1	PUBLIC HEARING
2	LITTLE ROCK MINE PUBLIC HEARING
3	NEW MEXICO ENERGY, MINERALS AND
4	NATURAL RESOURCES DEPARTMENT
5	
6	WEB CONFERENCING
7	JUNE 3, 2021
8	5:05 P.M.
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000	02
1	APPEARANCES
2	Hearing Officer presiding: Ms. Felicia Orth.

3 ALSO PRESENT: 4 David Ohori, MMD Mandy Lilla, FMI 5 Dana David, Esq. Dal Moellenberg, Esq. 6 John Daws, EMNRD Kevin Myers, EMNRD 7 Tom Shelley, FMI John Ayarbe, FMI 8 Lee Nix, FMI Tom Meuzelaar, FMI 9 Morgan Warren, FMI Watt Niccoli, FMI 10 Jim Kuipers - GRIP Allyson Siwik, GRIP 11 Holland Shepherd Johannes Lencer 12 13 REQUESTS FROM THE PUBLIC AND OTHER AGENCIES TO MMD TO ATTEND HEARING: 14 15 Sandy Shelley Matthew Armijo, FMI 16 Seth Traeger, FMI Kim Kindle, FMI 17 Angela Roach, FMI David Brence, FMI 18 Gail Humphrey

J. Raffizan

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19 R.J. Parry
  Erich Bower, FMI
20 Ronald Gerdes, FMI
  Sharon Grande, FMI
21 Brooke Scarsella, FMI
  Danny Benavidez, FMI
22 Zachary Maughan, FMI
  Carlton Thompson FMI
23 Arthur Ratcliffe
  John Indall, Esq.
24 Laura Phelps, FMI
  Jene Moseley
25 Rebecca Summer
0003
1 REQUESTS FROM THE PUBLIC AND OTHER AGENCIES TO MMD TO
  ATTEND HEARING CONTINUED:
2
3 Glenn Griffin
  Carol Sassaman
4 Richard Martin
  Jenna Padilla, USFS
5 Beth Ihle, USFS
  Matthew Schultz, USFS
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0004
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         (Hearing commenced at 5:05 p.m.)
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           HEARING OFFICER ORTH: Good evening. My
3 name is Felicia Orth. I'm here on behalf of the
4 Mining & Minerals Division of the Energy, Minerals and
5 Natural Resources Department to serve as a hearing
6 officer in order to take and compile public comment on
7 the permit revision application by Freeport McMoRan
8 Tyrone for the Little Rock mining operation, which is an
9 existing operation. The application is for a revision
10 for expansion and then updated closeout plan. You may
11 hear this application referred to by its permit revision
12 number 20-1.
13
           If you'd like to look at the documents
14 related to this permit revision application, please go
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- 15 to EMNRD web page, and in particular the MMD, Mining &
- 16 Minerals Division, web page of the EMNRD website and
- 17 follow the links for existing operation permit
- 18 applications. The specific link for this permit
- 19 revision application can be found in the chat. If you'd
- 20 like to see the chat button, it's in the lower
- 21 right-hand side of your computer screen if you have
- 22 joined us on a computer.
- The hearing is being conducted in
- 24 accordance with 19.10.9.905 of the New Mexico
- 25 Administrative Code. The key provisions are as follows:

- 1 This is not an adjudicatory hearing, it is an
- 2 opportunity for Freeport to show the public its
- 3 application, for the public to give comment, for
- 4 division staff to set up the permit revision process.
- 5 You may notice some lawyers among us, but
- 6 the rules of civil procedure and the rules of evidence
- 7 do not apply.
- 8 Any interested person may testify, and all
- 9 testimony is taken under oath or affirmation. I will
- 10 invite your comment only once, so please collect your
- 11 thoughts before you begin. If you wish to add something
- 12 to verbal comment you've made, please set out your
- 13 additional thoughts in writing.
- 14 And I'll say now and I'll repeat
- 15 throughout the hearing and at the end, that written
- 16 public comment may be submitted by snail mail to EMNRD
- 17 on the address in Santa Fe that you see on the notice of

- 18 public hearing. It may also be sent via email to
- 19 emnrd.nmd2@state.nm.us. And the deadline for submitting
- 20 written public comment on this matter is 5 p.m.
- 21 June 17th.
- 22 Please know that the chat -- other than
- 23 setting out the link for this hearing on a virtual
- 24 platform, the chat is really intended only to provide a
- 25 method of communication between the technical hosts for 0006
- 1 MMD staff and participants. Nothing in the chat will be
- 2 preserved, so please don't think of it as another way of
- 3 making public comment.
- 4 Speaking of which, this proceeding is
- 5 being transcribed by Belen Soto, a certified court
- 6 reporter, and her transcript will be the only official
- 7 record of this proceeding. There may or may not be
- 8 folks making recordings of this virtual proceeding, but
- 9 none of those recordings represent the official record
- 10 in this matter, it's the transcript. Which of course
- 11 makes it all that much more important that we all keep
- 12 our voice up, that we speak clearly and that in the
- 13 event there are any technical glitches or anything else
- 14 that makes it difficult to hear someone, we will be
- 15 asking you to repeat what you've said so that we can
- 16 capture it on the transcript. And, of course, Ms. Soto
- 17 has been invited to speak up in the event she is having
- 18 trouble hearing someone.
- 19 Beyond just trying to assure the public
- 20 comment is taken in an orderly fashion this evening, my

- 21 only role is to prepare a summary report of the public
- 22 comments for the director of the Mining & Minerals
- 23 Division, which I will do shortly after the transcript
- 24 is finalized. That report does not include decisions or
- 25 recommendations from me as to the outcome. That's one 0007
- 1 way in which this hearing may differ from other hearings
- 2 that you're familiar with, obviously no decisions are
- 3 made this evening or this week.
- 4 We'll hear first from Mining & Minerals
- 5 Division staff about the permitting process. We'll hear
- 6 next from Freeport McMoRan Tyrone. And we will hear,
- 7 then, from GRIP. And then I will invite any public
- 8 comment there is to be given following GRIP's comments.
- 9 Let's see here. If the folks making
- 10 presentations this evening would introduce themselves
- 11 please. I saw David Ohori there briefly. Mr. Ohori, if
- 12 you would introduce yourself, please.
- 13 MR. OHORI: Yes. Thank you, madam hearing
- 14 officer.
- My name is David Ohori, and I am a permit
- 16 lead with the New Mexico Mining & Minerals Division.
- 17 I'm the -- presently the permit lead for the Little Rock
- 18 Mine and the neighboring Tyrone Mine, as well as a
- 19 number of other mines in the state.
- 20 Just briefly, I'm -- I've been with MMD
- 21 Mining & Minerals Division for about 19 years, and
- 22 during most of that time I have been the permit lead for
- 23 Little Rock and Tyrone. I'll have a short presentation

- 24 about the permitting process that we have engaged in and
- 25 are currently working on for Little Rock. Thank you.

- 1 HEARING OFFICER ORTH: Thank you very
- 2 much, Mr. Ohori.
- We have two technical hosts this evening,
- 4 Kevin Myers from MMD and also John Daws. You may be in
- 5 communication with them through chat or you may hear
- 6 them speaking in the event we have any glitches.
- 7 Mr. Moellenberg, are you here on behalf of
- 8 Freeport?
- 9 MR. MOELLENBERG: Thank you madam hearing
- 10 officer. This is Dal Moellenberg with the law firm of
- 11 Gallagher & Kennedy in Santa Fe for the applicant. And
- 12 I will not be doing much of, or any really, of the
- 13 presenting today on behalf of Freeport_-McMoRan, that
- 14 will be done by the technical team. But thank you for
- 15 having us and thank you for running the meeting tonight.
- 16 HEARING OFFICER ORTH: All right. Thank
- 17 you.
- 18 And Ms. Siwik, I saw -- there you are.
- 19 MS. SIWIK: Yes. Good afternoon. I'm
- 20 Allyson Siwik. I'm Executive Director of Gila Resources
- 21 Information Project. And thank you for putting the
- 22 hearing together today. And Jim Kuipers and I will be
- 23 making remarks today on behalf of Gila Resources
- 24 Information Project. Thank you.
- 25 HEARING OFFICER ORTH: Thank you very

- 1 much.
- 2 And I understand we have another call-in
- 3 user. So because we don't have to interrupt anything
- 4 just this moment, who is call-in user number 8, please?
- 5 Call-in user number 8, this is Felicia Orth.
- 6 Oh, they dropped off.
- 7 MR. JOHN DAWS: Looks like they dropped.
- 8 HEARING OFFICER ORTH: All right. Thank
- 9 you for that. When we get to public comment, if we have
- 10 any more call-in users we will ascertain who they are.
- So, if there is nothing we need to take up
- 12 before Mr. Ohori's presentation, let's begin.
- 13 Mr. Ohori, if you would raise your right
- 14 hand please.
- Do you swear or affirm that the testimony
- 16 you're about to give will be the truth, the whole truth
- 17 and nothing but the truth?
- 18 MR. OHORI: I do.
- 19 (Mr. David Ohori sworn in.)
- 20 HEARING OFFICER ORTH: Thank you very
- 21 much. Please proceed.
- 22 MR. OHORI: Thank you.
- 23 Again, my name is David Ohori. I'm the
- 24 permit lead for the Little Rock Mine with the New Mexico
- 25 Mining & Minerals Division. I hope everyone can see my 0010
- 1 PowerPoint presentation.
- 2 Okay. This hearing is regarding the
- 3 Permit Revision 20-1, application from the Freeport

- 4 McMoRan Tyrone operations, the operator of the Little
- 5 Rock Mine as well as the neighboring Tyrone Mine.
- 6 And, again, I introduced myself briefly
- 7 before, but I've been with the Mining Act Program for a
- 8 number of years and have covered the Little Rock Mine
- 9 during that time.
- 10 First, I'd just like to, briefly, go over
- 11 the purpose of this public hearing. As you see listed
- 12 here, not exactly in the order we're going tonight, but
- 13 I am describing and -- the process to review the Little
- 14 Rock Mine expansion and updated closeout plan
- 15 application in accordance with the New Mexico Mining Act
- 16 Rules. And as our hearing officer stated, Freeport
- 17 McMoRan Tyrone folks will be doing a presentation of the
- 18 mine expansion and updated closeout plan. And as far as
- 19 I know, the Gila Resources Information Project will be
- 20 either commenting or presenting tonight as well. And
- 21 then once the three presentations have been made, as
- 22 Ms. Orth has indicated, the public will be invited to
- 23 ask questions and comment.
- 24 The New Mexico Mining Act Rules, which
- 25 were promulgated as required by the New Mexico Mining

- 1 Act back in the early 1990s, provides for various
- 2 categories of mining operations in New Mexico. And
- 3 we're talking hard rock mines, not coal or oil and gas
- 4 which have their own sets of rules and regulations. The
- 5 Little Rock Mine is regulated under the New Mexico
- 6 Mining Act as an existing mine under Part 5 of the

- 7 Mining Act Rules. And just, briefly, the definition of
- 8 an existing mine, in part, would be: (Reading)
- 9 Mines that produce marketable minerals for
- 10 a total of at least two years between
- 11 January 1st, 1970 and June 18th, 1993.
- 12 Of course mines have been permitted --
- 13 mining operations are being permitted as we speak and
- 14 have been since 1994. And, again, Little Rock is
- 15 permitted currently as an existing mine under the Mining
- 16 Act Rules.
- 17 We process changes to mine permits as
- 18 typically either a revision or a modification, that
- 19 would be for Part 5 mines, in addition to other
- 20 operations. The way we decide which type of process we
- 21 use, either revision or modification, depends on a
- 22 number of factors. As you can see in the first bullet:
- 23 (Reading)
- 24 Significant environmental impact.
- 25 Significant increase to the financial

- 1 assurance, or FA, as we call it. And/or
- 2 significant departure from the nature or
- 3 scale of the original permit, or the
- 4 current permit.
- 5 Revision applications must include proof
- 6 of public notice, of course, a permit application fee
- 7 and additional information as requested by MMD. And it
- 8 also must include a reclamation plan and FA cost
- 9 estimates, if those are required. And it does provide

- 10 the opportunity for a public hearing of which we're
- 11 having tonight.
- 12 I just quickly want to go over some of the
- 13 significant permit revisions that -- or permitting
- 14 actions that MMD has processed over the years for the
- 15 Little Rock Mine.
- 16 Starting at the top, the permit GR⊕007RE
- 17 for Little Rock was approved in December of 1998.
- 18 Revision 97-1 incorporated a closeout plan
- 19 to the permit and financial assurance, and that was
- 20 approved in December of 2000.
- 21 Third, Revision 02-2, which approved
- 22 standby status for the mine, for Little Rock, was
- 23 approved in November of 2004.
- Then in 2010, December, the permit was
- 25 revised under Revision 10-1 to return to operating

- 1 status, again, for the Little Rock Mine.
- 2 And then Revision 14-1 for an expansion of
- 3 the permit area and design area limit was approved in
- 4 March 2016.
- 5 The other category of permitting actions
- 6 that MMD typically does for this type of mine are
- 7 modifications, and there have been a number of
- 8 modifications that we have processed and approved over
- 9 the years, since 2001. They include partial financial
- 10 assurance releases for reclamation that hasve been
- 11 completed at the mine; minor changes to the reclamation
- 12 requirements, in this case the addition of the USNR test

- 13 plot program for Little Rock; and then changes to
- 14 financial assurance instruments. Those are just some of
- 15 the permit modifications that we have approved over the
- 16 years.
- 17 This is a photo of Little Rock Mine open
- 18 pit looking west from the Tyrone Mine overlook. The
- 19 mine, of course, has expanded quite a bit since the
- 20 original permit, and the photo here shows pretty much
- 21 the expansion that was approved under the previous
- 22 approval of Revision 14-1.
- 23 This next photo is just another photo of
- 24 the Little Rock open pit, this time looking east from
- 25 the crest of the open pit. You can't quite see it, but 0014
- 1 in the background are some of the stockpiles for the
- 2 Tyrone Mine on the horizon in the right center of the
- 3 photo.
- 4 And this photo was taken, again, near the
- 5 open pit crest at the copper leach stockpile.
- 6 Heading on to the application for
- 7 Revision 20-1, this application was submitted by
- 8 Freeport to MMD in June 2020. The application includes
- 9 a proposed mine expansion as well as an updated closure
- 10 closeout plan, which is abbreviated CCP.
- 11 This is a plan view drawing looking at the
- 12 proposed expansion of the Little Rock Mine. It may be
- 13 difficult to see quite clearly because the writing's
- 14 kind of small, but the magenta or purple outline is the
- 15 current mine approved permit boundary and design limit

- 16 for the open pit and stockpiles. The red dashed line
- 17 represents the expansion area that the Little Rock Mine
- 18 operator, Freeport, has proposed for that mine.
- 19 Just for your reference the blue line,
- 20 which runs kind of from the upper to lower right of the
- 21 drawing, is the permit boundary between the Tyrone Mine
- 22 and the Little Rock Mine. So, the Tyrone Mine is to the
- 23 east or to the right in this drawing.
- 24 The open pit, which I showed you some
- 25 photos of, is very much in the center of this drawing.

- 1 And if you can read them, there are some in-pit and
- 2 out-of-pit stockpiles which are either existing or being
- 3 proposed as new stockpiles in this application.
- 4 I might add that FMI will present details
- 5 of the proposed mine expansion and the updated CCP in
- 6 their presentation, so I just briefly gave you a few
- 7 facts about the application.
- 8 In the processing over the last year of
- 9 this application, MMD has provided comments, and also
- 10 solicited and provided comments from other state
- 11 agencies, to Tyrone on the updated CCP and the expansion
- 12 application. Report Freeport has responded to the comments with
- 13 additional submittals, and the information is currently
- 14 posted on our website, as much as we possibly could, in
- 15 terms of the application, state agency comments and then
- 16 FMI responses.
- 17 Just briefly I'd like to talk about what
- 18 the Mining & Minerals Division reclamation standards

- 19 require. First off, as a permitted mine, Section 507 of
- 20 the Mining Act Rules requires that the closeout plan
- 21 specify incremental reclamation work to be done within
- 22 specific time frames.
- 23 Two very important aspects of the
- 24 reclamation standards are the self-sustaining ecosystem
- 25 or SSE. That is the goal of reclamation. It is

- 1 required to be site specific and life zone appropriate.
- 2 There is a requirement of a 12-year time period after
- 3 seeding with the required seeding mix at reclamation for
- 4 vegetation reestablishment.
- 5 And the other important aspect is the
- 6 post-mining land use, or PMLU, which is a beneficial or
- 7 multiple use established in the permit area after
- 8 mining. The PMLU is generally selected by the
- 9 landowner, in this case it's Freeport, and approved by
- 10 MMD. And the approved PMLU for the Little Rock Mine is
- 11 wildlife habitat.
- 12 Continuing on the reclamation standards
- 13 there is another section, Part 508 of the Mining Act
- 14 Rules, that requires that new previously undisturbed
- 15 areas have additional more stringent or more
- 16 comprehensive reclamation requirements. Since these
- 17 areas had not been previously disturbed, there's a
- 18 higher bar set as far as the requirements for
- 19 reclamation. There are parts of the Little Rock Mine
- 20 which are being proposed that have not been disturbed
- 21 yet, and, therefore, these new unit standards will apply

- 22 to those areas.
- 23 Another aspect of the Part 5 existing mine
- 24 regulations are waivers for pits and waste units. Just
- 25 briefly, it waives the requirement to achieve the SSE or
- 0017
- 1 PMLU. There is a demonstration required of technical
- 2 infeasibility, economic infeasibility and/or
- 3 environmental unsoundness. The Little Rock Mine does
- 4 not currently have a waiver for any of the pit or waste
- 5 units, and the application that we're processing does
- 6 not request a permit waiver.
- 7 I just like to contrast that with the
- 8 Tyrone Mine which does have a waiver for reclamation of
- 9 the open pit in some of the -- most of the open pits and
- 10 some of the stockpiles that generally drain towards the
- 11 open pit.
- 12 Some of the reclamation that has been
- 13 performed at the Little Rock Mine includes the copper
- 14 leach stockpile and former precipitation plant area,
- 15 which another mining company had disturbed in that area
- 16 in the past, I think in the 1970s to 1980s. Other
- 17 disturbances that have been reclaimed are the small
- 18 north and west canyon stockpiles, historic exploration
- 19 drill holes and some access roads outside the open pit
- 20 area.
- 21 The current proposal by Freeport in
- 22 Revision 20-1 is to remove the vegetated cover of the
- 23 reclaimed copper leach stockpile area, excavate and haul
- 24 the underlying copper bearing materials to the Tyrone

- 25 mine for processing. This area is then proposed to be 0018
- 1 the location of the CLW waste stockpile that the mine
- 2 would be placing there in the future. This stockpile
- 3 would have -- also have reclamation requirements.
- 4 Moving on to the financial assurance in
- 5 place. Basically, the FA is based on the cost estimate
- 6 for a third-party contractor to complete the reclamation
- 7 or the closeout plan in case of forfeiture by the mine
- 8 operator. This, again, is governed by the New Mexico
- 9 Mining Act Rules.
- 10 The current FA approved for the Little
- 11 Rock Mine today is almost \$3 million, that is jointly
- 12 held with the New Mexico Environment Department. The
- 13 current FA instruments are two surety bonds. And,
- 14 lastly, the proposed FA under Revision 20-1 is almost
- 15 \$8 million. And this, again, will be jointly held with
- 16 the New Mexico Environment Department.
- 17 Where we are in the process, we are
- 18 nearing completion of the review of Revision 20-1
- 19 application. Today's public hearing was requested by
- 20 the Gila Resources Information Project, as well as
- 21 others. And our requirement, as I mentioned towards the
- 22 beginning of my presentation, are that a public hearing
- 23 will be held, if requested, in a timely fashion, and
- 24 that is governed by Part 9 of the New Mexico Mining Act
- 25 Rules.

1 Continuing on. This public hearing is

- 2 held for comments and questions from the public. MMD
- 3 will keep a record of the public comments made during
- 4 this hearing. The hearing officer will announce how
- 5 long MMD will accept written comments after the hearing,
- 6 and I believe our hearing officer stated that they would
- 7 be accepted to the close of business on June 17th,
- 8 that's two weeks from now. The date will be posted on
- 9 MMD's website, which the link is shown at the bottom of
- 10 this slide.
- 11 And this presentation will also be posted
- 12 on the MMD website. So, for those of you just listening
- 13 in or who want to go back and review it, it will be
- 14 there for your review. I can't say it's there now, but
- 15 it probably will be there by sometime tomorrow.
- 16 Moving forward, as I said, MMD will review
- 17 comments received and may ask Freeport to respond to
- 18 relevant questions and comments.
- 19 Further, FMTI is required to obtain an
- 20 environmental determination from the New Mexico
- 21 Environment Department prior to MMD approval of
- 22 Revision 20-1. And just, basically, the environmental
- 23 determination is a, I guess, a concurrence from the
- 24 environment department that if the closeout plan is
- 25 performed according to what's been proposed and what is 0020
- 1 about to be approved by MMD, that that plan will meet
- 2 the environmental standards and regulations that NMED
- 3 oversees.
- 4 Currently, NMED is processing a renewal of

- 5 the discharge permit, DP1236, for the Little Rock Mine,
- 6 and that includes the expansion and updated CCP. And,
- 7 of course, NMED and MMD are coordinating our review of
- 8 the expansion that's been proposed and the updated CCP.
- 9 Once our review is basically complete,
- 10 NMED will require Tyrone, or FMTI as I've been referring
- 11 to them, to propose a financial assurance package or a
- 12 number of instruments, which currently as I've showed
- 13 are surety bonds. In the past they've been letters of
- 14 credit. There are a number of other mechanisms that are
- 15 acceptable under the Mining Act Rules. This would
- 16 happen after MMD deems the application technically
- 17 approvable, and we have not reached that point yet.
- 18 As a summary, again, this presentation and
- 19 related documents will be available on the MMD website
- 20 at this link. And, again, as some of you have submitted
- 21 comments or requests to participate in this hearing, the
- 22 emnrd.mmd2@state.nm.us email address, please if you do
- 23 submit emails with comments, enter in the subject line
- 24 Little Rock Mine expansion and closeout plan.
- 25 Again, here is the email address to send

- 1 written comments to. And that concludes my
- 2 presentation. Thank you very much.
- 3 HEARING OFFICER ORTH: Thank you,
- 4 Mr. Ohori.
- 5 I neglected to invite your counsel to
- 6 introduce himself. Mr. David?
- 7 MR. DAVID: Hello. My name is Dana David,

- 8 I'm a legal assistant general counsel to EMNRD, and
- 9 welcome everybody.
- 10 HEARING OFFICER ORTH: Thank you very
- 11 much.
- We're going to turn, then, to questions of
- 13 Mr. Ohori. Mr. Moellenberg, do you have questions of
- 14 Mr. Ohori?
- 15 MR. MOELLENBERG: Madam hearing officer, I
- 16 don't have any questions for Mr. Ohori. Thank you.
- 17 HEARING OFFICER ORTH: Thank you.
- 18 Ms. Siwik, do you have questions for
- 19 Mr. Ohori?
- 20 MS. SIWIK: Madam hearing officer, I do
- 21 not have any questions for Mr. Ohori.
- 22 HEARING OFFICER ORTH: Thank you.
- 23 Anyone else who is on the platform with us
- 24 this evening may pose a question to Mr. Ohori. Just a
- 25 few simple things, please keep your questions to the

- 1 topics that Mr. Ohori raised in his presentation. If
- 2 you'd like to ask a question, please find the reaction
- 3 button that allows you to raise your hand on this
- 4 platform and the technical hosts will let me know that
- 5 folks have raised their hand.
- 6 And, unfortunately, I should say, that if
- 7 you're on this platform this evening to cause mischief,
- 8 the technical host has been asked to expel you without
- 9 discussion. Ain't nobody got time for that.
- 10 So, Mr. Daws, do we have anyone raising

- 11 their hand to ask a question of Mr. Ohori?
- MR. JOHN DAWS: I don't see any hands.
- 13 HEARING OFFICER ORTH: Thank you very
- 14 much. In that case, thank you, Mr. Ohori.
- 15 And we'll move on to the presentation by
- 16 Freeport McMoRan Tyrone.
- 17 MR. OHORI: Thank you madam hearing
- 18 officer.
- 19 HEARING OFFICER ORTH: Let's see. I see
- 20 Mr. Shelley has turned on his video. Mr. Shelley, how
- 21 many of you speak this evening on behalf of FMTI.
- 22 You're muted. You have to unmute
- 23 yourself. I can't hear you.
- As a panelist, you have the power to mute
- 25 and unmute yourself. So, if you can find that button.

- 1 MS. LILLA: Hello?
- 2 HEARING OFFICER ORTH: Is that Ms. Lilla?
- 3 MS. LILLA: Yes. Can you hear us?
- 4 HEARING OFFICER ORTH: Yes. And that
- 5 terrible echo has come back now.
- 6 MR. SHELLEY: Can you hear me madam
- 7 hearing officer?
- 8 HEARING OFFICER ORTH: I can hear you now,
- 9 Mr. Shelley. There is an echo. If there's second audio
- 10 source, you're going to want to turn that off so you
- 11 just have the one.
- 12 Oh, that's better.
- So, Mr. Shelley, how many -- again, how

- 14 many of you will be speaking on behalf of Freeport
- 15 McMoRan Tyrone this evening?
- 16 MR. SHELLEY: Madam hearing officer, let
- 17 me count up. We have a number of presenters intended to
- 18 present, and then a few that I can introduce that were
- 19 on in case there were questions on topics, various
- 20 topics. So, I will be presenting on behalf of Tyrone,
- 21 and Mandy Lilla and Lee Nix and John Ayarbe.
- 22 COURT REPORTER: How do you spell that?
- 23 MR. SHELLEY: J-O-H-N A-Y-A-R-B-E.
- 24 HEARING OFFICER ORTH: All right.
- 25 MR. SHELLEY: Those are the main

- 1 presenters. And then there are a few that are on
- 2 standby if there were questions for them.
- Would you like me to give you their names?
- 4 HEARING OFFICER ORTH: Yes, please.
- 5 MR. SHELLEY: Tom Meuzelaar,
- 6 M-E-U-Z-E-L-A-A-R, and Morgan Warren, W-A-R-R-E-N. I
- 7 think that covers it.
- 8 HEARING OFFICER ORTH: All right. Thank
- 9 you. So, let me ask if your intention is to take
- 10 questions one at a time or as a panel?
- 11 MR. SHELLEY: As a panel.
- 12 HEARING OFFICER ORTH: All right. Thank
- 13 you.
- And if all six of you are on, Mr. Shelley,
- 15 Ms. Lilla, Mr. Nix, Mr. Ayarbe, Mr. Meuzelaar and
- 16 Mr. Warren, I can swear you all in in mass. Are you all

- 17 on?
- 18 Let's see. I see Mr. Shelley. I see
- 19 Ms. Lilla. I see Mr. Ayarbe. Let's -- let's see, is
- 20 Mr. Nix on? Oh, I see Mr. Meuzelaar.
- 21 MR. NIX: I am on, I'm just not on
- 22 independently. I'm in a conference room.
- 23 HEARING OFFICER ORTH: All right. Is that
- 24 you, Mr. Nix?
- 25 MR. NIX: Yes.

- 1 HEARING OFFICER ORTH: All right. Thank
- 2 you.
- 3 So -- and do we have Mr. Warren with us?
- 4 MR. MEUZELAAR: This is Mr. Meuzelaar.
- 5 And Mr. Warren will be on in about 13 minutes.
- 6 HEARING OFFICER ORTH: All right. So, the
- 7 other five of you, if you would please raise your right
- 8 hand.
- 9 (Tom Shelly, John Ayarbe,
- 10 Lee Nix, Mandy Lilla and
- 11 Tom Meuzelaar sworn in.)
- 12 HEARING OFFICER ORTH: All right. Thank
- 13 you, that was the five of you. And we'll swear in
- 14 Mr. Warren when he joins us.
- So, Mr. Shelley, are you going first?
- MR. SHELLEY: Yes.
- 17 HEARING OFFICER ORTH: All right. If
- 18 you -- the rest of you I thank you for muting yourselves
- 19 when you're not speaking.

- Whenever you're ready, Mr. Shelley.
- 21 MR. SHELLEY: Okay. If we could -- we
- 22 have a PowerPoint presentation, and Mandy Lilla has it,
- 23 if we could share that.
- Okay. Thank you.
- 25 Are you able to see our PowerPoint?

- 1 HEARING OFFICER ORTH: I can see the
- 2 PowerPoint.
- 3 MR. SHELLEY: Okay. Thank you.
- 4 HEARING OFFICER ORTH: Yes.
- 5 MR. SHELLEY: Thank you madam hearing
- 6 officer. And thank you MMD for setting this hearing
- 7 date, and all who have taken time to participate and
- 8 attend. And I'm -- I'm amazed that I'm still here
- 9 participating in the 2021 Little Rock Mine permit
- 10 hearing. I was here for the hearings back in '98 and
- 11 2000 and many others. And I'm glad to be here, by the
- 12 way.
- 13 Little Rock is an existing mine, as
- 14 Mr. Ohori mentioned. It had been mined by a small
- 15 mining company in the 1970s for a few years. After a
- 16 long permit period and acquiring patented claims Tyrone
- 17 reinitiated mining in 2010 and has continued since that
- 18 time.
- Today we're here to talk about the permit
- 20 revision, as Mr. Ohori and madam hearing officer
- 21 mentioned. Really, the expansion is a modest expansion.
- 22 We'll go over that here in just a minute. It

- 23 facilitates the last phases of mining at the Little Rock
- 24 Mine, and the revision also updates the reclamation
- 25 plan.

- 1 Little Rock is critical to Tyrone's
- 2 overall mine plan. So, we ask community and agencies to
- 3 support, to complete this successful project. It's
- 4 greatly benefited not only Tyrone employees and their
- 5 families, but the community, the county and the state.
- 6 And we're proud of what we've accomplished there.
- We are very interested in the input of our
- 8 community and neighbors. Freeport's a dedicated
- 9 founding member of the International Council on Mining
- 10 and Minerals -- Mining and Metals, referred to as ICMM.
- 11 We engage directly with our neighbors and appreciate
- 12 their feedback. We have presented information to
- 13 respond to that feedback quite a number of times over
- 14 the past few years, and we appreciate that opportunity.
- 15 And we have a number of ways that community members can
- 16 provide concerns, and we guarantee follow-up.
- 17 So, this project has been scrutinized over
- 18 the years in every way to ensure that public health and
- 19 safety are ensured, water supplies are not impacted,
- 20 environmental and cultural aspects are all assessed.
- 21 I'm going to introduce the panel who are
- 22 participating on behalf of Tyrone to either present or
- 23 answer questions.
- 24 First, Mandy Lilla. She's a senior
- 25 environmental engineer with many years of experience in

- 1 mine planning and reclamation planning and permitting.
- 2 She's going to present on the mine plan and the closeout
- 3 plan.
- 4 Then Lee Nix is a chief environmental
- 5 engineer with Tyrone, and he's here to support on water
- 6 quantity and quality-related permitting matters.
- 7 And then our -- one of our consultants,
- 8 John Ayarbe of Daniel B. Stephens & Associates -- who
- 9 also grew up here in Silver City -- will be presenting
- 10 on hydrology and pit lake aspects of the closeout plan.
- 11 And on standby if there are questions
- 12 related to geochemistry, we have consultants with the
- 13 company Life Cycle Geo, Mr. Tom Meuzelaar and Morgan
- 14 Warren.
- 15 And as he's already been introduced, Dal
- 16 Moellenberg with the Gallagher & Kennedy Law Firm is
- 17 also on hand with us and supporting us. So thank you.
- 18 With that introduction, I'm going to turn
- 19 the time over to Mandy Lilla. I'll mute myself and you
- 20 need to unmute.
- 21 (Discussion off the record.)
- 22 MS. LILLA: Okay. So, I'm going to talk a
- 23 little bit about the expansion first. This -- this
- 24 slide is to show where Little Rock Mine is. We're
- 25 located in New Mexico, Grant County, southwest of Silver 0029
- 1 City area and approximately a mile from -- or a mile
- 2 west of Tyrone Mine.

- 3 This is a figure showing the Little Rock
- 4 configuration. We're here today to talk about the 2021
- 5 expansion request. So, this slide is to talk about what
- 6 we're requesting compared to what we are currently
- 7 approved to do at Little Rock.
- 8 We're requesting a minor expansion to
- 9 complete the mining phases at Little Rock prior to
- 10 starting reclamation. This includes minor changes in
- 11 the configuration of the open pit along with the removal
- 12 of the copper leach stockpile which is an environmental
- 13 improvement to this site; the construction of the CLW
- 14 waste stockpile within the footprint of the copper leach
- 15 stockpile; a change in location to our access haul road;
- 16 and the construction of the NRW waste stockpile.
- 17 This figure shows the life of mine
- 18 configuration, which is estimated at ten years out. It
- 19 shows the open pit area along with in-pit stockpiles.
- 20 The CLW stockpile, which is placed on the exist --
- 21 within the footprint of the copper stockpile, that gets
- 22 removed.
- 23 (Discussion off the record.)
- 24 HEARING OFFICER ORTH: Sorry, for the
- 25 interruption, Ms. Lilla. But the echo has come back, 0030
- 1 there's reverberation. Ms. Soto, what was the last
- 2 thing you heard clearly?
- 3 (Discussion off the record.)
- 4 HEARING OFFICER ORTH: Ms. Lilla, would
- 5 you mute yourself, please? Thank you very much,

- 6 Ms. Lilla.
- 7 (Discussion off the record.)
- 8 HEARING OFFICER ORTH: All right. Thank
- 9 you very much. Ms. Lilla, did you hear what Ms. Soto
- 10 just had to say? You'll need to unmute yourself.
- 11 MS. LILLA: Okay. Can you hear me?
- 12 HEARING OFFICER ORTH: I can hear you.
- 13 Did you hear what the court reporter had to say about
- 14 the last little bit that she was able to hear?
- MS. LILLA: Not all of it, no.
- 16 HEARING OFFICER ORTH: All right. You
- 17 were talking about the CLW waste pile and where it fit,
- 18 basically, within the footprint of the mine, I believe.
- 19 So, if you would back up just a little bit in your
- 20 remarks and pick up in that area of your remarks.
- 21 MS. LILLA: Okay. So, I need to start at
- 22 CLW stockpile?
- 23 HEARING OFFICER ORTH: Yes, please.
- 24 MS. LILLA: All right. So, the CLW
- 25 stockpile is constructed over the area that was

- 1 previously -- that previously contained the copper leach
- 2 stockpile that gets removed.
- 3 And then the other stockpile was NRW
- 4 stockpile north of the pit. These stockpiles will
- 5 contain -- all the stockpiles will contain waste
- 6 material that is non-discharging or inert material that
- 7 won't negatively -- will not negatively impact the
- 8 environment. Tyrone follows an approved handling plan

- 9 for these stockpiles and will continue to do so. We
- 10 also continuously monitor the waste material placed
- 11 within these stockpiles.
- 12 In addition to the configuration change,
- 13 we're also requesting a change in our permit boundary
- 14 and our design limit boundary to this red line out
- 15 here (indicating). This is to accommodate the reclaimed
- 16 footprints of the stockpiles and to allow -- and
- 17 10 acres of additional minor disturbance. It's for
- 18 miscellaneous things, for example, installation of new
- 19 monitoring wells.
- 20 And, again, the configuration on the
- 21 screen is that life of mine configuration which is
- 22 approximately ten years.
- 23 This table shows the difference between
- 24 what we are currently approved to disturb at Little Rock
- 25 compared to what we're requesting. There is an

- 1 approximately 200-acre increase of disturbance that
- 2 Tyrone is requesting which includes the open pit and
- 3 stockpiles and other facilities, for example, power
- 4 lines, pipelines and 10 acres of other minor
- 5 disturbance, that I just talked about the last slide.
- 6 Next I'll talk about the closeout plan,
- 7 also known as the reclamation plan, and financial
- 8 assurance. So, when we start a reclamation plan or
- 9 closeout plan, first we take a five-year mine plan and
- 10 we determine what year is -- has the highest reclamation
- 11 cost year, which we determined was year five for the

- 12 five-year mine plan.
- Once we determine the highest reclamation
- 14 cost year, we take that mine configuration and we design
- 15 a reclamation plan for it, and we calculate the cost to
- 16 reclaim the facilities at the site at the end of that
- 17 five-year period.
- 18 This is a routine update to our closure
- 19 plan. This is completed every five years. The
- 20 reclamation activities that we are proposing have --
- 21 have been previously approved, including in 2014. And
- 22 we also use standard approved proclamation reclamation practices.
- This figure shows what the mine would look
- 24 like if Little Rock were to close at the end of year
- 25 five. The reclamation plan includes the regrading of

- 1 stockpiles; the partial removal of the haul room that
- 2 was constructed or the change location; the
- 3 reestablishment of Deadman Canyon. Once the earthwork
- 4 is completed we'll go back in and reseed areas. These
- 5 areas are shown in green. And we also will have a pit
- 6 lake which is shown in the blue. Through these
- 7 activities we will create a self-sustaining ecosystem
- 8 and wildlife habitat.
- 9 Next I'll talk a little bit about
- 10 financial assurance and the cost estimate. The cost
- 11 estimate was developed based on the fifth year, which
- 12 again, is the highest reclamation cost year. And the
- 13 estimated cost was 8 million, approximately \$8 million.
- 14 This is an increase of approximately \$6 million over

- 15 what we currently have in financial assurance for Little
- 16 Rock. Once MMD and other agencies approve the cost
- 17 estimate, we will be proposing instruments to be -- for
- 18 that \$8 million.
- 19 And now I'll turn it over to Lee Nix.
- MR. NIX: Yes, and can I be heard okay?
- 21 I'll assume I can.
- 22 So, recognizing a high potential for
- 23 neighbor concerns over groundwater quality and drawdown
- 24 of the water aquifer, Tyrone engaged early in a number
- 25 of activities related to those potential impacts.

- 1 Activities included predictive modeling at several
- 2 stages, as well as monitoring of groundwater quality and
- 3 elevations in a network of monitoring wells, and then
- 4 calibrating the model to those monitoring results.
- 5 After the initial stage of mining and several monitoring
- 6 wells have been mined out, we went in and installed a
- 7 new set of wells, a new network, in 2016.
- 8 In terms of neighbor engagement, we did
- 9 engage early with the Burro Mountain Homestead
- 10 management about a decade ago as mining of Little Rock
- 11 was about to get underway. Now, Burro Mountain
- 12 Homestead is our nearest community neighbors, about one
- 13 and three-quarters miles to our south -- to the
- 14 southwest of Little Rock Mine.
- 15 (Court reporter clarification.)
- 16 HEARING OFFICER ORTH: Hold on. Mr. Nix?
- 17 MR. NIX: Yes.

- 18 HEARING OFFICER ORTH: Hold on one second.
- 19 MR. NIX: Okay. Yes, Burro Mountain
- 20 Homestead is the name of a nearby community of -- an RV
- 21 park community.
- 22 HEARING OFFICER ORTH: And Mr. Nix, do you
- 23 have slides? We're looking at a single slide that just
- 24 says water.
- MR. NIX: No, we'll have some more in a

- 1 minute, this is just an introduction really of the
- 2 status. And then I'm going to turn it over to our
- 3 hydrogeology consultant, and he'll have a number of
- 4 slides.
- 5 HEARING OFFICER ORTH: Thank you so much.
- 6 MR. NIX: So just a little bit more on our
- 7 early engagement with Burro Mountain Homestead. And one
- 8 of the things we did as a result of that early
- 9 engagement was to install a monitoring well in between
- 10 the Little Rock Mine and their location. And we
- 11 installed that in late 2011.
- We've met with them periodically, with
- 13 their management, especially up there at the Burro
- 14 Mountain Homestead. It included an open house, that was
- 15 probably close to a decade ago. But, also, we've had
- 16 periodic meetings with them about once every two or
- 17 three years just to kind of check in with them, discuss
- 18 our monitoring results, as well as check in on any
- 19 concerns that they have.
- 20 And then more recently we've engaged with

- 21 the Oak Grove community located in a little different
- 22 direction. They're a little further away from the mine,
- 23 at around three to four miles away. And we engaged with
- 24 them as they became concerned really at the outset of
- 25 this CCP update. I believe they saw public notice and 0036
- 1 they've started inquiring about things, so we had a
- 2 series of engagements with them as well, showing the
- 3 results of our monitoring and groundwater conditions
- 4 relevant to their location with respect to the Little
- 5 Rock Mine.
- 6 And with that introduction, now what I
- 7 really want to do is turn it over to John Ayarbe of
- 8 Daniel B. Stephens & Associates, and he will have a
- 9 number of slides to show to go along with his
- 10 discussion.
- 11 MR. AYARBE: Thank you. I'm John, John
- 12 Ayarbe, a hydrogeologist at Daniel Stephens &
- 13 Associates. We're an environmental firm headquartered
- 14 in Albuquerque, New Mexico. We've been working for the
- 15 Tyrone Mine for a number years on various matters.
- So, are you going to share your
- 17 presentation, Lee, or did you want me to take it from my
- 18 desktop? Either is fine.
- So, I'm going to begin with a graphic that
- 20 we presented to members of the Oak Grove Subdivision,
- 21 gosh, it's maybe been about six months ago, to
- 22 demonstrate that mining at Little Rock is not impacting
- 23 their wells. And when I say "impacting their wells,"

- 24 I'm talking about the de-watering at Little Rock causing
- 25 drawdown at their wells.

- 1 So, on the graphic -- and I'll talk slow,
- 2 just interrupt me if I get going too fast -- on the
- 3 graphic you can see the Oak Grove Subdivision. The
- 4 light blue dots are domestic wells at the subdivision.
- 5 The posted values are water levels. Those water levels
- 6 are -- they were calculated from depth to water
- 7 measurements that were taken at the time the wells were
- 8 installed. And all this information came from the OSE
- 9 waters database.
- 10 Off on the right-hand corner of the screen
- 11 is the Tyrone and Little Rock Mine areas. The darker
- 12 blue dots are Tyrone monitor wells, and then the lines
- 13 are groundwater elevation contours. On the map I've
- 14 also shown -- I also have a few arrows drawn in that
- 15 give general directions of groundwater flow. And then I
- 16 have a hydrograph, which I'll discuss here in a moment,
- 17 off on the left bottom corner of the graphic.
- 18 A series of monitor wells -- like Lee was
- 19 talking about, back in 2016 we installed a series of
- 20 monitor wells around the perimeter of the Little Rock
- 21 Mine to monitor both groundwater level and quality.
- 22 Water levels are collected at these wells, currently
- 23 it's semi annually, it had been quarterly. And those
- 24 data are reported to the NMED. So, we have continued
- 25 observation of groundwater conditions at the Little Rock

- 1 mine.
- 2 The hydrograph -- and so then this
- 3 hydrograph I prepared to basically demonstrate that
- 4 dewatering at the Little Rock Mine, and that dewatering
- 5 occurred at this dewatering sump, is not causing
- 6 drawdown that propagates beyond the area of the mine.
- 7 So, the black line is dewatering at the
- 8 sump. And you can see that that's caused the water
- 9 level decline of about 300 feet. And then the water
- 10 levels at two nearby monitor wells -- and those are
- 11 shown as red diamond and a green triangle -- have been
- 12 relatively steady.
- Now, on the next few slides I'm going to
- 14 discuss closure conditions. And those closure
- 15 conditions being the formation of a pit lake and then
- 16 the expected water quality associated with that lake.
- 17 As we've been talking as we've gone
- 18 through FMI's presentation, mining has advanced below
- 19 the regional groundwater table. As a consequence,
- 20 groundwater is flowing into the area of the Little Rock
- 21 Mine. Currently there's no pit lake and no large
- 22 accumulation of water because the mine dewaters at an
- 23 operational sump and so they can provide safe access to
- 24 the ore. At closure dewatering is going to stop, and as
- 25 a consequence a pit lake will form.

- 1 Daniel B. Stevens & Associates conducted
- 2 groundwater flow and geochemical modeling to predict pit
- 3 lake conditions at closure. And I'll briefly go over

- 4 those with a focus more on the quality aspects of the
- 5 modeling.
- 6 So, I'm going to begin by going over
- 7 current conditions so that everybody can get an idea of
- 8 what things are like currently. So, little bit similar
- 9 to the previous graphic I showed only now we're kind of
- 10 zooming in to the Little Rock area. So, here -- so
- 11 we've got a little depression. We've got an enclosed
- 12 groundwater elevation contour, if you will, and you got
- 13 Little Rock pit. And this is the operational sump. So,
- 14 this is generally where pit dewatering would occur.
- 15 Also shown on the graphic are monitor
- 16 wells, and these are those monitor wells that were
- 17 installed in 2016. You can see that in their well
- 18 designations. And then we've got posted water level
- 19 elevation. And I believe most of these water level
- 20 elevations were taken in the third or fourth quarter
- 21 of 2020.
- We got our groundwater elevation contours,
- 23 they're based on the data that are collected at these
- 24 monitor wells. We've got a series of faults that are
- 25 drawn in, and these are shown in magenta. Got the

- 1 Austin Amazon Fault, for instance, Southern Star Fault.
- 2 And then in this yellow we've got some -- we've got a
- 3 series of monzonite dikes, intrusive dikes. Both the
- 4 faults and the dikes act as barriers to groundwater
- 5 flow, and so groundwater tends to flow parallel to these
- 6 features rather than across them.

- 7 So, it influences groundwater flow
- 8 patterns in the Little Rock area. For instance,
- 9 groundwater to the south of the Little Rock Mine tends
- 10 to flow to the east northeast rather than into the
- 11 Little Rock Mine area. This will change as mining
- 12 advances and starts to breach or -- and removing large
- 13 portions of this dike material then more groundwater
- 14 from the south would be expected to flow into the area
- 15 of Little Rock. And this becomes important when we
- 16 start looking at closure, because this is going to be a
- 17 source of water, this groundwater to the south, to the
- 18 pit lake.
- 19 When I talk about removal, I've drawn in
- 20 the portion of the dikes that's -- portion of the dike
- 21 that has been removed below the pre-mining groundwater
- 22 table, if you will. So we've been tracking it.
- 23 So, this graphic shows simulated
- 24 conditions. When I say "simulated conditions," the
- 25 groundwater contours and flow arrows -- the flow arrows 0041
- 1 are shown in red and the groundwater contours are shown
- 2 in blue -- are generated from a groundwater flow model.
- 3 It was MODFLOW. It's a pretty standard model that's
- 4 used in our industry to simulate groundwater conditions
- 5 and to make predictive forecast-type evaluations. The
- 6 pit lake itself is shown in this blue.
- 7 And yes, everything looks very rectangular
- 8 and very square. And that's because, again, it's a
- 9 computer groundwater flow model. So, we take a real

- 10 world environment and we put it into a mesh or into a
- 11 grid so that we can make those numerical calculations.
- 12 Also shown in the graphic -- and I talked
- 13 about this on the previous slide -- are these barriers
- 14 to groundwater flow, being the dikes or the faults, and
- 15 those are illustrated here with black lines. So, the
- 16 dikes are -- is this jagged black line to the south that
- 17 runs southwest to northeast. And then this is probably
- 18 one of the faults up there to the north, maybe the
- 19 Austin Amazon Fault.
- 20 And you can see in our model that we've
- 21 excavated out a portion of the dikes which is allowing
- 22 groundwater to flow from the south to the north and into
- 23 the pit lake. Other sources of water to the pit lake --
- 24 it's not just groundwater -- other sources of water to
- 25 the pit lake will include stormwater runoff from within

- 1 the area of the open pit and stormwater runoff from
- 2 California Gulch.
- 3 Also worth noting on this graphic is
- 4 groundwater doesn't just flow into the pit lake, but a
- 5 portion of the groundwater also flows out of the pit
- 6 lake. And you can see this on the east side of the pit
- 7 lake where the flow arrows tend to flow away from the
- 8 pit lake. So, yes, it's going to receive some inflow of
- 9 water on the left side of lake, and then some of that
- 10 water is going to discharge again back to the
- 11 groundwater system and exit on the east side.
- So, when groundwater exits on the east

- 13 side, where does that groundwater go? It's flowing
- 14 towards the Tyrone Mine. So, that's what we try to
- 15 capture here with the yellow lines. So, if you follow
- 16 my cursor, this is water that's flowing into the lake
- 17 and then you can see that water's exiting. In addition
- 18 to groundwater that discharges from the east side of the
- 19 pit lake, another source of outflow from the lake would
- 20 be evaporation.
- 21 So, what we did is we took this
- 22 groundwater flow model, we used it, and we used it to
- 23 come up with predictions of the pit lake extent and
- 24 final water level. And so the pit lake extent is going
- 25 to be roughly 40 acres when it reaches a steady-state0043
- 1 water level elevation. And that steady-state water
- 2 elevation is at an elevation of 5,700 feet. Then we
- 3 took the groundwater flow model, those results, the
- 4 various inflows that I just described, their associated
- 5 water qualities, and then we moved into geochemical
- 6 modeling to come up with a prediction of what the water
- 7 quality would be for the pit lake at closure.
- 8 And in addition to the inflows you've also
- 9 got to consider the outflows from the pit lake,
- 10 especially because you are evaporating water. So, the
- 11 geochemical model does include evapoconcentration, which
- 12 is very important.
- 13 I got a table after this so we can look at
- 14 it. It supports these conclusions. But the pit lake is
- 15 expected to meet water quality standards at closure.

- 16 This is based both on the geochemical modeling that
- 17 we've done as well existing water quality monitoring at
- 18 the dewatering sump at Little Rock.
- 19 There are some constituents, copper and
- 20 selenium, that we are keeping our eyes on because those
- 21 concentrations are near standard. For copper, that
- 22 concentration is a simulated concentration. For
- 23 selenium our simulated concentration is well below the
- 24 standard, but we still -- we see elevated concentrations
- 25 in the operational sump. So, these are two constituents 0044
- 1 that we are keeping our eyes on as we move forward.
- 2 And we have been working with NMED in
- 3 their evaluation of geochemical model. And what I mean
- 4 by that is, obviously been doing the models, preparing
- 5 their reports, submitting them to NMED, but we also have
- 6 meetings with NMED and we've provided them our modeling
- 7 files.
- 8 So, this is a subset of the results.
- 9 It's -- I did it for simplicity. We simulated the
- 10 concentration of approximately 25 constituents. Those
- 11 constituents are going to be your major cantions, your
- 12 major anions and metals.
- 13 (Court reporter clarification.)
- 14 MR. AYARBE: Yeah, I'll spell it for you.
- 15 C-A-T-I-O-N, and the other one is A-N-I-O-N. Yeah, you
- 16 don't do chemistry all the time, yep, they're going to
- 17 be new terms.
- 18 So, like I was mentioning, the two

- 19 constituents that we're keeping our eye on are copper
- 20 and selenium. You can see that the copper concentration
- 21 that we're simulating -- and this is 100 years after
- 22 closure, so this is after it's gone through some level
- 23 of evapoconcentration -- is 0.37, and the standard is
- 24 0.41. I should back up a little bit.
- We have been working with NMED on what are 0045
- 1 the applicable standards and what they've landed on are
- 2 the acute aquatic life criteria. And these are defined
- 3 in 20.6.4.
- 4 Selenium, what we're simulating is almost
- 5 an order of magnitude less than the standard, but we do
- 6 see it elevated in the operational sump. So, it's
- 7 something we're keeping our eye on and we're trying to
- 8 be -- we're aiming to be transparent about.
- 9 And then you can see that the sulfate and
- 10 TDS concentrations are relatively low. And to give you
- 11 a benchmark for comparison, the groundwater standards
- 12 for these two constituent, sulfate being
- 13 6,000 milligrams per liter and TDS being
- 14 1,000 milligrams per liter. These concentrations are
- 15 well below those.
- 16 And that's all I have. I threw this slide
- 17 in in case anyone asks about cones of depression and
- 18 drawdown and what to expect to look like. But I didn't
- 19 intend to go over it unless somebody asks a question and
- 20 then we can circle back to it. And that concludes my
- 21 presentation.

- 22 HEARING OFFICER ORTH: All right. Thank
- 23 you. Do I understand, then, that before presenters
- 24 who've spoken, Mr. Shelley, Ms. Lilla, Mr. Nix and
- 25 Mr. Ayarbe will stand for questions along with

- 1 Mr. Meuzelaar and Mr. Warren? Do we have Mr. Warren
- 2 among us?
- 3 Okay. Mr. Myers is telling me, our
- 4 technical host, is telling me that we do have him with
- 5 us.
- 6 Mr. Warren, if you can hear me, my name is
- 7 Felicia Orth. I'm the hearing officer and I'd like to
- 8 swear you in.
- 9 Mr. Warren, can you hear me?
- 10 Mr. Myers, do we need to unmute?
- 11 MR. WARREN: Hello, I was able to unmute,
- 12 I apologize. I'm here. Morgan Warren.
- 13 HEARING OFFICER ORTH: Please raise your
- 14 right hand.
- 15 (Morgan Warren Sworn in.)
- 16 HEARING OFFICER ORTH: Do you swear or
- 17 affirm that the testimony you're about to give will be
- 18 the truth, the whole truth and nothing but the truth?
- 19 MR. MORGAN WARREN: Yes, ma'am.
- 20 HEARING OFFICER ORTH: Thank you.
- So, Mr. David, do you have any questions
- 22 of the Freeport McMoRan?
- 23 MR. SHELLEY: Madam hearing officer --
- 24 HEARING OFFICER ORTH: Yes.

25 MR. SHELLEY: -- this is Tom Shelley,

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- 1 excuse me, we had just a little bit -- and I'll cut it
- 2 short -- of remaining presentation.
- 3 HEARING OFFICER ORTH: Oh, I'm sorry. I
- 4 didn't understand that there was going to be more. I'll
- 5 connect with Mr. David, then, when you're done.
- 6 MR. SHELLEY: Thank you.
- 7 HEARING OFFICER ORTH: Go ahead. Please
- 8 go ahead.
- 9 MR. SHELLEY: Can I share my screen,
- 10 please?
- 11 Okay. Thank you madam hearing officer.
- 12 I'm going to cut these slides way short because I know
- 13 we're late on time here.
- 14 And the question was -- a comment was
- 15 provided and raised by a couple entities on mine
- 16 operation site assessments at Little Rock over time, and
- 17 in -- particularly focused on the area of permit area
- 18 expansion, as I've understood it. And so I wanted to
- 19 just, briefly, indicate that yes, absolutely yes, the
- 20 site assessments are managed under another -- a number
- 21 of programs.
- As you've just witnessed, for example, the
- 23 original environmental impact statement did in detail
- 24 assess all media and impacts to the environment,
- 25 communities, et cetera. And since that time, looking at

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1 this in the -- as a whole, there have been a number of

- 2 updates, especially focused on water resources at
- 3 various updates, both to groundwater monitoring as
- 4 Mr. Ayarbe presented, as well as wildlife. There have
- 5 been multiple assessments of that usually lined with BLM
- 6 and forest service permitting.
- 7 And there have also been a number of
- 8 assessments through the New Mexico Environment
- 9 Department, updates to pit lake modeling. And as we do
- 10 this we don't just rely on pit lake modeling in the
- 11 original 1997 era, as we planned for mining of this
- 12 site, we had to rely on models.
- Now, we have the benefit, as Mr. Ayarbe
- 14 explained, to also rely on actual groundwater inflows
- 15 into the pit, which are much less than originally
- 16 predicted which explains also why the impacts or assumed
- 17 impacts or modeled impacts to neighboring wells have
- 18 been much less, and undetectable in most cases. So, we
- 19 have those kind of assessments.
- 20 I would also point out that -- without
- 21 going back and forth between these slides -- that the
- 22 modest expansion that we're talking about, if you look
- 23 at it closely, the pit is within primarily the area
- 24 that's already been approved for open pit mining. We
- 25 haven't requested -- the reason there was that expansion 0049
- 1 to the open pit was mainly to provide a buffer for
- 2 pit-related minor activities around it. But -- and
- 3 that -- but that area was thoroughly assessed for
- 4 blasting, et cetera. It's not changing significantly.

- 5 So, those types of assessments are not needed to be
- 6 updated at this time.
- 7 And then the one -- any resource that is
- 8 changing due to the impact is being assessed right now
- 9 also. For example, we have updated the wildlife
- 10 assessments and cultural resource assessments,
- 11 et cetera.
- 12 With that, I'll just cut this short and
- 13 thank you. Keep in mind that at Little Rock we are
- 14 committed to creating a self-sustaining ecosystem.
- 15 Tyrone's very proud of our award winning reclamation.
- 16 We're very good at it, and we'll do a good job on that
- 17 when we are completed with mining. So, with that, I'll
- 18 stop. And that's the end of our presentation.
- 19 HEARING OFFICER ORTH: All right. Thank
- 20 you, Mr. Shelley. I see -- I think and a collared
- 21 lizard.
- MR. SHELLEY: Yes.
- 23 HEARING OFFICER ORTH: All right. We will
- 24 turn, then, to questions of the Freeport-Freeport-McMoRan Tyrone
- 25 panel. For the transcript the panel consists of

- 1 Mr. Shelley, Ms. Lilla, Mr. Nix, Mr. Ayarbe,
- 2 Mr. Meuzelaar and Mr. Warren. All of you have been
- 3 sworn.
- 4 In this part of the hearing it will be
- 5 especially important -- insofar as any of you can speak
- 6 up to answer whatever question is within your expertise,
- 7 it will be especially important to identify yourself

- 8 before you begin speaking, if you would please.
- 9 So, Mr. David, do you have any questions
- 10 of the Freeport panel based on their presentation?
- 11 MR. DAVID: Madam hearing officer, no, I
- 12 do not. Thank you very much.
- 13 HEARING OFFICER ORTH: Okay. Thank you.
- 14 Ms. Siwik, do you have any questions of
- 15 the Freeport panel --
- 16 MS. SIWIK: Yes.
- 17 HEARING OFFICER ORTH: -- based on their
- 18 presentation?
- 19 MS. SIWIK: Madam hearing officer, I don't
- 20 have any questions. But I would like to just ask if Jim
- 21 Kuipers, our technical consultant, has any questions for
- 22 Freeport.
- 23 HEARING OFFICER ORTH: Certainly.
- 24 Mr. Kuipers?
- 25 MR. KUIPERS: Yes, thank you, Allyson.

- 1 Madam hearing officer, this is Jim
- 2 Kuipers. The question I have is really more a
- 3 clarification for Mr. Ayarbe. And that is, the
- 4 information you presented, if I'm correct, that's for
- 5 the end of the 2024 CCP or mine plan period and not for
- 6 the ultimate pit that would be at the end of ten years
- 7 of mining; is that correct?
- 8 MR. AYARBE: No. I think what -- can you
- 9 ask that question again? I'm sorry.
- 10 MR. KUIPERS: Yeah, no, I'm sorry.

- 11 MR. AYARBE: Yeah.
- MR. KUIPERS: I'll try to be more clear.
- The information you presented I believe is
- 14 from the closure closeout plan and the hydrology report
- 15 that is attached to that, and it addresses the mine pit
- 16 at the end of the next five years, in other words, to
- 17 the 5500-foot level; is that correct?
- 18 MR. AYARBE: Right. And our -- our -- at
- 19 least the geochemical piece goes beyond. It would be
- 20 the final extent, is what that aimed to simulate. That
- 21 said, I don't think there's going to be much difference
- 22 in water quality between the two different
- 23 configurations because the rocks are not that much
- 24 different, and the sources of inflow are very
- 25 comparable, as well as their associated quality. So, I

- 1 think we'd get a similar result.
- 2 MR. KUIPERS: Right. But the actual
- 3 information is for the 2024 period?
- 4 MR. AYARBE: It's for the larger pit,
- 5 yeah.
- 6 MR. KUIPERS: Yeah. Thank you.
- 7 MR. AYARBE: Yeah, you're welcome.
- 8 HEARING OFFICER ORTH: All right. Thank
- 9 you.
- 10 And Mr. Kuipers, for the record, would you
- 11 spell your name, please?
- MR. KUIPERS: Yes, madam hearing officer.
- 13 It Kuipers, K-U-I-P-E-R-S.

- 14 HEARING OFFICER ORTH: All right, thank
- 15 you.
- We'll turn now to anyone else who might
- 17 have a question of the Freeport panel. Please find the
- 18 button that allows you to raise your hand if you're on
- 19 your computer. If you are on a telephone, I believe
- 20 hitting star 3 will raise your hand.
- 21 Mr. Myers or Mr. Daws, do we have any
- 22 hands raised?
- 23 Let's see. Ronald Parry has a question,
- 24 and yes -- and Johannes. All right. Let's start with
- 25 Ronald Parry, and then we'll move to Johannes.

- 1 If you would please, unmute, Mr. Parry.
- 2 MR. PARRY: Can you hear me?
- 3 HEARING OFFICER ORTH: I can hear you now.
- 4 If you would please spell your name, your last name, for
- 5 the transcript before you pose your question.
- 6 MR. PARRY: My last name is P-A-R-R-Y.
- 7 HEARING OFFICER ORTH: Thank you. Please
- 8 go ahead.
- 9 MR. PARRY: So, I have a question about
- 10 the revegetation process. So, in the presentation that
- 11 Ms. Lilla gave she talked about there being an approved
- 12 seed mix which is used for revegetation. So, I'm
- 13 curious about how that approval process works. I live
- 14 in the Oak Grove community, and one of my neighbors is
- 15 Carol Martin who's done work on revegetation.
- So, she looked at the list of plants that

- 17 are used for revegetation for the Tyrone Mine, and she
- 18 gave it to Bill Norris who's an expert botanist at the
- 19 Western New Mexico University. And what they found was
- 20 that quite a number of the plants on the list of plants
- 21 that are used for revegetation are non-native species.
- 22 And Bill Norris and she felt that that was
- 23 inappropriate, that non-native species should not be
- 24 being used for revegetation.
- Now, I don't know what the rules are, but

- 1 I'm curious as to who approves the vegetation mix, who
- 2 looks at what's in there and decides that it's a proper
- 3 mix to use for revegetation?
- 4 MR. SHELLEY: I will try to answer that
- 5 question, if that's directed to the Freeport group.
- 6 MR. PARRY: Yes, it is.
- 7 HEARING OFFICER ORTH: Mr. Shelley, you're
- 8 speaking?
- 9 MR. SHELLEY: Yes, thanks.
- 10 So, the list of species are native. They
- 11 may not be native, all of them, to -- exactly to Grant
- 12 County, but regionally they are native species. And
- 13 that list of plants are -- typically the way they're
- 14 developed is to present -- our consultants examine the
- 15 area and propose a list of species. Those are presented
- 16 within like, for example, the closure plan, the
- 17 reclamation plan, that has just been submitted, is
- 18 then -- it's out for public comment right now.
- 19 And it's also in the agency's hands. We

- 20 get input on it from a number of agencies, as well. In
- 21 fact, typically, we will consult with them prior to our
- 22 final proposal of what goes into our plan. And then
- 23 after all of this process we'll either get an approval
- 24 or a recommendation for changes, usually from Mr. Ohori
- 25 and -- who also has a lot of experience in this area.

- 1 HEARING OFFICER ORTH: Thank you,
- 2 Mr. Shelley.
- 3 Kevin or John, if you would please unmute
- 4 the person who's name you indicated was Johannes. And
- 5 I'm sorry, I don't know if that's a first or last name.
- 6 MR. LENCER: All right. That's the first
- 7 name. My full name is Johannes Lencer.
- 8 HEARING OFFICER ORTH: Would you spell
- 9 that, please?
- 10 MR. LENCER: That is L-E-N-C-E-R.
- 11 HEARING OFFICER ORTH: Thank you. What is
- 12 your question, please?
- 13 (Court reporter clarification.)
- 14 MR. LENCER: It's J-O-H-A-N-N-E-S.
- 15 I'm also a resident of the Oak Grove North
- 16 Subdivision, and my question goes a similar direction as
- 17 the previous speaker. And I'd actually be generally
- 18 more curious about who exactly is designing the -- those
- 19 ecological restoration plans? Like who's the one
- 20 responsible for designing them and then also who's
- 21 carrying them out and then, finally, what is the time
- 22 plan on that, if there's a timeline.

- 23 I know there's probably documents, and I'm
- 24 sorry, I'm not aware of where to find them. So, where
- 25 the reclamation plan is, if you could point that out, 0056
- 1 that would also be sweet.
- 2 But yeah, so, exactly who's going to be
- 3 working on this, like a firm you're hiring or which
- 4 department within your organization, that would be
- 5 really helpful. Thank you.
- 6 MR. SHELLEY: This is Tom Shelley again,
- 7 and I will respond to that question. And thank you --
- 8 is it Johannes?
- 9 MR. LENCER: Yes.
- 10 MR. SHELLEY: Okay, Johan (phonetic).
- 11 Thank you.
- So, the designer, we do hire consultants
- 13 who have experience, a lot of experience, in mine
- 14 reclamation. And they provide the design in
- 15 consultation with us, and even a -- a conceptual design
- 16 is approved through this process. And then the --
- 17 and -- but as far as the revegetation goes, it's very
- 18 close to what we would implement depending on seed
- 19 availability and things like that at implementation.
- 20 So, we have the conceptual plan and financial assurance
- 21 to support it.
- When the mine is complete and mining is
- 23 finished, then we are required to begin reclamation
- 24 within 180 days of cessation. And so final designs will
- 25 be completed at that time. And then the reclamation

- 1 that we've completed so far has been largely
- 2 self-performed. We have a team of folks, earth movers
- 3 and so forth, who have become very accomplished at
- 4 reclamation. And you can see the results of their work
- 5 right across the valley from your subdivision.
- 6 We are supported occasionally by other
- 7 contractors to help us, for example, to make riprap
- 8 armoring for channels and things like that. So, it's
- 9 a -- it's a big team effort. And, typically, when we're
- 10 performing reclamation, we also have very regular visits
- 11 from the agencies overseeing this part of the work of
- 12 mining, so . . .
- 13 MR. LENCER: Thank you, Mr. Shelley. Is
- 14 there a list publicly available who the consultants are?
- 15 Or is the team of earth movers, are those hired by
- 16 Freeport or are these a subcontractor or how -- how does
- 17 that work?
- 18 MR. SHELLEY: Yes, they're -- the folks
- 19 that -- like I said, we self-performed most of the
- 20 reclamation that we have completed. And the designing
- 21 firm is a -- has been a combination of folks with
- 22 expertise, Golder Associates and Telesto are included in
- 23 the list of companies that have assisted us. Also,
- 24 AECOM, the engineer -- M3 Engineering. And let's see,
- 25 other contractors that have helped us in design and 0058
- 1 construction oversight include MWH, who now is part of
- 2 the Stantec, I believe.

- 3 So, there's -- there's a lot of folks
- 4 involved in that. They include soil scientists, plant
- 5 biologists and many others, civil engineers, so -- and
- 6 anyway, those are the ones that we've used. And I hope
- 7 I haven't forgotten anybody because they're all very
- 8 good and very helpful to us.
- 9 HEARING OFFICER ORTH: Thank you.
- 10 Is there anyone else who has a question of
- 11 the Freeport panel or --
- 12 Kevin or John, do we have anyone else
- 13 raising their hand?
- 14 No?
- 15 All right. So, we do need to take a
- 16 break. Let me thank all of the presenters on the
- 17 Freeport panel and those who were willing to stand for
- 18 questions. Thank you all very much.
- 19 Let's take 15 minutes and return at 7:05.
- 20 When we return we will hear from Gila Resources
- 21 Information Project, Ms. Siwik and Mr. Kuipers. And the
- 22 immediately following GRIP's presentation, I will invite
- 23 any public comment there is to be given.
- Thank you all, 15 minutes.
- 25 (Off the record 6:49 p.m.

- 1 (Off the record 7:05 ap.m.
- 2 HEARING OFFICER ORTH: We are back after a
- 3 short break. And as I mentioned before we broke, we're
- 4 going to go to the GRIP presentation, Gila Resources
- 5 Information Project. We've already heard from Mining &

- 6 Minerals Division staff and Freeport--McMoRan Tyrone. We
- 7 have on the screen Ms. Siwik and Mr. Kuipers.
- 8 Ms. Siwik, whenever you're ready. And if
- 9 you would, please spell your name for the court reporter
- 10 before I begin.
- 11 MS. SIWIK: Sure. It's Allyson Siwik,
- 12 A-L-L-Y-S-O-N, and the last name is S-I-W-I-K.
- 13 Okay, great. Good evening. I'm Allyson
- 14 Siwik, Executive Director of the Gila Resources
- 15 Information Project, also referred to as GRIP. And
- 16 thank you so much for the opportunity to provide public
- 17 comment today on the proposed expansion of the Little
- 18 Rock Mine and the associated reclamation plan and
- 19 financial assurance.
- 20 For those of you who aren't familiar with
- 21 our organization, GRIP was founded in 1998, and our
- 22 mission is to promote community health by protecting our
- 23 environment and natural resources in southwestern
- 24 New Mexico. And our role has been to facilitate
- 25 informed public participation in natural resource use

- 1 decisions that will have profound and long-lasting
- 2 impacts on the region's environmental and economic
- 3 health.
- 4 And for more than 20 years we've worked to
- 5 ensure that copper mining is done responsibly in Grant
- 6 County. And we understand the economic importance of
- 7 Freeport--McMoRan to local families and businesses, to
- 8 Grant County and the state, as well as the significance

- 9 of copper production to renewable energy development.
- 10 However, we believe that company profits should in no
- 11 way come at the expense of healthy communities and
- 12 environmental quality.
- So, based on this core value, last year
- 14 GRIP joined the Initiative for Responsible Mining Assurance or
- 15 IRMA, I-R-M-A is the acronym for short. IRMA's standard
- 16 for responsible mining defines good practices for what
- 17 socially and environmentally responsible mining should
- 18 look like at the industrial scale. And it provides a
- 19 checklist of expectations that independent auditors use
- 20 as the benchmark for responsible mines. And relative to
- 21 other assurance frameworks, IRMA represents the
- 22 strongest set of standards for verifying socially and
- 23 environmentally responsible minerals development. And
- 24 this is why mines like Anglo American and companies that
- 25 purchase metals like Ford Motor Company, Daimler, BMW 0061
- 1 and Microsoft and have all joined IRMA.
- 2 So, GRIP's public comments tonight offer
- 3 our recommendation for how the Little Rock MMD permit
- 4 and the reclamation plan can be improved to be
- 5 consistent with IRMA's socially and environmentally
- 6 responsible mining standards within the context of the
- 7 Mining Act Rules. And GRIP has been assisting local
- 8 residents in the burros who have significant concerns
- 9 about Freeport's expansion plans and the potential
- 10 impacts of expanded operations at Little Rock and
- 11 Tyrone.

- 12 And we strongly encourage the mining and
- 13 minerals division to put in place permit conditions that
- 14 will require a full assessment of Little Rock's impacts
- 15 to surrounding community members and provide meaningful
- 16 remedy of those impacts in order to protect public
- 17 health, residential water supplies and the environment.
- 18 So with that introduction, I'd like to
- 19 hand over the virtual floor to GRIP's technical
- 20 consultant, Jimaime Kuipers of Kuipers & Associates. And
- 21 Jim is going to provide a short presentation summarizing
- 22 our detailed comments on the Little Rock expansion and
- 23 reclamation plan.
- 24 HEARING OFFICER ORTH: Thank you,
- 25 Ms. Siwik.

- 1 Mr. Kuipers, will you raise right hand,
- 2 please?
- 3 (Jim Kuipers Sworn in.)
- 4 HEARING OFFICER ORTH: Do you swear or
- 5 affirm that the testimony you are about to give will be
- 6 the truth, the whole truth and nothing but the truth.
- 7 MR. KUIPERS: I do.
- 8 HEARING OFFICER ORTH: Please go ahead.
- 9 MR. KUIPERS: Thank you madam hearing
- 10 officer. I'm going to go ahead and share my screen and
- 11 you can see the presentation.
- 12 Okay. We'll keep our comments relatively
- 13 brief tonight. I realize it's getting late in the
- 14 evening for folks. At the same time, appreciate that

- 15 people have taken the time to attend the hearing and
- 16 listen to what folks have to say. And we appreciate
- 17 your staying on board this late.
- 18 Should mention, we're not going to spend a
- 19 lot of time tonight, or any time really, talking about
- 20 water quality issues. We have comments on the DP permit
- 21 that relate to the pit lakes and the water quality
- 22 aspects that were talked about previously. But we're
- 23 actually going to -- we submitted those comments, but we
- 24 don't plan on presenting comments that talk about the DP
- 25 tonight.

- 1 What we are going to talk about a bit is
- 2 the time frame. We have some concerns with respect to
- 3 the information provided and the amount of time that
- 4 ultimately is being requested through the revision, a
- 5 need for a site assessment, and appreciate the
- 6 information that Tom Shelley provided, and his
- 7 perspective on that.
- 8 We in particular want to talk more about
- 9 impacts to groundwater and further discuss ways that we
- 10 can deal with community perceptions or concerns that go
- 11 steps beyond what Freeport has done thus far. But we
- 12 certainly appreciate what they have done.
- And then, you know, a lot of our emphasis
- 14 tonight and comments, as Allyson mentioned, really is
- 15 with respect to surrounding landowners and residences.
- 16 And, again, really focusing on groundwater impacts, but
- 17 we also want to talk about noise and blasting, lights

- 18 and visual impacts, as well as dust mitigation and
- 19 monitoring.
- 20 And should mention that those last three
- 21 are things that we haven't typically seen addressed in
- 22 the NMED permitting process, at least to the extent that
- 23 we'd really like to see the department address these
- 24 things. And we really are here to provide some of the
- 25 rationale for why we think that's part of the duties
 0064
- 1 they have under the Mining Act.
- 2 So, most of the people on the call know
- 3 me. For those that don't, I'm a -- grew up in a mining
- 4 family. I'm a mineral process engineer. Spent some
- 5 time in industry. Beginning in 1996 started my own
- 6 firm, and since that time my clientele have primarily
- 7 been nongovernmental organizations, tribes, first
- 8 nations, state, federal, government. Basically
- 9 everybody except industry. But during that time I've
- 10 also spent a lot of time working with industry and
- 11 particularly working with industry consultants. My
- 12 primary areas of expertise are tailing storage
- 13 facilities, reclamation enclosure, water management,
- 14 treatment and financial assurance.
- 15 And for those of you -- some of you I
- 16 think I've known now for almost 25 years. I've been
- 17 involved in New Mexico in these type of hearings since
- 18 1998. So, I -- the company folks did a good job of
- 19 describing the Little Rock mine expansion. I think, you
- 20 know, it's very important to recognize that while in

- 21 their view, I think, the expansion is relatively modest
- 22 or minor as might have been suggested.
- To the public, to people looking at this
- 24 from the outside, it's a fairly significant expansion.
- 25 And they have a lot of concerns about the degree to 0065
- 1 which it will increase impacts they have already
- 2 experienced. And so therefore, you know, again, I think
- 3 it's we have to respect and realize that the public has
- 4 a perception of expansions that go beyond just the idea
- 5 of what are the physical limits of what we're doing and
- 6 is it all fitting within the same area or not.
- 7 So, one of the key issues that we have --
- 8 and I think the company folks explained this a bit
- 9 better -- is that this is part of a ten-year plan. The
- 10 mine revision application itself is part of a ten-year
- 11 plan, has two different phases of mining, Little Rock 6
- 12 and Little Rock 9. I don't think that was really
- 13 discussed, necessarily, but that's the two different
- 14 phases. One from 2024 -- 2020 to 2024, the other from
- 15 2025 to 2029, say.
- 16 The permit application is for the expanded
- 17 mine limit for the ten-year plan. And why that's
- 18 important is -- goes to really the last bullet on this
- 19 page, which is the supporting information for the
- 20 expansion is the 2020 closure closeout plan, which only
- 21 addresses years 1 through 5 or 2020 to 2024, also what
- 22 the company has described as Little Rock 6. It doesn't
- 23 describe supporting information and provide,

- 24 essentially, what we would look at as support, you know,
- 25 further site assessment information for the entire area 0066
- 1 or period of the expansion. And so that's really one of
- 2 our primary recommendations, is to address that and fix
- 3 that.
- 4 This shows the mine as it exists today,
- 5 before the Little Rock facilities are expanded and
- 6 everything else.
- 7 And then this shows the expanded pit at
- 8 the end of the ten-year mine plan. You got to keep in
- 9 mind this is not the end of the five-year closure
- 10 closeout plan, but really this is the end of the
- 11 ten-year mine plan as is being requested in the revision
- 12 application.
- 13 So, it is a significant addition.
- 14 There's, you know, it's -- the footprint itself may not
- 15 expand significantly or tremendously. But, typically,
- 16 when we look at any revision that expands by more than
- 17 10 percent the surface disturbance, that's considered to
- 18 be a significant or major expansion.
- 19 And so, for example, from the BLM
- 20 guidance, from forest service guidance, things of that
- 21 nature, a 10 percent increase in the actual disturbed
- 22 area can be looked upon as requiring additional
- 23 analysis. So, that's one of the comparisons we think is
- 24 important to make.
- 25 So, we're really, you know, talking about

- 1 here again, and just makes the same point, is the
- 2 stockpiles and other features would end up being removed
- 3 at the end. And they would expand the open pit
- 4 ultimately between the 2024 plan and the ultimate
- 5 ten-year plan. And in doing that, they would increase
- 6 the depth from about 5,500 feet to a depth of
- 7 5,050 feet, or 450 feet deeper, would be the additional
- 8 mining in the pit.
- 9 And that's -- that's fairly significant.
- 10 It's going to create quite a bit of more waste drop.
- 11 But most importantly, it's how the pit lake recovers
- 12 and, ultimately, reaches equilibrium and the water
- 13 quality comes out I think is very important.
- 14 And I think CCP really should provide
- 15 information not just going for the five-year mine plan,
- 16 but we really need information for, ultimately, how the
- 17 pit lake would result if the ten-year mine plan that's
- 18 being asked for or requested under the revision
- 19 application were to occur.
- 20 And really what we're, you know, citing is
- 21 the New Mexico Mining Act, and this section of the act
- 22 where it says: (Reading)
- That a site assessment should be required
- 24 if there's updated information or
- deviations from the original application.

- 1 Tom mentioned the 1997 environmental
- 2 impact statement that was conducted for the mine. And I
- 3 think it would be important for the department, NMED, to

- 4 take a close look at that EIS. And it's not -- the
- 5 EIS -- I don't know, and I think it was a good point Tom
- 6 makes, but it's the area of disturbance that was
- 7 anticipated at that time versus today that we need to
- 8 understand, whether or not that was, in fact, adequately
- 9 evaluated.
- But I'd also point out that 1997 to 2021,
- 11 that's almost a 25-year period. The methodologies, the
- 12 approaches we use, the overall concerns would be
- 13 different, I think, today than they were 25 years ago,
- 14 or almost 25 years ago.
- So, we are citing this part of the app
- 16 that also suggests what the assessment should include.
- 17 And I want to just focus on Items 5 and 6. Item 5 is an
- 18 analysis of mining operations impact on local
- 19 communities. Now, Tom mentioned that in 1997 there was
- 20 a, if you will, prediction of the mining operations
- 21 impact on local communities. Well, a very good exercise
- 22 to do would be a analysis of, well, what occurred in
- 23 that 1997 EIS in terms of predicted impacts to the local
- 24 communities. If they were, in fact, altogether
- 25 analyzed, with what's occurred 25 years later, today,

- 1 after the period of mining so far.
- 2 That actually presents a rare opportunity
- 3 to do what we call a comparative analysis of a
- 4 prediction versus what's actually happened. And that
- 5 information could be used to calibrate a new site
- 6 assessment going forward. So, it's a good example of

- 7 why doing something over after 25 years I think is
- 8 something worth considering.
- 9 In addition, it also has requirement for
- 10 description of wildlife and wildlife habitat, as well as
- 11 an analysis of the mining operation's impact on that
- 12 wildlife and wildlife habitat. And that also is
- 13 something that GRIP has been concerned about, other
- 14 folks, and we'd like to see that done.
- 15 This also would be important when we
- 16 talked about the appropriate water quality standard for
- 17 the site. If we have wildlife that's going to occupy
- 18 the site seasonally for long periods of time, things of
- 19 that nature, a chronic standard would be more
- 20 appropriate than an acute standard that was suggested.
- 21 And chronic standards are significantly lower than acute
- 22 standards. So, I think that's also something that
- 23 should be part of the site assessment.
- So, really to wrap all that up, our
- 25 recommendation is that the company should go ahead and 0070
- 1 expand the information. There should be a site
- 2 assessment done for the entire ten-year application or
- 3 period that's contemplated in mining in the revision
- 4 application.
- 5 Now, the company could take another
- 6 alternative, and that's just simply limit the revision
- 7 application to be the same as the five-year CCP that
- 8 they're providing as a supporting information.
- 9 Although, I'd still suggest, you know, that would not

- 10 answer the full question as the needs for a site
- 11 assessment.
- 12 Also, would just mention that I would
- 13 expect the BLM and forest service under the National
- 14 Environmental Policy Act will have to look very hard at
- 15 whether they would do a -- need to do an environmental
- 16 assessment or possibly even a new environmental impact
- 17 statement. Until that's been determined, I think it's a
- 18 little bit premature for MMDNMED to proceed without the
- 19 site assessment, given that that information would
- 20 actually provide much of what we're talking about here.
- 21 So, just a few things with respect
- 22 specifically to impacts to groundwater. And, again,
- 23 appreciated the information provided by FMI and their
- 24 consultant, and, you know, some of this pertains to
- 25 that.

- 1 But kind of stepping back a bit, you know,
- 2 we're not really disagreeing, I certainly am not
- 3 disagreeing, with the information that was presented.
- 4 But that's based upon a certain amount of assumptions.
- 5 It's based upon modeling. And part of our job, I think,
- 6 is to assure the public -- and this really goes,
- 7 perhaps, more to the companies' responsibilities than
- 8 MMD's -- but is really to assure the public that our
- 9 models and all these other assumptions that we have that
- 10 make sense to us, in fact, are right.
- So, you know, it's important regardless of
- 12 what we think's going to happen that we identify all the

- 13 different residential wells, other private wells,
- 14 within -- we're suggesting a two-mile perimeter of
- 15 predicted area of influence. And I think FMI has
- 16 largely done that. I don't know that that map they
- 17 showed actually was a two-mile perimeter, but they --
- 18 you can see in the map they identified quite a number of
- 19 those.
- 20 But we're also just suggesting that the
- 21 modeling work, the information presented, be based upon
- 22 the end of mine life scenario. In other words, a pit
- 23 drawn down to 5,050 feet versus a pit drawn down to
- 24 5500 feet as is contained in the information supporting
- 25 the closure closeout plan.

- 1 We would like to see the company provide
- 2 more cross-sections so that people can better understand
- 3 for themselves what's happening in terms of the actual
- 4 wells and well levels and the different things like the
- 5 monzonite barrier he'd discussed as far as the faults
- 6 and fractures. That would certainly influence
- 7 groundwater flow.
- 8 Again, we think it's very important,
- 9 though, that we portray the end of mine conditions.
- 10 Portraying the mine conditions after five years doesn't
- 11 satisfy fully what's being suggested in the revision
- 12 application.
- And, again, I think it's very important we
- 14 have more comments on this in our discharge plan
- 15 comments -- or discharge permit comments. But when we

- 16 talk about equilibrium, we need to go beyond 100 years.
- 17 And it's fairly certain that if we take those same
- 18 models, go out 200, 300 years, we're going to see more
- 19 constituents due to evapoconcentration end up exceeding
- 20 standards. So, to the extent that that's something MMD
- 21 needs to address, you know, we are making that
- 22 recommendation, certainly to ED as well.
- One of the things that I think is good to
- 24 have in place, even if you don't think you're going to
- 25 have impacts, is a voluntary well monitoring and

- 1 mitigation program. Something that citizens, community
- 2 members, other private landowners with wells can sign up
- 3 for. And in that agreement, really, the company would
- 4 volunteer to address any impacts if they were to occur,
- 5 and it can be, you know, pointed to as mining being a
- 6 potential impact.
- 7 So, again, I think some of these
- 8 recommendations are consistent to a degree with what the
- 9 company is doing. What we're really trying to suggest
- 10 is to, you know, some extent raise the bar, make sure
- 11 we're doing this right, make sure we're using the best
- 12 standards we can to do this.
- 13 Which really brings us to the next part
- 14 which is that under the Mining Act another requirement
- 15 that I think is oftentimes overlooked is the requirement
- 16 in NMAC 19.10.5.508A that most appropriate technology
- 17 and best management practices be used. And that section
- 18 requires that the mining operation and the reclamation

- 19 plan shall be designed and operated using the most
- 20 appropriate technology and best management practices.
- There are several really good examples of
- 22 best management practices. One of those is the
- 23 International Council on Mining and Metals that Tom
- 24 Shelley mentioned. The company is a founding member of
- 25 ICMM, and ICMM is constantly producing more good 0074
- 1 guidance. They really represent to a great degree the
- 2 current and best industry standards in the areas that
- 3 they've chosen to put together guidance.
- 4 The other, which is the one Allyson
- 5 mentioned, which is the Initiative for Responsible
- 6 Mining Assurance or IRMA. They have a standard that's
- 7 really working to assure that metals all the way from
- 8 the beginning of the supply chain to the end of the
- 9 supply chain all meet a common standard of best
- 10 management practice.
- 11 And IRMA's standard is taken from places
- 12 like ICMM, also taken from the New Mexico Mining Act, by
- 13 the way. Some of IRMA's language for reclamation, as
- 14 well as financial assurance, actually comes from
- 15 New Mexico Mining Act.
- So, you know, we're really recommending
- 17 that those are two good examples that we would suggest
- 18 the company look at and work to be consistent with as
- 19 best management practices.
- The ICMM has a water stewardship
- 21 framework. And I'm not going to go through these, each

- 22 bullet in detail. But what's important is the goal in
- 23 all of these approaches is that you take larger holistic
- 24 view, and you recognize that the mining needs to exist
- with all the other needs in the surrounding communities0075
- 1 and the surrounding -- in the county, if you will. And
- 2 that it needs to look at things not only, you know,
- 3 during a ten-year life cycle, but really needs to look
- 4 at things in a much bigger picture.
- 5 The community really needs to know more
- 6 about what FMI has for water rights, what they're doing
- 7 with those water rights. And ideally what we'd like to
- 8 see is the company, the county, the communities, other
- 9 water users all collaborating together to make sure that
- 10 drawing from one part of the straw and another straw and
- 11 another straw doesn't create an issue, ultimately,
- 12 long-term for all the water users in the basin in the
- 13 region. And so that's really the kind of thing that
- 14 ICMM and their larger picture water stewardship
- 15 framework is suggesting needs to be done.
- 16 And then the IRMA standard actually
- 17 provides more specific requirements that can be audited.
- 18 And the whole idea behind the IRMA standard as it was
- 19 written, was that you can go ahead and hire an
- 20 independent auditor and they'd come in and actually look
- 21 at these things to see if a company's done it.
- So, for example, they want to make sure
- 23 that the company has identified all the different water
- 24 users, water rights holders and other stakeholders that

- 25 could be affected by its practices. They want to make 0076
- 1 sure the company conducts a lot of its own research and
- 2 collaborates with the stakeholders to look at not only
- 3 current, but future potential uses of water. And,
- 4 again, with climate impacts, all the other things that
- 5 are happening, just more and more people trying to use
- 6 the same limited, really, supply of water, that becomes
- 7 more and more important as something to do.
- 8 And then the other is really to recognize
- 9 that we all need to work together again in the
- 10 collaborative way to essentially work to address the
- 11 challenges, also opportunities that may occur. For
- 12 example, when the mine does close, and that's -- that's
- 13 likely to be many, many decades from now overall at
- 14 Tyrone -- what is the best way to use that water from
- 15 treatment. There's going to be a lot of water from the
- 16 treatment processes that can be discharged in a variety
- 17 of ways. And that's something that a lot of different
- 18 entities should have an interest in.
- 19 Just a couple of other comments. Noise
- 20 and vibration, again, there are best management
- 21 practices out there to address noise and vibration.
- 22 We'd like to see the company take on those practices.
- 23 To the extent it's appropriate for MMD, we think MMD
- 24 should require the company to do some of these things.
- The IRMA standard actually has sections,

1 three sections, that address noise and vibration and the

- 2 various types of mitigation and reporting that should be
- 3 done. I haven't included those here in detail, but the
- 4 key is that you really would -- what we recommend is
- 5 that a blasting impact analysis be done for the local
- 6 community and residences. And it really provides a
- 7 baseline of information, if you will. And that way if
- 8 there are any concerns about blasting impacts, you've
- 9 got an assessment that occurred prior to those concerns.
- 10 And then a blasting plan can be developed from doing
- 11 that analysis, as well as talking with the public.
- 12 Interestingly enough, one of the questions
- 13 that we've been asked is, how will we know when they're
- 14 going to blast? Now, my experience is companies can
- 15 typically blast at a certain time of day or at least
- 16 within a window of time, things like that. But
- 17 providing that kind of information as to when you expect
- 18 to blast, that would be helpful, and is the kind of
- 19 information that ultimately, surprising enough,
- 20 addresses a lot of the public concerns. They can say,
- 21 oh, that was just the mine. They always do it at this
- 22 time of day. A little different than just all of a
- 23 sudden it happening and people wondering what happened.
- 24 Lights and visual impacts. And I think
- 25 this is something that if I were living in the

- 1 surrounding area around the mine, I'd want the mine to
- 2 do the best job they could to address this. But then,
- 3 again, I live in a very dark place on the other hand, so
- 4 I value dark. But anyway, the sighting measures, there

- 5 are a number of things they can do in terms of visual
- 6 mitigations.
- 7 One of the things you have to do is
- 8 literally go stand in the yard or on the properties of
- 9 the people who are being impacted to get a real measure
- 10 of the visual impacts that are occurring, and get some
- 11 idea also of how you might go about that visual
- 12 mitigation.
- 13 There are various design measures that
- 14 have been developed in order to deal with visual
- 15 mitigation. A lot of that has to do with sculpting and
- 16 blending things. Providing less visual contrast for
- 17 color. And then there are various special circumstances
- 18 where things can be done to offset visual impacts.
- 19 Where I'd really start with is some kind
- 20 of analysis of the light and other visual impacts on the
- 21 local community. People are seeing that. And, you
- 22 know, a good example is by doing that you develop
- 23 mitigation plan that recognizes that, well, we've been
- 24 shining these lights from our haul trucks dumping off
- 25 the waste drop piles in a certain direction that heads0079
- 1 right towards residential folks. Can we turn those
- 2 lights? Can we adjust them in a different way? Can we
- 3 use even potentially a different type of light that
- 4 won't have that same type of visual impact? And it's
- 5 doing, in some cases, I think small things like, just
- 6 recognizing that you can turn a light set in a different
- 7 direction, that can make a big difference.

- 8 And then finally dust mitigation and
- 9 monitoring. There's a lot of information out there on
- 10 fugitive dust. Should mention that we've discussed with
- 11 the agencies and others -- and there really isn't a lot
- 12 of -- well, really is -- are no regulations in
- 13 New Mexico dealing with fugitive dust other than where a
- 14 few counties have enacted some regulations. So, it's
- 15 really something that typically has been looked at as
- 16 more of a local issue.
- 17 But, again, I think it's something that's
- 18 a very significant issue to the community. It's the
- 19 type of thing that MMD in addressing communities'
- 20 concerns should being including, in our opinion. And
- 21 we'd like to see them put together a program that
- 22 identifies fugitive dust.
- 23 I should mention one of the key things in
- 24 all these mitigations I've talked about would be for a
- 25 the company to have a way for community members to

- 1 contact them and contact the right person who can
- 2 actually take action when they observe any of these
- 3 types of impacts. If they observe dust, noise, lights,
- 4 things like that, that they'd like to see the company
- 5 try to address. So, that's one of the kind of programs
- 6 that they need to make sure is there so that they can
- 7 react quickly and responsibly to issues that the
- 8 community identifies.
- 9 I believe that's everything I've got.
- 10 Thank you very much.

- 11 HEARING OFFICER ORTH: Thank you,
- 12 Mr. Kuipers.
- 13 Ms. Siwik, anything further?
- 14 MS. SIWIK: Jim, did you have that last
- 15 slide on reclamation cost estimates?
- 16 MR. KUIPERS: Thank you Allyson. I am
- 17 sorry everybody, I -- we actually added this last slide
- 18 on -- just at the end of today, so I forgot about it.
- 19 I -- and I kind of just rushed through the end there.
- 20 Sorry about that.
- So, we did just have a couple of brief
- 22 comments. You know, they mentioned the financial
- 23 assurance cost estimate. I actually believe the
- 24 discussion was more than what I have here, maybe I heard
- 25 8 million instead of 7 million. But the information

- 1 that I've reviewed today indicated that the financial
- 2 assurance would be 7 million, 5.4-million of that is in
- 3 direct costs. And for folks that aren't familiar with
- 4 things, the company mentions that it's consistent with
- 5 the methodologies that have been used at the other mine
- 6 sites.
- 7 And GRIP, myself involved, as well as the
- 8 agencies and Freeport spent about a year, year and a
- 9 half of working through the methodologies for the
- 10 financial assurance calculation for those three mines.
- 11 And I do agree that the methodology they're using meets
- 12 the accepted standard of practice for financial
- 13 assurance calculations. So, we're not going to have a

- 14 lot of comments on the direct costs.
- 15 Similarly, the 1.6 million in indirect
- 16 costs is estimated at 30 percent of the direct costs.
- 17 And that's essentially established on a previous
- 18 precedent that also is based upon on Tyrone, Chino and
- 19 Continental. Now, I would suggest that at some point in
- 20 the future MMD does need to go back to and look at and
- 21 follow its guidance that it has for indirect costs.
- 22 But, certainly, at this time without a further hard look
- 23 and more discussion on that, I think it makes sense for
- 24 the company to use that 30 percent direct cost factor
- 25 that was used elsewhere.

- 1 One place we have, or I have, you know,
- 2 and really we have the most concerns is with respect to
- 3 post reclamation. And when I looked at the financial
- 4 assurance estimate, it appears that in terms of
- 5 revegetation and post mining land use, the company is
- 6 doing monitoring maintenance for 12 years. But after
- 7 12 years they're done.
- 8 And then in terms of water quality,
- 9 they're looking at doing some additional maintenance
- 10 for, I believe, it's up to 15 years, continuing water
- 11 quality monitoring for 30 years. But then they're done
- 12 there.
- Now, we just heard the pit lake, in a
- 14 prediction, is not going to equal or reach equilibrium
- 15 for 100 years. In fact, it -- approximately 70 or a
- 16 hundred years I think is the prediction to meet that.

- 17 At that time -- and I should say geochemical
- 18 equilibrium -- at that time the water quality may or may
- 19 not meet the predicted water quality. And I think if
- 20 you carry it out, it -- and apply other standards, for
- 21 example chronic aquatic standards, it will not.
- 22 And so we're thinking that the groundwater
- 23 quality or surface water quality, whatever applies to
- 24 that lake, will still require monitoring to assure it
- 25 meets standards and/or mitigation if it doesn't for at 0083
- 1 least 100 years if not far longer into the future. Just
- 2 simply because of the uncertainty associated with any
- 3 estimate for that long-term water quality.
- 4 So, the one last comment I would mention
- 5 is, you know, the estimate, I would consider it to be
- 6 preliminary. And once the CCP is finalized, the
- 7 conditions to the discharge permit and other things are
- 8 finalized, then a final financial assurance estimate
- 9 will most likely need to be calculated with some
- 10 revisions to what they presented.
- 11 Now, I think I'm done. Thank you.
- 12 MS. SIWIK: Thank you.
- 13 HEARING OFFICER ORTH: Thank you,
- 14 Mr. Kuipers.
- 15 Ms. Siwik, anything else?
- 16 MS. SIWIK: Madam hearing officer, that
- 17 concludes our remarks. And thank you to everybody for
- 18 sticking with us through our presentation. We
- 19 appreciate it.

- 20 HEARING OFFICER ORTH: Thank you.
- 21 While I'm thinking about it, please
- 22 Mr. Kuipers's and also the Freeport panel, if you would
- 23 send your PowerPoints as presented to Mr. Ohori, we can
- 24 actually get those posted to give people the full amount
- 25 of information about this proceeding on their web page.

- 1 Let's turn to questions then of
- 2 Mr. Kuipers's.
- 3 Mr. David, do you have questions of
- 4 Mr. Kuipers?
- 5 MR. DAVID: Madam hearing officer, I have
- 6 no questions. Thank you very much.
- 7 HEARING OFFICER ORTH: All right. Thank
- 8 you.
- 9 Mr. Moellenberg, do you have questions of
- 10 Mr. Kuipers?
- 11 MR. MOELLENBERG: Madam Hearing Officer,
- 12 also I have no questions. Thank you.
- 13 HEARING OFFICER ORTH: All right. Thank
- 14 you.
- 15 If there's anyone participating on this
- 16 platform this evening who has a question of Mr. Kuipers,
- 17 please find the button that allows you to raise your
- 18 hand and the technical host will let me know who that
- 19 is. If you're on a phone rather than a computer, I
- 20 believe if you press star 3 you will be able to raise
- 21 your hand.
- 22 Let's see. Johannes Mencer, I believe as

- 23 how to pronounce your last name. Mr. Mencer, I believe
- 24 you have a question.
- 25 MR. LENCER: It's actually Lencer, it

- 1 starts with an L like in lamb. L-E-N-C-E-R.
- 2 HEARING OFFICER ORTH: Oh, Lencer? I'm
- 3 very sorry. So, Mr. Lencer --
- 4 MR. LENCER: Yes.
- 5 HEARING OFFICER ORTH: -- please ask your
- 6 question of Mr. Kuipers.
- 7 MR. LENCER: Yes, just a -- well, it's a
- 8 clarification. You mentioned that there was a chance to
- 9 do a re-evaluation after the 25 years that had past,
- 10 that's currently -- I was just wondering what area that
- 11 was in response to or concerning? Like what would that
- 12 be looking at exactly? Thank you.
- 13 MR. KUIPERS: Sure. This is Jim Kuipers,
- 14 and thanks for the question.
- This would be addressing the site
- 16 assessment that had been done in 1997, and doing a new
- 17 site assessment today that would include the actual
- 18 impacts versus the predicted impacts.
- 19 MR. LENCER: And that is for the Little
- 20 Rock Mine, the same area we're talking about?
- 21 MR. KUIPERS: Yes, that's correct.
- 22 HEARING OFFICER ORTH: Thank you.
- 23 Are there any other questions of
- 24 Mr. Kuipers by anyone participating? Please raise your
- 25 hand virtually. Mr. Ayarbe, I believe your hand is

- 1 raised.
- 2 MR. AYARBE: Yeah, I have a question. I
- 3 didn't know how to raise my hand virtually.
- 4 HEARING OFFICER ORTH: All right. Please
- 5 go ahead.
- 6 MR. AYARBE: All right. Mr. Kuipers, I
- 7 just have a clarifying question, maybe comment. You
- 8 talk about equilibrium of the lake. I want to make sure
- 9 you and I are on the same page. Because when you're
- 10 talking about 70 or 80 years, you're talking about the
- 11 lake itself, right? Not the geochemistry of the lake,
- 12 but you're talking about the final water level elevation
- 13 and extent?
- 14 MR. KUIPERS: Oh, that -- no, that's
- 15 what -- and I need to ask you maybe. Okay. So, I --
- 16 without -- you know, again, I was trying to respond to
- 17 your comment? But so I -- I think, as I recall, and you
- 18 correct me if you can't because I'm just trying to
- 19 recall your study unfortunately, okay?
- 20 MR. AYARBE: Yeah, yeah.
- 21 MR. KUIPERS: As I recall, the lake
- 22 reached equilibrium in terms of level, I want to say in
- 23 70 years. And then the actual chemistry I don't think
- 24 it had entirely reached equilibrium by the hundred
- 25 years, or had it?

- 1 MR. AYARBE: Like a hundred years --
- 2 MR. KUIPERS: Because the level has to

- 3 reach equilibrium before the chemistry.
- 4 MR. AYARBE: Correct. Correct. So, the
- 5 way the models working, 60 to 80 years it reaches that
- 6 water level equilibrium. And then from that, at a
- 7 hundred years -- so I'm going beyond, 30 years beyond
- 8 that point -- okay. I'm not muted -- 30 years beyond
- 9 that point and then I'm doing my mixing calculation and
- 10 my evapoconcentration calculation.
- 11 (Court reporter clarification.)
- 12 HEARING OFFICER ORTH: Ms. Soto, that's
- 13 Mr. Ayarbe, A-Y-A-R-B-E.
- 14 MR. AYARBE: Mixing calculation. Yeah,
- 15 geochemical mixing calculation, sorry. I know Jim knows
- 16 what I'm talking about.
- 17 Yeah, so at that point, yeah, I think it
- 18 is getting to that equilibrium geochemistry.
- 19 MR. KUIPERS: Okay.
- 20 MR. AYARBE: But we can talk more, but
- 21 yeah.
- 22 MR. KUIPERS: Yeah, that's what I
- 23 recalled, it was very close at a hundred years. And
- 24 then I -- looks -- so my 70 years splits your 60 to 80.
- 25 MR. AYARBE: Okay.

- 1 MR. KUIPERS: Okay.
- 2 MR. AYARBE: I just wanted to make sure.
- 3 Yeah, yeah, yeah.
- 4 MR. KUIPERS: Thanks for the
- 5 clarification, yeah.

- 6 MR. AYARBE: All right. Thank you.
- 7 HEARING OFFICER ORTH: All right. Thank
- 8 you Mr. Ayarbe and Mr. Kuipers.
- 9 Is there anyone else who has questions of
- 10 Mr. Kuipers? Anyone else at all?
- No, I don't think we see any hands. So,
- 12 thank you very much -- hold on here. Okay. No more
- 13 hands according to the technical host. So, thank you
- 14 very much Mr. Siwik and Mr. Kuipers.
- 15 MR. KUIPERS: Thank you.
- 16 HEARING OFFICER ORTH: All right. Let's
- 17 turn to public comment. And I understand we have a few
- 18 more callers. So, Mr. Technical Host, let's get them
- 19 identified. Do I understand that we have a caller on
- 20 Line 14? Who is on Line 14?
- 21 Please identify yourself. My name is
- 22 Felicia Orth, what is your name?
- No? Okay. What about Caller 16,
- 24 caller 16, please identify yourself.
- No, I'm not hearing anything there either.

- 1 All right. They are unmuted Callers 14 and 16. If you
- 2 can hear me, please speak up.
- 3 I'm just hearing some noises rather than a
- 4 human voice. It's just feedback.
- 5 All right. Is there anyone on the line to
- 6 identify themselves.
- 7 MS. SHAWL: Hello?
- 8 HEARING OFFICER ORTH: Hello. Who is

- 9 this?
- 10 MS. SHAWL: This is Wendy Shawl again.
- 11 HEARING OFFICER ORTH: All right.
- MS. SHAWL: I called earlier and then was
- 13 able to connect online. But then was having some
- 14 technical difficulties so called back.
- 15 (Court reporter clarification.)
- 16 HEARING OFFICER ORTH: Thank you. I can
- 17 hear that. Ms. Shawl, you're reverberating. So, I have
- 18 to ask you to choose one audio source or the other,
- 19 either your phone or your computer.
- MS. SHAWL: Hi. Can you hear me now?
- 21 HEARING OFFICER ORTH: That's much better.
- 22 Thank you very much. And this is Wendy Shawl?
- 23 MS. SHAWL: This is Wendy. I called
- 24 earlier before I was able to connect online.
- 25 HEARING OFFICER ORTH: Yes.

- 1 MS. SHAWL: And then called back when I
- 2 lost the audio online, so was listening on both.
- 3 HEARING OFFICER ORTH: All right. Thank
- 4 you. Let me ask you while we have you unmuted, do you
- 5 have any public comment to offer?
- 6 MS. SHAWL: I do have a question. The
- 7 assessments that were done were -- so mining has been
- 8 done subsequent to those first assessments; is that
- 9 correct? And --
- 10 HEARING OFFICER ORTH: So, I'm sorry.
- 11 Questions at this point would have to be directed to

- 12 either MMD staff or Freeport staff offline. At this
- 13 point they've made their presentations and the
- 14 questioning is done.
- 15 MS. SHAWL: Okay.
- 16 HEARING OFFICER ORTH: Do you have a
- 17 comment to offer?
- 18 MS. SHAWL: I do. I still have some
- 19 concern as a resident nearby about the water table. And
- 20 so I believe that the suggestions that -- I believe it
- 21 was Mr. Kuipers made -- are a good idea, for further
- 22 assessment.
- 23 HEARING OFFICER ORTH: All right. Well,
- 24 thank you very much for that.
- 25 And the rules require that I put under

- 1 oath everyone who makes a comment. So, let me ask you
- 2 if you swear or affirm that the comment you just made
- 3 was the truth, the whole truth and nothing but the
- 4 truth?
- 5 MS. SHAWL: Yes.
- 6 HEARING OFFICER ORTH: Thank you very
- 7 much. We're going to go back to muting you. But, of
- 8 course, please continue to listen if you'd like.
- 9 All right. What other hands do we have
- 10 raised in order to offer public comment?
- 11 No hands?
- No hands? Let me pause for a moment in
- 13 the event anyone changes their mind.
- 14 About public comment?

- 15 Have we -- Mr. Technical Host, have we
- 16 unmuted everyone on the call-in lines? Is there anyone
- 17 calling in who would like to offer public comments? I
- 18 understand all of the call-in users have been unmuted.
- 19 Yes, please unmute the callers.
- 20 Is there anyone who'd like to off public
- 21 comment?
- 22 (Court reporter clarification.)
- 23 HEARING OFFICER ORTH: Please remute the
- 24 callers. I'm not hearing a human voice.
- Thank you. Going once. Going twice. Any

- 1 public comment?
- 2 All right. Let's talk about the --
- 3 (Court reporter clarification.)
- 4 HEARING OFFICER ORTH: If you would
- 5 Kevin -- let's mute the callers please, Kevin or John.
- 6 Thank you.
- 7 So, let's talk about the post hearing
- 8 process. We can expect a transcript from Ms. Soto
- 9 sometime in the next two weeks. I've asked the Freeport
- 10 folks and GRIP to submit their PowerPoints so that they
- 11 can be posted online. The deadline for written public
- 12 comment is June 17th at 5:00 p.m. We have not
- 13 contemplated any other post hearing submittals, by the
- 14 way. I think it's probably premature to request any
- 15 post hearing submittal from anyone given where we are in
- 16 the permit application process.
- 17 And I am seeing a raised hand from Ronald

- 18 Parry.
- 19 If you would please, unmute Mr. Parry.
- 20 Mr. Parry?
- 21 MR. PARRY: Yes, can you hear me?
- 22 HEARING OFFICER ORTH: Yes, I can. If you
- 23 would please raise your right hand.
- 24 Do you swear or affirm to tell the truth,
- 25 the whole truth and nothing but the truth?

- 1 MR. PARRY: Yes, I do.
- 2 HEARING OFFICER ORTH: All right. If you
- 3 would please make your comment.
- 4 MR. PARRY: Okay. So, I am a resident, as
- 5 I said before, of the Oak Grove community which is close
- 6 to the proposed mine expansion. So, first of all, I
- 7 would like to say that I support everything that GRIP
- 8 has outlined in terms of their concerns about the
- 9 expansion. And then I would like to add that I talked
- 10 to a number of my neighbors who have various concerns,
- 11 and our concerns include those outlined by Jim Kuipers
- 12 including blasting, dust, noise, and interference with
- 13 our wells or depletion of the water table.
- 14 The other thing I'd like to say is
- 15 something about lighting since that came up. My -- some
- 16 of our neighbors are quite disturbed by the lighting
- 17 because they're quite close to the mine. They're closer
- 18 than I am. So, they have talked to the mine about this,
- 19 and the mine has given them some promises that something
- 20 will be done, and I presume it will.

- 21 But my other concern is that we live in a
- 22 very dark area and that the lighting from the mine is
- 23 undoubtedly interfering with the ecosystem. It's
- 24 undoubtedly interfering with bird navigation, with
- 25 insect navigation. It also -- there are studies that 0094
- 1 slow bright lights in dark areas interfere with
- 2 predator/prey interactions. So the mine needs to make a
- 3 real effort to somehow ameliorate or minimize the lights
- 4 that they're generating in the area.
- 5 This is not rocket technology. You can
- 6 put shades on lights that direct the light toward the
- 7 ground and so forth. So, all of us who live in that
- 8 community would be grateful if the mine would do
- 9 something about the excessive lighting that impacts our
- 10 community at the moment. Thank you.
- 11 HEARING OFFICER ORTH: Thank you very
- 12 much, Mr. Parry.
- 13 Anyone else, at all, who would like to
- 14 offer public comment this evening?
- 15 I certainly thank you all for hanging in
- 16 with us. I do have one bit of written public comment
- 17 from two state representatives that they asked be read
- 18 on to the record.
- 19 I'll read it and Ms. Soto, I will forward
- 20 it to you also via email. It's to the director of MMD,
- 21 Jerry Schoeppner, from state representative Rebecca Dow
- 22 and state representative Luis Terrazas. (Reading)
- 23 Dear Director Schoeppner. Thank you for

24	the opportunity	/ to	comment of	on the	Little

25 Rock Mine expansion and closeout plan

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- 1 update. We have been informed that Tyrone
- 2 is requesting a relatively modest
- 3 expansion and a routine five-year update
- 4 to the closeout plan.
- 5 We are also aware that while the Little
- 6 Rock Mine is relatively a small part of
- 7 the Tyrone Mine, it is very important for
- 8 Tyrone's continued successful mining
- 9 operation for the long-term.
- 10 We further understand the Little Rock Mine
- 11 has been operating since 2010 and that the
- 12 mining operations will be very similar to
- 13 what the local community has been
- 14 accustomed to for many years.
- 15 It should be noted that continued copper
- 16 mining in New Mexico is important to
- 17 helping meet our renewable energy goals.
- 18 Because copper is a highly efficient
- 19 conduit it is used in renewable energy
- 20 systems to generate power from solar,
- 21 hydro, thermal and wind energy across the
- 22 world. Copper helps reduce CO2 emissions
- 23 and lowers the amount of energy needed to
- 24 produce electricity. In many renewable
- 25 energy systems there are 12 times more

1	copper	being i	used	than	ın t	radit	ional

- 2 systems to ensure efficiency.
- 3 Given Tyrone's ongoing efforts to preserve
- 4 mining jobs and protect the health and
- 5 safety of the people in surrounding
- 6 communities, as well as their excellent
- 7 environmental stewardship by fulfilling
- 8 the rigorous requirements of our state's
- 9 environmental regulations, we request that
- this application be approved quickly so
- that the families and community that rely
- on this important industry continue to
- 13 prosper in Grant County.
- 14 Sincerely State Representative Rebecca Dow
- 15 talk and State Representative Luis
- 16 Terrazas.
- 17 Having done that, I'm not aware of any
- 18 other comment that was requested to be read into the
- 19 record this evening. Again, we can expect a transcript
- 20 in a couple of weeks. More information, all information
- 21 really, can be found on the Mining & Minerals Division
- 22 web page. And most importantly, from here out the
- 23 deadline for written public comment is 5:00 p.m.
- 24 June 17th. It can be sent snail mail or the via email
- 25 to the addresses you find on the notice of public

- 1 hearing this evening.
- 2 Is there anything else, at all, before we
- 3 adjourn?

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I'm hearing nothing. So, thank you all
4
5 very, very much. And we'll see you again later. We're
6 adjourned.
7
           (Concluded at 8:00 p.m.)
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1 STATE OF NEW MEXICO)
            ) ss
2 COUNTY OF DONA ANA )
3
     I, BELEN SOTO, Official Court Reporter in and for
5 the State of New Mexico, hereby certify that I
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6 reported, to the best of my ability, the LITTLE ROCK 7 MINE PUBLIC HEARING ON June 2, 2021, that the 8 pages numbered 1 through 97, inclusive, are a true 9 and correct transcript of my stenographic notes, and 10 were reduced to typewritten transcript through 11 Computer-Aided Transcription; that on the date I 12 reported these proceedings, I was a New Mexico 13 Certified Court Reporter. 14 Dated at Las Cruces, New Mexico, this 14th day of 15 June, 2021. 16 17 18 **BELEN SOTO** 19 New Mexico CSR No. 106 Expires: December 31, 2021 20 21 22 23 24 25