to go back, modify their proposed -- modify their plan of operations, make additional proposals, and then we would go through the NEPA process again to identify what changes had to be made.

AUDIENCE MEMBER: Am I done?

MS. ROZELLE: Yeah. Thank you. Thank you. But you can get another turn.

So while you're coming forward, a couple more questions on this side. Yeah. Why don't you come on up and one more in the back.

Sir, come on up, and then we'll keep working on this side, and maybe we'll go to this side next.

AUDIENCE MEMBER: I'm Bob Mickthall (phonetic), and I just moved here in the last six months or so. I have a residence here in town now.

And being new, I was not necessarily aware of what NEPA was. I know what EPA is. I know EPA in Alaska shuts down proposed mines if they want to. It's a federal land. The Forest Service is a federal land. It's all owned by us.

And all of a sudden we're going out and hiring a contractor to do all the environmental impact study and the government has -- from what I understand, you've got 19 Forest Service people on this right here doing an environmental impact study. We're hiring an outside contractor to do all this environmental impact study.

Where does the Forest Service get all the money to pay for it? And at the same time, you're going, look at how much economic stuff we're going to be getting in the area. What's that have

to do with the Forest Service? What's your mission statement? Is your mission statement to provide everybody jobs in the area or to regulate a mine or to take care of the forest or the saguaros or the hedgehogs? Just a question.

MR. NELSON: So I heard two questions. Let me tackle the first one, and I'll let Neil tackle the second one.

The first one was, who's paying for all this. The National Defense Authorization Act for 2015 is very clear in that Resolution Copper must pay for all costs associated with the Environmental Impact Statement.

So they're paying for all costs that -- you know, associated with this meeting tonight. They're paying -- they will pay for all -- all experts we need to engage, regardless of what the Forest Service chooses.

And the way that process works is all Resolution gets to do is pay the bills. They don't supervise. They don't direct those contractors. They have no say in what we study or who we use, and those contractors are all directed by the Forest Service.

And I think Neil would be the best

person to address your question about the mission of the Forest Service.

MR. BOSWORTH: So, yeah. The mission -- I mean, so the answer to your question was, yes. You know, I don't know if you want more explanation than that, but, yeah, our mission is all those things.

It is to look at the economic viability of the communities that we serve. It's all about the -- I mean, it is a Forest Service. It's all about the communities we serve and the people we serve, so it is looking at hedgehog cactus. It is looking at trails to make sure people can recreate on the National Forest, which is a big deal in the Phoenix area. It is. It's looking at -- actually, it's looking at mines, too. That's part of our mission. That's part of -- it's multiple use.

We do timber sales. We do -- we allow grazing to occur on National Forest. We are a working forest is the answer to that, but the whole purpose of this is to provide these forests for the people that use them and for the nation as a whole.

Now, I don't know -- your question -- you were talking about the mission, but I'm not sure if I'm capturing the essence of what you were

asking. Did I?

AUDIENCE MEMBER: I just didn't know if there was actually a mission statement for the Forest Service.

MR. BOSWORTH: I should have it memorized.

MS. ROZELLE: It's at the top of your Web site.

MR. BOSWORTH: This is what Tom does. He just shoves it in front of me on his phone.

The mission statement is to sustain the health, diversity, and productivity of the nation's forests and grasslands to meet the needs of present and future generations.

Now, don't tell my boss I couldn't memorize that.

MS. ROZELLE: Luckily, Tom had it on his phone.

All right. Thank you. Good. Thank you. Thank you.

Yes, sir, go ahead.

AUDIENCE MEMBER: My name is Mike Nigowski (phonetic), and I've got a twofold question. And, first of all, thank you for the introduction because it did answer a lot of things.

But on the NEPA process itself, is it the Forest Service's responsibility to educate the public as you get more and more information from Resolution?

Because we've got a lot of issues that we just talked about, and those issues will just continually be over and over until we get tired of hearing them, or are you going to educate as that comes and put out information so that we become a more informed audience when we come to these sort of things?

MS. ROZELLE: You mean as the studies and the analysis is happening?

AUDIENCE MEMBER: That's the first part.

MS. ROZELLE: Okay. Mark.

AUDIENCE MEMBER: Is that part of the NEPA process?

MS. ROZELLE: Would you like to address that?

MS. THOMAS: Can everybody hear me? I have a tendency to shout into microphones.

So I'm the NEPA coordinator, and when they developed the National Environmental Policy Act, one of the things that was important was for

the public disclosure piece.

Now, that can be just us throwing information at you. I mean, that's definitely one way to interpret that.

The other half of the National Environmental Policy Act was for Neil to get enough information to understand the issues, to understand the consequences and the effects, in order to make that informed decision.

And Neil is not -- no offense, boss, but Neil is not a mining expert, so I anticipate that a lot of the information that is provided through this process will be very educational and informative.

And working with SWCA and working through this process and working with Neil, as I have on this forest for four years, he takes -- he is -- it's very important for him for that disclosure, that transparency, and also that understanding.

So when Mark says, if you have a question, call me, when Mark says, we're taking your input and we're taking these questions and we're creating this information about, you know, questions asked, common questions and whatnot, we are taking

that seriously.

The one piece that kind of will fall to you as the public is, are we getting it right? So if we're providing the information, is it in a format that is useable? Is the information understandable from where you come from?

And so we're going to think we get it right, but we're going to have no idea if we do unless you communicate.

So one of the things about NEPA is it is kind of the structured process, but the biggest element of NEPA is that until Neil signs on the solid line for that decision, we will continue to take input from you. It's more meaningful at certain times, but we'll continue to have those conversations.

And so that is not just the essence of the rule, but it's also something that I can tell you, working with Neil on other projects, that he takes very seriously. And I don't know if you just want to nod and say, yes, Anne's right, or if you want to say more.

And did I address your questions?

AUDIENCE MEMBER: Somewhat.

MS. ROZELLE: You had a second part to

it.

AUDIENCE MEMBER: And the second part of the question is the reason for the first part, is tailings stands or tailings facilities strikes fear in the hearts of anyone that pays attention to mining, especially given the recent history internationally of what's going on with tailings dams and breaches.

So with that given -- that was the reason for my question -- are we going to get information to the public? I know you're going to be assessing and asking those very questions. You have the specialists that look at it.

Are we going to know about what kind of slurry is going to those dams, and is it a wet dam, or are you going to require dry tailings? Are you going to dry tailings? Are we going to decamp and put dry tails up so it has less chance of being the 600-kilometer spill that wipes out villages in Brazil and that sort of thing?

So to me that's the information that's good and they can put away some of the fears and some of the things that we hear in mining, so that was my question.

MR. NELSON: Yeah. Maybe I'll just

quickly address that one.

You're -- you're right on the money, I mean, with a lot of things we've thought about. We had several of our tailings experts here tonight, and, you know, what a disaster in Brazil. Unbelievable. Killed 19 people. What was that? Last November?

The year before there was a major tailings dam failure in Canada at Mount Polley. You don't have to go to Canada and Brazil. In the late '90s, there was a large tailings dam failure right on Tonto National Forest up in Pinto Creek.

And so we're going to be looking at that extremely closely, and as you mentioned, we'll be looking at other methods that could be used. And, you know, we look at it from the long-term outlook. 100 years from now, is that facility still going to be stable? And so those are really tough questions.

We're going to -- the standard approach in the NEPA process is we do public scoping. Then we study things, and then you do -- you release a draft, Environmental Impact Statement, and you allow the public to comment on the draft. And then you move forward and produce the final.

We're currently working on developing a plan that's going to provide for much more public involvement because we think it's important.

Throughout this year, we're really going to be focused on identifying issues. We'll -- towards the end of this year, we will prepare issues reports that summarize and discuss the issues. And then the next phase of the process is to look at alternatives.

And so one thing that we're working on now is developing some plans to potentially hold some public workshops or other types of meetings where we can, you know, inform you of what we found and what we're thinking and -- and give you a chance to provide further input.

So we're really working towards public involvement throughout the process.

AUDIENCE MEMBER: Thank you.

MS. ROZELLE: Yeah. Neil has something to add.

MR. BOSWORTH: To get to the education of the public component of your question, the way I view it is it goes both ways. So, you know, we have experts. We have tailings experts. We have minerals experts. We will provide information to

you on that.

The other piece, though, is we need to get information. We don't know everything. We don't know -- I mean, already we're getting -- we don't know what's important to the stakeholders regarding trails that they want, what's important for people regarding any other kind of value in the national forest.

And so it really is -- the NEPA process kind of forces us in a good way to get into a collaborative environment with stakeholders, with partners, with interested public, whoever. And it goes both ways, the information flow.

MS. ROZELLE: Thank you. All right. Yes, sir, and some questions on this side. Yes, sir, yes, sir. Yeah, we'll get there. Yeah. These two and you, and then we'll come back over.

Go ahead.

AUDIENCE MEMBER: My name is John Craig, and, you know, I've talked to you before, Mark.

You mentioned that one of the things that the Forest Service does is make sure that all these mining operations are abiding by federal and state laws.

There's a tailing impoundments specification. It's 2.5, 2.4 on liner specifications. Page 2-45 said tailing impoundments will be designed with a composite liner. In the Resolution's plan -- mining plan of operation, they specifically say that there is going to be no liner. So there's one -- just one instance where they're not going to go by the state laws on that.

And you say that, well, let's not speculate. Well, when sulfides are mixed with oxygen and water, acid rock drainage occurs. That's -- that's not an opinion, so you can't say that we shouldn't speculate on that because it happens. It's happened every time that sulfides are mixed with oxygens and water, and water runs downhill.

That tailing pile is going to be directly uphill from Queen Valley. We rely on between 1,000 and 1,500 gallons a minute coming through that dam to feed Queen Valley. It feeds our aquifers, it feeds our ponds, and everything else.

If that gets polluted, it would be a disaster for Queen Valley, and I'm not talking about all the pipelines that could rupture or anything like that. I'm just strictly talking about the

tailing pile and its location and the design of it.

It's -- it's so much bigger than -- you know, you talked about the Brazilian tailing pile breach. This would be a much, much bigger tailing pile than what was in Brazil.

So those are my questions. And -- and I don't know how Resolution Copper can say definitively that they are not going to pollute the water -- the surface water and the ground water of Queen Valley.

MS. ROZELLE: I think that was specifically about the liner -- a question about the liner.

MR. NELSON: Yeah. I appreciate your comments. You know, those are valid points.

One thing to consider is that their proposed general plan of operations is just a -- is just a proposal. And that's what we start with in the NEPA analysis.

And, you know, your concerns related to potential for groundwater contamination and whether or not groundwater contamination can be prevented without a liner, that's a really good example of an issue that, you know, we can take from this meeting and then develop an approach to analyze those

questions in the EIS.

You know, we're going to do an independent and unbiased analysis. We're going to analyze these ourselves and not rely on what Resolution has proposed as adequate.

And although Neil's authority is limited in a lot of cases, he has -- he has plenty of authority to affect the design of that facility. It could be a totally different type of facility. It could be totally lined. It could be double lined. There's a lot of different alternatives.

It could be in a different location. For example, there's a proposed mine up in Montana called Mount Moore, which they submitted their proposed plan of operations in 2004. It was just -- they just completed the NEPA process in January.

At that site, the Forest Service required the company to move the tailings to an entirely different location prior to approval of that plan of operation.

So, you know, keep in mind that they've just given us a proposal, and we're going to take a really hard look at that. And, ultimately, things -- things are likely to look very different than what has been proposed at this point.

AUDIENCE MEMBER: Right. And not just the possibility of pollution. The 12 square miles that it's covering, that's covering our watershed. That's where we get our water.

So lined or not lined, we're losing that, you see, and we lose that water. And one other point I would like to make --

MS. ROZELLE: Is this another question?

AUDIENCE MEMBER: This is another question.

I think that a public meeting may be -- over towards San Tan where they're going to have that facility would be important because I think those people would like to know about that this is going to come down their way.

MR. NELSON: Okay.

MS. ROZELLE: Thank you.

MR. NELSON: I appreciate that.

MS. ROZELLE: Would you like the microphone to be --

AUDIENCE MEMBER: That would be great.

MS. ROZELLE: All right. Go ahead.

AUDIENCE MEMBER: I'm Dolores Benjamin from Queen Valley, and I have a question that may be answered in the information we have already. I

don't know.

But the 4,000 acres that is going to be used for the tailings facility, which is going to affect us the most, I think, is not part of the land deal that's been passed by congress, as I understand it.

How is the -- and why -- is the Forest Service providing this land for the mining company?

MR. NELSON: That's a great question, and, you know, that -- that goes back to the days of Ulysses S. Grant and the 1872 mining law which was passed 25 years before the Organic Act, 25 years before anyone ever thought of the Forest Service.

What were they called in those days? Forest Preserves? Forest Reserves? The -- that 1872 mining law gave miners the right to go out on public lands and to locate mineral deposits and to mine them and to develop those -- those deposits into mines.

And when the Forest Reserves were first started in the very late 1800s, in our Organic Act, it provides for that continuing right of miners to use those lands.

And over the last century, the mining law has been amended in a lot of different ways and

modified and changed. But one of the things that remains is that those lands are open to these types of land uses associated with mining. And Neil does not have the regulatory jurisdiction to prohibit mining on those lands.

AUDIENCE MEMBER: That's not mining, though.

AUDIENCE MEMBER: That's not mining. I'm talking about just the facility for the tailings.

MR. NELSON: Right.

Those uses are what's called uses that are reasonably incident to --

MS. ROZELLE: That's the language in the --

MR. NELSON: -- extraction or processing of mining -- of reserves.

MS. ROZELLE: I think that Neil was going to add to your question.

MR. BOSWORTH: And you just expanded on the part. You were talking about mining. This is tailings. But they are associated and law and, you know, court rulings and everything shows that anything associated in practice with the mine is also considered part of that mine, and so we have to

allow it.

The other thing that, you know, Mark has mentioned a couple times is my authorities on mining. It's somewhat different than anything else. It's very unique.

When we do some kind of NEPA analysis, throughout my decision, I have no action alternative that says that, you know, I will choose not to do this, period. With mining, I really don't have that. That's like the one thing that I don't have, the alternative to say no.

I can just say, you're going to do it in a different way, and that's -- it's just different than anything else. You do a timber sale, I can actually say at the end of the day, no, we're not going to do it.

AUDIENCE MEMBER: This isn't really a question, but I'm going to throw this out anyway.

Have you considered an environmental part of earthquakes occurring in this kind of deep, deep mining and the way it's being handled like it's occurring right now in northern Oklahoma and southern Kansas because of the oil well fracking?

MS. ROZELLE: That's a comment, then, I guess.

MR. NELSON: Yeah, that's a great issue, and, no, I haven't thought about that, so I appreciate that. And we'll add that to our issues.

MS. ROZELLE: All right. Go ahead.

AUDIENCE MEMBER: Well, this prior gentleman just a moment ago actually covered quite a bit of what my concerns are. A lot of people in this room seem to be really concerned about the tailings.

My first question is you showed a slide earlier about the Benson Springs earlier. That seems to be a hydrostatically active area in a spring. Why would you -- why would that be chosen to put a tailings pond on, especially one that's unlined? That would seem like a highway to the aquifer for any sort of chemical to leak into it.

As a geologist, you would probably be best to discuss that or explain why that decision was made for Benson Springs.

MR. NELSON: I can't -- I can't explain why they made that decision because that -- you know, this is a proposal that Resolution developed and supported to the -- and provided to the Forest Service and requested that we approve. So I can't tell you why they proposed to build the tailings dam

right on Benson Spring.

It essentially -- their -- their tailing span would cover Benson Spring, but I can tell you as a geologist I had the exact same thought when I looked at those rocks out there and looked at the water movement in Benson Spring.

And, you know, that -- that's a really good observation that relates very much to the overall issue of, you know, what's the potential for that facility if constructed at that location to contaminate groundwater.

AUDIENCE MEMBER: One last quick thing, and then I'll leave you alone.

It was discussed the flotation process that separates the copper from essentially the tailings. I'm assuming that's not just straight water. I'm assuming there's some sort of chemical process that goes on.

MR. NELSON: Right.

AUDIENCE MEMBER: My question is, what are those chemicals? How much -- percentage of those chemicals will attach themselves to the tailings that will then get dumped on top of Benson Springs with no liner?

MR. NELSON: Yeah. They do add

different chemicals in the flotation process. I don't know the details to those questions, but that's something that we can definitely find an answer to, and we'll get that up on our Web site on the frequently asked questions.

AUDIENCE MEMBER: I think that would be greatly appreciated by everyone in this room.

MR. NELSON: Thank you.

MS. ROZELLE: All right. Good. Thank you.

Yes, sir. And then some questions from the back, so a couple people come on up. And there's some chairs up here. If some of you who have been standing would just like to sit down, please do.

Go ahead, sir.

AUDIENCE MEMBER: My name is Tim Stone. I'm a Queen Valley resident.

I was going to make a statement about snowball's chance and water is not the only thing that flows downhill, but I won't do that.

My question is kind of to the panel and probably Mark especially. How many mining proposals have you been subject to in your career?

You've hired outside consultants,

because I know this is all Forest Service. Have you ever come across any mining proposals of this magnitude, this size, and what percentage of mining proposals have been disallowed or modified?

MS. ROZELLE: Wait. You've got four questions there. Let's start with the first one.

So the first one is how many mining proposals has Mark worked on in his career. I think that was your first one?

AUDIENCE MEMBER: Yes.

MR. NELSON: Well, gosh. I've worked on probably 80 or 100 different mining projects over the years. Not all of them were proposed projects. I've worked on a lot of projects that were mining-related Superfund sites, mining cleanup projects.

I've probably worked on several dozen mining proposals. Some of the largest proposals are in copper mines. These -- these porphyry copper deposits are the largest type of metal mines that there are.

There's huge surface coalmines that are really the largest mines in the world, but if you look at metal mines, it's porphyry copper mines like -- like occur in Southeastern Arizona and

Southwestern New Mexico which are very large.

An example is a proposed copper flat mine in New Mexico, a proposed porphyry copper mine. One that I didn't -- I didn't personally work on, but Marty has worked on and the SWCA team and the Forest Service, of course, is Rosemont outside of Tucson, a very large proposed mine.

In terms of how many are -- are not approved, in my experience, the mines that are not successful in getting their permits don't really get to a point where government regulators just say no.

They kind of work so hard that they eventually tucker out, and they don't have any more money to continue investing in permits.

That copper flat mine in New Mexico is a great example. They opened initially in about 1980, and they mined for about three months, and then they shut down, and they removed the processing facility.

And then they -- they had to shut down because of low copper prices. They removed the processing facility, reclaimed the mine in the '90s. A company called Alta Gold took another run at getting the permits.

Metal prices were high for a period.

Metal prices declined. They couldn't raise any more money. They got tuckered out. It didn't go through. And in the last five or six years, another company called TMAC Resources has been taking a run at trying to permit the deposit. I don't know if they will ever get it permitted or not.

So that's usually the way that unsuccessful mine permits go. Although, you know, there have been a handful of mines that do get turned down from time to time.

And, you know, one thing I've seen in my career is there's certainly mines that should have been turned down when you look at some of the Superfund sites. And so we're learning a lot as the decades go on.

And over the course of my career, environmental laws have become much more stringent, which I think is a good thing. And the NEPA process is getting -- is getting better and more comprehensive. And all we can do is the best we can to -- to try and do the right thing on these types of projects.

MS. ROZELLE: Why don't you just pick one follow-up question, and if you still have some, come back.

AUDIENCE MEMBER: Perhaps you can just explain a little bit on the reasons that modifications have been made. Were they environment, or were they economic?

We hear a lot about the number of jobs that will be ancillary or directly related to this mine. I've never seen a list of those jobs, and I would really like to.

MR. NELSON: Yeah. Well, we -- the reasons that modifications are made is -- is to protect the environment. And specifically to -- as it's mentioned in our regulations, to protect surface resources of Forest Service lands.

So that's -- that's the reason that modifications are made. And, you know, I would think it's extremely unlikely that any mine has been approved in recent decades that hasn't required some modification to the initial proposal.

And that's going to be a big part of the work we do on the EIS is, you know, figure out what modifications may be necessary on this one.

MS. ROZELLE: Thank you. Yes, sir.

AUDIENCE MEMBER: I don't know whether this is a question or whatever. [indiscernible] expert on the tailings, you should be knowing what

kind of chemicals these companies use because all companies use the same type of chemicals in the flotation.

MR. NELSON: Right.

AUDIENCE MEMBER: Kennecott, ASARCO, they're all typical when you strike a copper -- you should know what kind, and I can tell you what kind. It's arsenic, lead, zinc.

And arsenic a long time -- I'm from Superior, Arizona. The last mine where the tailings was left there, we have 350 people who have died of cancer because -- related to the tailings.

People here in Queen Valley, wake up, because it's going to happen. These tailings, what you're saying here, when it dries, where do you think that dust is going to go?

It's not going to be damp all the time. No way you're going to have tailings that are damp all the time. When that section is dry, the dust is going to flow different directions. Even in the state park, it can go that far. It's only three miles. That wind blows all over in this area.

We have to -- we have -- you got to take a good look at this mine that we're trying to create. When I talked to the president of

Resolution, he said they were going to have three and a half million tons, three and a half million tons of contaminated waste. He didn't say contaminated waste, but it's going to be from the tailings.

They need to figure it out. If they're going to produce 1 billion tons, you can just imagine how much waste it's going to produce.

But what our concern is in Superior, and the next hearing is going to be, let these people here know that this tailings is going to seep through the ground, go into your water system. They've got water that does -- that has the contamination and has arsenic.

That's why people in Superior -- 200 people in that -- I mean 200 homes. In that area alone, there's -- 80 people have died of cancer -- fathers, brothers, sons, and all that.

You guys should take a good look at are we putting jobs ahead of lives? And that's what's going to happen in the future around here.

Resolution should be telling you what they're going to be doing. I've dealt with Resolution from 2005 when they first started. We had four different managers. Whenever they started

from 1,000 jobs to 3,700 jobs.

They buy out the politicians, you know, so they can get their way, and they give nothing to the schools in Superior.

But what they're saying is look at their -- what's happening before you approve something like that. And I'll be back. I'll be in Superior, give me more time over there.

But you people in Queen Valley, watch what you agree to.

MR. NELSON: Thank you very much.

AUDIENCE MEMBER: If you want, you can call me, and I'll tell you more stories on it.

MS. ROZELLE: All right.

Tom wanted to make a comment about something earlier.

MR. TORRES: Tom. Yeah. I just wanted to sort of -- there's been a couple of questions -- maybe three questions that reference the liner, the lack of a liner.

And I just wanted to say -- as I was saying, the liner issue came up a couple of times, and I just wanted to address that a little more fully.

The liner as proposed in the plan of

operations is just that, the proposal based on assumptions. Now, we're taking that at face value, but during our due diligence, as part of developing the EIS, we will validate the assumptions made where they say they do not need a liner.

Part of our due diligence is evaluating the information that's going to be collected as part of the baseline hydrological and geotechnical testing.

So when they actually get out there and drill the holes, dig the trenches, we'll have a much better handle on the rock units, the soils, the depths, the connection to the springs, et cetera, so that project is directly related to the need for or the assumption of the liner and also the engineering aspects of the tailings itself.

So I just wanted to address that a little bit more fully.

MS. ROZELLE: Come on up. A couple more questions. Back over here. You got any more over here? Over here? Yes, sir. You will be on deck next, and one more anywhere? All right. Go ahead.

AUDIENCE MEMBER: Yeah. My name is Tony. I got a question here. Here it says that a

copper concentration concentrate filtration plant and concentrate layout facility will be constructed of an already disturbed part of the land near Magma Junction.

I'm from Superior. So these disturbed lands means that they've already had tailings down there, and they've already been contaminated, period. And I know where they're talking about. Magma runs across the property on the west -- northwest side of Superior.

Now, you're redisturbing these lands, and the cancer rate is getting -- daily people are coming up with cancer. This is what has to be addressed because there's not just cancer. Breathing disorders. There's a lot of things. Babies -- you know, stillborns that I've heard of.

And just this type of contamination has got to be stopped. You just can't allow it. Because Superior is 68 percent Hispanic or whatever, you just can't allow anything to happen, you know, to the people and to the children's children and to the children that, you know, still need to be born, are going to be born. This is what I'm concerned about.

The other part -- one more question,

just the other part is about the jobs. Now, ASARCO -- Ray Mine, ASARCO, Hayden, the whole -- the whole kit and caboodle there, they've got 1,400 people working for them.

They've been destroying the land since 1892. 1,400 people. 1,200 are hourly; 200 are salary. Now, Resolution is saying that they've got 3,800 jobs. Where are they going to -- and this is a bigger operation than Resolution can -- will be according to this project alone. It can't be as big as ASARCO, but it will be, and it will do the destruction.

Even right now with the pollution and the contaminants they're putting into the air, they're redisturbing the grounds in Superior.

Thank you. My question is if you can do something about it.

MS. ROZELLE: Thank you. Yes, sir.

AUDIENCE MEMBER: My name is Larry Fromm. I'm a resident -- winter resident over in the Arizonian RV park on U.S. 60.

I ride an ATV-type vehicle, side-by-side unit. This tailing pile will be put right on top of some very choice trails out there. But that doesn't concern me near as much as the idea

that a huge tailing pile represents an environmental -- potential environmental hazard/disaster.

It occurred to me that the ideal properties -- and I don't claim to know all of them -- but certainly the ideal properties of a tailing pile would be somewhere where it isn't going to expand, burst a dam; and it isn't going to leech into the groundwater that people are going to drink; and it wouldn't have winds blowing all around it to blow the dust around and distribute it. In other words, a big hole in the ground that's really secure.

Can anybody think of a big hole in the ground around here? Well, there must be some pretty big hole in the ground like the Ray Mine out there. There must be some spots in that Ray Mine that negotiation could produce a favorable outcome.

By the way, one of the properties I didn't mention was the idea that it's away from urban areas.

So my question now, with that preface, has any thought been given to sites such as a hole in the ground out here?

MS. ROZELLE: Mark.

MR. NELSON: You know, one of our -- one of our goals in public scoping, along with identifying issues, is, you know, getting ideas for alternatives. And what you brought up is a great idea for an alternative that -- that we should be looking at with respect to tailings -- tailings disposal.

You know, my understanding is that at one point Resolution was looking at putting tailings in the Pinto Valley Pit near Globe. But after BHP sold that property, that -- that they moved away from that option.

So we have thought a little bit of that option, but -- but, you know, that's something that as we move forward and start developing alternatives that address the key issues and meet the purpose of the action, you know, that's a -- that's a great example of an idea for an alternative.

So, you know, thanks for mentioning that, and we'll make sure we note it and, you know, work more in the future to -- to investigate that.

AUDIENCE MEMBER: I have a second issue.

The -- the groundwater itself, both quality and quantity, are an issue. Now, the

Arizonian is I think probably about four miles north of the junction, with Florence Junction, I should say. And Queen Creek runs right across 60 probably about three miles away from us.

Our well over there is 800 feet deep, but not only quality of water but quantity of water could very well become an issue all around the area.

Some of the information contained here indicated there would be 30 more wells drilled along this corridor to carry the concentrate to a shipping site or dewatering/shipping site.

So my question is, in addition to water quality, is some thought being given to water quantity? And another companion question is, now that the well -- the shafts have been sunk down to 7,500 feet and they're dewatering at 7,500 feet, will Queen Creek actually flow again ever?

MR. NELSON: Those are great issues that we're going to have to study.

AUDIENCE MEMBER: I bet a dollar to a doughnut that our water supply is dependent on the aquifer that's recharged by Queen Creek.

And I think the people in -- I'm sorry -- Queen Valley people have a real concern about their water supply too, not only quality but

quantity.

MR. NELSON: Right.

AUDIENCE MEMBER: So if you haven't had that on the issue or burner for consideration, I certainly think it would deserve to be there.

MR. NELSON: Absolutely. Absolutely. Those are very valid concerns. Thank you.

MS. ROZELLE: Thank you. Yes, sir.

So anyone else with a question, come on up. You and straight back and over here and over here. Yeah, we'll get to you. I've got two more. Go ahead.

AUDIENCE MEMBER: I'm just going to add to the last.

AUDIENCE MEMBER: [inaudible] -- comment or question. He stated it as more of a comment, but he had a couple of questions that didn't -- that have not appeared on the question list.

Did you get those?

He had health concerns about disturbing the ground.

MR. NELSON: Disturbing the previously contaminated areas near Superior. Yeah, that's good.

MS. ROZELLE: Thank you. Thank you. And luckily we've also got Alisa over here taking notes, too, so thank you, though. Yes, sir.

AUDIENCE MEMBER: Just for the last comment about groundwater, groundwater is a -- you know, it's a declining resource. It's not only the amount of groundwater that's going to be required to process 50 million pounds of copper, but what about the groundwater that's going to be required to support the -- the influx of workers and the support mechanism that's going to be needed for the mine itself?

So in other words, if you've got 3,800 employees and each employee is now, you know, three or four individuals in that home, and supporting multiples of -- of service individuals for each of them, you're now talking about groundwater required for maybe a community of 30,000 people.

So it's not only the amount of water that's going to be used for the -- you know, that is going to be taken out of the aquifer for the 30 wells that they want to drill, but supporting all the additional people that are going to move into this community.

MR. NELSON: That's a great -- that's a

great comment, and that's something I hadn't thought about. That's what we call indirect effects; right? Right, Anne? That's a good comment. We'll get that noted.

AUDIENCE MEMBER: One quick comment.

MS. ROZELLE: Well, I would rather get these two. Please just stay there, and we will -- yes, sir. You had a question.

AUDIENCE MEMBER: I'm Roy Chavez. I'm a lifelong resident of Superior, former mayor, chairperson for Concerned Citizens and Retired Miners Association.

On that water issue, the other loss will be evaporation. In the time spent at the mine, our calculations are up at over half a billion gallons of water would be lost completely.

But my -- my question is in reference to the legislation that's being proposed at this time as we speak in regards to the Hoover Bill and the Bernie Sanders Bill.

If we're successful with that, what will that then mean to this process in determining that the bill that was violently passed in the method it was, getting turned around?

MR. BOSWORTH: So it depends. That's

the answer on that.

If that were to pass, then we would have a new law. With that, the devil's in the details. What's that law look like, you know?

I mean, as you know, Roy, the law we're working under has a ton of details that are complicated and difficult to implement.

And so if there was a complete repeal of it, then that would be -- that would be something -- you know, we'll implement whatever law is currently on the table.

And so right now I know that that's out there and that -- and there's lots of support for that, but right now we do have law that's been signed by the president that we are required by law to implement, and that's what we're going to do.

MS. ROZELLE: Yes, sir.

AUDIENCE MEMBER: Yeah. My name is Joe. I live here in Queen Valley, but I also used to work over for cementation on their construction part. And also on their truck.

Now, when I was working on cementation, before -- like about before they got all the way down to the bottom, like let's say about the last 400 foot or so, they hit a lot of water.

And when I say a lot of water, they had actual cement trucks filled with grout -- not concrete, grout -- to try to fill up the holes to stop the water, and they couldn't do it. I mean, it was like a river down there.

So why can't you get some kind of a chemical to put into it, drill a hole -- they have all kinds of holes out there -- and inject it and find out where that water actually goes.

If it does come down here to Queen Valley and if it does show that it's coming to Queen Valley, that means then whatever is going on over at that mine, eventually when it collapses, then you have all of that sulfuric acid and everything that's in it, it's eventually going to make its way over here.

You can find out ahead of time instead of waiting to the end. You can also do the same thing around your holes that you're drilling over here -- inject them and find out.

MR. NELSON: Joe, that's a really interesting idea. That's what hydrogeologists call tracer tests. And, you know, a lot of what they're looking for -- looking at for studying in the Oak Flat area is fracture flow aquifers.

So it's not like a sand where it's porous media, but it's discrete fractures and water flowing through discrete fractures, and it's very difficult to study fracture flow aquifer systems.

And one of the tolls that hydrogeologists use are tracer tests, and they will inject either a fluorescent dye or sometimes a salt, and then you can -- you can see if -- that's exactly what you're saying. See if that turns up and study how that moves.

And so right now we're at the issues phase, and the next phase, once we -- once we identify these issues, we're going to have to figure out how to -- how to solve -- how to study the issues, how to come up with the answers we need. And so that's a great suggestion that we'll have to think about.

AUDIENCE MEMBER: Every time they'd pour it, it was a 20 foot pour, and you would drop it and go down 20 foot.

When we hit the water over there, you couldn't do it, and they tried to stop it for months, and they couldn't do it.

So they have to go back and pour -- I think it was either 4 or 5 foot at a time because

there was no way you could stop it. They actually had to go back and just pour the whole bottom solid and then continue again.

MR. NELSON: Yeah.

AUDIENCE MEMBER: So, you know, you got a big 'ole river down there that you're going to be hitting. The water is moving constant.

MR. NELSON: With water moving through this fracture flow system.

AUDIENCE MEMBER: And it's moving very, very fast. If it moves that fast, I'm sure you could put a tracer, like you said, on it, and you could probably find out in about a week if it's going to come down here or not.

MR. NELSON: That's interesting. Thank you.

MS. ROZELLE: Thank you. Thank you. Before the final comment here, any other questions?

All right. Yes, ma'am. Come on in. You can go and give your comments to Charlotte at any time if you want to. We're getting towards the end, I think, but go right ahead.

AUDIENCE MEMBER: Okay. Is anybody familiar with the Eisenhower protected area at Oak Flat? Why is that not still in effect and protect

that from this mining venture?

MR. BOSWORTH: So the withdrawal, so when we talk about a mining withdrawal, it -- we actually have a lot of variance withdrawal from mining, that you cannot mine, you know, so a mining company can pick a lot of places on initial plans, as Mark had mentioned earlier, and just say -- based on the mining law, say, hey, we're going to build a mine here. Okay. Go nuts.

There are -- we have withdrawn areas and a lot of them are on sacred areas. A lot of them are on our recreation sites. Oak Flat is a good example of that. It was withdrawn -- I don't know how many years ago. Several years ago. Seventy years ago. And so it was administratively withdrawn.

They -- the act that was passed recently will change that. It will -- it makes that withdrawal area no longer a withdrawn area. It treats it -- but I guess it's no longer withdrawn. It's available to be mined. That's what the act does.

So did I answer that question?

MS. ROZELLE: I think so. Thank you. Thank you.

So did you have a question?

AUDIENCE MEMBER: Okay.

She said for me to interpret this portion. She said her name is Gladys Hemplen (phonetic), and she's a member of the San Carlos Apache tribe, and she's an elder, and she said she's quite concerned about the water aquifer at Oak Flat. She's concerned about the water that will contaminate the aquan (phonetic) that is used for traditional purposes, that the aquan sought there will be contaminated, and they will no longer be able to use it for the ceremonies that they have.

She said that for this portion she would like to say that she -- when she was a little girl, she had a coming of age puberty right ceremony, and those ceremonies are continued to be held there at Oak Flat.

And if there is a big block cave mining that will be set there, there will be a subsidence, and that will ultimately destroy their cultural property that is sacred to her and the way she was taught all her life.

And she said for her final comment she would like to remind everyone that the Apaches roamed all over the state of Arizona and New Mexico

until they were all removed from that area.

But that's the ancestral Apache land, and that there are burial sites there. And that in a way, the Apache believe that once the deceased are buried, that they are supposed to remain there, and they are not to be bothered or touched in any way.

If they are tampered with, the spirits will come back and haunt those who are tampering with it, and she would like for you to show respect for them.

Thank you.

MS. ROZELLE: Thank you. Yes, sir.

AUDIENCE MEMBER: I just had a couple quick questions. I'm Roger Featherstone. I'm director of the Arizona Mine Reform Coalition.

I want to focus a little bit on the longevity of water problems that this would create. I know, Mark, you and I have talked a little bit about the cone of depression that would be caused by the drawdown of the continued dewatering of the Oak Flat area. And I'm wondering if you have any indications yet as to the span of time it would take for that equilibrium to come back. Are we talking half a millennia? You know, what are we talking there?

And then along those lines, at the tailings facility, the model is based right now on catch dams, catch basins basically at the tall of the tailings dam.

And those would -- would presumably collect the water, pump it back up. And, again, what's the time span there? A couple hundred years of what -- and what kind of -- of potential do we have as owners of the land to make sure that we're not going to be responsible to clean up after them once they're long gone?

MR. NELSON: Yeah. Those are great questions.

You know, the first question relates to the underground mine. The mine is going to be very deep, 5- to 7,000 feet deep. And when they dewater that underground mine, they're going to create what's called a cone of depression.

Here's the surface, and here's the 5,000 feet. You have a cone of depression that's dewatered and dry.

And after mining stops and they stop dewatering, that cone of depression is going to slowly dissipate, and the groundwater table will go back to some eventual equilibrium level.

And those are -- those are really tough questions that absolutely need to be addressed in the EIS and that we don't have time to -- or we don't have the knowledge to try to address now. But we're going to have to find answers.

The other related to seepage from the tailings, how long would that last? It's another great issue and, you know, we'll get those issues noted and try and figure that out in the coming years.

MS. ROZELLE: Okay. Thank you.

AUDIENCE MEMBER: Mine is really easy. We got a couple people here from Superior.

I took the mine tour, and at the mine tour, I asked specifically where Superior gets their water. Do they get it from the water wells around Superior? No.

Even though supposedly it's not contaminated, all Superior's drinking water comes from Arizona Power. Not SRP but the other Arizona Water & Power. Not from the wells around Superior.

And the Superior gentleman can probably attest to that, but I just thought that was kind of curious, yeah, the wells aren't contaminated, but they're not using them.

MS. ROZELLE: Okay. All right.

AUDIENCE MEMBER: Our drinking water comes -- just across the road comes from -- there's pumps along the railroad tracks, the same rail that had the pipeline that's taking and dewatering into the Queen Creek area. There's an indigent pipeline running through there that pumps water into the town of Superior.

MS. ROZELLE: Okay.

AUDIENCE MEMBER: And it's dispensed by Arizona Water Company.

MS. ROZELLE: Thanks, Roy. All right. Thank you.

Yes.

AUDIENCE MEMBER: I just got another quick question for you. Since the land exchange has gone through, the Oak Flat area has been put on the National Historic Registry.

Now, how is that going to change this process?

MS. ROZELLE: Is that Mark or Neil?

MR. BOSWORTH: So the purpose of that is to raise awareness of the cultural sensitivity, the cultural importance of an area. That's why we worked with the National Park Service to get it on

that.

The answer to that is that we'll -- as part of the analysis and part of the requirements that I feel are, you know, the legal and ethical requirements that we have for consultation with tribes that kind of gives us a basis to kind of work off of, that we know that this is a traditional cultural property, what it is, but it doesn't necessarily alter a project.

That finding -- that registry notice does not have any kind of legal binding to this project, so the project can still go forward. In fact, you know, it pretty much says that you can even destroy a project.

What it does is it helps give us a starting point working with a tribe or several tribes to talk about why this is a traditional -- why this is a traditional cultural property and why it is important to them.

AUDIENCE MEMBER: It's all lip service.

MS. ROZELLE: All right. So please stay and visit with any of the folks around the room, the resource folks around the room, the Forest Service.

If you would like to make a formal

comment for the record, you can see Charlotte in here, and there's other ways to comment. I think you probably got a comment form.

Thank you very much, and we will be in Superior Monday night, Globe Tuesday, and Gilbert Wednesday.

(Concluded at 7:30 p.m.)