

1 STATE OF NEW MEXICO
2 ENERGY, MINERALS AND NATURAL RESOURCES DEPARTMENT
3 MINING AND MINERALS DIVISION
4

5 PERMIT APPLICATION BY NEW MEXICO
6 COPPER CORPORATION FOR THE COPPER FLAT
7 MINE. PERMIT TRACKING NUMBER S1027RN.

8 TRANSCRIPT OF PROCEEDINGS

9 VOLUME 1
10
11

12 BE IT REMEMBERED that on the 23rd day of
13 October, 2018, this matter came on for hearing before
14 FELICIA ORTH, Hearing Officer, at the Albert J. Lyons
15 Event Center, 2953 South Broadway Street, Truth or
16 Consequences, New Mexico, at the hour of 9:03 a.m.
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MARKED

NMCC EXHIBIT:

Exhibit A. Copper Flat Mine Location

240

Exhibit B. Overview of Permit Application
Package and Mining Operations and
Reclamation Plan

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Exhibit C. Presentation by Jeffrey Smith

240

1 MS. ORTH: Good morning. My name is Felicia
2 Orth, and I am here on behalf of the Mining and
3 Minerals Division of the Energy, Minerals and Natural
4 Resources Department to take and compile public comment
5 on the permit application by New Mexico Copper
6 Corporation, which you'll hear referred to as "NMCC,"
7 for the Copper Flat Mine new mining operation. You may
8 hear this application referred to by its Permit
9 Tracking Number S1027RN.

10 These comments are extended. So settle in.
11 I will first set out a brief history of the permit
12 application, then a summary of the applicable
13 procedures, and then some housekeeping matters.

14 First, the permit application. Permit
15 application for the Copper Flat Mine consists of
16 multiple documents: A Sampling and Analysis Plan
17 submitted in 2010 and an Addendum submitted in 2016; a
18 Baseline Data Report initially submitted in 2012, with
19 six Addendums of supplemental information submitted
20 between 2013 and 2017. The Addendums include
21 additional information on additional geochemical
22 characterization, vegetation studies, wildlife studies,
23 updates to groundwater flow models.

24 And then a Mining Operation and Reclamation
25 Plan submitted in 2012 with an updated plan submitted

1 in 2016, and revision one to that updated plan
2 submitted in 2017, supplemental information on the plan
3 submitted in 2017, and 2018.

4 Okay. A Draft Environmental Evaluation was
5 prepared by MMD in July of 2018 in accordance with
6 Section 19.10.6.604 of the New Mexico Administrative
7 Code. Based on its review of the technical information
8 submitted by NMCC for the Copper Flat Mine application
9 on July 13th, 2018, the Mining and Minerals Division
10 deemed the application "technically approvable" in
11 accordance with 19.10.6.605.E of the code.

12 A "technically approvable" application does
13 not mean that MMD has issued a permit. No permit has
14 been issued. "Technically approvable" means that the
15 application has been determined by MMD to meet the
16 technical requirements of the Mining Act and Rules,
17 pending public participation through this hearing.

18 NMCC submitted a Proposal for Financial
19 Assurance in August 2018 which is currently under
20 review by MMD, the New Mexico Environment Department,
21 and the Bureau of Land Management. These agencies
22 continue to discuss aspects of the financial assurance
23 proposal with New Mexico Copper Corporation.

24 No decisions on the financial assurance
25 amount or financial assurance instrument that will be

1 provided by NMCC have been made at this time. MMD has
2 posted the Copper Flat Mine application and other
3 relevant documents on its website, which is
4 www.nmmines.com. MMD will not consider issuing a
5 permit until the public comment taken today and through
6 midnight of this Friday have been compiled and
7 considered by the drafter.

8 Moving to the hearing procedures. The
9 hearing is being conducted in accordance with
10 19.10.9.905 of the New Mexico Administrative Code.
11 Here are the key provisions: It is not an adjudicatory
12 hearing. It is an opportunity for New Mexico Copper to
13 show the public its application and for the public to
14 give comments.

15 Although there are a lot of lawyers here, the
16 Rules of Civil Procedure and the Rules of Evidence do
17 not apply. Any interested person may testify or
18 comment, present. All such comment will be taken under
19 oath or affirmation.

20 Subject to time constraints and other
21 potential considerations, I will invite your comment in
22 the order in which you signed in on the sign-in sheet
23 over there in front of Kevin Myers sitting there at the
24 front table. No salesmen will call. We use these
25 sign-in sheets as evidence of public participation and

1 for the correct spelling of your name in the
2 transcript.

3 Again, any person wanting to present comment
4 should place their name on the sign-in sheet. Please
5 collect your thoughts before offering verbal comment as
6 each commenter may only present once. If you wish to
7 add to your verbal comment because you have heard
8 something, please put your additional input in writing
9 before midnight Friday.

10 Any person presenting comment is subject to
11 questioning on the subject matter of the comment. So
12 if you comment, you may be questioned. It's my job to
13 limit those questions, if necessary, in order to avoid
14 harassment, intimidation, or needless expenditure of
15 time or undue repetition.

16 If you do not wish to offer verbal comment,
17 you are encouraged to submit written comment containing
18 data, views, or arguments for inclusion in the record.
19 If you have brought a written statement, you may bring
20 it up to this table and set it right next to the
21 gourds.

22 If you are not ready yet to submit your
23 written comment, you may submit it to MMD up until
24 midnight this Friday, October 26, 2018, regardless of
25 when we finish here. Comments submitted after midnight

1 this Friday cannot be considered. And, Counsel, to be
2 clear, there will be no post-hearing submittal
3 process.

4 A verbatim record of this hearing is being
5 made by Denise Kopan of Kathy Townsend Court
6 Reporters. You may contact Denise directly to purchase
7 a copy of the transcript. It also becomes a public
8 record and it's filed with MMD.

9 Besides assuring an orderly event here in
10 Truth or Consequences, my only role is to prepare a
11 summary report of the public comments received for the
12 Director of the Mining and Minerals Division, which I
13 will do shortly after the transcript is finalized.

14 That report includes no decisions or
15 recommendations from me. That is one more way in which
16 this event will differ from other events, including the
17 one that we had in T or C three weeks ago. Obviously,
18 no decisions are being made this week.

19 So the specific process we will follow over
20 the next couple of days. We will definitely be in this
21 room ready to take any comment today and tomorrow from
22 9:00 a.m. to 7:00 p.m., with a break for lunch and
23 shorter breaks in the morning and afternoon.

24 If necessary, based on the volume of comment
25 or presentations, we will extend the event to Thursday

1 and/or Friday. The announcement as to the next day
2 will be made by the end of the previous day, and if you
3 would like to know whether the event has been further
4 extended, MMD will update their web page. So please go
5 to the MMD web page.

6 We will begin with a presentation by New
7 Mexico Copper Corporation, a presentation on the Copper
8 Flat Mine. There will be time set aside throughout the
9 day to hear public comment. Specifically, I will
10 invite public comment immediately following the lunch
11 break, which should be about 1:00, and, also, at the
12 end of each day between 6:00 and 7:00.

13 So the exits seem to be clearly marked
14 there. The bathrooms are that way. Again, we will
15 take a lunch break, but not a dinner break. There are
16 Fact Sheets also. Kevin will have this with a blue
17 outline around the page. You can get good information
18 from the Fact Sheet.

19 Finally, please reach for your devices. I am
20 using mine as a watch today, but reach for your devices
21 and turn them off, or set them on stun. They are
22 disruptive when they are during someone's comment.

23 Thank you all for comments, and I will invite
24 counsel in the room now to introduce themselves for the
25 transcript.

1 Mr. Butzier, would you start?

2 MR. BUTZIER: Thank you, Ms. Orth, and good
3 morning. Stuart Butzier of the Modrall, Sperling firm
4 in the Santa Fe office representing New Mexico Copper
5 Corporation.

6 New Mexico Copper has today only one
7 presenter that we have planned, and that is Mr. Jeff
8 Smith. We had a second presenter, Juan Velasquez, who
9 was going to present, but Jeff Smith is going to cover
10 for him because he had a family issue back in
11 Albuquerque and couldn't make it today.

12 I did hand the court reporter three documents
13 that I would like to be submitted into the hearing
14 record marked A, B, and C, NMCC, and they consist of
15 the two PowerPoint presentations that now will be
16 presented exclusively by Mr. Smith, as well as a third
17 packet of materials which consists of copies of all of
18 the posters that are at the back of the room and
19 available for people to look at throughout the day.

20 MS. ORTH: All right. Thank you very much.

21 Mr. De Saillan?

22 MR. De SAILLAN: Thank you, Madam Hearing
23 Officer. Charles de Saillan with the New Mexico
24 Environmental Law Center representing Turner Ranch
25 Properties and the Hillsboro Pitchfork Ranch, and I

1 will be giving an opening statement today, I presume,
2 or tomorrow, as things go, and we will have five
3 witnesses who will be presenting testimony, and I will
4 introduce them during my opening statement.

5 We will be presenting written statements from
6 each one of the witnesses, as well as a number of
7 exhibits. We are still cleaning those up. So they
8 will not be available today, but we will submit hard
9 copies to the Hearing Officer, the Mining and Minerals
10 Division, and counsel for the copper mine sometime
11 between now and midnight on Friday.

12 Thank you very much.

13 MS. ORTH: Thank you very much, Mr. De
14 Saillan. Are there any other counsel in the room who
15 would like to introduce themselves for the transcript?
16 No. All right.

17 Let's begin then, Mr. Butzier, with your
18 presentation.

19 JEFFREY SMITH

20 after having been first duly sworn under oath,
21 testified as follows:

22 DIRECT TESTIMONY

23 MR. SMITH: Good morning. This morning, I'm
24 going to cover our permit application for a mining
25 permit for the Copper Flat Mine, and I have a

1 presentation prepared. The outline of this
2 presentation is presented on the screen.

3 I'd like to talk just a little bit initially
4 about the New Mexico Mining Act of 1993 and the
5 requirements of the Mining Act. I will introduce the
6 New Mexico Copper Corporation, I will do an overview of
7 the Copper Flat Mine, then I'd like to discuss the mine
8 permit application, and the elements of that.

9 I will introduce the major mine units that
10 are covered in the application, discuss our reclamation
11 and closure plan, and point out how we comply with the
12 reclamation standards. At that point, I would like to
13 introduce the experts that are with us today. They
14 will not be giving testimony, but are here to answer
15 questions.

16 Following that, Mr. Velasquez was scheduled
17 to make a presentation, and I will cover his
18 presentation at that time. After that, I will discuss
19 our financial assurance proposal, summarize community
20 benefits that the project offers, and then summarize
21 conclusions.

22 The New Mexico Mining Act was enacted in 1993
23 to promote responsible utilization and reclamation of
24 lands affected by exploration mining or the extraction
25 of minerals vital to the welfare of the state. The Act

1 requires all mining operations to obtain permits and to
2 meet certain requirements.

3 The Act differentiates between existing and
4 new mines, and permitting requirements for a new mine
5 are more complex than for an existing mine. The Copper
6 Flat Mine is defined to be a new mine under the Act.

7 Requirements for a new mine permit include
8 collecting 12 months of environmental baseline data,
9 applying best management practices to design, and
10 operations to avoid or minimize acid drainage and other
11 impact to ground and surface water, erosion controls,
12 contemporaneous reclamation, and minimizing change to
13 the hydrologic balance.

14 After the Act was enacted, there were several
15 comments, all positive comments, on the New Mexico
16 Mining Act, and I'd like to share some of these
17 exhibits with you today.

18 Douglas Meiklejohn, Executive Director of the
19 non-profit New Mexico Environmental Law Center, who
20 helped draft what became the New Mexico Mining Act,
21 stated, "Our state passed a landmark law to change the
22 way mining is done here. It was a massive effort."

23 Brian Shields, Executive Director of Amigos
24 Bravos, has stated, "The Mining Act put into place
25 safeguards that say, 'You can mine, but we need to make

1 sure the mine doesn't destroy our natural resources.
2 The process that now is in place takes a more holistic
3 view of permitting: Regulators now look at
4 environmental and public health impacts along with mine
5 design and safety. 21 years after its implementation,
6 the law is resulting in a more sustainable future for
7 the state.'"

8 Harry Browne, former Director of the Gila
9 Resources Information Project, states, "This is an
10 extraordinarily insightful law. It seems rare that our
11 legislators think 100 years in the future, but that's
12 what the people who passed this law did. We should all
13 be extremely grateful that we have the Mining Act
14 because we care about future generations in New
15 Mexico. They are the main beneficiaries of the Act."
16 New Mexico Copper could not agree more. Our plans
17 comply with the Act, we meet the requirements of the
18 Act, the requirements of the standard, and our designs
19 to protect the resources.

20 New Mexico Copper is the owner of the project
21 assets at Copper Flat. We are the permittee, the
22 developer, and will be the operator of the Copper Flat
23 Mine. New Mexico Copper is organized as a New Mexico
24 domestic profit corporation organized in 2010.

25 It is a wholly owned subsidiary of THEMAC

1 Resources Group. The majority shareholder in THEMAC is
2 the Tulla Group, an Australian family investment
3 group. Tulla has other mining investments, including
4 Norseman Gold, which is Australia's longest
5 continuously running gold mining operation and has
6 produced over 5 million ounces of gold over a 65-year
7 time frame in Western Australia.

8 Tulla is fully funding the Copper Flat
9 Project and has invested more than \$55 million to
10 date. New Mexico Copper plans are designed to meet or
11 exceed health, safety, and environmental regulatory
12 requirements.

13 New Mexico Copper is committed to developing
14 a long-term relationship with our neighbors in Sierra
15 County and dedicated to providing the local community
16 with significant opportunities for employment and
17 economic development.

18 The Copper Flat Mine is located 20 miles
19 southwest of Truth or Consequences, four miles
20 northeast of Hillsboro. The history of the property
21 dates back to 1877. Placer gold mining occurred there
22 in the area.

23 And then in 1980 to 1983, the copper mining
24 facility was built by Quintana Minerals. The property
25 totals 4,741 acres in total, and within that property

1 is a 2,190-acre permit area. This property is a mix of
2 private property and unpatented mining claims that are
3 on public land administered by the BLM.

4 The production method will be open-pit mining
5 with a conventional flotation mill to produce a
6 saleable mineral concentrate. The reserves at Copper
7 Flat include 675 million pounds of copper; 20 million
8 pounds of molybdenum, gold, and silver.

9 The project is designed for a two-year
10 construction period, followed by 12 years of
11 production, which then, in turn, will be followed by
12 reclamation and closure. A Project Feasibility Study
13 has been prepared by M3 Engineering with a positive
14 result. Federal EIS and State permits are progressing
15 following a common Mine Operation and Reclamation
16 Plan.

17 This chart shows the location of the Copper
18 Flat Project denoted by the star here in Southwestern
19 New Mexico, Truth or Consequences is in this area,
20 Hillsboro is here.

21 So you can see there is a large number of
22 copper mines extending from Arizona into Southwestern
23 New Mexico. This is called the "Arizona-New Mexico
24 Porphyry Copper Belt" and is one of the world's most
25 prolific copper mining regions. The area is served by

1 rail, highway, and established infrastructure.

2 Our mine permit application started in
3 September of 2010, when New Mexico Copper developed and
4 submitted a Sampling and Analysis Plan to MMD. During
5 the period of 2010 to 2012, baseline data was collected
6 at the site for analysis and use in the permitting
7 process.

8 In July of 2012, New Mexico Copper submitted
9 a Permit Application Package to MMD. In August of
10 2012, MMD deemed the Permit Application Package to be
11 administratively complete, which started the Agency
12 technical review period.

13 During the period of 2012 to 2018, New Mexico
14 Copper responded to Agency comments, questions, and
15 requests for additional information. During this time,
16 New Mexico Copper was updating plans to reflect
17 engineering progress and coordination or
18 synchronization with plans provided to other agencies,
19 which led to the common mine plan that is now the basis
20 of all our permit applications.

21 A Draft Environmental Evaluation was prepared
22 by MMD pursuant to 19.10.6.605.D, New Mexico
23 Administrative Code. In July of 2018, the New Mexico
24 Copper Permit Application Package for the Copper Flat
25 Mine was deemed to be technically approvable by MMD,

1 which leads us to today, to this public hearing here in
2 October 2018.

3 The major mine units covered by our permit
4 application package includes the open pit. This is a
5 future pit that's located on the west side of the mine
6 property and is located primarily on private ground
7 owned by New Mexico Copper.

8 The process facility: Contained and lined
9 facilities that utilize existing foundations and
10 existing grading located east of the open pit. The
11 tailings storage facility is a synthetically lined
12 storage facility located southeast of the process
13 facility.

14 The tailings storage facility includes
15 solution underdrain and collection and a process water
16 recycling system. Recovered water will be reused for
17 mineral recovery as part of the water conservation
18 plan. The tailings storage facility then will comply
19 with OSE dam safety regulations.

20 The mine waste rock stockpiles are located
21 east of the open pit on low-permeability andesite
22 bedrock. HDPE-lined ponds and impoundments are located
23 adjacent to the waste rock stockpiles, the process
24 area, and the tailings storage facility. The ponds and
25 impoundments are designed to include capacity for

1 stormwater events.

2 Roads and administrative areas in the area
3 are graded and maintained for stormwater management.
4 The administrative areas include a waste water package
5 treatment facility that will discharge to the tailings
6 storage facility.

7 This is a figure showing the major mining
8 units. This is -- this figure is also available as one
9 of the posters in the back of the room for closer
10 inspection. On this figure, the open pit mine is
11 located on the west side of the property.

12 The plant area is in the center of the
13 property just east of the open pit. The tailings
14 storage facility is east of the plant area on the east
15 side of the mine permit area, and then Waste Rock
16 Stockpiles 1, 2, and 3 are located east of the open
17 pit.

18 One is in this location, 2 and 3 is in this
19 location. Engineering for the reclamation and closure
20 plan has been completed, and plans have been submitted
21 with the Mining Operation and Reclamation Plan. NMCC's
22 Mine Permit Application Package, including the
23 reclamation and closure plan, was deemed to be
24 technically approvable by MMD on July 13, 2018.

25 As part of the reclamation and closure plan,

1 growth media will be salvaged ahead of construction and
2 stored for reuse at reclamation. Mine rock stockpiles
3 and the tailings facility will be covered with the
4 growth media and revegetated.

5 Shortly after mining ends, the open pit will
6 be filled with fresh water to the equilibrium level of
7 the hydraulic sink, and the pit will be partially
8 revegetated to limit oxidation of the pit walls.

9 Water of the tailings facility will be
10 removed through evaporation, and the surface will be
11 regraded, covered, and revegetated. The TSF liner will
12 be left in place to ensure a long-term protection of
13 the groundwater.

14 Buildings, pipelines, and other surface
15 structures will be removed; concrete foundations will
16 be broken and removed or buried as appropriate. Ponds
17 and trench liners will be removed, and the excavations
18 will be backfilled and revegetated except as needed for
19 ongoing water management.

20 Slide 12 discusses compliance with
21 reclamation standards. The mine operation and closure
22 plans have been designed using the most appropriate
23 technology and the best management practices. Plans
24 are designed to return the area to a post-mining land
25 use that is compatible with lands uses that currently

1 exist at the site and in the surrounding area. These
2 uses are wildlife habitat, livestock grazing, and
3 recreation.

4 The operation is designed to meet without
5 perpetual care all applicable environmental
6 requirements of the Act and other laws following
7 closure. Contemporaneous reclamation is included in
8 our operating and reclamation plan.

9 The operations have been designed to minimize
10 change to the hydrologic balance in both the permit and
11 potentially affected areas. In a similar fashion,
12 reclamation is designed to result in a hydrologic
13 balance similar to pre-mining conditions.

14 Plans incorporate measures to limit the
15 formation of acid or other toxic drainage during the
16 operation and following reclamation to prevent releases
17 that cause federal or State standards to be exceeded.

18 The reclamation plans are designed to provide
19 a self-sustaining ecosystem. Success will be
20 determined through comparison of ground cover,
21 productivity, and diversity to approved reference
22 areas.

23 With me today are several experts that have
24 worked on our plans. New Mexico Copper has engaged a
25 team of highly qualified experts to contribute to our

1 plans and designs. Team capabilities fully cover the
2 range of disciplines that are needed to comply with New
3 Mexico mining regulations.

4 Mr. Juan Velasquez, who was scheduled to be
5 here today, is principal of Velasquez Environmental
6 Management Services. Mr. Velasquez was instrumental in
7 preparing our applications for the MMD mine permit and
8 the NMED groundwater discharge permit.

9 Also attending on behalf of New Mexico Copper
10 are several technical experts who are available to meet
11 with the public during breaks and provide additional
12 information and respond to your questions.

13 These experts are, covering reclamation
14 designs, Todd Stein, Golder Associates, Albuquerque,
15 New Mexico; covering hydrology and geochemistry is
16 Steven Finch from John Shomaker & Associates; also
17 covering hydrology and the groundwater modeling is Mike
18 Jones, principal hydrologist with John Shomaker &
19 Associates; geochemistry is covered by Amy Prestia,
20 senior geochemist with SRK North America, and our plans
21 and permits will be addressed by Katie Emmer, our
22 environmental and permitting manager for New Mexico
23 Copper Corporation.

24 Mr. Velasquez' presentation will provide
25 details of the contents of our permit application

1 package; in particular, the contents of our Mine
2 Operation and Reclamation Plan, which we often refer to
3 as the "MORP," M-O-R-P, the Permit Application Package,
4 which we refer to as the "P-A-P," or "PAP," and the
5 contents of these two components of the application.

6 The Permit Application Package essentially
7 contains all of the information that's been submitted
8 to the Agency as required by the regulations for the
9 review and approval. The Mining Operation and
10 Reclamation Plan, or the MORP, is specifically a piece
11 of the PAP that describes in detail how the mine
12 project is designed, how it will operate, how it will
13 be reclaimed in accordance with regulatory
14 requirements.

15 This document here on the table next to me is
16 our MORP. It's only one document in a stack of
17 documents that have been submitted to the MMD and other
18 regulatory agencies over the years leading up to
19 today's hearing.

20 As I described earlier, the New Mexico Mining
21 Act was passed by the State legislature in 1993 with
22 the objective to establish regulations designed to
23 ensure proper reclamation through permitting for
24 operations.

25 Copper Flat will be the first new mine permit

1 under the Mining Act since its passage in 1983 --
2 sorry, 1993. Prior to 1993, some New Mexico mining
3 operations were not required to have operation and
4 reclamation permits or operation and reclamation
5 plans.

6 Some mines located on federal lands had
7 requirements under an approved federal plan of
8 operation, but others on State or private lands did
9 not. After 1993, all mines operated in New Mexico,
10 whether existing or new, were required to meet the
11 Mining Act requirements.

12 The requirements for an existing mine; that
13 is, one that was operating prior to 1993, are somewhat
14 different than for a new mine proposed after 1993.
15 These new regulations are complex, which is one reason
16 why the permitting process for a new mine takes much
17 longer.

18 The Copper Flat Mine is a new mine. The
19 first one to be permitted under the Mining Act
20 requirements. We have successfully traveled this path
21 in order to get to this hearing. New Mexico Copper has
22 had to do a lot of up-front study and work to develop
23 the data needed to prepare and submit a Permit
24 Application Package.

25 This process began in 2010 with submittal of

1 the Sampling and Analysis Plan to the State Mining and
2 Minerals Division for their review and approval, which
3 then led to conducting 12 months of baseline data
4 gathering and submittal as a baseline data report.

5 Today's mining industry and New Mexico Copper
6 have responded responsibly to the regulatory changes
7 enacted with the Mining Act. New Mexico Copper has
8 spent the past six years since submitting its initial
9 MORP in July of 2012 working with MMD and other
10 reviewing agencies, including the NMED, the New Mexico
11 State Engineer, the Department of Game and Fish, and
12 the BLM.

13 We responded to a series of questions for
14 information on subjects such as safety, water quality,
15 surface water diversion and control, groundwater
16 impacts, ponds and tailings facility liners, wildlife
17 protection, post-mining land use, revegetation, and
18 many other technical issues to allow the MMD to
19 determine that NMCC's proposal is technically
20 approvable.

21 I will now go through some of the details
22 that are contained in our Mine Operation and
23 Reclamation Plan to demonstrate the care that New
24 Mexico Copper has taken to meet and exceed the
25 regulatory requirements.

1 We clearly understand our responsibility to
2 design and operate the Copper Flat Mine in a manner
3 that is protective of human health and the environment
4 and in compliance with Mining Act requirements. NMCC,
5 New Mexico Copper, is as interested in protecting the
6 environment, ensuring clean water quality and water
7 resources as everyone in this room. We have worked
8 hard to earn the confidence of the regulatory agencies
9 and expect that we will gain the confidence of the
10 local community also.

11 This slide, again, is a shot of the poster --
12 one of the posters in the back. It shows the location
13 of the Copper Flat Mine again. The mine, again, is --
14 this is the previous slide that I showed zoomed in to
15 see Highway 152, the permit area, and the mine
16 location.

17 I-25 and the Rio Grande are approximately 11
18 miles east of the property. The site is accessed by
19 New Mexico State Highway 152. The well field which
20 will supply water to the site is located about eight
21 miles east in this location, and water will be
22 transported through a pipeline.

23 As stated earlier, New Mexico Copper has
24 engaged world class experts in their fields to design
25 and develop our plans for the infrastructure and

1 facilities of the Copper Flat Mine that is contained in
2 the Permit Application Package to ensure protection of
3 the environment.

4 The content of the Permit Application Package
5 is very extensive and complete. It contains detailed
6 information about New Mexico Copper; it contains the
7 Baseline Data Report, or the BDR; it lists all other
8 permits that are required for the Copper Flat Mine; it
9 provides a detailed description of the proposed Mining
10 Operation and Reclamation Plan, and provides a detailed
11 description of the operation in the MORP, the Mine
12 Operation and Reclamation Plan.

13 NMCC will reclaim conditions that currently
14 exist from the previous operations that took place
15 prior to today's more protective environmental
16 requirements and regulations. Some reclamation work
17 will begin when the operations start.

18 The entire Copper Flat Mine project will be
19 reclaimed after operations cease, and the area will be
20 regraded to blend into surrounding topography to the
21 extent possible.

22 Reclamation will include recontouring of
23 disturbed areas, placement of the thick soil growth
24 media cover, and then reseeding the area with native
25 vegetation to support the post-mining land's uses, the

1 wildlife habitat, livestock grazing, and assure ongoing
2 protection of surface water and groundwater.

3 This slide lists several of the reclamation
4 standards, performance and reclamation standards,
5 contained in 19.10.6.6.603, New Mexico Administrative
6 Code, including the permit area is to be reclaimed to a
7 self-sustaining ecosystem; contemporaneous reclamation
8 is to be performed to the extent practicable; wildlife
9 and habitat protection requirements during the
10 operation and after reclamation are necessary to
11 minimize impacts.

12 Cultural resources require inventory and
13 protection. Plan and operation is to occur to minimize
14 change and result in a hydrologic balance similar to
15 pre-mining conditions and ensure protection of water
16 resources.

17 This site is to be stabilized and configured
18 to minimize future impact to the environment and
19 protect air and water resources, and designs need to
20 include erosion control through land shaping, water
21 diversion, mulching, riprap protection, and
22 revegetation. All of these elements are contained in
23 our designs.

24 This is an engineering drawing from the MORP
25 that shows the Copper Flat project site at final

1 build-out. As pointed out earlier, the major units of
2 the Copper Flat proposal are the open pit, the process
3 area east of the open pit, the tailings facility east
4 of the process area, the waste rock stockpiles located
5 east of the open pit and north of the tailings area.

6 Grayback Arroyo is shown on this engineering
7 drawing. Grayback Arroyo starts here, the west end of
8 the property, and runs -- it's been diverted south of
9 the pit area, then put back to the natural channel, and
10 runs through the permit area to the east.

11 The regulations prescribe the content of the
12 Mine Operation and Reclamation Plan in Section
13 19.10.6.602.D(15). Our Mine Operation and Reclamation
14 Plan includes a type and methods of mining.

15 Again, the open pit located at the west side
16 of the mine property; the waste rock stockpiles that
17 are located east of the pit on low-permeability
18 andesite bedrock; the ore processing facility that is
19 located in lined facilities utilizing the existing
20 foundations east of the open pit; the tailings storage
21 facility, which is a lined HDPE storage facility
22 located southeast of the process facility, with a
23 solution underdrain collection and process water
24 recycling system, and several growth media stockpiles
25 which contain soils salvaged from the waste rock

1 stockpile and the tailings storage facility area.

2 The Mine Operations Plan also describes
3 ancillary and off-site facilities, including roads,
4 administration areas, process water well field, and
5 pipeline. New Mexico Copper operations must meet the
6 requirements of all other State and federal agencies,
7 including TSF dam safety requirements of the New Mexico
8 Office of the State Engineer, environmental protection
9 regulations from the New Mexico Environment Department,
10 federal NEPA requirements, U.S. Fish & Wildlife, and
11 BLM requirements.

12 To provide a visual perspective of what the
13 site will look like when in operation, this slide has
14 two renderings that are prepared by our engineers which
15 show the site at final build-out. This is also a copy
16 of one of the posters in the back that you can look at
17 during break for closer review.

18 On this side, in the foreground is the
19 tailings storage facility. This is a south-to-north
20 perspective, and this is a east-to-west perspective.
21 In both, the tailings storage facility is in the
22 foreground.

23 Above or behind the tailings storage facility
24 are Waste Rock Stockpiles 2 and 3 in this location, the
25 process area is in the middle ground, and then at the

1 left side of these renderings is the open pit. So this
2 is the site at final build-out at the end of mining.

3 This slide shows the same perspective. It's
4 an engineering drawing of Copper Flat after
5 reclamation. Again, it shows the same facilities: The
6 open pit, the process area, waste rock stockpiles, and
7 the tailings facility.

8 The term "reclamation" is being used a lot in
9 this discussion. In the context of the Mining Act,
10 "reclamation" means the employment during and after
11 the mining operation of measures designed to mitigate
12 the disturbance of affected areas and permit areas and,
13 to the extent practicable, provide for the
14 stabilization of the permit area following closure that
15 will minimize future impact to the environment from the
16 mining operation and protect air and water resources.

17 The essence of our reclamation proposal
18 includes the following measures to meet or exceed this
19 requirement: In conformance with 19.10.6.602.D(15)(g),
20 mine facilities, including the waste rock stockpiles,
21 are designed to operate for closure.

22 During operations, certain existing waste
23 rock stockpiles will be reclaimed. These are the
24 stockpiles that exist on-site today, and our intent is
25 to reclaim a portion of those during construction of

1 the facility.

2 Growth media will be salvaged ahead of
3 construction and stored for reuse during reclamation at
4 the end of mining. Shortly after mining ends, the open
5 pit will be rapid-filled with clean water. The waste
6 rock stockpiles and the TSF, or tailings storage
7 facility, will be regraded, recontoured, covered with
8 growth media, and revegetated.

9 Processed water from the tailings storage
10 facility will be evaporated, the surface will be
11 regraded, the surface will be covered, and
12 revegetated. Buildings, pipelines, and other surface
13 structures will be removed.

14 Concrete foundations will be broken and
15 removed or buried as appropriate. Trench liners will
16 be removed, pond liners will be ripped and folded over,
17 and pond excavations will be backfilled and
18 revegetated.

19 Ancillary facility areas will also be
20 reclaimed. Certain legacy waste rock stockpiles will
21 be reclaimed during mine site development. These will
22 be recontoured, graded, covered with three feet of
23 growth media, and revegetated.

24 These areas will be utilized as vegetation
25 test plot areas to help determine the types of native

1 vegetation that is best suited for use for long-term
2 success. They will also provide us with the ability to
3 evaluate the effectiveness of the cover materials
4 regarding drainage, storage, and release. Other legacy
5 areas will be reclaimed after mining ceases as
6 discussed further in this presentation.

7 This slide here, again, a shot of a poster in
8 the back, shows the legacy stockpiles, waste rock
9 stockpiles, that exist on the site today. These are
10 the areas that are highlighted in light yellow on this
11 aerial photo.

12 The stockpile here, what we call "Existing
13 Waste Rock Stockpile 1," and a portion of this
14 stockpile we call "Existing Waste Rock Stockpile 2,"
15 will be reclaimed during construction of the facility.
16 A small portion of Waste Rock Stockpile 4 will also be
17 reclaimed to provide clean water runoff flowing to
18 Grayback Arroyo.

19 Waste Rock Stockpile 3, the north portion of
20 Waste Rock Stockpile 4, and existing Waste Rock
21 Stockpile 2 will be reclaimed at the end of mining.
22 All of these are existing. I was referring to these as
23 "Waste Rock Stockpile." These should all be called
24 "Existing Waste Rock Stockpile," EWRSP.

25 The pit. Going into detail of the

1 reclamation of the pit is shown on this slide. This
2 slide is a shot of an engineering drawing for showing
3 reclamation designs for the pit.

4 Looking at the design, the pit area, the pit
5 shell, is the area here in the center of the drawing;
6 the rapid-fill is the blue area in the center of the
7 pit; Grayback Arroyo is depicted at the west side of
8 the pit. Grayback runs through the Grayback Diversion
9 that was constructed in the early 1980s to the south of
10 the pit and then returns to the existing channel just
11 southeast of the pit.

12 After mining is complete, shortly after
13 mining is complete, the pit will be rapid-filled with
14 fresh water, and certain areas of the pit walls will be
15 revegetated. This will be done to limit the amount of
16 oxidation that can occur in the pit over time.

17 The rapid-fill will fill the pit to an
18 elevation just below the 4900 foot elevation, which our
19 hydrology experts have determined the water body
20 surface will -- at which point, the water body surface
21 will reach equilibrium.

22 At that point, evaporation matches the
23 inflows that would come from either groundwater or
24 surface water. Areas of the pit perimeter that are
25 disturbed by mining, these areas surrounding the pit

1 will be ripped, recontoured, covered with growth media
2 material, and revegetated.

3 The pit haul road leading down into the pit
4 will also be ripped and covered with material and, to a
5 certain extent, revegetated. A portion of the haul
6 road will be used to provide a stormwater ditch to
7 control storm water flow into the pit and lead water
8 draining to the pit down into the bottom of the pit,
9 the pit lake, in a controlled fashion, and to prevent
10 water from washing over the sides and eroding the sides
11 of the pit.

12 Also, certain flat areas of the pit will be
13 reclaimed. Areas around the top edge of the pit, the
14 crest of the pit, and this large flat area here, this
15 pitch here, will be covered with growth media, and
16 revegetated.

17 Water control channels will be constructed
18 and left, again, to provide stormwater control and to
19 -- so to prevent erosion of pit walls, all leading to
20 the top of the ramp, where it will flow down into the
21 pit.

22 This is a cross-section of the pit that shows
23 what it will look like at the end of mining with the
24 rapid-fill pit lake in the bottom of the pit. This top
25 surface is the existing surface that exists there

1 today, showing a small pit lake after mining.

2 The pit will match this configuration, and
3 water will be filled to here. The pit, as discussed in
4 our hearing three weeks ago, is a hydrologic sink
5 today. It will continue to be a hydrologic sink in the
6 future.

7 During operations, we will pump out water
8 from the pit, complete our mining, and then allow water
9 to flow back in after the end of mining. The purpose
10 of rapid-filling the pit is simple. It is literally to
11 fill the pit with clean water to the equilibrium level
12 much faster than would occur naturally, thus minimizing
13 the effects on the water quality in the pit water
14 body.

15 Our studies have shown that pumping
16 good-quality water into the pit will result in water
17 quality in the future that is similar to the water
18 which exists today.

19 This is a drawing of Waste Rock Stockpile 1
20 at reclamation. This is the pit here on the level side
21 of the drawing. This feature is Waste Rock Stockpile
22 Number 1 just east of the pit. Waste Rock Stockpile 1
23 will be located inside the open pit surface drainage
24 area.

25 The existing legacy stockpile that is

1 reclaimed is in this area here. The portion that was
2 left to the end is buried underneath Existing Stockpile
3 1. So at the end of mining, that's when this area gets
4 reclaimed.

5 Surface water running from Animas Peak and
6 other areas towards Waste Rock Stockpile 1 will be
7 intercepted into a channel and diverted away to take
8 the fresh water away and put it back into a natural
9 drainage.

10 Water falling onto the surface of the
11 reclaimed area will be channeled through control
12 channels that are constructed and flow and eventually
13 lead to the channel running down the ramp to the bottom
14 of the pit. There is armoring placed on the water
15 channels to prevent erosion in the future.

16 Next is a drawing of Waste Rock Stockpiles 2
17 and 3. Waste Rock Stockpile 2 is located just above
18 Waste Rock Stockpile 3. Waste Rock Stockpile 3 is the
19 large stockpile furthest east, and 2 is located on top
20 of it there.

21 These stockpiles will be recontoured, the
22 outslopes reconfigured to three-to-one slopes. A
23 surface will be covered with three feet of growth media
24 and revegetation. Again, surface water run-on will be
25 intercepted, surface water runoff will be prevented

1 from run-on by intercepting with ditches and then
2 directed away to natural channels.

3 Water falling onto the surface of the
4 reclaimed area will be directed to several channels and
5 taken to down channels to lead back to Grayback
6 Arroyo. All of these down channels are armored to
7 prevent erosion.

8 There is a growth media stockpile that in the
9 past was located here before reclamation. This area is
10 also to be reclaimed as this material is removed and
11 used to cover the stockpiles. When it's done, that
12 gets reclaimed and revegetated.

13 Next is a drawing of our tailings facility at
14 reclamation. The tailings storage facility will be
15 recontoured, the outslopes configured to minimum
16 three-to-one slopes covered with three feet of growth
17 media and revegetated.

18 The top surface of the tailings storage
19 facility will be graded to a nominal one percent slope,
20 and top channels constructed to control erosion and
21 route clean, direct precipitation off the top in a
22 controlled manner back to Grayback Arroyo.

23 These channels here from the top will direct
24 stormwater falling onto the top surface of the facility
25 back to the north and into Grayback Arroyo. Similar to

1 the cover placed on the side slopes, the top will also
2 be covered with three feet of growth media and
3 revegetated.

4 The tailings facility is located in a natural
5 basin. It is surrounded on three sides by a ridge and
6 tucked back in against this ridge. This ridge will
7 prevent water -- stormwater from flooding into the
8 tailings storage facility and eroding the facility.

9 Grayback Arroyo is separated from the
10 tailings facility by a ridge line here. Grayback
11 Arroyo is this blue line flowing between the tailings
12 facility to the south and waste rock stockpile to the
13 north.

14 Grayback Arroyo flows east and then on out
15 towards Caballo. So there is this separation, this
16 physical separation, that exists by a ridge line here
17 surrounding the north side and the west side of the
18 tailings storage facility.

19 There is a growth media stockpile located
20 here to the west of the tailings storage facility, a
21 second stockpile to the east of the storage facility.
22 This material is removed during the construction of the
23 facility and stockpiled for use during reclamation.

24 During reclamation, the material is removed
25 from the stockpile and used to construct the three feet

1 of cover that goes across the tailings storage facility
2 waste rock stockpiles, the process area, and other
3 reclaimed areas.

4 Then when those stockpiles are removed, those
5 areas are scarified, ripped, and revegetated. The
6 tailings storage facility will continue to drain
7 processed water through the underdrain collection
8 system for several years.

9 New Mexico Copper has developed an active
10 water management system to actively remove the
11 processed water through evaporation for five years
12 after mine operation ceases. This system consists of
13 active storm -- or water evaporation machines that will
14 be set up on top that actually space the water to
15 evaporate it. Forced evaporation.

16 The top of the tailings storage facility will
17 not be fully reclaimed while this active evaporation is
18 ongoing. Once an active evaporation ceases, it's no
19 longer necessary, then the top surface will be fully
20 reclaimed.

21 Active evaporation will cease when the water
22 -- the processed water coming from the toe of the
23 tailings facility reaches a drain-down level that can
24 be managed through passive evaporation. At that time,
25 an evaporation pond will be constructed at the toe.

1 The pond is sized to contain the outflow of
2 solution plus any stormwater precipitation that falls
3 directly on it and will evaporate, provides a surface
4 area that's necessary to evaporate that solution. The
5 pond will be lined, which will allow water to drain
6 down and continue to evaporate over time.

7 Our engineers project that the processed
8 water will be removed from the tailings storage
9 facility over a 25-year period, which includes the five
10 years of active evaporation and 20 years of passive
11 evaporation based on drawdown current projections.
12 When that is complete, when this pond is no longer
13 necessary, then it will be fully reclaimed.

14 This is an engineering drawing of the
15 reclaimed plant area and Existing Waste Rock Stockpiles
16 3 and 4. Buildings, pipelines, and other surface
17 structures will be removed; concrete foundations will
18 be broken and removed or buried as appropriate.

19 Trench liners will be removed and pond
20 excavations will be backfilled. The southern banks of
21 the plan area, this area here along Grayback, will be
22 sloped to three-to-one, and in certain areas where the
23 banks are too close to Grayback to push down, the banks
24 will be pulled back to provide the three-to-one slope
25 without encroaching on Grayback.

1 After reshaping, after removal of all the
2 buildings, the pipelines, the trenches, and reshaping,
3 the entire area will be covered and revegetated.

4 Potential erosion will be controlled by constructing
5 runoff control channels to collect clean water and
6 routing it to Grayback Arroyo.

7 Reclamation of Existing Waste Rock Stockpile
8 4 will also be completed at this time. This area will
9 be utilized during mining for lay-down. Following
10 mining, when it's no longer needed, then this area will
11 be final graded, recovered with three feet of cover,
12 and revegetated.

13 This slide is a rendering that provides a
14 visual perspective of what the site will look like
15 following reclamation. It has two different
16 perspectives on it, one looking -- one view is looking
17 from south to north; the second view is looking east to
18 west.

19 In these views, this is the tailings storage
20 facility after reclamation, the waste rock stockpiles
21 after reclamation, and the process area after
22 reclamation. And in the background is the pit,
23 showing, in this view, the rapid-fill is complete.

24 Included with this are photographs of
25 reclaimed areas that show what the area will look like

1 after revegetation is complete. Included in these
2 photographs is one photograph from Copper Flat. This
3 is a reclaimed area, an area of exploration drilling
4 that was reclaimed, and to show the growth that occurs
5 out there. Grayback Arroyo flows from the west through
6 the property and flows out to the east. And this is a
7 poster at the back for review during break.

8 New Mexico Copper will post financial
9 assurance for the reclamation and closure of Copper
10 Flat, and the financial assurance will be held jointly
11 by New Mexico Environment Department, MMD, and the
12 BLM.

13 New Mexico Copper's financial assurance
14 proposal is based on the estimated cost of reclamation
15 and closure as if it was performed by a third-party
16 contractor under Agency management as required by
17 19.10.12, New Mexico Administrative Code.

18 The financial assurance proposal also
19 includes a closure water management plan as required by
20 20.6.7.33.H, New Mexico Administrative Code, which is
21 administered by the NMED.

22 The estimated cost of reclamation and closure
23 has been prepared by SRK Consulting using the Copper
24 Flat Reclamation and Closure Plan that has been
25 prepared by Golder Associates. This estimate includes

1 the application of estimating standards and practices
2 that are accepted by a wide range of regulatory
3 agencies and jurisdictions.

4 The financial assurance estimate prepared by
5 SRK totals nearly \$56 million. This total includes
6 costs for contractor performance of the work,
7 mobilization and demobilization, Agency management,
8 contract administration, closure water management, and
9 monitoring. Documentation of SRK's cost estimate is
10 provided on the MMD website. The cost calculations
11 require approval by three agencies: The NMED, the MMD,
12 and BLM.

13 The Copper Flat estimate was submitted for
14 Agency review on August 9th, 2018. Discussion with the
15 Agencies regarding the basis and the calculations are
16 ongoing today.

17 I'd like to briefly discuss the community
18 benefits that will come from the Copper Flat Mine.
19 During construction, nearly 1200 jobs will be
20 generated, including direct, indirect, and induced jobs
21 in the state of New Mexico.

22 Construction and economic impact to the state
23 are significant. The project will add \$55.6 million to
24 statewide labor income and will add \$79.6 million to
25 the value of materials and goods that are produced

1 within the state.

2 Construction expenditures will total \$45
3 million for Sierra County and \$49 million in the
4 state. During the operation phase, the mine will
5 require 270 full-time jobs at the mine with individual
6 wages that range from 35,000 to 60,000 per year plus
7 benefits.

8 In total, nearly 400 jobs will be generated,
9 including direct, indirect, and induced jobs. The mine
10 will pay a significant amount of federal and State
11 taxes, \$175 million during the life of the mine. This
12 includes Ad Valorem, severance, income taxes, and gross
13 receipt taxes.

14 Following mining, there will still be a
15 period and a need for jobs, which will provide wages
16 and tax benefits during the two decades of reclamation
17 and closure phase. These statistics were generated by
18 the Arrowhead Center, which is located at New Mexico
19 State University in Las Cruces.

20 This slide details out -- provides a
21 breakdown of the investment that has been -- the money
22 that's been invested into the project by Tulla to
23 date. As I stated earlier, Tulla has invested \$55
24 million in the project to date.

25 Of that total, 39 million, or 70 percent, has

1 been directed to New Mexico. In Sierra County
2 spending, it's \$4.3 million to date. This includes
3 salaries, rent, vehicle maintenance and fuel, hotel and
4 restaurants, banking services, contractors, the power
5 co-op, land payments, and property taxes.

6 In conclusion, the operating and reclamation
7 designs and plans that we have developed for the Copper
8 Flat Mine meet or exceed the very rigorous requirements
9 for a new mine permit that was established by the New
10 Mexico Mining Act of 1993.

11 The reclaimed operation will achieve a
12 self-sustaining ecosystem that is appropriate for the
13 life zone of the surrounding area. All environmental
14 requirements can be met without perpetual care.

15 The designs and plans for the Copper Flat
16 Mine will provide a post-mining land use that is
17 similar to the existing lands, use of wildlife habitat,
18 livestock grazing, and recreation. The proposed
19 reclamation plan is economically and technically
20 feasible.

21 That concludes my presentation.

22 MS. ORTH: Thank you. We now have an
23 opportunity for questions of Mr. Smith based on his
24 presentation.

25 Mr. De Saillan, do you have questions of Mr.

1 Smith?

2 MR. De SAILLAN: Yes, ma'am. Hearing
3 Officer, I have a few. Thank you.

4 CROSS-EXAMINATION

5 BY MR. De SAILLAN:

6 Q. Good morning, Mr. Smith.

7 A. Good morning.

8 Q. You mentioned that New Mexico Copper
9 Corporation is a wholly owned subsidiary of THEMAC?

10 A. Yes.

11 Q. And where is THEMAC based?

12 A. THEMAC is a Canadian company.

13 Q. And who is it owned by?

14 A. THEMAC is a public company. The major
15 shareholder of THEMAC is the Tulla Group, the
16 Australian company I mentioned earlier.

17 Q. Okay. And how many mines does New Mexico
18 Copper Corporation operate?

19 A. Oh. We have now no operating mines.

20 Q. Okay. And other than the Copper Flat Mine,
21 does New Mexico Copper Corporation have any other
22 assets in New Mexico?

23 A. No, it does not.

24 Q. The cost estimate that was prepared for the
25 Copper Flat Mine assumes that 25 years after closure,

1 New Mexico Copper will be able to cease all monitoring
2 and maintenance and water management at the mine; is
3 that correct?

4 A. That's correct.

5 Q. And the closure cost estimate assumes that
6 the period of time that water will continue to drain
7 from the tailings storage facility is 25 years after
8 cessation of mining operations; is that correct?

9 A. Yes, that's our assumption.

10 Q. And the closure cost estimate assumes that
11 the period of time that groundwater monitoring will be
12 necessary is 25 years after cessation of mining
13 operations; is that correct?

14 A. Yes.

15 Q. And the closure cost estimate assumes that
16 the period of time for maintenance is seven years after
17 mining operations cease; is that correct?

18 A. Can you repeat that, please?

19 Q. The closure cost estimate assumes that the
20 period of time for maintenance is seven years after
21 mining operations cease; is that correct?

22 A. "After mining operations cease." I'd have to
23 go back and look. I believe there would be maintenance
24 ongoing through the drain-down period, but I don't
25 recall the detail.

1 Q. Okay. And the drain-down period is how long?

2 A. Twenty-five years.

3 Q. Okay. Were you present for the Environment
4 Department hearing on the groundwater discharge permit
5 for the Copper Flat Mine, DP 17 -- excuse me -- DP
6 18-40 that was held in September of 2018?

7 A. Yes, I was.

8 Q. And were you present for the Environment
9 Department Groundwater Quality Bureau presentation
10 during that hearing?

11 A. Yes, I was.

12 Q. And did you hear the testimony of Mr. Kurt
13 Vollbrecht?

14 A. Yes, I did.

15 Q. And do you recall that he stated that the
16 Environment Department would require that the cost
17 estimate for financial assurance would assume 100 years
18 of monitoring and maintenance?

19 A. I recall he made a statement that included
20 the opinion that 100 years would be required, yes.

21 Q. And has the New Mexico Copper Corporation
22 decided whether it will agree to such a requirement?

23 A. We have not made that decision at this time.
24 We are in discussions with the Agency now.

25 Q. And has the company made a decision as to

1 what form of financial assurance it will propose to the
2 Agencies?

3 A. No. That decision has not been reached at
4 this time.

5 Q. Now, is the mine plan to operate for 24 hours
6 a day?

7 A. Yes, it is.

8 Q. And is the mine plan to operate seven days a
9 week?

10 A. Yes, it is.

11 Q. Now, the mine will use big dump trucks to
12 haul the waste rock and ore from the excavation of the
13 open pit; is that correct?

14 A. The trucks that will be used -- "big" is a
15 relative term.

16 Q. Sure.

17 A. But, you know, the trucks that will be used
18 are end dump trucks typical of mining operations, yes.

19 Q. Okay. And do you know what size those trucks
20 are?

21 A. Our mine plan is based on using the 100-ton
22 trucks similar to a Cat 777.

23 Q. All right. Okay. And will those trucks be
24 operating 24 hours a day?

25 A. The mine operation will run 24/7. Of course,

1 there are breaks that happen. So, you know, the trucks
2 will be running 22 hours a day. Virtually 24.

3 Q. Okay. And there is a milling facility at the
4 mine for crushing and processing the ore; is that
5 correct?

6 A. There is a crusher and then a separate
7 milling facility, yes.

8 Q. Okay. And will that crusher and milling
9 facility operate 24 hours a day, seven days a week, as
10 well?

11 A. The milling facility is designed and
12 scheduled to run essentially on a 24/7 operation. The
13 crusher will likely not need to run for that 24/7. It
14 will build a stockpile and then shut down for some
15 portion of the day.

16 Q. Okay. So will that be a daily cycle, or a
17 weekly cycle, or how would that work?

18 A. Daily cycle. It will be a daily cycle.

19 Q. Okay. And to operate at night, the mine will
20 use bright lights; is that correct?

21 A. Yes, there will be light plants that are
22 utilized at the mine for illumination.

23 Q. And will the mine employ blasting to excavate
24 the open pit?

25 A. Yes, blasting will be required.

1 Q. And when will that blasting begin in the life
2 of the mine?

3 A. I'm sorry, say that again.

4 Q. When, in the life of the mine, will the
5 blasting begin?

6 A. The blasting will be required essentially at
7 the beginning, when mine operations begin.

8 Q. Okay. And then how long, in the life of the
9 mine, will the blasting continue?

10 A. The full life of the mine. Through the end
11 of mining.

12 Q. Which you estimate to be 12 years; is that
13 right?

14 A. Yes, that's correct.

15 Q. Okay. And how often will blasting occur
16 during that period of time?

17 A. My estimate -- you know, it will vary, but my
18 estimate is that we will blast three days a week, three
19 to four days a week.

20 Q. And how many times per day -- excuse me.

21 Will that -- let me start over.

22 Will that refer to -- what you said, will
23 that refer to one blast three times a week, or several
24 blasts three times a week?

25 A. Typically, it will be one blast per day, or

1 -- per day, three times a week.

2 Q. Okay. And how large will those blasts be?

3 A. Well, it depends. If we blast three times a
4 week, we would have to provide the broken material for
5 crushing that's sufficient to feed the crusher and the
6 mill for the entire week. So it's a third -- it will
7 be a third of a full week's production.

8 MR. De SAILLAN: Okay. Those are all the
9 questions I have. Thank you.

10 MS. ORTH: All right. Thank you. Others now
11 have an opportunity to ask questions of Mr. Smith based
12 on his presentation.

13 Sir? Just a few things. I will ask you to
14 just come up once, I will ask you to give your name for
15 the transcript, and then present your question to Mr.
16 Smith.

17 And if you would come up here so that the
18 court reporter and I can hear you. There is not a
19 microphone there.

20 MR. BUTZIER: Do you want me to put a
21 microphone on this?

22 MS. ORTH: Oh, I was going to put it on that
23 one there.

24 MR. BUTZIER: Okay. I think it will reach.

25

CROSS-EXAMINATION

1
2 BY MR. CALUWE:

3 Q. My question is, the ore trucks, when they
4 leave the mine site and they reach Highway 152, are
5 they going to turn east or west?

6 A. The trucks you are referring to are the
7 concentrate trucks that will be taking the product
8 away?

9 Q. Right.

10 A. When they reach Highway 152, they will turn
11 left and head east to the interstate.

12 MR. CALUWE: Thank you.

13 MS. ORTH: Thank you, Mr. Caluwe. Anyone
14 else have a question?

15 Sir?

CROSS-EXAMINATION

16
17 BY MR. MIJAL:

18 Q. You're going to have to buy chemicals for the
19 processed water?

20 A. We will need reagents, yes, for flotation.

21 Q. And how many tons will you have to buy, and
22 what will those ingredients be?

23 A. As far as the quantity, I'd have to look that
24 up. I don't know it off the top of my head. It is in
25 our more -- the reagents include frothers and

1 collectors. These are standard flotation chemicals
2 that are used to separate the mineral from the
3 non-mineral rock and cause it to float to the surface
4 or sink. There are other reagents, such as lime, that
5 will be used to adjust the pH.

6 Q. So basically, three ingredients will be
7 brought in by tons?

8 A. There will be a handful. I would say there
9 will be, you know, a half a dozen or so for the
10 flotation process, and we have reagents that are
11 necessary for the laboratory in small quantities that
12 will come in.

13 Q. That's pretty insignificant compared to the
14 process?

15 A. The amount of, quantity, yes.

16 Q. So it might be like five tons or 20 tons?

17 A. No. Again, off the top of my head, I can't
18 remember, but, you know, there is -- when we are
19 processing, we will need reagents to do that, yeah.

20 MR. MIJAL: Okay.

21 MS. ORTH: Thank you, Mr. Mijal. Other
22 questions of Mr. Smith based on his comment?

23 Ma'am, if you would come up.
24
25

CROSS-EXAMINATION

1
2 BY MS. NICOLL:

3 Q. You mentioned several times "growth media."

4 Could you elaborate on what this is, how it's
5 stored, how long it's stored?

6 A. Sure. The growth media is native material
7 that exists on the site today primarily in the area
8 where the tailings facility will be constructed. There
9 is also some over at the Waste Rock Stockpile 3. And
10 it's the material that's there today that is supporting
11 the plant growth. And that material extends down
12 deeper there at the area. I hesitate to call it
13 "topsoil." It doesn't meet the definition of
14 "topsoil," but it will support plant growth.

15 Q. By what criteria?

16 A. By what criteria?

17 Q. By what criteria does the growth media
18 support plant growth, and how well does it support it
19 compared to normal topsoil?

20 A. It will. It's the material that's there
21 today. And so it's the material that the plants are
22 growing in today.

23 Q. Uh-huh.

24 A. And so some of those pictures that show the
25 revegetation, it's that same material.

1 Q. Okay. But if it's sitting there for years on
2 end all sort of mixed around compared to the normal
3 topsoil, it doesn't seem -- you know, soil is a pretty
4 complex environment. It doesn't seem like a lot of
5 what's needed in normal topsoil will still be in
6 existence.

7 Is there any data to support that it is still
8 viable?

9 A. Well, the -- this material has been -- the
10 same process has been used at other operations and used
11 successfully. Test work will have to be done. That's
12 why we are going to be doing plot -- test plots to test
13 the material over the life of the mine as it
14 continues. In addition, samples will need to be taken
15 before we use it just to confirm that it is still -- it
16 still meets the requirement to support plant growth.

17 Q. And do you have any plans if it does not
18 support plant growth for enhancing it so that it does?

19 A. Well, at that time, we would have to
20 determine what's required, what amendments would be
21 required, to return it back to a condition that is
22 useful. Our reclamation plan, and ultimately a permit,
23 if approved, will require that we have, you know, good
24 cover that can support plant growth.

25 Q. Okay. And from your maps, it looked like

1 this Copper Flat Mine may be the only copper mine in
2 the Rio Grande drainage area, is that correct, or no?

3 A. Looking at the map that I showed at the very
4 beginning, the location in that Arizona-New Mexico
5 Copper trend, it is on the easternmost edge of that
6 trend as it's known today.

7 Q. Okay. But are there any other mines in the
8 drainage --

9 A. In the Rio Grande drainage?

10 Q. Yeah.

11 A. No, there are no operating copper mines
12 there, no.

13 Q. Okay. So this is also something new.

14 And since this is such a long-term project,
15 what kinds of guarantees do we have that THEMAC or NMCC
16 will remain a viable entity throughout the life of this
17 project? So many other mining companies have gone
18 under and left the communities with no recourse.

19 A. The Mining Act of 1993 requires a financial
20 assurance, a bond, essentially, to be put into place
21 under the control of the State, the State Agencies that
22 fully cover the reclamation. So that money will be
23 placed with the State. The State will hold that in the
24 event that the company is no longer viable.

25 Q. Will that cover 100 percent?

1 A. It will cover 100 percent. There are certain
2 calculations that get done, and yes, it will be
3 calculated to cover 100 percent of the requirements of
4 the regulations that are in place.

5 So there is a possibility for phased
6 operations, and things like that, but the plan
7 disturbance that is going to occur in a certain time
8 frame is covered, and before any additional disturbance
9 could happen, more money has to be placed, or 100
10 percent has to be placed up-front.

11 Q. And if you have to close it, like the
12 previous mine owners, for a certain amount of time, how
13 long does it remain just standing there open like this
14 one is now before it's determined that it just needs to
15 be filled back in and reclaimed?

16 A. The mining regulations do address standby,
17 and there are time limits on that. I don't know them
18 by heart, but there is a period of time. And the
19 Agency will step in and direct us to address it.

20 MS. NICOLL: Okay. Thank you very much.

21 MS. ORTH: Other questions of Mr. Smith based
22 on his comment?

23 CROSS-EXAMINATION

24 BY MS. BROWNE:

25 Q. My name is Candi Browne. B-r-o-w-n-e.

1 Mr. Smith, there is water in the pit lake
2 now, correct?

3 A. Yes.

4 Q. How are you going to get that water out, and
5 what are you going to do with it?

6 A. Well, that water is -- by several measures.
7 I would consider that water to be relatively small, and
8 it's easily pumped out. And then that water will
9 either be evaporated, or if the quality meets the
10 standard that's allowable, we could use it for dust
11 control there in the pit area as we are developing the
12 pit. So there are uses that we could use it for.

13 Q. When you say it will be "evaporated," how
14 will you do that?

15 A. Again, it would be a forced evaporation, if
16 we elect to go that way. You know, you have a machine
17 that sprays the water up in the air, and it just
18 evaporates. Snow-making machine really.

19 Q. Does that water meet the State specifications
20 now?

21 A. No, it does not.

22 Q. So when you say "if it meets the State's
23 specifications," you think that quality of that water
24 is going to change?

25 A. No, but there is an area called the "open pit

1 surface drainage area," and it's possible that that
2 water is of sufficient quality to use in that area,
3 that very specific area. So it would have to be
4 sampled and tested and determined if it's possible to
5 use it there.

6 Q. I don't understand what you just said.

7 There is a special area where water that
8 doesn't meet the State requirements can be used?

9 A. The open surface pit's drainage area is the
10 area that drains into the pit. And, again, it is
11 possible, I'm not saying this is certain, but possible
12 that that water is of sufficient quality to use right
13 in that specific area.

14 Q. Okay. So if you use the evaporative
15 technique, the particles in the water that don't meet
16 the State requirements, will they go into the air, and
17 will that pollute the air?

18 A. No. They will just be there on the ground
19 there in that area in a minute amount.

20 Q. Then go back into the pit, is what you are
21 saying?

22 A. Right, and evaporate right there.

23 Q. So if you use it for dust control, what does
24 that mean?

25 A. Put it on the ground to hold the dust down so

1 you don't generate dust.

2 Q. What area would you put it on if it doesn't
3 meet the State requirements that are you putting toxic
4 contents onto the ground?

5 A. No. It would be right in the open pit.

6 Q. Right back into the open pit?

7 A. Yeah. As we develop the open pit, as we mine
8 that and develop that, we would use it there for dust
9 control.

10 Q. But actually, what I was talking about was
11 the water that's in the mine right now.

12 A. Yes.

13 Q. So you can't take it out of the mine and
14 somehow put it right back into the pit and have it be
15 removed from the pit? I don't understand what you are
16 saying.

17 A. The water is contained in a very small area
18 of the open pit.

19 Q. Okay.

20 A. And so there will be mining in areas right
21 around the existing water that aren't under water now.
22 Mining in those areas will generate dust and will
23 require dust control.

24 Q. Okay. I wanted to ask about the pit --
25 okay. Thank you for that answer.

1 I wanted to ask about the picture that you
2 had of the tailings storage facility after
3 reclamation. It looked like a mountain to me.

4 Can you tell me how high that will be? And
5 use something like a one-story, two-story, three-story
6 building.

7 A. Well, I don't generally think in terms of
8 stories. Let me think about that. The tailings pile
9 will be approximately 250 to 300 feet tall.

10 Q. And it's covering 547 acres?

11 A. Yes.

12 Q. And it's held back by the dam?

13 A. Yes. There is an embankment that's
14 constructed to hold that in place.

15 Q. Okay. So it's 200 to 300 feet high, okay.

16 And it's -- and is that -- is it my
17 understanding that that pond, the tailings storage
18 facility, is all downhill to the dam, so that the
19 drainage all goes down toward the dam?

20 Because that's where the little pond is, or
21 the large pond is, the little underground pond that
22 recycles the water back; is that correct?

23 A. The pond that you are referring to is at the
24 toe of the embankment, and water that -- there is a
25 drainage collection network of types that are laid down

1 first before tailings go onto it, and those are used to
2 pull water out of the tailings and take and report to
3 that pond.

4 Q. Uh-huh.

5 A. And those do flow downhill. Then as we start
6 to build this structure up, we will operate so that the
7 tailings force the water to the back away from that
8 embankment. We don't want water up against that
9 embankment.

10 Now, water will continue to seep out, and
11 stormwater will fall onto the banks and flow down the
12 banks. And around the toe, there is a lined ditch all
13 the way around that takes water and does flow downhill
14 into that embankment, but the top of it, we are forcing
15 the water to the back away from the embankment.

16 Q. The liner that you are going to put down on
17 this 547-acre tailings facility, that obviously isn't
18 going to all be put down at one time, right?

19 A. The majority of it will go down at one time,
20 and then there are expansion phases that happen, but
21 the majority of it gets placed in a single construction
22 campaign.

23 Q. How long does that take?

24 A. That will take several months, to put that
25 liner down. It will take a year to 18 months to

1 construct the tailings facility, the base, do the
2 excavation, to shape it, to grade it so it all flows
3 properly, do all the prep work, the preparation, in
4 order to place the liner. And then the liner will take
5 several months to place.

6 Q. Several months. I have lots of questions
7 about that. I don't know exactly where to start. One
8 question I have about that is about laying down the
9 liner.

10 How will you protect it from our desert
11 environment while it's not covered?

12 And I guess I should preface that -- I'm
13 sorry. I should preface that with, if you lay the
14 majority of this liner down and that takes several
15 months, and then you start covering it, how quickly
16 will it be covered?

17 I will stop there. How long will it be
18 uncovered before you cover it with tailings?

19 A. That's a good question. The liner, as we
20 place the liner and finish pieces of it and do our
21 quality control on the sections that are placed, we
22 cover it with a cover layer, several feet of material,
23 as fast as we can, as soon as we can, after it's placed
24 to protect it from what you described, the wind. We
25 don't want the wind to pick it up and take it away.

1 You know, we don't want any punctures in it. We need
2 to cover it just as soon as we get it down and it
3 passes quality control.

4 Q. When you say that you are going to put down
5 the majority of the liner, how many acres will you be
6 putting down in that time period?

7 How many acres will you be covering?

8 A. Well, out of the 550 to 600, there will be
9 300 acres right up-front.

10 Q. Okay. So how do you cover it with material?

11 Aren't you using some kind of centrifugal
12 thing that sprays the material out?

13 Am I right about that?

14 A. Well, I am sure there are several ways of
15 doing it, but what I have done in the field is as the
16 liner goes down, passes inspection, right behind it, I
17 have these dump trucks --

18 Q. Dump trucks --

19 A. -- that start to dump material out. And then
20 a crawler tractor, a bulldozer, and pushing the
21 material out deep enough that you don't affect the
22 liner underneath. Acres and acres and acres of this
23 material has been placed in using this manner.

24 Q. You drive dump trucks and bulldozers over the
25 liner?

1 A. No. We operate the equipment on a very thick
2 layer of material that protects the liner. There is a
3 protection layer of material. Whether it's this
4 alluvial material, or a very fine gravel, or some sort
5 of very fine-grain material, you keep pushing out in
6 front, and you stay on top of that.

7 Q. I am having a little trouble with that
8 picture. I don't quite get it.

9 Okay. So in the process -- I'm sorry. Thank
10 you for that answer. I don't quite understand that.

11 As you are laying down this liner, I wonder
12 how you deal with the high winds that we get in the
13 process of laying down the liner.

14 A. Well, again, before it could be covered and
15 completely buried, again, there are weights that are
16 put on. Oftentimes, we use sandbags. We just buy
17 thousands of sandbags and fill them up and put them out
18 there to hold the liner down. And then as soon as we
19 can, we cover it with a thick layer of crushed rock or
20 other fine-grain material to cover it 100 percent.

21 Q. Okay. Thank you for that. I'd like to ask
22 about some of the chemicals that you use in the
23 processes that you do and about the actual product,
24 after you are done milling, that you send in the
25 trucks.

1 Are these products flammable?

2 A. I am not familiar with all of them, but
3 generally, no.

4 Q. So nothing that you are using up there is
5 flammable?

6 A. Oh, no. There will be flammable materials.
7 There will be diesel fuel, there will be gasoline, and
8 things like that that are flammable.

9 Q. Chemicals?

10 A. Again, off the top of my head, I don't recall
11 any specifically flammable materials in our reagents
12 process.

13 Q. The tailings concentrate that's sent away
14 from the trucks, is that flammable?

15 A. No, it's not.

16 Q. Okay. Well, for the products that you will
17 be using, including, I guess, the blasting, how are you
18 going to deal with any possible fire problems?

19 A. Specific to the blasting materials, the
20 blasting supplies are required to be stored in very
21 specifically designed and approved magazines, storage
22 facilities. These storage facilities have requirements
23 to keep the area surrounding the facility clean of
24 trash and weeds and brush and things like that so fire
25 can't get up to it.

1 And then these facilities are constructed
2 also to be -- I wouldn't say "fireproof," but at least
3 fire-retarding, and those are kept off by themselves,
4 there is no smoking allowed, nothing -- can you carry
5 matches in your pocket, no. You're supposed to take
6 them out.

7 So they are protected specifically to avoid
8 fire. They are stored in different types of blasting
9 accessories. We have caps and boosters and things like
10 that. The materials are stored separately, must be
11 transported separately. They are very controlled.

12 Q. Okay. But if a fire does start?

13 A. Where would the fire start that you are
14 referring to? Are you referring to outside the
15 magazine or inside the magazine?

16 Q. Anyplace that your company is responsible.
17 It could be inside the mining area, outside the mining
18 area, but if it's associated with the mine.

19 A. So a wildfire-type situation?

20 Q. You mean, started by --

21 A. A range fire?

22 Q. If it's on your property, sure.

23 A. Okay.

24 Q. And anything at the mine.

25 A. Equipment fire could happen, wildfire

1 happens. I have been around all of those, and they are
2 isolated. We have an emergency response team that
3 responds immediately and addresses the fire.

4 Q. And what does that emergency response team
5 consist of?

6 A. It consists of a group of very highly trained
7 individuals that meet on a regular basis and train in
8 fire and safety and emergency procedures in situations
9 and meet on a regular basis. They are specifically
10 designated to take care of these issues.

11 There is an alert system at the mine through
12 radio and other communication networks. Everybody is
13 trained as soon as they see an emergency like that
14 starting to develop, call "Mayday." That goes out over
15 the radio, everything stops, people go and address the
16 situation.

17 Q. So they work right there?

18 A. Absolutely.

19 Q. Okay. So is that their main job, or are
20 they --

21 A. No. These are employees. They could be
22 diesel mechanics, truck drivers, engineers. They work
23 there, they come to the community and work in the
24 community as volunteer fire people and emergency
25 services. So yeah, but their primary job is an

1 employee of the company.

2 We value these type of people. These are the
3 people that we want on our staff to protect us and
4 protect our equipment and property and protect the
5 community.

6 Q. Okay. So do you have a fire truck?

7 A. Typically, yes. We have a fire truck. If we
8 don't have a specific fire truck, we have large water
9 trucks that can spray water a long, long ways.

10 Q. And since you -- since the mine is operating
11 24/7, 365 days a year, do you have those people that
12 you are talking about who are these responders, do you
13 have them on staff 24/7?

14 A. Yes, 24/7. They are spread out throughout
15 all the crews so that they are there.

16 Q. Okay. What if it's a chemical fire?

17 A. Well, again, people are trained in the
18 materials that are stored there. So they know how to
19 deal with it. We will be communicating and interacting
20 with the local emergency services so they know what's
21 stored in our warehouse, they know what they are coming
22 up against if they have to come out.

23 Q. What do you mean by "local emergency
24 services"?

25 A. Well, the local fire department here, the

1 emergency services here.

2 Q. You mean, in Truth or Consequences?

3 A. Truth or Consequences, Hillsboro.

4 Q. Excuse me. You're going to use the
5 volunteers from the Hillsboro Fire Department?

6 A. If there is an alarm and they respond, you
7 know, they will need to know what's there.

8 Q. Are they aware of that?

9 Have you made an arrangement with them?

10 A. No, there is no arrangement at this time.
11 That will come.

12 Q. Okay. I am speaking specifically now of a
13 chemical fire, which is quite different from a regular
14 fire, and requires a lot of specific equipment,
15 protective gear, and specific training.

16 So your firefighters are equipped with all of
17 that, and they have all that training, and they have
18 all that equipment for a chemical fire?

19 A. Yes. We will include that in the training
20 for the materials that we have stored at the site.

21 Q. And this concept of using the volunteers from
22 Hillsboro, there is no understanding with them, is that
23 what I understood you to say?

24 A. Yeah. I don't have an understanding at this
25 time. My experience over the years is that as a

1 responsible manager of an operation such as Copper
2 Flat, I go and I work with the local communities and
3 air emergency services so in the event they have to
4 come out -- they don't have to, if they don't want to
5 -- but in the event that they do, that they know
6 what's there and what they are faced with. I believe a
7 mutual understanding is very, very important, and
8 that's my goal.

9 Q. Okay. So if they use the Truth or
10 Consequences, the response time from Truth or
11 Consequences seems like it would be -- I don't know.

12 How long would it take for them to get up
13 there?

14 And aren't they a volunteer fire department
15 also?

16 A. Again, I don't know all the details. I am
17 guessing it would take 30 minutes, but in the meantime,
18 we have the people and the equipment and the training
19 to deal with the situation and manage and control the
20 situation.

21 MS. BROWNE: Okay. Thank you for that
22 answer.

23 MS. ORTH: Thank you, Ms. Browne.

24 MR. SMITH: You are welcome.

25 MS. ORTH: Other questions? Sir? Sorry.

CROSS-EXAMINATION

1
2 BY MR. MADDEN:

3 Q. My name is Patrick Madden. One question.
4 Does the 1993 New Mexico Reclamation Act
5 permit self-bonding?

6 A. No, it does not.

7 Q. How is that reclamation fund established?
8 Is there an escrow fund?

9 A. Yes, it would be similar to an escrow fund.
10 There are several instruments that are allowed by the
11 Mining Act and the regulations. And so one of those
12 would be set up and put into place and funded by the
13 company.

14 Q. When is it funded, up-front?

15 A. It has to be funded up-front.

16 Q. And is it for the full amount of the
17 estimated reclamation costs?

18 A. It is. It is for the full amount, and,
19 again, it depends on exactly how the calculation is
20 done, and phasing, and things like that, but whatever
21 the agreement is with the State, what the State
22 approves, the Agency approves, will be 100 percent
23 funded.

24 Q. So that if there is an eventual bankruptcy,
25 there is no unsecured debt by the corporation?

1 A. Right. This reclamation fund is funded and
2 held by the Agency, correct.

3 MR. MADDEN: Okay. Thank you.

4 MS. ORTH: Thank you, Mr. Madden.

5 Sir?

6 CROSS-EXAMINATION

7 BY MR. BUSSMANN:

8 Q. I heard vegetation, I got all excited,
9 because my neighbor, Harvey, and I can't even grow
10 goatheads down there. I thought, "Wow, you guys have
11 some magic going."

12 Anyway, you mentioned at the beginning that
13 there would be a full 12-year operation funded by the
14 Mahoney family's Norseman Gold operation?

15 A. No. The Norseman Gold is an example of their
16 investments in mining.

17 Q. Oh, okay. Because I am just wondering, if
18 they are fully secured for a 12-year operation, why
19 they would have wanted to pass half the glory and half
20 the risk off to the Chinese mining company.

21 A. Well, the Maloneys -- "Maloney," not Mahoney
22 -- are funding the project to date, 100 percent to
23 date.

24 Q. To this point?

25 A. To this point. And continuing to fund the

1 project today as we advance.

2 Q. Okay.

3 A. At some point, they may consider partnering
4 up with somebody. I don't know what their plans are,
5 other than they continue -- or they intend to continue
6 funding this project.

7 Q. Okay. And, also, if the price of THEMAC goes
8 back down to a penny Canadian, can you buy me my 63
9 shares that I gave you the money for two years ago?

10 A. I am holding your 63 cents Canadian. I have
11 it in my desk, but I am holding it for that.

12 MR. BUSSMANN: Thank you very much.

13 MS. ORTH: Thank you, Mr. Bussmann.

14 Other questions of Mr. Smith? Sir?

15 CROSS-EXAMINATION

16 BY MR. PAXON:

17 Q. Jim Paxon. Good morning, Mr. Smith.

18 A. Good morning.

19 Q. I wanted some information on this geotextile
20 liner that's going to go in in the tailings storage
21 facility. Three things, specifically.

22 What is its purpose?

23 A. The purpose of the liner -- it's an HDPE
24 liner, and its purpose is to form a barrier between the
25 processed water that's contained in the tailings and

1 the ground and ultimately, the groundwater below.

2 Q. So it's to protect that groundwater
3 underneath so it's not interfered with by the waters
4 that come off the mining operation?

5 A. Yes, that's correct.

6 Q. What is a "geotextile"?

7 Explain that to us.

8 I mean, what kind of fiber is it, how thick
9 is it, what does it weigh?

10 A. Well, this particular liner that we are
11 discussing here is not a fiber liner, but it's a
12 manufactured liner similar to plastic. It's a very
13 thick plastic or rubberized material. The liner that
14 we have specified for our tailings facility is 80 mils
15 thick, which is 8,000ths of an inch. It's quite thick
16 material. And it comes in large rolls that might be 40
17 feet long, and then unrolls to a 300- to 500-foot
18 length.

19 Q. How do you connect the rolls, the ends, to
20 each other?

21 A. The material, as it's laid down, it's laid
22 out in a very specified manner, and then the rolls, the
23 material is overlapped just like shingles on a roof.
24 And then that material at the overlap is actually
25 welded to -- the two pieces are welded together, and

1 then that seam is tested, vacuum tested, to show that
2 the weld is complete.

3 Q. Is there a liner underneath the tailings
4 storage from the Quintana Minerals operation?

5 A. There is not.

6 Q. So will this operation take that material and
7 move it to cover the new liner and further protect the
8 environment from the old mining operation?

9 A. The material that is there from the Quintana
10 operation will be used in the construction of the
11 tailings facility and used as part of the liner system.

12 Q. Okay. Thank you. In revegetation, you know,
13 we don't grow much topsoil in this country, being an
14 arid environment, and I appreciate that you are using
15 growth media instead of topsoil.

16 In the revegetation efforts, will you use
17 additions to that growth media, to include fertilizers,
18 soil additives in the mulch and seed?

19 A. Well, the amendments, soil amendments, are --
20 right now, we don't have any soil amendments
21 specified. We believe that the material, as it exists,
22 will naturally support revegetation. So there will
23 have to be test work to prove that, and that's what we
24 intend to do with our test products. If an amendment
25 is required, then that's what we will do, we will add

1 whatever amendments are necessary.

2 MR. PAXON: Okay. Thank you.

3 MS. ORTH: Thank you, Mr. Paxon. Any other
4 questions of Mr. Smith? We do need a break soon.

5 Sir? Is that you, Mr. Lorimier? Please come
6 up.

7 CROSS-EXAMINATION

8 BY MR. LORIMIER:

9 Q. My name is Dan Lorimier. L-o-r-i-m-i-e-r. I
10 listened to your presentation about the economic
11 benefits to Sierra County, and I have the impression
12 the County is going to enjoy spillover economic benefit
13 from this operation.

14 Are there any agreements with the County as
15 to levels of employment?

16 Are half the miners going to come from Sierra
17 County and 30 percent of the truck drivers from Sierra
18 County, or is Sierra County just going to get, as I
19 say, what spills over the edges?

20 A. Well, there is no specific agreement with the
21 County as to numbers or percentages, but it is my
22 objective to provide employment as much I can from the
23 County, not spillover, but employment coming from the
24 County to the maximum extent that I can.

25 Now, we are going to need people that can

1 meet certain criteria, the main criteria being pass the
2 drug screen and come to work every day. If they can
3 meet that criteria, we will train them and put them to
4 work.

5 Q. Thank you. Do you folks have any
6 negotiations underway now with other groups of people
7 that does involve percentages or numbers of employees
8 for this project?

9 A. No, but you are referring to the Jicarilla, I
10 am sure, and in that agreement, there are no numbers
11 specified, there is no percentage specified, but we
12 have agreed that if they have people that meet our
13 criteria, we will employ them, as well.

14 MR. LORIMIER: Okay. Thank you for that.

15 MS. ORTH: Thank you, Mr. Lorimier.

16 Other questions? We do need a break soon.

17 Other questions of Mr. Smith? No.

18 Mr. Butzier, would you like to elicit any
19 further comment from Mr. Smith?

20 MR. BUTZIER: No, Ms. Orth. That concludes
21 the presentation of New Mexico Copper Corporation.

22 MS. ORTH: Thank you very much. Let's take a
23 15-minute break.

24 (Recess taken from 11:07 to 11:24 a.m.)

25 MS. ORTH: Just a few reminders. If you have

1 not yet signed in, please do so. The sign-in sheets
2 are at the table near the front door. Mr. Myers can
3 help you with that.

4 We will take verbal public comment
5 immediately following the lunch break. It will be one
6 of several opportunities, not your only opportunity.
7 We will do that immediately following the lunch break.
8 If you have written public comment, please bring it up
9 to the table on a break and set it here next to the
10 gourds.

11 We are going to hear next from Mr. De Saillan
12 and a variety of presenters.

13 Mr. De Saillan, I will let you introduce your
14 whole team, and if you would, please just identify a
15 good stopping place for our lunch break when you get
16 there.

17 MR. De SAILLAN: Okay. Thank you, Madam
18 Hearing Officer. Good morning. Again, my name is
19 Charles de Saillan I am with the New Mexico
20 Environmental Law Center, and I am here today
21 representing the Turner Ranch Properties, which owns
22 The Ladder Ranch, and I am also representing the
23 Hillsboro Pitchfork Ranch.

24 We appreciate the opportunity to present our
25 comments and testimony today. Although we were

1 originally given to understand that this hearing would
2 be held in January -- thank you, Stuart.

3 As I was saying, we were originally given to
4 understand that this hearing would be held in January
5 of 2019. We, nevertheless, appreciate the Division's
6 consideration in holding this hearing now, as opposed
7 to August 2018, as was, at one time, proposed.

8 As our witnesses will testify today, The
9 Ladder Ranch borders the Copper Flat Mine permit
10 boundary immediately to the north and to the east, and
11 the Hillsboro Pitchfork Ranch borders the Copper Flat
12 permit mine boundary immediately to the west and the
13 southwest.

14 These ranches oppose the issuance of the
15 mining permit for the Copper Flat Mine at least in its
16 current form. They oppose the mine not because they
17 are against copper mines, which they are not, but
18 because they fear the consequences that copper mining
19 at this location will have on the environment, on their
20 businesses, and on their way of life.

21 Businesses. The ranch depends on the natural
22 environment in the area. Both of the ranches are in
23 the business of raising livestock. The Ladder raises
24 bison; the Hillsboro Pitchfork Ranch raises cattle.
25 Both ranches organize and guide hunting trips, and The

1 Ladder Ranch organizes ecotourism trips, which includes
2 bird-watching, game viewing, and mountain-biking.

3 The Ladder Ranch is also implementing several
4 recovery programs for imperiled species. These
5 businesses depend, for their success and viability, on
6 a pristine and untarnished environment.

7 First of all, they depend on clean water:
8 Groundwater aquifers and surface water and creeks and
9 streams, yet mining operations are likely to pollute
10 groundwater and surface water with the mining impacts
11 of water and as of mine drainage.

12 Particularly vulnerable is the Avant Pasture,
13 which is on The Ladder Ranch immediately downgradient
14 of the mine facilities. Mine operations, particularly
15 the open pit, will also lower the water table beyond
16 the permit area boundary, which is likely to affect
17 private wells on neighboring property.

18 One of the attractions of the ranches is the
19 spectacular, dark, star-filled skies in the area. The
20 Copper Flat Mine, if it is permitted, will operate 24
21 hours a day, seven days a week, as we heard earlier
22 this morning.

23 Nighttime work will be conducted under bright
24 lights. These lights will be easily visible from the
25 ranch property. The lights will obscure the once

1 spectacular night skies.

2 The ranches also depend for their livelihood
3 on clean air. Fugitive dust from mining operations
4 will have the tendency to foul that clean air. Another
5 attraction of the ranches is their peace and quiet,
6 their serenity.

7 Copper Flat Mine, if it is permitted, will
8 destroy that peace and quiet. The mine will employ
9 blasting to excavate the open pit, as, again, we heard
10 earlier this morning. It will operate heavy equipment,
11 such as dozers and large dump trucks, 24 hours a day,
12 seven days a week.

13 It will operate a mill to crush the copper
14 ore. Noise from mine operations will affect wildlife,
15 but we can't say exactly how severely. Man-made noise
16 can hinder animals' ability to hear approaching
17 predators and to locate mates. Noise can also
18 adversely affect livestock.

19 Additionally, I have been told the
20 ecotourists react very negatively to anthropogenic
21 noise. The non-coal mine regulations at Section
22 19.10.6.603.A provide that a hard rock mine must use
23 appropriate technology -- the most appropriate
24 technology and best management practices.

25 This requirement applies not only to mining

1 reclamation, but, also, to mine operation. This
2 provision authorizes the Director of the Mining and
3 Minerals Division to address these issues through
4 permit conditions.

5 We urge the Director to impose conditions to
6 restrict blasting at the mine and to limit light
7 pollution and to limit noise pollution and to limit air
8 pollution from fugitive dust. These are issues that
9 are of particular concern to the ranchers.

10 We also ask that the permit provide that the
11 ranches and other members of the local community be
12 allowed to participate in developing plans to address
13 noise pollution, dust pollution, and light pollution,
14 but there are also some fundamental flaws with the
15 permit application that must be addressed before a
16 permit can be issued.

17 First of all, Section 19.10.602.D.13(g) of
18 the regulations requires that a permit application must
19 include a determination of the probable hydrologic
20 consequences of the operation and the reclamation. The
21 application submitted by New Mexico Copper Corporation
22 fails to meet this requirement in several respects.

23 The application fails to address the effects
24 that the pit view watering and long-term drawdown will
25 have on groundwater and other resources. The

1 application also fails to address the effects of
2 long-term water quality in the pit lake.

3 And the application fails to address the
4 effects on groundwater of seepage from the waste rock
5 piles, leaks from the tailings facilities, and releases
6 from other facilities at the mine.

7 Second of all, Section 19.10.6.603 of the
8 regulations requires that a mine be reclaimed to
9 achieve a self-sustaining ecosystem. The permit
10 application fails to meet this requirement because the
11 pit lake that will be created after mine operations
12 cease ultimately will not meet surface water quality
13 standards.

14 Third, Section 19.10.6.1201.A of the
15 regulations requires that an applicant must submit a
16 financial assurance proposal to the Mining and Minerals
17 Division. The financial assurance proposal that New
18 Mexico Copper Corporation has submitted is deficient in
19 several ways.

20 First of all, the proposal is based on the
21 assumption that no more than 25 years of monitoring and
22 maintenance will be necessary at the mine, resulting in
23 a significant underestimate of the cost of reclaiming
24 the mine.

25 Further, the proposal does not follow Agency

1 guidelines in estimating indirect costs, again
2 resulting in an underestimate of the costs of
3 reclaiming the mine. The proposal also does not
4 identify the form of financial assurance that is going
5 to be proposed, and the public has not had the
6 opportunity, is not going to be given the opportunity,
7 to comment on the form of financial assurance that is
8 going to be proposed.

9 Finally, Section 19.10.6.606.B.7 of the
10 regulations require that reclamation be designed to
11 meet all environmental requirements without perpetual
12 care. The Copper Flat Mine reclamation, because it
13 relies on source controls to protect groundwater, will
14 need monitoring and maintenance virtually in
15 perpetuity.

16 So today, we are going to begin with the
17 testimony of Stephen Dobrott, who is sitting here to my
18 right. He is the former manager of The Ladder Ranch,
19 and he will just be describing the unique ecosystem of
20 The Ladder Ranch and its abundant wildlife.

21 He will focus on Las Animas Creek, and
22 particularly on the Avant Pasture. He will describe
23 the businesses of The Ladder Ranch, its bison ranching,
24 its hunting expeditions, and its ecotourism. He will
25 explain that clean water is essential to the ecosystem

1 of the ranch and the businesses of the ranch. And he
2 will describe how noise, light, and dust from the mine
3 may affect the businesses of The Ladder Ranch.

4 Next, Robert Cunningham will testify. He is
5 part owner with his sister and manager of the Hillsboro
6 Pitchfork Ranch, and he will testify about the
7 ecosystem and wildlife of the Pitchfork Ranch, and he
8 will focus on Grayback Canyon, in particular.

9 He will also describe the cattle ranching
10 business and the hunting business that the ranch
11 operates. And he will also explain the importance of
12 water, and he will describe, in particular, how noise
13 from the mine may affect his business.

14 Next, Kathy McKinney will testify. With her
15 brother, she is the co-owner and co-manager of the
16 Hillsboro Pitchfork Ranch. She will also testify about
17 some of the effects -- potential effects on the ranch,
18 and she will also testify about the economics of
19 ranching and hunting in New Mexico and in Sierra
20 County.

21 Next, James Kuipers, a mining engineer, will
22 testify. Mr. Kuipers has been involved in hard rock
23 mining in the West literally since he was a teenager.
24 He will discuss the issues of blasting, light
25 pollution, noise pollution, fugitive dust pollution.

1 He will describe how these problems, how
2 these issues, can be addressed. And he will also
3 discuss in some detail the inadequacy of the proposal
4 for financial assurance.

5 Finally, Dr. Tom Myers, a hydrologist, will
6 testify. He will testify on the failure of the permit
7 application to make a determination on the hydrologic
8 consequences of the mining operation. He will also
9 discuss the failure of the proposal -- excuse me -- the
10 failure of the proposed pit lake to meet surface water
11 quality standards.

12 Thank you, Madam Hearing Officer, and that
13 concludes my opening statement.

14 We will now allow Mr. Dobrott to present his
15 testimony.

16 MS. ORTH: Thank you.

17 STEPHEN DOBROTT

18 after having been first duly sworn under oath,
19 testified as follows:

20 MR. DOBROTT: Thank you. Good morning, Ms.
21 Orth, and members of the public. And I want to tell
22 you how much I appreciate the Division allowing me to
23 testify on behalf of the Turner Ranch Properties and
24 The Ladder Ranch this morning. And I will be
25 submitting a written statement a little later on.

1 My name is Stephen J. Dobrott. I am
2 currently the Ambassador for Ted Turner Expeditions, a
3 New Mexico ecotourism business. My testimony and
4 statement will focus on the following issues: The
5 effects of noise from blasting on The Ladder business
6 operations, wildlife, and conservation programs; the
7 effects of ground migration on Ladder facilities,
8 infrastructure, and conservation programs; the effects
9 of dust on all ranch operations, wildlife, personnel,
10 and guests; the cumulative effects of all projected
11 actions of the mine on wildlife movement, breeding, and
12 population management; the effects of potential water
13 loss on bison ranching; the effects of the mine on
14 Ladder ecotourism business; the effects of bright light
15 from the mine on our dark skies; the effects of water
16 drawdown on Ladder water resources from the projected
17 "cone of depression" emanating from the mine pit; the
18 effects of potential groundwater pollution from the
19 mine's tailings storage facility and waste rock piles.

20 A little bit about my qualifications. I have
21 a Bachelor of Science degree from the University of
22 Arizona majoring in wildlife biology. I have also
23 received specialized training from the U.S. Fish &
24 Wildlife Service in refuge management, wildlife
25 management, endangered species propagation, and habitat

1 management.

2 I also received fire suppression training and
3 have prescribed fire management training. I was also
4 trained in rangeland evaluation and monitoring. I
5 worked for the Victorio Company as a range and wildlife
6 specialist on the Gray Ranch in Southwest New Mexico
7 for five years.

8 I inventoried range and wildlife resources.
9 I also inventoried all stock water resources. I
10 developed range management plans and recommended
11 stocking capacities. I developed and managed big-game
12 hunting programs. I planned and supervised various
13 range management programs, including prescribed burning
14 on rangeland improvements -- for rangeland
15 improvements.

16 After that, I worked for the Gray Land and
17 Cattle Company as game manager and commercial hunt
18 program coordinator under a different ownership for
19 three more years. I was responsible for promoting and
20 supervising big-game hunting programs. I planned and
21 implemented game surveys and research on rare and
22 endangered species.

23 Next, I worked with the United States Fish &
24 Wildlife Service for six years as a refuge biologist.
25 As refuge biologist, I was responsible for the recovery

1 of the endangered masked bobwhite on the Buenos Aires
2 National Wildlife Refuge in Arizona.

3 I participated in the development of the
4 Refuge Master Plan and startup of a new refuge. In
5 coordination with the Arizona Game and Fish Department,
6 I planned and implemented the introduction of pronghorn
7 to the refuge. I was responsible for all biological
8 surveys on the refuge. I also planned and conducted
9 biological surveys in Sonora, Mexico, related to the
10 recovery of the endangered masked bobwhite.

11 After that, I managed The Ladder Ranch, a
12 157,000-acre ranch managed for bison and wildlife with
13 special emphasis on imperiled species. I worked there
14 in that capacity for 24 years.

15 I was responsible for all aspects of
16 management of the ranch, including hiring employees,
17 annual budgeting and administrative duties,
18 coordinating native species recovery programs, hunting
19 and fishing programs, and raising bison for market. I
20 also coordinated ecotours with other ranch operations.

21 I am currently the Ambassador for Ted Turner
22 Expeditions. I promote and participate in ecotourism
23 business -- in the ecotourism business on Turner
24 properties in New Mexico. My job is to connect people
25 with nature by introducing them to some of the finest

1 and best-managed ranch properties in the Southwest.

2 I guide tours on The Ladder Ranch and
3 Armendaris Ranch. I also assist with our tour
4 development and training of our tour guides. I have
5 done this since March 2017. My current resume is, I
6 believe, Ranch Exhibit Number 2. It is accurate and
7 up-to-date.

8 Now, a little bit about the interests of The
9 Ladder Ranch. The management of The Ladder Ranch is
10 based on its mission "To manage and enhance Turner
11 lands in an economically sustainable and
12 environmentally sensitive manner while emphasizing the
13 conservation of native species and habitats."

14 The Ladder Ranch is in Western Sierra
15 County. I expect that no one could read this map
16 because I can't, either, from there, but it gives you
17 some sense of the location of the ranch and the immense
18 size of the ranch.

19 Winston is up here in the northern end, and
20 Hillsboro is at the southern end, and the Copper Flat
21 Mine is located right about here. The Ladder Ranch is
22 located just north and east of the Copper Flat Mine
23 approximately eight miles, including the mine
24 production well fields bound the ranch on the south.

25 Most critical is the four-mile stretch of

1 boundary adjacent to the mine pit due to its close
2 proximity to The Ladder Ranch headquarters and its base
3 of operations.

4 Another critical area is the Avant Pasture,
5 which livestock and wildlife use for grazing and
6 browsing, and which is immediately to the east and
7 hydrologically downgradient of the proposed waste rock
8 piles and other mine facilities.

9 What makes The Ladder Ranch sustainable from
10 a business perspective is the diversity and quality of
11 rangelands, the wildlife, and water resources that
12 occur there.

13 The ranch consists of 157,000 acres of
14 private land, 100,600 acres of National Forest and
15 wilderness lands, 20,079 acres of State lands, and
16 11,480 acres of BLM lands, totaling 289,159 acres, or
17 451.81 square miles, all within Sierra County.

18 Its proximity to the Black Range watersheds
19 and elevations from 4500 feet to 10,000 feet provide a
20 suite of biological life zones unmatched of any one
21 property in New Mexico. Thus, the biological diversity
22 on the ranch is remarkable and highly regarded by
23 biologists and ecologists alike.

24 A little bit about our surface water. The
25 ranch is incised by five semi-perennial creek systems:

1 From north to south, the Cuchillo Creek, Palomas Creek,
2 Seco Creek, Cave Creek, and Las Animas Creek that drain
3 into the Rio Grande Basin.

4 Each contributes greatly to the biological
5 richness of the ranch. Of the five creeks, Las Animas
6 is the most notable for its biodiversity and importance
7 to The Ladder Ranch.

8 The Las Animas and Cave Creek stream system
9 is crucial and is the life blood of the ranch. Its
10 surface and groundwater supply pristine, dependable
11 water for central ranch operations, including in the
12 administrative facilities, employee and guest housing,
13 livestock, farm irrigation, wildlife, imperiled species
14 programs, all within three to four miles distance of
15 the Copper Flat Mine.

16 Notably, Las Animas Creek has been nominated
17 as one of New Mexico's scenic waterways, and its
18 environmental importance has been documented in
19 scientific publications and the book River of Spirits,
20 a Natural History of New Mexico's Las Animas Creek,
21 which I co-authored.

22 This remarkable riparian corridor has also
23 been designated as an Important Bird Area, or IBA, by
24 the Audubon Society. One of the creek's most unique
25 features are the ancient Arizona sycamores that occur

1 only on this creek within the entire Rio Grande Basin.

2 Biological significance of Las Animas Creek.

3 Las Animas Creek provides streamside, or riparian,
4 vegetation and food used by waterfowl and migrating and
5 breeding bird populations unique to the Southwest.

6 This riparian corridor connects migrating birds along
7 the Rio Grande with upper reaches of the Black Range.

8 Food cover and good quality water along this
9 reach is used by many bird species, including the
10 Yellow-billed Cuckoo and the Southern Bald Eagle,
11 currently listed as threatened species by the U.S. Fish
12 & Wildlife Service.

13 Las Animas Creek currently supports four
14 native fish species: The Rio Grande chub, the Rio
15 Grande sucker, the Rio Grande Cutthroat Trout, shown
16 here, and the Long-fin Dace. These species depend on
17 pristine water for reproduction and production of
18 macro-invertebrate food sources made possible by these
19 waters.

20 The springs along Las Animas Creek. Again, I
21 know it's hard to see. Las Animas Creek, if I can keep
22 my hand from shaking, is this section right through
23 here. And the springs that I am going to describe are
24 located right along this stretch, about a three- to
25 four-mile stretch.

1 Within the area nearest to the Copper Flat
2 Mine are several natural springs: Animas Warm Spring,
3 the Manager House Spring, Garden Tank Spring, Myers
4 Animas Spring, along with several unnamed springs and
5 seeps along Las Animas Creek.

6 Now, a little bit about the groundwater
7 resources. Back to this map again. I will describe
8 the groundwater resources located along this stretch of
9 Las Animas Creek, as well as livestock wells just
10 adjacent to the boundary with the Copper Flat Mine.

11 Within the area closest to the Copper Flat
12 Mine are five livestock wells, three irrigation wells,
13 and three domestic wells. These are, west to east,
14 Myers Well, John Cross Well, Wanda Well, Evans Well,
15 and Feedlot Well.

16 The irrigation wells are, from east to west,
17 Shipping Pens Well, Higgins Well, and Orchard Well.
18 The domestic wells are also at headquarters. In the
19 Avant Pasture in the southeast section of the ranch,
20 along with the Evans Well, it is used to supply
21 "drinkers" for quail and stock tanks used by bison and
22 large game for drinking.

23 That's this area right in here. It also
24 provides water to two important conservation
25 facilities: The endangered Bolson tortoise facility,

1 where young tortoises are raised, and the Feedlot steel
2 rim water storage that is used for maintaining
3 threatened Chiricahua Leopard Frogs. These water
4 sources are an important component of our ecotourists
5 due to the variety of visible wildlife that they
6 provide for our guests.

7 A little bit about wildlife. Wildlife
8 abounds on The Ladder Ranch. Healthy populations of
9 elk, mule deer, Coues whitetail deer, pronghorn,
10 javelina, black bear, mountain lion, turkey, and three
11 species of quail occur there.

12 Fifty-seven species of mammals and over 250
13 species of birds have been recorded on The Ladder
14 Ranch. I believe that these lists will also be entered
15 as Ranch Exhibit Number 3. Each suite of species is
16 considered a biological treasure and an economic asset
17 to the ranch. Bison are managed as livestock and
18 coexist with other wildlife species ranch-wide.
19 Achieving a balance between conservation and
20 sustainable businesses has been a goal for 25 years.

21 Habitat conservation programs. Specific
22 conservation programs have been developed in The Ladder
23 Ranch in accordance with its Mission Statement. The
24 non-profit Turner Endangered Species Fund partners with
25 United States Fish & Wildlife Service and the New

1 Mexico Game and Fish Department in imperiled species
2 restoration projects like the federally listed
3 Chiricahua Leopard Frog, the Mexican gray wolf, the
4 Bolson tortoise, and the Yellow-billed Cuckoo. Its
5 mission is "To conserve and restore imperiled species,
6 with an emphasis on promoting wild, working
7 landscapes."

8 Additionally, the Turner Biodiversity
9 Division works closely to restore less imperiled
10 species like the Rio Grande Cutthroat Trout and other
11 native fish to the Las Animas Creek stream system.

12 The propagation of the threatened Chiricahua
13 Leopard Frog depends upon pristine and reliable
14 groundwater. Pristine water is essential for the frog
15 propagation facility at headquarters, and notably, the
16 water storage facility supplied by water from the
17 Feedlot Well.

18 Pristine water quality and reliable flow is
19 also important to this species in the wild on Cave and
20 Las Animas Creeks. The captive endangered Bolson
21 tortoise also relies on pristine, reliable
22 groundwater. The threatened Yellow-billed Cuckoo
23 depends on pristine, reliable surface water in the Las
24 Animas Creek for its habitat.

25 Business enterprises of The Ladder Ranch.

1 Since 1992, The Ladder Ranch has been raising and
2 selling bison meat commercially in markets and
3 restaurants. It's lunchtime.

4 The ranch also conducts big-game hunts for
5 mule deer and elk through Turner Ranch Outfitting. The
6 ranch also is a popular destination for guests of Ted
7 Turner Expeditions, an ecotourism enterprise based in
8 Truth or Consequences.

9 Guests who visit the ranch for the day will
10 stay at our sister property, the Sierra Grande Lodge,
11 an 18-room historic hotel in Truth or Consequences.
12 Each enterprise depends on a healthy, well-managed
13 environment -- on healthy and well-managed environments
14 to operate successfully and to accomplish their
15 objectives in concert with each other.

16 It is important to note that all these
17 businesses contribute to the economy of Sierra County
18 through taxes and purchases of goods and services. The
19 Ladder Ranch has been doing this on a sustainable basis
20 for 25 years, and it will continue to do so for the
21 foreseeable future.

22 Community outreach and youth development.
23 For 25 years, The Ladder Ranch has hosted numerous
24 programs for local and region-wide youths, such as the
25 Native American Natural Resource Management Practicum

1 that focus on preserving tribal connections with the
2 land and wildlife and encouraging youth to stay in
3 school and go on to higher learning.

4 To date, over 500 Native American youths from
5 Southwest tribes have spent time on The Ladder Ranch
6 learning about its conservation programs. Through the
7 Turner Youth Initiative, the ranch has been a focal
8 point for opportunities for local youths, such as high
9 school biology classes and the Boys and Girls Club of T
10 or C.

11 Last Friday, 30 students from Socorro and
12 their teachers visited the ranch to see and experience
13 the vast landscapes, historical sites, and wildlife.
14 The landscapes, the riparian environments, are
15 tremendous outdoor classrooms that offer our youth a
16 chance to connect with nature. Las Animas Creek is
17 high on the list for providing a sense of connectivity
18 to the importance of water and the resulting habitats
19 and wildlife it can support for future generations.

20 A bit about The Ladder Ranch concerns.
21 According to the BLM's Draft Environmental Assessment,
22 Copper Flat Mine will pump about 7,000 acre-feet per
23 year of groundwater, almost 2 billion gallons,
24 threatening water supplies on The Ladder Ranch,
25 adjacent ranches, Hillsboro, and downstream users along

1 the Rio Grande.

2 Hydrologists project that the mine will
3 eventually reduce the flow in Las Animas Creek at some
4 point after mining begins and potentially eliminate the
5 flow entirely after mine closure. The mine will dump
6 over 100 million tons of polluted waste into a 500-acre
7 pond just over 11 miles west of Caballo Reservoir.

8 Contaminants from the mine could leak into
9 the ground or into the groundwater or pollute Ladder
10 Ranch and reach the Rio Grande, threatening drinking
11 water supplies as far south as El Paso.

12 Blasting will be heard and felt at The Ladder
13 Ranch, disrupting the ranch's solitude, affecting the
14 ecotourism business, and potentially damaging its
15 historic buildings and pipelines.

16 The experience of former night ecotourist
17 guests will be disrupted from the sound of blasting
18 from the mine just three miles distance from the
19 guesthouse. The ranch biking tours will also hear the
20 blasting.

21 Nearby captive animals within conservation
22 program facilities may be sensitive to the effects of
23 blasting. The prevailing southwest winds will bring
24 dust to The Ladder Ranch headquarters three miles
25 directly downwind of the mine. The resulting drift of

1 airborne pollutants could harm imperiled species
2 conservation programs.

3 Our remarkable dark skies will be lit up by
4 the mine's lights, damaging one of the region's best
5 star-gazing and photographing locations. Mine lights
6 will adversely affect the quality of experience we
7 offer through our ecotourism business.

8 Ladder Ranch and neighboring watering wells
9 adjacent to and downstream of the mine will also see
10 significant drawdown and static water levels, resulting
11 in hardship for the ranch and lower Las Animas water
12 users.

13 One of New Mexico's last remaining
14 populations of Chiricahua Leopard Frog listed by the
15 U.S. Fish & Wildlife Service as threatened will be at
16 risk due to the projected drawdown of Las Animas
17 Creek.

18 The lowering of the water table caused by the
19 cone of depression from constant groundwater pumping
20 during operations and evaporation of the pit lake after
21 mine closure will be devastating to The Ladder Ranch
22 and to the important biodiversity that occurs here.

23 Native fish and frogs and riparian obligate
24 species, such as the federally listed Yellow-billed
25 Cuckoo that depend on the cottonwood gallery forest,

1 will be jeopardized.

2 Any impairment in the quality or depletion in
3 water quantity, quantity or quality, derived from ranch
4 domestic livestock and irrigation wells and springs
5 would significantly impact these business enterprises
6 and wildlife.

7 Any drawdown of the water table from the
8 projected "cone of depression" emanating from the mine
9 pit, or potential contamination of the water resources
10 from mine facilities, this area, would be -- in this
11 area would be a disaster.

12 Ladder Ranch businesses and established
13 programs could potentially collapse. Without reliable
14 and sufficient clean water, bison ranching on the
15 southern portion of the ranch would be seriously
16 compromised.

17 The habitats of native fish and rare wildlife
18 found along Las Animas Creek could be lost. Without
19 abundant game within this area, our outfitting business
20 would be significantly affected. Without a healthy
21 vibrant ecosystem to show our guests, The Ladder Ranch
22 ecotourism business would be significantly affected.

23 The Ladder Ranch urges the Mining and
24 Minerals Division to consider the projected and
25 irreversible impact that the Copper Flat Mine will have

1 on The Ladder Ranch, its neighbors, local ranchers and
2 farmers, and all downstream water users in the lower
3 Rio Grande.

4 Issuing this permit flies in the face of
5 those who understand the importance of our limited
6 groundwater resources and potential costs of pumping
7 7,000 acre-feet per year of groundwater from this
8 aquifer, especially during this time of uncertain
9 precipitation, of continuing drought conditions in the
10 Southwest, and of change in climate.

11 Issuance of this permit would be at the
12 expense potentially forever -- and would potentially
13 forever alter the existing Las Animas Creek. It would
14 be at the expense of that already existing remarkable
15 ecosystem.

16 The Ladder Ranch understands the importance
17 and complexities involved in managing self-sustaining
18 natural ecosystems. It is doubtful that the Copper
19 Flat Mine would ever achieve a sustainable ecosystem,
20 as required by the New Mexico Mining Act, without
21 massive and perpetual expenditure for reclamation and
22 restoration.

23 Therefore, The Ladder Ranch stands opposed to
24 the issuance of this permit. If the permit is used --
25 is issued and the Copper Flat Mine is allowed to

1 operate, the ranch's water, unique environment, quiet
2 and scenic open spaces, clean air, dark skies, its
3 historic buildings, its diversity of wildlife, bison,
4 hunting, ecotourism, its conservation programs, could
5 all be affected in ways that would be devastating and
6 irreversible.

7 Thank you.

8 MS. ORTH: Thank you. Please don't applaud.

9 Mr. De Saillan?

10 MR. De SAILLAN: If there are any questions.

11 MS. ORTH: Okay. So it's time for
12 questions.

13 Mr. Butzier, do you have questions of Mr.
14 Dobrott?

15 MR. BUTZIER: I would actually prefer, if
16 it's okay at this point, to have lunch.

17 MS. ORTH: Oh. All right. Let's see what
18 time it is. It is 12:06, in fact. If we break now and
19 come back at 1:15, is that enough time for folks? I am
20 not hearing objections.

21 All right. Let's come back at 1:15. Thank
22 you.

23 (Lunch recess taken from 12:06 to 1:17 p.m.)

24 MS. ORTH: Okay. We are back after a lunch
25 break, and we are going to interrupt the ranches'

1 presentation, as previously arranged, to accept public
2 comment.

3 If you have not yet signed in on the sign-in
4 sheet near the door, please do so. I'm going to call
5 folks in the order in which they signed in. There are
6 no time limits on your public comment. So you don't
7 need to try to keep it within three minutes. You don't
8 have to watch the clock.

9 There are really just a couple of rules.
10 Please don't make personal attacks, please don't offer
11 scientific testimony, and please don't repeat
12 yourself. That's about it. We do swear you in before
13 your comment, and we will ask you -- the court reporter
14 will ask you for the spelling of your last name for the
15 transcript.

16 If you have written public comment, you can
17 either submit it at the same time you are doing your
18 oral public comment, or you can just submit it,
19 regardless, today, tomorrow, in this room, or after we
20 finish here by submitting it to the Mining and Minerals
21 Division by midnight, Friday, October 26th.

22 Let's see. Oh, there are Fact Sheets on that
23 table, they are like this, that give you a little
24 information, including a web page for additional
25 documents. If you comment, folks will be asked if they

1 have questions of you, and if I don't ask after each
2 commenter and you actually have a question of someone
3 else, please just raise your hand. Please just raise
4 your hand. And please help yourself to coffee or tea
5 at the other front table.

6 So I'm going to start right now -- oh,
7 finally, this is not the only opportunity to offer
8 public comment. I will also set aside the hour between
9 6:00 and 7:00 tonight, tomorrow after lunch, tomorrow
10 night between 6:00 and 7:00, and the same on Thursday
11 and Friday, if we get into Thursday and Friday.

12 All right. Jim Paxon. I will ask folks to
13 sit at the table here.

14 JIM PAXON

15 after having been first duly sworn under oath,
16 testified as follows:

17 DIRECT TESTIMONY

18 MR. PAXON: Testing, one, two, three. That
19 sounds good. Welcome back from lunch, everybody. I am
20 Jim Paxon. I am a Sierra County Commissioner, and I
21 personally and as a member of the Sierra County
22 Commission support the Copper Flat Mine.

23 The current Commission is unanimously in
24 favor of the mine proposal and the benefits that it
25 will bring to Sierra County. A citizen recently asked

1 me why I did not give serious consideration to the
2 information presented by those who were against the
3 mine.

4 I campaigned on listening to all Sierra
5 County citizens and taking their concerns to heart. I
6 owe it to all citizens to consider their input on
7 issues, and I honestly feel that I do.

8 We are a country and a society of laws and
9 order. The General Mining Law of 1872 is still the
10 foundational federal law regarding the exploration of,
11 filing for, and protection of private entities' claims
12 and rights for the extraction of locatable minerals, to
13 include gold, silver, copper, lead, zinc, molybdenum,
14 hard for me to say, and others. Now, some folks don't
15 really like that, but until the law is changed, that is
16 the law of the land.

17 Now, the 1976 Federal Land Policy and
18 Management Act, otherwise known as "FLPMA," did, in
19 fact, revise the 1872 Mining Law, and in it, it
20 requires reclamation of lands mined, financial
21 guaranties and bonds to reclaim federal and applicable
22 State permits to operate extensive, detailed plans of
23 operations, and, of course, preparation of an
24 Environmental Impact Statement to disclose potential
25 environmental impacts.

1 In addition, the New Mexico Mining Act of
2 1993 added to those environmental protections by
3 dictating required actions of the mining proponents so
4 that the protection of the environment is ensured by
5 several State agencies in permitting and monitoring of
6 mining activities.

7 This is not the gold rush of the 1800s, nor
8 is it the extractive mess of too many mining operations
9 in the 20th century. In today's era of advanced
10 technology, along with demonstrating responsibility, I
11 believe that mining can be accomplished and the
12 environment protected at the same time.

13 New Mexico Copper Corporation has indicated a
14 willingness to comply with all applicable laws, rules,
15 and regulations. It's been stated several times that
16 they have met or exceeded all of the required measures
17 to date.

18 Their proposal is not a "dig out and get out"
19 operation. You are here today to consider the pros and
20 cons of issuing New Mexico Copper Corporation a mining
21 permit. This hearing is one of many by the several
22 State agencies who have permitting authority, as well
23 as the BLM.

24 Other federal agencies, such as the
25 Environmental Protection Agency, Alcohol, Tobacco, and

1 Firearms, Fish & Wildlife Service, Army Corps of
2 Engineers, Federal Mine and Safety Health
3 Administration, all have stringent permit requirements
4 and strict processes for approvals that must be met
5 before the mine can begin operation.

6 Sierra County would be involved in issuing
7 New Mexico Copper Corporation a business license, and
8 we will monitor the mining activities. Mining today is
9 very closely examined and monitored. Required permits
10 from each of these agencies would be appropriately
11 enforced.

12 New Mexico Copper Corporation filed their
13 first Plan of Operations with the BLM in December 2010
14 for the reestablishment of a mine and processing
15 facility previously operated by the Quintana Minerals
16 Corporation.

17 New Mexico Copper has spent nearly \$40
18 million in New Mexico and more than 55 million in total
19 preparing and revising their Plan of Operations,
20 conducting continued exploration, environmental
21 studies, water studies, engineering studies, and more,
22 to include participation in public forums such as this
23 one.

24 To me, New Mexico Copper Corporation has
25 shown determination and staying power with a desire to

1 be in Sierra County long-term and to contribute to the
2 welfare of our citizens and our communities. In other
3 words, to be a good neighbor.

4 I toured the proposed mine facility with Mr.
5 Smith in July, and I saw the old Quintana mine
6 infrastructure. Water wells, pipelines, roads,
7 tailings storage facility, milling plants, waste rock
8 disposal areas are there, and they can be reused with
9 minimal modernization and changes to meet the new
10 mine's production, and thus, limit the initial
11 disturbance and environmental impacts associated with
12 the construction of a totally new operation from the
13 ground up.

14 In reading the BLM Draft EIS, Environmental
15 Impact Statement, I have noted a few things. 47
16 percent of the mine is on BLM, 53 percent of the mine
17 is on patented ground that New Mexico Copper
18 Corporation owns.

19 However, 90 percent of the ore removal would
20 be from private lands. Another thing is this is not a
21 process from the ages. There is no toxic use of
22 chemicals, such as cyanide leaching, in this proposal.
23 They are using flotation processes and reagents.

24 The BLM's Draft EIS stated that the impact of
25 hazardous materials and solid waste and waste disposal

1 was not significant from their Table ES-3, Summary of
2 Impacts. Also, in the same summary, concerns for human
3 health and public safety were deemed not significant.

4 Another note, 72 percent of the total water
5 needed for the mining operation would be on-site
6 processed water, recycled from storm catchment,
7 existing ponds, the pit lake dewatering, watering the
8 rock that's being processed.

9 This seems to be efficient use of water to
10 me. It's still going to control -- demand considerable
11 pumping, and we understand that. It's up to the mining
12 company to actually obtain the water rights that they
13 will need to continue mining.

14 You know, the BLM talks about the pit lake
15 not being usable by wildlife. However, when I was
16 there and viewed the facilities, it looked like it was
17 being used by deer and javelina. There were tracks all
18 around as I walked it, around the pit lake to the
19 water's edge. I also saw several birds in the area.
20 There were no carcasses, nor animal bones, near the pit
21 lake that I could observe.

22 As a good neighbor, New Mexico Copper
23 Corporation will provide a trust fund that will
24 maintain water quality management of the pit lake for a
25 minimum of 30 years after cessation of all mining

1 activities. That's already in the requirements.

2 Grayback Arroyo is currently diverted by a
3 major ditch around the mine pit and the pit lake that
4 prevents any mine water from getting out of the
5 operating area and flowing downstream into Grayback
6 Arroyo. That diversion would be reinforced and
7 maintained as need be to be kept functional.

8 The current New Mexico Copper Plan of
9 Operation would reclaim 910 acres of land impacted by
10 the previous Quintana mine that has not been
11 reclaimed. One great improvement is a new tailings
12 storage facility with an impervious geotextile liner
13 that would be laid out in sections, welded and covered
14 over with the existing tailings from the operation and
15 that in the 1980s.

16 This structure would serve to capture any
17 liquid residues and keep them from flowing into Animas
18 Creek, Grayback Arroyo, Greenhorn Wash, Percha Creek,
19 or, most importantly, Caballo Lake and downstream into
20 the Rio Grande.

21 Planned and financed reclamation will return
22 the area to a more natural self-sustaining ecosystem
23 than we see at present, and that will benefit wildlife
24 and perhaps range livestock, as well. This includes 50
25 percent of the area that was never reclaimed by the

1 Quintana operation when they ceased.

2 Growth media, although we know it doesn't
3 have topsoil, there is topsoil in it, but it includes
4 other things, alluvial material, and it would be
5 collected and retained for use along with fertilizers
6 and seed as needed to revegetate the area impacted by
7 mining.

8 New Mexico Copper Corporation is committed to
9 having a \$56 million surety bond to assure that the
10 reclamation work will be done even if they are not
11 around to do it.

12 Finally, as a selfish standpoint, I would
13 like to suggest that the Copper Flat Mine would provide
14 opportunities that are not available in Sierra County
15 right now.

16 My wife, Debbie, has been in Sierra County
17 since the middle '60s. I have been here since 1988.
18 Together, we have nine grandchildren, six of whom are
19 adults. Only one of those youngsters lives in Sierra
20 County today. She works in a dental practice and she
21 is studying to be a hygienist. Right now, she is on
22 maternity leave with our second great grandbaby, and
23 surely the apple of Grandma Debbie's eye.

24 Sadly, none of the other kids could find
25 employment opportunities locally. They are in Tucson,

1 El Paso, Las Cruces, and Albuquerque. Would they
2 prefer to reside and work here where they could be
3 close to their parents and three sets of grandparents?
4 Absolutely.

5 I have asked them individually. They have
6 expressed a strong desire to be closer, but without
7 opportunity, occasional visits are centered around
8 holidays, and they simply have to suffice. Several of
9 them have skills and experience that are applicable to
10 the mining operation, welding, construction, heavy
11 equipment operation, bookkeeping, and administration,
12 they all fit very well in with the potential skills
13 needed at the Copper Flat Mine.

14 Our hope is that some of these kids will be
15 able to compete for job openings as the mine facilities
16 are constructed and operations begin. My bottom line,
17 in response to the citizen who took me to task for
18 supporting the mine, is yes, I have looked at the
19 "evidence" from both sides, the plans, facts, and
20 evaluations that I have been able to review by
21 technical specialists, conclusions from analysis by
22 government agencies, and those far outweigh the
23 influence of the fear of the unknown, the nebulous
24 "what if" arguments, and sometimes a personal bias
25 against mining anywhere, anytime, which I perceive as a

1 "not in my backyard."

2 You know, Hillsboro exists as a community
3 because of mining. At one point, it was Sierra's
4 County seat during an active period of mining, and it
5 still sees considerable hobby prospecting and some
6 mining.

7 I believe very strongly that New Mexico
8 Copper Corporation is a good neighbor and that the
9 operation of the Copper Flat Mine will benefit all
10 Sierra County citizens, as well as New Mexicans, in
11 general, through the diversity to our dire economic
12 situation.

13 Thank you, Ms. Orth, and the New Mexico
14 Mining and Minerals Division for the opportunity to
15 present my thoughts to you and the citizens assembled
16 here today.

17 MS. ORTH: Thank you, Commissioner Paxon.
18 Greg Koontz. A few moments ago, I said, "Please don't
19 offer scientific testimony." What I meant to say is if
20 you are offering scientific testimony, give us your
21 credentials before you do that.

22 GREG KOONTZ

23 after having been first duly sworn under oath,
24 testified as follows:

25 DIRECT TESTIMONY

1 MR. KOONTZ: My name is Greg Koontz. I
2 represent Matrix Service. We are an industrial
3 contractor in oil and gas, mining, and power. My
4 statement is going to be very short.

5 I just wanted to tell the community that when
6 a company like us comes in, if we have the opportunity
7 to work for Copper Flat, we have employment
8 opportunities that start with entry-level people that
9 we teach them what they need to know to grow in the
10 business.

11 We also have, for college-educated people
12 that have a degree, they can come in and learn and get
13 some experience if they want to stay in the area. We
14 like to hire from the local environment, and any
15 contractor that comes in here to work for Copper Flat
16 is going to be looking for the local people.

17 They want to train them. They don't want to
18 pay subsistence. They want the people there to be
19 involved in their community, to educate them in a new
20 job. They will transfer -- they have transferable
21 skills, most likely, from another type of work that
22 they have done, and they will provide opportunities
23 that will stay with them the rest of their life.

24 So the employment opportunities that this
25 mine will open up to the community is something that

1 they can build for the future with. Just like he said,
2 his grandchildren, they are moving away because there
3 is not opportunity. This is a place to give experience
4 -- or jobs to people and get the experience and live
5 in their community.

6 So that's just what I had to say. Thank you.

7 MS. ORTH: Thank you, Mr. Koontz. Tom
8 Stroup.

9 TOM STROUP

10 after having been first duly sworn under oath,
11 testified as follows:

12 DIRECT TESTIMONY

13 MR. STROUP: My name is Tom Stroup. I am
14 Vice President of the Board of Directors for Sierra
15 Electric Cooperative. I built my home here in Sierra
16 County in 1998 and have been a full-time resident since
17 approximately 2006.

18 Sierra Electric was established in 1941. We
19 are one of the first cooperatives in New Mexico. We
20 are now in our 77th year of existence. We have about
21 3200 members, serving about 4,000 meters, and
22 challenges of an electric co-op in Southern New Mexico
23 include declining membership because of declining
24 population in our area; one of the poorest counties in
25 New Mexico, with a stagnant-to-declining economy, and

1 little industrial electrical load; aging infrastructure
2 -- mind you, we have been here for 77 years -- with
3 constant need for replacement and upgrading and
4 modernizing.

5 We have nearly 900 miles of power lines. We
6 have almost 3,000 miles of line. We have got over
7 14,000 wooden power poles, 3300 transformers, 600
8 regulators, capacitors, sectioning devices, et cetera.
9 We have two major substations where we purchase all of
10 our power from Tri-State G&T, plus all the specialized
11 vehicles, equipment, safety gear, et cetera.

12 We are primarily a residential customer
13 base. Approximately 80 percent of our customers are
14 residential. This type of base is the most difficult
15 to sustain our infrastructure and service without
16 continually raising rates.

17 Our mission -- part of our mission is to
18 serve our customers with reliable and affordable
19 power. That's getting so hard to do with a declining
20 membership. We have difficulty finding skilled
21 workers.

22 We try to rely on hiring bright, energetic
23 locals. We provide professional training and then try
24 to keep them. Our co-op just experienced how trying
25 this can be at times. Last Friday was the last day of

1 employment for an eight-year employee.

2 They are leaving because their husband has to
3 leave the state of New Mexico to find proper employment
4 to what he is qualified for. So a bit of that problem
5 is an economically challenged county that we cannot pay
6 what some of the large co-ops pay their employees.

7 So we are typically at a disadvantage.
8 Electric co-ops, like mining operators, rely on
9 professionals to design and construct our
10 infrastructure. Sierra Electric has ongoing
11 requirements to replace our aging infrastructure as
12 described above.

13 For large capital projects, after they are
14 professionally designed, it goes to bid, it is
15 constructed by a licensed professional specializing in
16 electrical projects.

17 Once construction is complete, our own highly
18 trained and specialized linemen, support crew, monitor
19 and maintain the system, conduct maintenance, and
20 new-scale construction.

21 New Mexico Copper Corporation has done the
22 same thing with their design of the mining facilities,
23 including their Mine Operation and Reclamation Plan,
24 \$56 million of reclamation plan, and that could be
25 adjusted.

1 It's been designed by professionals with
2 extensive experience in such operations and
3 facilities. These professionals rely on their designs
4 and constructed facilities working to protect the
5 environment in order to stay in business, as will New
6 Mexico Copper Corporation.

7 Sierra Electric is a working example of how,
8 when good opportunity for good employment is available
9 in Sierra County, that our local youth and talented
10 individuals who might be from other areas and would
11 like to live in a small town seek those jobs working
12 through intensive and professional training programs,
13 improve themselves, and build careers in Sierra
14 County.

15 This results in growth to the County, which
16 is what Sierra Electric needs to sustain and improve
17 our service to our members. We have heard a lot of
18 talk in the past several weeks, most of it personal
19 opinion or pure conjecture, not fact, about the
20 effects of mining on a community.

21 Tourism has been promoted as a future
22 economic engine of Sierra County. While tourism is a
23 very important component of the future of the County of
24 Sierra, it cannot carry the County on its own, as
25 Sierra County's current economy illustrates.

1 Tourism jobs tend to be seasonal, temporary,
2 little or no benefits, while copper plant jobs would be
3 full-time benefits, training, health, and a future.
4 Tourism in Sierra County centers primarily around
5 Elephant Butte Reservoir.

6 Our lake level is now at three percent, as
7 low as it's been in 50 years. A year ago, the lake was
8 at 12 percent, and with the inflow in 2017 and 2018,
9 it's still gone down to nine percent. And now, through
10 the summer drawdown, to three percent.

11 Will the lake be full next year? One
12 percent? Maybe zero if we don't get some snowpack.
13 How is that going to affect Sierra County's tourism
14 economy? With ever-increasing vegetables and so forth
15 being planted, both high water-use crops, desert and
16 riparian lands being converted to cropland, the issue
17 of water with Texas and Mexico, will Elephant Butte
18 ever again be a lake that is the engine of tourism for
19 Sierra County?

20 Copper Flat Mine Project has been designed
21 with the most advanced and proven technologies known
22 and will use the most advanced and proven materials to
23 protect the environment while providing jobs, training,
24 and opportunity to our local youth and working people
25 and economic stimulus to Sierra County.

1 New Mexico Copper has followed a path that
2 federal and State regulations require. They have
3 engaged highly trained, experienced, professional teams
4 to design a comprehensive project that will protect the
5 environment, generate much-needed opportunity and
6 economic benefits to Sierra County, and reclaim the
7 land to a condition probably better than what it is
8 today.

9 On behalf of Sierra Electric Cooperative and
10 myself, I believe it's time to approve this project and
11 let those in Sierra County that want to work, that want
12 to see their kids stay in Sierra County and work, and
13 want a county that is economically sustainable, receive
14 and get the project approved.

15 Thank you.

16 MS. ORTH: Thank you, Mr. Stroup.

17 Ted Caluwe.

18 TED CALUWE

19 after having been first duly sworn under oath,
20 testified as follows:

21 DIRECT TESTIMONY

22 MR. CALUWE: My name is Ted Caluwe, and I am
23 a resident of Sierra County, New Mexico. We have heard
24 a lot about how much water we might would need, 7,000
25 acre-feet.

1 Here to draw a visual picture of the water
2 consumption, imagine a wall of water ten feet wide and
3 ten feet high. In the first year, that wall would
4 extend from Caballo Lake to Silver City. By the end of
5 operation, that wall would extend all the way to the
6 Pacific Ocean.

7 That is the volume of water it's going to
8 take to operate the mine. Now, historically, copper
9 mines have had a very poor track record with their
10 tailing ponds, dam breaches, and failures are all too
11 common.

12 Having sat through the discharge permit
13 process, it became apparent through -- that their
14 tailing ponds and the dam are built to just minimal
15 specifications as allowed by law. Also, by their own
16 admission, they do not have an emergency action plan in
17 place in the event of a dam failure or breach.

18 In looking at New Mexico Copper Corporation's
19 website, they bill themselves as an "exploratory and
20 developmental company." They do not currently operate,
21 nor have they ever operated, a mine. They have no
22 experience in operating a mine.

23 Their misplaced trust and dependence upon the
24 dam and a lack of emergency action plan only expresses
25 how dangerous a lack of experience can be. For these

1 reasons, I ask that the operating permit be denied.

2 Thank you.

3 MS. ORTH: Thank you, Mr. Caluwe.

4 Harry Trueblood.

5 HARRY TRUEBLOOD

6 after having been first duly sworn under oath,

7 testified as follows:

8 DIRECT TESTIMONY

9 MR. TRUEBLOOD: My name is Harry Trueblood.

10 I am a resident of Elephant Butte. The credentials I
11 bring to this meeting are very simple, I am a casual
12 observer. One of the things I have observed is perhaps
13 Quintana mine did not fail through no problem of
14 theirs. The market fell apart.

15 It may very well have continued to operate
16 through today. If that was the case, then this meeting
17 would be best held with some sort of a scholastic
18 exercise. There would be no need for it because they
19 will have continued to operate under the permits that
20 were in existence then, and they would have had to
21 follow them.

22 One of the benefits of having that mine work
23 and fail, so to speak, is it provides us with the
24 opportunity as a laboratory to see what kind of
25 environmental impact it would have had.

1 Copper Flat people have been monitoring the
2 site for years, they have all the information they need
3 as to what the environmental impact of the -- of an
4 operational copper mine is, and their information is
5 available to anybody who would like to study it. There
6 should be no questions, or no unanswered questions
7 about what an impact is.

8 Another casual observation is that Sierra
9 County needs jobs. There are certain things that were
10 supposed to be happening, they may, but they have not
11 yet. The Spaceport may, it hasn't happened yet; a
12 NASCAR track; other things that have been promised, but
13 have not come to fruition. Well, I think this is one
14 of the brightest promises we have seen in quite some
15 time.

16 Thank you.

17 MS. ORTH: Thank you, Mr. Trueblood. Deb
18 Nicoll. Candi Browne.

19 Would you like to go now or later?

20 MS. BROWNE: I can do it now.

21 MS. ORTH: All right.

22 CANDI BROWNE

23 after having been first duly sworn under oath,
24 testified as follows:

25 DIRECT TESTIMONY

1 MS. BROWNE: Just let me say thank you again
2 to the State of New Mexico for allowing this public
3 hearing to happen. I wanted to make a few statements
4 about the trucking situation of the trucks that will be
5 carrying the ore.

6 They are going down, I guess, Highway 152
7 down to Interstate I-25. I am just going to briefly
8 say that I have read a lot of information that says
9 that that highway is not set up for the weight of the
10 trucks that will be used, and it will probably
11 deteriorate.

12 There are not very good edges on the highway
13 now, and there would be deep concern for deterioration
14 of the highway that could cause accidents, and that
15 could be the public, or it could be the ore trucks that
16 get into trouble.

17 The first thing I'd like to just mention is
18 that my understanding is that these trucks will be on a
19 schedule to meet trains and -- so that the ore can be
20 taken away or something.

21 My concern here, and the thing I would like
22 to point out, is that if the trucks are on a schedule
23 and they are running 24/7, which can be at night, it
24 can be in the daytime, it can be any time of the year,
25 that there can be storms.

1 And if they are on a schedule and they have
2 to meet their deadline at the railroad, I am concerned
3 about storms, I am concerned about the safety on the
4 highways when there are storms.

5 And I don't want to say that this is what I
6 am most concerned about, but I will say that if we have
7 snow, the roads really are not set up for snow, and we
8 have pretty poor snow here, but these trucks have to
9 go. So that's a concern.

10 And I am also concerned because in the mining
11 Plan of Operation put out by the New Mexico Copper
12 Corporation, as far as truck safety goes, New Mexico
13 Copper Corporation simply refers to any responsibility
14 for the hauling of the toxic material that's in the
15 trucks that the contract cars -- the trucking companies
16 will be responsible for accidents and spills along the
17 transport routes. And this is in the Copper Flat Spill
18 Contingency Plan, page one, Facility Information and
19 Emergency Response.

20 So when I say that what they are hauling is
21 something toxic, I say that because copper concentrate
22 is known to be a toxic substance with adverse health
23 effects related to inhalation of copper-concentrated
24 dust and other concerns.

25 It's listed in the United States TSCA

1 inventory as hazardous under hazard communication
2 standards and the CERCLA Section 103, Hazardous
3 Substances. It needs the Comprehensive Environmental
4 Response, Compensation, and Liability Act, and then it
5 just says "Superfund."

6 I really feel that New Mexico Copper
7 Corporation needs to be adequately bonded for the
8 cleanup of any accidental spills on the highway
9 involving their trucking and their hauling and any
10 transportation of any hazardous or toxic materials
11 because they have to bring those in on the highway,
12 too.

13 And I also wanted to mention that there is a
14 need for a rapid response. And, again, there is only
15 that one highway that goes up to the mining site, and
16 it's the only way that -- well, unless they use
17 helicopters -- the only way that they get -- that's the
18 only way they can get any response in there.

19 And although I spoke this morning about fire,
20 I also meant any kind of chemical spill. And the
21 trucking of the ore is a chemical, and if it gets
22 spilled on the highway, there needs to be a rapid
23 response to that.

24 And it's not just -- I don't believe, I am
25 not 100 percent sure of this -- is that rain -- yes --

1 that I am not 100 percent sure it is, but I do believe
2 that the response for a toxic spill is not meant to be
3 handled just by people on staff of the New Mexico
4 Copper Corporation.

5 I believe it's supposed to be handled by
6 specific departments in the State and maybe in the
7 nation. There is a possibility of fire with even --
8 with the spill of the ore because if it creates dust,
9 there are ways that that can generate fire.

10 People handling copper concentrate, there are
11 a lot of restrictions on that, and one of them does say
12 that -- I'm sorry, I am not as well prepared as I
13 should be.

14 I also wanted to say again that because I
15 believe that there is meant to be a rapid response for
16 any products that might be spilled on the highways by
17 the trucks that depending on -- I just think it's so
18 far away from any rapid responders that I would like to
19 know how the New Mexico Copper Corporation is planning
20 on handling that.

21 When they -- they do have a plan in their
22 information that's called a "Spill Contingency Plan,"
23 but the information that I have says that the way that
24 they respond to that, to spill hazardous or toxic
25 materials, is that they can only do it by a long list

1 of people in their chain of command who may be in --
2 may be contacted in the event that the first person or
3 the first people in the chain are not available, then
4 the next thing is that they go to the next person.

5 And it starts out saying that whoever
6 discovers the spill contacts their supervisor, and if
7 he is not available, they contact the loss control
8 department, and if he is not available, they contact
9 the EM, and if he is not -- or she is not available,
10 they contact the loss control leader.

11 After that, the general manager. After that,
12 the maintenance superintendent. Well, it goes on and
13 on and on. And the thing is that if it takes that long
14 to just let somebody know that there is a problem, I am
15 concerned about that.

16 So I guess that's it. I guess that's the end
17 of my concern on that. Thank you very much.

18 MS. ORTH: All right. Thank you, Ms.
19 Browne. Are you submitting your notebook?

20 MS. BROWNE: Can I leave it tomorrow?

21 MS. ORTH: Yes. Pat Madden.

22 PAT MADDEN

23 after having been first duly sworn under oath,
24 testified as follows:

25 DIRECT TESTIMONY

1 MR. MADDEN: Folks, for 14 years, I was a
2 general jurisdiction trial judge in Iowa, and if my
3 recollection is correct, my juries found that this was
4 just about nap time. So if any of you would like to go
5 to sleep, I will only be a short while here.

6 I am not here to advocate allowance of or
7 opposition to this copper mine. I want to address the
8 issue of funding for reclamation of this mine site when
9 it finally shuts down if it is approved to begin
10 operations.

11 Often, government allows corporations to give
12 assurances that do not prevent taking steps to avoid
13 payment of debt not already funded by cash. These
14 reclamation costs may not be secured by any property or
15 assets the corporation owns.

16 If a bankruptcy occurs, reclamation costs may
17 be treated like unsecured debt. As a result, when a
18 corporation declares bankruptcy, all done in accordance
19 with excellent legal advice, that's important,
20 corporations have excellent legal advice, these funds
21 are not available for reclamation purposes, leaving
22 taxpayers on the hook for millions of dollars of
23 cleanup costs.

24 The estimated reclamation costs for this
25 particular mine, if approved, I understand to be about

1 \$56 million by the company's own estimates. That
2 amount may be accurate or may be very low. What I want
3 to suggest is that if mine operations begin, as part of
4 each year's operating total costs, not profits, a set
5 percentage of these operating costs be set aside in
6 actual dollars in an escrow or other fund controlled by
7 the State for eventual reclamation purposes.

8 In other words, a more dependable form of
9 corporate surety so that over a period of years,
10 perhaps up to ten years or less, a fully cash-funded
11 escrow or other account controlled by the State is
12 established for reclamation purposes.

13 Thank you.

14 MS. ORTH: Thank you very much. Charles
15 Stephens. All right. Dan Lorimier.

16 DAN LORIMIER

17 after having been first duly sworn under oath,
18 testified as follows:

19 DIRECT TESTIMONY

20 MR. LORIMIER: Thank you, Madam Hearing
21 Officer. My name is Dan Lorimier. I am a 40-plus
22 years resident of Sierra County. I was here when some
23 of the first hydrologic studies about the impacts of
24 the Copper Flat project were conducted.

25 Those studies were then replaced by other

1 studies. The original studies predicted a fairly huge
2 cone of depression that would have, in fact, affected
3 my shell residential well.

4 Subsequently, because of that huge impact to
5 the economy and to all of the residents whose wells
6 would be impacted or affected, from my perspective, it
7 was time for another study. And so there was another
8 study that, more or less, discounted the idea of a huge
9 cone of depression around the well field for this
10 project.

11 Earlier studies also described several
12 opportunities for connectivity between the aquifer that
13 was being exploited by the well field and the Animas
14 Creek Aquifer, which has been described as a perched
15 aquifer.

16 The mine now has studies that contend the
17 connectivity between Animas Creek, the aquifer being
18 pumped, is non-existent. And I would like to express
19 how disconcerted it makes me feel to see the
20 correlation between the price of copper and the
21 connectivity of the Animas Creek watershed to the
22 aquifer that's being pumped.

23 These are the kinds of reasons, to my mind,
24 that science is under attack in America. The Mining
25 and Minerals Division sees itself, and I think rightly

1 so, as a permit facilitator for mines. Somewhere in
2 that process, though, they should be certain to apply
3 the precautionary principle, and they should do that in
4 order to fulfill the part of their mission that calls
5 on them to protect the environment and New Mexico
6 citizens.

7 An example of their ability to apply this
8 would be through conditions in the permit such as
9 requiring 100-year coverage of remediation at the mine
10 site rather than 25 years. I have lived here, as I
11 mentioned, for 45 years. I can comprehend the idea of
12 a 25-year reclamation period. It's not long at all.

13 And so I ask the Mining and Minerals
14 Division, on behalf of myself and citizens like me in
15 Sierra County, to please protect us.

16 Thank you.

17 MS. ORTH: Thank you, Mr. Lorimier. Joe
18 Ellis. No. Charles McMath.

19 CHARLES McMATH

20 after having been first duly sworn under oath,
21 testified as follows:

22 DIRECT TESTIMONY

23 MR. McMATH: I am Charles McMath. I live at
24 the Elephant Butte Lake in a very modest house. We
25 have lived there for 30 years. This is my country. My

1 grandparents homesteaded on the head of the Animas in
2 the late 1800s and the early 1900s.

3 They had a cattle ranch there. They went
4 broke during the depression and had to leave. But we
5 have had property here since the '60s. We have lived
6 here permanently since 1990. Today, I serve as
7 secretary to the Board of Trustees for the Sierra
8 Electric Co-op.

9 I am a member of the Board to the Middle Rio
10 Grande Economic Development. Both of these entities
11 support the copper mine totally. This copper mine
12 means a lot to this community. We have heard today a
13 number of people state what the jobs will do for this
14 community, but let's look at the future.

15 On the Board of Directors at the co-op, we
16 look to what the copper mine will generate in revenue
17 for the co-op. With this revenue, we can pay off or
18 increase our payments on long-term notes. We can
19 rebuild some of the infrastructure.

20 This reaches out generations into the
21 future. And what this generates, we can put into the
22 hospital. The hospital is struggling. It's been
23 struggling for 30 years. Maybe this mine can put it on
24 a sound financial basis.

25 It will increase our population in the

1 County, and Dona Ana County will get part of it. It's
2 a win/win situation for us in this county and in this
3 city. You say, "Well, at 30 years, when it's all over
4 and these guys all go, pull out and are gone, what do
5 we do then?"

6 If we are wise, we will invest this money,
7 the city will invest it into 55-plus housing for
8 snowbirds who come for -- our winter visitors. They
9 will invest it in the infrastructure of the City, they
10 will invest it in things that can promote commerce.
11 There are a lot of things that this money could bring
12 not for today, but for generations to come.

13 I thank you.

14 MS. ORTH: Thank you, Mr. McMath.

15 Allyson Siwik.

16 ALLYSON SIWIK

17 after having been first duly sworn under oath,
18 testified as follows:

19 DIRECT TESTIMONY

20 MS. SIWIK: Good afternoon. My name is
21 Allyson Siwik. I am the Executive Director of the Gila
22 Resources Information Project, otherwise known as
23 "GRIP." Thank you for the opportunity to provide
24 testimony today on the Copper Flat new mine operation
25 permit application.

1 First, a little bit about who we are. GRIP's
2 mission is to promote community health by protecting
3 the environment and natural resources in Southwestern
4 New Mexico. We facilitate and form public
5 participation and natural resources decisions that will
6 have profound and long-lasting impact on the region's
7 environmental and economic health.

8 We have worked on mining issues in New Mexico
9 for the past 20 years. According to the Mining Act,
10 the purpose of the new mine operation permit is the
11 protection of human health and safety, the environment,
12 wildlife, and domestic animals.

13 If this is the goal under the Mining Act, we
14 don't see how the Copper Flat Mine operation, as
15 currently described in New Mexico Copper Corporation's
16 application, can be permitted when, number one, it's
17 proposed consumptive use would cause impairment to
18 streams and springs, negatively impacting wildlife
19 including -- I will also submit this in writing, and I
20 will slow down. Thank you.

21 So it's proposed consumptive use would cause
22 impairment to streams and springs, negatively impacting
23 wildlife, including threatened and endangered species,
24 and to groundwater use for domestic and agricultural
25 water supplies, and reduce flow to the Rio Grande,

1 exacerbating the situation for the Texas lawsuit.

2 Number two, a self-sustaining ecosystem won't
3 be achieved since the mine will produce a pit lake that
4 exceeds, one, quality standards, and creates a
5 perpetual hazard to wildlife, and, three, financial
6 assurance is inadequate.

7 As we have heard, the operator proposes
8 monitoring and maintenance for 25 years post-closure
9 when we know that a perpetual liability will be created
10 at the Copper Flat Mine. The permit should require
11 monitoring and maintenance for at least 100 years.

12 100 years post-closure for monitoring
13 maintenance is assumed at Freeport Mine in Grant
14 County, and there should be no shortcuts taken up with
15 the State and public at risk for long-term impacts.
16 Moreover, we have not seen yet the proposal for the
17 form of the financial assurance.

18 We are strongly opposed to a corporate
19 guaranty for the Copper Flat Mine. The maximum should
20 -- THEMAC should not be allowed. For financial
21 assurance purposes, GRIP would like to see the results
22 of the financial soundness test if a third-party
23 guaranty is proposed.

24 Additionally, we would like to see -- to be
25 able to review and comment on the proposal for the form

1 of the financial assurance once it's available because
2 that would be very critical. We are also very
3 concerned that best management practices for mine
4 operations are not proposed as part of the mine
5 application.

6 Given our experience with Grant County copper
7 mines, most recently with the reopening of the
8 Cobre-Continental Mine, it is critical that the new
9 mine operation permit address the impacts from Copper
10 Flat's mining operations.

11 As Mr. Smith testified earlier today, there
12 will be dust, light, and noise impacts from Copper
13 Flat's operations. MMD needs to place permit
14 conditions requiring the most appropriate technology
15 and best management practices to limit impacts from
16 blasting, dust, light, and noise, as well as other
17 impacts to the surrounding community, such as increased
18 traffic and road damage from mine haul trucks.

19 So road damage is a big issue for local
20 communities. Road damage caused by increased heavy
21 truck traffic poses a safety issue. The Draft EIS for
22 the Copper Flat Mine states that the reduction in life
23 expectancy of road pavement due to increased truck
24 traffic on Highway 152 is 53 to 70 percent.

25 Additionally, the Sierra County Road

1 Superintendent stated in the Draft EIS that the level
2 of heavy traffic at Gold Mine Road "would destroy the
3 roadway." Because the public sector pays the cost of
4 road repair, already stressed local and State budgets
5 often can't handle the cost of increased maintenance
6 from mine truck traffic.

7 Copper Flat should set aside dollars to
8 offset the increased cost of road maintenance rather
9 than push the costs off onto the public. Mitigation of
10 this public safety issue should also be included in the
11 operation permit.

12 And I think really globally, what is lacking
13 here is a plan for how impacts from mining operations
14 will be mitigated to protect public health and safety
15 and how New Mexico Copper Corporation is going to
16 respond to community concerns about impacts when they
17 arise. This is a significant deficiency right now in
18 the mine operation application.

19 So thank you very much for consideration of
20 my comments, and I will, as I mentioned, submit more
21 detailed comments to you by the end of the comment
22 period.

23 Thank you.

24 MS. ORTH: All right. Thank you very much,
25 Ms. Siwik.

1 DENISE BARRERA

2 after having been first duly sworn under oath,
3 testified as follows:

4 DIRECT TESTIMONY

5 MS. BARRERA: Good afternoon. I am Denise
6 Barrera. I am the general manager of Sierra Electric
7 Cooperative headquartered in Elephant Butte, New
8 Mexico. You have already heard a couple of my board
9 members talk about our co-op.

10 Sierra Electric is a member-owned rural
11 electric cooperative serving over 3100, 3200 members
12 with about 4200 meters. We serve Sierra, excluding the
13 City of T or C, Catron, Socorro, and Luna Counties. 99
14 percent of our meters are here in Sierra County. We
15 have about 900 miles of line with a density of 4.65,
16 which is 4.65 meters per mile.

17 Rural cooperatives have seven cooperative
18 principles that they go by, one being concern for
19 community, which is one of the highest concerns for
20 Sierra Electric, including the economic needs of the
21 members and residents of Sierra County.

22 The Copper Flat Mine will enhance and provide
23 a unique opportunity for growth and sustainability to
24 the Sierra County residents, surrounding counties, and
25 the State of New Mexico. It will offset the existing

1 new economic conditions our county is currently
2 facing. It will allow local companies to provide
3 additional employment opportunities and local
4 governments the resources to improve and develop
5 sustainable critical services for its citizens.

6 In 1982, when Quintana mine came on line for
7 a short period of time, Sierra Electric purchases went
8 from 18.2 million kilowatt hours in '81 to 47.5
9 million. That is an increase of 63 percent in sales.
10 And that was just for a few months that they were in
11 operation.

12 The NMCC, with an estimate of a 40-megawatt
13 load at 90 percent load factor would increase our
14 purchases from 65.4 million kilowatt hours to 263
15 million kilowatt hours a year. That's about a 74 to 75
16 percent increase that we would be looking at.

17 This would benefit the economic and financial
18 conditions for our members of Sierra Electric by
19 reducing the burden on our current rate payers, which
20 is 81 percent residential. It would allow us to
21 maintain and upgrade our system and infrastructure
22 without having to increase rates or borrow loan funds.

23 It would help reduce our debt, and, in turn,
24 it would open up opportunities for additional economic
25 development projects. The Sierra Electric Board of

1 Trustees adopted a Board resolution in February of 2016
2 supporting NMCC for its investment and efforts in the
3 development of the Copper Flat Mine project in Sierra
4 County.

5 Over two years later, we continue to strongly
6 support this unique opportunity for the growth and
7 sustainability to Sierra County and State economics, of
8 which I am attaching a copy of the resolution from
9 2016.

10 Now, on a more personal note, I have lived
11 here in Sierra County practically my whole life. I
12 graduated from Hot Springs High School. I started my
13 career at Sierra Electric. I left in 1987 for a
14 better-paying job. Same job, better pay.

15 The last 22 years of my 36 years in the
16 electric cooperative business, I drove every day to
17 Deming to work. While working in Deming, I never left
18 Sierra County. I have served on numerous boards and
19 committees, one of which I served 12 years on was the
20 local school board.

21 As a member of the school board, I handed out
22 hundreds of diplomas to graduating students knowing the
23 majority of these kids were going to leave Sierra
24 County for better career opportunities, and those who
25 remain in Sierra County are faced with higher costs of

1 living and lower wages.

2 My son and his classmates graduated in 2004.
3 My son is in Yuma, Arizona. He has fellow classmates
4 in Las Cruces, Albuquerque, Santa Fe, Dallas,
5 Nashville. And that's just a few of them.

6 I could go on for hours on what this mine
7 would and could do for our community, but in closing, I
8 believe that NMCC has demonstrated their commitment to
9 Sierra County. They have already invested millions of
10 dollars in this project. I just wish and ask that you
11 please grant them the operations permit.

12 And thank you for giving us the opportunity
13 to comment.

14 MS. ORTH: Thank you, Ms. Barrera. Harvey
15 Chatfield.

16 HARVEY CHATFIELD

17 after having been first duly sworn under oath,
18 testified as follows:

19 DIRECT TESTIMONY

20 MR. CHATFIELD: Well, I don't have a big,
21 long speech or a degree or anything like that, but I
22 have lived here all my life, and my dad called this --
23 he didn't call it "Sierra County," he called it "Sorry
24 County," because everything was so doggone poor, you
25 couldn't do anything, you know.

1 And he said that we had to get a little bit
2 of that Democrat welfare money, but he didn't -- I
3 mean, it wasn't welfare because it was some kind of a
4 project that somebody was bringing, and he said, "We
5 will get some of that government money to make Sierra
6 County liveable."

7 And so I think that I worked up there at
8 Copper Flat when they were doing what they were doing,
9 and I think that -- you know, I have seen lots of pros
10 and cons, and everybody has got a good opinion, but,
11 you know, I think that we ought to just let them do it,
12 you know.

13 We need a doggone income here. We don't have
14 any jobs. Our kids are all going here, going there,
15 going everywhere, and we need some kind of -- we have
16 got the Spaceport, which they say is a wonderful thing,
17 but all we have done is stuck wind into the standing
18 thing, and probably will be sticking more into it
19 before it ever sees a profit, but now we have got some
20 not government funds, as they say, but we have got some
21 private enterprise funds and people that want to do
22 something, I think we ought to let them do it.

23 Thank you.

24 MS. ORTH: Thank you, Mr. Chatfield. Jeff
25 Cullum. No. Selma Brown. I am happy to take your

1 comment tonight. Bruce Swingle.

2 BRUCE SWINGLE

3 after having been first duly sworn under oath,
4 testified as follows:

5 DIRECT TESTIMONY

6 MR. SWINGLE: Good afternoon, Madam Hearing
7 Officer. Thank you for the opportunity to speak in
8 support of the mine. My name is Bruce Swingle, Sierra
9 County Manager, and I am speaking on behalf of the
10 Sierra County Board of County Commissioners.

11 The Sierra County Commission has and
12 continues to support Copper Flat Mine. In determining
13 whether to support the mine as a matter of public
14 policy, County leadership relied on much data and
15 information presented by many credentialed
16 professionals, professionals with extensive mining
17 hydrology, geochemistry, and environmental experience.

18 After assessing New Mexico Copper
19 Corporation's business model and environmental
20 safeguards, the County Commission has approved two
21 resolutions of support of the mine.

22 The City of Elephant Butte and Village of
23 Williamsburg have also approved resolutions of
24 support. Suffice it to say that the vast majority of
25 Sierra County residents support the mine.

1 Today, New Mexico Copper Corporation gave an
2 impressive presentation, and in prior presentations, as
3 well, in mine operations and mitigation plans to
4 protect the environment and area resources.

5 Let us not forget that New Mexico Copper
6 Corporation is trying to reopen a mine that has been
7 operating on and off for generations in an area where
8 mining of copper and other precious metals has been a
9 part of the community since the 1880s.

10 Mining, particularly at the Copper Flat site,
11 is culturally and historically connected to Sierra
12 County. Hillsboro was originally selected as Sierra's
13 County seat because of the mine and the mining
14 population that resided there at the time.

15 New Mexico's economy has always struggled,
16 but our economic decisions and policy over the last few
17 decades is truly defining where we are, who we are, and
18 where we are going as a state.

19 According to an article published by 24/7
20 Wall Street on March 5th, 2018, New Mexico has the
21 third worst economy in the state -- or in the country.
22 New Mexico has the second worst unemployment rate. New
23 Mexico has the second worst poverty rate in the
24 country.

25 New Mexico has the worst property crime rate

1 in the country, and the second worst violent crime
2 property rate. New Mexico has the second worst drug
3 overdose mortality rate. New Mexico has the worst high
4 school graduation rate. New Mexico has the worst
5 college readiness rate.

6 New Mexico is experiencing an exodus in its
7 population. According to an article published in the
8 Albuquerque Journal dated January 29th, 2017, titled
9 "Exodus: New Mexico's population stagnant as people
10 leave in unprecedented numbers" indicated that in 2010
11 to 2016, we lost over 37,000 residents in population.

12 They have left the state, migrated out of the
13 state. New Mexico's population decline, .01 percent in
14 2013 and '14, and showed zero population growth in
15 2015. We are experiencing this out-migration of our
16 population while surrounding states are experiencing
17 substantial growth in population.

18 The Santa Fe New Mexican published an article
19 on November 18, 2017, indicating that people are
20 leaving New Mexico -- of the people leaving New Mexico,
21 the largest growth are our professionals, and they are
22 taking their children with them. So not only are we
23 losing educated people, we are losing the families, as
24 well.

25 The term generally used of this phenomenon is

1 "Brain Drain," and yes, New Mexico is experiencing a
2 Brain Drain. Again, New Mexico has the second worst
3 poverty rate in the United States. The national
4 poverty -- New Mexico's rate is 20.4 percent; the
5 national poverty rate is 12.7 percent.

6 Sierra County's poverty rate is over 22
7 percent, and Truth or Consequences is even worse at
8 27.6 percent. Sierra County's per capita income is a
9 meager \$20,495, while the national rate is over twice
10 that at \$58,030.

11 Sierra County is truly one of the poorest
12 counties in one of the poor states in the country. The
13 County's household median income is \$29,679,
14 substantially lower than the New Mexico rate of
15 \$46,748. The national median household income rate is
16 over \$59,000.

17 The median property value in New Mexico is --
18 or in Sierra County is \$89,900, compared to New
19 Mexico's at \$167,500. Properties are not selling.
20 They are decreasing in value. I personally am a
21 property owner, and it's very discouraging. It's very
22 difficult to convince people to buy and support the
23 community when they know that their property values are
24 going to decline and have been declining for some
25 time.

1 And there is no new construction occurring in
2 Sierra County. As of March 2018, Sierra County's
3 unemployment rate was 8.8 percent, compared to the
4 State's rate at 5.6 percent. The national rate is 3.9
5 percent.

6 To compound the issue, Sierra County is
7 losing its population, as well. The County's
8 population has declined 19 percent since 2000. That is
9 a significant number when you consider that these are
10 the professionals, these are the people that are
11 capable of working who are leaving the community.

12 Currently, our youth are leaving the
13 community for jobs; our skilled work force is leaving
14 the community for jobs. One can't blame them for
15 leaving. They have got to receive -- they have got to
16 have a job, and they have got to receive a reasonable
17 wage for that job.

18 From a public policy perspective, the only
19 thing worse than the out-migration of our residents is
20 that residents capable of working are staying, and they
21 are going to remain unemployed or underemployed while
22 they stay in Sierra County.

23 Ultimately, they end up on some form of
24 government assistance or social assistance program.
25 New Mexico has to change its practice and take

1 advantage of job and revenue opportunities when they
2 present themselves.

3 The State must recruit and support business
4 and industry. We must welcome industry, industry such
5 as Copper Flat Mine. If we don't become a
6 business-friendly state and take advantage of the
7 resources that we have available to us in this state,
8 the data and our trajectory are painfully clear.

9 Sierra County and the State of New Mexico
10 need Copper Flat Mine. New Mexico and Sierra County
11 rank at the bottom of most socioeconomic measures.
12 Copper Flat Mine can single-handedly change the
13 economic landscape of Sierra County and vastly
14 contribute to New Mexico's economy without compromising
15 the environment.

16 Copper Flat Mine will provide a significant
17 economic boost to Sierra County and New Mexico through
18 job creation and tax revenues. The mine will create
19 approximately 1300 direct, indirect, and induced jobs.
20 The mine is expected to create 275 direct jobs, which
21 will make it the largest employer in Sierra County.

22 The estimated taxes paid over construction
23 and life of the mine is approximately \$175 million.
24 Property taxes alone are projected to exceed \$6.5
25 million in a county that only collects approximately

1 \$8.3 million a year.

2 These taxes will equate to improved
3 services. It will improve the quality of life of our
4 residents and provide much-needed revenue for our
5 schools and our hospitals and our service
6 organizations. The entire state will benefit from
7 Copper Flat Mine.

8 As of February 2018, New Mexico Copper
9 Corporation has spent \$38.8 million in New Mexico. Of
10 that, 3.4 million was spent in Sierra County, 12.6
11 million in Albuquerque, and 22.8 million around other
12 parts of the state.

13 With respect to the environment, we are all
14 environmentalists. We all want to protect our
15 environment. It sustains our resources, our way of
16 life, and our quality of life in this region. However,
17 if someone is against mining simply because of the
18 belief that all mineral extraction is an assault on the
19 environment, they will never support Copper Flat Mine,
20 or any other mine, for that matter.

21 Reasonableness must prevail. Mining is
22 accomplished all over the United States without harming
23 the environment. After hearing New Mexico Copper
24 Corporation's presentation, reasonable people will
25 agree, New Mexico Copper Corporation is implementing

1 reasonable safeguards to protect the environment in our
2 community.

3 After decades of regulations, State and
4 federal oversight, and scientific and technological
5 advancements, a win/win scenario can be achieved.
6 Based on the plan articulated by New Mexico Copper
7 Corporation today and in past hearings, the Sierra
8 County Commission believes New Mexico Copper
9 Corporation's mine meets every reasonable and relative
10 standard and regulation.

11 Realizing you have received hundreds, if not
12 thousands, of comments from people living outside the
13 state of New Mexico, please don't let them dictate
14 policy to New Mexico or Sierra County.

15 They have no idea of the struggles we face:
16 Our population decline, our lack of employment
17 opportunities, our deteriorating economy, and the many
18 social challenges associated with poverty we face on a
19 daily basis. Challenges that are worsening, not
20 improving, in Sierra County.

21 Sierra County is in a crisis. The mine will
22 stimulate population growth, improve employment rates,
23 increase earnings per capita, positively affect our
24 housing market, improve the quality of life of every
25 area resident, and affect other key industries in the

1 area: Recreation, health care, arts, tourism, and I
2 could go on.

3 The Commission implores you to make a
4 reasonable decision, make the right decision for Sierra
5 County and the State of New Mexico and approve Copper
6 Flat Mine's permit and environmental evaluation.

7 Thank you for giving Sierra County the time
8 and opportunity to support Copper Flat Mine.

9 MS. ORTH: Thank you, Mr. Swingle. We would
10 accept your written comments. Thank you.

11 Catherine Wanek.

12 CATHERINE WANEK

13 after having been first duly sworn under oath,
14 testified as follows:

15 DIRECT TESTIMONY

16 MS. WANEK: Thank you. I appreciate the
17 opportunity to offer some comments today. I really --
18 I live up in Kingston. I have lived there for 34
19 years. I grew up in Las Cruces. So I really kind of
20 come from New Mexico.

21 Mining is certainly a historical industry in
22 Sierra County. Kingston was founded in the 1880s, and
23 it's a former mining town. There were thousands of
24 miners there, built many buildings. I think they say
25 there were 26 saloons and one church.

1 And perhaps that is what mining brings. When
2 the silver played out and the price dropped, the town
3 died. There were -- they went from thousands to the
4 dozens of people that there are now.

5 However, it's a beautiful life, and when I
6 hear the dire statistics that have been cited by many
7 of the people here, I don't recognize them at all
8 because I think we have a wonderful quality of life
9 here in Sierra County, and we are very rich.

10 There may be some economic issues that we
11 have, certainly, but we have a rich life, a beautiful
12 place that we live, and we also have wonderful
13 neighbors that I cherish every day, and that's really
14 why I am speaking.

15 I can understand why people in Truth or
16 Consequences and Elephant Butte and even myself in
17 Kingston would be not as concerned about the effects of
18 the mine because they are upstream from it, but I
19 really -- but I certainly, being aware of what was
20 called the "cone of depression" of the water that would
21 be pumped out of the aquifer, that is going to impact
22 our neighbors in Animas Creek and very possibly the
23 water system and the water in Hillsboro.

24 These are also our neighbors. And so,
25 therefore, that, to me, is the number one issue here.

1 I am sure that with the technology that exists today,
2 the appropriate financial assurances, that mining could
3 be -- could take place in a way that could potentially
4 be -- you know, and the issues could be mitigated.

5 But, again, water becomes the number one
6 thing that makes me request that you really look hard
7 and fast at this permit, because drinkable water is
8 increasingly precious in the whole world, and
9 certainly, we know that now that Elephant Butte is
10 down, as they say, to three percent of its historical
11 potential.

12 And I talked to some of the farmers
13 downstream, and they said, "We farmers have no money.
14 The mining company has lots of money." So they are all
15 depressed about it because they see here -- you know,
16 increasingly, their allotment of water is decreasing,
17 and they are not being allowed to pump water out of the
18 ground, and yet this particular industry will be
19 pumping 7,000 gallons per minute, 24 hours a day, seven
20 days a week.

21 That is, I guess, 7,000 acre-feet per year,
22 and that is -- and the amount of water, clean water,
23 that would be enough to be enough for a city of 70,000
24 people. So we certainly don't have that many people up
25 and down the Rio Grande, and the possibility of that

1 impacting the wells of our neighbors down in Animas
2 Creek is very high over the lifetime of the mine,
3 which, by the way, is predicted only to be 12 years.

4 So if -- and this mine is supposed to
5 basically rescue Sierra County from poverty. It will
6 be very much like what Kingston experienced back in the
7 1880s, robust economy, which is not really a long-term
8 or sustainable economy.

9 So I -- and I do not see New Mexico as a dire
10 place. I see New Mexico as a place with a terrific
11 quality of life. And some of the new news, you know,
12 is that Netflix is coming to New Mexico. That's going
13 to be billions of dollars in a very clean industry, and
14 it will bring lots more jobs and lots more people, and
15 maybe some of those will trickle down to Sierra County,
16 too. I'm not saying that they will, but they could
17 possibly.

18 And in addition, that will bring a lot more
19 wonderful professionals here. Our business. The
20 economic drivers of Sierra County are currently
21 tourism, agriculture, and health care. And all of
22 those things are compatible with the new industry
23 that's coming to our state. That, you know, could
24 hardly be better news for New Mexico.

25 Additionally, I do drive Highway 152 every

1 day, and recently, it was repaved, and it's a total
2 pleasure to drive these days with the repaving of it,
3 but as I contemplated the idea of big trucks on it, I
4 have been told, or I do understand that it's not really
5 constructed for -- it doesn't have the road base to
6 support the weight of these large ore trucks. So the
7 road, itself, will have to be basically rebuilt, and I
8 understand the cost of that will be in the tens of
9 millions of dollars.

10 Also, it doesn't have a shoulder. So if we
11 -- and it's also -- it's a cross-country bicycle route
12 known as the "Southern Tier," and thousands of
13 bicyclists actually participate, ride bicycles. People
14 from all over the world come through that Highway 152,
15 over the Black Range, and to Silver City, or vice
16 versa, from Silver City, over the Black Range, down to
17 I-25, and then they basically go down the Hatch Valley
18 towards Las Cruces and so forth.

19 So there is just no place for those bicycles
20 to be. There is not a bike lane. And if we have large
21 trucks like that, you know, I am concerned for the
22 safety of these many visitors to New Mexico. And I do
23 know some bicyclists who have not visited us in the
24 past, it wasn't here in New Mexico, but I heard later
25 that these two women who were world travelers were

1 struck by a vehicle, a truck, in their travels, and
2 they were killed.

3 They, again, had stayed with us, and they --
4 but, you know, a year later, they were killed on their
5 journey. Again, it wasn't here in New Mexico, but that
6 is the kind of thing that can happen.

7 And so not that we can't have a -- you know,
8 so we have that kind of traffic on this road, and we do
9 need the road, and that should be part of the permit,
10 improving the road so that it will support bicycle
11 traffic.

12 Lastly, I want to address the idea that
13 leaving New Mexico is a terrible thing. I grew up in
14 Las Cruces. When I got out of high school, the first
15 thing I wanted to do was to go see the world, and I
16 did.

17 And I had an opportunity to travel north,
18 south, east, west, and live in many different places.
19 I came back and found a beautiful life and am very
20 content and happy here in Sierra County. And if I did
21 not have that experience of seeing the world, I would
22 never be so happy as I am today.

23 So I think that it's important that we have
24 family and we have our people that stay close to home
25 and that, you know, stay in touch with their family and

1 -- but I also believe that if people do travel and do
2 have an experience in the world, I think Mark Twain is
3 the one who said that -- something to the effect that
4 "Travel is the main reason that -- is an antidote to
5 bigotry and closed-mindedness because it exposes you to
6 so many different things and different ways that people
7 can live."

8 And I think that that's the sort of thing
9 that's great, if our high school graduates go travel
10 and go see other things and go have jobs elsewhere and
11 then come back to Sierra County. They come back with
12 skills that are just not going to be available here,
13 and they could be entrepreneurs.

14 I do see that the best things that have been
15 happening, in my mind, lately in Truth or Consequences
16 are the entrepreneurs that are starting new businesses
17 and are bringing more and more people to bring tourism
18 dollars into the community, in the health industry,
19 and, also, exploring the Hot Springs. And those are
20 very sustainable kinds of industries. Not that mining
21 can't be sustainable.

22 So I am hoping that the -- those who are
23 looking at the permits will make sure that all the Is
24 are dotted and the Ts are crossed, but that's not the
25 only salvation to our economic issues.

1 The salvation lies within us, and the
2 solutions are here, and I just hope that you'll make
3 sure that if -- oh, and one last thing about the water,
4 and that is that I understand that much of the water
5 rights are being leased from the Jicarilla Apache
6 Reservation, which is in Northern New Mexico. It's not
7 in the lower Rio Grande Basin.

8 So that is a big issue that -- I think
9 probably the number one issue is the securing of water
10 rights within the Rio Grande Basin, because that's not
11 -- because, again, Jicarilla is not in the lower Rio
12 Grande Basin.

13 So those are things that we really have to
14 look at long-term. You know, we have a short-term
15 potential for some economic growth, but what happens
16 when the mine finishes and then they go away, what
17 happens to all those people that bought homes here.

18 And then what happens -- and what about the
19 water? That's the number one thing, what about the
20 water? It's going to be more precious than gold at
21 some point. And so -- and perhaps more precious than
22 copper.

23 So thank you very much for listening, and I
24 will probably write all this up into a more coherent
25 form and submit it by e-mail.

1 MS. ORTH: Thank you very much, Ms. Wanek.
2 James Morgan. No. Hans Townsend.

3 HANS TOWNSEND

4 after having been first duly sworn under oath,
5 testified as follows:

6 DIRECT TESTIMONY

7 MR. TOWNSEND: Good afternoon. My name is
8 Hans Townsend. I am with the Chamber of Commerce and
9 the Desert View Inn. I have got a few things I'd like
10 to say about Copper Flat Mine because I hear over and
11 over again people making what seems to be very personal
12 comments that don't really relate to the overall
13 picture.

14 They take their own personal side of it, and
15 they put that out there as being a general picture, and
16 it isn't. Anybody who lives and works here, especially
17 people who work here, have businesses here, know how
18 difficult it is to survive.

19 New Mexico is not a very business-friendly
20 environment, and some places are a little more
21 unfriendly than others. Our expenses here as far as
22 utilities and other things are very high, and they are
23 very high because of the environment we live in.

24 We live in a very warm environment, and this
25 year has been warmer than usual. And so you are paying

1 for AC at least 50 percent of the year, and those
2 expenses can be pretty high, and if something doesn't
3 help businesses to move forward, then this county is
4 not going to advance much.

5 So anyway, before there was a Sierra County
6 -- and this microphone and speaker make it very
7 difficult for anybody to understand what's being said
8 over here. So I'm going to raise my voice more. It's
9 all base, no treble, and very difficult to understand.
10 And I don't know why you don't have a little more
11 control over it, but, anyway, we live with what we have
12 got.

13 Before there was Sierra County, or before
14 there was a New Mexico, mining was the main trading
15 source of the area by the Spanish, the Native
16 Americans, and the inhabitants long before them.
17 Sierra County grew up on mining because it was blessed
18 with an abundance of underground resources, resources
19 that many others would be overjoyed to have.

20 And we still mine today. There are more
21 mines than you can imagine out there in the hills
22 around us. So this is not a new thing. So why do so
23 many people throw their hands up in horror and try and
24 tell us that it will be the apocalypse for life as
25 people know it if Copper Flat is allowed to proceed?

1 It really seems that some people think this
2 is the first time a mine has ever come to Sierra
3 County; that we have had mining here for many, many
4 hundreds of years, and it's still a beautiful place to
5 live. And the rules weren't the same before. They
6 weren't enforced the way they are now.

7 The restrictions have all been increased, the
8 rules and regulations have all been increased. So why
9 do you think it's going to be worse now than it was 100
10 years ago? It makes no sense. It's time that our
11 citizens realize the enormous value the Copper Flat
12 Mine will have on our community.

13 It's time that the advantages and the true
14 facts are seriously considered and appreciated by this
15 community, not exaggerated hogwash continuously
16 promulgated by those who don't want things to change,
17 most especially those who consider themselves to be
18 leaders.

19 These are the people who should be making
20 sure we move forward, not letting real opportunities to
21 improve our economy slip away. Many make the claim
22 that the mine would take away water we cannot afford.
23 But I don't hear the resistance to a new pecan orchard
24 being open.

25 Go count the water that a pecan orchard uses,

1 how much economic impact it has, and compare it with
2 the mine. This is the kind of thinking that goes down
3 one's dark street and doesn't open up to the real facts
4 out there.

5 The pecan orchard uses multiple more times
6 per acreage, and they don't have much impact to the
7 general citizens. It's time to come back to earth and
8 realize that all things change, they change for the
9 better or they change for the worse. Nothing stays the
10 same.

11 The mining industry has changed greatly
12 also. It's time that the old perceptions catch up with
13 those changes. Technology advancement over the recent
14 years affects every aspect of the industry, especially
15 the ability to operate a successful mine that is also
16 ecologically responsible in its operations.

17 The mine will need several hundred employees,
18 and although local labor will have the chance to be
19 trained for some of the jobs needed at the mine, most
20 of the labor will have to move here because we have
21 little to offer in the way of employment.

22 We have little to offer in the way of labor
23 because most of our young people move away. We don't
24 have work, very little, and very little-paying work.
25 So the young people move away. When they move away,

1 they don't come back. They don't bring their children
2 back until they are too old to work.

3 This is another reason why Sierra County is
4 considered by a lot of people to be a retirement
5 community. If the mine employs 200 workers that come
6 from elsewhere, and that's a low figure, it will mean
7 about 600 new residents.

8 We are not just going to bring in 200 people
9 to work. It includes spouses, children, and other
10 relatives. This is a ten percent population increase
11 for T or C and a six percent increase for the County.
12 These are not retirees. These are mostly young people
13 of working age, something we need.

14 That will be 400 who do not work at the mine,
15 and some will have skills that we really need in this
16 community. From these 400 family members, you can be
17 sure that a good percentage of these will look for
18 work, part-time or otherwise, and this will also help
19 bring other businesses to our area, because one of the
20 drawbacks we have had for bringing in new business has
21 been a shortage of labor, especially skilled labor.

22 Having a larger labor pool would draw more
23 business to our area. It will also improve the growth
24 opportunities for our already-established businesses.
25 It will also be a magnet for other businesses. When

1 you don't have anybody to work, you don't get
2 businesses.

3 These new residents will shop, buy gas, and
4 use services here in Sierra County. They will use our
5 doctors, our hospitals, and our clinics. They will go
6 to the cinema, the brewery, et cetera, and they will
7 need houses and apartments.

8 There are many here who have the common sense
9 to realize this is an enormous opportunity for our
10 community. It's time to hear from more of those people
11 about the positive support for this one-time,
12 one-of-a-kind, opportunity to Sierra County.

13 This would be a catalyst. Not just the mine
14 bringing in people. We need a catalyst to acknowledge
15 future business, to improve the labor we have, and to
16 make things work around here. We have a lot of people
17 who live in retirement homes; we have a lot of people
18 who get their pension every month, and they are very
19 happy to live as they are. Good for them.

20 This is a beautiful place to live. That's
21 one of the reasons I am here, but that doesn't do any
22 good for your children or your grandchildren, and the
23 only way to make the world work for them is to have
24 work.

25 So it's about time we did something that

1 brings in the work. We have a lot of negative,
2 repetitive naysayers who want to bend and shape that
3 fact out of all reality to fit their agenda. Sometimes
4 they don't even start with the facts at all.

5 Many of the things we hear about, like
6 Hillsboro complaining that the road through Hillsboro
7 is going to be under destruction when there is
8 traffic. That's not going to go through Hillsboro.
9 They are only interested in going from I-25 to the
10 mine.

11 They are willing to do the road -- to make
12 the road a place that is fit for that traffic. A lot
13 of these facts that are brought up, I shake my head and
14 wonder, "Did you read anything? Do you look at
15 anything? Have you read any of the facts on the mine?
16 Do you read how much money they have to put up?"

17 Over \$50 million. \$50 million to make sure
18 that that mine does not destroy the environment. And
19 as I said before, we have had mines here for so many
20 years, and it's still a beautiful place to live. What
21 makes you think this one mine is going to be
22 different?

23 What makes you think this is going to be
24 something that's going to destroy it? You don't make
25 sense. They don't think about the survival of the

1 community. They say these things mostly for selfish
2 personal reasons.

3 And you'll excuse me, I was in the hospital
4 for four days until yesterday, I am struggling a
5 little. They have no thought for the families that
6 struggle to survive here. There is a population here
7 that's lived here for hundreds of years.

8 There is a standing population here that's
9 very old. They don't want to go anywhere. But they
10 need work. And they were here before most of us. I
11 hear the claim that this is a retirement community. As
12 I said, that's an assumption that is based on the
13 present preponderance of old folk, not in the way the
14 community was built.

15 The City was built by workers from the dam,
16 workers who brought their families. There wouldn't be
17 T or C if it wasn't for those workers. We still have
18 families, we still build schools for the children.
19 Where do you think the money is coming from?

20 The reason for the abundance of all the
21 people is that we have a generation gap, a gap caused
22 by the migration of young adults leaving to find a
23 place where they can earn a living. They need to earn
24 a living.

25 We don't just lose those young adults, we

1 lose their children and their children's children, and
2 it leaves a community with a too-young-to-leave and the
3 older adults who don't want to leave, or don't need to
4 leave, retirees, but the percentage would be much more.

5 If we kept our young adults, we would have a
6 balanced community, and, of course, the children who
7 would then grow up and restart the cycle. We hear
8 continuously complaining about the state of our roads,
9 our water, our sewer systems, electric, and many other
10 basics that make life comfortable. That's partly
11 because Sierra County is so very poor. That's not
12 going to change unless we help it to change, and this
13 is about the best chance we are going to get.

14 Thank you.

15 MS. ORTH: Thank you, Mr. Townsend. We need
16 to take a break soon. Was there one more person? All
17 right. We will take one more comment, then we will
18 take a break.

19 So we have three more. We need to take a
20 break now, but we will just be ten minutes. We will
21 come back, we will take three more comments, and anyone
22 else who would like to offer comment.

23 Thank you.

24 (Recess taken from 3:08 to 3:23 p.m.)

25 MS. ORTH: As we come back from the break,

1 please reach for your devices. There has been a fair
2 amount of ringing during people's comments, and it's
3 attention-grabbing.

4 James Morgan. If you would come up and be
5 first.

6 JAMES MORGAN

7 after having been first duly sworn under oath,
8 testified as follows:

9 DIRECT TESTIMONY

10 MR. JAMES MORGAN: My name is James Morgan.
11 So you have an idea of who I am, I come from a small
12 business family in this community that's been here for
13 almost 70 years. I joined the United States Navy at
14 17, I went to college at Western New Mexico University,
15 and I returned home to become a police officer in this
16 community and did so until November of last year, when
17 I retired after 23 years service.

18 I remember when the mine was open before.
19 There were jobs, there was -- because there were
20 businesses that could afford to be open. There were
21 quite a few people around that were my age. That's
22 less and less nowadays.

23 I come up from a family of a total of five
24 kids. I am the only one in this community still. One
25 lives in Phoenix, one lives in Cruces, one is deceased,

1 and one lives in Upstate New York. All of them have
2 college degrees. They can't work here. There are no
3 jobs.

4 I have spent all my adult life in public
5 service or the service of others. Special interest
6 groups tend to irritate me. The last time I checked,
7 it's "We, the people," not the Turner foundation, not
8 some rancher, not some farmer, not some biodiversity
9 group, it's "We, the people."

10 This community is dying. Again, I have lived
11 here all my life. You don't see people my age around
12 here. I will be 48 in December. You very seldom see
13 anybody in this community my age that's had a 20-year
14 career because they don't exist unless you work for the
15 government, what little government there is left.

16 People talk about the water and how much the
17 mine is going to use. Anybody bother to add up how
18 much water half the Valley uses in farms every year and
19 what the runoff is on those farms? I bet they are
20 equal or greater to.

21 This place, if we don't have the jobs, it
22 doesn't matter whether you have a ranch here, you have
23 a farm here, or a personal interest here, because it
24 ain't going to exist because you're not going to have a
25 base to operate out of.

1 I hear and have heard over many years here,
2 "We want this, we want that, we want this." Well,
3 guess what, you ain't getting any of it if you don't
4 have a job to support it, to support the government
5 entity that provides it.

6 I have heard a lot of stuff about the
7 roadways here today. How many of you have handled a
8 fatality crash on one of our highways in this area? I
9 have. Multiple times. The roadways around here,
10 trucks or no trucks, is not even an argument, folks.

11 Right now, off the top of my head, the best
12 road I can tell you in this county right now is going
13 to be the one out 51. Why? Because they just improved
14 it for the Spaceport. There is a money reason that
15 road got improved, okay?

16 152, it's not going to get approved, hasn't
17 been approved in my lifetime. They chip-seal it, and
18 they add to it, but there has not been a roadbed laid
19 on that road in my lifetime. Not going to happen, yet
20 it's my understanding, based on what I have actually
21 read just today even, that there has been an agreement
22 with the New Mexico Department of Transportation to
23 upgrade 152 to handle the heavy trucks, yet I know I
24 have heard at least three or four people in here
25 complaining about the road conditions and what these

1 heavy trucks are going to do.

2 Kind of like pissing in the wind, if you ask
3 me. We didn't even read what we were given. Again, I
4 support We, the people, as a whole, not a
5 special-interest group. I have a very unique way of
6 looking at things in this community because I was born
7 and raised here.

8 Again, my family has been here for 70 years
9 in business, and I just finished serving 23 years as a
10 law enforcement officer here protecting each and every
11 person that I came in contact with. I think we all
12 need to take all of our special interests and take that
13 into consideration when we make the decision on whether
14 or not we approve this mine.

15 Because I think if we don't, we are going to
16 be starving. And that's your special interest. Unless
17 you are a special interest and it works to your
18 benefit. I have got nothing else to say.

19 Thank you.

20 MS. ORTH: Thank you, Mr. Morgan.

21 Richard Shetter.

22
23
24
25

1 RICHARD SHETTER

2 after having been first duly sworn under oath,
3 testified as follows:

4 DIRECT TESTIMONY.

5 MR. SHETTER: Hi. I am here to speak on my
6 behalf. Richard Shetter. We have a farm in Las
7 Palomas. I grew up here. My family has been here
8 since the early 1900s, and we was here before when the
9 mine was here. No problems, everything is good.

10 There used to be all kinds of businesses in
11 this town. You used to have all kinds of activities in
12 this town, and slowly, these institutes keep coming in
13 trying to kill our community more and more. We need
14 the mine for the growth. We have got to have jobs
15 here.

16 Even I work for the government, County
17 employee, okay? We get less than \$1 million a year to
18 maintain 700 miles of roads for you people, and
19 everybody complains about us not getting it done. We
20 have no revenue because nobody will let businesses come
21 in.

22 That's not our fault. That's the community's
23 fault. Let the businesses come in, and we can do the
24 jobs for you. But you guys do not realize, the
25 Sheriff's Department, their environment -- you know,

1 their hands are tied, too.

2 They need people, also, but you guys will not
3 let businesses come in and do this for you, but you
4 complain about all the drugs, everything that's going
5 on. You guys have got to let loose. This is our
6 community. You have to give it back to the community.

7 All these special-interest groups keep coming
8 in for everything, wanting to change it to their way,
9 all the locals is tired of them. We need to start
10 speaking up. All the locals need to speak up about
11 this. There is no reason for this anymore. Take the
12 community back, then we can get jobs coming in here.
13 And that's all I have got to say about it.

14 Thank you.

15 MS. ORTH: Thank you, Mr. Shetter.

16 Clay Spears.

17 CLAY SPEARS

18 after having been first duly sworn under oath,
19 testified as follows:

20 DIRECT TESTIMONY

21 MR. SPEARS: My name is Clay Spears. I live
22 here in Sierra County. I have lived here in Sierra
23 County since '01 permanently. I had an extremely
24 difficult time making a living here. I think this
25 would be a tremendous asset for us.

1 I have got some folks that I work with in the
2 back that also -- Liz Carson, Josh Chavez, Carl Chavez,
3 and myself. They are not much for public speaking. So
4 I am kind of speaking on their behalf, as well.

5 We are all in favor of the mine. The growth
6 of the mine will help Sierra County flourish with
7 homes, grocery stores, convenience stores, fuel
8 depots. I believe that it would be a tremendous asset
9 for our roads in the County.

10 We have all struggled here in Sierra County
11 trying to make a living, and it's extremely difficult
12 to make a living here. I have had to leave this county
13 many, many times working construction jobs and other
14 things to make a living because there is nothing here
15 in Sierra County to help us make a living.

16 This mine will help us all make a living.
17 There was a mention of Gold Mine Road. It is up to the
18 Sierra County Road Department and NMDOT to keep up all
19 roads to their standards. So there will be no roads
20 being demolished or tore up.

21 Sometimes they may get rough, but they get
22 plans, and they put them back together. And I have
23 been building roads for the State for years, as well.
24 So I am very well-knowledged in that. And in
25 conclusion, I think we need the growth for Sierra

1 County. This would be a good start and a good help to
2 help bring more stuff into Sierra County.

3 Thank you.

4 MS. ORTH: Thank you, Mr. Spears.

5 Andrew Harley.

6 ANDREW HARLEY

7 after having been first duly sworn under oath,
8 testified as follows:

9 DIRECT TESTIMONY

10 MR. HARLEY: My name is Andrew Harley. I am
11 a Ph.D. geochemist. I have been working in mining --
12 you can tell I am actually not from around here, if you
13 can't tell from the accent I have.

14 I make a very good living looking at
15 environmental reports, chemical reports, associated
16 with mining activities. My tech and I looked at the
17 reports on this project last week, and I can say that
18 those reports are excellent.

19 I cannot find anything wrong with them. The
20 findings are sound. The sampling done has been
21 excellent. The analysis has been excellent. The
22 interpretation would have been the interpretation that
23 I would have done.

24 So I just wanted to come here, give support
25 to what sometimes can be the difficult part of

1 reviewing these documents, which is the geochemical and
2 the waste and the reclamation piece.

3 Just from my analysis of that, I wouldn't
4 have done anything different, and that the data is
5 excellent, and the conclusions are -- we have come to
6 the -- I would have come to the same conclusions.

7 There is a minimal amount of waste, but the
8 waste appears to be encapsulated in silica material. I
9 don't think it's going to weather through any
10 geological time, and I think it's going to be quite
11 stable.

12 So really, I just wanted to come here and
13 lend that support and give that interpretation on that
14 side of the documentation. That's really all I have to
15 say.

16 MS. ORTH: Thank you very much, Mr. Harley.
17 That comes to the end of the list for folks who signed
18 in requesting an opportunity to make public comment.
19 Did we miss anyone? No. There will be another
20 opportunity at 6:00 p.m. tonight, and more
21 opportunities tomorrow. Thank you very much. If you
22 have written public comment, please bring it up to put
23 it next to the gourds, or after we are done here,
24 please e-mail it to MMD.

25 All right. Is there any reason not to return

1 to the presentation by the ranches? Okay.

2 Mr. De Saillan? I think we had Mr. Dobrott
3 at the table.

4 MR. De SAILLAN: Yes, indeed, we do.

5 MS. ORTH: Thank you, Mr. Dobrott, and I
6 believe I had asked Mr. Butzier if he had any questions
7 of you.

8 MR. BUTZIER: Thank you, Ms. Orth. No
9 questions.

10 MS. ORTH: All right. Is there anyone who
11 has questions of Mr. Dobrott based on his presentation
12 before lunch?

13 Mr. Paxon?

14 CROSS-EXAMINATION

15 BY MR. PAXON:

16 Q. Afternoon, Stephen.

17 A. Hello.

18 Q. We have known each other awhile, haven't we?

19 A. Yes, sir.

20 Q. When did Mr. Turner buy The Ladder?

21 A. 1992.

22 Q. '92. And you came to work immediately
23 thereafter as the manager, did you not?

24 A. Yes, sir.

25 Q. I was the District Ranger of the Black Range

1 U.S. Forest Service on the Gila National Forest. We
2 worked together on many projects, to include a unique
3 plan for prescribed burning from North Palomas Creek
4 down to Hermosa.

5 Do you recall those days?

6 A. Yes, sir, I do.

7 Q. You had a co-op agreement Mr. Turner helped
8 finance, and we even burned out onto The Ladder, where
9 the fire ran out of fuels, with your cooperation and
10 your participation; is that correct?

11 A. That's correct.

12 Q. How many bison were on the ranch at the peak
13 of production on The Ladder Ranch?

14 A. If my memory serves, we started out with
15 young animals, the calves. So we had probably almost
16 2,000 calves, but then once we got into a cow/calf
17 operation, the adult cows went down to about 700 cows.

18 Q. So you have diversified Ladder Ranch with
19 various activities, and you are really responsible for
20 that diversification, for being willing to take on
21 those projects and move in that direction, were you
22 not?

23 A. Well, I could say that I did my best to do
24 what the owner would want me to do in that regard.

25 Q. I know that he gave you overall direction,

1 but he gave you latitude to develop programs that are
2 unique?

3 A. Yes, sir.

4 Q. And I captured some of those. I am not sure
5 that I got all of them.

6 I understand ecotourism that you are now the
7 Ambassador for, but you have got hunting and fishing
8 programs, birding, youth programs, mountain-biking and
9 hiking.

10 Are there any other things -- oh, the
11 endangered and imperiled species development and
12 management.

13 Any others?

14 A. And those are all within separate divisions
15 within our company. The business parts, I think you
16 have described quite well. Ecotourism is the newest
17 that we are working on. The hunting has been there for
18 several years.

19 The bison. As you pointed out, the bison
20 business has been there since 1992, and as far as I can
21 recall, those are all the businesses that we are
22 involved in. Beyond that, we strive to include a lot
23 of these imperiled species programs through the Turner
24 Endangered Species Fund, who is another division within
25 Turner who handles those types of operations. So I

1 think as I pointed out in my testimony, it's quite
2 diversified, and it's all very important.

3 Q. I think the key to me is that diversity is
4 what you have worked for as both the manager, now as
5 the Ambassador for the ecotourism, and diversity is
6 very important to the Turner organization, and to you,
7 personally?

8 A. I would agree with that.

9 Q. You referenced The Ladder Ranch estate. You
10 included some figures that I just want to question.

11 How many acres of National Forest did you
12 include in that 700,000 acres that you referred to, do
13 you remember?

14 A. It was over 100,000 acres.

15 Q. Do you know how many acres are BLM?

16 A. Yes. 11,000.

17 Q. 11,000?

18 A. 11,000 and change.

19 Q. And there are State lands involved in there,
20 too?

21 A. Yes, sir. 20,000 acres.

22 Q. Does The Ladder Ranch or Turner Enterprises
23 or you have any management responsibilities on those
24 acres?

25 A. Not directly. Indirectly, we do participate

1 in using those lands through hunting permits, hunting
2 agreements with the State, and, therefore -- and we
3 also lease those lands. So that we participate in a
4 variety of different things, not only grazing, but --

5 Q. As we did on the prescribed fire plan for
6 Hermosa?

7 A. Basically, uh-huh.

8 Q. Basically, you are a permittee or lessee on
9 those lands?

10 A. That's correct.

11 Q. So do you have any decision-making authority
12 on those acres?

13 A. No, sir.

14 Q. I hope not to be nitpicking, but it seems an
15 error to claim those acres in the ranch estate when
16 they are federal lands or State lands and that the
17 ranch is either a permittee or a lessee. I would
18 caution that that's something that needs to be
19 footnoted and explained when you talk about a
20 700,000-acre estate.

21 A. Well, I appreciate that, but it was part of
22 the responsibility of the ranch in its entirety, and it
23 was my point to try to show the extent of the ranch,
24 even with the permits that are involved in it.

25 MR. PAXON: Okay. Thank you, Stephen.

1 MR. DOBROTT: Thank you.

2 MS. ORTH: Thank you, Mr. Paxon.

3 Any other questions of Mr. Dobrott based on
4 his presentation earlier today? I see no hands.

5 Thank you very much, Mr. Dobrott.

6 MR. DOBROTT: Thank you.

7 MS. ORTH: No follow-up?

8 MR. De SAILLAN: No.

9 MS. ORTH: Mr. De Saillan?

10 MR. De SAILLAN: Next up is Mr. Robert
11 Cunningham.

12 MS. ORTH: Thank you.

13 MR. CUNNINGHAM: Madam Hearing Officer, it
14 will probably take me five minutes to set up, if that
15 would be all right.

16 MS. ORTH: That's fine.

17 MR. CUNNINGHAM: Looks interesting, but I
18 don't think that's it.

19 Ma'am, can you hear me all right?

20 MS. ORTH: Yes. Thank you.

21 ROBERT CUNNINGHAM

22 after having been first duly sworn under oath,
23 was questioned and testified as follows:

24 DIRECT TESTIMONY

25 MR. CUNNINGHAM: Good afternoon, Ms. Hearing

1 Officer, and members of the general public. Good day.

2 My name is Bob Cunningham. With my sister,
3 Kathy McKinney, I am the owner and manager of the
4 Hillsboro Pitchfork Ranch owned by the family since
5 1906. Kathy and I are the fourth generation of the
6 family to have ownership and responsibility for our
7 family ranching legacy. Our family ranch will be
8 passed along to a fifth generation of the family in
9 future days.

10 I will present my testimony -- my statement,
11 rather, through oral testimony during the hearing to be
12 held today in Truth or Consequences, New Mexico. My
13 written statement to the appropriate authorities will
14 be provided by our attorney of record for this matter.

15 My slides for this presentation are Ranches
16 Exhibit 4. Qualifications. Let me begin by providing
17 you with a brief background of my qualifications and
18 experience. I have a bachelor's of science in general
19 studies from the University of New Mexico in
20 Albuquerque.

21 I might add, I began my education in a
22 two-room schoolhouse in Hillsboro, New Mexico, and
23 completed one -- grades one through sixth at that
24 community school. I attended Truth or Consequences
25 High School and graduated in 1969, when we had an

1 undefeated football team and won the State
2 championship.

3 This unique beginning to my education
4 fostered my interest and understanding of the history,
5 cultural diversity, economic basis, and the ecology of
6 the Hillsboro, New Mexico, area.

7 I worked for the United States Forest Service
8 for 34 years, retiring in September of 2009 as a
9 supervisory fire management technician. During my
10 employment with the U.S. Forest Service, I had the
11 following responsibilities in regard to forest
12 management: I participated in NEPA, National
13 Environmental Policy Act, planning efforts and fuel
14 management activities as a fire management specialist.

15 In regard to fire management, I worked as a
16 line firefighter, as a Helitack and Hotshot crew
17 member, and spent 22 years as a U.S. Forest Service
18 person. In regard to aviation management, I managed
19 complex aviation operations, to include over 80 large
20 wildland fire incidents in the United States.

21 I have also managed complex aviation
22 operations on all hazard incidents. The most
23 noteworthy are FEMA's response to the 9/11 Twin Towers
24 attack in New York City, Hurricane Opra, Hurricane
25 Katrina, and Hurricane Rita.

1 In regard to my Forest Service
2 responsibilities in wildlands fire and incident
3 management training, I managed an Interagency Wildland
4 Fire and Incident Management Command System, ICS,
5 training program in the Northwestern United States. I
6 was responsible for a staff that developed and
7 delivered wildlands fire and ICS training to an
8 interagency audience. A copy of my resume is Ranches
9 Exhibit 5. It is current and up-to-date.

10 My time and experience on the family ranch.
11 I grew up on the family ranch, learned to rope, ride,
12 brand, fix windmills and fences. In general, I learned
13 about cattle and care for and improvement of the land.

14 When working for the U.S. Forest Service, I
15 returned to the ranch often to assist my father in
16 running the ranch. Upon the death of my father in
17 2003, my sister, who is presently in the audience and
18 will make a presentation after mine, and I became the
19 fourth-generation owners and caretakers of the family
20 ranch and legacy.

21 Specific responsibilities I have regarding
22 the ranchland include business and financial
23 management; care and improvement of land, cattle, and
24 game management; hunt guiding, of which my sister and I
25 are the active guides; wildlife habitat improvement,

1 and facilities management.

2 So in regard to our business -- the business
3 our family conducts, I am personally involved. I
4 negotiate leases, maintain and upgrade facilities,
5 maintain financial documents, I pay the bills, and I
6 pay the taxes.

7 My sister and I have been personally involved
8 in the hunting and guiding aspect of the business for
9 over 30 years. We initially began that business
10 enterprise in an effort to assist our father. Again,
11 as I stated earlier, we are actively involved in the
12 cattle ranching aspect of the business. All in all, it
13 has been over 30 years on a family ranch.

14 However, without question, the one
15 fundamental principle my time and experience on the
16 ranch has taught me is this: The primary
17 responsibility of any ranching family is to understand,
18 monitor, and foster the ecology of the land and its
19 care.

20 A unique understanding of the native
21 vegetation, including grasses such as black grama, side
22 oats and vine mesquite, shrubs such as sumac and
23 mountain mahogany, and tree species such as the Rio
24 Grande cottonwood and the black walnut is key to the
25 successful stewardship of the land. As with any

1 business enterprise, economic success comes from the
2 care and improvement of the land.

3 Now, I will return to research as to the
4 proposed development of the New Mexico Copper
5 Corporation Copper Flat Mine. Having spent
6 considerable time on the family ranch during the late
7 1970s and early 1980s, I have observed firsthand the
8 initial development of the mine.

9 I saw with my own eyes the negative
10 environmental effect on the Grayback Canyon ecosystem,
11 which I will describe geographically in more detail in
12 a moment.

13 Again, I saw with my own eyes the negative
14 environmental effect on the Grayback Canyon ecosystem
15 brought about by the development and subsequent
16 abandonment of the Copper Flat Mine site by the failed
17 Quintana Mining Company.

18 When New Mexico Copper Corporation first
19 proposed to reopen the Copper Flat Mine approximately
20 nine years ago, maps and documents from various State
21 and federal agencies, as well as from THEMAC, New
22 Mexico Copper Corporation's parent company, became
23 available.

24 At that time, I began to research how the
25 proposed Copper Flat Mine might affect our family

1 ranch. As such, I have reviewed in detail the various
2 documents and maps associated with the proposed mine.
3 I have primarily reviewed documents and maps from the
4 Draft Environmental Impact Statement prepared by the
5 Bureau of Land Management dated November 2015.

6 In addition, I have reviewed administrative
7 filings by New Mexico Copper Corporation, the State of
8 New Mexico, the State of Texas, Elephant Butte
9 Irrigation District, and the Bureau of Land
10 Management.

11 I have reviewed the Draft EIS very
12 thoroughly. As a result, we submitted 50 pages of
13 comments to the BLM regarding the Draft EIS. As of
14 this date, the BLM has not issued a final EIS regarding
15 the Copper Flat Mine project.

16 Now, I'd like to turn to the geographic
17 relationship of the Hillsboro Pitchfork Ranch to the
18 proposed Copper Flat Mine. The ranch is to the west of
19 the mine here adjacent to the western -- west property
20 boundary of the proposed Copper Flat Mine.

21 The physical distance from the ranch property
22 boundary to the existing mine is approximately 1,680
23 feet. And as you'll see here in this slide, what I
24 have used is Google Earth to develop these slides and
25 the associated distances.

1 What I would like to point out to you, Madam
2 Hearing Officer, as well as to the public, are a couple
3 of features on this map. This white line indicates our
4 ranch fence line boundary of the private land adjacent
5 to BLM land and then the path of the land that is owned
6 by New Mexico Copper Corporation. And, of course, here
7 is the center of the existing pit lake, and here is the
8 closest boundary to our ranchlands.

9 Now, I will describe Grayback Canyon, a
10 principal pasture of the ranch, and where it is in
11 relationship to the Hillsboro Pitchfork Ranch and the
12 proposed Copper Flat Mine.

13 Grayback Canyon is located on the eastern
14 portion of the Hillsboro Pitchfork Ranch. The canyon
15 is bounded on the north by The Ladder Ranch and on the
16 east by the Copper Flat Mine.

17 The headwaters of Grayback Canyon are
18 primarily on lands owned by the Hillsboro Pitchfork
19 Ranch. And, in general, this is the drainage system of
20 the Grayback Canyon system upgradient of the proposed
21 Copper Flat Mine.

22 The drainage area of the Grayback Canyon
23 owned by the ranch is indicated by the aqua-colored
24 area on the slide. The drainage area of Grayback
25 Canyon leased by the ranch for grazing management

1 purposes from the BLM is indicated by the green-colored
2 area on the slide.

3 So, in general, all of these drainages flow
4 downgradient to the east towards the proposed Copper
5 Flat Mine, the existing pit lake, and the hydrological
6 sink that would be developed as the proposed mining
7 operation deepens the pit.

8 So although these areas look somewhat
9 irregular or geometric in shape, these polygons, I can
10 assure you, because I have walked and ridden and hunted
11 and built fence in this country for a considerable
12 period of my ranch, accurately represent these ranges.

13 And I will just point out briefly one area.
14 This area looks somewhat rectangular in shape, but,
15 again, I assure you that because of the topography of
16 the area, this drainage and this subsequent area flows
17 north into Tank Canyon.

18 Again, over here on the west, you can see
19 some very subtle topological features. Right here is
20 actually a break. There is a little, tiny saddle on
21 the ranch. This canyon flows north into Tank Canyon;
22 this canyon flows south into Warm Springs Canyon;
23 subsequently into Coal Springs Canyon, and then into
24 North Percha.

25 So to summarize this slide, the approximate

1 areas upgradient of the Copper Flat Mine that are
2 privately owned by the Hillsboro Pitchfork Ranch is
3 about 1254 acres, but of equal importance are those
4 public lands, indicated, again, by the green, of
5 approximately 493 areas that will also be affected by a
6 potential mine development.

7 I have personally spent much time in Grayback
8 Canyon. I have ridden horseback, walked on foot, and
9 ridden in vehicles in the Grayback Canyon area. I have
10 worked cattle, hunted and guided, improved wildlife
11 habitat, built fences, and installed solar-powered
12 water pumping systems, drinking troughs, and pipelines
13 in the Grayback Canyon area.

14 There are natural sources of water in
15 Grayback Canyon. These are intermittent streams,
16 springs, and seeps in the canyon system. They do not
17 flow all the time. Commonly, they flow after a
18 rainstorm or other significant precipitation event.

19 These intermittent water sources within the
20 Grayback Canyon help to support native vegetation for
21 wildlife and livestock forage and provide a
22 supplemental source of drinking water for wildlife and
23 livestock.

24 Now, I'd like to discuss the hydrological
25 relationship of the Hillsboro Pitchfork Ranch to the

1 proposed Copper Flat Mine. The Hillsboro Pitchfork
2 Ranch relies on groundwater sources along the eastern
3 property downward of the ranch to maintain its economic
4 viability and to maintain the ecosystem of a family
5 ranch and adjacent private and public lands.

6 The Pitchfork Ranch owns and operates two
7 groundwater wells near our eastern property boundary.
8 The first well is the Rodgers Well, operated by an old,
9 wooden windmill tower known as the "Rodgers Mill."

10 Based on historic records, we believe this well was
11 developed around 1900. The depth of the well is 150
12 feet below the ground surface. The well provides
13 drinking water to livestock and wildlife.

14 The second well is the Grayback Well. It was
15 originally developed in 1950 by our father. Its depth
16 was 200 feet below the ground surface. The Grayback
17 Well utilizes a solar-powered pumping system, numerous
18 water lines, storage tanks, and drinking troughs that
19 have been installed and supplied water to remote areas
20 of the Grayback drainage. This water source is used
21 for drinking water for livestock and wildlife. And
22 there is the slide of the Grayback Well solar pumping
23 system. And as some of you have seen before, there is
24 a black bear watering the water trough, or taking a
25 bath, one or the other.

1 Now, I will show the proximity of the Rodgers
2 and Grayback Wells to the existing proposed Copper Flat
3 Mine pit lake. The Rodgers Well is approximately 3,270
4 linear feet upgradient from the proposed Copper Flat
5 pit lake.

6 And so, again, I don't know how well the
7 audience can see this slide, but right here where the
8 cursor is, that's the location of the wooden windmill
9 tower that Rodgers built, and here is the approximate
10 center of the existing pit lake.

11 And, again, that linear footage is
12 approximately 3270 feet. And then we have the location
13 here of the Grayback Well. That's the solar pumping
14 system to the existing pit lake, and that distance is
15 approximately 8,074 linear feet upgradient from the
16 proposed pit lake.

17 The existing open pit lake is immediately to
18 the east/northeast of the Grayback Canyon on the
19 ranch. I believe it is important for New Mexico MMD
20 and you, Madam Hearing Officer, to understand where
21 Grayback Canyon is located at its termination from its
22 natural channel to the mine diversion channel and to
23 the existing pit lake.

24 And so, again, here is the pit lake, and this
25 is the termination of the original natural channel of

1 Grayback Canyon. And Grayback Canyon, I can tell you
2 from personal experience, used to flow here and
3 approximately down to here, but was diverted in the
4 late 1970s and the late 1980s in the previous mining
5 attempt.

6 This channel here is the diversion channel
7 that was created to divert the natural flow around the
8 proposed copper pit, and it flows down this area around
9 the mine site and then eventually regains the natural
10 channel. These are all drainages that flow into the
11 Grayback Canyon system.

12 Now, I will talk a little bit about the
13 consequences of mine development to private and public
14 lands in the Grayback Canyon area. The proposed open
15 pit at the Copper Flat Mine would be hydrologically
16 immediately downgradient of the Grayback Canyon area of
17 the Hillsboro Pitchfork Ranch and public lands
18 administered by the Bureau of Land Management.

19 This slide provides information on well
20 depths in relationship to the bottom of the proposed
21 pit mine for the previously described Rodgers and
22 Grayback Wells. I will describe the contents of this
23 slide in some detail.

24 The first thing I'd like to bring to the
25 attention of you, Madam Hearing Officer, as well as to

1 the public, is that the X and Y axis are not to scale.
2 So as an example, these distances are not accurate from
3 Grayback Well, as an example, to the bottom of the
4 proposed pit, are not accurately represented on this
5 slide.

6 So this depicts above-sea level elevation
7 change from the bottom of the ranch wells to the bottom
8 of the proposed pit. So the Grayback Well is 5518 main
9 sea-level elevation. And so what I have done is I have
10 deducted -- as we remember from an earlier slide, this
11 well is 200 feet deep. So I have deducted 200 feet and
12 actually come up with this figure of 5518.

13 And a similar calculation was done for the
14 Rodgers Well. 150 feet were deducted from that. And
15 then the bottom of the proposed pit lake is going to be
16 about 780 feet below the current elevation, and it kind
17 of depends upon which document you look at, but this is
18 a good approximation of how deep the proposed pit may
19 go.

20 So I just wanted to show, you know, the
21 geologic relationship between these wells and the
22 bottom of the pit and the subsequent pit lake. Given
23 the groundwater gradient and given the proximity of the
24 Pitchfork Ranch to the proposed open pit, groundwater
25 from beneath Grayback Canyon system will be drawn into

1 the hydraulic sink and associated pit lake from the
2 Copper Flat Mine development, lowering the water
3 table.

4 Our ranch wells may produce less water, or
5 they may go dry. The intermittent streams and seeps in
6 the Grayback Canyon will most certainly be affected.
7 Their flow will be reduced, or, again, they may go
8 dry.

9 What we do know is without a plentiful supply
10 of water, the ecosystem of the Grayback Canyon will be
11 harmed. Vegetation will change, less water will be
12 available for game and livestock for forage and
13 livestock purposes.

14 We will be forced to reduce our cattle
15 numbers. Wildlife, including game species, will become
16 less abundant. The resulting loss of income will
17 result in less money available to maintain and improve
18 the ranch and its lands.

19 This will result in less revenue to local,
20 State, and federal governments and in tax revenue, loss
21 to local businesses, and gross receipts, and a loss of
22 income to those employees and contractors we utilize
23 for ranch operations. My sister, Kathy, will provide
24 further information on economic impacts in her
25 presentation.

1 And now, I'd like to turn to the consequences
2 of noise pollution. Noise generated by the proposed
3 Copper Flat Mine can affect wildlife and livestock
4 operations on the ranch. And this would include,
5 again, both private and public lands.

6 Game animals are public property in New
7 Mexico. And I'd like to repeat that statement. Game
8 animals are public property in New Mexico. And as
9 such, public property should be considered in any
10 permitting decision related to the Copper Flat Mine.

11 In general, noise acts as a signal to
12 wildlife. An unusual noise is perceived by a mule deer
13 and other wildlife species to be a sign of danger,
14 signaling, for example, the approach of a predator.

15 Studies show that each time a mule deer hears
16 an unusual noise, it ceases feeding until it can
17 identify the noise as non-threatening. Mule deer,
18 being a small animal, must consistently high-quality
19 browse to maintain their health.

20 Repeated noises can greatly affect mule deer
21 feeding success. Given the Copper Flat Mine operation
22 will require hundreds, if not thousands, of explosive
23 detonations over a period of ten to 15 years, the
24 effects on mule deer and the elk populations in the
25 Grayback Canyon system will be profound.

1 These detonations can exceed peak pressure
2 levels of 140 decibels. Several hundred charges will
3 be detonated each year. To put this in perspective,
4 140 decibels is about the noise level of an active
5 aircraft carrier flight deck. It's pretty loud noise.

6 A 30-decibel level is considered normal for a
7 quiet rural area. Here is Table 3.47, taken from the
8 Draft EIS, which described the closest noise-sensing
9 areas to the proposed mine area. Note this table does
10 not identify a category for areas such as ranch private
11 lands, public lands, and wildlife habitat that may
12 exist adjacent to the proposed mine.

13 The table only identifies the Town of
14 Hillsboro, New Mexico, and residential areas. And so
15 I'd like for you to keep a general reference to this
16 slide as I move forward in this presentation because I
17 will be discussing it in a little more detail.

18 The important things that I would ask you to
19 look at are under the description category, only two
20 descriptions are provided in this Draft EIS prepared by
21 the Bureau of Land Management that are the Town of
22 Hillsboro and residential. And then approximate
23 distances from the project, and then the type, which,
24 in this case, is residential.

25 The land-use category, as identified in this

1 slide, is very quiet suburban, although I find little
2 or no suburban communities in the Hillsboro area, and
3 rural residences, but the most important feature of
4 this table I would like for the Madam Hearing Officer,
5 you, as well as the public, to look at is the day/night
6 sounds level, which is one of the metrics that was used
7 in the noise portion of the Draft EIS.

8 But, anyway, that noise level is calculated
9 or estimated to be 42. Okay. As I previously stated,
10 a quiet rural area is an identified noise level
11 descriptor, and a 30-dB level is considered normal for
12 a quiet rural area.

13 So the following slide, I had developed.
14 This is my personal slide where I combined information
15 from the existing slide and the Draft EIS with the
16 descriptor which was missing from the previous slide of
17 a quiet rural area.

18 And so I just, again, Madam Hearing Officer,
19 wanted to bring up the fact that in the existing slide,
20 you know, the noise level was 42. If we consider a
21 quiet rural area, and I have calculated the distance to
22 the ranch boundary in both feet and miles, I assume the
23 type to be rural, it's not residential, it's not
24 suburban, it's a rural area, and under the land-use
25 category, of course, we have very quiet suburban and

1 rural.

2 For the existing land-use category in the BLM
3 table, I have identified ranching and wildlife habitat
4 as an appropriate land-use category. So as we can see,
5 there is a significant difference in these figures.
6 And so I just wanted to point that out to the Hearing
7 Officer.

8 Now, I will review the table of Risk of Noise
9 Concern and Complaints from Blasting. And, again, this
10 was taken from the Draft EIS, and the references are
11 included in the slide and in the corresponding
12 exhibit.

13 Note the title of this, "Risk of Noise
14 Concern and Complaints from Blasting." So I believe
15 that we can assume that what this table is showing is
16 human concerns and complaints about the noise from
17 potential blasting activities.

18 And the risk-of-noise concern ranges from low
19 to high, and peak noise levels from less than 150 dB
20 down to 130 to 140 dB, and here are the critical
21 distances. Again, note it describes human noise
22 concerns, it does not address wildlife or livestock
23 reactions to loud or sustained noise.

24 It also uses a peak noise level as an
25 indicator of noise produced. So in the prior slide, we

1 talked about day/night levels in the slide -- or excuse
2 me, table. Now, you know, in the Draft EIS, they kind
3 of switched gears a little bit. Here, they are using a
4 different metric again, and now, we are talking about
5 the dB, which is considered the peak dB descriptor.

6 So now, we will move on to another slide.
7 Now, let's compare the information provided in the
8 previous slide, Slide J, to this slide. This slide
9 shows a map of operational noise contours at the
10 proposed mine.

11 The mine shows contours for day/night sound
12 level, and we talked about that descriptor briefly two
13 slides ago at the proposed mine. This map does not
14 include an analysis of peak noise levels. And, again,
15 you know, let's go back to the 140 dB of an explosive
16 charge, that doesn't really represent that.

17 This shows the average noise level. This map
18 does not include an analysis of peak noise level as
19 depicted in the previous slide, or how far the noise
20 might be transmitted. It emits the effect of mine
21 noise on livestock and wildlife on adjoining private
22 and public lands.

23 So, again, you know, if I am understanding
24 this table, you know, what this is talking about is the
25 average noise level for mining operations, and that may

1 include both blasting, heavy equipment operation,
2 milling operations, other associated noise-producing
3 activities, but it provides us with an average, you
4 know, over a 24-hour period rather than a peak.

5 And it also does not give us any information
6 on how, as an example, the peak noise generated by an
7 explosion, how that would be promulgated, how far it
8 would go, and what would the noise level be at, let's
9 say, 3,000 or 4,000 feet from the explosion.

10 To summarize, Slides H, J, and K describe how
11 blasting or other mine-generated noise affects people
12 and some types of infrastructure. Each table in the
13 Draft EIS uses different metrics to describe noise
14 generated by mining activities.

15 These tables do not provide an accurate
16 overview to the public or permitting agencies as to how
17 loud or how far these noises may travel. The tables
18 are silent in every case on effects to livestock and
19 public wildlife by mine-generated noise.

20 Analysis of how noise affects livestock and
21 wildlife is missing in the Draft EIS and the other
22 documents I have reviewed. I believe this is an
23 omission in the Draft EIS and should be addressed by
24 MMD prior to issuing any Copper Flat Mine permit.

25 I believe that over time, public wildlife, to

1 include mule deer, populations in the Grayback Canyon
2 area will be greatly reduced by development of the
3 mine. This decrease will be caused by a reduction in
4 surface and groundwater, as well as adverse effects of
5 noise.

6 I also believe that livestock in the area
7 will be adversely affected for the same reasons. Not
8 only will this affect the economic condition of the
9 Hillsboro Pitchfork Ranch, but, also, the value of
10 adjoining private and public lands and public wildlife
11 in the Grayback Canyon area.

12 In conclusion, I believe the development of
13 the Copper Flat Mine would have a profound negative
14 ecological and economic impact to the Hillsboro
15 Pitchfork Ranch.

16 I believe -- in addition, I believe these
17 impacts will extend to other private and public lands
18 in the Grayback Canyon system to the west of the
19 proposed mine. I respectfully request MMD not issue a
20 permit for the Copper Flat Mine.

21 Granting the permit would have serious
22 negative consequences to adjacent public and private
23 lands. If MMD, nevertheless, issues the permit, I
24 would respectfully request that MMD place conditions in
25 the permit to protect water sources, livestock,

1 wildlife, and the environment.

2 The conditions should restrict blasting at
3 the mine. They should limit light and dust. Any
4 permit issued should ensure existing ground and surface
5 water resources in the Grayback Canyon system will not
6 be impacted by the mine development.

7 Thank you, Madam Hearing Officer.

8 MS. ORTH: Thank you very much, Mr.
9 Cunningham.

10 Mr. Butzier, do you have questions?

11 MR. BUTZIER: Thank you, Ms. Orth. No
12 questions.

13 MS. ORTH: Is there anyone else who has a
14 question of Mr. Cunningham based on his presentation?
15 I see no hands. Oh, I see a hand.

16 Ma'am, if you would come up, give us your
17 name.

18 CROSS-EXAMINATION

19 BY MS. LILLA:

20 Q. I have a question in regard to one of your
21 slides. I want to say it was Slide 13, but I couldn't
22 read the slide number. If we could bring that up,
23 please.

24 A. Yes, ma'am. Could you describe this slide a
25 little bit? I am sure I can find it.

1 Q. It had a graph on it. The graph is labeled
2 "Above-elevation Change from Bottom of Ranch Wells to
3 Bottom of Proposed Pit."

4 A. Was that it?

5 Q. Yes. What is the Y exaggeration on this
6 graph?

7 A. You know, ma'am, I can't really say. I used
8 the graphing program in Excel. You know, I put in the
9 existing data, and that's what I wanted, to make it,
10 you know, real clear to all participants that the X and
11 Y axis are not to scale, but let me -- if I may, can I
12 ask you, are you -- are you asking what this distance
13 is here, or are you talking about the horizontal or
14 vertical access?

15 Q. Well, I am interested in knowing what it
16 would look like if the Y exaggeration was removed, how
17 flat that line would actually be.

18 A. Well, you know, one way maybe to do this is
19 to just kind of draw an imaginary straight line from
20 the Grayback Well to the bottom of the proposed pit,
21 and then this is, again, probably an exaggeration. So,
22 again, I am not 100 percent sure what you are asking.

23 Q. Well, isn't this graph deceptive, exaggerated
24 to show that the -- I mean, it makes the lines look
25 significantly steeper than what it would actually be if

1 it was a one-to-one?

2 A. Uh-huh.

3 Q. And so that concerns me, that this could be
4 misunderstood.

5 A. Okay. Yes, ma'am. Now I think I better
6 understand your question. I am slow on the uptake
7 here. Because of the fact that these distances are not
8 valid, I will -- I would not testify that these
9 gradients, as shown, are in any way, shape, or form
10 accurate.

11 What I would suggest is that when we look at
12 the elevation change from here to here, there is a
13 significant elevation change, and there will be a
14 significant gradient.

15 Q. But without knowing your X distance, you
16 don't know what the change in gradient is?

17 A. I do not.

18 Q. The other question I have has to do with the
19 testimony that physical access is a signal to wildlife
20 to signal danger to unusual noise, and you said, I
21 believe, that it affects mule deer and other animals
22 and potentially impacting their feeding.

23 Isn't it a fact that deer actually thrive in
24 urban areas?

25 I mean, I live like in the Silver City area,

1 and I know they are a nuisance in town. And that's --
2 you know, it's not a rural -- or it's not a really
3 quiet area.

4 A. Correct. I would agree that there is some
5 adaptive mechanism in many wildlife species, but based
6 on a study that I reviewed, it was in the area of Teton
7 National Park. I believe it was funded by the National
8 Park Service.

9 What they observed was that not necessarily
10 animals would quit feeding, but their feeding is
11 interrupted on a much more frequent schedule,
12 particularly, you know, when it's an unusual or
13 particularly loud, loud noise.

14 So that's not to say that they would not
15 feed, but that study indicated, over a period of time,
16 it could have a significant effect on their feeding
17 habits and the amount of food that they consumed.

18 MS. LILLA: Okay. That's all I have.

19 MR. CUNNINGHAM: All right.

20 MS. ORTH: Thank you, Ms. Lilla.

21 Other questions of Mr. Cunningham based on
22 his presentation?

23 Sir?

24

25

CROSS-EXAMINATION

1
2 BY MR. SPEARS:

3 Q. Bob, years ago, I worked in the School of
4 Mines. We leased out some crushing equipment out
5 there. So we spent a little time out there, and they
6 shot those large shells out there. The bullets they
7 use on the ships, I don't know, huge, very loud, and
8 there was a shooting range they had out there, and
9 there was a lot of green grass and stuff in it, and the
10 bell would go off, I didn't know what the bell was, and
11 then the deer would just kind of leave the area.

12 Then about ten minutes later, the bell would
13 go off, and the deer would come right back into it. So
14 I believe the animals do have an extreme way of
15 adapting to all circumstances, and those kinds of
16 bullets are extremely loud, way louder than --

17 MS. ORTH: So, Mr. Spears, I'm sorry. Rather
18 than commenting right now, pose a question.

19 MR. SPEARS: A question?

20 MS. ORTH: Yes, a question.

21 Q. (By Mr. Spears) The water flow system that
22 you are talking about here, I was kind of looking at
23 that a little bit.

24 I believe it was 8,000 feet to the well from
25 the lowest point in the pit?

1 A. Let me look back here briefly, if I may.

2 Q. Okay. It was 8,000 and some change. I can't
3 remember, 8300.

4 A. 8,074 feet, yeah.

5 Q. So in the graph, it's showing that you have
6 got about 1100 feet, approximately, I didn't do exact
7 numbers, but you have got 1100 feet. So this graph is
8 really 1100 vertical feet and 8,000 feet. That type of
9 graph is not showing any kind of the way it really is.

10 A. I would very much agree that the gradients as
11 shown by that thicker white line are not adequate, or
12 are not accurate, and that was not the intention of
13 this slide. I wasn't -- you know, when we look at the
14 title here, I am not proposing that these grade lines
15 are correct. I am just showing the distance from the
16 bottom of these wells to the existence of the
17 proposed --

18 MR. SPEARS: Okay. It just looks awful
19 skewed. All right. That's all I have. Thank you.

20 MS. ORTH: All right. Thank you. Is there
21 anyone else with a question of Mr. Cunningham? I don't
22 see any hands.

23 Mr. De Saillan, do you have any follow-up?

24 MR. De SAILLAN: Nothing, Madam Hearing
25 Officer.

1 MS. ORTH: All right. Thank you very much,
2 Mr. Cunningham. Let's take a ten-minute break.

3 (Recess taken from 4:39 to 4:51 p.m.)

4 MS. ORTH: Let's come back from the break,
5 please, and if you would, shut the doors. We are back
6 after a break.

7 Mr. De Saillan, would you introduce your next
8 presenter?

9 MR. De SAILLAN: Thank you, Madam Hearing
10 Officer. The next presenter is Ms. Kathy McKinney.

11 KATHY MCKINNEY

12 after having been first duly sworn under oath,
13 testified as follows:

14 DIRECT TESTIMONY

15 MS. MCKINNEY: Good afternoon, Hearing
16 Officer, and ladies and gentlemen of the public. I
17 appreciate very much the fact that you all came out
18 today and the fact that you are staying over.

19 MS. ORTH: It's hard to hear you.

20 MS. MCKINNEY: I'd like to introduce myself.
21 My name is Kathy McKinney, and along with my brother,
22 Bob Cunningham, we are the co-owner/operators of
23 Hillsboro Pitchfork Ranch.

24 Being a fourth-generation rancher on the
25 Pitchfork Ranch, our education started at a very young

1 age. From the very beginning, we were raised with a
2 strong work ethic and to be good stewards of the land,
3 and in doing so, providing care for the ecosystem of
4 that land.

5 The ranch has never been a job. It's been a
6 way of life. As I remember, my first introduction to
7 ranching was about the age of four, and two things are
8 vivid. Back during that time, we rode horseback
9 everywhere, and I can remember riding the old, blue
10 mare and following my dad for hours as we rode, and
11 when I would get sleepy, I would wrap my hands around
12 the saddle horn and go sound to sleep, and she would
13 just walk behind Dad. She was my baby-sitter.

14 Horses were the only method of
15 transportation, and I figured out at a very young age
16 that I would rather ride than walk, and I spent many
17 hours in the saddle checking waters, building fence,
18 and moving cattle. During those times, I was always
19 entertained by the behavior of certain horses, but,
20 also, cattle and the wildlife, as well.

21 This fascination with the animals was
22 enhanced by the fact that Dad started letting me go
23 hunting with him when I was old enough to carry his
24 binoculars. Beginning to carry the binoculars at four
25 years old was my apprenticeship to the day when I would

1 be allowed to carry a gun and guide hunts.

2 I have spent a lifetime working to improve
3 the land that is our family heritage. I built fence,
4 worked on windmills, helped install solar systems, and
5 continue to complete brush control.

6 I have been involved with the State of New
7 Mexico in respect to the Conservations Stewardship
8 Program for the last nine years, personally hunted deer
9 and quail on the ranch for 20 to 25 years, conducted
10 wildlife surveys, guided mule deer and elk hunts.

11 We are currently one of the only ranches in
12 Southern New Mexico to acquire a Level 3 incentive hunt
13 due to our land stewardship and dedication to enhancing
14 the quality and quantity of the mule deer population.

15 Having begun my formal education in the same
16 two-room schoolhouse that Bob did, I am a graduate of
17 Texas Tech University, with a degree in business
18 administration. I am a licensed real estate broker in
19 the state of Texas and a certified general real estate
20 appraiser as certified by the Texas Appraiser Licensing
21 and Certification Board, with over 37 years of
22 experience in real estate and real estate appraisal
23 experience.

24 Over the last 32 years, I have completed much
25 work on highway and pipeline right-of-way condemnation

1 projects with comprehensive analysis valuing the
2 economic effects of landfills on surrounding property
3 values. I led three years of research on the effects
4 of an explosion at an LP storage facility in Western
5 Texas and the surrounding lands values.

6 Projects completed by myself include
7 evaluating the effects of a gas pipeline explosion in
8 Grand Prairie, Texas, and a refinery explosion in Texas
9 City, including numerous projects on contamination of
10 properties by adjacent property owners. My clients
11 have enjoyed recent success in the State Court of
12 Appeals in findings of property contamination in
13 respect to disclosure of contaminants into perpetuity.

14 I have been qualified as an expert witness on
15 real estate appraisal in county and State courts in
16 Texas. I spent a lifetime directly involved in the
17 day-to-day activities of ranching and wildlife and am
18 quite aware of the ecological system of the Pitchfork
19 Ranch. I have also spent 32 years researching economic
20 impact to land and land values. My resume is current
21 and up-to-date and filed as Ranches Exhibit Number 6.

22 The purpose of my presentation here today is
23 to preserve our family legacy as we groom and move
24 forward to our fifth generation of heirs. I will be
25 speaking not as a co-owner/operator of the Pitchfork

1 Ranch, but, also, as a member of the public in general
2 as to the potential impact of the permitting of the
3 proposed Copper Flat Mine.

4 I will be discussing the economic impact of
5 hunting and fishing in the state of New Mexico, as well
6 as in Sierra County. Having expanded on the financial
7 significance to both in the State and the County, I
8 will discuss the potential impact to private and public
9 lands based upon my experience specific to the
10 Pitchfork Ranch, the Grayback Drainage, and the
11 adjacent public lands currently being leased by the
12 Pitchfork Ranch.

13 In 2013, the New Mexico Department of Game
14 and Fish commissioned a study of fishing, hunting, and
15 trapping to estimate statewide and County-level
16 activity and to determine the contribution that
17 fishing, hunting, and trapping activities make to the
18 State's economy and to present results for selected
19 species to estimate their individual share of the total
20 economic contribution to hunting.

21 Understanding the study was completed in
22 2014, I have made no adjustments for increases. The
23 goal of this study was to communicate the magnitude of
24 spending by sportsmen and their associated
25 contributions to the State's economy and to inform

1 discussions among legislators, Agency personnel, and
2 other stakeholders to assist with strategic
3 decision-making associated with wildlife resources.

4 The economic contributions associated with
5 recreational fishing, hunting, and trapping can be a
6 powerful economic engine for the communities across New
7 Mexico, generating additional spending, supporting and
8 creating jobs, and building future investment in open
9 spaces and wildlife area.

10 According to the study, the State was host to
11 more than 160,000 anglers, with these anglers spending
12 \$268 million in fishing and related activities, while
13 in 2013, there were over 86,000 hunters in the state of
14 New Mexico, spending \$342 million in hunting-related
15 activities. This comes to a total of 610,000 -- excuse
16 me. This comes to a total of \$610,085,000.

17 In respect to jobs, jobs are described as the
18 number of full-time and part-time jobs created or
19 supported as a result of the economic activity. There
20 was a total of 7,891 jobs created.

21 MR. De SAILLAN: Excuse me, Madam Hearing
22 Officer, can I interrupt a second? There seems to be a
23 problem with the slides. Okay.

24 MS. MCKINNEY: Total labor income can be
25 regarded as total payroll, including salaries, wages,

1 and benefits paid to employees and business
2 proprietors. Labor income was \$110,408,000. The State
3 GDP, which represents the total value-added
4 contribution of the economic output made by industries
5 being impacted by State participation was
6 \$451,417,000. The tax revenue, being State- and
7 federal-generated, was a combined sales tax revenue of
8 \$105,881,000.

9 The goal of this analysis is to help provide
10 insight about jobs, tax revenue, and other economic
11 contributions that result from recreational fishing and
12 hunting in New Mexico.

13 It is to be noted at this point that
14 according to Alexandra Sandoval, Director of the New
15 Mexico Game and Fish Department, there are currently
16 87,000 hunters and 160,000 anglers spending
17 approximately \$613 million.

18 Their fees pay for ongoing projects such as
19 the Desert Bighorn Restoration Program. They have paid
20 for restoration of 132 miles of streams, ten lakes, and
21 one reservoir for our State fish, the Rio Grande
22 Cutthroat Trout.

23 The New Mexico Game and Fish Department, as a
24 part of the study, also commissioned a study of fishing
25 and hunting on a County level to determine the

1 contribution made to each of the 33 counties in the
2 state.

3 This also quantifies the total economic
4 contribution to each of the counties and presents
5 results for selected species to estimate their
6 individual share of the economic contribution derived
7 by hunting.

8 It should be noted at this point that hunters
9 in New Mexico were able to pursue a variety of
10 different species of game, big and small. 92 percent
11 of all hunters hunted big game, with deer and elk being
12 the most common of the species.

13 And as a result, I have reflected a breakdown
14 in the spending for the large game animals with the
15 addition of categories for small game, and this is
16 referenced in specific to Sierra County hunting. The
17 activity between deer and elk, being the two largest
18 categories, deer with 1,144,000, and elk with
19 1,363,000. They have -- just the deer and elk have a
20 combined total of \$2,507,000 annually.

21 Combined with a balance of large game
22 animals, being bear, cougar, javelina, turkey, and
23 other species that I combined, it comes up with a total
24 spending of \$3,451,000. That, combined with small
25 game, bring the total hunting to \$4,357,000 in Sierra

1 County alone.

2 One thing that they don't break down by -- on
3 a number basis is the number of jobs that were created,
4 obviously, by each one of the species. The total jobs
5 estimated was 56. Labor, with the same criteria as
6 previously, was paid \$1,192,000.

7 The state GDP income is going to be
8 \$2,867,000 generated. The tax revenue, federal, State,
9 and local, was a combined total of \$689,000, basically,
10 which is a pretty substantial contribution that hunting
11 is making in Sierra County and is a critical part of
12 the County, I'd like to admit.

13 Having lightly discussed the economic
14 benefits of not only the State of New Mexico, but
15 Sierra County, as well, I would now like to shed light
16 as to the activities and potential impacts the
17 permitting of the Copper Flat Mine could inflict on the
18 Pitchfork Ranch, as well as the hunting opportunities
19 in Area 21B.

20 And I apologize that this slide is probably
21 not quite as distinct as I would like to have it, but I
22 was pretty excited about these. Area 21B is a specific
23 hunting area designated by the State -- by the New
24 Mexico State Game and Fish in which the Pitchfork Ranch
25 and the adjacent BLM lands, as well as other areas,

1 comprise 21B on which public hunts are located.

2 And I will describe in greater detail the
3 personal and economic activities of our ranch. Cattle
4 ranching is a primary activity on our ranch. The ranch
5 is a cow-and-calf operation, running about 210 head of
6 cows.

7 We utilize a pasture rotation system and
8 supply supplemental feeding as necessary to maintain
9 good cattle condition. We manage and improve grazing
10 lands to ensure good range conditions for today and
11 improve ranching conditions for future years.

12 Previously in my brother's statement, he
13 described the geographic location of Grayback Canyon on
14 the Pitchfork Ranch in reference to the proposed Copper
15 Flat Mine.

16 Regarding the Grayback Canyon in terms of its
17 water resources, its plants, animal life, and the
18 ecosystem, I make the following observations: The
19 intermittent springs, seeps and streams in Grayback
20 Canyon support a varied natural ecosystem, habitat for
21 wildlife, and forage area for livestock.

22 The canyon has particularly good grasses, to
23 include side oats and black grama. Livestock feed on
24 these grasses. And it also has an abundance of forbes
25 and gamble oak, with thick concentrations of mountain

1 mahogany.

2 Wildlife feed on these forbes, with mountain
3 mahogany being the preferred forbe for mule deer. Both
4 livestock and wildlife utilize the area year-round due
5 to good forage, thermal cover, and access to plentiful
6 water dispersed from the Grayback Canyon and the
7 Rodgers Well and the available water sources. Because
8 the deep canyons make the area very excluded, and
9 because the canyon has good feed and good water, the
10 area has become a premium for mule deer habitat.

11 And what I would like to explain to you in
12 this particular slide, which is Exhibit 7-E, what you
13 will see right here by this little point is actually a
14 drain drinker, and water to this drinker is provided by
15 the Grayback Well.

16 It's a piped system, but I think what you can
17 see -- and this is kind of over in the northern
18 northeast corner of the ranch -- but what you can see
19 indicated here in all of these fine lines, and I am not
20 sure that you all can pick them up, all of these are
21 game trails that lead to this water across these flats,
22 here, here, here.

23 This is like a spider web, and we honestly
24 and truly knew we had a lot of game running in there,
25 but we didn't have any idea that this was what the

1 situation was, but what this does indicate, the cattle
2 have a boundary. They are bounded by fences.

3 Game doesn't have a boundary. It comes and
4 goes and roams wherever it wants to go. That's the one
5 thing that we cannot capture, and it does belong to the
6 State, and that's -- the reason it does belong to the
7 State is because it does have the right to move.

8 Representatives of the New Mexico Department
9 of Game and Fish refer to this section of the ranch as
10 the "nursery" as a substantial number of mule deer
11 grow, live, and fawn here. I have personally seen
12 herds in excess and size of 20 head on any given day in
13 the area.

14 Many of the doe in this area I personally
15 believe are replenishing a lot of the deer inventory on
16 the BLM lands. We have got a very high concentration
17 of doe around. A lot of times, we have twins. In
18 fact, I have watched these twins a lot.

19 Over the previous nine years, we have
20 partnered with the National Resource Conservation
21 Service to implement improvements to the ranchlands for
22 livestock and wildlife and their habitat. The
23 practices include, but are not limited to, such
24 programs as comprehensive monitoring of key grazing
25 areas, implementation of safety features for wildlife,

1 to include riparian areas, as well as solar facilities
2 such as those utilized in the Grayback system.

3 Hunting is another primary activity of the
4 ranch. Hunting species include mule deer, elk, dove,
5 and two varieties of quail, being Gambel's and Mearns.
6 I have personally guided hunting trips in the Grayback
7 Canyon for the previous 29 years, providing big-game
8 hunting experiences for over 100 individuals, and Bob
9 and I are very greatly honored to say that beginning
10 this year, we will host our first Wounded Warrior Hunt,
11 where we donate a big-game hunt to a service member who
12 has suffered injuries while defending our country.

13 In our plight to improve the mule deer
14 quantity and quality to achieve our required financial
15 goals, we have worked with the New Mexico Game and Fish
16 Department over the previous ten years.

17 In doing so, we have finally been able to
18 achieve a Level 3 incentive hunting opportunity through
19 the State of New Mexico Game and Fish Department, being
20 one of the only ranches in Southern New Mexico to
21 achieve this level.

22 The purpose of the program is in recognition
23 of the value to the State of New Mexico wildlife
24 population and contributing to the improvement of mule
25 deer habitat, the landowner agrees to improve -- to the

1 improvement of deer habitat.

2 Habitat management includes maintaining
3 wildlife, putting up fences around riparian areas,
4 maintaining and continuing the treatment of mesquite,
5 to which, to date, 937 acres have been hand-treated,
6 and that was as of May of 2018.

7 The property owner is to maintain and
8 continuing hand-trimming of mountain mahogany to which
9 128 acres of mountain mahogany have been hand-trimmed
10 with a chain saw, with the majority of the habitat
11 management taking place in the Grayback and Rodgers
12 area of Grayback drainage.

13 The fourth criteria is to continue the
14 existing hunting strategy that we have developed and to
15 provide a relatively conservative harvest level of
16 legal bucks.

17 Mule deer population have experienced a
18 steady decline over most of the species traditional
19 range, reflecting declines in New Mexico populations
20 have been halved in less than 30 years.

21 The report goes on to describe that mule deer
22 habitat is subject to an extensive and expanding range
23 of external pressures, resulting in the loss of
24 approximately 2500 acres of suitable mule deer habitat
25 every day.

1 The core component of mule deer habitat are
2 water, food, and cover. In general, mule deer habitat
3 requirements include forage, vegetation, and land forms
4 that provide hiding, thermal cover, and accesses to
5 sources of water.

6 In the Southwest, most mule deer herd are
7 non-migratory, though they may move in response to
8 changes in vegetation and moisture conditions. Field
9 studies have shown that mule deer home range patterns
10 are closely associated with water availability between
11 a mile to a mile-and-a-half, with the mule deer
12 requiring approximately a gallon-and-a-half of water
13 per day for an average-sized animal.

14 Human activity has caused the lowering of the
15 water table in many areas, which has resulted in the
16 disappearance of springs, cienegas, artesian wells, and
17 even entire rivers.

18 Although mule deer may not be completely
19 dependent on free water every day, they do shift their
20 area of activity within their home range or even move
21 out of their home range when sources dry up.

22 And this comes from the Wildlife Habitat
23 Management Institute, and it's Habitat Guidelines for
24 Mule Deer: Southwest Deserts, Ecoregion. In a study
25 conducted at Fort Stanton in Southern New Mexico, it

1 appears through the study that the deer densities
2 fluctuated in conjunction with the availability of
3 water.

4 According to discussions with Orrin, and I
5 apologize, I still can't pronounce his last name, the
6 deer and pronghorn biologist for the New Mexico
7 Department of Game and Fish, on October the 18th, 2018,
8 and I quote, "Without a viable source of water, mule
9 deer will move out of the area."

10 The Grayback Canyon is upstream from the
11 existing mine pit, is a primary mule deer hunting area
12 for both the ranch and the public who hunt on the
13 adjacent Bureau of Land Management areas.

14 I'd like to take an instant and explain this
15 slide to you. This is a photograph that I took last
16 fall where, on a ridge up above the proposed Copper
17 Flat Mine, this will be the mine site right here, our
18 boundary fence lines come right across here and comes
19 around the front side of the hill, but this picture, to
20 me, depicts several things: It will show you where the
21 Grayback drainage area is, but, also, it shows you the
22 proximity of our ranch to the mine and the fact that so
23 many of our hills overlook the mine site.

24 This is critical from both the sound
25 perspective as well as the lighting. We all know, in

1 the thin air, sound is going to travel further. If
2 nothing else, the views that it does to us personally
3 is one thing, but it's for the hunting experience of
4 our hunters, as well, that we are concerned.

5 What you'll see also in this photograph is
6 you have got the Caballo Mountain Range, and down in
7 this area right here is Caballo Lake, although
8 downgradient of it.

9 There is a potential for substantial drawdown
10 in permanent water sources in the Grayback Canyon and
11 for drinking purposes. If so, we will be forced to
12 reduce our cattle numbers; wildlife, including game
13 species, will be less abundant.

14 The loss of water and the loss of habitat
15 will result in a decrease in the number of game
16 animals, resulting in a loss of income to the Pitchfork
17 Ranch, but it will also decrease the hunting
18 opportunities for the general hunting public and the
19 game area of 21B on public lands and State land.

20 Decreases in the number of cattle will result
21 in the loss of income to the Pitchfork Ranch, making
22 less money available to maintain and improve the ranch
23 and its land area. This will result in less revenue to
24 local, State, and federal government, and tax revenue,
25 losses to local businesses in gross revenue receipts,

1 and the loss of income to those employees and
2 contractors that we utilize in our ranch operation.

3 So I'm going to read this, anyway. I would
4 like to ask that you consider the short-term income
5 stream to the proposed Copper Flat Mine as to the
6 substantial economic loss that will be suffered into
7 perpetuity not only by Sierra County, but by the State
8 of New Mexico, as well.

9 Thank you.

10 MS. ORTH: Thank you, Ms. McKinney.

11 Mr. Butzier, do you have any questions?

12 MR. BUTZIER: No questions.

13 MS. ORTH: Does anyone have any questions of
14 Ms. McKinney based on her presentation? I see no
15 hands.

16 Thank you very much, Ms. McKinney.

17 MS. MCKINNEY: Thank you.

18 MS. ORTH: So we are at 5:35. Mr. De
19 Saillan, would you estimate the length of the
20 presentations of your other two presenters?

21 MR. De SAILLAN: Yes, Madam Hearing Officer.
22 Mr. Kuipers will probably be over an hour and will be
23 followed by Dr. Myers, who will probably be close to an
24 hour, but not quite as long.

25 MS. ORTH: Okay. We are here until 7:00

1 tonight, regardless. Let me ask who here -- I know
2 you, Ms. Boone.

3 Is there anyone else who planned to make
4 public comment during the evening session? I see a
5 hand there.

6 MS. BOONE: May I hold off until tomorrow?

7 MS. ORTH: Absolutely. You can hold off
8 until tomorrow.

9 Sir, would you like to go tonight, or would
10 you like to hold off until tomorrow?

11 MR. McENANEY: Tonight is my only option.

12 MS. ORTH: Okay. Is there anyone else who
13 would be commenting tonight?

14 So let me ask, if I took this gentleman now,
15 does it make sense -- because I understand you don't
16 want to break Mr. Kuipers off into two or three parts.
17 If I take this gentleman now, would it make sense to
18 take all of Mr. Kuipers? I think we would still be
19 done before 7:00.

20 MR. De SAILLAN: If I could consult with him
21 just a minute.

22 MS. ORTH: Absolutely.

23 MR. De SAILLAN: Thank you. Madam Hearing
24 Officer, I think our preference would be to start Mr.
25 Kuipers tomorrow, because I am not sure exactly how

1 long it's going to last, and I think we would rather
2 start off fresh. We are going to have to go into
3 tomorrow, anyway.

4 MS. ORTH: Uh-huh.

5 MR. De SAILLAN: So I guess that's our
6 thinking, if it's all right with everyone else.

7 MS. ORTH: All right. It's fine with me. I
8 guess I don't see a danger of us going into Thursday at
9 this point.

10 MR. De SAILLAN: I think that's correct.

11 MS. ORTH: Mr. Butzier?

12 MR. BUTZIER: Ms. Orth, would it be possible
13 to do Dr. Myers if he is shorter in duration than Mr.
14 Kuipers, knock one out of the way, and maybe we can be
15 done partway through tomorrow?

16 MS. ORTH: How do you feel, Mr. De Saillan?

17 MR. De SAILLAN: I think we would -- well,
18 let me consult, please.

19 MS. ORTH: Uh-huh.

20 MR. De SAILLAN: Thank you. Madam Hearing
21 Officer, Dr. Myers has a telephone call that he has to
22 be on this evening. So sorry, I'm afraid that won't
23 work very well for our schedule.

24 MS. ORTH: All right. That's fine. I think
25 we are going to be -- just to be clear, the court

1 reporter and I have to stay until 7:00 tomorrow night,
2 regardless. So we want the rest of you to do whatever
3 your schedule calls for you to do, but we will be here
4 all day tomorrow.

5 So let me take this gentleman here. Come up
6 and give us your name.

7 JOE McENANEY

8 after having been first duly sworn under oath,
9 and testified as follows:

10 DIRECT TESTIMONY

11 MR. McENANEY: I would just like to make some
12 brief comments about mining, in general, and my
13 position regarding it. And I know the benefits of
14 mining projects having been on the ground at a startup
15 in a rural community in Nevada.

16 It's a project that started in 1975 and is
17 still going to this day, 40 years later. I know mining
18 provides opportunities that are not available in other
19 industries and certainly are scarce here in Sierra
20 County.

21 I started in the industry as an unskilled
22 laborer on a drilling rig in 1979. I learned the
23 industry alongside my more experienced co-workers and
24 benefitted from the generosity of many mentors over the
25 years.

1 I have worked in gold, copper, silver, coal,
2 and industrial minerals. I have held positions in
3 exploration operation, sales, and senior management. I
4 have traveled to over 25 countries, doing business
5 across languages and cultures, making lasting
6 friendships all over the world while working in the
7 industry.

8 My story is not unique. Mining is very much
9 a hands-on, on-the-job, training industry where anyone
10 who works hard, wants to advance, and shows initiative
11 can pretty much become what they want. I think I am
12 testimony to that.

13 I know mines invigorate communities. Jobs
14 become plentiful, skilled, well-paid jobs, and, also,
15 unskilled jobs, but the unskilled workers can learn
16 higher skills, like I did, and learn an industry which
17 provides critical raw materials to basic and high-tech
18 industries throughout international markets.

19 Remember, everything we have is either farmed
20 or mined. There is nothing that's not. Mining is an
21 essential industry, and the U.S. mining sector is
22 perhaps the most heavily regulated or monitored
23 industry in the world, as evidenced by the process that
24 New Mexico Copper Corporation is obliged to undergo.

25 Skilled workers bring more skilled trades.

1 As communities grow behind mines, plumbers
2 electricians, roofers, remodelers follow. Choices
3 ensue, and the benefits of competition accrue to the
4 community.

5 Mines bring direct follow-up jobs and
6 services that offer benefits to the entire community.
7 Young people can stick around with the prospect of
8 good-paying jobs. Marginalized people will have real
9 options and can embark upon a path of a productive
10 future.

11 Families can stay together, communities are
12 uplifted. The future, all of a sudden, becomes
13 promising. Funds become available, and community
14 projects, long on the drawing boards, can be realized.
15 And it's jobs that funds these projects or benefits,
16 and mines bring jobs this county needs.

17 So I say, just please be fair in the
18 evaluation of New Mexico Copper. Don't obstruct or
19 deny the opportunity for better lives to other people.
20 The longer this project is unnecessarily and cynically
21 delayed, the longer the County stays in stagnation.

22 Thank you very much.

23 MS. ORTH: Thank you, Mr. McEnaney.

24 Is there anyone else at all who would like to
25 offer public comment at this time? If not, we will

1 take a break until someone appears to offer comment,
2 and then we will be accepting comment again. And in
3 any event, we will be back at 9:00 tomorrow morning.

4 All right. Thank you all very much.

5 (Recess taken from 5:43 to 7:00 p.m.)

6 MS. ORTH: All right. It is now 7:00. We
7 have waited for additional commenters to appear, but
8 none have, except one gentleman to submit a written
9 comment.

10 We are adjourning now, and we will reconvene
11 at 9:00 a.m. tomorrow morning.

12 Thank you.

13 (Proceedings adjourned at 7:01 p.m.)

14 (NMCC Exhibits A, B and C admitted.)

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1 STATE OF NEW MEXICO)

2)

3 COUNTY OF BERNALILLO)

4 I, DENISE KOPAN, the undersigned Court
5 Reporter, HEREBY CERTIFY that the foregoing hearing was
6 recorded by me by machine shorthand; that I later
7 caused my notes to be transcribed under my personal
8 supervision; and that the foregoing is a true and
9 accurate record, to the best of my ability, of said
10 proceedings.

11 I FURTHER CERTIFY that I am not a relative or
12 employee of any of the parties or attorneys involved in
13 this matter and that I have no personal interest in the
14 final disposition of this matter.

15 DATED this _____ day of _____, 2018.

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DENISE KOPAN, NM CSR #124

License Expiration: 12/31/18

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1 STATE OF NEW MEXICO
2 ENERGY, MINERALS AND NATURAL RESOURCES DEPARTMENT
3 MINING AND MINERALS DIVISION
4

5 PERMIT APPLICATION BY NEW MEXICO
6 COPPER CORPORATION FOR THE COPPER FLAT
7 MINE. PERMIT TRACKING NUMBER S1027RN.

8 TRANSCRIPT OF PROCEEDINGS

9 VOLUME 2
10
11

12 BE IT REMEMBERED that on the 24th day of
13 October, 2018, this matter came on for hearing before
14 FELICIA ORTH, Hearing Officer, at the Albert J. Lyons
15 Event Center, 2953 South Broadway Street, Truth or
16 Consequences, New Mexico, at the hour of 9:04 a.m.
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E X H I B I T S
(None)

1 MS. ORTH: Good morning. My name is Felicia
2 Orth, here on behalf of the Mining and Minerals
3 Division to accept public comment and presentations on
4 the application by New Mexico Copper Company for a
5 permit for the Copper Flat Mine. We were in hearing
6 yesterday, and we will be here today again until 7:00
7 tonight.

8 When we broke last night, we were in the
9 middle of the presentation by the ranches, the Turner
10 Ranch and Hillsboro Pitchfork Ranch. If you have not
11 signed in, please do so. If you would like some more
12 information on the application, please pick up a Fact
13 Sheet also on the sign-in table, and please help
14 yourself to coffee. And we have some folks who brought
15 some treats today, too.

16 So do we have anything to talk about before
17 we begin with the presentation by Mr. Kuipers? No.
18 All right.

19 Mr. De Saillan?

20 MR. De SAILLAN: Madam Hearing Officer, the
21 next presentation is Mr. Jim Kuipers.

22
23
24
25

1 JAMES KUIPERS

2 after having been first duly sworn under oath,
3 testified as follows:

4 DIRECT TESTIMONY

5 MR. KUIPERS: Good morning, Ms. Orth, and
6 good morning, Mining and Minerals Division. I should
7 mention that our comments here today are specifically
8 intended to go to the Mining and Minerals Division,
9 and, in particular, to the Director.

10 And what we have essentially today that I'm
11 going to present are a number of recommendations
12 specific to the Mining Act. I am here today on behalf
13 of the Turner Ranch Properties and Hillsboro Pitchfork
14 Ranch folks.

15 In fact, it's my honor, if you will, to work
16 for both these parties, both large ranches, but, also,
17 I enjoy working for smaller ranches, like Bobcat, and
18 to me, that's very important, to be able to have that
19 opportunity to represent them.

20 This is just a Summary of Issues, and I am
21 hoping it's a little more focused in for you than it is
22 for me over here. But we want to start off with
23 talking about the protection of health and safety, the
24 environment, wildlife, and domestic animals.

25 And, in particular, I want to touch upon

1 wildlife protection, lights, noise, blasting, and
2 fugitive dust. These are all subjects which you heard
3 both the Turner Ranch and the Hillsboro Pitchfork Ranch
4 folks discuss yesterday in terms of some of their
5 concerns, and we have some suggestions in that regard.

6 I also want to mention the stream and
7 stormwater diversions that are specific to Grayback
8 Arroyo Diversion, and, also, to protection of the waste
9 rock tailings storage facility and other features and
10 their ability to meet both the storm events, given
11 current predictions and the need for long-term
12 maintenance to protect those. Those features are
13 essentially source controls. They are intended to
14 prevent metals and other contaminants from leaching
15 into water.

16 The third subject we want to address is that
17 of perpetual care and the inherent nature of mines such
18 as Copper Flat. When mines use source controls, it
19 turns out they are required to use long-term monitoring
20 and maintenance to continue to ensure those source
21 controls perform as specified.

22 And so that's part of what, for example, when
23 we apply the one-percent infiltration limit to the
24 Copper Rule, that's a good example. That's a
25 specification that needs to be maintained not just

1 initially, but throughout time for that source control
2 to continue to perform as expected.

3 The fourth subject we want to address is the
4 acceptance by MMD of the environmental evaluation,
5 essentially the Draft Environmental Impact Statement.
6 And essentially, that Environmental Impact Statement is
7 not complete.

8 And it's very interesting in that the Bureau
9 of Land Management, in particular, will not issue a
10 Record of Decision, which essentially constitutes the
11 permit, nor will they issue financial assurance until
12 that Draft EIS is, in fact, a final EIS and has
13 undergone six months of potential public appeal beyond
14 that. And so essentially, the Department is using a
15 document that is not yet finalized or been validated
16 for their environmental analysis.

17 Fifth, we just want to talk more about the
18 financial assurance. It's a very important part of how
19 we go about ensuring to the public that there is not
20 liability, and we want to talk about key aspects of the
21 proposal that, in particular, speak to the long-term
22 monitoring maintenance aspects that need to be part of
23 any financial assurance proposal for a modern metals
24 mine.

25 Just a little bit on my professional

1 qualifications. I think many people have heard me
2 testify before in New Mexico. So I am not going to
3 belabor it, but I basically worked in the mining
4 industry since I was young.

5 I have 35 years of professional experience
6 since graduating from the university. That experience
7 has been both with industry and in support of
8 public-interest groups. I started in 1996 to actually
9 work with public-interest groups after working in
10 industry for the first period of my career.

11 I continue to work and have worked for
12 tribes, government, individuals, organizations, and
13 quite a diverse clientele. My areas of specialization
14 include areas such as metallurgy, financial analysis.
15 I probably do five to ten financial analyses on mines a
16 year for clients. It's interesting to what extent they
17 are interested in that information.

18 Also, I look at things like reclamation and
19 closure, financial assurance, water treatment.
20 Essentially all the things that we are talking about in
21 the Mining Act. And I would mention that I have been
22 involved in New Mexico since 1998.

23 1999, in fact, I provided a workshop to the
24 Mining and Minerals Division at the Environment
25 Department on financial assurance, and it was a

1 relatively new concept, and New Mexico was just putting
2 its financial assurance in place for its existing mines
3 at that point.

4 So I have had extensive experience working
5 with the existing mines in the state, and as many of
6 you are aware, this is really the first new mine
7 proposal that's gone to this point in the permitting
8 process.

9 So essentially, the Mining Act, particularly
10 as it pertains to new mines, is very interesting. I'd
11 say it's almost unique. I am familiar with the
12 regulations of all the Western states, most of Canada,
13 various other places in the U.S.

14 I am not aware of another as clear
15 distinction between existing mines and new mines. Most
16 jurisdictions don't have different regulations for the
17 two. Same regulations apply to both. We have a very
18 specific and interesting part of the Mining Act in that
19 it actually has a different set of regulations, or
20 approach even, I would say, to new mines.

21 And it really starts, I think, with these two
22 key provisions. The first is that new mining
23 operations must be designed and operated using the most
24 appropriate technology and the best management
25 practices.

1 And that's something that I think was very
2 forward-looking in the Mining Act. It's something that
3 the mining industry embraces its philosophy, for the
4 most part, today, and all of us, I think, understand
5 what that means.

6 At the same time, it coupled that with the
7 second provision of assuring protection of human health
8 and safety, the environment, wildlife, and domestic
9 animals. So looking at both technology and ensuring we
10 have protection of valuable receptors and assets that
11 we see out there.

12 Now, when they put together the rules, it's
13 similarly consistent with the Mining Act, but the rules
14 contain a list. And it's always interesting when you
15 do this type of work because lists become somewhat --
16 as long as you check off everything on the list, the
17 thought is that you have it complete.

18 But in a lot of cases, these subjects that
19 are here don't cover everything they would appear to;
20 for example, wildlife protection, but we will talk
21 later how, depending on how you look at wildlife
22 protection, it may or may not cover that aspect.

23 And so the rules do have a list of things
24 that the applicant is required to address. And the
25 applicant has, in fact, provided -- addressed those

1 within the MORP, or the Mine Operation and Reclamation
2 Plan for those not familiar with acronyms here.

3 So when we look, it's intended to address the
4 requirements of the section. And what essentially we
5 are wanting to talk about, and we will do this by
6 subject, is when you look at the requirements and then
7 you apply those to some of these issues, like fugitive
8 dust, noise, lights and traffic, there are additional
9 recommendations that supplement or go beyond just
10 simply what's in the rules.

11 We want to recommend and we think that there
12 are requirements in the Act that don't just pertain to
13 the mine when it's reclaimed, but, also, that the Act
14 is quite applicable to the mine during operations, and
15 that the Mining and Minerals Division, in fact, has an
16 obligation or responsibility to address these matters
17 during operations and not just as part of reclamation.

18 So the first subject we want to talk about is
19 wildlife protection. And according to the Mine
20 Operation and Reclamation Plan, they will construct the
21 operations and reclamation phases of the project such
22 that they will not impact critical habitat for wildlife
23 based on wildlife studies conducted on the site.

24 Essentially, what they address are the
25 physical disturbances on the mine site, itself. And as

1 we discussed, the wildlife isn't just limited to the
2 mine site, itself, but it's also existing outside the
3 mine site.

4 The hazards may be different, they might not
5 be direct physical hazards of the wildlife, you know,
6 going into a pond, or being hit by a haul truck or
7 something, but this is more of the things we talked
8 about and heard about yesterday in terms of
9 larger-picture disturbances to wildlife.

10 So one of the things that the Act requires is
11 that measures should be taken to minimize adverse
12 impacts on wildlife and important habitat, and that
13 should be based on site-specific characteristics.

14 And it basically goes through and lists some
15 of those characteristics, such as restricting the
16 access of wildlife and domestic animals to toxic
17 chemicals; minimizing harm to wildlife habitat during
18 mining, and then (c), reclaiming areas of wildlife
19 habitat if not in conflict with the approved
20 post-mining land use, but you notice "during mining."

21 And so the idea is that the Mining Act,
22 again, doesn't just go into place when the reclamation
23 begins, but the Mining Act actually, I believe, is
24 intended to provide some level of operations management
25 and control, as well as enforcement, under the Act.

1 So this is where we want to provide some
2 recommendations. And I would mention, before I go into
3 specifics here, the same type of approach is something
4 that I worked with regularly and with other citizen
5 groups in mining in the United States.

6 And there are places, such as in Montana,
7 with the Good Neighbor Agreement, where we have worked
8 out mitigation plans to address some of these issues.
9 So if mining occurs, there are things that can be done,
10 and reasonable things that I believe -- that can at
11 least, in part, address these things. I don't think
12 anything can address all the impacts, but, in part,
13 there are effective ways to do that.

14 So the first thing is we believe the
15 Director, or the Mining Department, should require the
16 applicants to further demonstrate that the mining
17 operations will not impact wildlife outside the
18 proposed area.

19 Again, they have addressed within the area,
20 but we would suggest they need to at least provide some
21 of that outside the permit area, particularly with
22 respect to lights, noise, blasting, and traffic.

23 And then we are also going to, as I go
24 further through this presentation, provide some
25 specific suggestions for what could be done to mitigate

1 the lights, noise, blasting, and traffic impacts.

2 So with respect to lights, you know, as we
3 have discussed, essentially, the MORP, to my reading,
4 that I have been able to find, does not address the
5 potential impact from lights in such a way that assures
6 the protection of, in particular, I think, the
7 environment and wildlife, et cetera.

8 It's notable that when you read through the
9 literature, what you see is there is not a lot of --
10 there hasn't been a lot of focus on these type of
11 impacts. There is a lot of anecdotal information,
12 there is some higher-level studies that suggest these
13 impacts have potential for disturbing wildlife and
14 other things, but quite honestly, I don't think we have
15 a tremendous amount of science one way or another to
16 suggest what is or isn't going to happen.

17 And I know those of us that worked around
18 mine sites can provide anecdotes on both sides of the
19 equation. I can discuss times when it seems like the
20 mine site became a wildlife refuge at times. That
21 wasn't a good idea; other sites, where we had wildlife
22 that disappeared, came back.

23 So, you know, the main thing I would point
24 out is we can spend a lot of time arguing about one
25 thing or another, but ideally, one of the things the

1 Mining Department can help us with is, "Well, let's do
2 make sure, to the extent that it's reasonable to do so,
3 that we mitigate these impacts if, in fact, we have a
4 mine."

5 There are plans out there to address lights,
6 and, in fact, one of the more interesting plans that I
7 am aware of is the light plan that applies to the
8 Rosemont Copper project in Arizona.

9 And, again, one of the things I would
10 emphasize, when we talk about new technology practices,
11 these are not things I am recommending that have not
12 been suggested for other mine sites, and, in fact,
13 accepted, I believe, in most cases.

14 So we see Rosemont as a good example. And if
15 you know the area where the Rosemont Copper Mine is
16 located, or would be located, I should say, it's got a
17 number of observatories and other features, therefore,
18 that depend, in fact, upon the dark skies that we
19 talked about that similarly, the Turner Ranch folks and
20 others depend upon for part of what they are
21 essentially selling.

22 So what they have done at these sites is they
23 have actually gone through and put together what they
24 call a "Light Pollution Mitigation Plan," and it goes
25 through steps such as assessing first the baseline

1 night sky condition.

2 It's an interesting thought to do so, but, in
3 fact, those of us who live in places without a lot of
4 lights, not a bad idea, to kind of get a baseline of
5 what folks are experiencing.

6 And then what they have done is they have
7 gone through and looked at technology. And, again,
8 technology can provide answers to some of these issues
9 that are being raised, and we should look to promote
10 that.

11 I believe, again, that's part of what the
12 Mining Act, in its first provision, I think, was
13 suggesting. So things like LED lights, putting in
14 targeting lights so you don't have lights that are
15 shining out for miles, but focused on the area they
16 should be; the type of lighting being specific to the
17 task.

18 So it's not just one light fits all. It's
19 one big light, one smaller light, and then they have
20 various things like dimming switches and other things
21 that turn lights off when somebody is not there and
22 turn the lights on.

23 They have even gone to what they are calling
24 "color rendering." And quite honestly I don't have
25 any idea what that is, but I am sure it's interesting

1 and helpful.

2 So in terms of a recommendation, what we are
3 really suggesting is the Director of the Mining
4 Department should require the proponent to demonstrate
5 that the mining operation will not result in
6 environmental light impacts, and if the permit is
7 issued, then they should also require the permittee to
8 be consistent with these best management practices, you
9 know, develop and submit a Light Monitoring and
10 Mitigation Plan and look to find the effective ways to
11 mitigate these impact such that we can hopefully not
12 have any impact on the different programs and things we
13 heard about yesterday.

14 Now, noise. Noise is an interesting one
15 because we really need to think of noise in two
16 different contexts. The context that most of us are
17 used to thinking about it is in an industrial noise
18 setting, where we are really talking about noise that
19 could potentially damage folks' hearing.

20 And so when we do that, we talk about large
21 decibel impacts, and they talk about jet airplanes, the
22 sounds of a mill, various things, even blasting, you
23 know, and all these things are very, very loud noises.
24 And, in fact, I think there is a lot of attention paid
25 to that and mitigation being done on that.

1 There are some things still that could be
2 done to improve things in this case, but that's where
3 most of the emphasis has always been. What we have not
4 emphasized enough is what I would really term "nuisance
5 noise."

6 And the best example I can give you, I worked
7 on a mitigation plan for a tailings storage facility in
8 Montana, and one of the parts of our mitigation plan is
9 we have informed the public that if they hear something
10 that's keeping them up at night, that's bothering them,
11 that's out of the normal, we want to be contacted, and
12 we want to see if we can identify that noise, and if we
13 can identify it, can we find a mitigation of some type
14 for that noise.

15 Well, one of the calls we got was the backup
16 alarms that were occurring on the vehicles when they
17 went down to the tailings storage facility to work or
18 do inspections. And those backup alarms were very
19 annoying in the middle of the night, in particular.

20 Well, it turned out the operator was going
21 down and having to back up about a 100-yard road. And
22 all we had to do was do a turnaround at the end of the
23 road so he didn't have to back up any longer, he could
24 simply just continue and do a loop and do his route.
25 Eliminated that background noise.

1 Now, it's not always that simple, but
2 sometimes it is. If you don't have any kind of a plan
3 or approach, you won't have that opportunity to do that
4 type of thing. So what we see is that noises can have
5 impacts.

6 And, again, these are the type of things that
7 I don't think one side or another -- we could stack up
8 a whole lot of evidence either way, and I don't think
9 it would be conclusive that there are or are not
10 impacts.

11 I do think what the Mining Act, again,
12 recognizes is that if we have technologies and we have
13 the ability to mitigate these, then that's part of what
14 we should be looking to do.

15 So, you know, again, they are saying that
16 there is a growing and substantial body of literature
17 that suggests, however, that noise impacts may be more
18 important and widespread than previously imagined.

19 So that's really what I am, again, trying to
20 emphasize, is we don't -- these are difficult things to
21 actually get facts on, but the evidence does suggest
22 that there are these type of impacts that happen, and,
23 you know, they point out things like -- basically, the
24 impacts run the gamut from damage to the auditory
25 system, masking of sounds important to survival and

1 reproduction, the imposition of chronic stress, and
2 associated physiological responses, including things
3 like startling and interference with mating and
4 population declines.

5 Now, again, these are the concerns that my
6 clients, both the Turner Ranch Properties and the
7 Hillsboro Pitchfork Ranch folks, have expressed
8 concerns about. And so, you know, I don't think their
9 concerns are just coming out of the middle of nowhere,
10 there is a foundation for those concerns.

11 Now, what do we do about it? That's an
12 important part of every conversation. What we can do
13 about it is put together what we call a "Noise
14 Management Plan." I found it interesting in my
15 research that Noise Management Plans are a part of
16 nearly every mine in Australia.

17 I didn't find a whole lot of those examples,
18 for example, in North America. But this is where one
19 of the things that I try to do with my job is review
20 what's happening worldwide to make sure that if we see
21 best management practices occurring elsewhere that we
22 bring them into play in places like New Mexico, where
23 that's similarly the intention.

24 And so we do have examples of where these
25 plans exist. First, they ensure that environmental

1 noise from operations is minimized and appropriately
2 controlled. So there are all kinds of source controls,
3 if you will, for noise that you can put in place, from
4 muffling to different types of ways of directing the
5 sound, et cetera, ensuring that impacts on surrounding
6 residents is minimized.

7 Again, what we found and what we have done is
8 residents get very annoyed by these nuisance sounds, in
9 particular, and it's something that we generally can do
10 something about.

11 The third bullet point, I think, is very key,
12 and that is keeping the local community and the
13 regulators informed of activities, where required, and
14 respond quickly and effectively to the issues or
15 complaints.

16 You know, this is where the phone company
17 wants to have a number that people could call -- or
18 excuse me, not the phone company, the mining company
19 wants to have a phone number that the residents or
20 community folks can call, and if they have a concern,
21 have a complaint, they have somebody there whose job it
22 is, in fact, to respond to that, and we see that being
23 done at a lot of different places.

24 In fact, Freeport-McMoRan has been doing a
25 very similar mitigation of some of their operations.

1 And one of the key things that I think is very
2 important that they do is they have a person who is
3 being very responsive and spending time going out to
4 the folks who have the concerns and doing what they can
5 do to try to figure out both the nature of the concern
6 and what the company can do to address that if it's
7 something that they can, in fact, address.

8 We want to see regular monitoring to ensure
9 compliance. And, again, the idea is not the monitoring
10 at the mine site from an occupational standpoint, but
11 the idea here is to do some monitoring of ambient
12 noise, nuisance noise.

13 And I have actually been involved in some
14 programs that have done that, where we have tried to
15 sort out what was happening with noise, and one of the
16 findings that I found interesting in the project was
17 wind was a huge factor.

18 And when the wind was blowing in one
19 direction, the noise was being heard quite clearly, but
20 when it wasn't blowing, we weren't hearing it at all.
21 And so if we weren't there when the wind was blowing,
22 we didn't understand what that citizen was actually
23 listening to.

24 And then, of course, what you want to see is
25 the company adequately managing and mitigating those

1 potential noise impacts from construction and
2 operational activities. You know, again, there is a
3 whole list of measures.

4 These were additional measures that we
5 noticed in terms of the environmental education. A
6 good example also is the purchase of equipment that
7 meets relevant noise standards. There are some types
8 of equipment that can be quite loud, other types that
9 can be less loud.

10 Maintaining your plant machinery in good
11 working condition. That's always important. If you
12 have got a muffler on a truck that's not being properly
13 replaced or maintained, there is a noise source that
14 you could otherwise eliminate.

15 So, again, there are a lot of different
16 ideas. Again, I would focus, very important, that
17 regular contact with local residents. And so -- and
18 that really applies to not just noise, but lights, all
19 these mitigations. I found out that's real key.

20 You can see there is a lot, okay? I'm not
21 going to go ahead and read every one of these to you,
22 but there are plentiful noise mitigation measures out
23 there. And, again, I think one of the key things in
24 the Mining Act is for the Mining Department to
25 encourage the use of these best practices.

1 And that's essentially our recommendation, is
2 that the Mining Department and Director do that with
3 respect to noise. You know -- and, again, I really
4 think these are things that ideally need a more
5 thorough environmental risk assessment.

6 For example, these things need to be flushed
7 out beyond what's in the environmental evaluation or
8 the Draft EIS that's being utilized. So it's a very
9 good example. When we look at that Draft EIS, the BLM
10 was very focused with its blinders in this particular
11 area, and it really needed to look beyond just the mine
12 site, itself.

13 Now, blasting is something that we heard
14 folks express concerns about. It's something that
15 those of us who have worked around mines are quite
16 familiar with. There are a number of things that need
17 to be done, similar to what we have talked about for
18 noise, lights, and other impacts.

19 In particular, most mines do develop a
20 blasting plan, and they eventually, in my experience,
21 arrive at a common time for blasting. So, for example,
22 many of the mines I have worked at, mines probably
23 within Mr. Smith's earshot at times, we blasted at noon
24 as a matter of policy, just when the guys were getting
25 -- everybody was taking their break for lunch.

1 That was the best time, actually, with the
2 pit and everything else cleared out, to go in and do
3 our blasting. So we established and let everybody know
4 that noontime was when we would blast. And so then
5 when they felt the vibration, or heard something, they
6 knew what it was from and it wasn't as unexpected. And
7 that's a simple example of a practice that we want to
8 recommend.

9 There are also a lot of studies on different
10 types of blasting impacts, et cetera. Flyrock, things
11 of that nature, that can be dealt with. So I think,
12 you know, the Mining and Minerals Division is familiar
13 with blasting plans.

14 I think some of the blasting plans they have
15 received in the past probably weren't as thorough or
16 detailed as I would recommend, but at the same time,
17 requiring companies to submit a blasting plan that
18 provides some of this key information to folks is a
19 standard practice in many places.

20 So our recommendation is that, in fact, the
21 Director require a detailed blasting plan. It should
22 include things like preblast surveys should specify the
23 blast design limits, and the idea should be to control
24 possible adverse effects to structures, potential for
25 flyrock, things of that nature.

1 We also think the Director should require the
2 applicant to submit the plan. It should include
3 identification and application of protective measures
4 and mitigation consistent with current best management
5 practice.

6 And those mitigations should be intended to
7 reduce the potential impacts to both property and the
8 environment, including humans, wildlife, and domestic
9 animals. And, again, I think one of the concerns we
10 have is the focus has been on dealing with, for
11 example, impacts to property, but it also needs to look
12 at those other impacts to humans, wildlife, and
13 domestic animals.

14 Fugitive dust is the fifth area that we
15 wanted to just speak to. The MORP does address dust
16 control throughout the document. It includes things --
17 describes things like water space in the primary
18 crusher pocket, it describes dust controls within the
19 open pit, and, also, dust control as a surface
20 stabilization measure.

21 And, also, it discusses things like the
22 unpaved haul roads and other disturbed areas, but they
23 have not actually submitted a Dust Control Plan. And
24 part of what I would suggest needs to be done is just,
25 you know, development of and including a formal Dust

1 Control Plan as part of the application package, or as
2 a condition. The idea is that if we apply, again, best
3 management practices, we can address these things.

4 Sorry, I keep going between, which I'm
5 looking at my screen or up there. So the control
6 measures that we can use. First, they need to take
7 into account the identification and classification of
8 fugitive dust initiation sources.

9 So normally, we have a long list of items
10 that can create fugitive dust at a site, and you can
11 see, we have a start of that list up here, but ideally,
12 we would have a more complete list, along with
13 mitigations listed for each one of those.

14 And so the identification is important. Then
15 we have fugitive dust characterization. You know, this
16 is something that's interesting for folks. A lot of
17 the public has a perception of what might be in dust.
18 So I think it's actually important to collect and
19 measure dust that comes off our mine sites, have
20 analysis done, and be able to show people that the dust
21 generally is not the highly contaminated material that
22 we are talking about here.

23 This is fugitive dust. This is dust that
24 tends to blow around because these particles are
25 light. And so we don't have particles of metals flying

1 around in the atmosphere. These are particles
2 primarily of sand.

3 And even when we look at this fugitive dust,
4 the issue is not metals content generally, the issue is
5 what it does as in fugitive dust coating plants, to
6 falling on things, to visually obscuring all types of
7 other things we have to take a look at.

8 And so, again, the idea is to implement a
9 Best Management Practices Plan to address fugitive
10 dust. And a lot of that is really practices that are
11 done at the mine site and employees paying attention to
12 things like when they see dust, calling for a water
13 truck and getting them to actually address that problem
14 and not allow it to go on for some period of time.

15 So, again, we have the recommendation that
16 they look to develop a formal Dust Mitigation Plan.
17 There are good examples out there. We provided a
18 reference to read, Organiscak -- and you'll find that
19 in the presentation in terms of spelling -- and then
20 there is also a Centre for Excellence in Mining
21 Innovation, and they have a Fugitive Dust Best
22 Practices Manual that I looked through and think it
23 would make a good place to start it also.

24 So we want to turn our attention now to
25 stream and stormwater diversions. This is a subject

1 that I might mention, it seems like we just go through
2 every hearing that I believe we have had in New Mexico
3 that I have been involved in for 20 years, and
4 essentially, it has to do with the adequacy of the
5 present -- of the stormwater specifications that are
6 out there.

7 In this case, what we are talking about in
8 Section 19.10.6.603.C(5) requires that "When streams
9 are to be diverted, the stream channel diversion shall
10 be designed, constructed, and removed in accordance
11 with the following: (A), unless site-specific
12 characteristics require different measures to meet the
13 performance standard and are included in the approved
14 permit, the combination of channel, bank, and flood
15 plain configurations shall be adequate to safely pass
16 the peak runoff of a ten-year, 24-hour precipitation
17 event for temporary diversions, a 100-year, 24-hour
18 precipitation event for permanent diversions."

19 So largely, what I would focus on is the
20 100-year, 24-hour event, because for the most part, I
21 think that's what we are concerned about here from a
22 long-term reclamation and closure standpoint.

23 And let's say that we had total confidence in
24 the NOAA predictions, National Oceanic and Atmospheric
25 Association, but NOAA has -- essentially, they have

1 been providing the stormwater predictions that we have
2 all been relying upon for decades now, but let's say
3 for a minute that there are adequate -- they are not,
4 by the way -- but I am just going to assume for a
5 minute that they are.

6 If we did have an event that exceeded a
7 100-year storm, it would actually cause damage to a
8 design for only a 100-year storm. So let's say we only
9 were going to get that 100-year storm 100 years from
10 now -- and that's actually not the way it works.

11 Each year, there is a one percent probability
12 of that. One percent -- of that 100-year storm, but
13 let's say it does happen at the end of the 100th year
14 and it's a 101-year storm and it just happens to exceed
15 the design, now we begin to damage these stormwater
16 diversion structures that we were depending upon.

17 Many of you were at the Environment
18 Department hearing to protect water quality.
19 Essentially, what the Copper Rule requires is that we
20 put in place a cover, meaning the top cover above the
21 contaminant, the waste rock, that will not allow any
22 more than one percent infiltration, and that's a source
23 control measure.

24 Now, if it allows greater than one percent
25 infiltration, it's not meeting that specification. One

1 percent infiltration, I have got to tell you, is a
2 pretty high bar, but let's say it does meet it
3 initially, as we start to see erosion as we see storm
4 events, various other things happen.

5 In order to maintain that level of
6 performance indefinitely, because the Mining Act
7 doesn't just say it applies for ten years or 100 years
8 or even a thousand, but indefinitely, we would have to
9 continue to come back and maintain those features in
10 order to protect our remedy.

11 And this is a very common concept that we do
12 recognize, for example, in Superfund. When Superfund
13 does a remedy, they actually put in place what's called
14 "institutional controls." And those institutional
15 controls are intended to protect that remedy
16 essentially in perpetuity.

17 They are oftentimes covenants or other things
18 that go with the lands that prevents you from doing
19 certain things, for example. So this is one of the key
20 concerns we have, is when we look at how we look at
21 mine sites today versus how we looked at mine sites 25
22 to 30 years ago, when the Mining Act was put together,
23 is today, there is a general recognition that for
24 metals, meaning that, by and large, all metals mines
25 require some level of source controls.

1 That also means that there will be some level
2 of long-term operation and maintenance that's similarly
3 required. And so we do see that at other sites. Now,
4 in particular, at this site, what we have is the
5 Grayback Arroyo diversion, as well as all these
6 stormwater features that you saw on some of the
7 drawings that were presented yesterday from the site
8 when it will be reclaimed.

9 And so those are critical features specific
10 to this site. They are intended to prevent erosion
11 from copper mines and the source control covers. And,
12 again, those will be the covers that are installed by
13 the top of the tailings facility and the waste rock, in
14 particular, that are intended to decrease the amount of
15 pollution that would enter groundwater.

16 We talked a lot about anthropogenic climate
17 change, essentially, human-caused climate change, and
18 what that means. So one of the key things that we have
19 also mentioned, and, you know, the discussion I really
20 had just prior was, "Okay. Let's assume the 100-year
21 events are correct, what we know over the last 20
22 years, in particular, is that they are not correct."

23 There are sites, such as Questa in Northern
24 New Mexico here, that many of you are familiar with. I
25 believe we have had four storm events that exceeded

1 100-year events in the 20 years that I have been
2 involved there.

3 There are very few mine sites I have worked
4 at in the last 20 years that have not experienced
5 100-plus year storm events. We are seeing these events
6 happen more frequently. We are also seeing them
7 larger.

8 So at least what some states have done -- in
9 Montana, we think this is a critical concern because we
10 need to be able to, for example, make sure our dams and
11 our tailings storage facilities are designed properly.

12 For these type of storage events, they went
13 ahead and put together what they called the "Montana
14 Critical Stream Storm Working Group." And what that
15 working group has done is take the data that's
16 available, and rather than wait for NOAA to come up
17 with new predictions, which we were hopeful they might
18 do soon, but now it seems that it's continually being
19 slowed down.

20 In the meantime, Montana went ahead and put
21 in place its own stormwater standards as an interim
22 requirement. So that we didn't need to continue to
23 have these kinds of debates in regulatory processes,
24 but, rather, we had new guidance and direction, given
25 what we know is our current conditions.

1 So the actual MORP references the sections
2 that are intended to deal with this, began identifying
3 that the arroyo diversion, for example, the Grayback
4 Arroyo diversion, must be properly maintained to ensure
5 that it will continue to bypass stormwater around the
6 open pit and through the site indefinitely in the
7 future.

8 You know, we also mention the tailings
9 storage facilities and the other features at the site,
10 the stormwater channel designs, the three-foot source
11 control covers, and the need to maintain the stormwater
12 diversions, as well as the actual covers, themselves,
13 which we have included here.

14 And if the cover starts to get erosion and we
15 start to see rolls in that cover, before that becomes a
16 big gully, we want to go in there and fix that. That's
17 something that may be required ten years from now.
18 Similarly, it may be required 500 years from now as a
19 regular erosion control method beyond talking about
20 maintaining stormwater ditches and other things for
21 higher-than-designed events.

22 So our recommendations in this regard are
23 that -- and really, I didn't get this revised as I
24 hoped to. I say, "Recommendations to NMED." I have
25 said "MMD" in this -- concerning stormwater features,

1 that the Director include permit conditions to require,
2 at a minimum, that all permanent diversion and
3 stormwater control structures be designed to meet a
4 500-year storm event; that all other diversions and
5 stormwater-controlled structures be designed to meet
6 the 200-year storm event.

7 Now, these are the criteria that I am seeing
8 being applied by the engineering companies in advising
9 their clients. Again, when we have got critical
10 structures that are designed really to last forever, we
11 at least want to design them to 500-year events.

12 And this is as an engineer, as it really has
13 nothing to do with an environmental consideration, but
14 if it's designed, if it's supposed to last for many
15 lifetimes, then it needs to be designed for that.

16 Similarly, what we are seeing as kind of
17 interim measures by a lot of engineering firms is we
18 are recommending that the companies go to a 200-year
19 storm event. That's actually typically maybe only 15,
20 20 percent greater than the 100-year storm event, but,
21 again, the idea is we are making an investment in these
22 features. We want to protect that investment. And if
23 we don't do something to address it, then we will be
24 basically losing that investment in a short while.

25 Okay. This is one that I have been probably

1 waiting for for almost 20 years, perpetual care. I
2 really think that is -- I really know no other way to
3 describe it -- the gorilla that's been in the room at
4 both ED hearings as well as this hearing. It's a very
5 interesting aspect of the New Mexico Mining Act.

6 And I should mention kind of as a preface, to
7 my knowledge, until recently, this is the only such
8 requirement in any Mining Reclamation Act in the United
9 States, that you cannot have perpetual care and
10 maintenance.

11 Now, more recently, just in this past year,
12 there are two states, both Montana and Colorado, that
13 have, in fact, proposed as initiative ballots similar
14 requirements. Now, those requirements in those two
15 states only pertain to water treatment.

16 So they are basically saying, "You can't have
17 a mine if it requires a perpetual water stream."
18 That's actually a much lower bar than perpetual care
19 and maintenance.

20 Care and maintenance includes things like
21 monitoring, as well as the maintenance I have
22 described, and things like maintenance on roads and
23 other facilities. So, in fact, New Mexico's bar, if
24 you will, isn't just water treatment not being allowed,
25 but any type of care and maintenance.

1 Now, in the discussions in Montana and
2 Colorado, what I can tell you is the mining industry
3 looks at that as meaning that if you're not going to
4 allow water treatment, you can't have hard rock metal
5 mines. It's similarly very hard not to reach that same
6 conclusion with the Mining Act, given that, as I said,
7 it actually puts in place an even higher bar.

8 So, again, we know that the Act requires that
9 it be designed to meet, without perpetual care, all
10 applicable environmental requirements of the Act and
11 other laws following closure. And so, you know, that's
12 the high bar, if you will, that's been set.

13 If you look at current industry best
14 practice, basically, a mine such as the Copper Flat
15 Mine requires source controls or other measures to
16 protect water quality. So, in fact, they can't walk
17 away after 20 years, as they have suggested, or as the
18 Act might suggest they need to do so.

19 It's also important for me to mention that,
20 you know, this site goes under the Bureau of Land
21 Management, as well, and the Bureau of Land Management
22 has been dealing with this idea of perpetual care for
23 some time now.

24 And they have come to realize, and they were
25 a good example of 25 years ago, I think if you would

1 have talked to the Bureau of Land Management, they
2 would have been one of the leading advocates for the
3 belief that we could do walk-away reclamation.

4 Twenty-five years later, what I can tell you
5 is they are, at least in Nevada and a number of other
6 jurisdictions, the leading advocate for recognizing
7 there is no such thing as a walk-away mine when we are
8 talking about a major metals mine.

9 And what they have essentially done in their
10 BLM Handbook is identify that they require
11 post-reclamation monitoring maintenance to be performed
12 indefinitely to protect the reclamation and closure
13 features.

14 Now, "indefinitely" basically is the same
15 thing as "in perpetuity." And what they have done,
16 they basically require that you use a 500-year period
17 for estimation of the financial assurance. And when
18 you do a 500-year estimate, what you start to look at
19 is it only requires, in that year 500, a \$10 investment
20 to end up with several million-dollars.

21 So the idea is 500 years really reflects a
22 closer amount for perpetuity than 100 years. 100 years
23 actually gets you maybe 75 to 85 percent of the way
24 there. And so they have actually, in recognizing,
25 again, we are not just talking 100 years, but talking

1 perpetuity, they have at least required these plans and
2 financial assurance to go out to 500 years.

3 And by the way, those aren't just for gold
4 mines, but a very good example is the Phoenix Copper
5 Mine, and the Phoenix Copper Mine is a relatively new
6 copper mine, and its financial assurance went out for
7 500 years, for the long-term monitoring maintenance.

8 So in recognition of the necessity of
9 long-term monitoring and maintenance for the indefinite
10 period of time, the New Mexico Environment Department,
11 at the Copper Rule hearing, Kurt Vollbrecht did state
12 that the New Mexico Environment Department was going to
13 require financial assurance for a 100-year monitoring
14 and maintenance program.

15 And, again, a very key part of that
16 discussion was understanding that we don't know when or
17 if we will be able to walk away from the mine. It is
18 potentially possible sometime in the future, you could,
19 but the idea is that we continue to roll this over
20 every five years, as long as the company exists, to
21 roll it over with so that it could go out
22 indefinitely.

23 One of the key concerns we always have is
24 that there is still a company to continue to roll this
25 over with. So our recommendation, rather lengthy here,

1 but essentially, what we are saying is although the
2 Mine Operation and Reclamation Plan proposes to rely on
3 source controls and other measures to protect
4 groundwater quality in the long term, it does not
5 describe or provide for monitoring and maintenance that
6 will certainly be necessary for the continued
7 performance of those source control measures into the
8 foreseeable future.

9 And, again, we have examples here of given
10 the need to maintain the less-than-one-percent
11 infiltration as a source control performance standard,
12 that needs to be maintained. Therefore, there has to
13 be some kind of a monitoring and maintenance program to
14 ensure that the cover continues to perform as specified
15 indefinitely.

16 So really, our conclusion is while the
17 Director could require the permittee to include a
18 long-term monitoring and maintenance plan in the MORP,
19 that would be an apparent violation of the Mining Act's
20 prohibition on perpetual care.

21 So whether we like it or not, really, it
22 would appear that the Director must deny the permit
23 application because the proposed reclamation plan does
24 not require perpetual care.

25 I will touch on the environmental evaluation

1 again that we mentioned, and, you know, it's
2 interesting that the Mining Act did anticipate that
3 some of these mines might not be on federal land. They
4 might require -- should require environmental analysis
5 to be done, but it also didn't, in the Act, itself, nor
6 the rules, really address whether one would use --
7 could or should use an existing environmental
8 analysis.

9 There is guidance that was prepared that does
10 make it clear that you can use it, but as we said, the
11 real concern we have is essentially that the analysis
12 they have done relies upon the BLM's analysis. As I
13 said, the BLM's analysis is preliminary.

14 It's, right now, a Draft Environmental Impact
15 Statement. There has been a large volume of public
16 comments submitted to that Draft Environmental Impact
17 Statement. It's been over almost two years, I think,
18 maybe over two years now since it was produced, and
19 there has not been a Final Environmental Impact
20 Statement.

21 So that would suggest that all may not be
22 well with that because otherwise, I would have expected
23 the BLM to have produced in six months. And then, you
24 know, again, we need to emphasize that there is a
25 period of time after we get a Final EIS where the

1 public may file an appeal on the EIS, and that can
2 require another six months before the BLM would be
3 ready to rely upon their EIS to write their Record of
4 Decision and essentially approve their permit.

5 So the main concern that we have is how the
6 Mining and Minerals Division can rely upon the document
7 that, in fact, a sister agency, the BLM, if you will,
8 cannot rely upon to at least issue a permit at this
9 time.

10 So, again, basically, before MMD can issue
11 the permit, it must prepare its own environmental
12 analysis for, I guess, the -- or I guess the option
13 would be if the Environment Department -- or excuse me,
14 the Mining and Minerals Division wants to rely upon
15 that EIS to simply wait until it's undergone all the
16 different fields and it's, without question, something
17 that could or should be relied upon.

18 Okay. Last subject, financial assurance.
19 And some of this is quite repetitive from the
20 Environment Department hearing. So I will just go
21 through it somewhat briefly. There is one other
22 additional part to it that is different, though, and
23 that's right at the end.

24 So this is the detailed breakdown of the
25 financial assurance cost limit that was submitted by

1 New Mexico Copper Corporation. And I wanted to take
2 this opportunity to compliment them on the use of the
3 Standard Reclamation Cost Estimator program, or SRCE,
4 as those of us who do financial assurance commonly do.

5 SRCE is not perfect, and let me make that
6 clear at the front, but what the Standard Reclamation
7 Cost Estimator does for us, and this was something that
8 a group of us sat down more than 15 years ago and
9 decided it needed to be done, is if you didn't have a
10 standard method, what happens is every single mining
11 operator would submit its own method of estimate, and
12 as long as it's done by a professional engineer, it's
13 probably reasonably good, but you still have to go and
14 review it line by line by line.

15 And we are involved in doing a bit of that
16 line by line by line, looking at financial assurance,
17 in some other sites here in New Mexico. And it's
18 something that if you start to get into it, you
19 literally try to perfect an estimate that if you
20 actually have done professional cost estimation, where
21 I think you would realize you never would do, there is
22 a certain limit into how far you try to dive into
23 details.

24 And what the Standard Reclamation Cost
25 Estimator did is it said -- a group of us got together

1 and said, "This is a reasonable way for engineers to
2 calculate costs. Let's put it together in a program.
3 Let's offer it to folks and see if we can get everybody
4 to use it."

5 And, again, it may be plus or minus ten
6 percent either way, but it's quick, it's relatively
7 easy, and we can generate numbers that then we can move
8 forward with financial assurance and do regular
9 renewals and do the various things that we are supposed
10 to do.

11 So, again, I appreciate their putting it in
12 there. One of the things it does for me is I am not
13 here to question their engineer's estimates. In fact,
14 I think it's important, even in all the testimony that
15 we are providing, we have great respect for their
16 experts.

17 Experts, however, can disagree on items, and
18 they do regularly. And that's what we are really doing
19 here, is not questioning the expertise of the company
20 and the experts they brought to the table, we are
21 really saying, "Their opinions aren't the only opinions
22 out there."

23 So it's just something to, I think, keep in
24 mind with the process, but, again, I wanted to make
25 sure the SRCE estimate, we are not questioning the

1 calculation that went into the estimate. It's the
2 assumptions that go into the estimate that we are
3 really questioning.

4 So, again, we have heard that the
5 direct/indirect costs -- or excuse me, the direct
6 costs, which really represent the cost of construction
7 and building and doing the reclamation, that's about
8 \$44 million, and then we have indirect costs, which
9 basically are all the costs surrounding actually doing
10 it, things like contingency design, overhead, profit,
11 that get tapped on top of those direct costs that gave
12 us a total cost of 55.8 million.

13 So the first thing we just wanted to mention
14 was drain-down management, and what the company has
15 described in their Mining Operation and Reclamation
16 Plan is a total of 25 years drain-down management, and
17 this is from the tailings storage facility.

18 Basically, what they are talking about is
19 five years of active water management during those five
20 years. Again, as was described, they will actually
21 take the water to the top of the tailings storage
22 facility and they will actively evaporate it by running
23 it through misters or other devices that encourage a
24 higher evaporation rate.

25 And then after that, they will do basically

1 what they have described as 20 years of passive water
2 management. Now, the first 25 years of this is
3 actually a pretty standard approach, and, in fact, what
4 we do at a lot of mine sites today at storage tailings
5 facilities. When we have water in the pond, we do want
6 to take that period of time and actively get rid of
7 that water.

8 Once we have water off the pond, off the
9 tailings storage facility, the risk of a catastrophic
10 failure drops by orders magnitude. So it actually is
11 our first priority, getting rid of that water, and
12 evaporation, active evaporation, is a very effective
13 way to do it.

14 In Nevada, they oftentimes then convert it
15 from active evaporation to more passive evaporation,
16 such as is described in their Mine Operation and
17 Reclamation Plan. The difference is, again, Nevada
18 didn't stop at 25 years.

19 They assumed that 20-year passive water
20 management phase goes on indefinitely, it doesn't go to
21 zero. Now, it may only be five or ten gallons per
22 minute, but they are managing that. And I might say, I
23 approve of their plans.

24 What they are saying is, "We are going to
25 plan this massively," but then they also mentioned that

1 they have to keep in place bird-netting, because in
2 some cases, the pond water, they need to prevent
3 ingress of the wildlife, for example, but in all cases,
4 what they do is they actually have a replacement period
5 for the passive water management pond.

6 These ponds simply don't last forever. And
7 one of the things they do is they collect sediment and
8 various other things. And so Nevada typically has
9 replacement periods that range anywhere from 30 years
10 to 100 years for these passive water management
11 features.

12 And, again, that's really the difference
13 here. It's a subtle difference. That the same
14 management was extended, I'd say that's common, but
15 best practice, it's the fact that we simply cut it off
16 at the end of 20 years and said, "Well, it's all going
17 to be fine."

18 We don't know that. Yeah, I am not here to
19 say, "I hope it isn't fine." I actually hope it is,
20 but what I can say is we don't know that with any
21 certainty whatsoever. So that's where drain-down
22 management becomes, we believe, a real issue.

23 So, again, what we simply would do is
24 recommend that that cost of continuing the passive
25 management be carried out for at least 100 years.

1 Again, if we did it similar to what BLM is doing in
2 Nevada, it would be for 500 years, and that would be
3 conditions of the plan, essentially, to continue to
4 maintain and manage the passive water treatment
5 requirements.

6 Now, we also heard discussion of the pit
7 rapid-fill. And, again, I would not suggest that it's
8 a bad idea. In fact, if you have the water and all of
9 the things are equal, it's a good idea to mitigate the
10 potential for additional metals to end up in the pit.

11 The concern we have simply is what financial
12 assurance is about, is the mine going bankrupt. Again,
13 this is not about hoping they go bankrupt, or wanting
14 them to go bankrupt, but we know from this site, other
15 sites, that it just simply can happen. It's the nature
16 of mining. It's a risky business.

17 So if the mining company goes bankrupt, they
18 don't necessarily continue to have the water rights
19 even if those water rights are adequate, it doesn't
20 matter. The bankruptcy trustee is going to look at
21 those water rights as an asset, and that trustee is,
22 more than likely, going to try to sell those water
23 rights.

24 And if the State wants to use them, the State
25 may well need to be in the position to buy them. So

1 that's why we are saying we need to not just address
2 the operational costs, but we also believe that the
3 Agency needs to address the potential purchase costs of
4 the water connected with that scenario.

5 And that's part of, you know, again, one of
6 the things folks who don't work in financial assurance
7 need to be aware of, is financial assurance is
8 negotiated. It's very rarely something that we would
9 even expect the company submits something, we check it
10 off, and approve it.

11 I don't know of a single financial assurance
12 that has not been negotiated. And so coming back and
13 having discussions about looking at some of these
14 things that are identified as potential shortfalls,
15 that's relatively regular in the business.

16 Now, this was something that was discussed
17 yesterday about their reclamation and monitoring plan.
18 This was something that I was hoping we would get some
19 clarification, because I, myself, am not clear on what
20 their plans are for reclamation and maintenance.

21 And the reason we are not clear is how it's
22 described in this table and how it's described in the
23 financial assurance document, because the actual Mine
24 Operation and Reclamation Plan doesn't address the
25 monitoring and maintenance of that reclamation.

1 So what is described here is that they would
2 do the bulk of reclamation on the site in the, I
3 believe, waste rock facility's years 15, 16; contouring
4 at the tailings storage facilities in year 17 -- years
5 17 through 19, and then this table suggests passive or
6 minimal maintenance from years 20 through 40.

7 And that would be post-mining years five
8 through 25, okay? But when you actually look at the
9 schedule of costs in the financial assurance, all the
10 costs show it occurring in year 22.

11 Now, the company may have intended for that
12 cost to actually be spread out over time, or maybe they
13 did intend it to be at least conceptually placed in
14 that year seven, but that is something we could use a
15 little bit of clarification on, but then the other
16 thing, you know, as we talked about, the other part is
17 in terms of the actual wells that are utilized.

18 And what we see here is this is the number of
19 groundwater wells. And additionally, there are 25, and
20 then you can see it reduces to 24, to 22, and then the
21 last ten years, we have 20 wells. And then after that
22 last ten years, zero.

23 So there wouldn't even be, at least under
24 this scenario, a continued follow-up groundwater well
25 to continue to assure that even the remedy that might

1 have been effective after 20 years or 25 years
2 continued to be effective. And we do see delayed
3 impact in mine sites in some cases. So rarely do we
4 see a situation where, in year 25, we just walk away
5 from the site and assume everything will be fine in the
6 future.

7 We see the same thing happening just in terms
8 of assumptions with sampling frequency. Initially,
9 they start with quarterly, then they go to biennially,
10 and then annually. Well, each of these assumptions of
11 reduced frequency is based on an assumption that there
12 were no problems.

13 You decrease the sampling frequency because
14 you're not seeing an instance of exceedance, but, in
15 fact, if you are seeing exceedances, you would continue
16 that frequency. In fact, you might even go more
17 frequent. You might go to monthly sampling in some
18 cases.

19 So, again, the scenario that they are showing
20 here is simply one where it's somewhat ideal, and we
21 actually get everything exactly the way we want it.
22 Surface water. You see we have five samplings stations
23 for five years here, and then we go down to zero.

24 Again, I think it's too quick a presumption
25 after five years that we no longer need to sample

1 surface water. So their estimated costs for that
2 sampling for a 25-year period is 1.9 million.
3 Theoretically, if we were to make that four times that,
4 extending that over 100 years essentially, we would be
5 talking about \$7 million.

6 So there is no basis, I believe, in terms of
7 best practice, for only requiring monitoring for a
8 25-year period. Again, that assumes that we could walk
9 away from the mine. That might have been the concept
10 25 years ago. It's not the concept that's accepted
11 today.

12 There are no costs, in addition, for
13 vegetation, erosion, wildlife, monitoring of the pit
14 lake, sidewall stability; for example, the tailings
15 storage facility.

16 There is actually a set of protocols that are
17 required now as part of best practices for tailings
18 storage facilities that would suggest we need to
19 continue looking at the stability of that facility, and
20 that's not included in here, and I don't believe the
21 Office of the State Engineer has bonding capacity
22 within its office to ensure that. So, again, this is
23 basically a shortfall of the monitoring side.

24 In terms of maintenance, similarly, we are
25 assuming, or the mine plan assumes that we walk away at

1 the end of year 25 after reclamation, and we really
2 can't tell, as I mentioned, whether there is any
3 maintenance being done after year seven.

4 I do believe that when the company clarifies
5 this, they will inform us that they intend it for the
6 maintenance to continue through the period, but, again,
7 they need to clarify that. What they have allowed is
8 ten percent of the area for reseeding, and six percent
9 of the area requiring growth media in that year seven.
10 And so explaining kind of how they intended for that
11 money to be spread out or used just in one year.

12 The estimate of the cost of reclamation and
13 maintenance is 686,000. But there is no basis for just
14 simply cutting it off. And so we are suggesting that
15 that same practice of maintenance needs to be continued
16 similar to what we see in Nevada, similar to what we
17 see at the major mine sites in New Mexico, such as
18 Chino, Tyrone, and Questa that have been carried out
19 for a 100-year period.

20 And, again, if the idea is to be consistent
21 with BLM policy, we believe that should be carried out
22 to a 500-year estimate. You know, again, one of the
23 things we did note, in addition, is that there are no
24 costs included for road maintenance, stormwater
25 maintenance, tailings storage facility, or other

1 maintenance, and, also, no costs for long-term pit lake
2 mitigation.

3 So with respect to the direct costs, you
4 know, right now, they are 44 million. We are
5 suggesting there are a number of areas that are
6 shortfalls in terms of monitoring maintenance, pit lake
7 rapid-fill, other aspects.

8 I suggested here a direct cost closer to 100
9 million for the project. And like I said, this is a
10 negotiation. So I don't expect us to be at 100 million
11 at the end of the day.

12 Actually, if I were to wave a wand right now,
13 I think it's probably going to be, if we went out to
14 the 500 years, I think it might take 55 of the 44 in
15 direct costs, and probably add about another ten
16 million to that cost, but that is the type of thing
17 that we think needs to be looked at. That cost should
18 be estimated so folks can understand it.

19 There is quite a bit of discussion in New
20 Mexico about indirect costs, and this table just
21 provides a comparison of those indirect costs. And
22 what this shows is these are the different indirect
23 cost categories.

24 We have mobilization and demobilization;
25 engineering, design, and construction; contingency;

1 contractor profit and overhead; liability; performance
2 and payment bonds; Agency management/contract
3 administration; Agency overhead, and then there is a
4 total.

5 Here we have New Mexico Copper Corporation's
6 financial assurance proposal, and they accounted for
7 these costs in several different places. Not counting
8 the mobilization/demobilization, they ended up with
9 about a 26 percent indirect costs.

10 The New Mexico Mining Division has developed
11 draft guidance, and they actually would suggest a
12 considerably higher cost than 46 percent. And then in
13 the fourth column labeled "USBLM," we have actually put
14 in the BLM's indirect costs.

15 And, again, excluding
16 mobilization/demobilization, BLM ended up with about 32
17 percent. Now, if the financial assurance is intended
18 to meet, at the minimum, both Agencies' requirements,
19 then it should have similar direct or indirect costs to
20 that of the BLM.

21 And so I would have expected, instead of 26
22 percent, to see 32 percent. The Mining and Minerals
23 Division guidance is draft, but I think it's very
24 well-intended, particularly with respect to concern
25 about actually needing to run these mine sites.

1 And so we really don't have a lot of
2 experience in the United States with mine site
3 reclamation and closure being done by State and federal
4 agency folks. While we do have mine sites that have
5 gone bankrupt in Montana, Nevada, Idaho, even New
6 Mexico and elsewhere, the amount of experience that
7 Agency folks really gain directly in terms of that
8 cleanup is not real great.

9 I don't think the folks at the Mining and
10 Minerals Division, themselves, have had to take over
11 one of these sites, but I can tell you from having been
12 involved in having taken over the Pecos and the Beal
13 Mountain site, but those are in Montana.

14 I have been involved in Superfund activities
15 extensively where they had to come in and do things.
16 These indirect costs are very difficult to estimate.
17 Each site has its own kind of unique qualities that
18 happen, and the Agency is not unfounded at all for
19 suggesting that 46 percent is a good number.

20 I have seen Superfund sites, such as
21 Summitville in Colorado, where that number probably was
22 closer to 60 or 70 percent. I have seen other numbers
23 in Nevada where I think they managed to keep it closer
24 to this 32 percent.

25 So in the meantime, at the very least, we're

1 suggesting that in terms of indirect costs, the
2 estimate should, at a minimum, reflect that of the BLM,
3 and, in fact, we believe that there should be
4 consideration given to it meeting the MMD
5 requirements. Again, this site is not without a
6 history, and ignoring that history, I think, would be a
7 mistake.

8 Now, there is one more facet. This is really
9 the end of our presentation that we want to raise, and
10 this has really come up since the Environment
11 Department hearing, although we touched upon it in the
12 Environment Department hearing, but essentially, as we
13 have said, what we are looking at is an ideal outcome.

14 An ideal outcome is the mining company
15 proceeds to mine as planned, and then we get to the
16 end. And really, we are assuming in this financial
17 assurance that they go bankrupt the last day they are
18 there. So they have done all the mining, everything is
19 done the way we thought it would be, and then this
20 financial assurance says, "Okay. Now, if they left the
21 mine site the next day, this is the amount of money we
22 would need to reclaim the site."

23 Now, when you look within financial assurance
24 guidance, what you'll see is this phrase "maximum
25 reclamation requirements." And there is a common

1 knowledge that what you need to do is make sure that
2 you don't just put financial assurance in place for,
3 again, the ideal condition, because I am not sure, if
4 the mining company was there to the last day, that it
5 really makes sense that they would go bankrupt that
6 last day and walk.

7 Instead, what typically happens is mining
8 companies leave before the end of the last day. And so
9 the Office of Surface Mining, which is where most of us
10 have taken our lead for financial assurance because
11 they developed the first financial assurance under the
12 coal mine regulations clear back in the 1980s, the
13 Mining and Minerals Division, in developing their
14 guidance for existing mines, and I really see no reason
15 why the existing mine financial assurance guidance
16 wouldn't be applicable to new mines, because from this
17 standpoint, there is no difference, but they actually
18 require that you look at this maximum case.

19 And what the Mining and Minerals Division
20 basically has set forth is that you look at the
21 following conditions: You want to make sure your
22 financial assurance covers the greatest area of
23 disturbance, or the greatest area requiring final
24 grading, topsoil placement, and revegetation.

25 Now, it is typically the end of the mine, but

1 if you have backfilling and some other things
2 happening, that's not always the case. They also want
3 to make sure we cover the time when we have the largest
4 volume of material to be graded.

5 And, again, the largest volume, if we do some
6 of our work and we are planning some of that
7 dirt-moving to be done as part of mining that might not
8 actually get performed, we want to take into account
9 the longest haul distances, the greatest number of
10 structures, and the greatest amount of material that
11 must be handled.

12 We also need, very importantly, to look at
13 special reclamation activities, such as handling of
14 acid rock drainage, acidic or toxic materials,
15 developing final cut lakes, handling of disposal (sic)
16 -- honestly, I don't really know what that means --
17 handling of disposal, sealing underground mine entries,
18 and addressing difficult topographic situations.

19 So what are we really talking about if that
20 were to happen? Is there a scenario that that could
21 apply to? Mr. Smith provided us some information on
22 the mine's financial situation, and essentially -- or
23 really, this is based -- I would call it a "pro forma
24 cash flow analysis."

25 And information from that, that shows us what

1 the projected annual copper production would be over
2 here on the left-hand Y axis, and then on the
3 right-hand Y axis, they have percent copper grade, and
4 then each of the 12 years of mining.

5 Now, what they show here, it's an interesting
6 aspect of this particular project, is that the first
7 five years through year five, they are mining
8 relatively high-grade ore. That's good news for them,
9 because that allows them to potentially make more
10 profit, pay back their capital, and hopefully get in a
11 good situation to then be able to afford to operate for
12 the next six to seven years lower-grade ore.

13 And this, again, is uncommon to a plan in the
14 mining industry, but what's important to note is a
15 couple of different factors, but first, it's dependent
16 upon there being a good copper price when they are
17 producing this relatively high quantity initially.

18 If that doesn't happen, their debt, similar
19 to last time, is going to become an issue and could
20 drag the company down, but the greater concern I have,
21 just given historical significance of what's happened
22 in the mining industry, is right here at year six, when
23 the grade essentially goes down, and at the end of --
24 at that year six, that's when you might see the
25 greatest risk exists of bankruptcy, because, again, I

1 don't see them going bankrupt year 12. It's somewhere
2 in here, and it probably has nothing to do with
3 anything that was within their control.

4 That's the thing to realize, this is about
5 putting assurance in place in case things happen in the
6 marketplace that they have no control over. So our
7 suggestion is that the Environment Department should
8 require the proponent to look at what if the mine
9 closed down in year six.

10 So as we say, they may not be favorable in
11 year six, the mine might be abandoned at that point, it
12 might be put on standby, all kinds of different things
13 could happen, but what we are concerned about is the
14 following things: First, the materials with high
15 leaching potential that would be mined during the first
16 five years.

17 The company's plan is to put those -- is to
18 use what we call "waste management handling" and is to
19 segregate those materials into, if you will, a
20 repository within the waste rock piles. Good idea.
21 It's actually a mitigation approach that is very
22 commonly used. It could be effective. It has to be
23 completed.

24 So if they are halfway through putting those
25 materials in the repository, it hasn't been covered

1 with ten or 20 feet of material, as planned, the Agency
2 only has money for three feet of material, you see the
3 problem you end up with, is we can't complete that very
4 important processing of that material with the greater
5 leaching potential.

6 The waste rock piles might require additional
7 reclamation, such as material and grading. Again, they
8 describe that they are designing for closure. That's a
9 good thing. What that means, though, is you have to
10 get to closure for that design to really benefit you.

11 If they didn't get all the way to closure, it
12 actually might be more expensive to reclaim the waste
13 rock than if it was just halfway constructed. Tailings
14 storage facilities, this is even more so true. I have
15 been involved in the reclamation of a number of
16 tailings storage facilities that were not completed.

17 In both cases that we had the final cost
18 compared to the estimated cost, we were significantly
19 short by about 50 percent, in fact, because you have
20 got a great, big hole that's intended to be filled and
21 graded. If it's only halfway full, you have to move a
22 whole lot more dirt than what you were intending to to
23 get it covered and graded.

24 Another concern we have is that the pit would
25 not be completed, and the pit ultimate water level is

1 very dependent upon mining to a certain level and then
2 the water coming back in.

3 If that pit is not mined as deep as was
4 ultimately planned, then the water level may be higher
5 than was projected at the end, and, in fact, that water
6 level could be such that it encroaches on public lands,
7 which then changes the potential water quality
8 standards.

9 So, again, this is why this stage of
10 potential closure, particularly, again, given the fact
11 that this mine has started and closed at least once
12 before, we believe needs to be evaluated as this
13 maximum reclamation requirement scenario and as
14 contained in the Agency's guidance.

15 So essentially, our recommendation is the
16 Director should require the applicant to develop the
17 plan for mine year six, and if that is, in fact, the
18 highest-cost year, then that reclamation and closure
19 amount should be required at least through year six.

20 There are just two other notes that I would
21 make in our testimony. One has to do with the form of
22 financial assurance. We think it's very important that
23 the Agency require a cash form of financial assurance
24 in this case.

25 Again, they may need the financial

1 assurance. It's not a hypothetical exercise, and
2 requiring it in a cash form, again, that means that you
3 have got a surety bond, a local letter of credit, a
4 number of things, cash or equivalent, but what we don't
5 want to see is any discussion of a corporate or
6 self-guaranty. It would be entirely inappropriate in
7 this case, we believe.

8 The second thing I just want to mention is
9 the renewal period for financial assurance. The State
10 of New Mexico, I believe it is at the Director's
11 discretion, has used a five-year period for renewal of
12 financial assurance.

13 We are not getting it done in five years,
14 though. It's taking us much longer than five years at
15 other mine sites in the state. In fact, what's
16 recognized in other jurisdictions is that's entirely
17 unacceptable.

18 And the states where jurisdictions -- where
19 financial assurance is working and where it's being
20 renewed appropriate to the regulations, they are doing
21 it every one to three years. I think it's something
22 the Director needs to look very hard at in this case
23 because, again, we have a mine that it's just the mine
24 characteristics that it's going to be very sensitive to
25 the economics.

1 So, again, we would suggest, at a minimum, a
2 three-year renewal and actually think it might be a
3 good idea to simply require an annual estimate of the
4 financial assurance.

5 Thank you.

6 MS. ORTH: Thank you, Mr. Kuipers.

7 Mr. Butzier, do you have questions?

8 MR. BUTZIER: I do, Ms. Orth. Thank you.

9 MR. De SAILLAN: Madam Hearing Officer, if I
10 could just interject here. There are a couple of
11 clarification points I would like to make with the
12 witness.

13 MS. ORTH: All right. I'm sorry, Mr.
14 Butzier.

15 MR. De SAILLAN: My apologies, Stuart.

16 MR. BUTZIER: No problem.

17 DIRECT EXAMINATION

18 BY MR. De SAILLAN:

19 Q. Jim, I just wanted to clarify a couple of
20 things in your statement.

21 In talking about streams and stormwater
22 diversions in that recommendation, if you could put
23 that slide up. I'm afraid I don't know what the number
24 is.

25 A. No problem.

1 Q. Yeah. Okay. So you said that you had failed
2 to change that from "NMED" to "MMD," and I think
3 actually, the way that it's written is correct.

4 A. Thank you, Counsel. Now that I take a look
5 at it, yes, it is.

6 Q. You are saying that your recommendation here
7 is consistent with the recommendation that you made to
8 the Environment Department.

9 Then the second thing I want to clarify is
10 you were testifying -- when you were testifying about
11 perpetual care, you mentioned the testimony of Kurt
12 Vollbrecht "at the copper mine hearing," and I think
13 you were referring to the groundwater discharge permit
14 hearing for the Copper Flat Mine.

15 A. Yes, I was.

16 Q. Okay.

17 A. I referred to it as the "Copper Rule
18 hearing," I believe.

19 Q. Yes. Then the last thing is I was wondering
20 if you could comment a little bit on the benefits of
21 having or allowing the public the opportunity to
22 comment on the form of financial assurance.

23 A. Sure. Well, again, we mentioned how we have
24 a great deal of concern about the form of financial
25 assurance even in -- you know, it's a general concern

1 that the public has with any mine, is that form.

2 And so under the Act, I don't know that there
3 is an explicit allowance for it, but would --
4 certainly, in my experience, it's very important. It's
5 something that the public will want to weigh in on,
6 particularly depending on what the company actually
7 proposes for that financial assurance, because we don't
8 know. That's one of the issues today, is that we have
9 actually not heard what the form of financial assurance
10 can be. So we can't really use this form to do so.

11 MR. De SAILLAN: Thank you. That's all I
12 have.

13 MS. ORTH: And let me just offer one
14 additional -- it was just a single word. It was one of
15 your later slides. You said handling of "disposal,"
16 and the word was actually "topsoil."

17 MR. KUIPERS: Thank you.

18 MS. ORTH: Mr. Butzier?

19 MR. BUTZIER: Thank you.

20 CROSS-EXAMINATION

21 BY MR. BUTZIER:

22 Q. Thank you for your testimony, Mr. Kuipers.
23 I'd like to go kind of in the order of your
24 presentation and ask a number of questions about your
25 testimony.

1 Okay. Is it your position that lights had to
2 be addressed in our requirement of the regulations to
3 be addressed in the MORP or in the permit application?

4 A. My interpretation would suggest they should
5 have been addressed. I would not say it was clear to
6 me that it's an absolute requirement.

7 Q. And part of your proposal relating to lights
8 was to have a plan that included the collection of
9 baseline data relating to lights in the area; is that
10 correct?

11 A. That's correct.

12 Q. And there are specific baseline data
13 requirements that are part of the Mining Act and
14 regulations adopted in the Mining Act, correct?

15 A. Yes.

16 Q. And do they include a requirement to collect
17 baseline data for anticipated light usage?

18 A. Not to my knowledge.

19 Q. And you indicated that it would be your
20 recommendation to require that lights be addressed, and
21 the baseline data collection be addressed, or be
22 collected for lights.

23 That was your recommendation, and that came
24 from MMD, and that it was required?

25 A. Yes. And I identified that as a best

1 management practice consistent with the requirement of
2 the Act.

3 Q. Is it your position that every baseline -- or
4 excuse me, every best management practice has to be
5 spelled out in the rules in order for the industry to
6 actually go about and undertake best management
7 practices?

8 And let's use light, for example.

9 What's your experience in how the industry
10 addresses lights even though the regulatory program may
11 not specifically require it be addressed?

12 A. My experience is that it varies from no
13 addressing it to addressing it to an extreme in some
14 cases. So it largely varies. And, again, I don't know
15 that any -- this is the difficulty, I think, with the
16 Act when it was written, as well as the regulations, is
17 how do you capture everything that's going to be best
18 management practice forever and now into the future in
19 a list developed in 1996.

20 So that's where I am saying I don't think
21 it's possible to capture all the requirements of the
22 Act in the list that's simply in the results or in a
23 list of simple, "Here is what we think you should apply
24 to your baseline data back 20 years ago."

25 Q. And wouldn't you agree that it just wouldn't

1 be practical to try to develop a regulatory system that
2 puts every single requirement -- for one thing,
3 baseline -- best practices are something that evolves
4 largely from industry-driven practices over time; isn't
5 that the case?

6 A. That is absolutely the case.

7 Q. Okay. And do you have any reason to think
8 that New Mexico Copper would not undertake reasonable
9 best management practices in its use of lights, for
10 example, the use of, you know, sky protectors and
11 directional lighting like the kind of thing that you
12 talked about?

13 A. Well, the reason I would have questions about
14 it is it wasn't volunteered in their Mine Operation and
15 Reclamation Plan. So, again, if a company intends to
16 do that type of thing, then I would think they would
17 actually well advertise that, whether required or not
18 in their Mine Operation and Reclamation Plan.

19 Q. But you acknowledge it's not something that
20 they were required to put into their MORP?

21 A. Well, again, what I am suggesting, the word
22 "required" could truly be addressed in the way that we
23 are thinking, a list developed 20 years ago could
24 address that.

25 Q. I'd like to ask you next about noise.

1 Is it your position that the Mining and
2 Minerals Division has not considered noise in looking
3 at this permit application?

4 A. Again, as I mentioned, I do believe the
5 application has considered occupational noise. It's
6 the nuisance-type noise that I am directing my comments
7 towards.

8 Q. And noise is part of what was considered in
9 the draft environmental evaluation that MMD put
10 together, correct?

11 A. Again, I don't believe they really looked at
12 noise, nuisance noise outside of the site of that
13 nature. It primarily focused on, as we described it,
14 more the blasting impacts, things of that nature, for
15 machinery, things that I would describe more as
16 relative to potential occupational issues.

17 Q. And just to be clear, Noise Management Plans
18 like you found were in use in some Australian
19 operations is not something that's required by the
20 Mining Act or regulations adopted under it, correct?

21 A. Again, not specifically required, no.

22 Q. Okay. One of the recommendations relating to
23 noise was to take into -- to basically analyze what the
24 -- I think you said "what the ambient noise is in the
25 area in order to be able to develop a plan," correct?

1 A. That's correct.

2 Q. Would that kind of plan -- I assume you would
3 then want to take into account and analyze the kind of
4 noise that would occur from blasting and other
5 equipment use at the mine, correct?

6 A. Again, as I described, blasting is one thing,
7 but actually, more typically, when we talk nuisance
8 noise, it's that background noise; that we have
9 otherwise quiet, peaceful, you know, surroundings, and
10 then suddenly, in the middle of the night, you have a
11 backup operator that is maybe not even five or ten
12 decibels above background, but it's that piercing noise
13 in an otherwise quiet place.

14 Q. And you are proposing that a mine consider
15 all of those kinds of noises and analyze it and try to
16 determine what the potential impact might be, for
17 example, on wildlife not only on the permit area, but
18 off the permit area?

19 A. No. So actually, what I suggested is we not
20 try to determine what the impact will be, but, rather,
21 we just employ best management practices that are
22 available to minimize an impact regardless.

23 So we consider, again -- like I said, argue
24 forever about whether there is an impact or not, or we
25 can simply do what's out there and what other mines are

1 doing as very reasonable things to address those
2 impacts. And that, to me, is a preferred way to deal
3 with these issues, versus one side saying they exist,
4 and the other side saying they don't.

5 Q. And noise in the area of the mine that is
6 considered, would that include the noise, for example,
7 of hunting rifles in the areas that you are concerned
8 might be impacted by noise from the mine?

9 A. That could certainly be part of that
10 background ambient noise, certainly.

11 Q. And do you have any reason to believe that
12 the company that has hired the kinds of experts that
13 you have complimented in your testimony would not take
14 into account best management practices not only in the
15 area of light, but, also, noise in carrying out its
16 activities going forward?

17 A. As I mentioned previously, the only -- I
18 would expect them to, but I would expect that to have
19 showed up then in their Mine Operation and Reclamation
20 Plan. That's because, you know, it's not there that we
21 are recommending it. It's not suggesting that they
22 won't do it, but it's suggesting that there is not
23 evidence that they are going to do it.

24 Q. And is it your position that dust controls
25 and dust and particulate matter are not taken into

1 account at all in the mining application whereby MMD,
2 in -- or by MMD in considering this application?

3 A. With all due respect, you must not have
4 listened to my testimony, because I predicated right in
5 front in the, if I remember, paragraph listed "The
6 Actual Dust Controls that were Recognized in the Mine
7 Operation and Reclamation Plan." My point was they
8 were here, there, there. There was not a clear Dust
9 Control Plan outlined.

10 Q. And I wasn't attempting to summarize your
11 testimony. I was asking you a question.

12 I want to turn now to storm -- stream and
13 stormwater diversion issues.

14 A. (Witness nods head.)

15 Q. And I don't think we need to call up a slide
16 on it, but we may.

17 The key stormwater diversion and significant
18 diversion at this site is the diversion of the
19 Grayback, the upper end of the mine of the Grayback
20 Arroyo, correct?

21 A. Diversion, yes. Yes.

22 Q. Okay. And that's one that I think you
23 acknowledged has been analyzed for a 500-year-plus
24 storm event?

25 A. That's correct.

1 Q. And that's one that was cut during the
2 Quintana period back in the early '80s?

3 A. That's correct.

4 Q. And that is cut into andesite rock,
5 low-permeability andesite rock, correct?

6 A. You know, I never looked at it that
7 specifically.

8 Q. And that's -- well, I will just suggest to
9 you that it is.

10 And that's a diversion feature that's mined,
11 that's been out there for 30 years, and is still an
12 effective diversion, is it not?

13 A. It's an effective diversion, at least the
14 last time I was out there. It was in need of
15 maintenance, though.

16 Q. And what kind of maintenance was that?

17 A. It just appeared to have erosion, as well as
18 sediment collecting in it. I would be interested to
19 see if the company has just left it entirely, or if
20 there has been any maintenance done.

21 Q. Okay.

22 A. And that was in 2003 that I was at the site
23 to make that observation.

24 Q. Now, you made -- I guess I do want to have
25 you call up the recommendations that you made after you

1 were talking about anthropogenic climate-change issues.
2 And then what came after that. Okay.

3 Could you briefly summarize what this
4 recommendation says?

5 A. Sure. Sure. Well, again, what I am trying
6 to make a point of here is when we -- you know, and,
7 again, we are suggesting, as we did to the Environment
8 Department, but the standard today, when we talk about
9 storm events -- and, again, this is where I point out
10 that much of this was written sometime ago -- the
11 standard recommendation, engineers to their clients, to
12 deal with the fact that we see these storm events
13 exceeding the 100-year standard has been adopting the
14 200-year storm event as engineering design standard for
15 features such as stormwater channels, but for critical
16 design features, essentially, if you will, features
17 built of concrete that we design for 500-year events,
18 because, again, the idea, from an engineer's
19 standpoint, this is an environmental protection.

20 This is a protection of investment of the
21 asset. And so if we are not protecting the asset in
22 terms of what we put in there -- and, again, that's the
23 whole idea of financial assurance, is to have money to
24 replace those assets.

25 Q. Was this basic recommendation one that you

1 made as part of the Copper Rule working group
2 proceeding that you participated in?

3 A. I recall doing so, yes.

4 Q. And was this recommendation adopted as part
5 of the Copper Rule?

6 A. Obviously not.

7 Q. I'd like to talk next about perpetual care.
8 Here, I'm going to attempt to characterize your
9 testimony, and I'd like you to tell me if I am
10 incorrect about it.

11 A. Okay.

12 Q. I think I understood your testimony to say
13 that if there are source control elements to a mine's
14 closure plan, or, you know, long-term closure plan,
15 that that is going to require perpetual care, and,
16 therefore, it's not possible to permit a new mine in
17 New Mexico where source control measures are necessary
18 as part of the closure.

19 Is that an oversimplification, and could you
20 address --

21 A. Well, I believe that's accurate.

22 Q. So in the New Mexico Mining Act of 1993,
23 which talked about, you know, mining being vital to the
24 welfare of New Mexico, et cetera, but that we also
25 needed to address reclamation and other issues, is it

1 your view that the legislature, when it adopted that
2 Act, was intending to prevent any mine in the future
3 from ever being able to be developed where source
4 controls might be necessary as part of the long-term
5 closure aspect of the mine?

6 A. That's an interesting question. Because as
7 you know, I attempted over the last number of years to
8 talk with a number of people who were involved in the
9 development of the Act.

10 It's certainly very hard for me to express
11 what the legislature intended, but I can suggest that
12 those who developed the Act, they interpret it one of
13 two different ways: One is that there was an
14 acknowledgment, kind of a trade-off, if you will, that
15 said the existing mines, particularly Freeport-McMoRan,
16 or at that time, it was Phelps Dodge, you get a license
17 to operate, but you are agreeing with us that we are
18 going to make it nearly impossible for any new future
19 mines to exist in the state.

20 And many people that I have talked with that
21 believe they understand the Act because they were
22 involved in it suggest that that was an acknowledged
23 outcome, that there would not be any new mines in New
24 Mexico.

25 The other thing that I have heard, and I do

1 think this, similarly, has validity, is that folks were
2 just simply naive back when this was done; that, in
3 fact, the intention was that if we could install best
4 management practices, at least at that time, we thought
5 we could walk away from the mine.

6 Again, this is 25 years ago. That's
7 changed. And so I think similarly, there may have
8 simply been some naivete back then that best management
9 practices equals walk away; whereas, today, I believe
10 the standard is best management practices recognizes
11 you don't walk away from these type of mine sites.

12 Q. And you're not -- I assume you're not opposed
13 to future mining?

14 A. Not at all.

15 Q. And isn't it the case that almost any mine
16 that operates and then is reclaimed under the Mining
17 Act is going to include some sort of cover, typically,
18 of a waste rock pile or a tailings storage facility at
19 the end of operations as part of closure?

20 A. No. This is what is, I think, interesting to
21 note, because we are really distinguishing metal mines
22 from non-metal mines. So a good example is at the
23 Environment Department hearing, I spoke briefly about
24 the US Hill Mine that I was involved in reclaiming.

25 Now, there, there weren't -- we weren't

1 installing source controls. The covers -- the only
2 purpose of the cover was to promote vegetation. The
3 underlying materials were not a source of potential
4 groundwater contamination.

5 So in the event where all you are doing is
6 reclaiming to support vegetation and you're not
7 actually putting in place the source control to address
8 groundwater contamination, for example, then I actually
9 would anticipate that a mine may be able to achieve the
10 requirements of the Act.

11 Q. So you are identifying a fairly small subset
12 of the potential metal mines, correct, because
13 typically, cover and revegetation and a storm release
14 system for a waste rock pile is not only to design to
15 ensure the adequate reclamation and revegetation, but,
16 also, is a source control to limit the percolation of
17 water through the pile, correct?

18 A. Yes. So, again, if we have any kind of
19 metals, leaching or otherwise, then that type of
20 feature would be required. And, again, as I am saying,
21 it simply requires some level of monitoring and
22 maintenance ongoing.

23 Q. In perpetuity, in your view?

24 A. Yes, indefinitely, which many people define
25 as "in perpetuity."

1 Q. So under your interpretation, as I understand
2 it, there could never be any future mine in New Mexico
3 where a storm release cover, part of whose purpose is
4 to serve as a source control mechanism, that could
5 never be permitted in New Mexico, according to your
6 view, given the prohibition on a perpetual care
7 component of the Mining Act?

8 A. Correct. It is my view that such a
9 prohibition essentially stops the vast majority of
10 metal mining from occurring in the future.

11 Q. If the mining industry hereafter proposes to
12 eliminate the prohibition on perpetual care so that
13 mines can exist, the kinds of mines we are talking
14 about can exist in the future under your
15 interpretation, I assume that you would -- since you're
16 not opposed to mining, you would support eliminating
17 that prohibition, am I correct, the perpetual-care
18 prohibition?

19 A. It is my opinion that if we want to mine
20 metals, and I do believe we need to mine metals in the
21 future, I think they can be a very important part, for
22 example, of dealing with climate change, that we will
23 have to allow for mines that would have perpetual
24 treatment in order to supply the demands of society,
25 yes.

1 Q. So your answer is "yes"?

2 A. Yes.

3 Q. Okay. Thank you. You talked about the BLM
4 example of requiring 500 years of care.

5 Can you give me, more specifically, examples
6 of what mining operations you are talking about where
7 BLM has had that requirement?

8 A. Yes, I'd be glad to do so.

9 Q. Thank you.

10 A. And it's actually contained in our exhibit
11 which will be attached to our statement, which is a
12 one-page BLM guidance document that was developed in
13 Nevada. And what happened in Nevada was initially, as
14 they started to close the numerous gold-mining
15 operations in the state -- and, you know, Nevada, at
16 one point, had 83 different gold mines, major gold
17 mines, operating in the state.

18 As they began to close these mines, what they
19 started to observe was some of the features that had
20 been built, the assumption had been that it would drain
21 down and go to zero, essentially, like we are talking
22 here, but, in fact, that wasn't happening; that they
23 were getting some amount of residual seepage coming out
24 of their heat piles and other tailings facilities.

25 So in dealing with that, they put in place

1 what they call a "process fluid stabilization program"
2 that looks at, first, reducing the volume, similar to
3 what Copper Flat is proposing here, and then managing
4 those discharges by those methods, but essentially
5 using ponds and evaporation and replacing the ponds.
6 And actually, they also built some wetlands -- what
7 they call "wetlands cells."

8 As they began to look at applying those, what
9 they realized simply was, "Well, we will need to do
10 maintenance on those, and as part of our requirement,
11 we will need to require that long-term monitoring and
12 maintenance provision."

13 And specifically, they list facilities that
14 have heat-bleached facilities, or tailings storage
15 facilities are very explicitly listed, and they really
16 talked about these as the facilities get larger, it
17 becomes more and more apparent to be necessary.

18 Q. Is it the case that most of the -- most of
19 the mines that BLM considered in the development of
20 that were gold-mining operations where there was
21 cyanide heat-bleaching facilities that were unlined?

22 A. Well, again, as I mentioned, some of the
23 facilities are heat-bleached. By the way, all the heat
24 bleaches are lined in gold.

25 Q. Yeah, okay.

1 A. Unlike copper, where they don't line copper
2 with a heat bleach, and gold, they, in fact, do place a
3 synthetic lining underneath always because the solution
4 is valuable. And so -- but, also, for tailings storage
5 facilities, which are the same as here. So it's not
6 just for heat bleach. In fact, it's equally, if not
7 more, important applied to tailings storage facilities.

8 Q. Okay. And one of the distinguishing features
9 of the proposal from Copper Flat in relation to the
10 tailings storage facility is that it is proposing to
11 line that failed facility, correct?

12 A. Yes. A number of different -- the facilities
13 I am talking about in Nevada are similarly lined, as
14 well.

15 Q. But not all of them?

16 A. They actually are not all lined with
17 geosynthetic liners. Some of the ones I am thinking of
18 have a clay liner, but all of them do have some type of
19 an intended liner system.

20 Q. And have you reviewed the analysis that the
21 Copper Flat's experts have gone through to determine
22 and anticipate and project what the drain-down period
23 would be at this tailings storage facility?

24 A. Yes, I have.

25 Q. And would you agree, it's a robust analysis?

1 A. It's the standard analysis. I don't know
2 that I would characterize it as "robust," but it's the
3 standard analysis that one does.

4 Q. And have you reviewed the geochemical
5 analysis relating to the quality of the water that
6 might be expected in the distant future to be coming
7 from the tailings storage facility?

8 A. Yes, I have.

9 Q. And we are talking about innocuous water
10 coming -- if we are talking about 30 years out, I am
11 not specifically referring to a particular part of the
12 analysis, but my understanding is that we are talking
13 about fairly innocuous water if we are talking
14 small-scale, you know, a few gallons a minute seepage
15 from the tailings facility?

16 A. Right. So similar to what we see in a lot of
17 places, it's not necessarily a large volume. It can be
18 five to 20, even as low as two gpm. It does contain, I
19 believe, some constituents that would be in excess of
20 the New Mexico standards. So I don't think you can
21 call them innocuous if they exceed the standard.

22 Q. But you don't have any -- you have not done
23 any independent analysis to conclude that the 25-year
24 drain-down period, including partly passive and partly
25 active, is inaccurate from the experts that Copper Flat

1 has employed?

2 A. Well, no. And if you look at their curve,
3 they are projecting what might happen. They are not
4 saying, "This is absolutely what's going to happen,"
5 either. And so when you look at their analysis, it
6 actually shows a number of facilities where seepage has
7 continued, and they are suggesting in this case that it
8 won't. I simply don't believe that analysis. I would
9 disagree with that part of the analysis. In my
10 experience, there would be some terminal seepage even
11 in a very dry environment such as this.

12 Q. You mentioned the Phoenix Copper Mine at
13 Battle Mountain?

14 A. Yes.

15 Q. Can you describe that operation for me,
16 please?

17 A. Yeah. Actually, Phoenix is a large copper --
18 in fact, to my knowledge, it's one of the first copper
19 heat-bleached, and the reason we call it a "heat
20 bleach" is they actually are replacing that copper ore
21 on a geosynthetic liner, treating it much like a
22 gold-mining operation in terms of how they are placing
23 the ore. So it's a -- they pile the ore up on a big
24 pad and sprinkle an acidic solution to it.

25 Q. So that's unlike the Copper Flat operation as

1 proposed, there is going to be some sort of acidic mix,
2 or whatever you want to call it, that's going to be
3 used as part of a heat-bleaching process?

4 A. Absolutely.

5 Q. Okay. And you agree that that's not going to
6 be occurring at the Copper Flat Mine as proposed?

7 A. That's correct.

8 Q. I think you referred a couple times to the
9 environmental evaluation performed by the Mining and
10 Minerals Division.

11 Do you recall that?

12 A. Yes, I do.

13 Q. And you understand, correct, that that is a
14 draft environmental evaluation at this point; it could
15 change?

16 A. I did not understand that. I was informed
17 that there was a draft comment period on the
18 environmental evaluation.

19 Q. Well, I am going to be asking the questions,
20 and my question is, were you aware that it was a draft
21 environmental evaluation?

22 A. No, I was not.

23 Q. I am turning now to financial assurance and
24 your testimony that you were part of a group that
25 assisted in the development of the SRCE program?

1 A. That's correct.

2 Q. And SRCE, again, stands for?

3 A. Standard Reclamation Cost Estimator.

4 Q. And can you tell me who was a part of that
5 group?

6 A. Sure. So the initial meeting actually
7 included myself; Sarah Zuzulock, who was an
8 environmental engineer who worked for me; Jeff
9 Parshley, who was a principal with SRK, I am not sure
10 he was a principal then, I think he is now; Dave
11 Bental, who was also with SRK; Allen Biaggi, who I
12 believe was the head of the Nevada Department of
13 Environmental Protection. Mr. Myers might be able to
14 better confirm that for you; and then Dave Gaskin, who
15 was the head of the Nevada Department of Environmental
16 Protection Mine Reclamation Division, and then there
17 was also a gentleman from Nevada BLM whose name I
18 cannot recall.

19 Q. And that was an initial meeting of some kind?

20 A. Yes. So what transpired from -- initially, I
21 was working for a corporation called "Great Basin Mine
22 Watch" in Nevada. They are a public-interest group.
23 And there had been, I think, three different financial
24 assurance estimates that I had submitted comments on on
25 behalf of the group, and the Agency, recognizing that

1 the comments, I believe, were quite valid in that it
2 appeared that everybody was going to just use whatever
3 technique they wanted in Nevada, realized it was in all
4 of our best interests to sit down and agree upon a
5 common technique so that instead of my comments having
6 to pertain to calculations, they could pertain to the
7 more substantive matter, such as here, as the
8 assumptions that went in.

9 Q. And who actually designed the SRCE program?

10 A. I would credit Jeff Parshley with being the
11 designer. I think Jeff has spent much of his last 20
12 years designing SRCE and I am greatly appreciative to
13 him for that effort.

14 Q. And Jeff Parshley is with SRK, who was the
15 consultant hired to do the financial assurance analysis
16 in this very case, correct?

17 A. Yes.

18 MS. ORTH: Mr. Butzier, we have been going
19 approximately two hours. Would you identify a good
20 stopping point for a break?

21 MR. BUTZIER: I'd be fine with right now. I
22 will continue with some financial assurance
23 opinion-related questions, but if this is a good time,
24 that's fine with me.

25 MS. ORTH: Thank you so much. Let's take 15

1 minutes.

2 (Recess taken from 11:00 to 11:15 a.m.)

3 MS. ORTH: All right. When we broke, we were
4 in the middle of Mr. Butzier's questioning of Mr.
5 Kuipers.

6 Mr. Butzier?

7 MR. BUTZIER: Thank you, Ms. Orth.

8 Q. (By Mr. Butzier) After the break, you would
9 think I would be ready to ask my next question, but
10 give me just a second.

11 Okay. I am still talking about financial
12 assurance, and I think you acknowledged that financial
13 assurance is commonly something that's negotiated,
14 correct?

15 A. Absolutely.

16 Q. And in this case, that negotiation is
17 ongoing, correct?

18 A. That's my understanding, correct.

19 Q. And it involves three separate agencies, MMD,
20 NMED, and BLM, correct?

21 A. I would assume so, but since I am not
22 involved in negotiations, I would have to take your
23 word for it.

24 Q. Okay. And you are aware that there is some
25 MOU or Joint Powers Agreements addressing financial

1 assurance between and among those three agencies,
2 Mining and Minerals Division, New Mexico Environment
3 Department, and BLM?

4 A. Yes, I am.

5 Q. So those would be, most likely, referred to
6 in developing the financial assurance in this case?

7 A. Yes.

8 Q. You talked about the Copper Flats proposal
9 for financial assurance and the assumptions it makes
10 over time about the number of monitoring wells that may
11 be needed, correct?

12 A. Correct.

13 Q. And I think you indicated that some of the
14 assumptions at the latter end of the table that you
15 presented, you didn't agree with; for example, where it
16 went to potentially zero monitoring of wells after a
17 certain period of time, correct?

18 A. It's not that I don't agree with it, but that
19 I said it represented an ideal set of circumstances.

20 Q. And I think you were also drawing upon your
21 basic knowledge of other operations, perhaps in Nevada
22 or Montana or elsewhere, correct?

23 A. That's correct.

24 Q. And one thing that -- did your analysis or
25 evaluation of the New Mexico Copper's projections about

1 what kind of monitoring is needed take into account the
2 fact that this is the first mine permitted under the
3 Part 6 new mining regulations, and, also, is the first
4 whole mine that is being permitted under the Copper
5 Rule that's been adopted?

6 A. Certainly, I took that into account, yes.

7 Q. And the requirements of the Part 6 mining
8 rules and the Copper Rule are significantly more
9 rigorous than what existed prior to those rules,
10 correct?

11 A. In part, yes, but there are examples of where
12 they are not.

13 Q. Let's talk about the indirect costs.

14 I think you testified that New Mexico Copper
15 Corporation, on top of the \$44 million of direct costs,
16 proposes 26 percent, essentially, indirect costs,
17 correct?

18 A. That's correct.

19 Q. And you pointed out that that's a little
20 different from the 46 percent that you say was included
21 in what you acknowledged were draft guidance materials
22 that came from the Mining and Minerals Division?

23 A. That's correct.

24 Q. And let's talk about the Mining and Minerals
25 Divisions Draft Guidance.

1 In fact, at one point, they were actually
2 issued as guidance, and then they were retracted,
3 correct?

4 A. I am not aware of that.

5 Q. Okay. Are you aware of the extensive
6 comments that were received from all sources, including
7 yourself --

8 A. Yes, I am.

9 Q. -- that addressed those original guidance
10 materials that were fairly recently issued by the
11 Mining and Minerals Division, the result of which was
12 for them to withdraw that guidance document?

13 Are you aware of that?

14 A. I was not aware of the exact process. I only
15 know that I was commenting on a particular document in
16 front of me. I was not aware that that was a final
17 document. I actually thought that was a draft
18 document, but if it's a final that we are commenting
19 on, then the comments made it, in fact, a draft. I
20 appreciate that clarification.

21 Q. That is my understanding of how it happened.

22 So you, in fact, submitted comments, among
23 many others who commented on the guidance materials,
24 correct?

25 A. Oh, absolutely.

1 Q. And do you remember what some of the
2 criticisms were that may have -- MMD may have taken
3 into account when it withdrew that guidance document?

4 A. I do.

5 Q. And could you summarize your understanding of
6 those?

7 A. You know, my understanding was that some of
8 the comments were simply that it was higher than any
9 other jurisdiction, inappropriate, in particular, I
10 think there were some comments related to the scale of
11 the mines. Things of that nature.

12 Q. And isn't it the case that there was also an
13 attempt by the guidance document to basically come up
14 with an average, and part of that average included
15 Agency guidance from places like Alaska, which, of
16 course, are much different than New Mexico?

17 A. That's correct. A lot of the guidance came
18 from multiple sources, and there is one document, in
19 particular, that actually has ten, 15 different
20 jurisdictions of actual source comparisons.

21 Q. And so part of the criticism and rationale
22 for MMD withdrawing is that you couldn't just average
23 such, you know, widely disparate kinds of guidance from
24 places that have very different considerations to take
25 into account when you are talking about indirect costs?

1 A. I recall that criticism, yes.

2 Q. I think you mentioned that the Summitville
3 Superfund site in Southern Colorado included 67 percent
4 in indirect costs?

5 A. I think it was something in the neighborhood
6 of 60 to 70.

7 Q. And the Superfund regime and mediation
8 process that occurs under Superfund is considerably
9 different from what we are talking about in this
10 proceeding, correct?

11 A. Oh, yes. And I would not recommend it to
12 anybody as an efficient way to get cleanup done, but
13 it's what we do when we get into that type of
14 situation.

15 Q. And the Summitville Mine was a high-altitude
16 Southern Colorado mine that included cyanide
17 heat-bleaching, and, in fact, it had experienced a
18 failed heat bleach that essentially slid down the
19 mountain; is that correct?

20 A. Without question, Summitville was a
21 disaster. And it's not even typical to what we would
22 look at for abandoned mine sites. I would be the first
23 to acknowledge that.

24 Q. Thank you. Let's turn now to the
25 closure/closeout plan financial assurance topic that

1 you addressed, and I recall you used a phrase which
2 sounded like it was a term of art in some context, and
3 that is "maximum reclamation requirements."

4 Do you remember that?

5 A. That's correct. That is a term of art that's
6 common to the Office of Surface Mining, the Mining and
7 Minerals Division guidance, and most financial
8 assurance estimators.

9 Q. That's not language or a phrase that's used
10 in the Mining and Minerals Division rules that were
11 adopted by the Mining Commission, correct?

12 A. No, it's not. It's just in their guidance.

13 Q. The guidance that was retracted?

14 A. No. In this case, we are talking about
15 financial assurance guidance for existing mines, and
16 that was not retracted.

17 Q. Okay. You are talking about the older ones
18 that are from maybe 1998 or so?

19 A. Yes, that's correct.

20 Q. Okay. I stand corrected. Thank you.

21 You also talked about -- you listed a number
22 of things that MMD takes into account, or requires a
23 company to take into account, including the greatest
24 area of disturbance, the largest volume of material,
25 the longest haul distances, and a need for special

1 reclamation.

2 Do you recall that?

3 A. Yes, that's correct. That's what the
4 guidance recommends, is that you look at those factors.

5 Q. Okay. And are you suggesting that the New
6 Mexico Copper Corporation has not taken any of that
7 into account in its proposal?

8 A. I don't know what they have done. So, again,
9 it's typical in a financial assurance proposal. Rarely
10 do I see the company, in their initial offer, recognize
11 this national reclamation cost.

12 Typically, it's the Agencies who come back
13 and say, "Well, in examining your plan in your cost
14 estimate, we believe there may be more critical
15 juncture at point X." And, in fact, it's very common
16 now in, for example, 40-year plans to do an estimate
17 every five years so we can determine where in that 40
18 years that maximum, for example, is.

19 I am not suggesting, you know -- we could
20 suggest the company does a cost estimate for the end of
21 every single year now. I think that may be a good idea
22 in the future, but for permitting, that's not what I am
23 suggesting.

24 I am saying, let's assume, based upon how you
25 can visualize the situation, that it's probably this

1 year six. So we just simply need to do another
2 estimate based upon that year six to determine whether
3 or not we have that situation occurring at this site.

4 Q. Well, is the reason why you don't know New
5 Mexico Copper did that is that you did not review the
6 financial assurance proposal?

7 A. No, I reviewed it in detail. I did not see
8 in there a year six cost estimate. I saw in there an
9 end-of-mine-life cost estimate.

10 Q. And I wasn't asking about a year six. I was
11 asking about the list that you made of greatest area of
12 disturbance, largest volume of material, largest haul
13 distances, and need for special reclamation.

14 You don't recall seeing that?

15 A. I did not see in the MORP a section that
16 specifically went through and said, "We have identified
17 this as meeting all of the above."

18 Q. All right. You gave an example where there
19 was a tailings storage facility that was 50 percent
20 completed, and that would result in a significantly
21 higher cost for reclamation as a result?

22 A. Yes, I did.

23 Q. What was that operation, can you tell me?

24 A. That was the Pony Mills site in Montana. It
25 was actually the first -- when I first started my own

1 company in 1996, that was the first contract that I
2 managed to get awarded by the State of Montana, was for
3 the cleanup of the Pony Mills site.

4 It was a great example of where the mining
5 company started. This was a Chicago Mining Company
6 they went bankrupt, abandoned the site, and the cost of
7 doing reclamation was quite a bit more than was
8 originally estimated because they had not completed the
9 fill in the tailings ponds.

10 Q. Okay. Thank you. Now, you have indicated a
11 strong preference for a cash bond, correct?

12 A. That's correct.

13 Q. And we are talking not about necessarily an
14 escrowed bank account, but you include within your
15 meaning of "cash" a surety bond and maybe some other
16 forms of financial assurance?

17 A. Surety bonds, irrevocable letters of credit,
18 commercial deposits, those type of things. If the
19 company can obtain those, we would consider those the
20 same as cash. It is a matter of whether a company
21 could qualify to obtain those.

22 Q. And the things I think you object to, the
23 forms of financial assurance that you object to,
24 included self-bonding, correct?

25 A. Absolutely.

1 Q. And that's not something that's even allowed
2 under the Mining Act, is it?

3 A. No, it's not.

4 Q. Okay. I think you also talked about -- I
5 can't remember if you said "parent corporation
6 guaranty" or "third-party guaranty."

7 A. Well, the Act allows for a corporate
8 guaranty.

9 Q. Okay.

10 A. And in this case, we would have a lot of
11 concerns with that, given the fact that the corporation
12 doesn't exist -- the parent corporation doesn't exist
13 even in the U.S.

14 Q. So the assumption of your criticism is that
15 by "corporate guaranty," you would be talking about
16 THEMAC, the parent of New Mexico Copper Corporation?

17 A. Or Tulla Group, or any of the corresponding
18 companies' owners.

19 Q. In the family, okay. So if there is some
20 other corporation, you wouldn't necessarily object to
21 if there is a corporate guaranty?

22 A. Well, in general, I do not support corporate
23 guaranties because essentially, our experience has been
24 that it's a piece of paper that, under the rules, if
25 the company no longer qualifies for corporate guaranty,

1 the Agency would then go to the company and say, "You
2 need to replace that with a legitimate -- more
3 legitimate form."

4 The problem is the rules say that you cannot
5 go to the company and request that until they have
6 already basically been on the verge of bankruptcy, and
7 your ability to get that cash, I don't think there is
8 any ability to do so.

9 There has never been an example where an
10 agency has been able to go to a company that suddenly
11 has a BBB-minus or lower rating and say, "Oh, by the
12 way, we want some of your cash." It doesn't work that
13 way.

14 Q. Now, under the financial assurance
15 regulations that are part of the Mining Commission's
16 regulations under the Mining Act, isn't it the case
17 that there are rigorous and substantial financial
18 capacity showings that have to be made before there can
19 be a corporate guaranty or a third-party guaranty?

20 A. So this was the BBB-minus rating, which is a
21 rating under a company's ability -- I actually forget
22 the -- where it comes from right now, but the whole
23 point being that that rating is what you have to
24 qualify for to get the corporate guaranty.

25 As I said, the problem is when you no longer

1 meet that rating, supposedly you're supposed to give
2 the Agency some form of cash to replace your corporate
3 guaranty, but the reason you can no longer meet the
4 rating is, most likely, you don't have any cash.

5 Q. And is it the case that both BLM and the
6 Mining and Minerals Division, in the regulations they
7 administer, have specifically listed the kinds of
8 financial assurance mechanisms that are permissible
9 under each of those programs?

10 A. Yes. And as a matter of fact, BLM -- there
11 are a number of letters out there that make it very
12 explicit that no federal agency is allowed to allow any
13 type of corporate or self- or third-party guaranty.

14 Q. Okay. And it's also the case, isn't it, that
15 BLM does not allow for collateral financial assurance,
16 correct?

17 A. That's my understanding, correct.

18 Q. Although that is required by the Mining and
19 Minerals Division?

20 A. Not required, but allowed.

21 Q. Or is allowed, excuse me. Thank you.

22 A. Yes.

23 Q. So isn't it safe to assume, since all three
24 of the Agencies we talked about earlier, the BLM, the
25 Mining and Minerals Division, and the New Mexico

1 Environment Department, are all part of the ongoing
2 negotiations that they are only going to end up using
3 or accepting, at the end of the day, a financial
4 assurance mechanism that is not prohibited by one or
5 the other of the programs?

6 A. That's essentially our expectation.

7 Q. So there is really not a concern that there
8 would be a corporate guaranty or a third-party guaranty
9 or a collateral guaranty in this case?

10 A. I wish I could agree with you that there is
11 not, but my experience has told me not to take that as
12 -- for granted.

13 Q. I want to just back up a little bit to the
14 500 years that you mentioned in relation to BLM
15 requiring it at some of its sites, the five-year
16 monitoring period?

17 A. (Witness nods head.)

18 Q. Is it your testimony -- I think you testified
19 that that's the case sometimes, but not all the time?

20 A. So what I testified was the, I would call it,
21 more typical approach that's out there right now is to
22 use 100 years.

23 Q. Okay.

24 A. And if I were to look, you know, say there is
25 100 long-term estimates out there, the majority of

1 those are based on 100 years. BLM, in its development
2 of 3809 guidance, and I believe they, in part, took
3 into account, for example, tribes and others who were
4 looking longer term than just 100 years, they, in their
5 infinite wisdom, if you will, decided on the 500
6 years.

7 And I, again, support that approach because
8 when I do a 100-year estimate, what people see is it
9 doesn't quite provide to keep going on. When we do a
10 500-year estimate, if interest stays where it should
11 be, discount rate reality is it should be able to go on
12 indefinitely.

13 Q. Okay. And, in fact, right in our backyard,
14 in essence, at the Little Rock Mine, the BLM has
15 accepted a 100-year monitoring period as part of its
16 requirements, correct?

17 A. I am not -- I don't have that particular
18 estimate in front of me, no.

19 MR. BUTZIER: Thank you. I don't have any
20 further questions.

21 MS. ORTH: All right.

22 MR. De SAILLAN: Thank you, Mr. Butzier.

23 Is there anyone else who has a question of
24 Mr. Kuipers based on his presentation?

25 Sir? If you come up and give us your name

1 first.

2 CROSS-EXAMINATION

3 BY MR. STEIN:

4 Q. I just had some questions more of
5 clarification based on your presentation.

6 A. Sure.

7 Q. I was at the DP-1840 hearing, the NMED
8 hearing, and as part of that, one of the quotes, when
9 you were giving your presentation, you referred to the
10 "Copper Rule was developed by the best of the best."

11 A. Uh-huh.

12 Q. And I think you were referring to the working
13 group and how the Copper Rule was built up and
14 established.

15 A. Yeah. So, again, I recognize that people who
16 were there on behalf of Freeport-McMoRan, on behalf of
17 NMCC, and others, a great bunch of people, but that
18 doesn't necessarily mean we all agree on the final
19 result, but, certainly, as a working group, a
20 tremendous group of people to work with.

21 Q. Okay. And what's the prescribed design
22 criteria for stormwater conveyance channels, diversion
23 channels?

24 A. The end rules said the 100-year storm event,
25 as we have discussed already today.

1 Q. Okay. And then also in the New Mexico Mining
2 Act regulations?

3 A. Well, as I mentioned, they are somewhat
4 older, about 25 years ago, but similarly, they have the
5 100-year criteria, as I mentioned.

6 Q. And the Copper Rule was what, 2012?

7 A. Yes.

8 Q. Okay.

9 A. And, again, I would just mention that I did
10 strongly push, during the Copper Rule, that we adopt a
11 200-year criteria.

12 Q. And how many other engineers were in that
13 group with you?

14 A. You know, there weren't, as I recall. I
15 don't know exactly the number of engineers, two or
16 three others. There were a lot of people in the room,
17 whether everybody was an engineer or not. We had a lot
18 of hydrologists and others.

19 Q. Right.

20 A. But a number of others.

21 Q. Do you consider yourself a hydrologist?

22 A. No, I do not.

23 Q. Okay. Is it your understanding that the
24 stormwater conveyance channels that are in the MORP, in
25 the reclamation plan, are designed to the 100-year,

1 24-hour storm event?

2 A. Yes, that's my understanding.

3 Q. Do you believe that they are designed to that
4 minimum requirement, or do you think that that's the
5 maximum load that they would handle?

6 A. As I recall, and I'd have to actually open up
7 the design documents now, but as I recall, that was the
8 design specification. I don't recall if they said it
9 still would handle 150, and maybe in some cases, it
10 could be greater. So it seems like that would be what
11 I might term as "minimum design specification."

12 Q. Right. Okay. Okay. And you referred to a
13 "recommended design criteria" for permanent diversion
14 and stormwater control structures of a 500-year storm
15 event, or storm --

16 A. Yes. That's actually the Nevada requirement
17 in the State of Nevada for --

18 MS. ORTH: Let me remind both of you not to
19 step on the end of the other one's sentence.

20 Go ahead.

21 MR. KUIPERS: Or that was the Nevada
22 Department of Environmental Protection. I'm sorry, I
23 actually lost the train of thought.

24 MS. ORTH: I'm sorry.

25 Q. (By Mr. Stein) And in the 200-year --

1 A. Yes, the 500-year comes from their Nevada
2 regulations, looking at those critical structures. The
3 200-year is something that I have seen predominate over
4 Canada for the last five to ten years. And the
5 Canadian engineers I worked with, the Golder folks in
6 Canada, et cetera, they, in fact, recommend it's a
7 standard to use the 200-year storm criteria there.

8 Q. That's in Canada?

9 A. Yes. And, again, it's for the protection of
10 the features as assets. We don't talk about it as a
11 regulatory standard, but, rather, it's something that
12 the company simply put out there without the regulators
13 meeting to require it because it's the accepted
14 engineering design standard.

15 Q. And that's in Canada, right?

16 A. Yes. And I would just mention, I believe
17 Canada is a little more progressive than the U.S. when
18 it comes to dealing with climate change.

19 Q. And would you be surprised if our conveyance
20 channels were designed to convey a 200-year storm
21 event?

22 A. Well, designed, or had the capacity to, I
23 don't know, but, again, what the document says is it's
24 a 100-year design. It may have the capacity to carry a
25 200-year, I don't know, because the document, to my

1 knowledge, did not provide that information.

2 Q. Okay. Are you aware of reclamation efforts
3 that have been completed at Chino and Tyrone --

4 A. Very aware.

5 Q. Okay. Have they received any reclamation
6 awards for their work, that you are aware of?

7 A. I believe they have.

8 Q. Okay. And would you say that they are -- do
9 you have any idea what their design -- their standard
10 design for their conveyance channels are?

11 A. Yes. Their standard design is 100-year, and
12 there hasn't been an occasion that I have met with them
13 that I have not made the recommendation for 200-year,
14 similarly.

15 Q. But, yet, they have received some reclamation
16 awards for their efforts?

17 A. Yeah. I don't believe their reclamation
18 awards have been for their stormwater channel designs.
19 I think their reclamation awards is for their
20 reclamation. So I don't think we are talking apples
21 and apples for their awards.

22 Q. And you would consider the conveyance
23 channels part of the reclamation?

24 A. Certainly.

25 Q. Okay. Is there currently an accepted,

1 universally accepted, model that protects long-term
2 climate change?

3 A. Absolutely not.

4 MR. STEIN: Okay. That's all the questions I
5 have. Thanks.

6 MS. ORTH: All right. Thank you, Mr. Stein.

7 Are there any others with questions of Mr.
8 Kuipers based on his presentation? Please come up,
9 ma'am, and give us your name first.

10 CROSS-EXAMINATION

11 BY MS. LLOYD-MILLS:

12 Q. I just want to be sure I understand some of
13 the stuff you said. And I want to go back to the
14 500-year cost estimate by BLM.

15 A. (Witness nods head.)

16 Q. I think, and I saw on that slide, you said
17 that the BLM is requiring that; is that right?

18 A. On some sites, yes.

19 Q. On some sites. Did you mention that it was
20 in the 3809 Handbook?

21 A. No, it's not in the 3809 Handbook. I
22 actually, in the statement, have an exhibit that I am
23 providing a statement that provides that guidance from
24 BLM.

25 Q. Okay. So --

1 A. It is not -- that same guidance has never
2 found its way into their BLM Handbook.

3 Q. Okay. So what were you referring to with the
4 3809 Handbook, Section 5.33?

5 A. There, I was referring -- if I went back to
6 that just a second -- now I need to remember where that
7 was. Here we go. So basically, what I said was that
8 the BLM Handbook provides for this information, okay,
9 providing for post-mining monitoring and maintenance
10 and/or treatment, okay? So really, that's all I was
11 referring to for BLM.

12 Q. Okay. So the handbook does not mention the
13 five-year?

14 A. No. So the handbook actually mentions the
15 need to put together a trust fund, et cetera, and the
16 handbook actually, to my knowledge, does not provide
17 years in the 3809 Handbook.

18 Q. That's right.

19 A. Yeah. As I recall, looking at it most
20 recently, it doesn't say "30," "100," or "500."

21 Q. That's right.

22 A. It leaves the point blank. And so you really
23 have to go elsewhere within BLM's guidance to find
24 where they talk about years.

25 Q. So can I have a copy of wherever it says in

1 the BLM --

2 A. Absolutely.

3 Q. Because in that section, Section 6.3 has all
4 the details about the cost estimate, what the cost
5 estimate should look like on their property, but it
6 does not say the five-year period of monitoring.

7 A. So what one has to keep in mind with BLM is
8 they have other guidance that's being developed either
9 statewide or otherwise, and until the BLM Handbook is
10 revised, they don't typically bring that in. So the
11 BLM Handbook is not the only kind of go-to for BLM
12 guidance.

13 Q. Do you think the 100-year monitoring is not
14 enough?

15 A. So let me be clear. It's -- well, what I am
16 saying is financial assurance for 100 years. And the
17 reason I am saying it's not enough is when you look at
18 it, it's basically designed to run out at the end of
19 year 100.

20 So if we have X amount of natural assurance
21 and the interest stays exactly what we predicted,
22 inflation stays exactly where we predicted, we will
23 have exactly enough money to run, in theory, to the
24 last day of the 100th year, but after that, there would
25 be no more money.

1 And if future generations still look at it as
2 an issue, they would need to fund that, most likely,
3 through the public, if the corporation is still not
4 there. So when you look at the actual amount of money
5 calculated, you get very close to what you would need
6 in perpetuity; at 100, not quite there; 500, it really
7 is a flat line. And, again, it typically doesn't add a
8 huge amount, because we are talking net present value,
9 not the actual dollars on the day.

10 Q. Okay. Again, with the monitoring and back
11 with the financial assurance, I just want to mention
12 that Chino reclamation, the feds reclamation was
13 completed in 2010, and so the channel was designed in
14 2010, and there has been no maintenance of it, just so
15 you know.

16 A. And, again, oftentimes, you may not need to
17 do the maintenance until you get the event that
18 actually occurs greater than what the design was.

19 Q. Well, I was here for the NMED hearing also,
20 and I think you had mentioned that Silver City has had
21 back-to-back 500-year storm events.

22 A. Yes. And as you know, I called Mr. Shelley,
23 asked Tom whether or not those events had hit the mine
24 site. He said no. He watched them, but they had not
25 hit the mine site. So I would suggest that if they

1 have hit the mine site, we would, perhaps, have seen a
2 result that was different from what was observed.

3 Q. Do you think without any -- or do you know if
4 we have had any 100-year storm events?

5 A. I don't. I would assume you have, but,
6 again, I am not that familiar with the actual events.

7 MS. LLOYD-MILLS: Okay. So we have had a lot
8 of 100-year storm events between 2010 until now, and we
9 have still not had any maintenance.

10 Thank you.

11 MS. ORTH: All right. Thank you. Anyone
12 else with questions?

13 Sir?

14 CROSS-EXAMINATION

15 BY MR. SWINGLE:

16 Q. It's very confusing hearing your testimony
17 today and hearing your testimony from the prior
18 hearings.

19 What specific requirements from the Mining
20 Act has the mine not achieved?

21 A. It would appear the one particular one is the
22 care and maintenance. Again, they are suggesting that
23 they won't require care and maintenance. I would
24 suggest that they will require care and maintenance,
25 and that's the one specific part of the Mining Act, the

1 allowance for no perpetual care, that I believe is a
2 critical issue in this.

3 Q. Is that a requirement of the regulations now
4 and they just ignored it, they just didn't address it?

5 A. I believe they tried to address it the best
6 they could. I believe it's an insurmountable object,
7 if you will, for them to address despite their best
8 efforts.

9 Q. So they have addressed it, they just have not
10 addressed it to your satisfaction?

11 A. Yeah, to what I believe that the Act intended
12 it to require it to.

13 MR. SWINGLE: Thank you.

14 MS. ORTH: Thank you, Mr. Swingle. Any
15 questions of Mr. Kuipers?

16 Ma'am?

17 CROSS-EXAMINATION

18 BY MS. LILLA:

19 Q. Good morning, Jim.

20 A. Good morning.

21 Q. I have got a couple of questions. I will
22 start on this slide.

23 The last sentence says, "BLM has addressed
24 long-term closure cost and guidance that recommends
25 using a 500-year period." However, just under recent

1 questioning, you also stated, I believe, that that
2 guidance is being developed. So I am confused.

3 Is it developed and approved, or is it being
4 developed right now?

5 A. You would have to ask BLM that question.
6 This particular piece of guidance that I provide in
7 Exhibit B was actually issued by BLM in around 2005.
8 The original source of it was actually a Northwest
9 Mining Association website that I observed it.

10 I have, since then, provided this as an
11 exhibit to numerous legal hearings and others. To my
12 knowledge, BLM has never denied it. At the same time,
13 I have asked numerous times why they have not brought
14 it into the 3809 Handbook. I have not really had a
15 good answer there.

16 What I can tell you is in the last
17 conversations that I have been involved in with BLM
18 outside of the State of Nevada, their regional engineer
19 out of Salt Lake City has said during those
20 conversations that that very guidance I am providing is
21 valid, and is, in fact, accepted as BLM guidance.

22 Now, I don't typically like to testify what
23 somebody else said, but that's all I can simply do in
24 responding to your question.

25 Q. Okay. Thank you. I think I also heard you

1 state that there has never been a company that had a
2 third-party guaranty; that after they lost their, I
3 think, credit rating, that they were ever able to
4 convert to a different type of bond.

5 Did I understand that correctly?

6 A. What I said was that they were able to
7 replace -- or essentially, in response to a request to
8 replace the bond, that a company has -- to my
9 knowledge, I have never seen a company actually be able
10 to do that. They basically come back with the excuse,
11 "Well, now, we don't have the cash."

12 Q. Could we look at the indirect rates table,
13 please?

14 A. Sure.

15 Q. Okay. When looking at this table, I notice
16 that the Copper Flat indirect -- proposed indirect rate
17 and BLM's indirect rate does not have a value for
18 mobilization and demobilization?

19 A. No. As I mentioned, the
20 mobilization/demobilization, in the case of the BLM and
21 the New Mexico Copper Corporation, are both
22 incorporated as part of the direct costs.

23 Q. So if their direct costs, actually, for
24 mobilization for those -- for Copper Flat and BLM, is
25 it true that the proposed 26 percent and BLM's 32

1 percent indirect rate would be applied to that direct
2 mobilization cost?

3 A. I'm sorry, I kind of got confused there.

4 Q. So under the BLM, when they calculate the
5 indirect cost, do they apply that 32 percent to the
6 mobilization direct cost?

7 A. Yes, they do.

8 Q. Okay.

9 A. So the mobilization cost is included as part
10 of the direct cost; the total direct cost is then
11 multiplied by the indirect cost multiplier.

12 Q. And would you expect the proposed Copper
13 Flat's financial assurance estimate to apply this same
14 calculation?

15 A. It does.

16 Q. It does, okay.

17 A. Because both use SRCE.

18 Q. So reality is Copper Flat has actually -- if
19 you were to take their mobilization costs and put it
20 into an indirect, they have actually proposed a higher
21 indirect rate than 26 percent?

22 A. Sure, but similarly, BLM would require a
23 higher percent than 32 percent. So if we compare
24 apples and apples, 26 and 32 isn't an apples-and-apples
25 comparison, because, again, up on the mob and demob,

1 both are in the indirect -- or in the direct costs.

2 Q. But in that same scenario, MMD's indirect
3 cost of 46 percent is not a direct apples-to-apples
4 comparison to the BLM or Copper Flat's proposed
5 indirect rate, either; is that correct?

6 A. No, it's not.

7 Q. Could you talk about how MMD developed their
8 proposed indirect rate, or their draft indirect rate,
9 please?

10 A. No, I can't. I am sure MMD could, but I did
11 not develop that for MMD. I was not involved in their
12 development of it. So no, I can't.

13 Q. Have you reviewed it?

14 A. Yes. And as Mr. Butzier mentioned, I
15 provided extensive comments on it.

16 Q. Did you review the references or the other
17 Agency guidances that were utilized to develop MMD's
18 new guidance?

19 A. I didn't need to review them. I was actually
20 quite familiar with all of them.

21 Q. Is it true that the guidance used three
22 Alaska guidances to influence the indirect rate
23 proposed for New Mexico?

24 A. I know they used -- they took into account
25 Alaska. Exactly how it influenced it, what they did

1 with it, it certainly had a part of it. Again, I was
2 not part of the development. So I don't know exactly
3 how they came to what they came to.

4 Q. Is it true that there are conditions in
5 Alaska mines that don't exist in New Mexico?

6 A. Yeah. And, likewise, there are conditions in
7 New Mexico that don't exist in Alaska.

8 Q. Would you agree that Alaska sites are
9 probably more complex, given that a lot of their sites
10 utilize bringing equipment, materials, people in
11 through like the Bering Sea, fly in/fly out operations,
12 ice highways, which don't exist in New Mexico?

13 A. Anybody who has ever worked or lived in
14 Alaska will tell you that the cost of doing anything in
15 Alaska is appreciably higher for all costs, not just
16 indirect costs, but, also, for direct costs. So it's
17 not an apples and apples.

18 Q. So is it really appropriate to be utilizing
19 Alaska indirect rates to influence New Mexico indirect
20 rates given, as you just stated, Alaska costs,
21 including indirect rates, are significantly higher?

22 A. Again, what you would need to do is take a
23 look at what Alaska has done. In some cases, it makes
24 sense to do something different. For example, mob and
25 demob is certainly different going to an island in the

1 middle of the ocean in Alaska, but, at the same time,
2 administrative costs are not that different. So yes
3 and no.

4 MS. LILLA: That's all I have. Thank you.

5 MS. ORTH: All right. Thank you, Ms. Lilla.

6 Any other questions of Mr. Kuipers based on
7 his presentation? No.

8 Anything further, Mr. De Saillan?

9 MR. De SAILLAN: Nothing further here. Thank
10 you, Hearing Officer.

11 MS. ORTH: All right. Thank you very much,
12 Mr. Kuipers. This seems like a good time for a lunch
13 break. When we return, we will begin with public
14 comment, and then we will return to the ranches'
15 presentation.

16 Mr. Butzier, anything?

17 MR. BUTZIER: I had heard a request that
18 somebody would like an hour-and-a-half this time. I
19 don't know if that's too much.

20 MS. ORTH: For lunch?

21 MR. BUTZIER: For lunch.

22 MS. ORTH: I am not going to object. Is that
23 okay with the rest of you?

24 MR. BUTZIER: Or maybe an hour and 20.

25 MS. ORTH: An hour and 20 would put us at

1 1:15. All right. 1:15.

2 (Lunch recess taken from 11:57 a.m.
3 to 1:24 p.m.)

4 MS. ORTH: We are coming back from the lunch
5 break, and as advertised, I will invite public comment
6 at this time.

7 Is Mr. Bowen still with us? There is Mr.
8 Bowen. So just a few things. We will ask you to be
9 sworn in. We ask that you sit there at that table. If
10 you comment, it is possible you'll be questioned,
11 although I will not invite that questioning. If
12 someone wants to question you, they are going to have
13 to get my attention.

14 If you have already spoken, we are just
15 taking you once. If you want to add something to what
16 you said yesterday, for example, please submit it in
17 writing, and, in any event, if your comment is in
18 writing, the court reporter and I would appreciate
19 having it. And this is the stack here next to the
20 gourds. It's considered just like verbal comment.

21 So with that said, Mr. Bowen, let's swear you
22 in.

23
24
25

1 MICHAEL BOWEN

2 after having been first duly sworn under oath,
3 testified as follows:

4 DIRECT TESTIMONY

5 MR. BOWEN: Thank you, Madam Hearing
6 Officer. I have already given the stenographer a copy
7 of my comments, and my comments will be very similar as
8 they were in the discharge permit hearing. Thank you
9 for the opportunity to be here.

10 My name is Mike Bowen, and I am the Executive
11 Director of the New Mexico Mining Association. The
12 Mining Association currently has about 18 operator
13 members who explore, mine, produce, and refine sand and
14 gravel and other aggregates, coal, copper, humate,
15 industrial minerals, molybdenum, potash, precious
16 metals, and uranium in New Mexico.

17 In addition, the Association has over 70
18 associate members who provide consulting, construction,
19 engineering, drilling, laboratory, legal, reclamation,
20 equipment, fuel, power, chemicals, and other supplies
21 to the New Mexico mining industry.

22 The Association serves as a spokesman for the
23 industry and is active in representing its members and
24 keeping them informed concerning legislation and
25 regulatory developments.

1 It also serves its members on a wide variety
2 of subjects, such as taxation, environmental quality,
3 public lands, health and safety, and education
4 primarily through the expertise of our members and
5 member companies.

6 According to the latest Annual Report
7 published by the Energy, Minerals and Natural Resources
8 Department, in 2016, the mining industry in New Mexico
9 reported production values of more than \$1.7 billion.
10 New Mexico ranges first in the United States in potash
11 production, second in copper production, and 11th in
12 coal production.

13 New Mexico was once a leader in the
14 production of uranium, and still has large uranium
15 resources that may be mined in the future, market
16 conditions permitting.

17 Our total employment in 2016 was just under
18 5,000, with total payrolls over 4330 million. Mining
19 jobs are typically some of the highest-paying and
20 sought-after jobs, particularly in rural areas.

21 Mining creates many additional jobs in the
22 community, as illustrated by the goods and services
23 provided by our associate members and other local goods
24 and services provided to our mine employees.

25 Since most mining operations are located in

1 rural areas, these jobs are critical to the local
2 economies where the mine is operated. Now, minerals
3 are vital to everyday life. All of our electrical
4 energy is supported by mineral production, including
5 electric power generated from coal, uranium, oil and
6 gas, as well as renewable power, such as wind and
7 solar.

8 Potash and other fertilizers are essential to
9 produce our food and our roads, and building for homes
10 and businesses cannot be constructed without
11 aggregates. If these essential minerals are not being
12 produced in New Mexico, they must be produced somewhere
13 else. New Mexico might as well enjoy the economic
14 benefits of mineral production, as well as the everyday
15 benefits that consume minerals.

16 As the legislature said in the Mining Act,
17 the exploration, mining, and extraction of minerals is
18 vital to the welfare of New Mexico. I am impressed by
19 New Mexico Copper Company's plans for the Copper Flat
20 project.

21 New Mexico Copper has worked tirelessly to
22 satisfy the requirements of multiple federal and State
23 agencies, including the Bureau of Land Management, the
24 U.S. Fish and Wildlife Service, the Environment
25 Department, and the Mining and Minerals Division.

1 The mine plans reflect the need to comply
2 with a myriad of environmental protection laws. These
3 plans have taken years to come to fruition at a
4 tremendous cost, representing New Mexico Copper's
5 investment in the development of New Mexico's mineral
6 resources.

7 As I previously discussed, development of New
8 Mexico's mineral resources provides many local and
9 statewide economic benefits and employs many local
10 residents. Issuance of a mining permit for the project
11 will be a great step forward to realizing the important
12 benefits this project will provide in terms of
13 employment, revenue for local and New Mexico
14 businesses, and substantial contributions to State and
15 local tax revenues to support our schools, roads, and
16 other government services.

17 Many years have been spent, and countless
18 dollars spent, for experienced engineers, scientists,
19 and other experts to develop the plans for the Copper
20 Flat project. These plans must comply with a myriad of
21 federal and State laws and regulations imposed on
22 mining projects to ensure protection of public health
23 and safety and the environment.

24 Approving this mining permit will be good for
25 the state and local communities and will send the right

1 message to mining companies that are willing to invest
2 significant resources in promising projects such as the
3 Copper Flat Mine.

4 For these reasons, on behalf of the New
5 Mexico Mining Association, I urge the approval of the
6 mining permit after considering all relevant testimony
7 and comment.

8 Thank you.

9 MS. ORTH: Thank you, Mr. Bowen. Jason
10 Garcia. I also forgot to say, this is not the last
11 opportunity to offer public comment. There will be
12 many more opportunities later this afternoon and this
13 evening. So if Mr. Garcia returns, please let him
14 know.

15 Paul Tooley. Mr. Tooley actually gave me his
16 written comment in case he didn't make it back.

17 Lee Newman.

18 LEE NEWMAN

19 after having been first duly sworn under oath,
20 testified as follows:

21 DIRECT TESTIMONY

22 MR. NEWMAN: My name is Lee Newman. I have a
23 tree farm right below the proposed mine, and according
24 to the mine's own documents, our tree farm is going to
25 be closed down and drive up --

1 MS. ORTH: Mr. Newman, would you please
2 address your comments to me and the court reporter?

3 MR. NEWMAN: Yes.

4 MS. ORTH: Thank you.

5 MR. NEWMAN: So this is a matter of life and
6 death, for me to come and talk here. We are talking
7 about the death of our farm, of our award-winning tree
8 farm that we have been developing for 25 years.

9 It's a solar-powered drip irrigation tree
10 farm that produces about 75,000 trees, and it has
11 annual sales in products of close to \$1 million. And
12 our overall employment is about 35 well-paid employees
13 that we have had -- many of them have worked for us for
14 more than 35 years. We are not talking about 11, we
15 are talking about forever.

16 The mine -- the amount of water the mine will
17 take, just according to their own tables -- now, a wise
18 professor once told me, "Don't argue about the facts."

19 MS. ORTH: Mr. Newman --

20 MR. NEWMAN: So I will just quote right from
21 their own tables here, if I can find them. The amount
22 of water that the mine is going to consume --

23 MS. ORTH: Please, please, face this way.

24 MR. NEWMAN: Okay. It's hard when they are
25 all wanting to hear that way, too.

1 The amount of water that the mine uses is so
2 extraordinary at six million gallons a day. To give a
3 better perspective of it, let's say that the proposed
4 tailings dam that they are going to build of 640 acres,
5 let's say that you were going to go and look at that
6 dam, and what would it look like?

7 Well, it would be a four-mile hike just to
8 walk around the dam. The dam, each foot of water, of
9 poison-contaminated water, in the dam will be over two
10 billion gallons of water per foot.

11 Now, they ask, "Well, that water, if they
12 have a breach, what about the Rio Grande?" Well, from
13 my calculations, yes, it will reach the Rio Grande and
14 more. It will reach El Paso. It will taint the Rio
15 Grande, if they have a breach, and loss of a foot of
16 water, which a foot isn't really that much.

17 The dam is not a protective dam with cement
18 spillways. It's a dam of crushed, deleted,
19 rock-bearing material that is like talcum powder. And
20 I worked on Animas Minerals, helped repair it, and I
21 worked for many of the mining companies. Mining
22 companies put me through college.

23 I worked for Atlas Minerals, I worked for
24 Homestake, I worked for Heckland. All of my friends.
25 Growing up with mining engineers. For me to come and

1 have to speak against mining is like sacrilegious, but
2 I have to do it.

3 I grew up in a mining town. We are fighters
4 in mining towns. We are here to fight for our farm.
5 This is going to flat shut our farm down. According to
6 their own documents, our farm will close.

7 The drawdown on our wells, on our domestic
8 wells, is 40 feet. We can live with that. Our well
9 isn't even that deep. In Animas Creek, the water table
10 is very shallow. Our commercial wells are going to
11 drop between 15 and 30 feet.

12 The artesian -- that will end the artesian
13 water. That will end the whole program of the building
14 of this system that is durable and made to last 50, 100
15 years. I always felt that the system -- and I went --
16 when I set this system up, this irrigation system up, I
17 built my own relays, current relays, to handle the
18 current for 100 years.

19 I overbuilt them. I put in long-term
20 durability pumps. I want, when I am long gone, 50, 100
21 years from now, for kids on a field trip to visit my
22 control room, sit down, the pumps will be humming, the
23 relays will be clicking, everything will still be --
24 that's the way we built it, to last.

25 It's not 11 years. 11 years? Are you

1 kidding? We have not even figured out what to do in 11
2 years. This mine and the corresponding mine dump will
3 -- is in such conflict with recreation.

4 Look at Moab, Utah, one of our star mining
5 communities in the Southwest. The mine dump from the
6 Atlas Minerals Mill is right on the Colorado River.
7 When the big water spills came down the Colorado, the
8 big 100-year storm, and what year was it, '81, it took
9 out part of the tailings dam and spread uranium,
10 radioactive radiation, all the way down to Colorado, to
11 the Sea of Cortez, and into Los Angeles.

12 Okay. At that point, the mill was closed.
13 And at that point, they took the mill down and removed
14 the tailings pond, and the town committed itself. The
15 town was dead after the mines closed in the '70s. I
16 mean, it was booming. Everybody had a good job when I
17 was growing up.

18 In the late '70s, the mines all closed. The
19 town died, went from 7,000 people to two. You couldn't
20 give houses away. New people came along. New
21 administrators, new elected officials, teamed up with
22 the Department of Interior, built recreation
23 facilities.

24 And we see them on TV, the annual Jeep
25 Safari, the trails, the paved trails up the Colorado

1 River. They put their money into recreation. It paid
2 -- the town is a wealthy town now. You go into Moab
3 now, it is a wealthy town. Everyone has good jobs.
4 Everyone is thriving.

5 They all felt the sting of mining. We are
6 all part of mining. So we don't have bitter feelings
7 about it, but the sting is there. We don't have to do
8 that. We can bypass that step of 11 years of good
9 jobs, good -- the mine sounds like they are good
10 people, but 11 years just gives time for the high
11 school kids to get married, maybe have some kids, and
12 then the mines abandon them.

13 This happened in Moab, Utah, Grand Junction,
14 Colorado, Cobalt, Idaho, Grants, New Mexico, all over.
15 When the mines closed, they were allowed to leave their
16 tailings ponds. Every community had trouble with it.
17 They held back in every community.

18 Moab didn't thrive until we moved the
19 tailings ponds and uranium mill from beside the
20 highway. Do we need to make the same mistakes here?
21 Why can't we -- yes, mining is important, but not if
22 it's going to spoil recreation that is -- that has a
23 dollar value, much less, much higher.

24 They have got their charts here which show
25 the effect of the mine on the flows of Animas Creek and

1 the wells of Animas Creek for 100 years. The flows of
2 Animas Creek in 100 years will decrease by 136
3 acre-feet a year.

4 My whole farm, and it's pretty big, uses
5 under 40 feet of -- 40 acre-feet of water a year
6 through the drip systems. 100 years from now, they are
7 going to be depleting the canyon more than all of the
8 farms in the canyon.

9 And what is the value of all the water that
10 they will be appropriating and taking? What is the
11 value of shutting down the farms? What is the value?
12 Where is the value? What are we thinking here? Don't
13 do this to our community. Don't do this to Animas
14 Creek. Don't shut it down.

15 And I have got a lot more to say, but that
16 should be enough. Don't do it.

17 MS. ORTH: Thank you, Mr. Newman.

18 Billy Chappell.

19 BILLY CHAPPELL

20 after having been first duly sworn under oath,
21 testified as follows:

22 DIRECT TESTIMONY

23 MR. CHAPPELL: Right now, I am 56 years old.
24 I bought a place in Caballo 20 years ago. I do, right
25 now, work for Animas Nursery. Now, with the water

1 tables dropping, what's going to happen to my job?
2 What's going to happen to the other people that are
3 working for me?

4 What's going to happen to Animas Creek? I
5 have been coming up here for 20 years. I moved up here
6 two years ago, but Animas Creek has always been a
7 hidden paradise. I have always taken people down
8 there, and they are like amazed of the trees and
9 everything that's growing down there.

10 It's a whole different environment than what
11 we have here. My whole concern is I don't want to see
12 Animas Creek disappear because of someone wanting to
13 make more money, okay? I don't want to see poison
14 going to our groundwater, which goes downstream, which
15 I live in Caballo, which I will be drinking that.

16 I don't want to drink poison. You know, our
17 water is already bad enough. If we have any water left
18 after the mine comes in. My whole concern is I want to
19 see Animas Creek stay as a hidden paradise. I don't
20 want to see it destroyed, and I think the copper mine
21 is going to destroy it.

22 Thank you.

23 MS. ORTH: Thank you, Mr. Chappell.

24 Don Steinnerd.

25

1 DON STEINNERD

2 after having been first duly sworn under oath,
3 testified as follows:

4 DIRECT TESTIMONY.

5 MR. STEINNERD: My name is Don Steinnerd. I
6 live in Socorro, New Mexico. I come down here
7 regularly just to partake in recreational activities.
8 As a concerned citizen, I'd like to say I support the
9 proposed mine.

10 I believe the mine will be a positive impact
11 for the benefit of the area. I believe it is prudent
12 to develop our domestic mineral resources and reduce
13 our dependence on foreign sources. I believe that the
14 proposed mining operation will not bring any harm to
15 the environment.

16 I trust that the Mining -- New Mexico Mining
17 Corporation will operate in a responsible manner, and I
18 believe that in accordance with the government
19 requirements and the regulatory Agencies' review and
20 approvals, I believe that they will be able to operate
21 in such a fashion that they will operate safely, both
22 in the -- in terms of no harm to human life or the
23 environment.

24 I hope that the appropriate federal and State
25 and local agencies will all review these permits and

1 expeditiously review both -- all the comments everybody
2 has given, and I hope they reach a conclusion, and my
3 hope is that this will get approved and that this mine
4 will go in operation as soon as possible.

5 Thank you.

6 MS. ORTH: Thank you, Mr. Steinnerd.

7 Janet Perrone. Mike Easley. Oh, no, said
8 "No comment."

9 Nolan Winkler.

10 NOLAN WINKLER

11 after having been first duly sworn under oath,
12 testified as follows:

13 DIRECT TESTIMONY

14 MR. WINKLER: My name is Nolan Winkler. Can
15 you hear me? Okay.

16 I am Nolan Winkler. I am an artist who has
17 lived in Hillsboro for over 25 years now, and
18 currently, I am also the vice president of the
19 Hillsboro Mutual Domestic Water Consumers'
20 Association.

21 My concern is water. I strongly believe that
22 the mine's claims that they will need 7,000 acre-feet
23 of water annually or more would seriously damage Sierra
24 County and those along the Rio Grande south of us.
25 This 7,000 acre-feet of water usage is actually enough

1 for the annual needs of more than 25,000 residents,
2 which would seem to me to be a much better way to make
3 revenue and get jobs.

4 Also, our county is in a major drought, and
5 has been for years, and is expected to continue to be.
6 Giving the mine access to 7,000 acre-feet of water
7 annually would seriously drain and damage the water and
8 farming supplies in places like Hillsboro, Kingston,
9 Animas Creek, Arrey, Garfield, Hatch, Salem, and every
10 community south along the Rio Grande, into Texas and
11 Mexico.

12 Pollution and lack of water kills, and I
13 don't think we want to take the risk for the few jobs
14 and the few years it might be open. 7,000 acre-feet
15 annually would damage the inflow to the Rio Grande and
16 affect the Interstate Compact between -- Agreement
17 between New Mexico and Texas, which is now under
18 litigation.

19 So I think it's pretty premature to give
20 permits to this mine. Besides water, there is the
21 possible and probable issue of pollution to groundwater
22 surrounding the mine and on down and into the Rio
23 Grande.

24 I do not think this is a good solution for
25 local jobs, our environment, or simply for our

1 lifestyle. New Mexico deserves more than to have an
2 out-of-country corporation, or even an in-country
3 corporation, and I believe this is the second
4 out-of-country corporation to own this mine trying to
5 re -- trying to reopen this mine, coming in to pollute
6 our water and lives for their profit.

7 I also hear that the next country possibly
8 being interested in purchasing the mine from the
9 current Australian-based corporation is in China. I
10 urge those with the power to deny this reopening of a
11 questionable mine, at the very best.

12 At the discharge permit meeting, I spoke of
13 it being premature to grant that permit. I would say
14 the same thing here, until the mine has water and all
15 they need to place. And until New Mexico's issues with
16 Texas has been litigated, our water is too precious to
17 grant for this endeavor.

18 Thank you.

19 MS. ORTH: Thank you very much, Mr. Winkler.

20 Robert Byrd.

21 ROBERT BYRD

22 after having been first duly sworn under oath,
23 testified as follows:

24 DIRECT TESTIMONY

25 MR. BYRD: Good afternoon. My name is Robert

1 Byrd. I am a retired engineer from Las Cruces. I have
2 family from the old Hot Springs area, which is now T or
3 C, and my father graduated from the New Mexico School
4 of Mines. He worked at Magdalena, and later Grants
5 before moving out of state.

6 I was afforded my own educational
7 opportunities, in great part, due to my father's work
8 and opportunities in mining. It is no secret that
9 opportunities for today's youth in Southern New Mexico
10 are seriously limited by a lack of good-paying jobs
11 that invest in the communities, which, in turn, affects
12 the abilities of communities to adequately fund
13 education and pay for infrastructure upkeep. A deadly
14 cycle.

15 Farming is important, but work is generally
16 seasonal and low-paying. Government jobs are good, but
17 may be relocated as political winds shift. New Mexico,
18 with its low education rating, unfortunately, cannot
19 attract its share of high technology.

20 Wind and solar energy may be the future, but
21 how many people does a solar or wind farm actually
22 employ? Tourism, service industry jobs are
23 overwhelmingly minimum wage, and local attractions
24 subject to climate change.

25 The Spaceport, manana. It seems meanwhile,

1 new Spaceport projects are springing up in neighboring
2 states, and even Canada. So why not modern mining? We
3 have the resources that other states don't have, we
4 have access to institutional excellence at New Mexico
5 Tech, we have a willing work force that needs
6 high-paying jobs, and we have opportunities in this
7 project to help strengthen and diversify the local and
8 State economies.

9 Contrary to naysayers who argue that it is a
10 zero-sum activity, modern mining is entirely compatible
11 with tourism, farming, ranching, and high tech.
12 Because we are fortunate to be mineral rich -- mineral
13 resource rich in New Mexico, it makes sense to include
14 modern sustainable mining as a lively component to our
15 economic development.

16 The Fraser Institute, a top-ranked
17 independent Canadian Think Tank, publishes an
18 "Investment Attractiveness Index," which rates states,
19 countries, and regions based on a multi-point survey of
20 mining companies to perceived attractiveness to
21 investment.

22 In other words, places it will focus -- or
23 they will focus activities that may lead potentially to
24 significant investment and job creation. It's latest
25 report in 2017 ranks Finland as the most

1 mining-investment friendly.

2 That Finland, well-known for its high quality
3 of life and educational excellence, earned the top
4 score means that they understand that mineral resource
5 exploitation is a desirable component in their economic
6 development, particularly in the sparsely populated
7 North, where good jobs are also scarce.

8 That Finland is at the forefront of
9 technological innovation also speaks to their
10 understanding and trust in the management of mining,
11 metallurgical, and environmental processes.
12 Environmental awareness in Finland is supported by a
13 highly educated population and clear, concise
14 legislation.

15 For comparison, New Mexico ranked 43rd in
16 this survey, lagging behind such "welcoming"
17 jurisdictions as Russia. And just for general
18 information, Guatemala was in last place.

19 Modern mining is investment-intensive, and
20 countries around the world vie for it. That New Mexico
21 Copper is planning to spend over \$360 million to put a
22 modest-sized mine in operation is a testament to the
23 quality of the project and their faith in the community
24 that supports them and this state.

25 Let's take advantage of this opportunity for

1 the future of our region. I strongly support approval
2 of the necessary permits of the Copper Flat Mine.

3 MS. ORTH: Thank you, Mr. Byrd.

4 Taylor Streit.

5 TAYLOR STREIT

6 after having been first duly sworn under oath,
7 testified as follows:

8 DIRECT TESTIMONY

9 MR. STREIT: My name is Taylor Streit. I
10 live in Caballo. I used to live in Taos for 50 years,
11 and I was very involved with fighting, I guess is the
12 word, the Questa Mine, the moly mine, the
13 second-largest molybdenum mine in the world. It was.
14 It's been closed for awhile.

15 And one of my observations about this mine
16 and the mine out there is back when we were fighting
17 the mine, there weren't many people around. Taos
18 wasn't a happening place. There wasn't much
19 opposition. There were about six of us, matter of
20 fact.

21 And I think that that's kind of, from my
22 observation, a big factor here, is that there is no
23 people around so things can happen. I mean, you
24 wouldn't get this mine to happen in Northern New Mexico
25 now.

1 And so I live on the lake, and I have
2 deferred from my written testimony here. This is
3 something I wrote hoping to get published. I sent it
4 to a few places. I don't know if it's -- anybody has
5 published it yet, I have not heard, but like an op-ed
6 and a couple of other things -- because there has been
7 so little press about this mine, and I think that that,
8 again, reflects to the fact that it's so isolated.

9 In 1981, the mine in Questa went underground,
10 and it made a huge push, and it was -- in various
11 ways. There was a pipeline that broke, and there were
12 other things that happened, and it pretty much
13 devastated the Red River.

14 And I am in the fishing business. I am in
15 the -- I had a fly fishing business in Taos, and --
16 called "Taos Fly Shop" -- but it pretty much went under
17 during that period, or at least fishing in the Red
18 River in the Rio Grande did.

19 And the mine has been closed now for, I don't
20 know, 20 years, something like that, a good little
21 while, and -- but there are still effects from that in
22 that the Red River meets the Rio Grande west of Questa,
23 and still, to this day, we find that the larger trout
24 are above the confluence with the Red River because --
25 this is the information that came from the mine, the

1 moly mine, was that the toxic buildup in organs only
2 allowed the trout to live about four years.

3 And so I think that's the case now, or it's
4 better than it was, certainly, but we find the larger
5 trout, when we have guide people fishing, are above the
6 confluence with the Red River on the Rio Grande. So
7 that's where we take a lot of our trips.

8 And fortunately, it's way down in the
9 canyon. At any rate, so I have been through a lot of
10 this with my history up North and here sticking to
11 something that I know, the Animas Creek up above The
12 Ladder Ranch has Rio Grande Cutthroat Trout.

13 It's the southernmost population of Rio
14 Grande Cutthroat Trout in the world, and it's probably
15 the southernmost population of Cutthroat Trout in the
16 world. And from what I understand, when the water
17 starts coming out of the system of the aquifer, it will
18 affect even the upper -- I forget the technical term
19 for it, but I am sure many of you here know -- but it's
20 going to affect that upper portion of the creek which
21 now has Rio Grande Cutthroat Trout.

22 And we hope that that stream has a chance,
23 because in the fire, they died. So these fish were
24 reintroduced. And then, of course, there is the
25 Animas. And I live just a mile from the Animas, and

1 when I have people come, I say, "Look at this paradise
2 that I moved to. You know, we can go cat-fishing, we
3 can go hunting, this and that." It's fabulous, you
4 know.

5 And I -- you know, to somebody I like, I say,
6 "Well, you should come see Animas Valley because it is
7 really something. It is an oasis. It's five degrees
8 cooler. You have got these huge, incredible trees."
9 And those trees are there because they suck water out
10 of the ground that's just a few feet away, but I am
11 pretty sure that would go away if you start drawing
12 water out. At any rate, that's about all I have.

13 Thank you.

14 MS. ORTH: Thank you, Mr. Streit.

15 Sandra Ficklin.

16 SANDRA FICKLIN

17 after having been first duly sworn under oath,
18 testified as follows:

19 DIRECT TESTIMONY

20 MS. FICKLIN: I am Sandra Ficklin. I live in
21 Animas Canyon. It is so interesting that so many
22 people here today are speaking about Animas Canyon and
23 Animas Creek because that's exactly why I am here.

24 I am supposed to be addressing you, right?
25 Sorry. Okay. We reside in the canyon of Animas Creek

1 among the huge, unique sycamore trees, together with
2 many other deciduous trees, including cottonwoods, all
3 of which are dependent on a constant shallow source of
4 water.

5 If the four large production wells are
6 allowed to be continuously pumped, there could be a
7 drawdown in the Animas Alluvial Aquifer significant
8 enough to destroy those shallow-rooted trees. The
9 sycamores are a constant draw for tourists and birders,
10 who come to see our county to study them and provide
11 another source of revenue to our county.

12 Unfortunately, we have a rather shallow well
13 which almost certainly will be affected. According to
14 the EIS study for Alta Gold in 1999, our aquifer is
15 quickly drawn down by up to 20 feet. Alta even offered
16 to drill new wells for whomever was affected.

17 A guest editorial in The Herald on January
18 17th, 2018, asked the rhetorical question several
19 times, "Who needs this water? Who needs this water?
20 Who needs this water?" And they are talking about
21 Animas Creek.

22 My response is, all of us who reside in the
23 Animas Creek area, from Caballo Reservoir west to
24 Hillsboro. For most of us, it is our only source of
25 water, and it is critical to our survival, as well as

1 the survival of all wildlife in the area.

2 With your permission, a short statement from
3 my husband, who couldn't be here?

4 MS. ORTH: Please go ahead.

5 MS. FICKLIN: Thank you. Same subject.

6 MS. ORTH: Tell us his name.

7 MS. FICKLIN: Joseph K. Ficklin.

8 You want me to spell it?

9 MS. ORTH: No. We have got it. Thank you.

10 MS. FICKLIN: Okay. These are comments
11 submitted by Joseph K. Ficklin.

12 Our house and well are situated on the north
13 side of Animas Creek. Directly across the creek from
14 our house, there are three mining company monitoring
15 wells on what in 2012 -- what was, in 2012, known as
16 the "Gaya property." That's G-a-y-a.

17 In the summer of 2012, New Mexico Mining
18 Corporation did a test pumping of the production wells
19 situated less than a mile south of our house to
20 determine if there was an anomaly in the monitoring
21 wells during the pumping.

22 Joe asked a company rep for a copy of the log
23 from those wells taken during the pumping. The rep
24 said that that was proprietary information and that he
25 would have to obtain permission to give us those logs

1 and that he would get back to Joe one way or another.
2 We never heard from him again.

3 Earlier testimony stated that there were
4 hundreds of mines in that part of Sierra County, but
5 this is a strip pit mining operation, more damaging to
6 the environment than all of those underground mines.

7 The EIS reported that the level of the
8 Palomas Basin Aquifer may be lowered by 20 feet. That
9 aquifer underlies the Animas Alluvial Aquifer. Our
10 concern is what effect that drawdown of the Palomas
11 Basin Aquifer might have on our well, which is in the
12 Animas Alluvial Aquifer. Further, will that drawdown
13 deny water to the sycamores on the Animas, effectively
14 killing them?

15 Thank you.

16 MS. ORTH: Thank you very much, Ms. Ficklin.

17 Is there anyone else who would like to offer
18 public comment at this time? Again, this is not your
19 last opportunity. If anyone has changed their mind who
20 didn't speak earlier, I am happy to take your
21 comments. If not, we will return to the ranches'
22 presentation.

23 Do we need a short break?

24 MR. De SAILLAN: Yes, I think probably, we
25 do. Thank you.

1 MS. ORTH: All right. Short break. Five
2 minutes or so.

3 (Recess taken from 2:08 to 2:14 p.m.)

4 MS. ORTH: All right. We are coming back
5 from the break now. We have Dr. Myers at the table.

6 Mr. De Saillan?

7 MR. De SAILLAN: Thank you, Madam Hearing
8 Officer. Our next presentation is from Dr. Tom Myers.

9 TOM MYERS, Ph.D.

10 after having been first duly sworn under oath,
11 testified as follows:

12 DIRECT TESTIMONY

13 DR. MYERS: Good afternoon, Ms. Orth, and
14 everyone else around here. So here we are, the last
15 one, I hope. My name is Tom Myers. I am a hydrologic
16 consultant. I am based in Reno, Nevada.

17 I don't have a slide-show for
18 qualifications. I thought I would just mention a
19 couple of things. I have a Ph.D. in hydrogeology,
20 about 25 years of experience consulting work in
21 hydrogeology, 35 years overall specialty in mining
22 issues and energy natural gas development issues.

23 My specialty in hydrology has been
24 groundwater modeling and transport and just general
25 hydrogeology. During that time, I have published two

1 peer-reviewed journal articles that are specific to
2 mining and that involve groundwater modeling and
3 contaminant transport. And they are listed in my CV,
4 which I believe will be part of one of our submittals.

5 My clients, over the years, have been a few
6 -- quite a few for governmental organizations,
7 conservation groups, County and State governments, and
8 other entities. We have written testimony that will be
9 submitted.

10 I'm going to just summarize fairly generally
11 -- and specifically in some instances -- what that
12 written testimony is, but I will say that a lot of my
13 focus is on the concept in the regulations of
14 hydrologic balance, which I did not actually find a
15 definition for in the regulations.

16 And I noticed that even NMCC's, New Mexico
17 Copper's, reports mention that there is not a
18 definition of "hydrologic balance," either. When I
19 think of hydrologic balance, I think in terms of water
20 balance, quantity issues, amounts of water in, amounts
21 of water out, and the specifics of the documents have
22 been more issues on more of a consideration of water
23 quality. Now, I will note that most of the numbers in
24 almost everything I present here does come directly
25 from New Mexico Copper reports.

1 A basic overview of what I want to talk
2 about. First off, pit dewatering and drawdown at the
3 pit will have a huge impact on the hydrologic balance
4 of the groundwater in the area.

5 Second, pit dewatering will dry the alluvium
6 in the Grayback Arroyo, and production pumping for the
7 mine will substantially decrease water inflow into the
8 Caballo Reservoir portion of the Rio Grande and
9 decrease flow in Las Animas Creek and from flowing
10 wells near Las Animas Creek and Percha Creek.

11 The long-term water quality in the pit lake
12 will violate water -- surface water quality standards
13 and leave too poor of a quality for wildlife and
14 aquatic life beneficial uses, which I believe is
15 planned for the pit lake in the long term.

16 The lack of a liner system under the waste
17 rock piles, which is based on the largely unsupported
18 assumption that the underlying andesite bedrock is very
19 low permeability, will allow potentially contaminated
20 seepage into the groundwater, and the failure to
21 consider leaks from the tailings storage facility
22 ignores the potential for large amounts of contaminated
23 seepage into the groundwater.

24 And then finally, I will show how these
25 factors will significantly impact The Ladder Ranch and

1 the Hillsboro Pitchfork Ranch. And the references I
2 use throughout are listed on the last slide here.

3 I want to start off with just a general
4 overview of the area. From a hydrologic perspective,
5 there is really almost two sections of the project
6 area. You have the project area, which I am pointing
7 at now on the western side here. You can see the
8 permit area boundary and the different mine facilities
9 within here. A large portion of this is developed in
10 bedrock.

11 The tailings facility is this purplish color,
12 and it's actually developed over Santa Fe Group, but
13 importantly, for the hydrologic balance discussion, the
14 production water that will be used at this facility
15 comes from four production wells that are approximately
16 six miles east of the mine site, and they are
17 approximately one mile from Las Animas Creek.

18 So the water gets pumped in this area and
19 moved up to the mine site for production. Pit
20 dewatering and long-term pit lake development will have
21 large effects in the hydrologic balance of the pit
22 area.

23 This first slide just sort of establishes the
24 existing conditions in the area. The mine pit will
25 occur -- well, first off, there is a north/south zone

1 of bedrock, with crystalline bedrock in the middle here
2 in the green where the project area is with sediment
3 there, with more of a sedimentary rock in the blue
4 north and south.

5 East of that is the Palomas Basin, and the
6 orange color represents the Santa Fe Group, which is a
7 higher-conductivity formation than is the greenish area
8 here. And I will mention off and on throughout my
9 presentation the andesite and monzonite rock, and that
10 is what is found in this greenish area around the
11 permit boundary.

12 Now, the slide on the right shows existing --
13 or I guess -- I think it's 2011 water table contours
14 near the mine site. You can see the permit boundary
15 outlined here, with the mine pit being in the far west
16 end of the permit boundary.

17 You should notice that the water table forms
18 south of a ridge, or almost a plateau, with fairly
19 steep slope to the north and a steep slope to the
20 south. The gradient to the north is basically showing
21 water flows toward the Las Animas Creek, which is just
22 off -- I guess it's right there in the upper right-hand
23 corner of this side, and to the south, it flows towards
24 Percha Creek, but at the mine site, itself, it is
25 relatively flat -- or excuse me, relatively -- yeah,

1 flat on a north/south basis, with a slope to the east.

2 Now, I will note that the pit right there,
3 it's hard to see on this particular slide or in this
4 drawing, but there is a closed contour around the pit,
5 which represents the current drawdown caused by the
6 very small pit lake that currently exists at the site,
7 and that causes a capture zone wherein water flowing
8 from west to east is drawn into that pit from which it
9 evaporates at this time.

10 Now, this slide, on slide five, is from the
11 Probable Hydrologic Consequences Report, and it shows
12 the projected drawdown due to mine dewatering. You can
13 see that it is centered on the west end of the mine
14 permit boundary, and the close contours there, where
15 you can see the number 300, is about where the future
16 lake pit would be.

17 This shows that the drawdown, at least based
18 on the one-foot contour, is approximately four miles
19 north to south, about three miles east to west. I'd
20 like to point out that this is based on numerical
21 modeling using a groundwater model that -- and if the
22 andesite area was modeled with a slightly higher
23 conductivity, I believe -- I mean, if there are reasons
24 that it should be modeled with a higher conductivity,
25 this dewatering cone could go further -- could go

1 further north and south away from the mine pit.

2 Now, if you superimpose the drawdown that I
3 showed in the previous slide on top of the potential
4 geometric surface -- or excuse me, the water table that
5 I showed two slides ago -- you could then show how much
6 the capture zone would increase.

7 Unfortunately, none of the documents actually
8 show the projected water table in the future. So what
9 I have done here is I have blown up the water table
10 drawing from two slides back and the drawdown from the
11 previous slide, and if you can just visualize imposing
12 this drawdown on this water table, essentially, what
13 that means is if you look at a given point on the water
14 table map and see what the drawdown is, that's how much
15 lower the water table would be.

16 I mean, this is not all a drawdown cone.
17 This is an area of drawdown. Some of the area north of
18 the mine will continue to slope away from the mine even
19 though it experiences a drawdown. There will be --
20 although the slope toward Las Animas Creek will be
21 decreased somewhat substantially, meaning if the slope
22 of the groundwater table is decreased, the flow towards
23 Las Animas Creek will also decrease.

24 And I will mention that again in a couple of
25 slides. The point that I am trying to get to here is

1 that the capture zone that we saw on the previous slide
2 as being -- based just on that little tiny circle
3 closed contour right there, if we could actually redraw
4 this with this superimposed on it, it would be a much
5 larger capture zone.

6 And that's important, because what it means
7 is that more water, more groundwater flowing from west
8 to east will be drawn toward the pit in the future both
9 during operations, during dewatering, and then in
10 perpetuity toward the pit lake, which I will point out
11 that there is no drawing of drawdown in any of the
12 documents for what that drawdown will look like 100
13 years out, a thousand years out. It would be really
14 nice to see that.

15 So evaporation from the pit lake is lost to
16 the aquifer, and it's lost to the hydrologic balance.
17 The existing pit lake loses an estimated 20 acre-feet
18 per year, I believe is the number that I have seen in
19 the different documents.

20 The future pit lake will lose about 93
21 acre-feet per year. So that's essentially saying that
22 the additional loss from the aquifer in perpetuity, 70
23 acre-feet per year. That is due to that large increase
24 capture zone.

25 Its water that is currently flowing east to

1 west down into the Palomas Basin and towards the
2 Caballo Reservoir is being drawn toward the pit, and
3 ultimately, the discharge point is evaporation from the
4 pit lake.

5 To my knowledge, New Mexico Copper has not
6 attempted to minimize this loss. The only way to get
7 rid of this loss would be to backfill the pit, but I am
8 not sure that they have done anything to attempt to
9 minimize that loss.

10 Dewatering -- I am up to slide eight now.
11 Dewatering of the pit and development of the pit lake
12 will divert groundwater flow from Las Animas Creek and
13 Percha Creek. That was the -- I mentioned this two
14 slides ago, as you lower the -- impose a drawdown on
15 this water table right in here, it will be -- this
16 water table will be hundreds of feet lower around the
17 mine, and it will be lower for some distance out here,
18 but it will not be reversed.

19 The gradient toward Las Animas Creek and
20 toward Percha Creek on the south will be lessened, and
21 there will be less flow going in that direction. It's
22 just a simple mass bounds. It has to be -- I mean,
23 it's a simple application of Darcy's law, meaning that
24 the flow will go down as a result of the gradient going
25 down, and it will eventually -- that 73 acre-feet has

1 to come from somewhere, and some of it will be lost to
2 Las Animas and to Percha Creek.

3 So summarizing the three points I just made
4 on dewatering and pit lake development, drawdown will
5 vastly expand the capture zone and decrease groundwater
6 flow to the Palomas Basin and Caballo Reservoir. Pit
7 lake evaporation will cost the basin an additional 73
8 acre-feet per year, and dewatering will divert flow
9 from Las Animas Creek and Percha Creek.

10 The second point I had listed up front was
11 the dewatering will affect groundwater flow through the
12 Grayback Arroyo alluvium, thereby dewatering hydric
13 soils and limiting water for riparian vegetation.

14 This figure, which is from one of the
15 abatement reports from 2013, shows that existing
16 groundwater levels in the underlying andesite are
17 higher than in the alluvium of the Grayback Arroyo.
18 That can be seen by looking at these contours right
19 here.

20 And when you see crenulations in the water
21 table, that is showing the water is flowing toward the
22 creek, or toward the alluvium in this area, and that is
23 primarily due to well -- I mean, that's primarily
24 identified by Well GWQ-5R, which is not really visible
25 in this figure, but it lies right in the middle, and

1 that particular well had a static water level higher
2 than the water level in the alluvium within the
3 Grayback Arroyo.

4 So if you dewater the andesite, you'll lower
5 the water table at that point, and you'll decrease the
6 discharge or any flow that could be occurring from
7 andesite into the Grayback Arroyo.

8 My third -- the third point. Project water
9 supply pumping will significantly reduce groundwater
10 flow to the Rio Grande system. Just a few -- I will go
11 over a few tables and just show what the projected
12 pumping will be.

13 Projected water supply pumping would remove
14 almost 74,000 acre-feet of groundwater over 25 years
15 for construction, startup, operations, the rapid-fill
16 of the pit, and for reclamation. The majority of this
17 water would be used for production during the 11.5
18 years of operation, with production pumping exceeding
19 6,000 acre-feet per year, and approximately 2200
20 acre-feet would be used during six months of
21 rapid-fill.

22 Now, I'm going to show these two tables from
23 the Probable Hydrologic Consequences Report. The one
24 on -- the table on the left is Table 2.1. It shows
25 that the pumping duration, they say it's 23 years, but

1 when you consider the table of the year-to-year
2 pumping, most of the pumping -- you know, saying it's
3 23 years, when several of the years only have ten or 15
4 or six or five acre-feet of pumping, it's really more
5 the pumping occurs primarily between year two and year
6 14, or over about a 12-year period 12.

7 The average annual pumping rate here says
8 3211 acre-feet, but it's really over 6,000 for 12
9 years. As one can see on the annual pumping schedule
10 on the far right, there would be approximately a little
11 over 6,000 acre-feet of water pumped for operations
12 each year up until the last year of operations, at
13 which point, you would have 2200 feet of rapid-fill.

14 Now, if you recall the second -- one of the
15 first slides I showed, the production wells are six
16 miles east of the mine permit boundary, and they would
17 be encircled by -- well, this figure shows drawdown as
18 a -- in the Santa Fe Group aquifer as a result of
19 production pumping and its projected end of mining
20 groundwater.

21 So I believe it's -- at 12 years, I believe
22 it's at the maximum point just after rapid-fill. You
23 can see a 60-foot drawdown around the production wells,
24 with 40 feet extending to the north just up the Las
25 Animas Creek, and overall, there is about a ten-foot

1 drawdown running about, what is that, about ten miles
2 north/south, and the ten-foot drawdown extends almost
3 to within a mile, mile-and-a-half, of the Caballo
4 Reservoir.

5 The pumping will upset the balance of
6 groundwater flow in the Palomas Basin and discharge
7 into the Caballo Reservoir. As I mentioned, the
8 ten-foot drawdown extends about ten miles north/south.
9 Most of the water drawn from the aquifer -- is drawn
10 from aquifer storage, but pumping also draws some flow
11 from the north, north of the Palomas Basin, or the
12 Palomas Graben, and there is a significant reduction in
13 discharge from the aquifer, with the major impacts
14 occurring over 30 years.

15 So what the figure shows here is that
16 initially, all water pumped is removed from the
17 aquifer, all 6,000 acre-feet is being removed from the
18 aquifer, but as drawdown occurs and as the pumping --
19 and as that drawdown begins to capture discharge to
20 other places, it peaks out. And you'll see that you
21 reduce overall discharge by a little over 3,000
22 acre-feet after approximately 14 years.

23 The amount drawn from the north peaks at
24 about 600 or 700 acre-feet per year here, and then it
25 takes about 30 years -- this 30 years here refers to

1 the fact that things will be back to normal within
2 about 30 years after pumping for the mine operations
3 and for rapid-fill cease.

4 So the previous slide showed -- had this
5 hydrograph on it here showing the overall reduction in
6 discharges. It breaks down, according -- as this
7 almost three different -- approximately a third of the
8 water comes from three different places: One is a
9 decrease in groundwater discharge to the Rio Grande
10 above Caballo, the other is a reduction in groundwater
11 discharge to the Rio Grande below Caballo, the third is
12 a reduction in the flowing well discharge that is some
13 artesian wells on the downstream ends of both Las
14 Animas and Percha Creek. And that is primarily where
15 the water comes from that makes up the overall loss
16 discharge.

17 So overall, pumping substantially changes the
18 hydrologic balance in the Rio Grande system. Total
19 cumulative change from mining through three months
20 after the rapid-fill, rapid pit refill, would be --
21 well, I will say it, approximately 74,000 acre-feet.

22 The reduction to groundwater in storage,
23 that's water that's removed from storage and would
24 otherwise be the volume of the drawdown, is 42,800
25 acre-feet. The cumulative discharge reduction and flow

1 to the Rio Grande above Caballo dam is about 8,878
2 acre-feet. Below Caballo dam, about 7,504 acre-feet,
3 with a reduction to the flowing wells of a little over
4 9,000 acre-feet.

5 Now, this was straight from the Probable
6 Hydrologic Consequences Report. What wasn't included
7 in that report was what percentage -- you know, what
8 effect that actually has on the river, itself.

9 So if you consider that the total annual
10 discharges to the Rio Grande system from the overall
11 project area averages about 19,373 acre-feet per year,
12 that total loss -- and then when the -- at the peak,
13 the loss to the system is about 3,000 acre-feet.

14 So that's about 15 percent of the discharge
15 -- 15 percent of the discharge to surface water from
16 the project area. That is a substantial impact to
17 surface flows, and, as I understand it, over an
18 appropriated basin.

19 Now, my last comment here says that I have
20 seen no evidence that the agreement, which is talked
21 about in the Probable Hydrologic Consequences Report,
22 an agreement with the Jicarilla Apache Nation to
23 provide water, would adequately offset this loss.

24 And I say that because my understanding is
25 the plan would involve pumping -- would involve putting

1 water into the river at a rate that's been determined
2 by the existing groundwater model, and that's good for
3 -- that's a first cut, but they need to go several
4 steps further and attempt to validate or verify that
5 those flows are what's actually happening.

6 So, I mean, just using the groundwater model
7 to determine when and at what point the water should be
8 added to the Rio Grande to make up these losses doesn't
9 -- you know, may be doing it at a time when it's not
10 efficient, it may not actually make it up, and that's
11 assuming the water actually is available and that they
12 can actually measure the flow reduction to the river.

13 And that becomes a big problem. We are
14 relying on a groundwater model to tell us what the loss
15 is going to be, and we need -- there needs to be a
16 better way to verify that. What the loss is and what
17 the timing of the loss is.

18 Okay. Moving on to the pit lake a little
19 bit. The pit lake water quality will exceed standards
20 for some parameters. I show a couple of Time-series
21 Plots here of sulfate and total dissolved solids,
22 sulfate on the left, and total dissolved solids on the
23 right.

24 And one can see that on the left -- the one
25 on the left is for -- I mean, the lower one, excuse me,

1 the one in the red, is for a reclaimed pit model; the
2 one on -- the upper one is for the unreclaimed pit. So
3 you can -- clearly, pumping the pit does make for
4 better water quality initially, but it will continue to
5 get worse, and they have only modeled that up to 100
6 years.

7 Evapoconcentration will cause these values to
8 get worse and worse and worse. The table I show here
9 at the bottom is just a comparison of surface water
10 quality standards that I got from the Draft
11 Environmental Impact Statement with what the projected
12 values in the pit lake at 100 years is.

13 And one can see that these exceed a lot of
14 the different standards. And the two -- like for
15 Cadmium here, I show 1.22/5.38. That is an acute
16 standard on -- excuse me, that should be -- I
17 apologize.

18 It should say chronic on the left, acute on
19 the right, because the higher value -- acute means that
20 it's very quickly toxic, and the chronic on the left is
21 something that's toxic to -- you know, toxic over a
22 time period.

23 I apologize that I have that table backwards,
24 but it shows the values, and one could compare them to
25 the pit lake. This pit lake is not going to be

1 suitable as wildlife habitat, you can see, compared to
2 selenium, you can compare 33 to five. Mercury, it will
3 exceed the mercury -- wildlife habitat mercury
4 standard.

5 Now, I have noticed the application seems to
6 suggest that the standard that's going to be compared
7 to is the existing pit lake, and, you know, what we
8 have is an existing pit lake that's 70 acre-feet, plus
9 or minus, some at five acres, and a future pit lake
10 that's 2200 acre-feet.

11 The future pit lake will be 31 times larger
12 than the existing pit lake, and somehow suggesting that
13 the existing is a baseline for the future, especially
14 in a mine that is being considered in this application
15 as a new mine, I mean, the technical term is "absurd."
16 I just don't -- it just seems that that is way too -- I
17 mean, it's a completely different situation. You can't
18 compare the apples from this pit to the oranges in the
19 previous one, quite honestly.

20 My fifth point, the tailings storage facility
21 and waste rock stockpiles will be a source of
22 contamination. Initially -- all right. The
23 application -- and this is also in the -- I see I
24 didn't change my slide from the discharge permit
25 application, but essentially, it's the same thing in

1 the permit application for MMD, is that there is no
2 discussion of the potential for leaks or estimates of
3 leak rates.

4 It's in the Probable Hydrologic Consequences
5 Report that there are estimates of flow through pinhole
6 leaks. I am just going to note that significant tears
7 and leaks have been observed to occur frequently and
8 that the application does not estimate the amount of
9 potential leaks or consider their fate at this site.

10 Now, NMCC proposes to not use a liner under
11 the waste rock because of claims that the andesite
12 permeability affecting seepage into the ground is --
13 NMCC proposes not to use a liner under the waste rock
14 because of claims that the andesite permeability
15 affecting seepage into the ground is less than
16 ten-to-the-minus-six centimeters per second.

17 I have six reasons why that -- that suggest
18 that may not be correct. First, there was a pressure
19 injection test that shows low permeability may have
20 been misinterpreted and it's not representative;
21 second, there are seven supply wells in the area that
22 were developed in andesite that indicate that andesite
23 conductivity could be high enough to produce a water
24 supply; third, one of the wells shows changes in
25 chemistry that could only occur with substantial

1 groundwater flow; fourth, the mine dewatering during
2 the 1982 operation showed the conductivity of the
3 central bedrock core is 66 to 110 times the rate
4 assumed for bedrock; fifth, scale effects of
5 conductivity measurements suggest that the conductivity
6 would be three orders of magnitude higher. And this
7 one actually goes together with the previous one,
8 because the larger the bed of rock you consider, the
9 higher the conductivity is. And then sixth, the waste
10 rock seepage reaches the ground surface in a manner
11 more conducive to infiltration than occurs during
12 natural events.

13 Now, I have a slide for each of these. Well
14 GWQ-5R was tested from a pressure injection test, and
15 basically, the pressure injection test is designed to
16 determine the conductivity based upon injection rate
17 into a borehole under pressure.

18 I'm not going to go through the details of
19 this particular test here other than to note that my
20 written testimony actually goes into quite a lot of
21 detail on this specific item here, but it's a very
22 complicated and difficult thing to explain orally, but
23 I will note that the pressure injection test was
24 completed at 64 to 100 feet below ground surface and
25 below the water table and that when you go through the

1 numbers that are applied in these figures over here,
2 you end up estimating a permeability or conductivity of
3 anywhere from 5.2-times-ten-to-the-minus-seven to
4 1.3-times-ten-to-the-minus-six.

5 So just the one test includes a range that is
6 higher than the ten-to-the-minus-six centimeters per
7 second, not a great deal higher, but it's a little bit
8 higher. And I also wanted to note at this point that
9 in a lot of documents I have reviewed, there is a
10 reference to two or three other wells that have been
11 tested over time.

12 There is a groundwater pumping, or a slug
13 test, at a couple of other wells developed in
14 andesite. The reason I don't discuss these is that I
15 have never seen a reference that actually takes me to
16 the analysis of those wells. I have seen them
17 referenced and a number given, but I have never been
18 able to review the actual data for the slug test. So I
19 am not discussing those specifically.

20 The seven andesite water supply wells, I
21 realize that this table is unreadable on here, but the
22 point -- but it's a table that has been provided in one
23 of the abatement -- Sulfate Abatement Reports from
24 2011.

25 And it lists seven supply wells: GWQ-4,

1 GWQ-6(N), GWQ-6(S), the Pague Well, the Dolores Well,
2 Paxton Well, and LRG-4156. All are developed in
3 andesite, all are less than 150 feet deep, and three
4 are less than 50 feet deep.

5 And while they are labeled "supply wells,"
6 there is no evidence as to how much they produced, and
7 there may be evidence a couple of them are perched.
8 That doesn't really matter. The issue is permeability,
9 not whether it's developing water from a regional
10 andesite well.

11 So the fact that -- I mean, if they are
12 called "supply wells," there needs to be better --
13 really good evidence that they were not used as a
14 supply well at some point. So there is at least
15 evidence that suggests that there could be higher
16 conductivity in some or all of these andesite wells.

17 Third, Well GWQ96-22 is fully developed in
18 andesite, and it lies west of the pit. This figure
19 shows that the chemistry in that well has changed a lot
20 over time, and that would only occur if a fair amount
21 of water was moving through the pit -- or moving
22 through that well, which I do not believe would occur
23 at the flat gradient that occurs at this site at a
24 ten-to-the-minus-six conductivity.

25 That, literally, over the period of time we

1 are talking here, this is July '96 through July of
2 2010, the water -- only a few tens of feet of water
3 would have actually -- the Darcy philosophy is only a
4 few tens of feet of water through this area. And so
5 for it to have changed that much suggests that the
6 conductivity has to be a lot higher than
7 ten-to-the-minus-six.

8 The low permeability. Andesite is not
9 reflected in the 1982 mine dewatering. I have shown --
10 this figure here I have shown before. This shows that
11 central bedrock area around the pit, which is there on
12 the west side of the permit boundary; the cross-section
13 shows that the pit is developed within this large plug
14 of monzonite in the middle, and then andesite around
15 it.

16 So it's fair to say that any water that flows
17 toward that pit and is evaporated from the pit has to
18 flow through this bedrock. So there has been a pit
19 lake which is currently, I understand, to be about five
20 acres, but it has varied as high as 14, up to as much
21 as 14 acres. It has evaporated from 16 to 45 gallons
22 per minute, and the estimated groundwater flow toward
23 it is about six to ten gallons per minute.

24 Now, this figure shows measured pit area
25 groundwater levels. It shows some of the same

1 information as some of the previous slides that I have
2 had, but it shows a fair amount of detail in the
3 contours around the pit lake.

4 And what I have done is I have applied
5 Darcy's law, which allows me to calculate conductivity
6 as a basis of the flow rate divided by the area and
7 divided by the gradient. Gradient is I in this case.

8 Now, I have determined that the area that
9 groundwater would flow through to get to the pit lake
10 is about 290,000 square feet. The average gradient
11 coming from the four different directions here, which
12 is laid out on this slide, is approximately .02125 feet
13 per feet.

14 And if you just consider the groundwater
15 inflow, you end up with a conductivity of anywhere from
16 6.6 to 1.4-times-ten-to-the-minus -- I mean,
17 6.6-times-ten-to-the-minus-five to as high as
18 1.1-times-ten-to-the-minus-four centimeters per
19 second.

20 That is a lot higher than
21 ten-to-the-minus-six, but I want to point out, and I'm
22 going to go back to the previous slide to do so, that
23 it applies to a much larger area. I mean, yes, it
24 applies to some monzonite.

25 So I'm not going to say that strictly -- that

1 it is strictly andesite, but it applies to this bedrock
2 plug here, and thus, it is suggesting that it is --
3 well, I think my number was 66 to 110 times higher than
4 the assumed conductivity for andesite. Now, I mean --
5 and so this is a fairly large area.

6 Now, the next concept is just a very general
7 concept in fracture flow and in conductivity, in
8 general, and that is that the effect of conductivity
9 increases as the scale of a measurement increases in
10 the laboratory scale to the regional scale.

11 In other words, if you think a column of -- a
12 sampling taken to the lab, and you determine the
13 conductivity, you're going to get one value, but if you
14 are somehow able to determine the conductivity over the
15 same formation over a much larger area, you're going to
16 get a much higher conductivity.

17 And the reason for that is that basically,
18 the heterogeneities control the scale dependency of K.
19 By "heterogeneities," I am referring to the fact that a
20 large formation is not just a solid rock, or not just a
21 solid gravel. I mean, there are variations.

22 And if you -- everything, all fractured rock,
23 even andesite, has preferred flow pathways that are
24 more frequently encountered as you consider a larger
25 block of the subsurface.

1 In other words, if you just consider a boring
2 a few inches in diameter, 100 feet deep, the chances of
3 you hitting a fracture, when 99 percent of the rock is
4 unfractured, is very low, but if you go to a much
5 larger area, you have a chance of eventually
6 encountering that fracture.

7 And when you -- and the conductivity that is
8 effective for that area is an average of the
9 conductivity in the fracture and in the unfractured
10 rock. So the fractures are both the primary fluid
11 pathways and they are the storage locations for water
12 and contaminants in the system.

13 Now, fracture flow systems have the largest
14 variability of conductivity with measurement volume.
15 And I am providing a slide here, or a picture that
16 comes from a paper that has to do with this very
17 issue.

18 And that particular paper provides dozens --
19 or provides maybe a dozen figures that show how --
20 based on measurements in the field, as the volume of
21 the media considered goes up along the X axis, the
22 effect of conductivity goes up.

23 Now, clearly, unfortunately, they don't have
24 one in this particular andesite, and I have -- this is
25 a -- I mean, I am using the aquifer from that

1 particular -- just as an example. I'm not saying this
2 is an exact analog -- well, actually, I am saying it's
3 an analog of the fractured flow system and the
4 andesite, but these values are probably different.

5 I am most interested in the difference -- in
6 the magnitude of differences, and what one should see
7 is, first off, that ten-to-the-minus-six centimeters
8 per second on this graph corresponds to an area of
9 about one cubic meter.

10 I apologize. And this is hard to see. I
11 hope that on my written testimony, it will be easier to
12 pull that off and look at it, but if you notice,
13 eventually, at some point, it becomes horizontal.

14 That's where you have incorporated -- all of
15 the fractures are being encountered is where the
16 relationship becomes horizontal, and in this case, it
17 becomes horizontal at about ten-to-the-minus-five
18 meters per second, not centimeters per second, and it's
19 about at 500 cubic meters, which is probably a smaller
20 volume than is flowing in toward that pit lake.

21 So based on this relation, the effect of
22 conductivity could be a thousand times greater than the
23 andesite conductivity, but, I mean, again, this is an
24 example of the reason why I am arguing that scale
25 effects need to be considered.

1 And obviously, the area beneath the waste
2 rock pile would include numerous preferred pathways and
3 a much higher conductivity than one borehole, or that
4 you can even get out of four boreholes, if that's what
5 we are using.

6 And then finally, the seepage under a waste
7 rock pile has a much greater chance of recharging. And
8 this goes into -- this sort of goes hand-in-hand with
9 the previous concept of scale.

10 Precipitation enters unreclaimed waste rock,
11 it flows through to the ground surface. The seepage
12 through the waste rock, it reaches a ground surface at
13 a rate much more uniform than natural precipitation,
14 and it would pond, and the seepage would pond. By
15 "ponding," I mean, maybe an eighth of an inch, and
16 then start flowing laterally.

17 The seepage either enters the ground due to
18 that ponding, or it flows laterally to a zone with a
19 higher infiltration capacity, which would be one of
20 these preferred zones that I am referring to in the
21 previous discussion, or eventually reports to the edge
22 of the waste rock.

23 Thus, the average infiltration for waste rock
24 area based on area average, which would be highly
25 affected -- should be based on area average, which

1 would be highly affected by a few fracture/higher
2 conductivity zones.

3 Thus -- then the next thing to consider is
4 simply that stormwater ditches, and especially around
5 Waste Rock Storage Pile Number 3, are not lined, and
6 they are potential sources of contaminants to
7 groundwater.

8 I used this slide in the discharge permit
9 hearing. It shows that there is an impacted stormwater
10 channel around the east and south side of the waste
11 rock storage pile. This cross-sectional diagram shows
12 that it is not lined.

13 Now, one might say, "Well, that's running
14 across andesite well." As you know, at some point,
15 it's going to cross andesite and it's going to hit a
16 zone that's more apt to allow groundwater to -- or
17 allow water to seep into the groundwater.

18 Now, all this stuff can occur, and it can --
19 the contaminants from both the waste rock and tailing
20 sources could reach The Ladder Ranch boundary due to
21 dispersion due to fractures. I mean, less than half a
22 mile downgradient.

23 As you can see, the mine facility is in here,
24 the tailings storage facility is just to the southwest
25 and west of The Ladder Ranch property boundary, with

1 some flow going in this direction, some dispersion and
2 some fractures that could easily get onto The Ladder
3 Ranch.

4 And I believe that this area here is the
5 Avant Pasture, in this lower portion of The Ladder
6 Ranch. And any north-trending fractures will increase
7 the flow toward the ranch.

8 And then as I noted before, the pit lake
9 would draw groundwater from surrounding private lands,
10 it will draw water away from the creeks, and this is a
11 projected post-mining groundwater elevation. One can
12 see that water gets drawn toward the pit.

13 And if you remember, the -- one of the maps
14 that was put up yesterday showing the Hillsboro
15 Pitchfork Ranch, just to the southwest, this is pulling
16 water off of that site and The Ladder Ranch to the
17 north. It's pulling water from The Ladder Ranch, as
18 well.

19 And with that, I think that concludes my
20 testimony.

21 MS. ORTH: All right. Thank you, Dr. Myers.
22 Anything further, Mr. De Saillan?

23 MR. De SAILLAN: Just a couple of points I
24 wanted to make, Madam Hearing Officer. There was a
25 correction, I think, that needed to be made on one of

1 the slides. We will make that correction on the slides
2 that we submit for the record, and we will also make
3 sure that the table and the graph that were a little
4 bit illegible on the slide here, we will get larger
5 copies so people can read that.

6 That's all I have. Thank you.

7 MS. ORTH: Thank you. Mr. Butzier, do you
8 have questions of Dr. Myers?

9 MR. BUTZIER: Ms. Hearing Officer, may I take
10 a few minutes?

11 MS. ORTH: Yes, of course. Let's take five
12 minutes.

13 MR. BUTZIER: Thank you.

14 (Recess taken from 3:03 to 3:19 p.m.)

15 MS. ORTH: We are back after a short break.
16 Mr. Butzier, do you have questions of Dr.
17 Myers?

18 MR. BUTZIER: With your permission, I'd like
19 to have Mike Jones be the one to ask questions.

20 MS. ORTH: All right. Thank you very much.
21 Please go ahead, Mr. Jones.

22 CROSS-EXAMINATION

23 BY MR. JONES:

24 Q. You have several slides discussing the
25 effects on the Rio Grande due to the pumping of the

1 wells.

2 A. Yes.

3 Q. Should the company obtain water rights and
4 retire other water uses in order for this, what would
5 happen to those effects?

6 What would those effects then be?

7 A. It would clearly -- I would have to speculate
8 on the rights you are talking about. When they are
9 applied to the Red River, there is an awful lot of
10 information that has to be known to answer your
11 question.

12 Q. And are you aware that this would be the
13 evaluation the New Mexico State Engineer would perform?

14 A. He would have to consider the water rights,
15 that is correct.

16 Q. Yes, the State Engineer will require the
17 effects to be offset. That is the terminology in New
18 Mexico.

19 Now, if the State Engineer considers the
20 effects to be offset and grants the water rights, what
21 would the effect on the Rio Grande be?

22 A. If he does it perfectly, the effect would be
23 minimal.

24 Q. Thank you. Can you pull up your slide with
25 the pressure injection test results, please?

1 A. I am going the wrong way.

2 Q. Can you explain what these graphs show?

3 A. Well, that's what I was hoping to avoid doing
4 orally, but I can do so. The one on the top is a --
5 shows what the injection rate is in liters -- or
6 gallons per minute for a certain amount of head that is
7 applied.

8 And I will say it, this test has a borehole,
9 and it's collared off between 64 feet below ground
10 surface and 100 feet below ground surface. And so this
11 is -- you maintain a certain pressure, and it is the
12 amount of water that is injected into that zone at that
13 given pressure.

14 And the bottom one then is, I believe, if
15 memory serves, because I can't read it on my screen
16 here, but I believe it's Lugeon, L-u-g-e-o-n, units.
17 And from that, you can convert it to the permeability
18 values based upon the 1.3-times-ten-to-the-minus-five
19 centimeters per second for one Lugeon unit.

20 Q. Now, if the injection rate is zero, what
21 permeability does that imply?

22 A. It implies that it's zero, but I will note
23 that it gets to -- that once you get to 200 feet of
24 head, it becomes -- I'm going to assume that what
25 happened in this test, based on the reading I did of

1 the Shomaker report, from which this comes from, is
2 that once you got to approximately 200 feet, it broke
3 -- it probably broke through, broke -- the best word I
4 can think of is "seal," or the material that's in these
5 fractures, and, therefore, it started, at that point,
6 to -- flow started to go, if you will.

7 Q. So the test began to create permeability in
8 the andesite?

9 A. No. Due to the fact that this is a
10 consistent injection rate, it was a one-time -- to me,
11 it's a one-time -- it appears to be a one-time
12 blockage; that once it got to 200 feet, it broke
13 through, because it continues to inject for, I don't
14 know -- we don't know how long it goes in, but you have
15 got 220, 240, up to 300 feet of head. So no, I
16 disagree, it is not a -- this is not showing zero
17 permeability.

18 Q. If we had only gone to 200 feet of head and
19 not been able to inject any water at all, what would
20 your estimate be then?

21 A. Well, you probably didn't stop at 200 feet, I
22 mean, because the method suggests that you should --
23 you know, that you continue until you get -- you had a
24 blockage in those fractures that are in there.

25 Unfortunately, what is needed with this

1 particular test is that you have a physical exam that
2 shows exactly, you know, where you have gone through,
3 and, you know, maybe a camera or something that allows
4 you, or a gamma test to show where the fractures
5 actually occurred. What we don't know is whether it's
6 over all the whole 36 feet or whether it's one little
7 spot. We just don't know that. So it's really hard to
8 interpret this based on that.

9 Q. More on the andesite.

10 Can you go to the -- go to --

11 A. I am not sure which one you mean.

12 Q. The slide where you calculate permeability
13 based on the historical pit flow.

14 A. Right there.

15 Q. Yes. Now, you are familiar with our model
16 report?

17 A. Oh, yeah.

18 Q. And so you are aware that the model is
19 calibrated to the historical flow to the pit?

20 A. Actually, I do not believe that it is
21 calibrated to the historic flow of the pit because one
22 of the concerns I had with the model is that I do not
23 recall that it actually modeled discharge to that pit,
24 and it did model discharge at a lot of other places. I
25 mean, it did not appear to me as though the calibration

1 was set to discharge. So no, I don't think so.

2 Q. You have mentioned some other supply wells in
3 the andesite.

4 Have you tested -- pump-tested any of your
5 clients' andesite wells to confirm some of your ideas
6 about the high conductivity of andesite?

7 A. No. I believe that would be the company's
8 thing maybe, because they are using -- they are relying
9 on one or two observations, and there's all these other
10 wells out there, you know, that were used as supply
11 wells. That seems like a standard approved -- that
12 should have been part of the application.

13 Q. Have you seen evidence of regional flow
14 through the andesite, of a large-flow system through
15 andesite?

16 A. Have I seen evidence of it? Just in that one
17 slide that shows the change in chemistry. I am not on
18 the site. I have to rely on the -- I am basically
19 having to rely on the reports that have been done by
20 Shomaker and others.

21 Q. All right. The model is calibrated to the
22 historical pit inflows, and accepting that, if you took
23 the model and increase the simulated permeability of
24 andesite by 33 to 100 times, as you suggest, what would
25 the resulting historical pit inflow -- how would that

1 change?

2 A. I believe you would simulate a -- well, if
3 you increase the historic inflow to the pit lake, it
4 would go up.

5 Q. And would, therefore, be incorrect?

6 A. I don't -- well, I'm sorry, this is getting
7 kind of circular, because if you increased the
8 conductivity of the andesite and simulated -- can you
9 ask your question again, please?

10 Q. All right. Given that the model, as it
11 simulates the correct historical groundwater inflow to
12 the open pit, if you were to increase the conductivity
13 in the model of the andesite by 33 to 100 times, how
14 would the simulated historical flow to the open pit
15 look?

16 A. Oh, it would simulate -- assuming that it's
17 calibrated, and that, I don't believe, is the case, but
18 assuming if you did increase it, it would -- it would
19 give you a higher flow.

20 Now, bear in mind, I mean, calibration
21 six-to-ten, that's quite a range to calibrate to, plus
22 the -- it also ranged from -- I believe it's my
23 previous slide. It mentions that the pit lake was from
24 five to 14 acres, was the calibration, supposed
25 calibration, for five to 14 acres. I mean, those are

1 questions that would have to -- you know, that I need
2 to know before I can answer some of the questions you
3 are asking. Sorry.

4 Q. Okay. Do you know what the -- you mentioned
5 taking water out of Grayback Arroyo from the pit.

6 Do you know what the base flow in Grayback
7 Arroyo is, what the perennial flow is in Grayback
8 Arroyo?

9 A. At what point?

10 Q. At the point near the pit.

11 A. I don't remember the exact numbers, no, but I
12 have seen -- you have seen a lot of pictures yesterday
13 from Mr. Dobrott that shows it's a perennial stream. I
14 am aware of that. I don't remember the numbers. I
15 don't know the numbers.

16 Q. Grayback is not a perennial stream.

17 A. I'm sorry, I am mistaking your question. Las
18 Animas Creek. I'm sorry. I mistook, for some reason,
19 the way -- I mistook what you were saying. No,
20 Grayback is not -- I agree with you, it is an ephemeral
21 wash. E-p-h-e-m-e-r-a-l. Sorry. I misunderstood your
22 question.

23 MR. JONES: Okay. That's it.

24 MS. ORTH: Thank you, Mr. Jones.

25 Is there anyone else with questions of Dr.

1 Myers based on his presentation?

2 Anything further, Mr. De Saillan?

3 MR. De SAILLAN: Nothing further, Madam
4 Hearing Officer.

5 MS. ORTH: All right. Thank you very much,
6 Dr. Myers. We will -- I believe then the ranches'
7 presentation is complete?

8 MR. De SAILLAN: That's it. We are finished.

9 MS. ORTH: We are finished. So I believe we
10 will return then to individual public comment, and the
11 first gentleman we will hear from is Jason Garcia.

12 JASON GARCIA

13 after having been first duly sworn under oath,
14 testified as follows:

15 DIRECT TESTIMONY

16 MR. GARCIA: My name is Jason Garcia. I am
17 45 years old. Okay. I am a lifelong resident of
18 Sierra County, graduated from Hot Springs High School
19 in 1991, and I am one of the very few that have been
20 able to come back to my hometown and find employment in
21 the sense that it can support my family in the area.

22 So THEMAC and the Copper Flat Mine, I
23 followed it for the last ten years that they have been
24 having meetings and the potential of what it could
25 bring to Sierra County.

1 Now, I have sat back and I have been
2 non-partial for most of the time because you want to
3 hear all sides of -- all sides of the story here.
4 However, I think that THEMAC and Copper Flat Mine have
5 gone above and beyond and have identified more than due
6 diligence as far as what they are bringing to the
7 area.

8 Now, with that being said, I think that with
9 the opening of the mine, the positive ripple effect is
10 going to be far beyond Sierra County. I mean, we have
11 Socorro, which is north of us by about an hour, and
12 they have New Mexico Tech, which is the School of
13 Mining and Technology.

14 Those folks will not have an availability to
15 look for jobs down this way, as well as Sierra County
16 residents. I just can't believe that we are at a point
17 in time in our lives that with the magnitude of what
18 this can bring to Sierra County that it's such an
19 argument.

20 This can better the lives of so many people
21 in the area, and it can bring so many people to the
22 area to make this more of a viable area as far as
23 sustainability for everybody that wants to be in a
24 place like this.

25 I mean, it's a beautiful town, great place to

1 live, great place to raise a family, and for my
2 purposes, I hope I can retire here, and, you know, have
3 my grandkids come visit me down this way, but I do have
4 kids, they are in the school system, and for them to
5 have a future, we need this type of industry to come in
6 here, because as you know, in New Mexico, most small
7 towns, such as Sierra County, it counts.

8 They are being choked out by economy,
9 starving economy. I mean, jobs are hard to come by.
10 So Las Cruces, El Paso, Albuquerque, is, for most of
11 the people and up -- I mean, most of my family is in
12 Albuquerque only because there is not sustainable jobs
13 here.

14 So with that being said, I would hope that
15 you would take into account somebody that's been here
16 off and on for the last 45 years to tell you that we
17 need this, and we need this really bad. I mean, the
18 whole county needs it. The whole southern portion of
19 New Mexico needs it.

20 And I think that, like I said, moving
21 forward, I don't have any doubt what THEMAC has
22 identified and has portrayed here as far as what they
23 are doing. And what they are going to do is what's
24 going to happen.

25 So thank you.

1 MS. ORTH: Thank you, Mr. Garcia.
2 Martin Mijal.

3 MARTIN MIJAL
4 after having been first duly sworn under oath,
5 testified as follows:

6 DIRECT TESTIMONY

7 MR. MIJAL: To mine or not to mine, that is
8 the question. Is it nobler to leave the copper in the
9 ground, since any extraction is an insult to the earth,
10 or is the problem of poverty in Sierra County more
11 important?

12 Logic is, number one, our county is one of
13 the poorest in the whole United States, needing jobs;
14 two, the mine offers short-term jobs --

15 MS. ORTH: Mr. Mijal, I'm sorry. The court
16 reporter is having trouble distinguishing your words.

17 MR. MIJAL: Therefore, we should start to
18 mine immediately. Let's get the boom prosperity
19 going. The mine does present unique and compelling
20 evidence that they will not discharge pollution.
21 Number one, the ore body is surrounded by impervious
22 volcanic bedrock; number two, the mine that operated 40
23 years ago has very limited pollution, and that is
24 contained. It is not spreading to the Rio Grande
25 watershed.

1 Therefore, the mine says, "It's perfectly
2 safe. Trust us. We have jobs for 12 years." The
3 ranches and Elephant Butte present information that the
4 above data does not look at the big picture. Number
5 one, the mine assumes that the scientists have explored
6 all of the possibilities where pollution might be
7 leaking. It does present anomalies. What if the
8 engineers are not putting their probes and test wells
9 in the right spot? There is more pollution that hasn't
10 been found.

11 Number two, the data presented by the mine
12 doesn't include all the man-made errors that are common
13 in this massive industrial project. There are 14-plus
14 years for alert, conscientious, and ethical decisions
15 that will have to be made by you, the miners. History
16 clearly shows that disasters happen.

17 Three, another factor to consider is the
18 shocks to the volcanic bedrock from the mining
19 operations. The 1980 mine removed 1.1 million tons of
20 material in three months. The new mine plans to go
21 about 780 feet deep and remove 100 million tons in the
22 12 years of mining.

23 MS. ORTH: Mr. Mijal, again, distinguish your
24 words just a little more slowly.

25 MR. MIJAL: So the math is 52 weeks a year,

1 times 12 years, times three times a week, which is
2 1,872 blasts. All this causes lots of shock and
3 vibration. The mine explosive experts are well-aware
4 of this, and their expertise is to minimize the
5 concussion in the pit and especially not weaken the pit
6 walls.

7 My concern is that in the real world, some of
8 this shock/vibration will affect the bedrock. Any
9 small cracks will get larger, and new cracks can
10 occur. While it's true that this bedrock is
11 impervious, it does have a water table, which does mean
12 rough fissures and cracks are already in it.

13 Over the eons, there could have been a series
14 of volcanic material, each one resting on top of the
15 lower one. Where the new, hot one met the new, cold
16 one, there is a welded seam, and this could be a
17 potential crack with the 12 years and 1,872
18 shocks/concussions.

19 I think it is probable that the blast
20 vibration over the 12 years will exacerbate any
21 weaknesses in the bedrock and cause cracks, which mean
22 the mine pollution gets into our invaluable watershed.
23 The 1980 mine did not blast long enough to encounter
24 this problem.

25 Water and pollution love to disperse. These

1 cracks could lead to Animas Creek watershed and the
2 adjacent ecological areas, as well as the Rio Grande
3 watershed. All of these potential leaks are not
4 visible now; only when we notice that there is a
5 pollution leak, it will be too late to stop it.

6 So number four, the plan said after 14 years,
7 the mine will be out of ore and then it's time to
8 restore the mine site to be pristine and safe for
9 cattle and wildlife. The mine feels 25 years is plenty
10 of time, energy, and money to devote to this, and they
11 will be done.

12 But let's imagine 100 years into the future.
13 The mine tells us that in the year 2130, you'll see a
14 site without any damage and no erosion. They promise
15 their well-designed and well-constructed dams are
16 perfectly intact despite 100 years of nature's violent
17 monsoons, high winds, flash floods, and seismic
18 events.

19 Do you feel confident that their -- holding
20 back toxic tailings next to the Grayback Arroyo is
21 still sound? They think earthen dams are marvelous
22 structures.

23 Let's imagine returning 200 years after mine
24 remediation. The mine insists that we will be truly
25 amazed if their work is still intact. Usually,

1 man-made structures do not have a long life without
2 consistent maintenance.

3 We all know that the desert is the most
4 changeable ecoregion on the planet. There is scarce
5 vegetation; therefore, minimal roots to hold sand,
6 earth, and rocks in place. This is a fantasy the mine
7 is telling us.

8 Nature loves to disperse and scatter, which
9 is not good in the case of toxic mine tailings. What
10 will this site look like in 300 years? The mine claims
11 no maintenance is needed. I can't believe it will be
12 pristine for cattle and wildlife.

13 It's interesting to me that the mine has two
14 unique ecological ranches as neighbors. There are not
15 many ecological, pristine, enhanced, beautiful spots in
16 our beautiful region, and here we have two. Both
17 neighbors restore wildlife.

18 You have heard that mule deer are half the
19 1980 population. The reason is common, lost habitat.
20 The Hillsboro Pitchfork Ranch is deemed a "nursery."
21 Imagine fawn twins being common. This shows that these
22 creatures are thriving.

23 This is a precious and unique area. It seems
24 mule deer are conservative. They don't respond well to
25 man-made industrial scale insults. Why jeopardize this

1 rare and precious area? We have seen the slides of the
2 Animas Creek oasis and the thriving deer families at
3 the stock tank. These are Sierra County treasures.

4 I was surprised to learn that our county
5 benefits greatly from hunting. There are 56 jobs that
6 pay 1,192,000 a year. These special ranch areas are
7 already pristine and vulnerable. They have already
8 been improved and are sustainable if not interfered
9 with by the mine.

10 There is an old story about two brothers.
11 Naturally, the oldest inherits the father's legacy.
12 The eldest is a hunter and returns after a long, active
13 day and is starving.

14 The younger brother has some delicious lentil
15 stew, which I think his mom made for him. The older
16 brother says, "Let me have your food." The younger
17 brother, perhaps being cruel and greedy, says, "Sell me
18 your birthright for this mess of pottage." The eldest
19 says, "Bah. What good is my inheritance when I am
20 starving to death?" That's how Jacob became one of the
21 three patriarchs of the Chosen People of God.

22 Unfortunately, Sierra County is desperate,
23 like the eldest brother. Is the younger brother,
24 Jacob, an exploiter and con man? We went for the
25 prosperity of jobs of the Space Center, even taxing

1 ourselves extra to subsidize the Branson billionaire.

2 We are excited about the NASCAR prosperity.

3 There is also a magnificent proposal from some
4 Floridians to bring new housing and factories to the T
5 or C area. Unfortunately, this is all equally a
6 fantasy.

7 We are so desperate that we gladly exploit
8 ourselves through jobs that don't come. We are
9 vulnerable to con men because we feel the jobs will be
10 real. This mine may be the most feasible source of 15
11 years of jobs, yet our precious birthright of this
12 prime nature is at high risk.

13 Another factor is that I think opening the
14 mine is premature. Technology is developing at a
15 dizzying rate. The current copper extraction is
16 extremely crude. Blow it up, crush and grind it up,
17 mix it with invaluable desert water, et cetera.

18 We are on the cusp of learning how to get the
19 metals out without all the damage that is now used.
20 This is also a win for the mine. They own the site,
21 and if it is opening in the future with less damage to
22 our environment, the price of metals will probably also
23 be higher. The future technologies will extract them
24 with precision and elegance.

25 So here is the story of a wrecked ecosystem

1 because of short-term greed. I may offer another story
2 about the vast grasslands around Las Cruces, New
3 Mexico. For 7,000 years, the grass eaters and humans
4 lived in harmony and sustainability.

5 When the Europeans came, they brought vast
6 herd of cattle. This native grass sustainable
7 ecosystem was ruined in a few years. The subtle and
8 sophisticated intimate relationship between plants and
9 growing medium was disturbed and cannot be reduplicated
10 or restored.

11 Invaders got a boom of economic prosperity,
12 the land is desecrated forever. The 1993 Mining Bill
13 states -- starts with the guiding principle, which are
14 the goals of the law.

15 So any mine must be vital to the purpose to
16 the people of New Mexico. Opening the mine is not
17 vital. Please refuse to permit it. We pay too high a
18 price to have these mine jobs. Once New Mexico is
19 ruined even more, we can't duplicate God's exquisite
20 creation.

21 If this copper mine was in the Elephant Butte
22 Lake area, I think there would be more people with a
23 legitimate concern that any leak of or pollution would
24 ruin Elephant Butte and T or C.

25 So I think we are just putting too much

1 stress on the short-term jobs. Sierra County is full
2 of boom and bust from 1890, the 1880s, and we have
3 prosperity, and then we have ghost towns. So I am
4 against the mine. Right now, anyway, with the current
5 technology.

6 So thanks.

7 MS. ORTH: Thank you, Mr. Mijal.

8 Michael Skidmore.

9 MICHAEL SKIDMORE

10 after having been first duly sworn under oath,
11 testified as follows:

12 DIRECT TESTIMONY

13 MR. SKIDMORE: Can you understand me okay?

14 Thank you. New Mexico is 49th in economy in the United
15 States. We are the second poorest in the nation. Only
16 Mississippi is worse than we are. Sierra County is the
17 sixth worst county out of 33 in New Mexico.

18 The average salary for our county is 16,000 a
19 year. That's just a little over 1300 a month. Imagine
20 the economic boom and prosperity for our county if we
21 had jobs that -- 387 full-time jobs that were three
22 times that amount per household, that would change our
23 economy considerably.

24 THEMAC has shown over and over again their
25 willingness to comply with all environmental

1 regulations, most of which they have already met and
2 are willing to exceed, and our county has a history of
3 mining since the 1880s. So 135 years.

4 The gentleman was speaking about the concerns
5 in the next 100 years. All you have to do is go to
6 Hillsboro and Kingston and look around at the time when
7 mines had no regulations of any kind and you'll see the
8 land is healed, the grass is doing well, water is
9 restored, everything is fine, not any problems left
10 there, and that's when there were no regulations.

11 Today, we have the EPA, which can monitor
12 things completely and continuously, and if any problems
13 do begin to develop, they can certainly shut the mine
14 down at that time.

15 I moved here 35 years ago to Sierra County.
16 I have lived here ever since. My children graduated
17 from school here. And unfortunately, part of them had
18 to move away to find employment. One moved away and
19 then moved back because they felt concern for our
20 county, to improve it.

21 The mine operated once before, and it can do
22 so again. And the environment was safe at that time.
23 Let the operations begin again for the sake of our
24 County's children and for the citizens here. It would
25 be a huge blessing to our community.

1 Thank you.

2 MS. ORTH: Thank you, Mr. Skidmore.

3 Nichole Trushell.

4 NICHOLE TRUSHELL

5 after having been first duly sworn under oath,

6 testified as follows:

7 DIRECT TESTIMONY

8 MS. TRUSHELL: Good afternoon. I'm Nichole
9 Trushell of Kingston. I am a biologist, and I have
10 lived in the Southwest all of my life. As a resident
11 of Kingston, you might wonder why I am concerned. This
12 project is not located in my backyard.

13 I care because if the new Copper Flat Mine
14 operation permit is granted, what else will be in
15 motion for stunning quantities of unreclaimable water
16 to be used, for toxic chemicals to be released from the
17 soils, and for life-supporting waterways to be
18 threatened.

19 Groundwater would likely be impacted, as
20 would Animas Creek, a unique perennial ribbon of life
21 running from the Black Range through our dry
22 landscape. The lives and farms of local people, many
23 of whom have lived along the Animas for decades, could
24 be irreparably damaged.

25 And, of course, the Animas flows into the Rio

1 Grande. Deciding in favor of this permit is wrong.
2 The key reasons for me boil down to three points: One,
3 the toxicity of the massive amount of waste material
4 and its permanence.

5 Serious questions: How can long-term
6 management of a liner be assured? A close friend of
7 ours is in the business, at this point in time, of
8 dealing with liners, and he has spoken to this group
9 about the expected failure of such a liner.

10 Who truly understands the effects of this on
11 the underlying geology? Who will monitor this area and
12 the potential for devastating contamination for
13 generations to come? Who monitors it now? Where are
14 those reports? Who will respond when system failures
15 do inevitably occur? Who will pay the cost for
16 long-term care?

17 Two, the monumental and toxification of
18 precious water. The amounts of water proposed for
19 operational needs are preposterous in a dry
20 environment. I noted that a figure of 2.3 billion
21 gallons of water was requested by NMCC for yearly
22 operations.

23 Unlike municipal water, this water will never
24 directly recharge our groundwater. It cannot. Let's
25 quickly calculate. If an average personal water use

1 is, say, 125 gallons of water a day, which is a
2 moderate amount, this amount of water alone would
3 supply a city of 50,000 people for a year.

4 Third, the economic benefit is short-term and
5 questionable, at best. I hear many speak of jobs,
6 jobs, jobs, as a benefit. We know the difficulty of
7 making a living in Sierra County. My husband drives
8 long distances to make his business work. It is true,
9 it is hard to make a living here.

10 However, a plan that takes water and
11 ultimately jobs of farmers and successful
12 tree-producing business, as well as tourism opportunity
13 of your neighbors, cannot be a just solution to the
14 struggling economy of Sierra County.

15 I would echo the comment that if this was
16 upstream of Elephant Butte, might this be seen a little
17 differently by Truth or Consequences and Elephant
18 Butte? Jobs promised are intermittent, short-term
19 really, and from my understanding, many are already
20 promised to the Jicarilla Apaches. The job argument
21 feels like a con to me, certainly given the fact that
22 the real economic benefit is to a foreign company, not
23 to New Mexico, in the long run.

24 In closing, allowing this project is a
25 decision with effects long into the future - stunningly

1 negative effects. If any of you here have precious
2 family members who do live here or care about your
3 water, you must not grant this permit. The excessive
4 waste and toxic legacy will be yours. The true cost to
5 our water and to the environment of Sierra County is
6 too great. I say no permit.

7 Thank you.

8 MS. ORTH: Thank you, Ms. Trushell.

9 Steve, and I am not sure I am able to read
10 the last name, it might be Morgan.

11 STEVE MORGAN

12 after having been first duly sworn under oath,
13 testified as follows:

14 DIRECT TESTIMONY

15 MR. STEVE MORGAN: Hello. My name is Steve
16 Morgan. I am a landscape architect, and I live in
17 Kingston, New Mexico. I also perform living history
18 performances.

19 Those of you who do not know who Aldo Leopold
20 is, he is considered by many as the most important
21 conservationist of the 20th century because his ideas
22 were so relevant to the environmental issues of his
23 time, as well as to our time.

24 He is also referred to as the "father of the
25 national wilderness system." He wrote the first book

1 on wildlife management for many of our federal
2 agencies, established the science of ecological
3 restoration, and authored The Sand County Almanac in
4 1949, which still inspires many to see the natural
5 world as a community to which they belong.

6 I speak his words here, "We must quit this
7 thinking about decent land use as solely an economic
8 problem. Instead, we should look at each problem in
9 terms of what is ethically and aesthetically right, as
10 well as economically expedient. For a thing is right
11 when it tends to preserve the integrity, stability, and
12 beauty of the biotic community, and it's wrong when it
13 turns otherwise."

14 Someone else who also was very strong about
15 the environmental policy in this country and was
16 responsible for a lot of the expansion of National
17 Forests and cared about the overall picture in this
18 country, instead of the very narrow view seen as
19 economic, and that is Theodore Roosevelt.

20 A quote from Theodore Roosevelt is, "The
21 nation behaves well if it treats the natural resources
22 as assets which it must turn over to the next
23 generation increased and not impaired in value."

24 I strongly believe that if Aldo and Mr.
25 Roosevelt were aware of these current issues, they

1 would both say these words, and, also, remind those
2 around that the total cost of this kind of economic
3 destruction is never fully complete. It's never fully
4 revealed until after the fact.

5 These types of things are pushed forward and
6 are never fully understood by the people who agreed to
7 them because most of us do not look long-term. We look
8 very short-term, which when you are economically
9 deprived, as this county is, that's the way most people
10 live, but those of us that are able to look long-term,
11 it's our responsibility to take that in consideration
12 and make sure that this type of decision is not made
13 based on something very short-term, but with very
14 long-lasting consequences.

15 The amount of New Mexico water that's
16 involved in this and the possibility of catastrophic
17 flooding and the resulting environmental and economic
18 destruction downstream should heavily outweigh the
19 economic benefit, short-term benefit, to a foreign
20 country.

21 I am opposed to granting the New Mexico
22 operation permit for the New Mexico Copper Company. I
23 ask you to truly look long-term and not short-term at
24 this. There are much better ways to do economic
25 development without such incredible destruction to our

1 natural resources, and that's where our focus should
2 be, is more on those natural resources, and bring
3 tourism and that type of economic development that is
4 sustainable, not hit-and-run.

5 Thank you for accepting and considering my
6 concerns and thoughts.

7 MS. ORTH: Thank you, Mr. Morgan. I have
8 read through all the names on the sign-in sheets. Let
9 me ask if anyone has changed their mind who has not yet
10 commented -- thank you very much --

11 MR. STEVE MORGAN: Thank you.

12 MS. ORTH: -- and would like to offer
13 comment. Sir, are you saying yes? All right. Please
14 come up.

15 JEFF CULLUM

16 after having been first duly sworn under oath,
17 testified as follows:

18 DIRECT TESTIMONY

19 MR. CULLUM: Okay. I am not an expert on any
20 of this stuff. So I am just here to -- I am a resident
21 here, and I thought I just have a little story about
22 what I have been through.

23 I was born in Bakersfield, California. My
24 dad and my grandfather worked together. They invented
25 a machine to do automatic hardbanding on drill pipe.

1 They mounted it on a truck. As they grew, they built a
2 shop in Grants, New Mexico.

3 And so my dad really liked it here. So he
4 purchased a ranch up above Reserve. So I came to New
5 Mexico in 1979, moved to Reserve to help my dad on the
6 ranch. Eventually, he sold our business and went
7 full-time into ranching.

8 He passed away about ten years ago. The year
9 before he passed, he was the Cattleman of the Year for
10 New Mexico. I guess they elected him because he was
11 part of the -- or vice president of the Cattle Growers
12 Association, and he -- for all his work he did for
13 ranchers overall.

14 I went to Silver City College in Silver City
15 in 1979, and that's where I met my wife, Mary Ellen
16 Armijo. Her family has lived in this community since
17 before it was a state. After two years of college at
18 Western, they offered a program that was vocational
19 technologies.

20 I was just taking classes, I didn't have a
21 real goal yet, and so I worked part-time for a roofer
22 while I was going to school, and I decided to go into
23 construction technologies and learn how to build
24 houses.

25 After I got going there, I learned that

1 Phelps Dodge had actually worked with the college to
2 set up the program. We had a whole bunch of students
3 there, and they were all people that had been laid off
4 from the mines, because this was back in 1981 and '82,
5 and they provided -- they got them in the program.
6 They bought them all tools.

7 And I went to school with them. I was just
8 an individual who ended up with them here. They were
9 called "CETA," the CETA program. Okay. And so, you
10 know, that was -- okay.

11 So all these guys, they were learning new
12 trades. I graduated in 1983, got married, got my
13 contractor's license, my GB-98, and the housing market
14 in Silver at that time was really slow. I built a new
15 home, and it took awhile to sell, a few months, but at
16 that time, nobody was building homes there because the
17 economy was slow, the mines were shut down, or most of
18 them.

19 So it was only a -- so it sold. And then I
20 did it two more times, just buy a lot and sell it, and
21 they sold right away. So I was looking for more
22 property, and a local realtor, he took me to a property
23 15 miles out of town.

24 And on the way there, we drove past the
25 Tyrone Mine, and I was still pretty young, I didn't

1 quite understand everything, I just remember thinking
2 as we drove past, "Oh, there is a mine out here. I
3 wonder how this will hurt my housing business."

4 And so I just went on buying, you know, and I
5 didn't really question. So the property was four miles
6 south of the mine on Highway 90. My dad helped me.
7 And we purchased the property, and I built my first
8 home. It took a few months, but then it sold.

9 So we subdivided 24 parcels. I built another
10 home. It was slow for the next three homes. Then
11 people started showing up out there. They started
12 showing up at my house. And they would come and knock
13 on my door and say, "I heard you build homes, and I
14 heard you have property for sale."

15 It was all different types. Some were young
16 families, some were retired. All ages were coming. I
17 didn't understand, you know, why people were coming. I
18 was hiring guys from town and teaching -- I was hiring
19 young people and teaching them how to -- you know,
20 teaching them housing trades.

21 And I started hiring more and more
22 subcontractors, and they were bringing new people, and
23 housing was really taking off. The other people were
24 coming out there and buying homes. They were coming
25 from other places just because they saw the activity.

1 So they were coming in there to retire. And
2 what it turned out was I still was pretty young, you
3 know, wasn't -- I didn't watch the news at that time.
4 I stayed out there on my property. But it turned out
5 copper went up, the mines were opened back up, and
6 there were jobs.

7 And these people, a lot of them were related
8 to the mine in some way, or they had family that worked
9 in the mine. There were grandparents that had their
10 kids work at the mine. They wanted to be near their
11 grandkids.

12 So I built -- it just kept on going. People
13 just kept on coming. So I started another subdivision,
14 42 lots, right beside the one, and we had nonstop work
15 out there. I didn't run out of work. I had too many
16 people coming asking me to build homes. I would refer
17 friends of mine.

18 By 2004, I had sold almost everything. And,
19 let's see -- okay. Then they would drift off a little
20 bit, but during the early stages out there, I would
21 have customers that would come out and they would buy a
22 house from me.

23 And they would say they had seen me building
24 another home, and they would be, "No, we don't want
25 more neighbors. We came out here to be away from

1 people. We wanted to be out in the country."

2 And I built another, another, and pretty
3 soon, I would see these people visiting and walking the
4 streets and visiting in their cars. And as it grew and
5 grew and we just kept on building, more people came.
6 The guy that gave me the hardest time about bringing
7 more people in, he stopped me on the road one day and
8 he came and shook my hand.

9 And he said, "I just want to thank you for
10 all the good neighbors you brought out here." And so
11 it was a really good feeling. It was a -- let's see,
12 so as of today, this is still -- it's probably one of
13 the nicest neighborhoods in Grant County.

14 It's just this side of White Signal, four
15 miles from the mine, and it has -- it's full of
16 residents. Everyone takes super good care of their
17 yards. And so it turns out being close to the mine was
18 the best possible thing that could have happened to my
19 business.

20 I was close for people who worked there;
21 people liked being out in the country. Just that was
22 the big drive that brought the jobs in. It was a real
23 good life, you know, 20 years nonstop building. I made
24 a lot of money.

25 And so I started -- I had another project I

1 started once I built it, all out in Hidalgo County. So
2 my wife had majored in physical education at Western,
3 and she waited until our kids were big enough to try to
4 get a job in Silver, and they didn't hire her.

5 So in 2004, the school here offered her a job
6 to come back down to her hometown and teach PE. So we
7 moved here. I didn't realize how much the income from
8 all the people in the mines had helped me, you know,
9 with the construction, and I thought when I moved here,
10 you know, it would be easy to get a house, jobs. You
11 know, it was real easy there.

12 So far, I have not built a single home here,
13 new home, and I now work -- I work in Grant County
14 now. I have a store in -- I still work some in Hidalgo
15 County. I have helped people with jobs here. I worked
16 for free for awhile just to show them I could do
17 concrete, you know, and do everything. And some guys
18 hired me and gave sometimes \$100 for a day's work, you
19 know.

20 So I have three daughters that live here.
21 One is a schoolteacher. And I have two grandkids. And
22 I would like for them to be able to stay here and have
23 their lives go, you know, a little more like ours went
24 for that long stretch. It was, you know, a good
25 stretch, and we are still, you know, living off of some

1 of the money that we made back then.

2 I feel right now, opening this mine is
3 probably the best chance we have to get the ball
4 rolling here. One more thing. Okay. At the store in
5 Hatchita, and I meet people from all over the world
6 almost daily there, I am on the Continental Divide, I
7 am on the walking trail and the bicycling trail, and I
8 tell some people about what we have here, the gold, the
9 silver, and the copper, and they are really envious.

10 They say, "You have that there," you know.
11 So I have been -- I meet these people, but their finish
12 line -- usually, they are bicyclers -- they drive right
13 from Canada to Mexico, and I am their last stop. And
14 so they -- you know, we visit a lot.

15 So after I was there last year and I met them
16 all, I thought I had to do it, too, you know, to see
17 what this was all about. So I rode this year. I went
18 from Canada down to Mexico. It took me just over a
19 month, but it was a huge learning experience.

20 I saw all these towns who were doing really
21 well, super neat. You know, I mean, the buildings, the
22 streets, they had bike trails going from town to town
23 to town. They had a lot going on. And, you know, it
24 was -- I had never been -- traveled very far. This was
25 way further than I had ever been.

1 So I learned a lot. I would like to see this
2 place look more like some of those nicer areas. When I
3 was riding, I would ride sometimes all night long,
4 because it's really cold, and it would rain, and I
5 couldn't stop, you know.

6 And so I really had time to think. I would
7 think really serious. And what I thought most about
8 was, you know, my wife and my kids and my grandkids.
9 And then moving forward, you know, what their lives --
10 I thought about everything in the past.

11 And, I mean, it was 33 days, you know, by
12 myself. And so I just -- for me, I thought about this
13 project, you know, over and over. I rode past the
14 Henderson Mine, I saw the mill was on this side, the
15 water excretion went on this side, and it went under
16 the road where we rode our bicycles.

17 And we didn't seem to -- there were trucks
18 out there. I passed a lot of gravel trucks and other
19 bicyclers all day, too. It's right there on the
20 trail. They seem to be working good together, and the
21 people seemed to be really happy.

22 I think when people do well, they are
23 happier, they treat people better. I didn't run into
24 any negativity all that way. So I hope that we can get
25 this mine approved and get it started. I think it

1 would mean a lot for our future here.

2 So thank you.

3 MS. ORTH: Thank you, Mr. Cullum. Let's see,
4 Mr. Townsend already spoke.

5 Gerald and Susan LaFont, or LaFont.

6 GERALD LaFONT

7 after having been first duly sworn under oath,
8 testified as follows:

9 DIRECT TESTIMONY

10 MR. LaFONT: My name is Gerald LaFont. I am
11 a businessman, and I am 100 percent for business, I
12 don't care what anybody says. I was raised in Prewitt,
13 New Mexico, and one of our local Navajo found uranium.
14 I saw the uranium mines in the Grants area and all, and
15 it was quite an economic boost.

16 Even today, Grants is a bigger town. Of
17 course, there are not any uranium mines anymore. I
18 have been a resident of Elephant Butte for 22 years,
19 and as far as I am concerned, we need businesses. I
20 have got four grandchildren, I have got children. I
21 want them to have at least an ability to make a living,
22 and even though maybe the mine won't be hiring them,
23 but the whole area grows when things happen.

24 And that's the type of person I am. I know
25 that the company will take care of the groundwater and

1 make sure it's right. And you don't have to go very
2 far, especially in this area, to find somebody who will
3 give somebody something.

4 I never saw an area that was so negative in
5 my life. And I love everybody here. And it irritates
6 me when everybody is so negative for just the reason of
7 being negative. So anyway, that's where I come from,
8 and I hope my wife sounds better.

9 SUSAN LaFONT

10 after having been first duly sworn under oath,
11 testified as follows:

12 DIRECT TESTIMONY

13 MS. LaFONT: So my name is Susan LaFont.
14 Yes, the wife of Gerald. And he neglected to say he is
15 a City Councilor from Elephant Butte and has been very
16 passionate for quite a few years as he has been on the
17 City Council.

18 And not only that, he serves on the -- one of
19 the transportation boards, being a City Councilor, and
20 the hospital board, the JPC. So he and I have been
21 aware of many things transpiring in this county since
22 1996, when we moved here, and we had the hotel in
23 Elephant Butte.

24 And then now, we still have -- we sold that
25 in June, after having it for 22 years, and it was very

1 difficult so many years because the economic base here
2 was -- it fluctuated quite a bit. And we still have
3 our Elephant Butte Lake RV Resort, and I will say that
4 during this time when Copper Flat and the group came
5 in, and many times, they stayed at the hotel, and they
6 have utilized our event center at the RV Resort. Maybe
7 people have stayed there, too.

8 So we have already reached some very good
9 business from this group, and everyone that we have
10 ever dealt with from the first start have been very
11 professional. And we have heard many presentations.
12 And the thing that I would like to say is I am not a
13 scientist, and so I can't even begin to say I
14 understand many of the major issues here.

15 However, I have seen so many of their reports
16 and know that they have spent millions and millions of
17 dollars in fulfilling the very stringent requirements
18 of the State of New Mexico, which we understand -- I
19 think there has not been a mine approved for many
20 years, and that with the mining regulations having been
21 redone, revamped, and they are very strict in regard to
22 the environment.

23 And so with the dollars and the experts, the
24 many experts, that THEMAC has hired for the New Mexico
25 Copper Corporation, they have got the expertise, and

1 they have submitted things in exactly the way they were
2 supposed to and have been checking off the list over
3 the years. And I know there have been many of these
4 hearings, as well.

5 So then I would put a lot of this back on to
6 the mining authority in the State of New Mexico. They
7 are going to take all of this information -- and we
8 have got to put some trust in them, too, that these
9 regulations that were put into place, that they will
10 look at all the information that New Mexico Copper
11 Corporation has put together and they will make a wise
12 decision.

13 And, of course, we want this to be
14 environmentally sound, and with the water and
15 everything else, of course, you know, we want that, but
16 I just believe that this company has done everything in
17 their power to be aboveboard and to do everything
18 right.

19 And it seems to us that they are doing it the
20 right way. And we just firmly believe and trust that
21 it will be approved because everything has been done
22 right. They have even looked ahead to the future to
23 keep it safe for the water, and any possible
24 contamination in the future will be taken care of, that
25 it won't happen.

1 And so with that being said, I, personally,
2 my husband, and our family are 100 percent for this
3 mine permit to be approved and for our children, for
4 our county, for all of us, that it will be a very good
5 thing.

6 We need another shot in the arm here in our
7 poor, little county. And I just want to applaud them.
8 I think they have just done a phenomenal job, and to
9 keep going through so many hurdles. And, you know, of
10 course, we are entitled to our own opinions here,
11 that's what's the great thing about our country, but --
12 so that's our opinions, and we just want to say we are
13 100 percent for the mine.

14 Thank you very much.

15 MS. ORTH: Thank you, Mr. and Mrs. LaFont.

16 Is there anyone else who would like to offer
17 public comment who has not yet made that comment?
18 Otherwise, we will take a break, and we will
19 reconvene.

20 Ms. Lilla.

21 MANDY LILLA

22 after having been first duly sworn under oath,
23 testified as follows:

24 DIRECT TESTIMONY

25 MS. LILLA: My name is Mandy Lilla. Good

1 afternoon. I grew up in South Dakota at a community
2 that is not mining; a very small community that
3 depended -- still depends highly upon farming and
4 hunting, fishing, just as it seems like Sierra County
5 currently relies heavily on, at least that's what I
6 have heard in public comments the last couple days.

7 When I was in high school, the community was
8 around 500 people. I graduated with a class size of
9 only six. Yes, that's very small. And there really --
10 there are no -- there were no other opportunities in
11 that community. There still aren't today.

12 And it is -- I would love to go back to South
13 Dakota and live, be able to go home to my home
14 community and get a job there, but they don't exist
15 anymore. Hunting and fishing is very seasonal. Most
16 of the residents no longer live there.

17 It is a very more retirement community now,
18 where only a handful of kids live there anymore, only a
19 handful of families. Most of the residents that are
20 there full-time are retired. We have a lot of
21 part-time residents where people from out-of-state or
22 other parts of the state move in, or they come in, they
23 buy a house, and then only stay there for a couple
24 weeks out of the year and to use the utilities, but
25 they don't bring in any income to the community other

1 than the couple of weeks that they are there a year.
2 And the houses, they get run-down, and they become an
3 eyesore.

4 I wish that community had other opportunities
5 just as Copper Flat is trying to bring to Sierra
6 County. I have been working in the mining industry for
7 over 14 years. I am not here to speak as an industry
8 expert. I am speaking from a personal experience as a
9 member of Grant County and New Mexico. It is my
10 personal opinion that mining can be done safely. And
11 from an environmental standpoint, it can be done while
12 protecting the environment.

13 Thank you.

14 MS. ORTH: Thank you, Ms. Lilla.

15 Anyone else who would like to offer public
16 comment who has not yet commented? We will be here
17 until 7:00 p.m., and if you are moved to offer
18 something additional, or you would rather not speak,
19 please just add written comments to this pile, or
20 submit them by midnight, Friday night, this Friday,
21 October 26th, to the Mining and Minerals Division.

22 Mr. Townsend, do you have a question?

23 MR. TOWNSEND: Is there a reason we are
24 restricted to one time to speak?

25 MS. ORTH: Yes, sir. It's so that we --

1 again, I ask people to collect their thoughts and just
2 appear once.

3 MR. TOWNSEND: Sometimes we learn a lot when
4 we hear things.

5 MS. ORTH: I understand, and I would only ask
6 you to put that in writing. You have until midnight,
7 Friday night.

8 MR. TOWNSEND: Thank you.

9 MS. ORTH: Yes. All right. We will take a
10 break and reconvene when someone else appears to offer
11 comment.

12 Thank you.

13 (Recess taken from 4:24 to 5:42 p.m.)

14 MS. ORTH: We are going back on the record,
15 and I understand we have two commenters wishing to
16 offer comment.

17 MR. WITTERN: Yes.

18 MS. ORTH: All right. We will start with Mr.
19 Klaus Wittern.

20 KLAUS WITTERN

21 after having been first duly sworn under oath,
22 testified as follows:

23 DIRECT TESTIMONY

24 MR. WITTERN: Good evening. Allow me to make
25 some opening remarks. I want to thank everybody that

1 testified here, congratulate them for a job well done.
2 I may not agree with them, they may not agree with me,
3 but I think it's important that they took the time to
4 make the comments they did make.

5 I have several concerns, but let me state
6 up-front that I am very much in support of the mine. I
7 believe all issues that are still pending can be
8 resolved, should be resolved, and should be attempted
9 to be resolved in an environment of settlement
10 negotiation, rather than protracted litigation and
11 asking you to make a written -- and you probably have
12 to do that -- but in my opinion, it is best if we can
13 short-circuit that and come to a negotiated settlement
14 between the issues and -- the issues that are pending
15 before you.

16 I believe most of them would be best settled
17 through a negotiation and direct contact with each
18 other, and I have not heard anything that would prevent
19 that, other than an unwillingness and the issue of
20 bankruptcy, the issue of water rights, the issue of the
21 copper price, most we can address in an open discussion
22 and settlement negotiations.

23 A lot of education needs to happen in that
24 process because I believe there is a significant
25 shortage of financial understanding between certain

1 individuals, certain groups, and in my opinion, that
2 needs to be eliminated, to the extent possible.

3 Let me get to a very significant portion
4 now. I believe the hearings today, yesterday and last
5 month, have not addressed what I would consider to be
6 best practices. And I need to qualify that best
7 practices needs to be seen and viewed in the
8 environment in which the setting takes place.

9 Water is not in abundance, but water is
10 available. I am representing the resource that feels
11 that would be available at a price that, apparently,
12 may not be acceptable today, but that's all part of
13 negotiation.

14 I believe that a system that, in my opinion,
15 needs to be employed in order to reduce the water
16 climate is the tailings method. That is what I
17 consider to be best practice, and that is
18 dry-stacking.

19 That's a term that is well-known and
20 understood in the industry. It has been recently
21 employed by the Rosemont Mine near Tucson, south of
22 Tucson. They, as a result of public pressure, came to
23 the conclusion that it was in their best interest to
24 reduce the public's concern for water.

25 Rosemont is no different than us, except that

1 they have tap water that we do not have yet, but in my
2 opinion, it is a similar set of circumstances that the
3 mine faced that we face here.

4 I believe all of the matters that earlier --
5 I believe all of the issues that are separating the
6 parties can be addressed, should be addressed,
7 especially in light of the pending litigation that the
8 Lower Rio Grande is threatened with by the State of New
9 Mexico, Texas, and that now is before the U.S. Supreme
10 Court and will be litigated there.

11 It is my understanding that the hearing, the
12 evidentiary hearing, by the Judge appointed by the
13 Supreme Court from Iowa is currently scheduled for the
14 later part of 2021. So we have, basically, three
15 years, two-and-a-half years maybe, because once you get
16 into close proximity to that date, unless it's
17 postponed, it's unlikely to be able to forge a
18 settlement.

19 I believe we need to do that because in my
20 opinion, a settlement with the Lower Rio Grande
21 Association, Texas, and the City of Las Cruces, which
22 are the three big entities that are involved, is
23 essential, because without that, I don't think that the
24 State Engineer will avoid litigation.

25 Even if he issues an opinion, it will be, in

1 my opinion, immediately appealed, and that -- when that
2 happens, it's no option any longer. I am very
3 concerned. And let me give you a thought. We heard
4 over the last two days numerous times bankruptcy issues
5 and financial assurances.

6 I believe those two issues are not very
7 significant, but they are potentially divisive. I
8 believe now a company like Bircher Hathaway would be
9 happy to give a price, what it would cost to, a, hatch
10 the copper price, and, b, give financial assurance that
11 certainly would be able to make up whatever price it
12 would be.

13 And it comes as a surprise, but it's best for
14 the company to know, it's best for the public to know
15 that somebody has the financial stability of Bircher
16 Hathaway. Insurance and reinsurance companies could
17 give them a price probably in 15 minutes or less once
18 all the questions have been asked and answered.

19 So that's, in my opinion, a typical approach
20 that I believe we need to employ. Those are -- when
21 people bring it up in these hearings that those are
22 concerns, they are real to them, just as much as the
23 water requirement for the tree farm.

24 Those are very real issues that anybody that
25 is involved in this type of endeavor must recognize and

1 can't avoid to address up-front, direct, and put it on
2 the table what they can do and what they can't do. And
3 that, I believe, is -- in my opinion, has always been
4 the best way to approach it: Be open, be fair, be
5 understanding, and be part of the solution rather than
6 being the problem.

7 I will tell you that the water rights issue
8 is very real, it is very painful for everybody. I can
9 readily understand that the mine had every right to
10 believe that the water that they purchased with the
11 asset purchase was real.

12 Unfortunately, a judge that has the right to
13 rule on it found that there are only 800 instead of
14 7200 acre-feet. That is a setback that is very real
15 for any mining operation because it's a real asset.

16 MS. ORTH: I'm going to shut the door. Go
17 ahead.

18 THE WITNESS: I continue to believe that all
19 of the issues that were raised are real, are, on the
20 party that raises it, important, and have a right --
21 the parties have a right to believe that they are being
22 heard, that they are being considered.

23 And I don't envy your position, Madam Hearing
24 Officer. That's a difficult decision to make. I have
25 been involved in many hearings. I was an Intervenor in

1 the El Paso Electric case, and it was shortly before
2 bankruptcy. That was no fun.

3 I was a part of the settlement that I moved
4 on, and unfortunately, at the end, I couldn't sign it
5 because there was nothing in it for my weight class. I
6 had everything given away, but that was okay. It was a
7 very small weight class.

8 Nevertheless, I got chided by Chairman Zamora
9 at the time for not having signed the agreement, and I
10 expressed it to him, and I said, "I just can't." I
11 will further tell you that I have, in the past, been
12 not -- I am a German citizen in this country, came
13 after -- all my education was paid for in Germany
14 courtesy of the State.

15 I came eight days after graduation and came
16 to the United States not to stay here, but that's the
17 way it turned out. The University of Detroit offered
18 me a position that I couldn't refuse. It was a great
19 opportunity.

20 I had at that time opportunity to meet very
21 unusual men that I cherish to know, they taught several
22 occasions at the University of Detroit that I taught
23 in, and it gave me an insight into what I consider to
24 be the global problem.

25 We have to learn to look at our issues from

1 the broader, higher level of perspective. 30 feet is
2 not high enough, 30,000 feet is not high enough, 200
3 miles high is probably a good level.

4 And let me say to you why that is. We can
5 see a huge plume at the mouth of the Mississippi River
6 that is due to pollution and has significant impact on
7 the river, its environment, its people, and I believe
8 at some point in time, we need to clean it up.

9 I will tell you, I am involved in the project
10 that intends to do that. Hopefully, in a couple
11 months, begin with the public with that. It will solve
12 our water problem in New Mexico. We will bring
13 two-and-a-half million acre-feet of water to New
14 Mexico, 17-and-a-half million acre-feet to the arid
15 Southwest, and believe that it is a project that is
16 similar to the Erie Canal in the 1700s, to the
17 railroads in the 1800s, and will solve many, many
18 problems that we have today and need to solve in the
19 near-term future. Water, at some point in time, will
20 be more valuable than oil, and we just need to come to
21 grips with the needs that that entails.

22 In conclusion, let me say that I appreciate
23 the opportunity you have offered me. I hope in the
24 near-term future, we can solve outstanding issues,
25 resulting in an operating mine that is well-received

1 within the environment in which it works and has to
2 operate because without that, I believe we are missing
3 the boat.

4 The option of jobs is real; the option of tax
5 collection is real; the option of potential
6 environmental -- and I say that unguardedly -- the
7 potential environment degradation is real. The light
8 pollution is a solvable -- very solvable problem.

9 The blasting is probably not so easy to
10 solve, but one comment that was made yesterday, I
11 believe, was that animals are trainable. And I know
12 that one from all the dogs and all the peacocks and the
13 horses, yes, they are. I believe we can do that. We
14 can accomplish that.

15 So in closing, again, I appreciate your
16 presence here, I appreciated your presence in
17 September, and I would like to leave you with the
18 thought that if there should be an opportunity to
19 participate in the settlement effort, please feel free
20 to call on me. I'd be happy to do so.

21 Thank you.

22 MS. ORTH: Thank you, Mr. Wittern.

23 Nathan LaFont. Whenever you are ready.

24

25

1 NATHAN LaFONT

2 after having been first duly sworn under oath,
3 testified as follows:

4 DIRECT TESTIMONY

5 MR. LaFONT: My name is Nathan LaFont. I am
6 a local business owner in this community. I am also on
7 the Planning and Zoning Commission for the City of
8 Elephant Butte. I have three kids and a wife and have
9 been part of this community since 1996.

10 I support the Copper Flat Mine project. And
11 this community needs growth and economic drivers. We
12 need a project for our community that will allow it to
13 grow again and stop the loss of residents who have to
14 leave because of lack of opportunity.

15 This project, and others like it, need to be
16 developed correctly in New Mexico. We cannot keep
17 relying on foreign projects to be able to provide all
18 the minerals that our state and our country need. We
19 need to be able to do it in a responsible manner, and I
20 believe Copper Flat Mine is doing every bit of its
21 effort to come in and develop a project here in our
22 state. I think that it is a good project to be able to
23 help our community to grow, and I support it.

24 MS. ORTH: Thank you, Mr. LaFont.

25 MR. LaFONT: All right. Thank you.

1 MS. ORTH: Gay Skidmore.

2 GAY SKIDMORE

3 after having been first duly sworn under oath,
4 testified as follows:

5 DIRECT TESTIMONY

6 MS. SKIDMORE: I just want to say I am for
7 the mine. It has been a -- it's been going on here,
8 trying to get it here, for over 20 years, and in the
9 meantime, the town is dying.

10 When we first came here, we came here in
11 1985, and we started a painting business, and we did
12 one new house after another for years. This past three
13 years, I think we have had one new house, and the
14 economy is -- has gone down.

15 You know, all the people that have moved into
16 the downtown area are literally killing it, and we need
17 it for our young people, we need it for our old people,
18 we need it for everybody to have -- to be able to make
19 a decent income.

20 We have got a Wal-Mart here, but, you know --
21 and we have got a hospital, but they are probably not
22 going to stay very long if things don't pick up.
23 Anyway, I just want to say I am for it, and we need the
24 money, we need the economy, and I don't think it's
25 going to hurt anything to get it going again.

1 Thank you.

2 MS. ORTH: Thank you, Ms. Skidmore.

3 Dale Skidmore.

4 DALE SKIDMORE

5 after having been first duly sworn under oath,

6 testified as follows:

7 DIRECT TESTIMONY

8 MR. SKIDMORE: My wife led off. So you know
9 we have been here over 33 years. In fact, Skidmore
10 Painting is the one who painted this building when it
11 was built. I had employees then, I have none now. I
12 don't have enough work in this town to keep a crew.

13 I had one individual who, actually, I
14 employed him for 12 years, and then after 9/11, when
15 the stock market began its bounce around and the
16 retirees were unable to fund a lake house, then our
17 business plummeted.

18 I have been involved in construction the
19 entire time here, and I can just say that the new
20 housing and new construction, primarily at the lake,
21 but, also, in the Lake Valley area up there, and we
22 have painted all over the County. In fact, we have
23 painted all over the state.

24 The situation now is there is not enough work
25 for me to employ -- to keep employees and treat them

1 decent. Most of them -- most of our employees went on
2 to work -- I paid vacation, I -- you know, full pay.

3 I have worked for the Bureau of Reclamation,
4 I have worked for Corps of Engineers. We have painted
5 post offices all over the state of New Mexico. We have
6 worked at Fort Wingate on the reservation at Gallup,
7 and that was a Corps of Engineer job involving the Star
8 Wars initiative and the Intercontinental Ballistic
9 Missile Defense.

10 I kept a crew of -- I kept a wonderful crew
11 of hard-working, knowledgeable, professional painters.
12 We had five crew members plus myself and my wife. So
13 that's a pretty good-size crew for construction in
14 Sierra County.

15 This town needs employment. I do know -- you
16 know, construction is what it is, and your workers are
17 what they are. And I do know that there are some
18 people that are currently probably involved in things
19 they shouldn't be involved with, in drugs and so on and
20 so forth, that might be able to get off of that and
21 actually perform in life, if they had something to go
22 to.

23 I don't know a lot about mining except that I
24 am claustrophobic. I don't know if that's going to be
25 underground or what, but, you know, as far as the

1 environmental impact, I am an avid hunter, horseback
2 rider. We don't go to the lake, we go to the
3 mountains.

4 We have livestock. We go to the mountains.
5 We hunt wilderness. We pack in. We take day trips.
6 Every chance we get, we go to the mountains, because we
7 love the mountains. And I can say this, I have been
8 all over the Kingston area, I have been around and know
9 most of the people around the Hillsboro Gold Dust
10 Region, down there where the mine is.

11 I have hunted deer right above the old mine,
12 at the old Quintana site, and I can't say that the
13 environmental impact affected the deer population much,
14 maybe the hunters did, but the deer seemed to thrive up
15 there just fine.

16 And the javelina, I have not seen a decline
17 at all. I would say that in Sierra County, our worst
18 environmental impact is our forest fires. And as far
19 as the mines affecting the environment, riding through
20 the woods on the trails and so on and so forth, there
21 are mines up there that nobody can ever see until the
22 forest fire exposed them.

23 The trees were vibrant. The trees were
24 healthy. Some of them very large. The creeks run when
25 it's wet, and they are dry when it's not -- or when

1 it's not wet. Many of the old mines, I don't go in
2 them, but I like to go up and look around them, you
3 know, but I do know that the old mine sites up there,
4 as far as seeing the green water or the dead trees from
5 the -- I, personally -- they may be there, but I have
6 never seen one.

7 I have seen water down in the mines, but I
8 have never -- you're not going to get me in a mine, you
9 know. I do know that there have been some javelina
10 that met their demise in some of those mines, but we
11 are talking javelina versus employment for human
12 beings.

13 Personally speaking, I think I would err on
14 the side of humans versus a stinking animal like a
15 javelina. You know, I know that we have talked to and
16 worked with the Forest Service and done everything we
17 can to try to come up with some kind of a plan for
18 their fire portfolio, whatever you call it, their plan
19 for fire prevention, or for fire -- putting out the
20 fires, and I just can't understand why anybody with
21 their -- fire is natural.

22 Therefore, let it burn. And yet you see the
23 burn scars that last for 100 years. Snow Lake, for
24 example, Bearala Mountain, we actually had ferns that
25 grow there. I have been all over the Rocky Mountains,

1 and we had some of the largest aspen trees that I have
2 ever seen anywhere in my travels, and they no longer
3 exist. Bearala Mountain is just a charred moonscape.

4 Now, that was not mining. That was fire,
5 natural, allowed to burn. There are regulations, there
6 are laws, there are inspections to regulate the
7 environment that the mine is working under. They have
8 regulations, and they have inspectors, and they have
9 people that will -- you know, the State Mining
10 Commission, they -- their job is to come in and make
11 sure that the mining companies follow the law. And if
12 they follow the law, I believe that the same mining
13 convention has laws concerning the environment and what
14 the mining company has to do.

15 So I think that Sierra County is in desperate
16 condition for employment, and I am totally for the
17 mine. And as far as whether or not the mine -- I mean,
18 it's -- it would go to the fact that there will be
19 somebody from the State of New Mexico Mining Commission
20 who will be employed also to go in there and make sure
21 that the employees of the mine will follow the
22 guidelines, the environmental guidelines, and laws.

23 So, I mean, there are people that are
24 employed by the State to monitor the employees and the
25 mine owners to make sure that the environment is

1 protected. And I am sure that they will do their job.

2 So I would just like to put in a plug for
3 jobs for Sierra County, and I know that some of the
4 jobs that we currently have are extremely low pay, and
5 if the mine does go through, my understanding, and I am
6 not an expert, but my understanding is it will be a
7 boost for whoever is able to get a job with them.
8 Being a greeter at Wal-Mart won't pay the same.

9 So I just want to go on record as saying I am
10 an employer, or was. I was a Skidmore Painting
11 contractor, and I had people that watched over me. The
12 State of New Mexico, they were more interested in
13 getting their tax money from me and my employees, but
14 yeah, we have inspectors, and the painting end of it is
15 not really inspected, but I would just like to put in a
16 plug and just say, you know, how many mines -- Sierra
17 County is all about farms, ranches, and mining.

18 I could say recreation, but the lake is
19 almost gone. It's almost gone. And if we get another
20 dry year, which hopefully we will get a wet year, then
21 maybe the lake will come back. There are mines all
22 over the Caballo, there are mines all the way from Lake
23 Valley all the way up this mountain chain.

24 If you take a United States Forest Service
25 map, it will show you -- it shows on that Forest

1 Service map that there are existing mines that have
2 been there for over 100 years, and we have not had an
3 environmental catastrophe from those mines to date.

4 I do know that they said that there was some
5 leaching of the water and so on and so forth from the
6 tailings and whatnot, but I am not an expert on that,
7 but I do know that they took care of that in the --
8 what is it, up in Kingston.

9 So speaking as an employer who is no longer
10 an employer because there is no longer any work, I say
11 I am for the mine.

12 MS. ORTH: Thank you, Mr. Skidmore.

13 Is there anyone else who would like to offer
14 comment at this time? No. In that case, we will be on
15 a break until someone else appears. It's about quarter
16 after 6:00. We will be here another 45 minutes.

17 Thank you.

18 (Recess taken from 6:16 to 7:00 p.m.)

19 MS. ORTH: Okay. It is 7:00. No one else
20 has appeared to offer comment. So we are adjourning
21 the hearing entirely. And I believe MMD will note on
22 their web page that the public comment -- written
23 public comment may be submitted to them until midnight,
24 October 26th. Thank you.

25 (Proceedings concluded at 7:01 p.m.)

1 STATE OF NEW MEXICO)

2)

3 COUNTY OF BERNALILLO)

4 I, DENISE KOPAN, the undersigned Court
5 Reporter, HEREBY CERTIFY that the foregoing hearing was
6 recorded by me by machine shorthand; that I later
7 caused my notes to be transcribed under my personal
8 supervision; and that the foregoing is a true and
9 accurate record, to the best of my ability, of said
10 proceedings.

11 I FURTHER CERTIFY that I am not a relative or
12 employee of any of the parties or attorneys involved in
13 this matter and that I have no personal interest in the
14 final disposition of this matter.

15 DATED this _____ day of _____, 2018.

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Denise Kopan

DENISE KOPAN, NM CSR #124
License Expiration: 12/31/18

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