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STATE OF NEW MEXICO
ENVIRONMENTAL IMPROVEMENT BOARD

No. EIB 21-27(R)

IN THE MATTER OF PROPOSED NEW REGULATION, 20.2.50 NMAC - Oil and Gas Sector - Ozone Precursor Pollutants

TRANSCRIPT OF PROCEEDINGS

BE IT REMEMBERED that on the 20th day of September, 2021, this matter came on for hearing before FELICIA ORTH, Hearing Officer, virtually through Cisco Webex Meetings video conferencing, commencing at 9:00 a.m.

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I N D E X

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HEARING OFFICER ORTH: Okay. Good morning. My name is Felicia Orth; I'm the Hearing Officer appointed by the Environmental Improvement Board to conduct a hearing in this matter. It's a Petition for Rulemaking docketed by the Board Administrator and as EIB 21-27, related to air pollutants, which are ozone precursors. The hearing will be conducted in accordance with the Board's rulemaking procedures, which you can find in Section 20.1.1 of the New Mexico Administrative Code.

We have Board members present, so let me introduce them before I go any further. Member Suina: Is there. Good morning, Madam Chair.

CHAIRPERSON SUINA: Good morning.

HEARING OFFICER ORTH: We have Vice Chair Davis you see on the screen. We have -- do we have Member Cates

BOARD MEMBER CATES: Here, yes.

HEARING OFFICER ORTH: Yes. Good morning, Member Cates.

BOARD MEMBER CATES: Thank you.

HEARING OFFICER ORTH: Member Bitzer, I think was just speaking with us. There's Member Bitzer waving. Member Duval, I know is with us. Member Duval. Member Garcia , there you are. Good morning. And Member Honker, I know you're on.

BOARD MEMBER HONKER: Good morning.

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HEARING OFFICER ORTH: Good morning. We also have the Board Administrator, whom you will hear me referring to quite a bit. There, she's waving. Her name is Pamela Jones and she will be a primary contact for a lot of you in a couple of different ways I'll mention shortly. And we have Board Counsel Karla Soloria.

MS. SOLORIA: Good morning.

HEARING OFFICER ORTH: Good morning. All right. We also have -- we have a number of parties in this matter; about a dozen, and many, many lawyers representing those parties. I'll ask for appearances in a little bit. I need to make some comments first about the case, the virtual platform we're on, and our process.

So all documents in this case, including the rulemaking petition, entries of appearance, direct and rebuttal testimony, exhibits, motions, public comment received at least as of this morning, all of those documents can be found on the EIB webpage and in particular on the page that is titled Docketed Matters.

As additional pleadings are filed or comments submitted, that will also be posted. The Board will be hearing a lot of evidence and argument on this petition and no decision will be made any time soon. We expect the evidentiary hearing to last two weeks. Hoping to end on October 1st. And there will be a multiweek post-hearing process following the close of the record.

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If you are curious about where we are in the process and it's unclear from the webpage, please reach out to the Board's Administrator, Pamela Jones, whose contact information is on the web page. The hearing is structured to provide both for -- let's see. Member Cates, please mute yourself.

The hearing is structured to provide for both technical testimony and nontechnical public comment every day. There are currently 29 opportunities to offer public comment at 9 a.m., except today, 1:00 p.m. and 5 p.m. each day of the hearing. If you would like to identify a day and time during which I can call on you to offer public comment, please send an email to Pam Jones and let her know when you'd like to speak. Public comment can only be offered once, so please collect your thoughts before you begin, and is limited to five minutes. In the event the statements you would like to share with the Board would exceed five minutes, please put those statements in writing. There are no page limits on written public comment, and the Board will consider all of it in its deliberations. Written public comment must be received before we adjourn the hearing; again, likely on October 1st. So please, please get your written public comments in before then.

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In addition to nontechnical public comment, we have, I believe it's 59 technical witnesses being presented by the parties. And the parties' representatives have generally agreed that the Board would find it most helpful to hear as much as practicable, that testimony by topic. Now, that won't be possible completely; that is to say based on witness availability, for example, and other factors, but a lot of the testimony in this matter will come in by topic, meaning we won't hear from each party all at once in order.

It remains one transcript. That entire transcript will be considered and obviously in the post-hearing process, the parties will be able to make their arguments and lay out their evidence anywhere from that -- from that transcript.

Speaking of the transcript, our court reporter today is Theresa DuBois. Because the transcript is the official record of this proceeding, it is important that she be able to hear everyone. And she has been invited to speak up at any time in the event she is struggling to hear someone, and we may have to ask you to repeat something if she -- if she didn't hear it the first time.

I have hit the record button, and eventually the recording may be available, for example, on a -- on the Board's webpage or another channel, but, again, it's not

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the official record; the transcript is. So, although, we have a lot of folks to hear from every day, we will generally take one morning break of about 15 minutes, one lunch break, which may or may not be an hour, and one afternoon break. The end of the day is a little more fluid. It depends in part on how much public comment is offered in the 5:00 session. It depends also on whether it's possible to wrap up a particular technical witness before we break for the day. So that's a little fluid.

Let me say a few words about the platform. It is true a couple of weeks ago, the Board Administrator did put on the EIB calendar a link to the hearing in this matter. And those links -- that link, excuse me, was replaced with a different link for each day of the hearing on the calendar, and was certainly there this morning when everyone wanted to check in. It was driven by the fact that -- the change in the link prior to this morning was driven by the fact that it was important to set this event up as Cisco WebEx event rather than a Cisco WebEx meeting. And having said that, I tried to remove any requirement for registration or passwords. Ideally, you could just click on the link for that day's hearing and get to us directly. I had some folks try it this morning and it worked for them. Having said that, we didn't want the original link to lead merely to an error message. So the

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Department's CIO is sitting in the meeting that the original link would take you to, with the information to join us here on this link. And if someone actually calendared the original link, it will be very easy for them to see the information that would allow them to join us here.

So the Board members and party representatives have joined as panelists and can control their own sound and video. Witnesses will become panelists when they are called upon to testify. No one will be made a presenter, meaning you can share your screen, until it is necessary to assign that role. And just know that I can only have -- I can only assign the presenter role to one person at a time. See, I'm making Mr. Baca a panelist.

And lawyers and party representatives, if you would, please do what a few of you have done this morning; in the event you have any trouble with the panelists' link or panelists' invitation, join as an attendee. Let me know somehow that you've joined as an attendee and I will -- I will redesignate you.

The remaining folks on the platform are attendees and will be unmuted as necessary in order to make public comment at the appropriate time. You will see that the Chat function, which is in your lower right-hand corner, has been configured to allow only Chat with the host. Pam

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Jones and I will be trading off on the host duties throughout this hearing. That is the only place that your Chat will go. Please do not put anything in that Chat that is not about, for example, platform technology. The Chat will not be saved or recorded. It's certainly not meant for any kind of public comment, which must come in either orally or in writing to the Administrator.

Board members and party representatives have been given a number to text in the event of serious technical difficulties. Attendees may communicate with a text to Pam Jones. Let me give you that number: (505) 660-4305.

With so many people on the platform, I will encourage those folks, other than the court reporter and the Board members to turn on their video only when they are speaking. And if you can, please avoid the virtual backgrounds, which as the court reporter has noted, can interfere with the audio.

Today, we take public comment sessions at 1 and 5 p.m. We expect to be hearing opening statements and some testimony, particularly from the Environment Department in support of their petition. We're working from a spreadsheet in which the parties have agreed to the general order of the topics here. That will definitely -- could definitely change as we go on, again, based on witness availability, but we may well be hearing on ozone

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formation, ozone monitoring, stakeholder outreach, to begin with. So I'm going to ask for appearances, Counsel. Not every morning, but this morning. And on that note, again, lots of Board members, lots of lawyers and other party representatives. Having called for your appearances at the beginning of this hearing, I am not going to ask you to announce when you are coming or going. I turned off attention tracking. As far as I'm concerned, if you're on the platform, you're on the platform. And if you're not on the platform, you're not on the platform. The drawback there, obviously, is that if I call on you for any questions to cross-examine a witness and you're not in attendance, that time will have passed. We won't be recalling witnesses. And once again, if you are not on the platform and it is a serious technical emergency -- technological emergency, please text me and we'll work through that.

So Ms. Katz, if you would, I'm going to call you roughly in the order with one exception -- roughly in the order in which we prepared the service list. Ms. Katz, please.

MS. KATZ: Thank you, Madam Hearing Officer. Good morning, Madam Chair, members of the Board: Lara Katz on behalf of the New Mexico Environment Department. I have with me today my colleague Andrew Knight, also with

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the Department. Thank you.
HEARING OFFICER ORTH: Thank you very much.
Ms. Fox.
MS. FOX: Good morning, Madam Hearing Officer, Madam Chair, members of the Board. My name is Tannis Fox, with Western Environmental Law Center. I'm here today with my co-counsel David Baake, and we represent nine clients today throughout the hearing, whom we're referring to by shorthand as "Clean Air Advocates." Thank you.
HEARING OFFICER ORTH: Thank you. Ms. Paranhos?
MS. PARANHOS: Good morning, Madam Hearing Officer, Madam Chair, members of the Board. Elizabeth Paranhos here this morning on behalf of the Environmental Defense Fund.
HEARING OFFICER ORTH: Thank you. Mr. Jaynes and the others on behalf of Center for Civic Policy and NAVA.
MR. JAYNES: Good morning, Madam Hearing Officer. Daniel Jaynes with University of New Mexico on behalf of Center for Civic Policy and NAVA Education Project. And I have Gabe Pacyniak, Travis Shimanek and Keifer Johnson here with me today.
HEARING OFFICER ORTH: Thank you very much.
National Park Service. Is Ms. Devore with us?
MS. DEVORE: Hi. Lisa Devore with the National Park Service, and I'll turn off my virtual background in a

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few minutes here. Thank you.
HEARING OFFICER ORTH: All right. Thank you. WildEarth Guardians, do we have Mr. Timmons or Mr. Nykiel?
MR. NYKIEL: Good morning, Madam Hearing Officer, Madam Chair, members of the Board. My name is Matt Nykiel; I'm here with Daniel Timmons, my co-counsel, on behalf of WildEarth Guardians. Thank you.
HEARING OFFICER ORTH: Thank you very much. Mr. de Saillan.
MR. DE SAILLAN: Thank you. Good morning, Madam Hearing Officer, Madam Chair, members of the Board. I'm Charles de Saillan and I'm here on behalf of the New Mexico Environmental Law Center.
HEARING OFFICER ORTH: Good morning. New Mexico Oil and Gas Association, who you'll hear referred to as NMOGA throughout the hearing.
MR. HISER: Good morning, Madam Hearing Officer, Madam Chair, Board members. This is Eric Hiser representing the New Mexico Oil and Gas Association, or NMOGA. I'm here with Brandon Curtis, also of my office and we have co-counsel as well, Dalva Moellenberg.
HEARING OFFICER ORTH: Thank you very much. Mr. Rose?
MR. ROSE: Yes, Madam Hearing Officer, this is Louis Rose on behalf of the Independent Petroleum

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Association of New Mexico and I'm here all by myself.
HEARING OFFICER ORTH: All right. Mr. Janoe?
MR. JANOE: Good morning, Madam Hearing Officer, Madam Chair and members of the Board. My name is Scott Janoe; I'm here on behalf of Oxy USA, Inc.
HEARING OFFICER ORTH: Thank you.
Mr. Holmstead or Mr. Swift?
MR. BUTZIER: Good morning, Madam Hearing Officer. This is Stuart Butzier, of the Modrall Sperling Santa Fe Office, representing GCA. Also Gas Compressor Association is the formal name. Whit Swift, who you invited to speak, is one of our co-counsel, with the national law firm of Bracewell, LLP. And I'm also accompanied by my partner, Christina Sheehan, from the Albuquerque office of Modrall Sperling.
HEARING OFFICER ORTH: Good morning. Ms. Gutierrez.
MS. GUTIERREZ: Good morning, Madam Hearing Officer, Madam Chair, and the Board members and other parties. My name is Ana Gutierrez, with Hogan Lovells, and I'm representing Kinder Morgan in these hearings.
HEARING OFFICER ORTH: Thank you. The Commercial Disposal Group?
MR. NEUMANN: Good morning, Madam Chair. I'm sorry, Madam Hearing Officer, this is Chris Neumann with

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Greenberg Traurig. And with me are Casey Shpall and Greg Tan, Matthias Sayer of NGL Energy Partners and this is Chris Colclasure, representing the Commercial Disposal Group.
HEARING OFFICER ORTH: Good morning. Let's see. Do we have Ms. Witherspoon on?
MS. WITHERSPOON: Yes. Good morning, Madam Hearing Officer, Madam Chair and the Board members. Leslie Witherspoon representing Solar Turbines.
HEARING OFFICER ORTH: Good morning.
I believe those are all of the parties who entered appearances and/or submitted a Notice of Intent to present technical testimony. Let me turn then to some motions or -- well, let me -- let me ask if other than the motions and opening statements, if any of the parties have another matter that we would need to address before we begin taking testimony.
All right. I hear nothing. Let's see. Well, we have -- the Department filed two motions, one to strike the National Park Service NOI or Notice of Intent and another to strike the Solar Turbines NOI. I did get responses both from the National Park Service and from Solar Turbines.
The National Park Service repackaged, as appeared to be the request from the Department -- repackaged their

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materials as part of a rebuttal NOI.
And Ms. Katz, I'm inclined to accept the rebuttal NOI and their planned testimony in that format. Would you have anything to add if that were my plan?
MS. KATZ: No, Madam Hearing Officer, we agree with that decision.
HEARING OFFICER ORTH: All right. Thank you. Moving then to Solar Turbines, I -- I understand that there wasn't perfect compliance with service, for example. Although, I will note there hasn't been perfect compliance with the service list on behalf of a couple of parties. And I'm inclined to accept -- provide Solar Turbines with an opportunity to give the comments that they want to give. And other than assuring that there aren't, if you will, surprises that, in fact, the testimony will stick closely to what was submitted, I'm wondering if you had any other comment there.
MS. KATZ: Thank you, Madam Hearing Officer. The Department doesn't object to Solar Turbines giving comment. I do believe, though, that the requirements for submitting technical expert testimony were not complied with and that -- that's my concern is guarding that process. So if there's some way to have that presented in a different manner, that would be fine.
HEARING OFFICER ORTH: Okay. What I'd like to do

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is make sure that Ms. Witherspoon understands that she'll be invited to, you know, provide her comment at the right time. And to the extent we need to draw out a little more qualification, for example, or you would have very specific objections about a technical statement and whether, for example, she was qualified to make it, I'd like to address that at the time she's giving her testimony.
MS. KATZ: That's sounds good, Madam Hearing Officer. Thank you.
HEARING OFFICER ORTH: All right. Thank you. Let's see. There was Clean Air Advocate's motion to strike the commentary in NMOGA's Exhibit B and Exhibit 47. And here, let me just offer -- I think the -- I'm just looking, for example, right now at Exhibit 47. This is very close to something I would invite the parties to do at the end of the hearing. That is to say, in your, sort of, closing arguments or your post-hearing submittal, tell the Board what change you would like to make in each section, and then identify the testimony or exhibits that supports each of those changes right below it.
Those of you who have been through a triennial review hearing with me, and that's several of you, know that I think that's the way it is easiest for the Board to follow every party's proposal. And I may or may not -- at

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the end of this hearing, I may or may not be asked to compile that, for example, in a report. The Board won't make that decision for a little bit.
But I think at this moment, it's premature and my recommendation would be that the Board disregards for the moment these comments throughout Exhibit B and Exhibit 47 because they're not, if you will, cited to testimony or to exhibits just yet. That record will be made as we go along. I think this sort of thing will come in very handy after the end of the record, but not just yet.
So I don't know who would be speaking on behalf of NMOGA, but I'm wondering if we can get Exhibit B and Exhibit 47 without the commentary for now, understanding that at the end of the hearing this may be very useful.
MR. HISER: Madam Hearing Officer, this is Eric Hiser on behalf of NMOGA. While I don't disagree, to some extent, with where you are recommending that we go, I don't believe that would be appropriate to remove this exhibit. And the reason is that it's referred to certainly in the testimony of a number of the NMOGA witnesses, but also by a number of the other parties, and so it is a critical part for the administrative record because you cannot understand the testimony of the other parties. And so I think striking it is inappropriate.
I do think that we could leave it in for the

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purposes of the redlines, and that we will then at the end of this hearing, if you would be amenable to that, file an evidentiary version of it, which would cross-reference those pieces of it that have been properly shown to be evidentiary, as opposed to a statement of reasons for the change. And then that could become an evidentiary exhibit, which we would move at that point, if that would be acceptable to you and the other parties.
HEARING OFFICER ORTH: I see your hand, Ms. Fox, but I'm going to talk a little bit further with Mr. Hiser. So, Mr. Hiser, if I'm going to recommend that the Board disregard this commentary at this point, again, I would recommend that the Board look at it after the hearing when you've got record citations to it. But if I'm going to recommend that they disregard this, and in my mind there's a distinction between what has been filed in the administrative record, which I don't feel I have the authority, for example, to destroy, if you will, or simply remove. I mean, it was filed, it's there.
Having said that, I'm wondering if it would be more helpful, again, knowing that it's there, it was filed on May 6th, 2021, to have a substitute B and a substitute 47, that could also be part of the record so that the Board didn't have to go through the mental exercise of reading past it all.

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MR. HISER: Madam Hearing Officer, obviously, we'll do as you direct, but to the extent that witnesses refer to, you know, the original document, that creates problems in the understanding of the expert testimony that is presented in direct and rebuttal.

HEARING OFFICER ORTH: Ms. Fox, do you have something to add here?

MS. FOX: Thank you, Madam Hearing Officer. I was going to make the same suggestion that you just made, and that is that NMOGA file a substituted Appendix B and a substituted Exhibit 47, for exactly the reason you stated. And that is, so that anybody looking at those exhibits doesn't have to make their way through the comments.

I think the extent to which this is an issue for NMOGA, it's an issue that it has brought on itself. And it had an opportunity to cure with its rebuttal testimony, because this objection, I did raise this objection during our prehearing conference. And so I think the fact that NMOGA's witnesses referred to Exhibit 7, and it's a prior Exhibit 7 that's going to be substituted, and a little bit of a glitch there for the witnesses, I -- I think that that, again, is sort of a problem they brought on. And I think the record is much cleaner if they file a substituted Appendix B and a substituted Exhibit 47, so it's clear from the record that the commentary in those

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exhibits is struck.

HEARING OFFICER ORTH: Okay. Thank you for that. Mr. Hiser, if -- I really think it would serve the Board to get your redline -- your proposed redline without the commentary, that I have to ask them to disregard. And again, I think this will be terrific in about two months, but I think it's premature now.

MR. HISER: So, Madam Hearing Officer, do you want us to file a revision of the two exhibits, or do you want us to file new exhibits? Because we need to preserve page numbers and other things like that. We simply can't move stuff because it will cause all the line numbers to shift.

HEARING OFFICER ORTH: I see. So if you remove the commentary, but leave the line numbers, the line and page numbers alone, will that be easiest for us as we all sort of walk through it?

MR. HISER: Yes, we can do that. We'll file this as revision one of each of those two exhibits, which will delete the commentary. Although, my understanding is that you're leaving the original document in place in case somebody needed to refer to it to understand the experts.

HEARING OFFICER ORTH: Exactly. I'm not removing the original document from the record proper. Based on my reading of the Board's rulemaking procedures, having been

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filed it's part of the underlying record proper. I am asking you to submit the revised exhibits so that I don't have to continue to remind the Board to disregard something that was filed maybe just a little too early.

MR. HISER: Very well.

HEARING OFFICER ORTH: Thank you very much.

My understanding is there was one other motion. It was filed yesterday, and was a motion to strike the testimony of Professor Villa. Because that motion was filed yesterday and UNM has not had -- excuse me -- Center for Civic Policy and NAVA has not had an opportunity to respond to it, and I think it's going to be a while before we get to Professor Villa's testimony, in my mind it is too early to address that motion this morning. Okay.

Anything else from counsel? I'm just going to pause for a moment. Anything else from counsel?

MR. ROSE: Madam Hearing Officer?

HEARING OFFICER ORTH: Mr. Rose?

MR. ROSE: We had identified earlier in this proceeding, I guess last week is earlier -- maybe it was this week. There was -- about exhibits and testimony that there was at least a question about admitting testimony and exhibits en masse, without necessarily offering them individually. We identified a number of exhibits and the testimony related to them. We objected to -- and I don't

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know whether it's something you want to address now or after opening arguments or in the context of admissibility, when those exhibits are being offered. It may be prudent, because they all read -- all of the objections relate to a single point -- that maybe we address those after we get to opening arguments, but before testimony is offered. So I think that may be the most prudent way to do it, but just wanted to alert you that that's still pending as well.

HEARING OFFICER ORTH: Thank you very much for that reminder. I do have that in my short stack here surrounded by boxes and a short stack of documents. I -- I did note that a number of the parties had no objection to any of the exhibits, but that NMOGA and IPANM had objections to certain of the exhibits. So when we got, for example, to the Department's presentation, I was going to invite Ms. Katz to offer the exhibits that could be admitted en masse, if you will, and then have a discussion about the exhibits that we need to have some -- we just need to make a record as to the objections and have some argument about it before ruling. So thank you for that.

Anything else? I'll pause for just a moment in the event party counsel would like to identify any other issues. Okay. So let's begin with opening statements. I'm going to invite that each party has a choice to make

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an opening statement now or to make an opening statement at the beginning of their presentation. So the Department, Ms. Katz, whenever you're ready, please make your opening statement. I will call on the rest of you in the order -- in the order in which I invited your appearances. Ms. Katz, if you would.

OPENING STATEMENT BY MS. KATZ

MS. KATZ: Thank you, Madam Hearing Officer.

The Department is here before you today to propose new rules to regulate emissions of ozone precursor pollutants from the oil and gas sector in New Mexico. These proposed rules are in furtherance of this Board's mandatory duty as provided in the New Mexico Air Quality Control Act, to address rising ambient ozone concentrations across the state.

Specifically, the Board is required to adopt a plan, including regulations, to control emissions of ozone precursor pollutants from sources within the Board's jurisdiction, that cause or contribute to ozone levels exceeding 95 percent of the federal National Air Ambient Quality Standards, or NAAQS. The stated purpose of the statute is to provide for attainment and maintenance of the federal standards.

Put another way, the goal is to try to avoid a nonattainment designation by the U.S. Environmental

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Protection Agency under the Clean Air Act and the corresponding burdens on the Department and industry that such a designation would entail.

In essence, the legislature wanted any requirements imposed on New Mexico sources for the purpose of controlling ozone levels to be prescribed by this Board, not the federal government. This rulemaking is the first time the Department has taken steps to seriously regulate the oil and gas sector. And it is taking place in the context of a massive expansion of this industry in New Mexico over the last several years.

New Mexico is now the second largest oil producing state in the country. Corresponding with the drastic rise in production, the Department's air quality monitors located in closest proximity to the state's two largest oil and gas producing basins, have shown consistently rising ozone concentrations. And that is why we are all here today.

Before I go further, I would like to introduce the Department's witnesses who will be testifying before you over the next two weeks, though not all of them are here this morning. Most of you have met Elizabeth Bisbey-Kuehn, chief of the Department's Air Quality Bureau, in previous hearings.

You have also met Michael Baca, manager of the

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Bureau's control strategies -- strategies unit. Cindy Hollenberg is the enforcement manager of the Bureau's Compliance and Enforcement Section. Angela Raso is an air dispersion modeler in the Bureau's modeling unit.

Brent Ellington is a supervisor with the Bureau's Ambient Air Monitoring Section. Andrew Ahr is the quality assurance manager of the Bureau's Operations Section. We also have Brandon Powell, from our sister agency, the Energy Minerals and Natural Resources Department where Mr. Powell is the chief of the Oil Conversation Divisions Engineering Bureau.

We also have some witnesses from our contractors that work on this rulemaking. Ralph Morris is the managing principal of Ramboll Environmental Health Central West Business Unit. Mr. Morris has over 40 years of air quality consulting experience and is one of the original developers of many of the photochemical air quality models that are used to support regulatory decision making in the United States and around the world, including the model that was used to evaluate the ozone impact of Part 50. He is truly one of the top experts in his field.

We also have two witnesses from Eastern Research Group, who NMED contracted to help develop the provisions of the rule and estimate the cost and emission reductions from implementation. Brian Palmer is a senior

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environmental scientist with ERG where he has worked for 25 years. He has 30 years of experience in the environmental consulting industry and has worked on numerous air quality efforts -- regulatory efforts at the federal level. Susan Day is a senior economist at ERG with 34 years of experience conducting and managing economic, regulatory and data analyses supporting federal environmental regulations. These witnesses are a stellar team that has worked incredibly hard to provide you with solid justification for adopting the Department's proposal.

The proposed rule before you is the result of over two years of outreach and engagement with stakeholders and communities across the state. This process began in 2019, with Governor Lujan Grisham's Executive Order 2019-3 directing NMED and its sister agency, the Energy, Minerals and Natural resources Department to, "jointly develop a statewide enforceable regulatory framework to ensure reductions in oil and gas sector methane emissions and to prevent waste from new and existing sources."

Part 50 responds to both the requirements of the Air Quality Control Act, as well as the directives of the Governor's Order, because regulations that reduce emissions of ozone precursors pollutants have the

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co-benefit of reducing methane emissions.

Ms. Kuehn will testify regarding the rule development process and the numerous opportunity for stakeholder and public involvement throughout that process. Those opportunities have continued during this formal phase of the rulemaking right up to this day.

The Department granted every request by the parties, to meet with us. And we listened to the input and concerns of the stakeholders. We've made every effort to carefully consider and respond to that input as evidenced by the substantial revisions we have made to the rule shown in the redline version filed last week.

Now turning to the Department's testimony. Several witnesses will provide background information for testimony on the specific rule requirements. Ms. Raso and Mr. Morris will discuss the chemistry of ozone and how it is formed in the atmosphere. Mr. Ellington and Mr. Ahr will explain the Department's air monitoring system and how data on ozone levels are collected, verified and provided to EPA. They will testify as to how compliance with the NAAQS is established using statistics called design values, and how EPA calculates those values based on the monitoring data.

Mr. Baca will testify regarding the Department's ozone attainment initiative, which was undertaken to

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address the rising ozone concentrations in the state, and to support the Board in carrying out its duties under the Air Quality Control Act. Mr. Baca will explain the Department's participation in EPAs Ozone Advance Program, including the development of the Ozone Path Forward Plan for submission to EPA.

The Department is proposing that the Board adopt the Ozone Path Forward to meet the plan requirement of the statute. That plan includes voluntary measures as well as mandatory measures in the form of regulations. This rulemaking is the first of the mandatory measures outlined in the Ozone Path Forward Plan.

After this rulemaking, the Department will be proposing regulations to address ozone precursor emissions from the transportation sector by establishing vehicle emissions standards. As Ms. Ely and I told you a couple of months ago, these proposed regulations are under active development and the Department will be back before you later this year with its petition to formally initiate that rulemaking.

Now, you will hear from witnesses from industry that the statute constrains the Board to regulating only sources in those counties that have an ozone monitor located within their boundaries that is registering design values in excess of 95 percent of the NAAQS. This is a

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far too restrictive reading of the statute and it runs contrary to the statute's obvious intent to keep the state in compliance with federal ambient air quality standards.

You will hear from Mr. Baca that the ozone monitors are located within air quality control regions established by EPA. These regions do not follow county lines, nor do the oil and gas bearing formations where the target sources are located. And importantly, any nonattainment designation, if that were to come about, would not necessarily follow those lines. The Department has used county lines for the purpose of establishing well-known boundaries within which the rule applies, and has proposed inclusion of all counties with a significant number of emission sources that are within the air quality control regions with monitors that have been exceeding 95 percent of the standard. This approach fully aligns with the language and intent of the statute.

To support this rulemaking, the Department contracted with Ramboll, the top modeling firm in the country, to conduct regional photochemical modeling predicting the effects of the rule on ozone concentrations. Mr. Morris will testify to that extensive effort and the results, which clearly demonstrate that this rule will achieve meaningful reductions in ozone concentrations that could make the difference between an

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attainment or nonattainment designation, or a lower or higher nonattainment classification.

The results of the modeling as well as the voluminous technical support documents and work products generated by Ramboll have been posted on the Western Regional Air Partnership's website since May for review by stakeholders and the public. Additionally, at NMOGA's request, the Department arranged for Mr. Morris to provide the modeling files, consisting of over 8 terabytes of data, to NMOGA's modeling expert so that he could review the underlying assumptions structuring the model. It is important for you to note that the modeling conducted by Ramboll assumed that all model sources were in compliance with existing permit limits and federal regulations.

Cindy Hollenberg, of the Bureau's Compliance and Enforcement Section, will testify regarding widespread compliance problems across the industry in recent years, that it resulted in the known release of millions of pounds of excess emissions. Given the proposed rules numerous provisions designed to aid industry and the Department in assurance -- ensuring compliance, it is likely that the rule will have an even greater impact on ozone concentrations than what is shown by the modeling.

To assist with developing the provisions of the rule itself, the Department contracted with Eastern

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Research Group, a national environmental consulting firm that frequently works with EPA on federal regulatory efforts. To develop the rule requirements, the Department and ERG drew upon the work of the methane advisory panel convened under the Governor's Executive Order, as well as existing regulatory provisions and information from other states and EPA. Using data from the Air Quality Bureau's environmental database, ERG complied equipment inventories, which were used to develop estimates of costs and emissions reductions for the rules.

These inventories cost estimates and emission reductions are thoroughly documented in numerous spreadsheets, which also include detailed explanations of the data. NMED posted this documentation on its website in early June so that all stakeholders had access to it in developing their technical testimony.

Ms. Kuehn's testimony details the equipment and processes used target -- targeted by each section of the rule and the specific applicability emission standards, monitoring and recordkeeping requirements for those sources.

Mr. Palmer discusses the requirements and supporting technical data from other state and federal regulatory efforts that formed the basis for the emissions standards proposed in each section and the estimated costs

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and emissions reductions from implementation of those requirements.

NMOGA and IPANM have submitted testimony citing the costs associated with the rule as a reason for the Board to significantly limit the reach of the rule or to outright reject it. NMOGA even commissioned its own economic analysis from Juan Dunham, owner of a New York City-based consulting firm, Gorilla Economics. In contrast to the extensive data, thorough documentation, and detailed explanations provided by the Department in support of its cost -- cost estimates and modeling, Mr. Dunham's ten-page analysis is severely lacking in supporting data, explanations and transparency regarding his model. This analysis reads less like comprehensive expert testimony intended to fully inform the Board, and more like lobbying material designed to induce fear in the legislature and generate media headlines. And on that score, it succeeded.

While clearly an effective lobbying piece, this study does not come close to being sufficient for serious consideration by the Board as the testimony from the Department and other parties witnesses will show. The fact that NMOGA was willing to submit this material as expert technical testimony for the Board to rely on should make you question the validity and reliability of other

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representations they are making in this proceeding.

This rule does contain important provisions to provide regulatory relief for smaller independent operators. Ms. Kuehn and Ms. Day will testify regarding the small business facility definition in the rule, the data that support that definition, and how it limits the requirements that small operators must comply with.

IPANM dislikes this definition and seeks to have the Board return to the approach proposed in the Department's first prepetition draft of the rule, which broadly exempted all low-producing wells from the requirements of the rule. But that approach was ultimately rejected because it simply leaves too many emissions on the table and is not tailored to small independent operators. Low production does not necessarily equal low emissions or low overall company revenues.

The Department has repeatedly asked IPANM to engage with our data and suggest ways to improve the small business facility definition. For instance, they could propose different thresholds that would apply to more of the companies they claim should be included, or different ways of calculating those thresholds, but they have simply refused to do so.

The rule also provides relief for smaller lower

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emitting facilities by establishing emissions thresholds throughout each section of the rule that exempts sources with low emissions from compliance with the requirements. And there are flexibilities provided throughout the rule that allow operators to determine the best way to achieve compliance based on their particular operations.

One example is an alternative compliance plan that can be proposed for Department approval, to allow operators to achieve compliance with required emissions reductions across their entire fleet of equipment rather than on a source-by-source basis.

Will there be impacts on industry if the Board adopts -- adopts this rule? Yes. Any new regulation will necessarily entail costs to the regulated community. Will there be public health and environmental impacts and costs to industry in the state if EPA designates these areas as nonattainment for the ozone NAAQS? You can bet on that.

Failure of the Board to act, while it may delay such costs, will not avoid them. If the Board does not take action to address sources of ozone precursors, the federal government will. The Department believes, and the testimony will demonstrate, that the proposed rule before you is reasonable and workable for both industry and the Department and appropriately balances the regulatory burdens on industry against the interests of the state in

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complying with federal air quality standards, and most importantly, the interests of communities in reducing harmful air pollution that is detrimental to public health, welfare and the environment.

The Department thanks you for your service and looks forward to putting on its case.

HEARING OFFICER ORTH: Thank you, Ms. Katz.

Ms. Fox, would the Clean Air Advocates like to make their opening statement at this time?

MS. FOX: Yes, ma'am.

OPENING STATEMENT BY MS. FOX

MS. FOX: Good morning, Madam Hearing Officer, Madam Chair and members of the Board. I am Tannis Fox, with Western Environmental Law Center here today with my co-counsel, David Baake. We thank you for your time during this proceeding.

This rulemaking is one of the most complex, if not the most complex, that has come before this body. And we appreciate the significant effort and resources this hearing will take. We represent nine parties in this proceeding: Conservation Voters New Mexico, Diné C.A.R.E., Earthworks, National Parks Conservation Association, National -- Natural Resources Defense Council, San Juan Citizens Alliance, Sierra Club, 350 New Mexico and 350 Santa Fe. For shorthand, we refer to our

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clients as "Clean Air Advocates."

All of these organizations share an interest in making sure the rules adopted by the Board are as strong as possible in order to reduce ozone precursors that create harmful ground level ozone, reduce methane, an extremely potent greenhouse gas that contributes significantly to our planet's warming, and protect public health, especially that of frontline communities most impacted by oil and gas operations.

The ozone precursor Rule put forth by Secretary Kenney and the Environmental Department staff is a strong rule and we appreciate their work over the last two years that has gotten us here today. Governor Lujan Grisham has lead the way through her commitment to pass, "the country's toughest methane and air pollution -- air pollution rules."

We would like to see the Governor's commitment to passing the strongest rules in the nation translated into the final rules adopted by the Board. In our direct testimony, Clean Air Advocates join forces with the Environmental Defense Fund, Civic -- Center for Civic Policy, and NAVA Education Project, to put forth four proposals that strengthen NMED's proposed rule in significant ways.

And since our filing, we engaged in highly

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productive discussions with Oxy USA, Inc., one of the top oil and gas producers in the state. In our rebuttal testimony, our coalition and Oxy came to agreement on a number of proposals, including on all four of our initial proposals, with some modifications from our direct filing. And since our rebuttal filings, we have also had productive discussions with the National Park Service and are very pleased that the park service supports our completions, pneumatics and tank measurement proposals.

We believe that our proposals supported by an expanded and diverse coalition that includes the top producer and the federal government, deserves serious consideration by the Board. And that adoption of our proposals, combined with NMED's proposed rules, would put New Mexico on the map with nation-leading rules, as promised by the Governor.

I'd like to summarize our proposals and the testimony we will present and support. First, we propose more frequent leak detection and repair inspections for LDAR at oil and gas facilities that are located 1000 feet within homes, businesses and schools. Our proximity proposal, as we call it, is modeled after a rule already adopted in Colorado, and is set forth in Section 116 of the proposed rule.

More frequent LDAR inspections translate into

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greater emissions reductions. Relying on EPA technical documents, NMED estimates, for example, that if conducting EPA Method 21 inspections on a quarterly basis, translates to an 83 percent reduction in emissions from -- the emissions from leaks and that monthly inspections translate into a 92 percent reduction. These are huge emissions reductions and we know that leaks from oil and gas operations are a major source of emissions and air pollutants in New Mexico.

In support of our proximity proposal, you will hear from Lee Ann Hill. Ms. Hill has a Master's in Public Health from the University of California, Berkeley, and is a senior scientist of Physicians, Scientists and Engineers for Healthy Energy. Ms. Hill provides extensive testimony on the public health impacts of volatile organic compounds, or VOCs, including VOCs like benzene that are hazardous air pollutants. She'll discuss peer-reviewed studies indicating that living in close proximity to oil and gas facilities results in increased health risks and impacts from elevated pollution levels, and that these health risks decrease further away from these operations.

These impacts include increased risk for cancer, and risk to humans' respiratory, neurological and cardiovascular systems. Our proximity proposal helps protect frontline communities who bear the brunt of the

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impacts of oil and gas operations. EDF estimates 35,000 New Mexicans live within 1000 feet of oil and gas sites, and that over half are people of color and indigenous people. This Board has the authority to consider environmental justice impacts of this rule, and our proximity proposal helps mitigate impacts to communities of color who live close to oil and gas operations.

For our second proposal, you will hear about these impacts from one of those people who lives next to oil and gas operations, Don Schreiber, a rancher from Rio Arriba County. There are 122 wells in and around Mr. Schreiber's land and 33 within one mile of his home. Mr. Schreiber understands the impacts of oil and gas firsthand, and will provide testimony in support of our proposal to require reduced emissions completions or green completions during development and redevelopment of a well.

Mr. Schreiber will explain to the Board how as early as 2008, he and his wife reached agreement with ConocoPhillips to undertake reduced emissions completions on their land; however, after Hilcorp Energy Company acquired ConocoPhillips' assets in 2017, it has refused to continue ConocoPhillips' program -- reduced emissions completions.

Our reduced emissions completions proposal has

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already been adopted by Colorado and would require capture of emissions during all stages of completion and recompletion of wells, instead of allowing emissions of pollutants to be vented into the atmosphere. EDF technical witness, Tom Alexander, will explain why this proposal set forth in newly-proposed Section 127 is technically feasible.

Our third proposal would accelerate retrofitting of pneumatic controllers with what are called zero bleed controllers or controllers that do not emit gas and the air pollutants contained within. Clean Air Advocates is fortunate to have the expertise of a national expert, Dr. David McCabe, who helped develop our proposal, and will testify -- testify in support of it.

Dr. McCabe is an atmospheric scientist with the Clean Air Task Force. He has a Bachelor of Arts in Chemistry from the University of Chicago, and a Ph.D. in physical chemistry from the University of Colorado. He has also been heavily involved in the methane rulemakings in Colorado.

As Dr. McCabe will explain in his direct testimony, pneumatic controllers are big emitters. Some, powered by gas, are actually designed to emit gas and the pollutants they contain, and many malfunction and emit pollutants. The Clean Air Task Force estimates there are

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over 118,000 pneumatic controllers in New Mexico that emit an estimated 30,000 metric tons of VOCs and 108,000 metric tons of methane. EDF analysis indicates pneumatic controllers are the second largest source of methane from oil and gas in the state. Any rule designed to reduce ozone precursors must include a robust schedule to retrofit pneumatics.

The proposal we put forth before the EIB has been negotiated with Oxy. The retrofit schedule is somewhat less aggressive than that in Colorado, but it is nonetheless, much stronger that what NMED proposes, and it is technically and financially feasible for operators, as demonstrated by Oxy's support in Colorado's adoption of the somewhat more aggressive schedule.

Dr. McCabe will also explain why our pneumatics proposal set forth in Section 122 is cost effective, while NMOGA's cost estimates are inaccurately high, and why NMED's cost estimates -- cost estimates are conservatively low.

Finally, Dr. McCabe will explain our fourth proposal to the Board. This proposal would require tanks, new or modified oil and gas sites, to use what we call a storage vessel measurement system. This system gauges the quantity and quality of liquids into a storage vessel or a tank. Typically, liquid levels in a tank are measured by

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opening a thief hatch on top of the tank, inserting a gauging device, and samples are collected by opening the hatch, but when the hatch is opened, air pollutants, including VOCs and methane are released. Since gauging is often performed frequently and the hatch is opened every time a measurement is taken, these emissions can be significant. Our proposal is set forth in Section 123 and the rule is modeled after Colorado's rule and is cost effective for operators.

That rounds out Clean Air Advocates' proposals and list of witnesses. Thank you again for your time and attention during this important proceeding. This rulemaking is critically important for New Mexico. We have a number of counties that are bumping up against the ground level ozone standard. This has real implications for public health. And we have a methane hotspot in the Four Corners area, which is real implications for climate warming. But make no mistake, this rulemaking has significance beyond our borders. EPA and other states are watching this proceeding. New Mexico's rule will serve as a model for the federal government and other states in adopting their own rules to prevent formation of ground level ozone, combat climate change and protect public health.

We urge the Board to follow through on the

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Governor's commitment to pass nation-leading rules. Thank you again for your time. We look forward to putting on our case before you.

HEARING OFFICER ORTH: Thank you, Ms. Fox.

Ms. Paranhos, would you like to make your opening statement now?

MS. PARANHOS: Yes, Madam Hearing Officer. Thank you very much.

OPENING STATEMENT BY MS. PARANHOS

MS. PARANHOS: Good morning, members of the Board, Madam Hearing Officer. Thank you for the opportunity to present an opening statement in this important proceeding.

I am Elizabeth Paranhos, Counsel for the Environmental Defense Fund. EDF is a national membership organization with more than 2.5 million members residing throughout the U.S., and more than 18,000 residing in New Mexico. Many of these members are deeply concerned about the pollution emitted from oil and natural gas sources.

EDF brings a strong commitment to sound science, collaborative efforts with industry partners and market-based solutions to our most pressing environmental and public health challenges. EDF strongly supports the proposed NMED rules. We commend the agency on proposing a strong rule, and recognize and appreciate the tremendous

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amount of time and resources NMED staff has put into its rule and supporting documentation. We appreciate NMED's adoption of our proposal to require gas-powered pneumatic controllers be included in equipment leaks inspections or LDAR, as well as other revisions NMED has made in response to our and our partners' suggestions.

That being said, we, in conjunction with other NGO partners and Oxy USA, propose a suite of improvements that will further reduce pollution emitted from oil and gas facilities in a cost effective and technically feasible way. We believe that by adoption of these improvements, the Board can finalize a rule that will meet Governor Lujan Grisham's goal of promulgating a nationally-leading set of requirements.

These joint improvements include more frequently leak inspections at occupied places, such as homes and schools, as Ms. Fox just reviewed. A proposal to hasten and increase retrofits of gas-powered pneumatic controllers, a requirement to control emissions from flowback vessels during well completions and recompletions, installation of a tank measurement system on new storage tanks, and additional clarifications and revisions to the leak detection and repair and tanks provisions, intended to ensure the benefits of the requirements match the cost. The rule has allowed for

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technological innovation and are clear and workable.

As evidence is presented, EDF will show steep reductions in ozone precursor emissions are necessary in order to protect the health of New Mexico residents and its environment from unhealthy and dangerous levels of ground level ozone. At the same time, New Mexicans are experiencing increased drought, wildfires and unhealthy air pollution caused by a warming climate.

Methane emissions co-emitted with VOCs from oil and gas facilities are a primary contributor to climate change; in particular to near-term warming. As NMED has pointed out, reducing VOC emissions will also reduce methane emissions, since the two pollutants are inextricably tied and co-emitted as components of natural gas.

The Governor directed NMED to promulgate rules to reduce methane emissions. While the primary aim of this rulemaking is to reduce VOCs and offset the nitrogen that contribute to ground level ozone, it is incontrovertible that VOC reductions will also reduce methane as a co-benefit.

EDF's first witness will be Maureen Lackner, an economist for EDF. Ms. Lackner's opinion is that the Dunham report has overstated costs, fails to account for the social costs of oil and gas pollution and is based on

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a faulty model that lacks transparency and has not undergone a sensitivity analysis. Ms. Lackner will tell you she agrees with NMED's witness, Susan Day, that you should give the report no weight.

You will next hear from Dr. Tammy Thompson, a senior air quality scientist with EDF. Dr. Thompson will explain that NMED's ozone modeling demonstrates that VOC emissions from oil and gas sources are contributing to unhealthy levels of ozone in New Mexico, and that adoption of rules to reduce emissions, as NMED and EDF have proposed, are necessary to protect air quality.

Next, you will hear from Dr. David Lyon, a senior scientist at EDF. Dr. Lyon will discuss some of the definitions EDF proposes, in conjunction with Oxy and our other NGO partners for Section 116, the equipment leak requirements. Dr. Lyon will next describe the results of 16 peer-reviewed studies, including five in the Permian Basin in New Mexico, that demonstrates the cost effectiveness of frequent leak inspections as proposed by NMED and as proposed by the EDF, NGO, Oxy, LDAR proximity proposal that requires increased inspections at public occupied places, such as homes and schools.

The studies, which are based on direct measurements, demonstrate that the pollution emitted from oil and gas facilities in New Mexico is magnitudes higher

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than traditional inventory suggests. For example, one study conducted by Robertson, et al., suggests that New Mexico Permian Basin methane emissions are ten times higher than operator reports to EPA, pursuant to EPA's greenhouse gas reporting rule.

As Dr. Lyon will explain, one reason for the difference between operator-reported emission estimates and measured emissions is the failure of traditional inventory estimations to account for improperly operating conditions or super emitters. Dr. Lyon will explain that such super emitters are mainly intermittent, which indicates the need for frequent, comprehensive inspections to detect leaks from equipment.

You will also hear from Dr. Lyon the results of the studies, including one in the Permian Basin, that demonstrates the need for recurring leak inspections at low producing wells. You heard a little bit about this topic from Ms. Katz earlier. These studies indicate low production wells are likely a disproportionately large share of U.S. Oil and gas emissions.

Dr. Lyon will explain why the Board should reject NMOGA's proposal to reduce the inspection frequency for wells that have a potential to emit of less than ten tons per year of VOCs, in light of the findings of these scientific studies.

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Next you will hear from Hillary Hull. She is director of Research and Analytics for EDF. Ms. Hull will provide evidence demonstrating the cost effectiveness of NMED's proposed LDAR requirements and of the EDF, NGO, Oxy LDAR proximity proposal. Ms. Hull will explain that NMED has likely underestimated the costs of frequent leak detection and repair requirements, not overestimated costs, as NMOGA suggests.

Further, per Ms. Hull's analysis, the per well site cost of conducting semiannual inspections is 30 percent lower than NMED's estimate, making NMED's estimate of cost effectiveness of LDAR quite conservative. Ms. Hull will also note that our joint LDAR proximity proposal will increase reductions associated with NMED's proposed rule by 3,600 tons of VOCs, at an average cost of only $894 per ton of VOCs reduced, within the proposed 1000 foot boundary of our LDAR proximity proposal.

Ms. Hull will also discuss the important co-benefits associated with increased inspections. Per her analysis, additional inspections at homes, playgrounds and schools will remove 14,300 tons of methane and 150 tons of hazardous air pollutants, including benzene, from the air annually. Importantly, these reductions will help protect the air breathed by over 35,000 New Mexicans living near oil and gas wells site, including 2,700

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children under the age of five, 19,000 people of color, including over 5,800 Native Americans and 4,500 adults 65 years or older.

You will hear additional testimony from Dr. Thompson regarding the scientific underpinnings of our LDAR proximity proposal. Ms. Thompson will underscore that adoption of our proposal to increase inspections at well sites near occupied places, such as homes and schools, will result in the removal of additional tons of VOCs, thus helping New Mexico avoid falling into ozone nonattainment.

Second, she will discuss results of a Colorado Department of Health study that found that persons living within 2000 feet of oil and gas production well sites are at risk of developing cancer, as well as noncancer adverse health impacts due to exposure from toxic VOCs.

Tom Alexander, a former vice president with Southwestern Energy, will provide additional support for the joint LDAR proximity proposal to increase inspections at well sites located near homes, based on his 18 years of experience working for Southwestern Energy. Southwestern Energy's experience implementing their own LDAR program helped the company reduce leaks, optimize operations and develop preventative maintenance procedures.

Moving on to the topic of liquids unloading,

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Mr. Alexander will provide testimony in support of NMED's proposed requirements to use a form of artificial lift or other approved control technologies to reduce venting from liquids unloading activities and minimize the need for manual unloading.

With respect to controlling emissions from natural gas-powered pneumatic controllers, one of our proposals, both Dr. Lyon and Mr. Alexander will express support for the joint EDF, NGO, Oxy proposal that increases the pace and amount of conversion to nonemitting pneumatic controllers. Mr. Alexander will note that the EDF, NGO proposal is economically reasonable and practical as technologies exist today to eliminate emissions from pneumatic controllers.

Mr. Lyon's testimony is rooted in the results of scientific, peer-reviewed studies that demonstrate high emissions from malfunctioning gas-powered pneumatic controllers. While frequent inspections can help reduce emissions from malfunctioning pneumatic controllers, the surest way to eliminate emissions is to replace gas-powered devices with nonemitting ones.

You will also hear from Mr. Alexander, support for our joint proposal to require operators install tech measurement systems on new storage tanks and to allow for the use of alternative approved control technology to

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control emissions from low emitting storage tanks. Ms. Hull will testify to the reasonableness of the NMED cost effectiveness estimate for its tank control requirements.

And lastly, you will hear from Mr. Alexander, support for our joint proposal with Oxy, to require operators to control emissions from flowback vessels during completions and recompletions. Mr. Alexander will explain why the joint proposal is safe, economically feasible and technically practical.

Again, I greatly appreciate the opportunity to testify on this important rulemaking. I appreciate the hard work of NMED's staff, this Board and Madam Hearing Officer. Thank you.

HEARING OFFICER ORTH: Thank you, Ms. Paranhos. Mr. Jaynes, would you like to make an opening statement now or reserve?

MR. JAYNES: Thank you, Madam Hearing Officer.

OPENING STATEMENT BY MR. SHIMANEK

MR. SHIMANEK: I'm going to speak for the Center for the Civic Policy and the NAVA Education Project. I'd like to thank you --

HEARING OFFICER ORTH: Mr. Shimanek, hold on. Please introduce yourself so that the court reporter knows who you are.

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MR. SHIMANEK: Sorry. Yes, my name is Travis Shimanek. I am a clinical law student from the University of New Mexico School of Law, National Resources, Environmental Law Clinic, representing the Center for Civic Policy and the NAVA Education Project.

Thank you, Madam Hearing Officer and Madam Chair and the Environmental Improvement Board members for your time and effort in this matter. The focus of our clients is to ensure that the regulations provide strong public health protections from ozone precursors, especially those in marginalized and underserved communities, such as Native American populations, those with limited English proficiency and for people who live near oil and gas wells.

Some background on the Center for Civic Policy and NAVA Education Project. The Center for Civic Policy empowers and amplifies historic -- historically-excluded and underrepresented New Mexicans for increased voter participation to increase equitable representation in the communities. The Center for Civic Policy is here to make sure that their communities' interests are equitably representative -- represented in this matter for the rulemaking hearing.

Similarly situated is the NAVA Education Project, whose missions is to unite community stakeholders to

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actively improve the quality of life for Native American communities and to protect Native American culture. NAVA Education Project is committed to social, economic and environmental justice principals that advance a healthy and sustainable community for the Native American families living in New Mexico.

We will be presenting three witnesses in this hearing. Mr. James Povijua will be representing the Center for Civic Policy. Mr. Joseph Hernandez will be representing the NAVA Education Project. And Professor Cliff Villa will be supporting both the Center for Civic Policy and the NAVA Education Project.

Mr. Povijua, of the Center for Civic Policy, and Mr. Hernandez, of the NAVA Education Project, will both testify about their respective organizations' missions, the relevant work with underserved communities, and why this has led their organizations to join with the Environmental Defense Fund, the Clean Air Advocates and other parties in supporting amendments to strengthen the proposed regulations. They will speak about the particular importance of provisions to require more frequent leak detection and repair on facilities in close proximity to where they live, work, and their children go to school.

Professor Cliff Villa will be supporting this

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testimony by offering rebuttal testimony from an environmental justice standpoint in response to the testimony of several parties that have proposed both strengthening and weakening leak detection and repair regulations. He will testify on the facts presented by different witnesses will relate to the disparate impacts on local communities, and how that in turn, relates to the Board's requirements to consider potential disparate impacts of any regulation on the marginalized population.

We would just like to reiterate the environmental justice perspective we believe the Board needs to consider, and the disparate impacts they have the power to mitigate for local communities through the adoption of our strengthened proposals.

Thank you. That concludes my opening statement.

HEARING OFFICER ORTH: Thank you very much, Mr. Shimanek.

Mr. Vimont or Vimont, on behalf of National Park Service.

OPENING STATEMENT BY MR. VIMONT

MR. VIMONT: Okay. There, my video came up.

My name is John Vimont; I'm the acting chief of the National Park Services Air Resources Division. It's a national office and serves parks throughout the national park system. Several national park service units in and

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near New Mexico measure exceedances of the ozone air quality standard, particularly Carlsbad Caverns National Park.

We will provide information on enhanced measurements of volatile organic compounds, VOCs, at -- and nitrogen oxides taken at Carlsbad Caverns National Park, which strongly support the need for this rulemaking. We will also provide some suggestions that will strengthen the rule. I appreciate the opportunity to testify before the Board today and I appreciate all of your work in this area. Thank you.

HEARING OFFICER ORTH: Thank you, Mr. Vimont. Let's turn then to WildEarth Guardians. Mr. Nykiel and Mr. Timmons, would you like to make an opening statement now?

MR. NYKIEL: Yes, please, Madam Hearing Officer.

OPENING STATEMENT BY MR. NYKIEL

MR. NYKIEL: Thank you, Madam Hearing Officer, Madam Chair, members of the Board. My name is Matt Nykiel and with me today is Daniel Timmons. Together, we -- we represent WildEarth Guardians. Thank you for the opportunity to present this opening statement regarding the Environment Department's proposed rules, which are critical to protecting the public health and environment of New Mexico.

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As you will hear from our witness, Mr. Jeremy Nichols, the Department's proposed rule is a good step forward, but could be made better. Mr. Nichols will present evidence supporting three targeted proposals to improve the rules by providing greater public transparency, comprehensively addressing precursor emissions, and providing a backstop to prevent the ozone problem from getting worse.

WildEarth Guardians is a nonprofit conservation organization, whose mission is to protect and restore the wildlife, wild places, wild rivers and health of the American West. Guardians was founded and is headquartered in Santa Fe and represents thousands of members and supporters, many of whom live in New Mexico and deeply hope this Board adopts the strongest possible rules that will finally get New Mexico's ozone problem under control.

To be clear, getting New Mexico's ozone problem under control isn't just about complying with an abstract numeric standard. It's about protecting public health and giving people the peace of mind that they can safely breathe the air in New Mexico. As you will hear today, for the past several years, New Mexicans across the state have been breathing air that is demonstrably unhealthy. So far, 2021 has been no different, as the state continues to wrack up ozone exceedances.

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Responding to this serious pollution problem and to actions by the Trump Administration, which stripped federal air quality protections that New Mexico relied on, the New Mexico State legislature and Governor Michelle Lujan Grisham authorized and directed this Board to adopt New Mexico-based rules to address the unique air pollution challenges of this state.

You will hear a good deal of testimony regarding air quality modeling and future projections, but the data on the ground today is very clear. New Mexico has a serious ozone problem, and no longer can this state afford to simply do the bare minimum by meeting the basic federal standards. The Ozone Attainment Initiative, including the proposed rules at issue in this proceeding must go farther if this Board is serious about its mission to protect public health.

With over a decade of experience working on air quality rules that address ozone pollution in states including New Mexico, Colorado and Utah, Guardians' witness, Mr. Nichols, will highlight the important context within which the Board will consider these rules, including the fact that the oil and gas industry is a predominant source of ozone precursor emissions, the importance of adopting strong rules the first time, to avoid the persistence of ozone pollution other states have

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experienced even after adopting similar rules, the alarming number of ozone exceedances recorded just this year, and how increasing ozone pollution and the increasing impacts of climate change are forecast to feed on each other.

Given the context of the ozone problem in New Mexico, Mr. Nichols will present three proposals to strengthen the Department's rules. First, Mr. Nichols will testify in support of a rule that requires all owners and operators to submit a semi-annual report to NMED, identifying deviations from the rules in Part 50. Reporting requirements like these are an essential feature of most, if not all, pollution control rules. And these reports would provide all members of the public transparent access to whether or not a particular operator or facility who may be in their community or their backyard, is following the rules.

As the Department's rules are currently drafted, only the Environment Department can request this information, if they do so at all. Mr. Nichols will explain how limiting access to this information, to a chronically underfunded and short-staffed state agency, is risky. And how the Department's discretion to request these report could lead to inequities in oversight and enforcement, and perpetuate environmental injustice

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against historically marginalized communities.

Second, Mr. Nichols will testify in support of a rule amendment that accounts for sources of ozone precursor emissions that have historically been overlooked. Mr. Nichols will explain how a recent report conducted by the UCLA Institute of the Environment and Sustainability identified the likelihood that a significant number of oil and gas facilities emit ozone precursors during wellhead construction, and that the emissions during this phase of development are not currently accounted for or regulated by the Environment Department.

Finally, Mr. Nichols will testify in support of a common sense rule that authorizes the Environment Department to deny new air quality permits for oil and gas facilities that would add more ozone precursors to areas of New Mexico that already exceed 95 percent of the ozone standard. Mr. Nichols will explain that despite years of ozone exceedances in New Mexico, year after year the oil and gas industry continues to secure new air quality permits that allow more ozone precursors to be emitted, making the ozone problem harder to solve.

This rule would create a critical backstop that accounts for the facts that many of the new rules proposed by the Environment Department do not become effective

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immediately. As you will hear from the industry parties, it will take owners and operators time to reduce their pollution levels according to the new rules. And while we're waiting for that, the rules should ensure the ozone problem doesn't keep getting worse, and, therefore, more difficult to solve.

We thank the Board for the opportunity to provide an overview of our case and we thank you for your time and consideration of strong New Mexico-based rules that will finally start to address this state's ozone problem and provide New Mexicans an essential comfort; that the air they breathe is clean and healthy.

As you consider these rules, we encourage you to bear in mind your charter, set forth in New Mexico's Environmental Improvement Act, Section 74-1-2 NMSA, which directs -- which directs you, as EIB members, to "ensure an environment that in the greatest possible measure will confer optimal health, safety, comfort and economic and social well-being on its inhabitants, will protect this generation, as well as those yet unborn from environmental threats -- from health threats posed by the environment, and will maximize the economic and cultural benefits of a healthy people." Thank you.

HEARING OFFICER ORTH: Thank you, Mr. Nykiel.

Mr. de Saillan?

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OPENING STATEMENT BY MR. DE SAILLAN

MR. DE SAILLAN: Thank you, Madam Hearing Officer. Good morning, Madam Chair, Ms. Vice Chair, members of the Board and Madam Hearing Officer. My name is Charles de Saillan. I'm a staff attorney with the New Mexico Environmental Law Center and I'm representing the New Mexico Environmental Law Center in this proceeding. We appreciate the opportunity to appear before you today in this very important rulemaking proceeding. New Mexico Environmental Law Center is a nonprofit public interest law firm that represents environmental community organizations on a wide variety of environmental and environmental justice issues here in New Mexico. The New Mexico Environmental Law Center has approximately 750 members. We have been a participate -- a participant in this rulemaking proceeding from its inception. We also participated in the related rulemaking proceeding before the Oil Conservation Commission, addressing waste from oil and natural gas production.

We're -- we were represented on the Methane Advisory Panel, which developed the technical groundwork for these regulations. We also submitted lengthy comments on the oil conversation division draft waste rules. And we gave public comment and expert technical testimony during the Oil Conservation Commission hearing on those

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rules.

We submitted detailed comments to the Environment Department on earlier drafts of the proposed ozone precursor rule that we're discussing here today. The proposed regulations would address emissions of oxides of nitrogen, or NOx, and volatile organic compounds, or VOCs, from oil and natural gas production. These pollutants are harmful to human health.

For example, one of the VOCs that emitted from oil and gas production, is benzene, a known human carcinogen. NOx and VOCs react with sunlight and oxygen in the atmosphere to form ozone. Ground level ozone is also harmful to human health. The co-benefit of these regulations would be the reduction of methane emissions from oil and natural gas production. Methane is a potent greenhouse gas. It is approximately 86 times more potent than carbon dioxide over a 20-year period. New Mexico Environmental Law Center generally supports the rules that the Environment Department has proposed in this proceeding, with a few exceptions. We thank the Environment Department and its staff for the tremendous amount of work that has gone in to these proposed rules.

There are a few issues that I would like to address. The first issue is the exemptions for lower-producing wells. Now, as originally drafted, the

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rules would have exempted so-called "stripper" wells. The rule also would have exempted facilities that emit less than 15 tons per year of VOCs. The proposed rule that the Environment Department submitted to the Board no longer includes those exemptions. We support the Department's decision on this issue and we appreciate the Department's actions.

Our witness, Theresa Pasqual, of the Acoma Pueblo, will address this issue from the perspective of the Native communities in the San Juan Basin. We, likewise, oppose the industry's proposals to exempt wells that produce less than 15 barrels, or barrel equivalents per well per day.

The second issue is the phase out of pneumatic controllers. We generally support the Environment Department's proposal to phase out pneumatic controllers, which are operated by natural gas. These devices are among the largest sources of emissions from oil and gas production. We agree with the Department that these devices need to be replaced with zero emission controllers. Those are -- those that are operated by compressed air or by electricity. However, we think that the Department's proposal to require replacement only by 2027 is much too long a time period.

We agree with and support the proposal of the

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Environmental Defense Fund and Clean Air Advocates and other organizations, to require replacements within six months.

The third issue is the result -- excuse me. The third issue is the use of storage vessel measuring systems. The current practice is to measure liquids in tanks by opening a hatch -- a thief hatch, and take the measurement manually. This results in substantial releases of pollutants into the atmosphere. We support proposals to require automatic measuring systems be installed in storage vessels.

The fourth issue is the installation of reduced emission completion equipment. Again, we support the proposals of several organizations to require the use of equipment for the completion and reworking of wells undergoing hydrologic fracturing, equipment that will reduce the emissions of harmful pollutants into the atmosphere.

The next issue is leak detection or repair, or LDAR. Leaking equipment is another major source of emissions of harmful air pollutants from oil and gas production. Leak detection and repair requirements are extremely important to reduce emissions, especially for people who live, go to school, and work near oil and gas production facilities. We support the strong LDAR

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requirements.

We, therefore, support the proposal of Clean Air Advocates, the Environmental Defense Fund, the Center for Civic Policy, the NAVA Education Project to require enhanced LDAR for facilities that are within 1000 feet of specified occupied areas. These occupied areas include schools, businesses and homes.

On several of these points, I -- I want to say that we support the agreement that has been reached among Oxy USA, EDF, Clean Air Advocates, and some of the other organizations. We commend these parties for reaching an agreement on these issues. We urge the Environment Department to also support this agreement and we urge the Board to adopt the terms of this agreement.

Finally, I'd -- it is important to emphasize that the emissions of harmful air disproportionately affect Native Americans and Hispanic communities in New Mexico. Our witness, Theresa Pasqual, will also address this issue. I would like to add that, although, we are playing a relatively minor role in this proceeding, that should not be taken as an indication of the importance of this rule, in our view. It is of critical importance.

We thank the Board for its time and effort in this complex, but very important rulemaking proceeding. We urge the Board to adopt a strong ozone precursor rule.

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Thank you.

HEARING OFFICER ORTH: Thank you, Mr. de Saillan. We have been going for an hour and 45 minutes. Now, some of us were on the platform at 8, we need a break. Let's take a brief break until 11 a.m. When we return I will invite NMOGA to make its opening statement and proceed through the rest of the service list. Thank you.

(Recess taken from 10:46 a.m. to 11:00 a.m.)

HEARING OFFICER ORTH: All right. Who will be offering -- oh, there's Mr. Hiser. Whenever you're ready, Mr. Hiser, your opening statement for NMOGA.

OPENING STATEMENT BY MR. HISER

MR. HISER: Thank you, Madam Hearing Officer. Good morning, Madam Hearing Officer, Madam Chair, members of the Board and the other parties. My name is Eric Hiser, with the firm of Hiser Joy. I'm here with Brandon Curtis, also from that firm. We represent the New Mexico Oil and Gas Association, or NMOGA, as you've heard us referred to many times throughout this hearing. We also are assisted by Dalva Moellenberg from Gallagher & Kennedy in Santa Fe, as co-counsel.

Well, who is NMOGA? NMOGA is the New Mexico Oil and Gas Association, and it comprises over 1000 operators who are engaged in the oil and gas business in New Mexico. And together, they represent more than 90 percent of the

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total oil and gas activity in New Mexico. We've been engaged in this rulemaking since its inception, and NMOGA established a working group with over 80 member companies that provided expert support in many areas and participated in the process before the Department.

What are NMOGA's objectives in this rulemaking and in this hearing? Well, contrary to the suggestion that may be coming across from other parties, including the Department and the environmental groups, NMOGA's suggestion is not that we do not need those rules, but, rather, that the rules should be crafted effectively to balance the emissions reductions while maintaining the viability of the important oil and gas industry to New Mexico.

We've been actively engaged in trying to provide proactive, cost effective solutions, and improve practices to help reduce the emissions of ozone precursors. NMOGA has also brought to NMED's attention, and will bring to this Board's attention during this hearing, some certain common things, such as requirements that are technically infeasible, we just can't do them, where they may be unworkable because of the way the oilfield works or the particular way the requirement is phrased.

We'll also address situations where the requirement may be, in our view, cost prohibitive, or

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where the emissions benefit is trivial for the cost incurred. Finally, there are some safety issues that we believe this Board should consider before it proposes to adopt certain regulations that may raise safety concerns for our workers in the field.

We have also, however, proposed and agreed to a series of cost effective solutions and best management practices that will greatly reduce the emissions of ozone and nitrogen oxide precursors. And we think that that should not be overlooked as part of NMOGA's efforts in this rulemaking.

We're pleased that many of our technical feasibility and some of the workability and cost prohibitive issues were addressed in the Department's September 16th, 2021 revisions. So what are going to be some of the themes that you, as Board members, will hear throughout this testimony?

The first is that this is an ozone rule, and that our focus needs to remain on the statutory authority and the prevention of ozone and its health effects. You may hear things about climate change and methane, but that's really sort of peripheral to the fundamental thrust of this rule.

Second, as you've already heard, this rule is different than many of those that come before this Board.

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Many of the rules that are brought by the Environment Department are rules that have already been adopted elsewhere by the Federal EPA and are being adopted and customized to New Mexico. In this case, the Department, consistent with that legislative directive, is bringing a brand-new rule that's breaking ground. That's good news in part, and shows New Mexico's leadership, but it also means that you, as the Board, bear a higher burden of vetting all of those aspects of the rule to make sure that they are necessary and appropriate, because we don't have the benefit of a different agency already having done that in a different context.

You will also see that this rule is different because it's costly. You've heard that the industry expert, John Dunham's estimate is about 3.2 billion. I note that even the NMED witnesses have conceded the cost is perhaps in the 1.5 billion range. Whether it's 1.5 or 3 billion, this is a very expensive rule compared to many that come before this Board. And that means that it's appropriate to pay attention to questions where we may be able to keep effective regulation, but do so at lower cost to New Mexicans.

The other thing that I think is important about this rule is that it has somewhat limited impact on those ozone levels. It's not a silver bullet that's going to

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solve all of New Mexico's ozone attainment issues, as much as we and industry wish it would as well.

NMED's modeling that Ralph Morris will present shows the maximum impact is about 1.5 part per billions in the Northwest at one monitor location, and that's about .8 part per billion, at best, in the Southeast. And the average reduction is only about .8 part per billion in the Northwest, and about .2 in the Southeast.

So we're spending a fair amount of money here for not a lot of emissions reductions. The NMOGA witness, Dennis McNally, from Alpine Geophysics, will testify that the NMED model shows that the VOC controls reduce a fraction of that total ozone amount by a controlled .1 and .3 part per billion across the state. So the VOC component of this rule in particular is troubling to NMOGA because it doesn't seem like there's a lot of bang for the money that the state is being asked to put in to that state and industry.

And Dennis McNally will also provide some overview about how the industry's ozone and VOC contributions are really fairly small in the overall picture. You've heard a number of statements that we are predominant cause of ozone formation in the State of New Mexico. And this is not true. The predominant cause is clearly transport, and clearly things like biogenic VOC

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emissions that occur regardless of the industry's presence. And it's important to see how all of the picture and pieces of that puzzle fit together as you are making decisions about the future of the state.

So, in general, we're generally supportive of the proposals that you have from the New Mexico Environment Department. We're asking this Board to give some particular scrutiny to some of the VOC controls to make sure that they are actually going to deliver the promised benefits at a reasonable cost.

So let's turn, then, to some of the witnesses and the issues that will be before the Board. First, there is a threshold issue, which we've heard, which is that it's not apparent to us at NMOGA that Rio Arriba or Chaves County should be included in this rule. The current design value of Rio Arriba County is less than 95 percent of the NAAQS. We believe that's below the threshold established by the legislature, and that's a trend in Rio Arriba County, not just a one-time occurrence.

For Chaves County, we don't believe that an adequate showing has been made that it is, in fact, causing or contributing or over 95 percent of the threshold. And we commend that to you, you'll hear some additional testimony from Dennis McNally on that issue.

Turning to the substantive provisions of the

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proposal, you will see that Section 113, on engines and turbines is one of considerable concern to NMOGA. This is the section that has a lot of opportunity to be very disruptive to field operations, and we want to highlight for you a couple of factors that are important to making this part of the rule very effective.

The first is, we need to have the ability to relocate engines and turbines as the decline in production sets in, so that we don't leave overly large engines at a well site. We need to be able to move those so that we can reduce the emissions. We are pleased the NMED, in the September 16th proposal, has recognized this.

Similarly, it's important for us that we have the ability to take engines and turbines into the shop and work on them there, where we can do better maintenance than being forced to do them out in the field. And NMED's latest revisions would allow that as well. We think those are very significant and important developments.

We believe that the current September 16th proposals in Table 1 and Table 2 on the emissions limits, represent the maximum that is currently technically and cost effectively achievable, but we are supportive of those levels found in Tables 1 and 2. And we think that Table 3 on turbines is also very close, with a couple of minor tweaks that you'll hear about from Solar Turbines.

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On the other hand, we do not agree with the National Park Service's suggestion that we should bring in all engines, regardless of size, and regulate them at these levels. We believe for reasons that our expert, Justin Lisowski, who is a designer and installer of these engines, that that's not possible under the design and capabilities of current technology for those smaller horsepower engines; basically, those under 1000 or 500 horsepower. And so that's important. There's also some workability issues in terms of the giant expansion and the number of effective units. That's enough on engines and turbines.

What's NMOGA's next concern? We also have concern about the equipment monitoring provisions. Here, we are pleased to say that the Department has moved in a very good direction, and we're down to now discussing a date and time stamp. This is in Section 112. You'll hear from our expert, John Smitherman, a long time industry executive, about the difficulties in trying to integrate new components into electronic database systems where you have to work with inherited systems already in place.

But you'll hear our commitment to trying to make that work, and the only thing that we really need here is a little bit more time to achieve that work, that integration. As presently set forth by the Department,

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they would adopt their rules in January, and we're supposed to have them in place by April of the same year. If anybody has ever worked with IT, we know IT doesn't integrate that quickly, so there will need to be a little bit more time for us to pull that off.

Our third issue is storage vessels addressed in Section 123. You'll see by looking at the positions of the parties, that there was never a verbal agreement on the threshold for existing storage vessels. What you didn't hear is that industry and the Department, and I think the environmental groups, are all in agreement on the two ton per year threshold for new facilities. So there is agreement on that.

Why are we concerned about existing? We believe that the cost estimates that we are seeing overlook the single tank battery, and that when you look at single tanks, of which there are quite a few in New Mexico, the resulting costs are simply unacceptable and would drive many of those tanks out of being used, and hence require shutdown of the associated facility.

One of the things that you heard from EDF and other groups is a number of academic studies, where they say this is achievable. Well, you'll hear from NMOGA's expert, Adam Meyer, whose job is to design and install these tanks, that the costs are, in fact, much higher than

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those historic studies, which may be from ten years ago, are currently, and that many of these things are not achievable. And so we think that you will find that to be very interesting testimony.

We will also propose that by tweaking the thresholds, this Board may be able to achieve the vast majority of the emissions reductions, but cut the cost by perhaps 50 percent or more, while achieving substantially the same results. And that's why when we talk about crafting effective rules that are also cost effective, this would be an example of that.

We also don't disagree with automatic tank gauging for new tanks. That's consistent with the OCD rules, and we remain supportive of that as well, although, we're not sure that the current NMED rules need to say the same thing as the OCD rule does.

Our fourth issue is hydrocarbon liquid transfers. We're pleased that there has been good movement over the course of this discussion, and that NMOGA and NMED basically have consulted and agreed on the draft that's been presented to this Board. It excludes produced water, which is not a significant source of hydrocarbons, which was NMOGA's principal concern, and I think the principal concern of many of the other people that you may hear from on the industry side in this proceeding.

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Industry, in its part, has agreed to adopt a number of good operating practices to reduce the emissions from these procedures. We think this is an example of a good rule and we note that it includes beneficial provisions like not requiring pipelines -- facilities that pipeline their liquids, to install additional controls when those aren't needed.

Moving to pneumatics; we're going to be talking a lot about pneumatics. I think the Board has probably already gathered that. There is little apparent agreement amongst the proposals, but I think there's actually a fair amount of actual agreement on what should be done. Industry has agreed to phase out high bleed controllers, that's part of our proposal that you will see. Industry has agreed to the phase out of controllers on the schedule that was proposed by NMED.

What our concerns are and what we ask the Board to keep in mind, is that we need to have a program that doesn't result in surprises. And a surprise occurs if a controller failure at a facility requires us to suddenly have to try to retrofit that entire facility at one time out of its planned order. We need to preserve certain gas-based controllers for certain applications for health, safety and process reasons, where there's not a good solution. This was accepted in Colorado. We don't

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believe it's very controversial.

And we do have a concern about the proposed line power, short-term phase-out because there is not adequate time, six months, for us to do all of that work. And you'll hear testimony from both Mr. Smitherman, our industry executive and also from Adam Meyer, who is our facility design and construction engineer, about why it takes more time, particularly right now in the post-pandemic era, where supplies are short.

Moving on then, you did hear that there is a distinction between industry and NMED beyond production percent or controller count. We have a small preference for the production-based approach because it better aligns with our budgeting processes; hence, it's easier for us to implement and we think that creates benefits in the long run for the state as well.

A few more issues and then we'll be done with the industry position. The last of these -- or the next is produced water. Our produced water, the initial proposal, which was a two-ton per year cap, is very problematic. It could potentially stop the recycling of produced water and require industry to shift back to drinkable water or fresh water for all of its activities. We regarded this as a very big problem because industry has been committed to recycling its water and reducing its impact on freshwater

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resources in New Mexico. The new proposal that's been brought forward on September 16th is substantially better. Industry is in substantial agreement with it and we commend this direction for the state moving forward.

On equipment leaks and fugitive emissions, or LDAR, that you've heard about, there's little agreement on the thresholds or frequencies for this, and we do have some problems with the general story that has been brought to this Board by the environmental groups and perhaps even Occidental Petroleum. And that is that the current approach is based on the study that we would represent is historic industry practice, but they don't represent current industry practice. And they don't reflect the waste rules that were adopted by Oil Conservation Division.

Those rules require us to have much more frequent inspection and AVO inspections -- audiovisual olfactory inspections of our facility, sometimes as frequently as weekly, but never less often than monthly. And so we're on these facilities, and now we're looking specifically for those leaks. And we believe that these leaks that have reached the level of super-emitters that you're heard about, that they would be detected by this and fixed much more rapidly than has historically been the case.

This means that some of the gains that have

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historically been seen by LDAR, may not be seen as we move into the New Mexico context. And we believe that that factor needs to be looked at and considered as we evaluate what should be the frequency for LDAR rules in New Mexico.

In light of the OCD rule -- (unintelligible) and fenceline communities, with community partners, we appreciate the division -- (unintelligible.)

HEARING OFFICER ORTH: Mr. Hiser, I'm sorry. You froze about 30 seconds ago.

MR. HISER: Was I starting the leak detection or where was I?

HEARING OFFICER ORTH: Hold on. Ms. DuBois, where was he?

MR. HISER: Hopefully, our court reporter hasn't froze.

HEARING OFFICER ORTH: Ms. DuBois, I can see that you're unmuted, but we're not hearing anything from you. Perhaps you could put his last few words in the Chat and I'll read it. We're not hearing anything from you.

COURT REPORTER: Can you hear me now?

HEARING OFFICER ORTH: Yes. Yes, thank you.

COURT REPORTER: Somehow the WebEx changed my microphone earlier, it put up a message. Anyway, okay. So the last part was, "We believe that that factor needs to be looked at and considered as we evaluate" --

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MR. HISER: Perfect. Thank you, Ms. DuBois. I appreciate that.

CONTINUED OPENING STATEMENT BY MR. HISER

MR. HISER: We believe what these factors with the OCD rule and the fact that we are out weekly or monthly conducting this audiovisual olfactory review suggests that there will not be issues with super emitters that are not caught and captured rapidly, and that, therefore, the cost effectiveness estimates based on historic practices may not be accurate moving forward for New Mexico. We'd like the Board to keep these factors in mind as it moves to consider the leak detection and repair requirements. In light of all of these elements, we believe the industry proposal is satisfactory and sufficient to protect our frontline and fenceline communities and our community partners.

In summary, members -- Madam Hearing Officer, Madam Chair, members of the Board, this is a big rule. It's asking you to make substantial changes to how the oil and gas industry has worked in the past. And we're committed to working with you to achieve a good level of controls of ozone and its precursors, nitrogen oxides and volatile organic carbons, moving forward. We have concerns about the extent of the volatile organic compound controls given the small benefits that NMED's own modeling

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tend to show, in the testimony of Mr. Morris, as Mr. McNally will explain. And so we think these deserve careful scrutiny.

We'd also ask the Board to consider the fact that when we launch a regulation, and we set those words into the law, we don't know how they're necessarily going to be interpreted. And so care needs to be executed in making sure that we don't criminalize potentially inadvertent or unavoidable occurrences in the oilfield.

And so there will be some cases that you see in NMOGA's comments, or otherwise, where we express concerns about concepts like leak-free or no emissions, because that may not be able to happen. And you will hear our witnesses talk about that. And we'd direct your attention to that so we don't set an unacceptable legal bar on those issues.

With that, Madam Hearing Officer, Madam Chair, members of the Board, that reaches the conclusion of the New Mexico Oil and Gas Association's opening comments. I appreciate your time, and I am, very, very grateful for your consideration of what is going to be a long and complex hearing, and I salute you for your volunteering to do this job for the citizens of New Mexico. We are all indebted to you. Thank you so much.

HEARING OFFICER ORTH: Thank you very much,

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Mr. Hiser. Before I call on the Independent Petroleum Association, two things: two of the Board members may have misunderstood earlier, when I asked the panelists who are lawyers and party representatives not to share their screen unless they were speaking. And, obviously, to keep themselves muted if anyone else is speaking.

Because we haven't seen two Board members on screen, whom I know have been with us from the beginning, Member Cates and Member Duval -- Dr. Duval. Member Cates and Member Duval, if you have the bandwidth and are comfortable being on video, we'd love to -- we'd love to have you join us on video. And if your connection becomes spotty or you need to step away, please feel free to go dark, that's fine, but I didn't want to be misunderstood. So thank you. Let's see. I see Member Duval now. Thank you.

All right. And the other thing -- sorry, that was one thing. The other thing is there was a question in the Chat to me, from Mr. Colclasure, about whether the order in which I was inviting opening statements -- what the implications of the difference between the order in which I was inviting opening statements and the order in which Ms. Katz reflected witnesses being called in the spreadsheet that you're looking at.

I do not -- I am calling for opening statements

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roughly in the order in which we set out the service list. And it does not have any implications whatsoever for the spreadsheet in which the witnesses will be called, and the order of the topics is set out.

Oh, and I see Member Garcia now on screen as well. Okay. That -- that was the two things that have come up since we last spoke.

So, Mr. Rose, will you be offering an opening statement for IPANM?

MR. ROSE: I will, Madam Hearing Officer. And if it's appropriate, I'd like to do it now as opposed to when I call my first witness.

OPENING STATEMENT BY MR. ROSE

MR. ROSE: Thank you, Madam Hearing Officer. members of the Board, for the record, my name is Louis Rose, I'm an attorney with Montgomery and Andrews here in Santa Fe. And I'm representing the Independent Petroleum Association of New Mexico, which as the name implies, is comprised of independent oil and gas producers in the state. We're not -- we're not dealing with vertically integrated companies, these are companies that produce oil and gas in New Mexico. It includes a number of smaller members, and the membership of IPANM is primarily comprised of procedures in the Northwest part of the state, but it also represents producers throughout the

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state.

And if I might, in terms of trying to shorten the opening statement, we agree with a number of the points raised by Mr. Hiser in his opening statement, concerning the effects of these rules on the ambient ozone concentrations.

And first -- and I think it's important to note that -- that what we're doing here is implementing a statute, it's not a new statute, as you've heard. The obligation for this Board to assure attainment and maintenance of the ozone NAAQS has been -- been on the books since the early 1970s, specifically in 2009, the legislature adopted provisions obligating this Board when ambient ozone concentrations reached 95 percent of the federal National Ambient Air Quality Standards, to develop a plan. And that plan was to include regulations, but it's not limited to regulations. That -- that authority was not executed until this proposed rulemaking. The legislature in this last session amended the Act, kept the obligation of this Board to develop a plan, but deleted language that was designed to ensure that technology-based requirement, that is, reasonably available control technology be implemented.

And where it left the Board, in essence, is -- is to look at this statute in the context of other provisions

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in the Act, that is to prevent air pollution and make the Board aware, because it's an area that hasn't been addressed by this Board in some time, is that this Board did regulate oil and gas as one of its earliest regulatory programs. Back in 1974, the Board adopted regulations dealing with -- primarily with gas processors and oil refineries, but also with -- with respect to storage vessels, tanks, those kinds of things. And those regulations were in effect since that time.

This Board has also regulated oil and gas through the permitting program, which requires air quality permits for facilities that have a potential to emit more than 25 tons per year of any criteria pollutant, and a number of sites within this industry, particularly compressor stations and gas processing facilities, have been subject to permitting authority and requirements since the late 1970s.

What -- what this is -- what is unique here is that you're being called upon to regulate production facilities. Most of those are below the threshold requiring a permit. A number of them are below the threshold that this Board has established for notice to the Department, that is that Part 73, Notice of Intent requirements, which relate to 10 ton -- which require that any facility that emits or has a potential to emit

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criteria pollutants in excess of 10 tons per year is required to notify the Department. In that content, this is unique and as -- and as, I think, Ms. Katz pointed out, it's something that this Board has not done, at least with respect to this industry, and probably others since the very inception of the air program.

I'd also like to make the Board aware that when it regulated the facilities under -- under the air act, to prevent or abate violations of ambient air quality standards, which the courts have said defines the levels at which air pollution occurs, the Court of Appeals very early on, in 1976 -- and that's still the law -- required that -- said that the Boards's authority, while it's required to assure that the standards are met, that its authority is to adopt requirements that are no more stringent than necessary to protect standards.

And you'll hear testimony in this proceeding concerning what effects these emissions have on ambient air quality. IPA's position is that under that statute, first, the Board is obligated to make a determination on whether these sources cause or contribute to levels in excess of 95 percent of the ambient air quality standards. And we believe it's -- it's a more difficult analysis than perhaps has been portrayed.

Our analysis is that, impacts of these facilities

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on ambient oil an -- on ambient ozone concentrations, in effect, does not cause or contribute to the levels that they are seeing in the areas of the state that exceed 95 percent of the NAAQS.

Secondly, we believe that the statute obligates this Board to establish a plan to determine how it's going to assure that the ambient air quality standards are not exceeded. The statute does not explain or give direction to this Board on what needs to be in a plan. Our testimony has alluded to two areas that the Board could look at for guidance as to what the contents of these -- this plan ought to include: that is, obligations for this Board under Section 110 of the Clean Air Act, to have plans to assure that ambient air quality standards are attained and maintained. And also, the requirements of the nonattainment provisions of the Clean Air Act specify plans for areas that do not attain the ambient air quality standards; particularly, what needs to be in both marginal and other designations for exceedances of the standard. You'll hear from our testimony, that we believe the plan as being proposed by ED, meets neither of those requirements.

And, finally, we believe that as the statute proposes, that this is an ozone precursor rulemaking. That is, you're looking at and obligated to regulate

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emissions of nitrogen oxides and volatile organic compounds. We believe that the testimony will -- will prove that the areas we're talking about in the state are what's called NAAQS-limiting. That is, the complicated chemical reaction that creates ground level ozone, which you've heard about, really in areas of this state that were talking about, are really controlled by NAAQS emissions. That is, if you're going to reduce ozone concentrations, the vast majority of those reductions will be created through the reduction of NAAQS emissions, not VOCs.

And we believe that the contribution of VOCs, both to the ambient ozone concentrations and to the reductions that have been identified, are minimal at best; and we believe do not justify the degree of controls that the Department is proposing and others are proposing on VOC emissions.

We believe that as a result of this hearing and the testimony, you will agree with us that perhaps much less regulation is warranted under this provision. I'd warn the Board, and I indicate that our position's fairly clear that this is not a methane rule. That the statute provides that if the Department chose to regulate methane and methane emissions, or if this Board does, there is provisions of this statute that need to be met and a

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different proceeding needs to be undertaken. As the notice of this proceeding and as the Department's testimony, I think, supports, this is a rulemaking designed to assure ozone concentrations do not exceed the NAAQS.

And any consideration by this Board as to methane reductions and predicate -- decisions predicated on methane reductions, we believe, is in error and would be in violation of this statute.

Madam Hearing Officer, that -- that concludes my opening statement, and we look forward to participating in this hearing.

HEARING OFFICER ORTH: Thank you, Mr. Rose.

Mr. Janoe?

OPENING STATEMENT BY MR. JANOE

MR. JANOE: Good morning, Madam Hearing Officer, Madam Chair and members of the Board. Oxy USA, Inc. supports the goals of the department's rulemaking and appreciates the opportunity to participate in this hearing to provide practical input on the proposed rule package based on Oxy USA's experience operating in the state.

Through coordination with the Department and other stakeholders throughout this process, many of Oxy USA's initial concerns have been resolved. However, there are still elements of the rule that Oxy UA believes need

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to be clarified or otherwise addressed.

Oxy USA's witness, Danny Holderman, is the asset director for the onshore resource and carbon management Delaware Basin business unit for Oxy USA, Inc. Mr. Holderman will address each of Oxy USA's remaining issues with the proposed rule.

Among other topics, Mr. Holderman will discuss the changes that Oxy USA believes should be made to the Department's proposed LDAR requirements for low-emitting facilities, including wellhead only facilities, and the Department's proposal for pneumatic controllers. Mr. Holderman will also speak to the need to establish practical and reasonable phase-in timelines for all of the Departments -- excuse me -- proposed requirements.

Oxy USA has worked with various stakeholders, including the Environmental NGOs. As representatives for the NGOs have noted, we provided feedback on each of their four main points. We've been able to agree to solution in many cases that work for Oxy USA's operations, with additional edits that Oxy USA will discuss during Mr. Holderman's testimony. Oxy USA's testimony only concerns what is workable and feasible for Oxy USA's operations in the state. We can't say whether it's feasible for every basin or for every other operator in the state; only what is workable and feasible for Oxy.

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Ultimately, Oxy USA appreciates the open dialogue and continued efforts of all stakeholders, and believes that the Department, the NGOs, and industry, can come to agreement on reasonable and practical strategies designed to improve air quality in New Mexico, while maintaining a vibrant oil and gas industry in the state.

Madam Hearing Officer, this concludes our opening remarks.

HEARING OFFICER ORTH: Thank you very much, Mr. Janoe.

Mr. Butzier, will you be making an opening statement?

MR. BUTZIER: I will. Thank you, Madam Hearing Officer.

OPENING STATEMENT BY MR. BUTZIER

MR. BUTZIER: Madam Chair, members of the Environmental Improvement Board, Madam Hearing Officer, good morning. My name is Stuart Butzier, of the Modrall Sperling Law Firm, Santa Fe office. I and my co-counsel, my law partner, Christina Sheehan, of Modrall Sperling Albuquerque office, as well as Whit Swift and others from the national law firm of Bracewell, LLP, will be representing the Gas Compressor Association, also referred as to GCA in this proceeding.

In -- in my very short opening statement, I will

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first briefly introduce the GCA, then offer some observations about NMED's proposed rulemaking, and finally, provide some basic context for the several witnesses who will be testifying for the GCA.

First, about the GCA: The GCA is an association whose member companies serve the oil and gas industry in New Mexico as well as throughout the United States, by providing compression services and related equipment to oil and gas procedures and midstream companies. The services and equipment provided to the GCA members customers allow for the compression of natural gas, to enhance its customers oil production through gas-lift operations and most commonly, to aid in the transportation of its customers natural gas to and through midstream gathering and gas processing infrastructures, much of which is in remote locations.

The natural gas ultimately leaves those facilities and enters into larger natural gas pipeline systems and storage facilities. As such, the GCA members serve a vital function in the New Mexico oil and gas industry, and by extension are state and local communities that benefit from GCA's and the GCA's customers economic activities, including, employment.

Second, by way of general observations regarding NMED's proposed rulemaking, the GCA first and foremost,

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commends NMED for exercising its air quality related authority to propose that EIB help address ozone precursors proactively in this proceeding, as well as in future similar rulemakings it plans to pursue involving other sectors.

Even though NMED's offered exhibits suggest the primary sources of ozone precursors that have brought certain counties to within 5 percent of reaching nonattainment status under the federal National Ambient Air Quality standards, or NAAQS, are from places outside of our state, such as Mexico and Texas, or are due to emissions-generating activities outside the oil and gas sector, the GCA recognizes both the authority and general prudence of NMED, in starting to offer the EIB regulatory mechanisms for getting a handle on ozone precursors to ensure our counties remain in compliance with those NAAQS.

The GCA is not antagonistic to the general motivations behind NMED's proposed rulemaking and also is very appreciative that NMED has remained opened and attempted to be responsive to reasonable input from stakeholders in the extraordinary and lengthy efforts leading up to this hearing before the EIB.

In fact, Madam Hearing Officer and the EIB members will hear a number of GCA witnesses who essentially endorse certain aspects of NMED's latest

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September 16 draft of the rulemaking as being sufficiently responsive.

Finally, to provide the hearing officer and Board members some context for the witnesses who the GCA will be offering in this proceeding, it might be useful to point out how the GCA has viewed its role in similar proceedings that have occurred at the federal level, as well as in other states, because the GCA offers its several witnesses in the same spirit here.

That is, it offers its witnesses in a spirit of cooperation, by lending their technical expertise and expert familiarity with some of the engines and other forms of equipment and processes that are the subject of various aspects of NMED's proposed rulemaking, so that the EIB will be well positioned to balance important policy considerations, avoid arbitrary decision making, and ultimately, do what's best for the citizens of our state.

The GCA has its own environmental committee chaired at one time or another by two of the witnesses we will be offering in this proceeding. The key goal of that committee, as well as the GCA itself, is education, both of its member companies to help ensure compliance with applicable law, and to provide regulators with the necessary insights to be able to make reasoned choices and, ultimately, to adopt reasonable and balanced

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regulations addressing this complex and highly technical area of the law.

The GCI -- the GCA thanks NMED's counsel and Madam Hearing Officer for the efforts already made to sensibly organize this proceeding. And thanks to EIB members in advance for their attention and diligence in the coming weeks, as it considers and addresses these issues of great importance to the citizens of New Mexico.

With that, I will yield this virtual platform to whomever may be next.

HEARING OFFICER ORTH: Thank you, Mr. Butzier.

Ms. Gutierrez, will you be offering an opening statement for Kinder Morgan?

MS. GUTIERREZ: Madam Hearing Officer, yes, I will. And might I ask you provide me permission to screen share?

HEARING OFFICER: Yes, just a moment

MS. GUTIERREZ: Thank you.

HEARING OFFICER ORTH: You should have that privilege now.

MS. GUTIERREZ: Can you seen on your screen a PowerPoint?

HEARING OFFICER ORTH: Yes.

MS. GUTIERREZ: Let me relocate that screen.

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OPENING STATEMENT BY MS. GUTIERREZ

MS. GUTIERREZ: Good morning, Madam Chair, members of the Board, Madam Hearing Officer Orth, Board Administrator Jones, New Mexico Environment Department, and other parties. My name is Ana Gutierrez, with Hogan Lovells and I'm representing Kinder Morgan, Inc., and its subsidiaries and affiliates, El Paso Natural Gas Company, Trans Colorado Gas Transmission Company and Natural Gas Pipeline Company of America.

Throughout this hearing I'll be referring to this collective group of companies as Kinder Morgan because that's a mouthful, and each of our technical witnesses will also refer to the companies collectively as Kinder Morgan.

Thank you for the opportunity to present an opening statement to you today. And I look forward to engaging on these important issues. As far as an agenda for this presentation, I'm going to spend most of my time providing an introduction to Kinder Morgan and their operations in New Mexico. Dovetailing on that, I'd like to then describe the uniqueness of the transmission segment of the natural gas supply chain.

Next, I want to spend just a brief bit of time framing the discussion that we will be having over the course of the next two weeks, and then I'll end by

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identifying the priority of issues for which Kinder Morgan is asking the Board's support.

While it was not on my agenda that I just walked through, we do just want to take a brief moment to thank the Department in particular and Hearing Officer Orth and the other parties for their work in developing a really robust record for the Board's consideration. And we want to thank the Board for diving into all of that work in preparation for this hearing. So let's -- let's jump right in.

Kinder Morgan transports natural gas in a safe, efficient and environmentally responsible manner for the benefit of individuals, communities and businesses. In New Mexico, Kinder Morgan operates approximately 3,595 miles of transmission pipeline and it owns assets in 23 counties throughout the state, including in counties that are the subject of the proposed rules. Kinder Morgan is an important member of the New Mexico community. The company employs approximately 180 individuals, maintains a payroll of over 16.6 million dollars and pays approximately 8.8 dollars annually to local and state taxing bodies.

This slide here just provides a visual of the role that Kinder Morgan plays in our communities. The company delivers affordable and dispatchable pipeline

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quality natural gas both to industrial users and to local distribution companies. The local distribution companies are the city gates for natural gas to be delivered to each of our homes for use in heating, stoves, water heater, all of our daily uses.

Kinder Morgan operates in what is referred to as the transmission segment of the oil and gas industry. And I want to give context to that and talk about what makes this segment unique and what distinguishes it from other oil and gas operations. You will see this slide a couple of times throughout our presentation -- presentations and it's intended to help orient us.

What this depicts is the entire natural gas system supply chain. And we show this because it's important to understand where Kinder Morgan -- Kinder Morgan's operations take place in this sequence. Transmission compression -- compressor stations are identified as number six on this schematic. Upstream operations, which are identified as numbers one and two, are where the product is extracted. The raw product is then moved by the midstream gathering and boosting segment, numbers three and four, through to the natural gas processing plant, number five.

Because of where we sit along the supply chain, Kinder Morgan's operations are distinct in a number of

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ways. Let's walk through some of those distinctions. First, the company transports pipeline quality natural gas. This is referred to as "sweet" natural gas and it has already been processed at the natural gas processing plant, which means that the natural gas has a much lower VOC content than the gas that is produced, transported and processed at well sites, gathering and boosting stations, and natural gas processing plants.

To illustrate this point, this slide summarizes a data set that we analyzed. The full data set is available at attachment B to the Kinder Morgan direct testimony. This data was gathered over the past year from gas chromatographs. Kinder Morgan operates somewhere around 40 gas chromatograph -- chromatographs in New Mexico that continuously monitor the natural gas. These chromatographs take about two to three samples every hour, which are then averaged to give one numerical block hour average.

The reason they monitor the gas so closely is because these are FERC-regulated pipelines, so the company is required by FERC to have certain gas composition for delivery to end users. You will see in this chart that the average annual VOC content at all five stations evaluated is less than 1 percent and can be as low as 0.206 percent VOC.

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In contrast, the VOC content of the gas processed and moved through upstream and midstream operations is typically much higher, depending on operation and location. Another critical distinction is that day-to-day operations are simply just different. Just one example which you'll hear more about in other presentations from us, is that Kinder Morgan pigs its transmission pipeline much more infrequently than operators in the midstream segment pig their gathering pipelines. This is because the impurities in the gas have been removed at the gas plant and there's less occasion for liquids and debris buildup that would require pigging.

Finally, another distinction is that Kinder Morgan's pipelines are interstate pipelines, meaning the company moves natural gas across state lines in interstate commerce. This in turn means they are highly regulated by FERC. So prior to construction and operation of a transmission compressor station in its network of pipeline, Kinder Morgan typically must apply for and obtain a certificate from FERC, which involves an extensive process, including consultation with stakeholders, environmental review under NEPA, project planning and revision and redesign. It is a carefully calibrated process.

Also, as a FERC-regulated operation, Kinder

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Morgan is then obligated to deliver natural gas to certain customers and there are consequences for failure to do so. This makes sense because end users to Kinder Morgan's product in many cases are hospitals, schools and general municipal operations.

I'd like to next frame the discussion that we'll have over the next two weeks. The Board's authority for this rulemaking, as we've heard, sources from New Mexico revised Statute 74.2.5 as revised by New Mexico Senate Bill 8 of 2021. By direction of the New Mexico legislature, the Board is directed to address certain areas of the state exceeding the primary NAAQS for ozone by 95 percent, by adopting rules to control emissions of NOx and VOCs.

Consistent with this authority and direction, NMED took on the task of proposing this set of rules that is before us. These rules are intended to address ozone precursor pollutants, namely NOx and VOCs. Thus, it is the Board's objective and within the Board's authority to adopt reasonable regulations to mitigate potential NOx and VOC emissions from the oil and gas sector.

Consistent with the scope of rule, Kinder Morgan conducted extensive analyses regarding the potential impact of the proposed NOx and VOC emission standards on their operations. And over the course of Kinder Morgan's

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technical testimony you will hear a sum -- a summary of those findings from Ms. Leslie Nolting, who is the air permitting and compliance manager for Kinder Morgan, from Mr. James Trent, who is a staff engineer from Kinder Morgan and from Mr. Vince Brindley, who is a technical supervisor for Kinder Morgan.

Finally, to further frame our discussions this week, we respectfully remind the Board that its authority requires the Board to take into account all facts and circumstances, including technical practicability and economic reasonableness of the proposed rules. While this statutory mandate of course permits the Board to exercise its professional discretion regarding the weight to attribute to any particular fact or circumstance, by enumerating this list the legislature made clear that of the facts and circumstances to be considered, technical practicability and economic reasonableness are priorities of the legislature.

Furthermore, in matters of air quality regulation, it's the common and expected practice that the cost per ton of reduction of the regulated pollutant be evaluated. This is true for the Department and other state and federal agencies. For example, as presented in the Kinder Morgan direct testimony, we researched several instances of agencies determining the appropriate and

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reasonable cost-per-ton threshold of a given regulation.
This slide shows just a few of those cost ton evaluations. You'll see that in 2019, NMED determined that $7,000 per ton of NOx reduced was an appropriate threshold for determining the cost effectiveness of certain of the components of the Regional Haze rulemaking. Pennsylvania, in turn, determined $3,750 per ton of NOx reduced was an appropriate threshold in the context of fracked analyses for major sources. This was also in 2019. While we recognize that determining whether a certain cost is economically reasonable is not an exact science, a cost well over $7,000 per ton warrant significant scrutiny to be defensible.
In order to evaluate the full impact of the proposed rules, Kinder Morgan conducted thorough, detailed and individualized cost analyses to evaluate the cost effectiveness of the various proposed VOC and NOx standard as compared against the anticipated emission reductions. In Kinder Morgan's technical testimony this week, we will provide you with a summary of these analyses.
In closing, I'd like to highlight for you Kinder Morgan's priority asks of the Board, which you will hear more about in the coming presentation. On definitions, we ask that you adopt the definitions in the September 16th draft proposal that relate to transmission compressor

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stations. For engines and turbines, we ask that you adopt Tables 1, 2 and 3 of Section 113 as proposed. We ask that you adopt the staggered compliance schedule set forth for turbines as proposed on September 16th. And we ask that you adopt workable alternate compliance options, in particular to address circumstances of technical or cost infeasibility. In particular, we ask that you adopt the Board's Section B10 and B11 of the Section 11 as proposed on September 16th.
For compressor seals, as we will discuss, it is not cost effective to control VOC emissions from wet seals at transmission compressor stations and we ask that the Board adopt the rule as proposed on September 16th. For leak detection, as we will present, we will ask for reasonable frequencies for transmission compressor stations and an opportunity to comply with the federal NSPS leak detection programs on all LDAR requirements, other than frequency, to avoid competing programs that cause resource intensive challenges without emission reduction benefits.
On the whole, Kinder Morgan supports reasonable regulation and we look forward to discussing this with you over the next several weeks. That concludes my opening statement. Thank you.
HEARING OFFICER ORTH: We move then to Commercial

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Disposal Group. Mr. Neumann, will you be making an opening statement?
MR. NEUMANN: Thank you. Yes.
OPENING STATEMENT BY MR. NEUMANN
MR. NEUMANN: Good morning, Madam Hearing Officer, Madam Chair, Board members. I'm Chris Neumann with the law firm Greenberg Traurig, and I represent the Commercial Disposal Group, which is made up of five entities: NGL Energy Partners, Solaris Water Midstream, OWL SWD Operating, Goodnight Midstream and 3 Bear Energy, LLC. And some of our members are also members of NMOGA, but as you'll hear, we are different in some fairly important ways, in the assets and the operations that we have that are impacted by this rule.
And we thought it was really important to explain those differences and why in certain instances some of the language and framework in the new rule might need to be adjusted to make sense for what we're doing. In many cases that -- that has been done and we're very grateful.
We appreciate the Department's consideration of the comments and language that the group has proposed. In particular, we're supportive of the changes to Section 111 on applicability of Part 50. We believe that this change and others are going to allow us to greatly streamline our witness testimony, which I'm sure many of you will be

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grateful for. And we hope to yield back much of the witness testimony time that we've reserved.
I'd like to start by telling you a little bit about the Commercial Disposal Group. As I mentioned, our issues are slightly different in pretty important ways. Each of our members has operations in New Mexico for the recycling and underground injection of produced water.
Most of the group had facilities -- have facilities that operate and produce water management units at which millions of barrels of produced water are recycled each year and returned to oil and gas producers for use in hydraulic fracturing and other reuse operations.
These recycle ponds are several acres in size and often have the capacity to contain several hundred thousand barrels of water. Importantly, the water sent to these units will have gone through pretreatment to remove oil and gas, and, thereby, reduce emissions significantly. To date, the group has a total of thirteen recycling facilities in New Mexico and several more in the planning stages.
In 2020, group members recycled over 18.8 million barrels of water, and in the first six months of 2021, the group has recycled over 16.7 million barrels of water. You can see there is a significant increase and the trend

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is for more recycling, which is -- which is a good thing.
If the produced water or running water at our facilities is not recycled by our group members, producers, our customers, will have to rely on -- more heavily on freshwater resources for their water needs.
Produced water that is not recycled by our group is treated and then responsibly disposed at an EPA underground injection control program facilities administered by the Oil Conservation Division.
The Oil Conversation Division reports that since the legislature's passage of the Produced Water Act, 408 wells have been completed and are using an average of just over 377,000 barrels of water each, and they report 55 percent of this water has been recycled produced water, with amounts to 85 million barrels of water that's recycled for this purpose.
Although our facilities in some instances -- in some aspects may look like typical exploration and production facilities, the operations and fluids at our facilities are much different; and, consequently, the emissions profiles of these facilities are much different than from those at production facilities.
As I mentioned, the disposal well facilities receive produced water from operators' production and drilling operations, but they don't produce oil and gas.

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Our business is recycling water or disposing of water, not producing oil and gas at these facilities. The produced water group members receive, receive low volatility, what we'll call post-flash water that has already gone through separation and processing and treatment at our customer's sites. Then at our facilities, the water is further separated from any remaining oil, and that oil is trucked off site to market.
The water is then either sent to a produced water management unit where it's recycled or it's injected into the UIC injection well for disposal. The oil that we're able to separate at our facilities is also different than what you would expect at a typical production facility. It's less volatile and it's considered what we call "dead" oil because it has a limited flashing or emission potential. A lot of those troubling hydrocarbons have already been removed by the time it gets to us.
Because the initial language of the proposed rule was crafted to address important issues at exploration and production facilities, we found that it didn't fit our unique operations at commercial produced water disposal facilities. In many instances it would have been technically infeasible or very expensive for us to implement.
An additional concern was that parts of the

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proposed rule might hinder further investment in or operation of important water recycling efforts in New Mexico. The group identified difficulties it would face and offered testimony on several key areas, including equipment monitoring and transfer of ownership in Section 112, hydrocarbon liquid transfers in Section 120, pig launching and receiving in Section 121, storage vessels in Section 123, and, of course, produced water management units in Section 126.
We proposed alternative rule language to the Department to achieve the goal of reducing ozone precursors, but giving members more flexibility in how to comply and the Department in many instances considered and adopted parts of our proposals. In others, others were rejected, but in the final analysis the group supports the latest proposed rule as applied to its operations with really only a handful of exceptions, on which we'll focus our testimony.
So these remaining concerns would be presented through our testifying witnesses. We generally support the proposed rule, and our witnesses will adopt their written testimony and where there are still live issues that we'd like to address further, we'll offer brief summary. On topics where we believe there's either been no further testimony or through the September 16th

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revisions, or otherwise the matter seems fairly settled, we intend only to adopt our written testimony and be available for cross-examination.
I'm not exactly sure how the surrebuttal and the testimony will proceed, but given our approach, if someone that comes after us has something important to say that we think might affect matters on which we've testified, if it's okay and you might consider, we'd like to raise our hand and perhaps be heard for a few brief moments on those issues. We think they'll be very few and really, rather than give lengthy summaries to which no one might reply, we'd rather yield back our time and just address those issues as they might arise.
And then, briefly, to summarize our witnesses, we have five witnesses who, again, will focus on what few issues remain for our concerns. Il Kim is the senior air permitting engineer for NGL. He's testified on Section 120, hydrocarbon liquid transfer and Section 123, storage vessels. Ashley Campsie is a licensed professional engineer with Evergreen Environmental Engineering and she has testified on Section 113, engine and turbine issues, Section 126, produced water management unit issues, and Section 112, monitoring issues.
Lori Marquez is a senior air quality consultant with Barr Engineering and she's testified on the

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logistical challenges and costs associated with the Section 112 program. Greg Jones is an air compliance specialist with 3 Bear and the focus of his testimony has been on Section 121, pig launching and receiving, where we do still have some issues we'd like to raise. And lastly, Jill Cooper is a senior principal with Geosyntec Consultants and has testified on Section 112, compliance evaluation issues, which we would like to speak to, Section 123 storage vessels and Section 126, produced water management units.

So we'd like to thank the Department again for listening to our thoughts and suggestions, many they've adopted, and look forward to speaking to our remaining issues hopefully in a very abbreviated way as we move forward. Thank you.

HEARING OFFICER ORTH: Thank you, Mr. Neumann.

Ms. Witherspoon, if you are on, I would invite you to briefly summarize what you will be encouraging the Board to do when you make your presentation.

OPENING STATEMENT BY MS. WITHERSPOON

MS. WITHERSPOON: Yes. Okay. Thank you. Madam Hearing Officer and members of the Board, my name is Leslie Witherspoon and I will be representing Solar Turbines. We appreciate the opportunity to give technical testimony with respect to the combustion turbine section

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of the rule.

Solar Turbines is largely in support of the September 16th, '21 version of the rule proposal, but we would like to take the opportunity during our testimony to make a few clarifying points and we look forward to presenting. I will be the technical witness for Solar Turbines. I have 30 years of air quality experience, a lot of air permitting and dispersion modeling experience, but for the last 23 years I've been at Solar supporting the placement of our turbines worldwide, and been involved in countless rulemaking processes specifically in the Pennsylvania General Permit 5 Rule development process. And the reason I mention that is that is the rule that New Mexico modeled the turbine section of this rule after. So I will be certainly available for -- for questions, if there are any from the Board and others on why certain numbers are the way they are because they do represent for the most part our turbines and because they are prevalent in the state of Pennsylvania also.

We have a large number of turbines installed in New Mexico and have a large number of the ones affected by this rule, as we've been putting turbines in in New Mexico for over 60 years. So that completes -- that's all I have to say today and I look forward to our testimony over the next -- when we do that in the next two weeks. Thank you.

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HEARING OFFICER ORTH: Thank you very much, Ms. Witherspoon.

All right. I think -- oh, I did want to say, Mr. Neumann had mentioned surrebuttal, and I wanted to share with the Board a discussion that I had with counsel and party representatives last Tuesday in a second prehearing conference. I will invite surrebuttal after the parties have had a chance to do their direct and rebuttal. Surrebuttal is not required to fit within that 30-minute limitation on technical witnesses. Surrebuttal will be invited in reverse order from the direct and rebuttal and the Department reserves the final spot there as the proponent of the rule, to address any surrebuttal that they haven't already addressed.

We can certainly talk more about that if you'd like when we get there. It's going to be a while before we get there. So let's break for lunch. We do have a 1:00 public comment period. I don't know if the folks are on as attendees right now, but the first -- the first four folks -- I'll just do four at a time. The first four folks I'll be inviting to offer public comment are Sharon Wilson, Brent Stoneking Clinton Whisonant and John Alexander. So let's reconvene at 1. Thank you very much.

(Recess taken from 12:11 p.m. 1:00 p.m.)

HEARING OFFICER ORTH: Okay. We are back after a

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lunch break. Let me just briefly remind folks about the platform protocol. If you are a Board member and are comfortable on screen, you are invited to be on screen at all times. If you go off screen, that's fine. It's just a matter of folks wanting to know that folks are listening. If you turn off your screen, maybe to walk around or snack, or what have you, just -- just turn off your screen, that's fine.

For all of the panelist, Board members, lawyers and party representatives, if you would please be sure to stay on mute; and for the lawyers and party representatives off screen, please, if -- if you're not speaking.

So it's 1:00 and this is one of our 29 public comment sessions. It's the first of them. We have ten public commenters indicating a desire to speak during this session. All of you, please remember that there is a five-minute limit on your comment. Certainly you don't need to go five minutes if what you have to say can be said less than that. Comment is taken under oath and is subject to questioning because all comment testimony, pursuant to the Board's statute and rulemaking rules, is taken under oath and subject to questioning.

Let me just say for the lawyers and party representatives who perhaps haven't been on a complex

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hearing with me before, I understand it's your right to cross-examine members of the public, but I discourage it. And without going into a whole long discussion as to why that might be, mostly, I don't think it's productive. It has never been productive. And I've been doing this for 22 years, so I'm not going to call on you and ask you if you have questions of any of these members of public. If you actually have a question to the member of the public, you're going to have to put something in the Chat to me to indicate that, in fact, you have questions you need to ask that member of the public. Otherwise, I'm going to move from one public commenter to the next without stopping.

Board members, the same for you, please. I'm not going to call on you to ask you if you have questions of a particular member of the public. If you do, please put something in the Chat.

Okay. So let me call out the order in which I will be calling on you. This is the order in which the request was sent to Pam Jones, our Board Administrator. And just generally, I will ask you if you swear to tell the truth, swear or affirm, and I will ask you to spell your name so that the transcript is correct. And I will ask you to speak loudly and clearly. And it may take me a moment to unmute each one of you. Public comment will be given by audio, not video.

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So this is the order in which I'll be calling all of you: Sharon Wilson, Brent Stoneking, Clinton Whisonant, John Alexander, Syd Goodlow, Michael Parrino, Todd Hawthorne, David LeBlanc and Joan Brown and Kayley Shoup. Again, five minutes. And I'm going to start with Sharon Wilson. So, sorry, this is just going to take me a moment each time.

I don't see Sharon Wilson on the platform. Ms. Wilson, if you are on the platform and I am missing your name here, it's all alphabetical, please reach out through the Chat. By the way, if someone has signed up to offer public comment and finds themselves unable to be there at the time they have signed up, that's perfectly fine. I will take them the next time they come onto the platform. It's not a problem.

All right. So I'm going to pass Sharon Wilson and go to Brent Stoneking. Let's see if Brent Stoneking is with us. I am not seeing Brent Stoneking either. Mr. Stoneking, if you're on the platform, please reach out through the Chat and I will unmute you.

Clinton Whisonant. And I'm sorry if I'm mispronouncing your name. Not my intention. Mr. Whisonant, can you hear me?

MR. WHISONANT: Yes, I can.

HEARING OFFICER ORTH: Great. I can hear you. You're are a little soft. So if you would please raise your right hand.

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And do you swear or affirm to tell the truth?

MR. WHISONANT: I do.

HEARING OFFICER ORTH: And would you please spell your first and last name?

MR. WHISONANT: First name is Clinton, C-L-I-N-T-O-N. Last name is Whisonant, and thank you for pronouncing it perfectly. W-H-I-S-O-N-A-N-T.

HEARING OFFICER ORTH: Thank you. Your five minutes starts now.

CLINTON WHISONANT,

having been first duly sworn or affirmed, gave public comment as follows:

PUBLIC COMMENT BY MR. WHISONANT

MR. WHISONANT: Okay. I'll be brief. I just have read through as best I could and as quick as I could, the bill. And my concern is the additional paperwork requirements that it's going to impose on an already very restricted in this state, industry. Gas and oil is -- I'm from Bernalillo County, Albuquerque. But as a citizen of this county and of the state, gas and oil contributes a great deal to the economy of the state. It also contributes considerably to the energy and the independence of the nation.

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And I think anything that we would -- anything that we would do to hinder or restrict this industry would be bad for the country and for the state and for the county. So that's my concern, is that we should minimize the paperwork requirements. We should let the experts decide how the industry will comply with standards, which I agree should be set, but not descriptions on the requirements in a law or a regulation that tells the industry how to meet a standard.

And that's essentially my comments. Thank you very much for the opportunity

HEARING OFFICER ORTH: Thank you, Mr. Whisonant. All right. Let's move to John Alexander if he is on the platform us with. Let's see here. Mr. Alexander, can you hear me?

MR. ALEXANDER: Yes, ma'am, I can. Can you hear me?

HEARING OFFICER ORTH: Yes, I can. Thank you.

Do you swear or affirm to tell the truth?

MR. ALEXANDER: I certainly do.

HEARING OFFICER ORTH: Thank you. Would you please spell your first and last name?

MR. ALEXANDER: Yes, ma'am. It's John, J-O-H-N. And then Alexander, conventional spelling: A-L-E-X-A-N-D-E-R.

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HEARING OFFICER ORTH: Thank you very much. If you would please, your five minutes starts now.

JOHN ALEXANDER,

having been first duly sworn or affirmed, gave public comment as follows:

PUBLIC COMMENT BY JOHN ALEXANDER

MR. ALEXANDER: Okay. Thank you very much. I appreciate the opportunity to address you-all. This is just an extremely important issue that all -- both parties -- and when I listened to the opening statements this morning, we can all -- we can all agree on that. It's extremely important.

It's also an extremely technical issue and the Environmental Improvement Board certainly has a big job in front of it because of the amount of technical things that are going on here. Energy is just extremely important to this state and so -- as is clean air and clean water. I don't think there's anyone in this group that would certainly want to have any sort of activity that would harm our environment.

I mean, we just -- we -- we -- we don't do that. We all breathe the same air, we all drink the same water. Energy is just extremely important. That's what drives us and it's what's driven our community, our state to be where we are today, which is one of the -- as was pointed

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out earlier this morning in testimony, the second highest producing state in -- of oil and gas in New Mexico.

And while we're all aware of that, we're aware of the importance it brings to us, an issue of trying to avoid adversarial positions saying it would be extremely critical for you-all at this time. There's a lot of testimony being presented from both sides that is going to be extremely useful in making this decision. And so I just -- I pray and ask that as the Board considers this, it carefully considers the testimony that's being presented from this very, very technical issue. Listening to all of this technical stuff, it's going to get a little boring, I'm sure at some point, but it's also critical. And you have a big decision on your part. So thank you for your time. I just ask that you seriously listen to both sides and try to emote -- avoid the emotional standpoints that we often get into it.

Society is way too -- way too divided anyway. And so I want to encourage you to do that, not much technical help here, but I'll be watching you-all as will the state, and I just, again, thank you for your service. We really appreciate it and I yield back.

HEARING OFFICER ORTH: Thank you very much, Mr. Alexander. Now we have Mr. Goodlow. Let's see if Mr. Goodlow is on the platform with us. I don't see

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Mr. Goodlow, but if he joins us later, I'd be happy to take his comment.

Michael Parrino, let me see if we have Mr. Parrino on the platform. Yes. All right. Mr. Parrino, can you hear me?

MR. PARRINO: Yes, I can hear you and see you. I don't know if you can see me. I don't see my face on the screen or my iPad.

HEARING OFFICER ORTH: So public comment is audio rather than video. If you would raise your right hand, please. Do you swear or affirm to tell the truth?

MR. PARRINO: I do.

HEARING OFFICER ORTH: Thank you very much. And your -- if you would -- oh, let's see. I need the spelling of your last name. The first name is standard. What's the spelling of your last name?

MR. PARRINO: Parrino, P-A-R-R-I-N-O.

HEARING OFFICER: Okay. Thank you. Your five minutes starts now.

MICHAEL PARRINO, M.D.,

having been first duly sworn or affirmed, gave public comment as follows:

PUBLIC COMMENT BY MICHAEL PARRINO, M.D.

MR. PARRINO: Okay. I'm a retired pediatrician. I just retired five months ago. I'm 78 years old, so I

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worked a lot longer than the average person. I live here in Bernalillo. This is my second time living in New Mexico. I've been here since 2017. Truth in lending, as they say, or truth in whatever; I do own stocks and some of them are oil and natural gas, so I do follow the industry with great interest. To me, it's very important because I have a son who's active that's in the educational business. A great deal of the budget for education in the State of New Mexico comes from the revenues that come from the oil and natural gas business. Anything that affects those revenue, those revenues affects our schools. Okay? I moved back here to be near him and my grandchildren.

Energy demand is rising constantly. There seems to be no understanding of the fact that we can't escape it, that it's a necessary part of our life. If you want to see what happens when you try to escape it by overregulation or by forbidding exploration and development, then what you get is California. And I'm not sure that everybody wants to be California. Some of us do, some of us don't. Okay?

We see in Europe right now a crisis developing in energy because they don't have enough of it. They have tried to rely on wind and solar which, to be honest, solar might work in New Mexico, but not as much as they'd like.

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And as for wind, Britain has a quandary right now because the North Atlantic, which is supposedly a very windy ocean hasn't been very windy of late and they have a shortage of energy. There are shortages of coal and natural gas in Europe. And there's going to be a worldwide shortage beginning this year.

If you don't believe me, go to oilprice.com and look at the price of natural gas on the market at the Henry Hub Centers. It's the highest it's been in the last seven years. We -- if we have a cold winter, and we're predicted to have a colder-than-average winter this year, we're going to see very high rises in the price of natural gas. You're going to pay a lot to heat your home if you heat with natural gas.

It seems to me folly, when we look at California and see how high the price of petroleum and natural gas are there, for us to do anything that further limits the production of oil and natural gas. We have it, we should be exploiting it. The only country in Europe that is safe is France. The alternative to oil and natural gas is not wind and solar, which are unreliable; it's nuclear power. The only country in Europe that's doing well in the present crisis is France, which gets more than 25 percent of its power from the nuclear energy. We have to go that way, too. If you really want to get away from the

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extraction of oil and natural gas for energy, then you have to go with nuclear power, but there are other aspects that people are not aware of either.

The base for fertilizer is natural gas and petroleum. There's a shortage of fertilizer in Europe. In England, the two leading producers of fertilizer are shutting their plants because they say the price of natural gas is too high for them to afford to manufacture it. That will drive up the price of food. It's an incredibly complex world we live in. Everything we do seems to drive the price of everything higher.

HEARING OFFICER ORTH: Mr. Parrino --

Mr. Parrino, I'm sorry to interrupt. Would you wrap up, please?

MR. PARRINO: Okay. I just think we can't do without it. We must have it and we must continue to develop it. If we don't, then we are going to see the price of everything, food, transportation, energy, heating our houses, it's all going to rise. Thank you.

HEARING OFFICER ORTH: Thank you very much. The next person who requested a spot now is Todd Hawthorne. See if Mr. Hawthorne is with us. I don't see him.

After that is David LeBlanc. Let's see here. I see Mr. LeBlanc. Mr. LeBlanc, can you hear me?

MR. LEBLANC: Yes, ma'am. Can you hear me?

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HEARING OFFICER ORTH: Yes, very clearly. Do you swear or affirm to tell the truth?

MR. LEBLANC: I do.

HEARING OFFICER ORTH: Thank you, very much. David is the standard spelling. Would you spell LeBlanc, please?

MR. LEBLANC: L-E-B as in boy, L-A-N-C.

HEARING OFFICER ORTH: Thank you. Your five minutes begins now.

DAVID LEBLANC,

having been first duly sworn or affirmed, gave public comment as follows:

PUBLIC COMMENT BY DAVID LEBLANC

MR. LEBLANC: Okay. I am a resident in San Miguel County and I really appreciated the comments of the previous gentleman about the interconnectivity of oil and with so many aspects of our lives, in not just food, but so many products that utilize natural gas in production of those products.

But my real emphasis is from my perspective as an engineer and project manager for over 40 years. And I just wanted to say that overregulation that is a little too short-sighted perhaps, tends to -- tends to diminish the capability of the operators in oil and gas to manage the environment themselves. And I'll just say that over

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the last several years, the company I was working for was involved in not only environmental, but water management projects for oil and gas operators, both in Texas and New Mexico.

So it's an evolving technology for environmental protection technologies and, you know, the industry is cognizant of the need for air and water quality. Water management is one of the things that has been a huge focus, especially in the Permian Basin, where we have shale gas in areas where there's a shortage of water. And so a lot of creative projects are under way or have been already performed to help the industry manage their water use on their properties, on their oil and gas properties, and reuse of water as well.

My company employs a whole division that are water experts. We deal in desalination as well as water management, water use, any kind of water treatment, and we're applying those technologies. And so, I just want to encourage the Board to consider the fact that, you know, the oil and gas industry has not just been sitting idle, that we've actually participated with the oil and gas industry, with my company, to improve water management, to improve emissions.

And so, I just don't want to -- I would prefer a flexible regulation, not one size that fits all. And

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this -- this actually helps promote the problem-solving and creativity. And there's going to be a cycle in environmental research and innovation, and we can apply those to continue to improve the environmental performance in our oil and gas properties. And I want to thank the environmental -- sorry, the Environmental Improvement Board, how you serve our state, and for allowing me to make these public comments. Thank you.

HEARING OFFICER ORTH: Thank you very much, Mr. LeBlanc.

The next presenter is Ms. Brown. And let's see, I'm unmuting you. Sister Brown, I did see your comment in the Chat and you are correct, it is not necessary to register or sign up ahead of time. I will be accepting folks' public comment regardless. However, because we have so many public commenters in this action, and I don't have the usual signal of a sign-in sheet at the front of the auditorium to tell me what order folks might have joined us, I am -- before I throw the platform open to anyone who reaches out through Chat, I am inviting those folks who actually sent me an email ahead of time. So I hope that answers your question.

SISTER BROWN: Yes. Thank you so much, Hearing Officer Orth. I so appreciate that clarification because I'm trying to get the information out to the public so

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they know what to do and how to do it.

HEARING OFFICER ORTH: Sure. Sure. So if you would raise your right hand, please. Do you swear or affirm to tell the truth?

SISTER BROWN: Yes.

HEARING OFFICER ORTH: Thank you. And I know that your first and last name are the standard spelling. And let's see here. Your five minutes starts now.

SISTER JOAN BROWN,

having been first duly sworn or affirmed, gave public comment as follows:

PUBLIC COMMENT BY SISTER JOAN BROWN

SISTER BROWN: Okay. Thank you so much. Good afternoon and thank you, Hearing Officer Orth and also the EIB for taking these public comments on this methane pollution rule that's not about sides, but really is about the common good. And we need to take into consideration all the common good. My name is Joan Brown, I'm a Franciscan Sister. And I'm the executive director of New Mexico Interfaith Power and Light.

And our organization works with faith communities and people of faith and conscience all over our precious state, to reflect upon, pray about, and then act on concerns of community health and environment as it relates to climate justice. We learned about methane concerns

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about ten years ago and have educated our thousands of members and faith leaders and we've offered hundreds of comments through various processes to regulate methane pollution. So this is not a new issue.

We've worked with faith leaders in Southeast New Mexico and we've also been into the homes of ordinary people down there who have been very concerned about the smells and the VOCs and what might be around them. And on one occasion, we visited with some women who were mothers in a lower income neighborhood who didn't understand the terrible odors coming into their home. And they also had had a young nephew who died of some strange cancer that was unusual.

So we offered to take them into actually a field right near their backyard to witness methane pollution with powerful cameras. And a few months later, we went back and we still saw this pollution coming out. These women were very afraid even to go out into the field with us. And many of the people that are affected don't speak up because they're afraid of repercussions that might come to them because of the powers that be in their communities.

Methane pollution is an environmental, economic, and a racial justice concern that needs attention and strong rules, with many of the strong recommendations that

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are being heard these days. In addition, it's a waste of God's resource. We use these -- the money that comes from methane in our state for our school system. And so much of it being wasted and it's not going to that.

So it is immoral and unethical to continue with business practices that disregards God's creation and our communities. The only commandment that we are given from all religious traditions is to love our neighbor and creation. And disrespect of the health, the environment and life that we are given to cherish is not acceptable and it's not ethical business practices.

We all have to be ethical in what our work is. Later this week I will submit a letter signed by about a hundred faith leaders from around the state who share these similar concerns about health, justice and climate. And they also have been concerned about the intergovernmental chatter on climate change that just said we are in a code red for humanity with climate change. And for us faith leaders, a code red means that we all, together, must take urgent action to care for life in our sacred home.

So we have a choice to continue life and creating sacrifice zones in our state, or to live up to our true identity as the Land of Enchantment and a common home that respects the common good. And so we thank you for this

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hearing and taking very seriously the strong methane rules and recommendations that will be made. Thank you so much.

HEARING OFFICER ORTH: Thank you very much, Sister.

All right. We'll turn then to Kayley Shoup. And after Ms. Shoup, Arcelia Isaias. Let's see here. Ms. Shoup, can you hear me?

MS. SHOUP: I can hear you.

HEARING OFFICER ORTH: Terrific. I can hear you clearly. If you would raise your right hand, please. Do you swear or affirm to tell the truth?

MS. SHOUP: I do.

HEARING OFFICER ORTH: Thank you. Would you spell your first and -- first and last name, please.

MS. SHOUP: First name is K-A-Y-L-E-Y. And last name is S-H-O-U-P.

HEARING OFFICER ORTH: Thank you. Your five minutes starts now.

KAYLEY SHOUP,

having been first duly sworn or affirmed, gave public comment as follows:

PUBLIC COMMENT BY KAYLEY SHOUP

MS. SHOUP: Hello everyone. So my name is Kayley Shoup and I'm an organizer with Citizens Caring for the Future in Carlsbad. And today, I will be sharing why, as

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a frontline community member in the Permian Basin, I strongly support the proposed methane and ozone rule. For years, I believed, like many in my community still do, the regulatory agencies were doing their best to protect frontline communities like mine.

As every day, I was learning of more young people being diagnosed with cancer, I continued to believe that we were being protected, that our air was clean, that the pollution couldn't be that bad, and that maybe I was just a human that was trying to find a reason as to why I was surrounded by so much tragedy.

Over the past year, I have learned that all of those beliefs were false. Those of us in frontline communities actually aren't being protected. I now know that the state does not have one air monitor that tracks methane or VOC pollution in the Permian Basin. I now know after being out in the field and looking through a flare video camera that the pollution is that bad and it is constant. And I also understand that two years ago, I wasn't just a girl trying to find meaning and seeing her loved ones ravished by cancer, but a girl that was starting to realize the danger that surrounds her and her community.

Because of the abysmal lack of enforcement in the Permian, we must have stronger rules such as these being

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proposed today. Rules that require things like frequent inspection, especially at sites near schools and neighborhoods. Rules that can be realistically enforced, such as I believe these rules can be. They are currently our only line of defense against methane and VOC pollution.

I'm not sure how the Governor or NMED plans to slash methane pollution that they aren't properly monitoring, but I do believe these rules are a start. As a community member in the region of the state that contributes the most to the New Mexico State budget, I believe the least the state can do is implement the proposed rules. This week concerned citizens and leaders that called and have called the Permian home will be submitting a letter to EIB voicing their support for NMED's rules.

When we prioritize the needs of the communities most affected by methane and VOC pollution first and foremost, when we work to protect the health and lives of those human beings in frontline communities, when we value doing what is right and not just politically simple, we set off a ripple that becomes a wave, and that wave makes real and meaningful change. Thank you for your time.

HEARING OFFICER ORTH: Thank you very much, Ms. Shoup.

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As I go to unmute Arcelia Isaias Gastelum -- and please correct me if I have mispronounced your name -- to unmute her, let me ask if there's anyone else on the platform who would very much like to speak now and not at one of the other 28 opportunities we'll have for public comment. Please reach out through the Chat.

So, Ms. Isaias Gastelum, can you hear me?

MS. ISAIAS-GASTELUM: Yes, I can hear you. Can you hear me?

HEARING OFFICER ORTH: Yes, I can. Would you raise your right hand, please? And do you swear or affirm to tell the truth?

MS. ISAIAS-GASTELUM: I swear.

HEARING OFFICER ORTH: Thank you. And if you would, please, both pronounce and spell all of your names.

MS. ISAIAS-GASTELUM: Yes, I hope you're all hydrated, Madam Hearing Officer. So it's spelled Arcelia Isaias-Gastelum and it's spelled A-R-C-E-L-I-A. Last name, I-S-A-I-A-S-G-A-S-T-E-L-U-M.

HEARING OFFICER ORTH: Thank you very much. Your five minutes starts now.

ARCELIA ISAIAS-GASTELUM,

having been first duly sworn or affirmed, gave public comment as follows:

PUBLIC COMMENT BY ARCELIA ISAIAS-GASTELUM

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MS. ISAIAS-GASTELUM: Okay. Thank you. And thank you, Board members as well, and good afternoon. My name's Arcelia and I'm a board member with New Mexico Interfaith Power and Light. And I'm here to ask that you vote to support and strengthen the New Mexico Environment Department's draft rules to addresses ozone precursor pollutants from oil and gas operations.

As a young adult who has dedicated my education and entire professional career to working to address climate change, I believe stopping pollution is a crucial first step and is also necessary for protecting our communities. From a moral, physical and spiritual standpoint, we can no longer afford to keep sacrificing the health of our people for short-term economic gain.

We saw how detrimental this was during the COVID-19 pandemic, and right now we have an opportunity and responsibility to learn from these hardships and do better. Our state has some of the worst methane pollution in the country. In addition to causing a quarter of the global warming we are experiencing, methane operations also release compounds into our air that cause respiratory diseases and increase risks of cancer.

These effects have disproportionate impacts on our children and it is for them that I wanted to draw attention to today. This country has repeatedly empowered

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industries who routinely put our children at risk. It's become so normalized and expected, there's now an entire generation of kids who are growing up and realizing they're beholden to a system that agreed to put their future at stake so previous generations could turn a profit. And its for these kids that we need to right these wrongs. They are acutely aware of everything that is going on at a level that has never been as accessible as it is today.

They are watching, and I ask that you show them that we won't keep sacrificing their well being for temporary gains. I share the concerns those kids have for our futures. And for this reason, I ask that you strengthen the meth -- the methane rules to ensure frontline communities are protected by routinely inspecting for and fixing leaks, where 70 percent of the emissions are coming from, and by cutting pollution caused by pneumatic controllers. Thank you for your time.

HEARING OFFICER ORTH: Thank you very much.

I don't have anyone else in the Chat indicating a desire to offer public comment at this time. That being the case, we will have another public comment session at 5:00 today and at 9 in the morning, 1 in the afternoon, and 5:00 tomorrow. The best way to have your name called is to send an email to Pamela Jones, the Board

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Administrator and I will call on your name. And I will also, as I am right now, throw it open to anyone on the platform who would like to reach out through the Chat. Going once. Okay. We've come to the end of public comment. We'll return to the technical session at this point.

Ms. Katz, the parties you've prepared, what we've been referring to as the spreadsheet in order of topics. Would you perhaps walk -- walk the Board members, just describe what's happening here in the -- in the spreadsheet.

MS. KATZ: Sure, I'm happy to do that, Madam Hearing Officer. So the spreadsheet puts together -- it lists all of the topics that we expect to cover in the -- in the rulemaking. So there's a topic rule section, subsection or paragraph column in Column B. I don't -- I don't know if everybody has the spreadsheet to look at. And then there's a description of either -- if it's a rule section, there's a description of that section or else there's nothing there if it's not an actual rule section.

Then we have all of the parties that were -- that entered appearances and submitted technical testimony. There's several rows -- all the first set of rows identify the witnesses who presented direct technical testimony on -- prefiled testimony on that particular subject. And

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then if you scroll across the columns to Column Q, it identifies whether parties submitted rebuttal technical testimony, and then there's a list of all the rebuttal witnesses associated with each topic, and then there is -- at the end there is a column that indicates witness availability issues regarding that topic. So it's to try to help us manage the multiple topics and many witnesses that we have in the hearing.

Does that -- is there some other specific thing you'd like me to address?

HEARING OFFICER ORTH: No. I just wanted to draw their attention to it and see if they had questions about it. Board members, as you imagine, there may well be adjustments made to it as we -- as we move along and witnesses have scheduling conflicts, but it represents a lot of work on Ms. Katz' part and a lot of discussion among all of the -- all of the parties with us.

Do any of the Board members have questions about it? Board Member Davis?

VICE-CHAIR TRUJILLO DAVIS: Thank you. First, I would like to say, Ms. Katz, this is awesome, you did a wonderful job on it. It helps keep us in order, so thank you very much.

Actually, my only question on it was about the topic order since that column is blank, can we just assume

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that we're moving top to bottom here, or is that something that's going to populate?

MS. KATZ: Yes, Member Trujillo-Davis. I'm wondering if -- I'm not quite sure maybe if you are all the way over on the -- if you scrolled all of the way to the left, there is a -- there are numbers associated with each row of the topics. And so I don't -- you might not have the latest version so I am happy to send it to Ms. Orth and Ms. Jones. Maybe that needs to be sent out again. But, yes, you are correct, though, generally that that is the order. And it's going in that order, although, it kind of got tweaked a little bit this weekend.

So, I don't know, Madam Hearing Officer, have they been provided with the more recent one?

VICE-CHAIR TRUJILLO-DAVIS: I must have the wrong one up.

HEARING OFFICER ORTH: Yeah, Member Bitzer was just asking in the Chat who had sent it and whether we have the most recent version to the Board members. I believe Pam did send the most recent version to the Board members, but I'll ask Pam to resend it because I know that everyone involved has been just slammed with emails. Especially, because I was forced to send each of you ten invitations and I really am sorry about that. There was

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no way around it.

So, Pam, if you would please resend the most recent version.

MS. KATZ: And it will say -- you know, it has the whole name and at the end it should say V2 because some of the topics moved. So that would be the one, Pam, for you to send.

ADMINISTRATOR JONES: Okay. Thank you.

HEARING OFFICER: Thank you for that. Other Board member questions of Ms. Katz about the spreadsheet? No? Okay.

So, then, Ms. Katz, would you please just briefly speak to us then about the next couple of topics if you would, please, and the witnesses who will be addressing them.

MS. KATZ: Sure. Thanks. So the first topic is ozone formation, and that's going to be Dr. Angela Raso. The second will be ozone monitoring and that will be covered by two witnesses: Andrew Ahr and Brent Ellington. Then the third topic is stakeholder outreach, which is Ms. Kuehn. Now, these are -- I expect we should get through these fairly easily, and that this should -- today, for sure, and they don't have -- I don't believe that there was any rebuttal testimony submitted to those. And so, I would put on -- I would ask to put on all of

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those witnesses, see where we are because I actually do not have my modeling expert here and so I think we're going to -- and we had asked to have the modeling testimony start tomorrow morning. And so, then there are certain topics that could move up if we have time after these witnesses.

HEARING OFFICER ORTH: All right. Yeah, as far as I'm concerned, I think I said this to the lawyers, that my highest priority is packing as much as we can into the hours we have. All right.

So, now, let's see. I do now have a Chat message from Ms. Devore, that the National Park Services is prepared to give their presentation regarding ozone formation this afternoon with rebuttal, if it fits.

MS. KATZ: Oh, my mistake. I'm sorry. Ms. Devore is right. I neglected -- they do have a rebuttal witness on ozone formation.

HEARING OFFICER ORTH: Yes. Mr. Vimont, I believe. All right. So if you would, please, Ms. Katz, if there's nothing else we need to discuss, call your first witness.

MS. KATZ: Thank you, Madam Hearing Officer. Did you -- did you want to do exhibit admissions --

HEARING OFFICER ORTH: Oh.

MS. KATZ: -- at this time?

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HEARING OFFICER ORTH: You know what? I did kind of blow past that, didn't I? All right. So I was looking forward to testimony.

MS. KATZ: That's right.

HEARING OFFICER ORTH: So the thing about the exhibits is that most of the parties have no objection to most of the exhibits. We do have a couple of parties who have objections to several of the exhibits.

So I -- I can certainly bring Mr. Rose back on. He seemed to perhaps have some strategy in mind for the discussion. We can do that, or I can ask you to offer the exhibits to which no one objected, we'll just admit those en masse. And we can wait until you actually offer the ones that were subject to an objection before we have that discussion. What -- what's your preference?

MS. KATZ: Thank you, Madam Hearing Officer. I actually don't have those specific exhibits that he's objected to of mine identified in the oral testimony. So it would be coming in through admission of my witnesses' prefiled testimony. I do not think that any of the exhibits that were associated with the next three witnesses -- yes, three witnesses on the first two topics are covered. But I do think he is objecting to some of the exhibits associated that are coming in through Ms. Kuehn's stakeholder outreach testimony.

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So I don't really know. I mean, I can just say I would move to admit all of the exhibits that do not have objections at this time

HEARING OFFICER ORTH: Okay. So the NMED exhibits -- NMOGA, I did not see had any objections to the NMED exhibits.

MS. KATZ: That's right

HEARING OFFICER ORTH: IPANM objected to Exhibits 5, 8, 9, 10, 32, 65, 72, 92, 110, and then the rebuttal Exhibit 1. And you're right, that is about the stakeholder outreach.

MS. KATZ: Yeah, I think they -- they -- they objected to every exhibit that had the word methane in it, so I think that's right.

HEARING OFFICER ORTH: Okay. All right. So please give me the numbers, if you will, of the ones -- other than the ones that they're objecting so we can put that clearly on the transcript that they're being admitted.

MS. KATZ: So those would be NMED Exhibit 1 through 110, excluding the ones identified by Ms. Orth. And NMED Rebuttal Exhibits 1 through 23.

HEARING OFFICER ORTH: Okay. So I'm going to do it this way so that the transcript is clear. I know it's a little more tedious. So 1 through 4 -- NMED Exhibits 1

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through 4, 6 and 7, 11 through 31, 33 to 64, 66 to 71, 73 to 91, 93 to 109. And 111 to -- did you say 123?

MS. KATZ: Sorry, no, Madam Hearing Officer, we actually marked our rebuttal exhibits starting again through 1.

HEARING OFFICER ORTH: No. I'm sorry. After 110, is it 120?

MS. KATZ: No, it's NMED Rebuttal Exhibit 1 --

HEARING OFFICER ORTH: No. I'm sorry. After 110, I thought there were still more after 110.

MS. KATZ: There were, but they are our rebuttal exhibits so they start at 1 again.

HEARING OFFICER ORTH: So there's nothing after 110?

MS. KATZ: Right.

HEARING OFFICER ORTH: In the draft?

MS. KATZ: Correct.

HEARING OFFICER ORTH: So I'm sorry. So, I'm sorry, Theresa. I just botched that. So 93 to 110 is what I should have said. All right.

All right. Now it's the rebuttal exhibits. Rebuttal Exhibits 2 through 23, right?

MS. KATZ: 1 through 23, I believe, or did he object to Exhibit 1?

HEARING OFFICER ORTH: 1 has been objected to.

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So 2 through 23?

MS. KATZ: That's my whole -- that's my -- the entire testimony of -- yeah, rule testimony of Ms. Kuehn and Mr. Palmer, so I guess we can take that up. And that's on the rule, so that's not -- that's a different one than Ms. Kuehn's testimony. That's coming up today.

HEARING OFFICER ORTH: Okay, but what I'm trying to do is admit the ones to which there was no objection.

MS. KATZ: I hear that. Thank you.

HEARING OFFICER ORTH: So Rebuttal Exhibits 2 through 23, right?

MR. ROSE: Madam Hearing Officer, let me -- let me further confuse this, so -- just to make sure. We did have some conversations with the Department after we noted our objections and Ms. Katz was correct, we identified exhibits that related to methane. As we understand the Department's testimony, we have no objections to those exhibits.

The others we still have with the other parties, but as to the Department's exhibits that we identified, we're withdrawing our objection.

HEARING OFFICER ORTH: I'm really sorry I didn't invite you up a little earlier there, Mr. Rose.

MR. ROSE: I wasn't sure whether to try to interject or not. As we're going down this road

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particularly far, I figured we ought to talk about that.

HEARING OFFICER ORTH: Right. No, any time you can rescue me from going through something like that when you've withdrawn the objection, that -- that would be good. So all of NMED's Exhibits are admitted because as I understand it, no other party objects to them. Mr. Rose's objections were the only objections made and they've been withdrawn. So NMED Exhibits -- the direct Exhibits 1 through 110 are admitted, and Rebuttal Exhibits 1 through 23 are admitted.

(NMED Exhibits 1-110 and NMED Rebuttal Exhibits 1-23 received into evidence at this time.)

HEARING OFFICER: Okay. I think we've cleared that up on the record now. Oh, I see Mr. Baake.

MR. BAAKE: Madam Hearing Officer, this is David Baake, with Clean Air Advocates. And I hate to interrupt, but I think it would be really helpful for the other parties to which this mainly broad objection has been lodged, to have this heard earlier rather than later.

As you can -- as you can probably imagine, with 47 exhibits being objected to and large sections of testimony, it makes it a little difficult for us to plan our presentation if we don't know how that objection might be ruled on.

HEARING OFFICER ORTH: I'm sorry. So do you mean

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the IPANM objections?
MR. BAAKE: Yes, that's correct. And maybe -- I mean, maybe we could address it first thing tomorrow or something, but I think it would just be helpful, like I said, to have it kind of scheduled maybe before we get to the technical people that might be objecting to, because I know it applies to three or four parties.
HEARING OFFICER ORTH: All right. Thank you. Let me think about that.
MS. KATZ: Madam Hearing Officer, I mean, I think there may be a little bit of difference as they apply. I know for the Department, you know, we haven't really -- we've said very little about methane, and the exhibits that mention methane are really just associated -- they're not being used to propose specific requirements or targeted at methane. So that's -- I mean, that was the basis of my response to Mr. Rose and so...
HEARING OFFICER ORTH: As you can imagine, my timing on the exhibits, once I understood that IPANM objected to a couple of dozen exhibits, it didn't make -- it made sense to me that I would have this discussion with Ms. Katz, such that in the event the objection had not been withdrawn, she could have laid a foundation and made her proffer while she had her witness on the screen. But that's all I was thinking about in terms of timing,

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Mr. Baake.
All right. Let's get back. Having admitted all of NMED's Exhibits, let's get back to your witnesses. I'm excited. And I believe you were calling Angela Raso.
DR. RASO: Raso.
HEARING OFFICER ORTH: Raso. Thank you, Dr. Raso. If you would, please, spell your last name.
DR. RASO: My last name is spelled R-A-S-O.
HEARING OFFICER ORTH: Thank you. And if you would raise your right hand. Do you swear or affirm to tell the truth?
DR. RASO: I do.
HEARING OFFICER ORTH: Thank you very much. Ms. Katz, your 30 minutes with Ms. Raso -- Dr. Raso starts now.
MS. KATZ: Thank you, Madam Hearing Officer.
And I will say that I apologize for my reference to Dr. Raso in the opening statement as "Ms. Raso." She is Dr. Raso and I will want to correct that for the record.

ANGELA RASO, Ph.D.,

(Relating to Topic Order 1)

having been first duly sworn or affirmed, was examined and testified as follows:

DIRECT EXAMINATION OF ANGELA RASO, Ph.D.,

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BY MS. KATZ:
Q. Dr. Raso, where are you employed?
A. I work at the Air Quality Bureau of the New Mexico Environment Department.
Q. And how long have you worked for NMED?
A. Approximately, three years.
Q. And what is your current job title?
A. I'm an air dispersion modeler in the Bureau's planning section.
Q. And what are your job duties?
A. I review dispersion modelings with permit applications to verify that air quality standards will not be violated by associated complex facilities. I also help review and understand photochemical modeling results for regional level projects.
Q. And can you please describe your educational and professional qualifications?
A. I hold a Bachelor's degree in Chemistry from Whitman College. I also hold a Ph.D. in Chemistry from Purdue University. During my Ph.D. research, I studied ozone chemistry and its interactions.
Q. Thank you. And a copy of your resume has been provided as NMED Exhibit 14, correct?
A. Yes.
Q. And have you submitted written direct testimony

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in this proceeding?
A. I have.
Q. And your full, written, direct testimony appears as Exhibit 13, correct?
A. Yes.
Q. And do you have any changes to your written testimony?
A. No.
Q. And do you adopt that testimony here today?
A. I do.
Q. All right. Ms. Raso -- Dr. Raso, can you please describe how ozone is formed in the atmosphere?
A. Ozone is not directly emitted into the atmosphere; rather, ozone is what's known as a secondary pollutant. It seems it's produced by photochemical reactions of precursor gases in the atmosphere. The indicated ozone precursor gases are oxide nitrogen, which we'll be referring to as NOx, and volatile organic compounds known as VOCs.
Q. And where do these precursor emissions generally come from?
A. NOx is predominantly produced by human activities, most often combustion, burning of fossil fuels. Most VOCs come from biological life plants, but in some areas, human activities can produce similar amounts

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of VOCs as plant life. Anthropogenic sources of VOCs include fossil fuel production and distribution and biomass burning.

In New Mexico, about 20 percent of total VOC emissions are from the oil and gas industry. The industry is the largest source of anthropogenic VOCs in New Mexico.

Q. And is it easy to predict ozone concentrations?

A. No, it's actually quite difficult. The chemical reactions that form ozone are very complex. It isn't as simple as assuming that 1 molecule of VOC plus 1 molecule of NOx will produce 1 ozone molecule. The oxidation of 1 molecule of VOCs typically produces 2 or more ozone molecules, and the reactions that create ozone doesn't actually destroy NOx in the atmosphere.

Additionally, there are many other competing reactions that are occurring in the atmosphere at the same time. This is why photochemical modeling is so necessary to understand the complexities and predict ozone concentrations in a region. Photochemical models contain hundreds of chemical reactions, in addition to physical reactions and transportation of gases.

Q. Can regulations reduce ozone concentrations, Dr. Raso?

A. Yes. The data has been very clear over the last several decades that regulations can reduce ozone

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concentrations.

Q. And did you review the work products produced by Ramboll during their photochemical modeling through this rule?

A. Yes. Ramboll conducted the photochemical modeling. As they were producing work products, I reviewed both draft and final work products, a list of the work products that we reviewed is included in my written testimony.

Q. Thank you, Dr. Raso.

MS. KATZ: I have no further questions for this witness.

HEARING OFFICER ORTH: Thank you very much. I will ask in the order of the service list again for questions by counsel. After I've done that, I will invite questions from Board members and anyone else. If you are not a panelist and you know that you have a question for this witness, please let me know in the Chat.

So, Ms. Fox, do you have a question of Dr. Raso?

MS. FOX: No, Madam Hearing Officer. Thank you.

MADAM HEARING OFFICER: Thank you. Ms. Paranhos? She may have stepped away.

Mr. Jaynes? He may have stepped away. Ms. Devore or Mr. Vimont?

MS. DEVORE: We don't have any questions. Thank

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you.

HEARING OFFICER ORTH: Thank you. And I just saw something in Chat from Professor Pacyniak, that CCP and NAVA do not have questions.

WildEarth Guardians, Mr. Nykiel?

MR. NYKIEL: No questions, Madam Hearing Officer.

HEARING OFFICER ORTH: All right. Thank you.

Oh, and Ms. Paranhos has just texted that she had no questions.

Mr. de Saillan?

MR. DE SAILLAN: No questions. Thank you, Madam Hearing Officer.

HEARING OFFICER ORTH: Thank you. Mr. Rose?

MR. ROSE: No questions.

HEARING OFFICER ORTH: Thank you.

Mr. Janoe?

MR. JANOE: No questions, Madam Hearing Officer.

HEARING OFFICER ORTH: Thank you.

Mr. Butzier?

MR. BUTZIER: No questions, Madam Hearing Officer.

HEARING OFFICER ORTH: Thank you.

Ms. Gutierrez?

MS. GUTIERREZ: No questions, Madam Hearing Officer.

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HEARING OFFICER ORTH: Thank you.

Mr. Neumann?

MR. NEUMANN: No questions, Madam Hearing Officer. Thanks.

HEARING OFFICER ORTH: Thank you.

Let's see. Mister -- let's see. Oh, Ms. Witherspoon? She may have stepped away.

All right. I'll return to the --

Madam Hearing Officer, NMOGA has no questions either.

HEARING OFFICER ORTH: Oh, thank you. Did I -- I'm sorry. Oh, yes, that's right. I'm very sorry. Was that Mr. Hiser?

MR. HISER: Yes, ma'am.

HEARING OFFICER ORTH: Okay. Thank you very much. All right. Let me turn to the Board members.

EXAMINATION BY THE BOARD OF ANGELA RASO, Ph.D.

HEARING OFFICER ORTH: Madam Chair, do you have questions of this witness?

CHAIRPERSON SUINA: I don't have any questions.

HEARING OFFICER ORTH: All right. Thank you. Vice-Chair Davis, any questions?

VICE-CHAIR TRUJILLO-DAVIS: No, ma'am.

HEARING OFFICER ORTH: All right. Member Cates? He may have stepped away.

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Member Bitzer?
BOARD MEMBER BITZER: No questions.
HEARING OFFICER ORTH: Thank you. Member Duval?
BOARD MEMBER DUVAL: Yes, I have just a brief question. Thank you, Dr. Raso. I was -- I was curious if in part of your capacity in evaluating models, do you also do -- do you do process modeling yourself in your position?
DR. RASO: The Bureau does not process photochemical models ourselves. We do process dispersion models, which don't account for chemistry and can't predict ozone concentrations.
BOARD MEMBER DUVAL: Okay. That was just a point of clarification. I was just curious. Thank you for your testimony.
DR. RASO: Uh-huh.
HEARING OFFICER ORTH: Thank you.
Member Garcia, do you have questions?
BOARD MEMBER GARCIA: No questions. Thank you.
HEARING OFFICER ORTH: Thank you. And Member Honker? I'm sorry. Mr. Honker, did you say "no questions"? Oh, there you are.
MEMBER HONKER: No questions.
HEARING OFFICER ORTH: All right. Thank you.
I think -- and I see no questions from any

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nonpanelists in the Chat. So is there any reason not to excuse Dr. Raso? Going once. All right. Thank you very much, Dr. Raso, for your testimony.
Ms. Katz, do we then hear from Mr. Vimont? Is that what we do?
MS. KATZ: Yes, I believe that's correct.
HEARING OFFICER ORTH: Okay. I'm working my way across the spreadsheet there, and that was how I thought we were going to walk through it. Mr. Vimont?
MS. KATZ: Madam Hearing Officer, I'm sorry, really quick. I don't think that the spreadsheet is set up in the order that we're doing the -- in the -- anyway, sorry. Yes, I mean, he is the only other witness for this one so it doesn't really matter.
HEARING OFFICER ORTH: All right. Thank you.
Mr. Vimont, have you joined -- oh, this is Ms. Devore. I see you, Ms. Devore.
MS. DEVORE: May I introduce Mr. Vimont quickly?
MR. VIMONT: Wait a -- please wait a second here. It might make more sense to go after the monitoring discussion since the -- we kind of covered both in our rebuttal, and, frankly, you know, they're interrelated, so...
MS. DEVORE: How do you want to do that?
HEARING OFFICER ORTH: All right.

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MR. VIMONT: It's at your pleasure; however you would like to do it.
HEARING OFFICER ORTH: Okay. So if you would like to move on, Ms. Katz.
MS. KATZ: Thank you, Madam Hearing Officer. The Department calls Brent Ellington.
HEARING OFFICER ORTH: Do we have him on the screen? Oh, there we are. Mr. Ellington, I can see you. Would you raise your right hand, please? Do you swear or affirm to tell the truth?
MR. ELLINGTON: I do.
HEARING OFFICER ORTH: Thank you. Let's spell your last name, please.
MR. ELLINGTON: It's Ellington, E-L-L-I-N-G-T-O-N.
HEARING OFFICER ORTH: Thank you very much. Ms. Katz, your 30 minutes starts now.

BRENT ELLINGTON,

having been first duly sworn or affirmed, was examined and testified as follows:

DIRECT EXAMINATION OF BRENT ELLINGTON

BY MS. KATZ:

Q. Thank you, Madam Hearing Officer.
Mr. Ellington, can you tell the Board where you are employed?

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A. The Air Quality Bureau of the New Mexico Environment Department.
Q. And how long have you worked for the Department?
A. Approximately, seven years.
Q. And what is your current job title?
A. I'm an environmental scientist specialist supervisor for the Air Quality Bureau.
Q. Can you describe your job duties?
A. I supervise the Bureau's Northern New Mexico operation staff with respect to air quality monitoring and data under federal regulatory requirements.
Q. And can you please describe your educational and professional qualifications?
A. I hold a Bachelor's Degree of Science in Biology from Eastern New Mexico University. I've worked as environmental scientist for over 17 years with the State of New Mexico, seven of which have been with the Air Quality Bureau. My positions have included the environmental specialist operator in Southeast New Mexico, Southern New Mexico supervisor of operations, and recently, the Northern New Mexico supervisor for the ambient air quality monitoring section.
Q. And a copy of your resume has been provided as NMED Exhibit 28?
A. Yes.

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Q. Have you submitted written direct testimony in this proceeding?
A. Yes.
Q. And your full, written, direct testimony appears as NMED Exhibit 27?
A. Yes.
Q. Do you have any changes to your written testimony?
A. No.
Q. Do you adopt your written testimony here today?
A. Yes.
Q. Thank you. Mr. Ellington, can you please summarize for the Board your direct testimony regarding the Department's air quality monitoring network?
A. Yes. The Department's responsible for collecting ambient air data to document present air quality and significant trends of pollution concentrations. This data must be of high quality because its use may have significant health, social and economic impacts. The NMED ambient air quality consists of state and local monitoring stations and special purpose monitors. The purpose of the network is to support the National Ambient Air Quality Standards and the Bureau is designated by the EPA to operate the monitors.
This existing NMED air monitoring network

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includes monitors in the areas of highest population density and includes sites that measure general background concentrations. There are currently 14 ozone analyzers deployed at various monitoring stations throughout New Mexico.
Q. Thank you. Can you discuss the federal regulations governing the Department's air monitoring network?
A. Yeah. The EPA specifies the general monitoring site types in its regulations. The location of the monitors in New Mexico meet the requirements in those federal regulations. The Bureau maintains the air monitoring instruments to 95 percent probability goals for accuracy and precision within EPA's required limits.
Q. And what are the air pollutants that are required to be monitored?
A. Currently, the Department monitors sulfur dioxide, nitrogen dioxide, ozone particulate matter, PM10 and 2.5 micrometers in size, in areas of New Mexico where the expected pollutants are expected to occur at significant levels, such as at or near cities near coal-fired plants -- power plants, mining operations, oil and gas operations and petroleum plants.
Q. And can you describe the ozone monitoring conducted by the Department?

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A. Yeah. The Department collects ozone data at each of the 14 monitoring sites in the state and uploads that data to the EPA's AirNow program every hour. The air pollution data are also available on the Bureau's website.
Information on this site includes pollutant concentrations, values, and are color-coded in the ambient air quality index, so the public can better understand that. And that represents the current ambient air quality for each monitoring location.
Q. And what equipment does the Department use to monitor ozone pollution and how are ambient ozone levels monitored?
A. Yeah, the Bureau currently uses the Thermo Fisher Model 49i Ultraviolet Photometric Ozone Analyzer. We just call it the 49i, to monitor ozone. This equipment's approved by the EPA for measuring ambient concentrations of ozone pursuant to federal regulations. The thermo analyzer calculates the ambient air concentration of ozone at a monitoring station by counting the molecules of ozone that are present as they pass by an ultraviolet lamp inside the analyzer over a defined period of time. And that calculated ozone concentration is then reported to the station data logger computer and is available thereafter on the Bureau's website for public review.
Q. Can you please describe how the Department

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complies with auditing and calibration requirements for this ozone monitoring equipment?
A. Yes. The in-station computer calibration systems perform weekly calibration checks. The Bureau evaluates the results of these checks as part of the data validation process, and the results are reported to the EPA. The Bureau follows standard operating procedures for uniformity and uniform practices and quality control of each one of our ambient air monitoring stations.
Q. Thank you, Mr. Ellington. I have no further questions for this witness
HEARING OFFICER ORTH: Thank you, Ms. Katz. We're going to go through the list again. Ms. Fox, do you have questions of Mr. Ellington?
MS. FOX: No, thank you, Madam Hearing Officer.
HEARING OFFICER ORTH: Ms. Paranhos? She may have frozen again.
Professor Pacyniak or Mr. Jaynes?
PROFESSOR PACYNIAK: No questions, Madam Hearing Officer.
HEARING OFFICER ORTH: Thank you.
Ms. Devore or Mr. Vimont?
MS. DEVORE: No questions, Madam Hearing Officer.
HEARING OFFICER ORTH: All right.
Mr. Nykiel?

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MR. NYKIEL: No questions, Madam Hearing Officer. Thank you.
HEARING OFFICER ORTH: Thank you.
Mr. de Saillan?
MR. DE SAILLAN: No.
HEARING OFFICER ORTH: Thank you.
Mr. Hiser?
MR. HISER: No questions and thank you.
HEARING OFFICER ORTH: Thank you.
Mr. Rose?
MR. ROSE: I just have one question for clarification.
CROSS-EXAMINATION OF BRENT ELLINGTON
BY MR. ROSE:
Q. And that is, are the monitors that you identified for ozone include monitors in Bernalillo County, or are those maintained by the city as opposed to the state?
A. Yes, those are maintained by the City of Albuquerque's monitoring network. That's -- that's out of our scope.
Q. Do you know how many monitors they maintain?
A. You know, that, I don't have readily available. I don't know how many stations they operate.
MR. ROSE: Thank you. I have no further questions.

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HEARING OFFICER ORTH: Thank you.
Mr. Janoe?
MR. JANOE: No questions, Madam Hearing Officer.
HEARING OFFICER ORTH: All right. Thank you.
Mr. Butzier?
MR. BUTZIER: No questions on behalf of GCA.
HEARING OFFICER: Thank you.
Ms. Gutierrez?
MS. GUTIERREZ: No questions. Thank you.
HEARING OFFICER ORTH: Thank you.
Mr. Neumann?
MR. NEUMANN: No questions. Thank you.
HEARING OFFICER ORTH: Thank you. And Ms. Witherspoon, if you're with us?
All right. I'm going to turn to the Board now. In the event you are not a panelist, please reach -- and you have a question for this witness, please reach out through the Chat.
EXAMINATION BY THE BOARD OF BRENT ELLINGTON
HEARING OFFICER ORTH: Madam Chair, do you have questions of Mr. Ellington?
CHAIRPERSON SUINA: Madam Hearing Officer, I don't have any questions. Thank you.
HEARING OFFICER ORTH: Thank you.
Vice-Chair Trujillo-Davis?

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VICE-CHAIR TRUJILLO-DAVIS: Thank you, Madam Chair. I just have one question for clarification. Mr. Ellington, how many air monitors are in Eddy County and how many area monitors are in Lea County?
MR. ELLINGTON: Did you say -- I got Eddy County; we have one monitor there. And then --
VICE-CHAIR TRUJILLO-DAVIS: And Lea County?
MR. ELLINGTON: In Lea County, we have a station in Hobbs, New Mexico as well, so that's one in each county.
VICE-CHAIR TRUJILLO-DAVIS: And where are those located at? I don't need specifics. I was looking more for close to population, out in the middle of the county, kind of just general?
MR. ELLINGTON: Yeah, in Eddy County, our station is on the western side of Carlsbad, kind of on the Southwestern side; very, very close to populated areas. And in Hobbs, it is in a city wellyard in the neighborhoods, close to an elementary school.
VICE-CHAIR TRUJILLO-DAVIS: Thank you. I appreciate it. And thank you for your testimony.
MR. ELLINGTON: You're welcome.
HEARING OFFICER ORTH: Thank you.
Member Cates, do you have questions of Mr. Ellington?

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BOARD MEMBER CATES: I do not. Thank you.
HEARING OFFICER ORTH: All right. Thank you.
Member Bitzer?
BOARD MEMBER BITZER: No. Sorry
HEARING OFFICER ORTH: Thank you. Thank you.
Member Duval, I believe, had to step away.
Member Garcia?
MEMBER GARCIA: No questions.
HEARING OFFICER ORTH: No, okay. Thank you.
And Member Honker?
BOARD MEMBER HONKER: I have no questions. Thank you.
HEARING OFFICER ORTH: All right. Thank you.
Is there any reason not to excuse Mr. Ellington? Thank you very much, Mr. Ellington.
MR. ELLINGTON: You are very welcome, Madam Hearing Officer.
MS. KATZ: I can't hear you.
HEARING OFFICER ORTH: I'm sorry. I was reading a message from Professor Pacyniak, asking me to make a few of the law students panelists. I guess they weren't able to come in through the panelist link, so let me take just a moment to do that. So Mr. Jaynes -- and who else was it? Keifer Johnson. All right. I'm sorry, I don't multitask as well as I think I do. Okay. Make panelists.

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All right. I have taken care of that little bit of business.

So should we turn now at this point, Ms. Katz, to the rebuttal from Mr. Vimont and Ms. Devore before you go to stakeholder information?

MS. KATZ: Madam Hearing Officer, I still have one other witness for the monitoring, and so I believe it would be appropriate to have Mr. Vimont go after that.

HEARING OFFICER ORTH: Oh, very sorry. Thank you. Please call your next witness.

MS. KATZ: Thank you. The Department calls Andrew Ahr.

HEARING OFFICER ORTH: Mr. Ahr, I see you on the screen. If you would raise your right hand, please.

Thank you very much. And Andrew is the standard spelling. Ahr, if you would spell it, please.

MR. AHR: Okay. My last name is spelled A-H-R.

HEARING OFFICER ORTH: Thank you. Ms. Katz, your 30 minutes starts now.

ANDREW AHR,

having been first duly sworn or affirmed,

was examined and testified as follows:

DIRECT EXAMINATION OF ANDREW AHR

BY MS. KATZ:

Q. Thank you. Mr. Ahr, where are you employed?

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A. I'm employed at the Air Quality Bureau of the New Mexico Environment Department.

Q. And how long have you worked for the Department?

A. I've been with the Department approximately four years.

Q. And what is your current job title?

A. Currently, I'm the quality assurance staff manager.

Q. And what are your job duties?

A. I manage the quality assurance auditors who perform audits of the air monitoring equipment at all of the air monitoring sites. I also manage the quality assurance data handling specialists, who validate the ambient air data reports precision and accuracy data to EPA's air quality system and performs data certification.

Q. Thank you. And a copy of your resume has been provided as NMED Exhibit 31?

A. Yes.

Q. And have you submitted written direct testimony in this proceeding?

A. Yes, I have.

Q. And your full, written, direct testimony appears as Exhibit 30?

A. Yes.

Q. Do you have any changes to your written

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testimony?

A. No.

Q. And do you adopt your written testimony here today?

A. I do, yes.

Q. Thank you. Mr. Ahr, can you describe for the Board what a design value is and how design values for ozone are determined?

A. Okay. A design value is a statistic that is used to determine the compliance status of a given location with respect to the National Ambient Air Quality Standards, or NAAQS. Design values are typically used to designate and classify nonattainment areas, as well as to assess progress toward meeting the NAAQS. Design values are computed and published annually by EPA's Office of Air Quality Planning and Standards, and reviewed in conjunction with EPA's Regional Offices.

The current NAAQS for ozone is 0.070 PPM or parts per million. This ozone standard has been in effect since October 26, 2015. The NAAQS is met at an ambient air monitoring site when the three-year average of the fourth-highest daily maximum 8-hour average ozone concentration, or the design value, is less than 0.070 parts per million. The three-year average is computed using the three most recent consecutive years of ambient

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ozone monitoring data. Design values are also reported in parts per million to three decimal places.

Federal regulations specify what is considered ozone season for each state. Ozone season for most states is generally considered to be from May through September; however, in New Mexico -- because those are considered the warmest months of the year. However, New Mexico's ozone season is designated as all 12 months.

Hourly ozone -- let me start again. Hourly average ozone concentrations are recorded at each ozone monitor, parts per million, to the third decimal place, with digits to the right of the third decimal place truncated. The daily maximum 8-hour average ozone concentrations are determined each day with ambient ozone monitoring data.

Q. And can you discuss the quality assurance requirements for design value data?

A. Yes. Four daily 8-hour average ozone concentrations data is submitted to the EPA. The data is reviewed by QA personnel at the Bureau to meet validity requirements. Ozone monitoring equipment must pass an annual accuracy audit to ensure that all flows, pressures, lamp intensities, temperatures and instrument response to ozone concentrations are within specifications.

Quarterly calibrations are performed on all ozone

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monitoring instruments by personnel from the Bureau's monitoring section. Ozone monitoring instruments -- ozone monitoring instruments must pass quality control checks which are performed automatically. If any ozone monitors do not pass this weekly check, monitoring personnel make required adjustments or fixes to the failing instrument to bring it back within specifications.

QA personnel verify that all ozone monitoring instruments pass this check and then submit the weekly data to EPA through the air quality system website. Daily checks are also performed by monitoring personnel to ensure ozone monitoring equipment is recording and operating within specifications. They look for any equipment alarms and note any unusual or high value concentrations above 0.070 parts per million.

The quality assurance data steward performs a daily check of ozone data each morning to ensure the instruments are recording, takes note of any data abnormalities. Lastly, QA personnel perform annual data certification on all data -- on all -- excuse me -- on all monitoring data. The Bureau then submits the certification letter and related reports to the EPA.

Q. Thank you. Can you describe the process for submission of monitoring data to EPA, for calculation of design values?

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A. Yes. The Bureau's QA personnel review all data to ensure that it meets all validity requirements and submits it to the EPA on a quarterly basis. Once the hourly ozone data is submitted, EPA uses it to calculate the 8-hour average ozone concentration for each day, to determine the first, second, third, fourth -- and fourth highly daily -- highest daily maximum 8-hour ozone concentrations. This is for the entire year, to produce the design value. EPA, therefore, determines the design value, not the Bureau.

Q. Thank you, Mr. Ahr, and I have no further questions for this witness.

HEARING OFFICER ORTH: Thank you very much. I will go through the list for questioning. Ms. Fox?

MS. FOX: No questions, Madam Hearing Officer.

HEARING OFFICER ORTH: Thank you.

Ms. Paranhos?

Professor Pacyniak? I saw you briefly.

PROFESSOR PACYNIAK: No questions, Madam Hearing Officer.

HEARING OFFICER ORTH: Thank you.

Ms. Devore or Dr. Vimont?

MS. DEVORE: No questions. Thank you.

HEARING OFFICER ORTH: All right. Mr. Nykiel?

MR. NYKIEL: No questions. Thank you.

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HEARING OFFICER ORTH: All right.

Mr. de Saillan?

MR. DE SAILLAN: No questions. Thank you.

HEARING OFFICER ORTH: Thank you. And Ms. Paranhos is unable to unmute herself at the moment, but she has no questions.

Mr. Hiser?

MR. HISER: Thank you, Madam Hearing Officer. I do have a question or two.

CROSS-EXAMINATION OF ANDREW AHR

BY MR. HISER:

Q. Mr. Ahr, you said that the Department itself does not calculate the design value, but EPA does; is that correct?

A. That's correct.

Q. And has EPA calculated a design value for Chaves County or not?

A. I do not believe so.

MR. HISER: Thank you.

HEARING OFFICER ORTH: Thank you.

MR. HISER: No further questions, Madam Hearing Officer.

HEARING OFFICER ORTH: Oh, thank you.

Mr. Rose, do you have questions of Mr. Ahr?

MR. ROSE: I have no questions of this witness.

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HEARING OFFICER ORTH: All right. Mr. Janoe?

No questions. Thank you.

HEARING OFFICER ORTH: Thank you. Mr. Butzier?

MR. BUTZIER: No questions on behalf of GCA.

HEARING OFFICER ORTH: Thank you.

Ms. Gutierrez?

MS. GUTIERREZ: No questions. Thank you.

HEARING OFFICER ORTH: Thank you.

Mr. Neumann?

MR. NEUMANN: No questions. Thank you.

HEARING OFFICER ORTH: All right. And Ms. Witherspoon, if you're with us. No?

I'm going to turn to the Board now.

If you are not a panelist and you have a question of this witness, please reach out through the Chat.

Madam Chair?

EXAMINATION BY THE BOARD OF ANDREW AHR

CHAIRPERSON SUINA: Thank you, Madam Hearing Officer. I do have one question to follow up from Mr. Hiser's line of questioning. So as you responded to Mr. Hiser, you don't have a value for Chaves County. Just so I can clarify in my mind, is that -- so, therefore, only the values are calculated for the monitoring stations in those locations where the county -- where the monitoring station is within the county; is that correct?

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MR. AHR: How I understand it, yes.
CHAIRPERSON SUINA: Okay. So those -- a follow-up question, Hearing Officer, if I may. So those counties without a monitoring station don't have those design values -- or the comparison to the design values calculated; is that correct?
MR. AHR: That's correct.
CHAIRPERSON SUINA: Okay. Thank you so much.
HEARING OFFICER ORTH: All right. Thank you. Vice-Chair Trujillo-Davis?
VICE-CHAIR TRUJILLO-DAVIS: Thank you, Madam Hearing Officer. I only have a couple of follow-up questions. So when the -- when you submit three years of data to the EPA for your design value, how long does that take to receive a design value back from the EPA?
MR. AHR: We don't -- we don't submit three years at a single time. As I've stated, we submit the data quarterly each year, and so -- and then -- then we certify all of that data once a year, too. But EPA, I mean, they have all of that data, they can come up with the come up with the design value for the year after it's been -- say, after it's been certified. The certifications are done at the end of May. That's when we certify the previous year's data. The requirement -- the required date is by May 30th of the following year.

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So I would imagine that the EPA would probably have that data after they receive -- after they receive our certifications for it.
VICE-CHAIR TRUJILLO-DAVIS: So as we move through this hearing and we're looking at data for these counties, how -- what's the time frame we're actually looking at? Are we looking at 2020, '19, '18, or are we looking further back into those years?
MR. AHR: You mean for the current design value?
VICE-CHAIR TRUJILLO-DAVIS: Yes.
MR. AHR: The current design value is based on 2018, 2019 and 2020. So those are the latest design values.
VICE-CHAIR TRUJILLO-DAVIS: Okay. And do you request from EPA which counties you want to have design values for?
MR. AHR: No, because it's dependent upon where we have air monitor -- ozone air monitors for that. So, EPA, they calculate what the design values are, and then they assign those to the specific county or our monitoring site.
VICE-CHAIR TRUJILLO-DAVIS: Okay. Thank you. And I'm just trying to get a picture of how those interactions between EPA and NMED work. So thank you for taking the time to answer my questions.

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MR. AHR: You're welcome
MS. KATZ: Member Trujillo-Davis, I think with witness Mike Baca, we'll also be addressing some of that information so you can also ask him about that as well.
VICE-CHAIR TRUJILLO-DAVIS: Okay. Thank you very much.
HEARING OFFICER ORTH: Thank you, both.
Member Cates, do you have questions of Mr. Ahr?
BOARD MEMBER CATES: I do not.
HEARING OFFICER ORTH: All right. Thank you.
Member Bitzer, do you have questions of Mr. Ahr?
BOARD MEMBER BITZER: I do. Mr. Ahr, just one question. You mentioned that the equipment you use is subject to an annual check, accuracy verification type of deal. How often is it spot on, and are there occasions when it's substantially off at the time of it?
MR. AHR: It has to meet -- it has to fall within a specific range of specifications. It can't -- if it's off at all, then it doesn't pass the annual audit. Then, the monitoring people -- personnel -- the monitoring personnel, the AQB go in and make the adjustments, the calibrations to the tool. We don't -- the auditors -- the QA auditors do not fix the tool. That's up to the monitoring people to bring it back within specification.
Once it's back within the specifications,

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according to the monitoring people, then we'll re-perform the audit to make sure that it is passing.
BOARD MEMBER BITZER: So they do have to be recalibrated fairly often? Is that what I'm hearing?
MR. AHR: No, I wouldn't say so. I mean, most of the time they do pass their audit. Because it's --
BOARD MEMBER BITZER: And you said it had to be audited. Is that 1 percent, 2 percent? How -- how plus or minus could it be and still pass?
MR. AHR: I don't have that in front of me right now. I wish I could get that to you. I don't know that number right off the top of my head. I'm sorry.
BOARD MEMBER BITZER: No rush. We're going to be here for a couple of weeks.
MR. AHR: Okay. Yeah, because we do have it -- it's specified on -- there's a -- we do have a document that has all of that written on there, that says, yes, it has to be within these specifications in order to pass.
MS. KATZ: We can provide that information.
MR. AHR: Yeah, we can submit that. I just don't have it in front of me.
BOARD MEMBER BITZER: I'm just wondering what constitutes good data and what the variations or deviations are likely to be. That's good. Thank you.
MR. AHR: All right.

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HEARING OFFICER ORTH: Thank you.
Member Garcia, do you have questions of Mr. Ahr?
BOARD MEMBER GARCIA: Yes, I do have one question. Can you hear me okay?
MR. AHR: Yes.
BOARD MEMBER GARCIA: So who decides where the monitor is located? Is that something that NMED proposes and EPA approves?
MR. AHR: That's -- that's really beyond my scope, I mean, how that's done. I think that the EPA, you know, pretty much, you know, proposes where they go.
BOARD MEMBER GARCIA: Okay. Perhaps somebody else can answer that a little later. That will be fine. Thank you.
HEARING OFFICER ORTH: All right. Thank you.
Member Honker, do you have questions of Mr. Ahr?
BOARD MEMBER HONKER: No questions at this time. Thank you.
HEARING OFFICER ORTH: All right. Thank you.
No one else has reached out through Chat.
Ms. Katz, did you have any redirect or can we excuse Mr. Ahr?
MS. KATZ: We can excuse Mr. Ahr. Thank you.
HEARING OFFICER ORTH: All right. Thank you very much, Mr. Ahr, for your testimony.

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Is it time now to turn to Mr. Vimont and Ms. Devore?
All right. So, Ms. Devore, I see you on the screen. And I believe you said you wanted to introduce Mr. Vimont. What I'd like to do is swear both of you in. If you would, each of you, raise your right hand.

LISA DEVORE AND JOHN VIMONT

having been first duly sworn or affirmed, were examined and testified as follows:
HEARING OFFICER ORTH: Thank you. That was both Ms. Devore: First name, Lisa, last name, D-E-V-O-R-E and Mr. Vimont, V-I-M-O-N-T.
Go ahead, Ms. Devore.

DIRECT EXAMINATION OF JOHN VIMONT

MS. DEVORE: Okay. So I'd like to introduce Mr. Vimont, with the National Parks Service. He holds a Bachelor of Science in Atmospheric Sciences, as well as a Master of Science in Atmospheric Science. And he has worked for the park service since 1991. And before that, held positions with the Environmental Protection Agency and the State of New Mexico Air Quality Bureau. And he is currently the acting chief for the Air Resource -- National Air Resources Division for the National Park Service and has also served in roles as meteorologist, and is the chief of the Research and Monitoring Branch of the

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Air Resources Division in the park services. And his curriculum vitae was submitted as National Park Services Exhibit A in our rebuttal testimony.
And he will be providing a presentation today focusing on ozone formation and monitoring, with emphasis on the study that the National Park Service did in Carlsbad Caverns. Thank you.
MR. VIMONT: Is it possible to share my screen? I have a PowerPoint presentation.
HEARING OFFICER ORTH: Yes, I will make you a presenter. Just give me a moment and remember, you have 30 minutes.
MR. VIMONT: Yep.
HEARING OFFICER ORTH: Let's see here. Change role, make presenter. All right. It should be coming up for you.
MR. VIMONT: Okay. Now, the next trick is to figure out how it's -- which window it's going to want to share here. These are always tricky when we get into the presentation things here on a webinar. But let me share. Okay. Let me try sharing screen two and then I will go to presentation mode, which I hope -- I did that. Well, interesting. Let's try that.
HEARING OFFICER ORTH: There we go.
MR. VIMONT: Okay. We have that. Let me -- what

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happens if I do this? Are you seeing the one with the slides on the side or are you seeing the presentation mode?
HEARING OFFICER ORTH: It was better earlier, because now we see something that is split.
MR. VIMONT: Okay. Let me get out of this. We can do it either way. All right. Okay. So you're seeing it okay now?
HEARING OFFICER ORTH: Yes, I see one large screen and then the -- see one large slide and then, you know, little thumb nails of the slides along the left margin which aren't distracting. Please go ahead.
MR. VIMONT: Yeah, let's just do that. It gets the point across at any rate. So we're the National Park Service that we're offering technical comments on the proposed rule. We have a quick synopsis of our results that we want to present. First of all, ozone concentrations exceed the level of National Ambient Air Quality Standards for ozone at Carlsbad Caverns National Park in New Mexico.
We'll go over our monitoring here in a minute, but the -- basically, our monitoring at Carlsbad Caverns follows the EPA guidelines that were outlined by the previous presenters for the state. It's certified data just like the state data is.

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Volatile organ -- excuse me. Volatile organic compounds measured at Carlsbad Caverns National Park indicate that the main sources of volatile organic compounds affecting ozone formation are from oil and gas activities. Nitrogen oxide emissions that affect high ozone concentrations at Carlsbad Caverns National Park are from localized sources, meaning somewhere in the vicinity of Eddy County, or that kind of a scale, not from the long distance transport.

The measures proposed in this rule will help to reduce high ozone concentrations. We'll talk about this more as a rebuttal later on. And based on the data that we have, we think that the NOx and VOC control measures are necessary to reduce ozone.

Okay. There we go. First, go over some of the general information about air quality at national parks. There's a variety of laws out there that we operate under to protect our resources in national parks and wilderness areas. The National Park Service relies on states and the EPA to implement air quality regulations so that it can protect park resources. We do not have regulatory authority, but we do have authority to measure what's happening in our national parks. Actually, I should say your national parks. It's all of our national parks.

The ground level ozone formation, one of the

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previous speakers discussed this; it's formed from a complex reaction of nitrogen oxides and VOCs in the presence of sunlight. It's just a little cartoon to kind of illustrate that. It can impact vegetation and human health. You can see here some of the chlorotic model we see on leaves that can happen from high ozone concentrations. And it's an EPA-regulated pollutant and that's why we're all here.

You know, we're focusing today on VOC and NOx. The other aspect of this is we have visitors that come and they exercise in the park. We have staff itself that are working outside and ozone can affect the health of the visitors and our staff, so we are concerned about that.

The sources of ozone, this schematic illustrates that air pollutants are transported into parks; they're generally not formed in the park or, you know, the source are not in the park so it comes to the park from outside sources. And it affects our staff and visitors, as I said before.

We have extensive oil and gas activities throughout the Midwest and the West. There's been certainly an increase in oil and gas development in many areas of the country, and including the areas that are going to be affected by this proposed rule. The several parks that we -- that are in New Mexico, you know, are

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located, you know, and affected by this: Carlsbad Caverns National Park; Guadalupe Mountains National Park at Chaco Cultural National Historical Park and Mesa Verde National Park in Colorado. Most of the data presented here are focused on studies from Carlsbad Caverns. We do also have ozone monitors at Chaco Cultural and at Mesa Verde.

The managers of Carlsbad Caverns National Park have been concerned about the development there, and asked us to put in some monitoring down there several years ago. As we monitored air, we've -- as we said, the ozone monitoring we have meets the EPA criteria that was described earlier. It meets the design concentrations down in here for the various years.

As we get back into here, the particular monitor we had was not being operated that way, but in recent years it has been operated according to EPA specs. You know, they're asked -- in looking at this, if you look at trends in nitrogen oxide, it's from satellite data. Lots of -- it's going down to claim the urban areas, we see that. But areas such as the Permian Basin down here, you can see the -- this little pink box down in here is showing increases in NOx over this time period.

Given that, we have -- we did some special studies down there in 2019 -- in 2017 and 2019. In 2017 we did a -- we did kind of a survey study around a number

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of parks in the Western United States. And from that, Carlsbad Caverns showed up as having very unique signatures of volatile organic compounds.

We talk about how ozone formation takes place from reactions of VOC and NOx in the presence of sunlight. The different VOCs have varying reactivities and in turn, they affect ozone formation to varying degrees. The different types of VOCs and the mix of the VOCs also provide unique markers for identifying sources. The types and the emission, you know, emission origins.

The remainder of this presentation will show that the markers indicate the dominance of oil and gas sources are found at Carlsbad Caverns National Park. The -- you know, during the studies we've been able to identify more than 70 different VOCs through our monitoring efforts.

We did the survey study in April to September of 2017, where we took RAD samples that you can see in the picture here on the side where at times they were evacuated canisters that are inert, to allow us to sample.

The studies were done at four national parks and they measured high ozone so we wanted to determine the mix of VOC that we were seeing that in these areas across the country or across the West at least: Carlsbad Caverns is one, Great Basin National Park, Grand Canyon National Park and Joshua Tree National Park. Each has their own unique

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source regions, but we wanted to see what the differences were between them.

Average VOC concentrations here are of different types, sources. Alkanes are related to oil and gas and transportation. The alkenes, ag -- and transportation. Ethyne is a combustion product. Biogenics are measured here, natural emissions. And aromatics from urban oil and gas operations.

The -- we use park abbreviations here. CAVE is Carlsbad Caverns. Great Basin is -- or GRAB is Great Basin. GRCA is Grand Canyon and Joshua Tree is JOTR. And ROMO is also on here, it was a separate study just for comparison, which is Rocky Mountain National Park. If you notice, the total VOCs, and especially the alkanes associated with oil and gas are up to 5 to 10s higher -- excuse me -- 5 to 10 times higher at Carlsbad Caverns than they are at the other parks.

So there's extensive oil and gas in the area east of Carlsbad Caverns, which raises the question: Where does the air come from during periods of high ozone? Using back trajectory analysis, you know, during the 2017 study, we found that the high ozone corresponds to airflow from the East and Southeast toward Carlsbad Caverns National Park.

The warm colors are more likely to be coming from

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these areas during the high concentrations. The cool colors are less likely to come from these areas. So you can kind of see that this area where previously we showed high NOx emissions in the satellite data, the same area here where we're seeing high ozone, correlating with that transport direction.

When -- based on the 2017 study, we conducted another study in 2019. And it showed in the picture earlier, the 2017 study, used evacuated sampler containers which we also had some of those during this study. But the -- we had many specialized research grid instruments where we could get high time resolution measurements of the VOC and nitrogen compounds that affect ozone formation.

Carlsbad Caverns National Park, there's some objectives, it was to figure out what the primary VOC drivers are of regional ozone formation. You know, what is the nitrogen budget, that helps produce ozone, and what are the species of the various compounds that contribute to or limit the aerosol formation, which we're not talking about here, but at the park service we're also interested in that. That was one of the objectives. And what's shown on the following slides, oil and gas emissions are driving the formation of ozone in Carlsbad Caverns. Okay. All right. How do these VOC and NOx interact?

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The next slide is going to show average concentrations of ozone, NO and VOCs during the 2019 study. Each figure shows the average ozone and the sunlight intensity for each hour of the day. And the three charts show the hourly daily patterns of different compound classes. So, how the NO, which is unreacted NOx -- think of it that way; most of what comes out of a combination source, a tailpipe or a smoke -- or a stack like a compressor station, comes out as NO and then reacts the NO2 and keeps going.

Ethane is one of the most abundantly-emitted VOCs, built up -- it builds up and is reacted away then. Then the formation of alkyl nitrates, it's one of the classes of VOCs that's formed through this set of reactions in the atmosphere. It has a similar pattern to ozone, as you can see.

So these three charts show the average concentration of NO, VOCs, ethane and 2-butyl nitrate and ozone throughout the day. Concentrations are plotted along with this daily solar insulation, it's an idealized solar insulation plot -- oops, sorry about that.

You can see that the ozone peaks in the later afternoon; it's a typical ozone production. There's a spike in fresh NOx emissions in the morning, that tapers off as it reacts during the daylight hours. Similarly,

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there are more ethane -- there's more ethane peaking in the morning that subsequently reacts in the ozone forming process, so it diminishes later on in the day.

The 2-butyl nitrate, which is a reaction product that peaks around the time the ozone peaks, indicating the reactions of the ozone-forming pollutants occurred during that day and that that ozone wasn't transported to the area from afar.

The 2017 and 2019 study -- studies both showed similar results at Carlsbad. This slide is a little confusing. We have the 2017 chart here and then some average values from 2019. Ethane is a distinctive indicator of emissions from oil and gas operations that can be seen in Carlsbad Caverns. The 2017 study stands out from the other parks that we studied. In most areas when ethane is measured in the background, you'd expect around 1 ppv -- 1 ppb by volume. In 2019, the average for the six-week study was just over 17 ppv -- ppb -- excuse me. And similarly, some values exceeded 100, so definitely Carlsbad stands out from other areas that we studied.

Oil and gas emission tracers, something called the i-to-pentane ratio. Fresh gasoline emissions typically have a ratio of 1 and 1/2 to 3. Fuel evaporation runs around 1.8 to 4. Vehicular exhaust, 2.2 to 3.8. As you

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can see in both 2017 and 2019, the i-to-pentane ratio is less than 1, indicating oil and gas again. It's consistent between these two years.

And the reason why 2019 are higher is because they cover all hours of the day, whereas we were only sampling in the afternoon in 2017. So, again another indication to the ethane, i- and n-to-pentane ratio that we were seeing in oil and gas contributing to ozone formation at Carlsbad Caverns National Park.

This slide shows that there's a fresh buildup of NOx at night, which is then processed with the VOCs and sunlight reactions to form ozone. The NOx is generated in the vicinity; NOx from the farther away would have a much lower NOx to NOy. NOy is all different compounds. And NOx is usually defined as NO plus NO2, whereas, NOy is NO plus NO2 and everything else -- nitric acid, different -- lots of different compounds. So it's really the total of all of the reactants. So, NOx from farther away would have a lower NOx to NOy ratio than we have in this chart.

And while this slide is showing a particular multiday event, it is important to note that the same NOx to NOy ratio is persistent throughout the entire study period, indicating fresh NOx emissions. So it's not coming from very far distances away.

Air mass aging, alkyl nitrates are products of

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the -- during the VOC NOx reactions that form ozone. The ratios of the alkyl nitrates to their parent compounds can give us a good estimate of how long the air pollutants have been reacting when they reach the park. This graph shows that the vast majority of the reaction times between -- below 12 hours. This clearly shows the ozone forming NOx and VOCs were nearby, the fact that the points fall off the idealized model, it's very idealized. It implies that the model doesn't capture everything that is occurring. But the majority of things are happening in there fairly quickly.

At this point I'm going to deviate from here. I think the ozone concentrations at Carlsbad Caverns National Park, they frequently exceed the National Ambient Air Quality Standards for ozone. The information presented highlights the need for both NOx and VOC reductions and supports the 18 proposed engine and turbine standards.

The rest of the -- this part of the slide will be discussed later when we're -- when you're talking about the actual elements of the rule. Let's see. This is also on that.

So our summary again: Ozone concentrations exceed the level of the National Ambient Air Quality Standards for ozone at Carlsbad Caverns National Park.

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These are done with regulatory monitors following the EPA requirements for operation and quality assurance. The NPS has studied ozone formation at a number of parks. Carlsbad Caverns National Park stands out as being the most affected by oil and gas sources. Two should have been done at Carlsbad in 2017 and 2019, during these times when peak ozone concentrations are measured there. The two studies show consistent results.

The volatile organic compounds measured at Carlsbad indicate that the main sources of VOCs affecting ozone formation are from the oil and gas activities. Nitrogen oxide emissions that affect high ozone concentrations at Carlsbad National Park are from nearby sources. The measures proposed in the rule will help to reduce high ozone. And NOx and VOC control measures are necessary to reduce ozone at the park, and really in the region in general.

That's my presentation and thank you for your listening.

HEARING OFFICER ORTH: Thank you, Mr. Vimont. Let me ask about exhibits. Ms. Devore mentioned Exhibit A. And I'm wondering -- I didn't see objections from either NMOGA or AP -- IPANM to any of your exhibits, or anyone else to any of your exhibits. I'm wondering if you just want to offer all of your exhibits right now.

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MS. DEVORE: Yes, we have Exhibits A through E.

HEARING OFFICER ORTH: A through E. Unless someone has changed their mind and reaches out right now, I'm going to admit Exhibits A through E for the National Park Service. No?

Thank you very much. National Park Service Exhibits A through E are admitted.

(National Park Service Exhibits A - E received into evidence at this time.)

Ms. Katz, do you have questions of Mr. Vimont?

MS. KATZ: I do not, Madam Hearing Officer.

HEARING OFFICER ORTH: Thank you.

Ms. Fox?

MS. FOX: No, Madam Hearing Officer.

HEARING OFFICER ORTH: Thank you.

Ms. Paranhos?

MS. PARANHOS: No questions, Madam Hearing Officer.

HEARING OFFICER ORTH: Thank you.

Professor Pacyniak?

PROFESSOR PACYNIAK: No questions, Madam Hearing Officer.

HEARING OFFICER ORTH: Thank you.

Let's see. Mr. Nykiel?

MR. NYKIEL: No questions, Madam Hearing Officer.

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Thank you.
HEARING OFFICER ORTH: All right.
Mr. De Saillan?
MR. DE SAILLAN: No questions. Thank you.
HEARING OFFICER ORTH: Thank you.
Mr. Hiser?
MR. HISER: Madam Hearing Officer, yes, I will have just a few questions for Mr. Vimont. Thank you.
HEARING OFFICER: All right. Go ahead.

CROSS-EXAMINATION OF JOHN VIMONT

BY MR. HISER:

Q. Mr. Vimont, in your testimony, you testified that you looked at ethane and at one point you characterized it as a volatile organic compound. Are you testifying here today that you believe that ethane is a significant contributor to ozone formation, or were you using that as a tracer to identify putative impacts from oil and gas sources?

A. Definitely as a tracer. If Dr. Sive is on the -- he should be here, one of our other witnesses, he may be able to better answer the -- about the reactivity of ethane. I know it's less. It contributes but I -- to what degree -- if he can get unmuted, I'm not sure.

HEARING OFFICER ORTH: So let me see.
MR. HISER: Barkley Sive.

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HEARING OFFICER ORTH: I'm sorry. Mr. Hiser, did you say something? Oh, there you are.
MR. HISER: Madam Hearing Officer, obviously, Mr. Sive is not listed as a witness.
HEARING OFFICER ORTH: Right.
MS. DEVORE: He is listed as a witness for the park service in our exhibits.
MR. HISER: My mistake.
HEARING OFFICER ORTH: I'm going to see if he is among the attendees. I think he is because he just reached out to Chat. Hold on one second while I make him a panelist.
Mr. Sive, would you join us on the screen, please? Mr. Vimont, should we take down your slide?
MR. VIMONT: Yes, and we can bring them back up if we need to here. Let me see if I can release them here.
HEARING OFFICER ORTH: All right. Mr. Sive, are you with us?
MR. SIVE: Yes, I am. To answer the question --
HEARING OFFICER ORTH: Well, hold on. Hold on one second. First, we need you to spell your first and last name.
MR. SIVE: First name is Barkley, B-A-R-K-L-E-Y. Last name is Sive, S-I-V-E.

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HEARING OFFICER ORTH: Okay. And if you would, please, raise your right hand. Do you swear or affirm to tell the truth?
MR. SIVE: I do.
HEARING OFFICER ORTH: Thank you very much. Please, go ahead and answer the question. And thank you for your help.
MR. SIVE: Sure. It's primarily a tracer, but in this case, too, the reactivity comes into play because you're looking at levels that are two orders of magnitude higher than typical background levels. Normally, the lifetime of ethane -- we'll just take the annual average -- it's two to three months in the atmosphere. More like two months, to pick a nice round number.
However, when we look at the reactivity, the fact that now you are two orders of magnitude higher in concentration, the fact -- the rate of reaction with hydroxyl radicals, which is the primary removal mechanism of ethane from the atmosphere, you have to factor that in, so now ethane actually becomes important as a potential ozone-producing molecule.
So the fact that the concentrations are so high balance out the fact that the rate of reaction in the atmosphere is slow.
MR. VIMONT: Thank you, Dr. Sive.

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MR. SIVE: So there is the two-fold -- it is, in fact, utilized in two different ways. I'll stop there.

CONTINUED CROSS-EXAMINATION OF JOHN VIMONT

Q. (BY MR. HISER) Mr. Vimont, in the draft or in the slides that you presented today, you showed a -- I think a back calculation of the sources of the oil and gas that showed hot and warmer temperatures versus cooler temperatures?

A. Yes.

Q. And I think that exhibit tended to show that those -- that the gas was coming solely from New Mexico sources, or was there also a significant Texas component to that?

A. That particular slide shows transport during high ozone emits from both New Mexico and Texas.

Q. Thank you. And then, in the evaluation that you've done, and the recommendations you're making here, have you given any consideration to the impact of the Oil conservation Division's rules that are now restricting the flaring, particularly to the venting of natural gas, moving forward?

A. No. This was a measurement program primarily that we were showing and analysis of that data. There were no projections made. It's strictly what was happening on the ground in 2017 and 2019 at Carlsbad

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Caverns.
Q. But to the extent that those rules will reduce the venting of natural gas, would you expect that to decrease local ethane concentrations around Carlsbad?
A. Honestly, I -- I -- I -- I really don't know the answer to that.
Q. Thank you. Appreciate it.
MR. HISER: No more questions, Madam Hearing Officer.
HEARING OFFICER ORTH: All right. Thank you, Mr. Hiser.
Mr. Rose, do you have questions of Mr. Ahr or --
MR. ROSE: I think we're on Mr. Vimont, but I think Mr. Ahr was talking --
HEARING OFFICER ORTH: I'm sorry.
MR. ROSE: It's been a while.
HEARING OFFICER ORTH: I'm sorry about that.
Did you say no questions or do you have some?
MR. ROSE: I have no questions.
HEARING OFFICER ORTH: Okay. Thank you.
Let's see. Mr. Janoe?
MR. JANOE: No questions.
HEARING OFFICER ORTH: All right.
Mr. Butzier?
MR. BUTZIER: No questions.

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HEARING OFFICER ORTH: Okay. Ms. Gutierrez?
MS. GUTIERREZ: No questions.
HEARING OFFICER ORTH: Okay. Mr. Neumann?
MR. NEUMANN: No questions. Thank you.
HEARING OFFICER ORTH: All right.
And Ms. Witherspoon? She may have stepped away.
MS. WITHERSPOON: No questions.
HEARING OFFICER ORTH: Oh.
MS. WITHERSPOON: No questions.
HEARING OFFICER ORTH: Thank you.
So I'm going to turn to the Board members now. And while I do that, if you are not a panelist and you have a question of Mr. Vimont, please indicate that in the Chat.
EXAMINATION BY THE BOARD OF JOHN VIMONT
HEARING OFFICER ORTH: Madam Chair, do you have questions of Mr. Vimont?
CHAIRPERSON SUINA: Thank you, Madam Hearing Officer. Yes, I have a couple of questions. So I think on one of your slides you had presented some -- some data regarding the 8-hour fourth-high ozone data between 2016 to 2022. And I was just wondering, how many -- was it just from one monitoring station or were there multiple monitoring stations around Carlsbad that you -- that -- that were utilized to capture this data?

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MR. VIMONT: This is at one -- one station that we have in the park, it's up near the visitors' center area if you're familiar with the park, and it's just the one station.
Now as I indicated in my talk, the early years -- we see 2016, '17 there, we had a portable station, we call it, that was not a regulatory station, to see what was even going on. And in the later years here, we have the full regulatory station there. So, like, from '73 to 2020, we calculated the design value following the EPA guidance. We could also -- you could go to the EPA's database that was referenced by the state earlier. Our -- our data goes in there as well, so you could get that same thing from there. But it does -- the 8-hour fourth-high ozone concentration exceeds the ambient air quality standards in the park.
CHAIRPERSON SUINA: Thank you for that, and you answered all of my follow-up questions in your answer so I appreciate that. Thank you, Mr. Vimont, and thank you, Madam Hearing Officer. Those are all the questions I have for now.
HEARING OFFICER ORTH: Thank you. Vice-Chair Trujillo-Davis?
VICE-CHAIR TRUJILLO-DAVIS: Thank you, Madam Hearing Officer. I actually don't have any questions. I

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just wanted to thank you for your presentation.
HEARING OFFICER ORTH: Member Cates, do you have questions of Mr. Vimont?
BOARD MEMBER CATES: I do. Sir, do you happen to know what the visitation count to that park is annually? And if we can take the COVID years, I guess, and set them aside, how many people visit Carlsbad annually? Do you have any idea?
MR. VIMONT: I do not, but we do definitely within the park service have those statistics and I can get them for you.
BOARD MEMBER CATES: And so do you feel like -- so I -- I'm guessing you probably don't know this one either, but I'm just wondering what -- has anyone ever done an economic impact study on what the -- how valuable that park is to the economy of that community?
MR. VIMONT: Again, within the park service, we do those kind of economic studies. I do -- I don't know if we have it specific to Carlsbad Caverns, but I can also find that as a follow-up, if you'd like.
BOARD MEMBER CATES: Do you live down there, sir?
MR. VIMONT: No, I am currently in -- living up near Denver, Colorado, up in the foothills west of Denver.
BOARD MEMBER CATES: Yeah, and then I'm wondering if you think -- if you've heard, if there's any evidence

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for the possibility that the, you know, the oil and gas industry as we're describing it here, you know, specifically with regard to the emissions, if we can call it that generally, has it affected the -- the quality of the experience of visitors, do you think?

MR. VIMONT: Yes. Certainly, as a -- well, ozone is a visible gas, I mean at some point the -- these levels that are above the national ambient air quality standard certainly affects the ability of some visitors to recreate outdoors. An aside to this, it's not an air quality issue, but certainly at night, looking out from the mesa, out toward the east, certainly the lights and the flaring are extremely visible from the park, rather than having a, you know, dark sky that we had experienced in a lot of parks, it's a semi-industrial sort of a look to it out there.

BOARD MEMBER CATES: And then, just to kind of follow-up, I'm wondering about the impact on the -- oh, what's the word on the -- I don't know, the branding of the park. You know, if it were -- if it were a business, which it sort of is, but not really, but if it were, you know, a product, do you think the product is blemished by -- has been blemished over the years by the -- what we're talking about here?

MR. VIMONT: Yes. I mean, the -- within the

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parks themselves -- parks are usually -- not all of them, but most of them are usually in fairly remote areas. And when the park was first established, that area would have been considered fairly remote, but now the -- well, it has to be near oil and gas and development of oil and gas is and industrial operation, so, you know, we -- as that has increased, yes, it's a -- we normally think of parks as being pristine remote areas. And with development around the park it's not as pristine and remote as it could be.

BOARD MEMBER CATES: Yeah, right. And so, what about the encroachability? I haven't been to Carlsbad in years. And I'm just, you know, I've heard that the roads are congested and things, and you know, it's just harder and harder to get around there as it used to be. Have you heard that kind of thing?

MR. VIMONT: I have not, but I'm not down there myself, so.

BOARD MEMBER CATES: Yeah, yeah. All right. Well, and so my questions are slightly off topic perhaps, but I appreciate it, so thanks. Thanks for the testimony. Thank you, sir.

MR. VIMONT: Uh-huh.

HEARING OFFICER ORTH: All right. Thank you, Member Cates.

Member Bitzer, do you have questions?

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BOARD MEMBER BITZER: I do not.

HEARING OFFICER ORTH: All right. Thank you.

Member Garcia?

MEMBER GARCIA: No questions.

HEARING OFFICER ORTH: Thank you.

And Member Honker?

MEMBER HONKER: Yes, I did have follow-up to Chair Suina's question. The data collected in the 2019 study, was that all collected from the one station you mentioned earlier that's near the visitors' center, or did you have some additional stations while you were conducting that study?

MR. VIMONT: Most of what I presented here, the high resolution, high-time resolution data that was collected in one of the slides that showed a picture of all the instruments there, it was near the visitors' center. It's not right at the visitors' center, but that general area, there's -- there's other park service office buildings and things there, near there. That was all there.

We did also collect canister samples out in various places around the region at different times and those -- those were not included in this presentation right now. We're still analyzing some of that and seeing how it all fits together.

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BOARD MEMBER HONKER: Okay. Thank you, Mr. Vimont. No further questions. Thanks.

MR. VIMONT: Thank you.

HEARING OFFICER ORTH: Thank you, Member Honker. I see in Chat, no one reaching out to request the opportunity to question. Oh, let's see. Member Bitzer has a question. Go ahead.

BOARD MEMBER BITZER: Sorry. I meant to ask this question, and then, "squirrel." Yeah, the data was collected on a quarterly basis through '18, '19 and '20; is that correct?

MR. VIMONT: You're referring to the ozone data?

BOARD MEMBER BITZER: Yeah.

MR. VIMONT: Actually, it's -- the instruments collect the data on like a one-second basis. It gets aggregated into an hour, which then gets aggregated into these other things, and then it gets reported to EPA, I believe it's on a quarterly basis, but --

BOARD MEMBER BITZER: I think I may have heard -- I think I may have heard somebody else mention the quarterly report earlier. But I'm wondering if we have any data from the first couple of quarters yet from 2021.

MR. VIMONT: We do. I don't have that on the tip of my tongue right now, but...

BOARD MEMBER BITZER: That would be interesting

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to get a look at over the next couple of weeks, I would think.

MR. VIMONT: Dr. Sive was actually down there. He's still on the call, he may be able to tell you if he's seen any other exceedances in the last couple of months.

HEARING OFFICER ORTH: Dr. Sive, are you still with us?

DR. SIVE: I am. Yes, I think we -- July and August we had, I think, about eight exceedances if I'm remembering, six in July. I know for sure six in July.

BOARD MEMBER BITZER: So, overall, the trend is still upward, or is the trend between '19 and '20 -- because it went down a little bit between '19 and '20. I think it peaked in '19 and down a bit in '20. So are we -- are we trending down or up so far in '21?

DR. SIVE: I would say we have at least as many exceedances this year as sort of like 2019. This is just, you know -- this isn't referencing final data yet and we aren't through the entire year either, but, you know, across the entire U.S., and globally, too, you saw decreases in things like ozone because of the total pandemic. So I think that's one of the reasons why we saw, you know, everything sort of tick down in 2020. And I would say comparatively, 2021 looks to be more like 2019 than, per se, 2020.

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MR. VIMONT: And I would say that I -- at this point we can't make any definitive statements about any trends with 2021 data, it's not been finalized yet. But the preliminary data indicates that we are still -- still exceeding the standard at the park.

BOARD MEMBER BITZER: Thank you.

HEARING OFFICER ORTH: All right. Thank you very much.

So Ms. Devore, I appreciate your attempt to be helpful by putting certain links to data around the park in the Chat, but nothing that comes through the Chat is going to be made part of the record. So what I'd like to do -- I really do appreciate you responding to Member Cates's questions with all of that. If you would, yourself, go to this link, PDF whatever it is you find there that would be responsive, put a new exhibit letter on it and send it to the service list, including Pam, of course. And Pam will forward it to the Board members.

MS. DEVORE: Okay. Will do.

HEARING OFFICER ORTH: Now I see Todd Hawthorne has a question for -- I'm not sure if it's for Mr. Vimont or Dr. Sive: "When was the standard established"?

MR. VIMONT: Well, this -- the current standard -- Barkley, do you remember which?

DR. SIVE: I didn't hear the question, I'm sorry.

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MR. VIMONT: When was the standard established?

DR. SIVE: The ozone standard?

MR. VIMONT: Yeah, this current one.

DR. SIVE: It was 2015.

MR. VIMONT: 2015, okay.

HEARING OFFICER ORTH: I think we heard testimony about that earlier from the Department actually. Okay.

So do you have anything by way of follow-up, Mr. Vimont, following all of these questions to you?

MR. VIMONT: No, other than to say, you know, I think the evidence is fairly clear that there's -- there's exceedances of the ozone standard there, and that a part of the solution is going to be looking at the oil and gas emissions in that area to -- I think that's what the data shows us.

HEARING OFFICER ORTH: All right. Thank you very much. You're Excused.

MR. VIMONT: Thank you.

HEARING OFFICER ORTH: And does that complete the rebuttal testimony on the ozone formation and monitoring from the National Park Service?

MR. VIMONT: It does.

HEARING OFFICER ORTH: Thank you both very much.

Well, we've been going now for quite some time, an hour and 20 minutes, so let's take a 15-minute break

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and return at 3:35. Thank you.

(Recess taken from 3:20 p.m. to 3:36 p.m.)

HEARING OFFICER ORTH: Ms. Katz, will you join on the screen? There you are. So are we going from here to the stakeholder outreach?

MS. KATZ: Yes, that's correct. So the Department calls Elizabeth Bisbey-Kuehn.

HEARING OFFICER ORTH: Okay. Ideally, she can join us on screen.

MS. KATZ: Is she a panelist? Has she been admitted as a panelist?

HEARING OFFICER ORTH: She should -- she should be, although -- you know what? She might have -- yeah, okay, sorry, let me re-add her. I added her earlier, but I need to add her again. Hold on. I don't see her among the attendees either.

MS. KATZ: Hang on one second. She says she's on there.

HEARING OFFICER ORTH: If she's on under a different name, I just need the name. Oh, Liz Kuehn, sorry.

MS. KATZ: Sorry. I was just asking her if she was Liz or Elizabeth on there.

HEARING OFFICER ORTH: Sorry. Yeah, I was looking under "E". There she is. Ms. Kuehn, would you

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please spell your last name? Elizabeth is the standard spelling.

MS. BISBEY-KUEHN: It is. Thank you, Madam Hearing Officer. My last name is Kuehn, K-U-E-H-N.

HEARING OFFICER ORTH: All right. Would you raise your right hand? Do you swear or affirm to tell the truth?

MS. BISBEY-KUEHN: I do.

HEARING OFFICER ORTH: Thank you very much. Go ahead, Ms. Katz.

MS. KATZ: Thank you.

ELIZABETH BISBEY-KUEHN,

(Relating to Topic Order 3)

having been first duly sworn or affirmed, was examined and testified as follows:

DIRECT EXAMINATION OF ELIZABETH BISBEY-KUEHN

BY MS. KATZ:

Q. Oops. Sorry, I have the wrong questions up here. One second. All right. Ms. Kuehn, can you tell the Board where you're employed?

A. I'm employed with the New Mexico Environment Department Air Quality Bureau.

Q. And how long have you worked for the Department?

A. Approximately 16 years.

Q. And what is your current job title?

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A. I am the Bureau Chief of the Air Quality Bureau.

Q. And can you describe your job duties?

A. I manage the section chiefs, who oversee the Bureau's four sections: planning, permitting, compliance and enforcement and operations. I direct the overall management of the Bureau, including technical and administrative staff, air quality-related planning and policy, operational permitting and compliance and enforcement services, financial oversight of the Bureaus' federal grant and state matching funds and other support services.

Q. And can you please describe your educational and professional qualifications?

A. I have a Bachelor of Science in Environmental Studies from the University of Iowa. I've worked at the Air Quality Bureau for approximately 16 years and my positions have included permit specialist, minor resource manager, major source permit writer, and Bureau Chief.

Q. And a copy of your resume has been provided as NMED Exhibit 5?

A. Yes.

Q. And have you submitted prefiled, direct testimony on this topic in this proceeding?

A. Yes.

Q. And your full, written, direct testimony on the

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stakeholder outreach for proposed Part 50 is marked at NMED Exhibit 6, correct?

A. Yes, correct.

Q. Do you have any changes to that written testimony?

A. No.

Q. And do you adopt your written testimony here today?

A. Yes.

Q. And can you please summarize for the Board the Department's public outreach and stakeholder engagement on the draft rule?

A. I will. And I will share demonstrative exhibits to walk us through those. And it looks like I need a permission to share. Oh, it's the share. Okay. So I don't need special permission, the share button is running for me.

As Mrs. Katz mentioned earlier today, our Governor Michelle Lujan Grisham issued Executive Order 2019-003 directing us and our sister agency -- the New Mexico Environment Department and our sister agency, the Energy, Minerals and Natural Resources Department to develop a statewide enforceable -- enforceable regulatory framework to secure reductions in the oil and gas sector methane emissions and to prevent waste.

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At the time that that Executive Order was issued, then the Board did not have the authority under the Air Quality Control Act to pass regulations for methane that were more stringent than federal regulations, but it did have authority to pass more stringent regulations for VOC and NOx for the purposes of reducing ambient ozone concentrations. And because ozone is emitted -- or because the ozone precursor VOC is emitted, along with methane and oil and gas operations, requirements that reduce VOC emissions necessarily reduce emissions of methane.

New Mexico Environment Department held numerous public engagement sessions after issuance of the Executive Order, with their sister agency around the state to provide initial public outreach on the plan that was being developed. And on the slide here you'll note the bottom half of this presentation outlines the dates and the locations of those five initial public stakeholder meetings that were held.

Following the initial public outreach meetings in the summer of 2019, community members expressed a strong interest in holding a community impact meeting to discuss the health, cultural and economic impacts of the oil and gas industry, and NMED hosted, and with EMNRD, a community impact meeting as well on March 19th, 2020.

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In addition, both agencies convened the methane advisory panel, which brought several technical stakeholders together to identify processes and equipment used in oil and gas sector, to develop emissions and waste-free standards for those processes and to propose standards, including monitoring, recordkeeping and reporting for those -- those standards.

The MAP process yielded a technical background document identifying specific oil and gas equipment and processes for consideration in moving forward with that enforceable regulatory strategy. The MAP was comprised of 27 individual members representing environmental organizations, the Nation tribes and pueblos, oil and gas industry, including small and large independent operators as well as nonindependent companies.

Industry representatives included companies from both the Permian and San Juan Basins. And additional technical expertise was provided by professionals from Los Alamos National Labs, Colorado State University and New Mexico Institute of Mining and Technology.

The MAP process, as I indicated before, culminated with a draft technical report which provided an informational foundation on the technical side of the ways in which the oil and gas sector emits methane, and therefore, VOC, under our statute, and what methods could

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be used to curb those emissions and prevent waste.

The draft MAP technical report was issued on December 19, 2019 for public comment, and approximately 42 comments were received on that report. In addition to this effort, the New Mexico Environment Department also undertook an extensive public outreach campaign related to its ozone attainment initiative, which is the state program developed by the Department in which our expert, Mike Baca, will speak to you later on. The New Mexico Environment Department held numerous public meetings related to the ozone attainment initiative and those dates and locations of those public meetings are listed on this slide.

Over the last two years during the development of the rule, we have promised to continue to seek comment and feedback from the public and the regulated entities and other stakeholders. As part of that effort, the Department conducted extensive prepetition outreach on the proposed rule, including a prepetitioned full draft rule that was issued for stakeholder and public input on July 20th, 2020, for essentially a 45-day public comment period.

We received extensive public comments on that prepetitioned draft, which are posted on the website. And based on the comments received on that draft, the

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Department made substantial revisions to the proposed rule that are reflected in the version included as part of the Department's petition for regulatory change filed with the Board on May 6th, 2021.

Q. And Ms. Kuehn, can you just briefly talk about the engagement with the parties following the filing of the petition and the -- just overview of just changes that were made based on that process?

A. Sure. We have engaged in multiple party communications, extensive communications since the draft was issued, made significant edits and revisions to the -- to the proposed rule in response to those comments. We have met with each stakeholder, and as Ms. Katz mentioned before, we have accommodated each meeting request that we have received and we have made edits to the rule up until the filing of the September 16th version.

Q. Thank you, Ms. Kuehn. I have no further questions for Ms. Kuehn on this topic.

HEARING OFFICER ORTH: All right. Thank you very much, Ms. Katz. We'll turn now to questioning. Ms. Fox, do you have questions of Ms. Kuehn?

MS. FOX: None, Madam Hearing Officer. Thank you.

HEARING OFFICER ORTH: Thank you.

Ms. Paranhos?

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MS. PARANHOS: No questions, Madam Hearing Officer.

HEARING OFFICER ORTH: All right. Professor Pacyniak?

PROFESSOR PACYNIAK: No questions, Madam Hearing Officer.

HEARING OFFICER ORTH: All right. Ms. Devore?

MS. DEVORE: No questions. Thank you.

HEARING OFFICER ORTH: I'm sorry?

MS. DEVORE: No questions. Thank you.

HEARING OFFICER ORTH: Oh, okay. Thank you.

Mr. Nykiel?

MR. NYKIEL: No questions. Thank you.

HEARING OFFICER ORTH: Thank you.

Mr. de Saillan?

MR. DE SAILLAN: No questions. Thank you.

HEARING OFFICER ORTH: Thank you.

Mr. Hiser?

MR. HISER: No questions. Thank you.

HEARING OFFICER ORTH: Thank you.

Mr. Rose?

MR. ROSE: No questions.

HEARING OFFICER ORTH: All right.

Mr. Janoe?

MR. JANOE: No questions. Thank you

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HEARING OFFICER ORTH: Mr. Butzier?
MR. BUTZIER: No questions.
HEARING OFFICER ORTH: Ms. Gutierrez?
MS. GUTIERREZ: No questions. Thank you.
HEARING OFFICER ORTH: Mr. Neumann.
MR. NEUMANN: No questions. Thank you.
HEARING OFFICER ORTH: All right.
Ms. Witherspoon?
MS. WITHERSPOON: No questions. Thank you.
HEARING OFFICER ORTH: All right. Thank you.
I'm going to turn to the Board members now to see if they have questions of Ms. Kuehn. While I'm doing that, in the event you are not a panelist and you have a question for Ms. Kuehn, please reach out through the Chat.
EXAMINATION BY THE BOARD OF ELIZABETH BISBEY-KUEHN
HEARING OFFICER ORTH: Madam Chair, do you have a question of Ms. Kuehn?
CHAIRPERSON SUINA: Madam Hearing Officer, I don't have any questions. Thank you.
HEARING OFFICER ORTH: Thank you.
Vice-Chair Trujillo-Davis?
VICE-CHAIR TRUJILLO-DAVIS: I don't have any questions. Thank you, Madam Hearing Officer.
HEARING OFFICER ORTH: Thank you.
Member Cates?

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BOARD MEMBER CATES: No questions. Thanks.
HEARING OFFICER ORTH: All right. Member Bitzer?
BOARD MEMBER BITZER: One question. And thank you by the way, for what has to have been an interesting year of extra -- extra duty here, getting to this point.
Has there been any complaint from anybody, any quarter -- any stakeholders, anybody in the community, that they didn't get adequate notice or proper procedural due process to this point?
MS. BISBEY-KUEHN: Member Bitzer, not that I am aware of.
HEARING OFFICER ORTH: All right.
Member Garcia? Member Garcia, were you speaking?
MEMBER GARCIA: (Shaking head.)
HEARING OFFICER ORTH: No questions. All right.
Member Honker?
MEMBER HONKER: I have no questions. Thanks.
HEARING OFFICER ORTH: All right. Thank you.
Thank you so much, Ms. Kuehn. Is there any reason not to excuse Ms. Kuehn?
MS. KATZ: (Shaking head.)
HEARING OFFICER ORTH: No? I see no questions in the Chat, so thank you very much. Ms. Kuehn, you're excused.
MS. BISBEY-KUEHN: Thank you.

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HEARING OFFICER ORTH: Ms. Katz, where are we going from here?
MS. KATZ: Madam Hearing Officer, I mean, we could -- so we could go to -- to number -- Topic Number 7 on the spreadsheet that I did send to Ms. Jones, and I believe she sent it to the Board members. And so that will be the Ozone Attainment Initiative and the Ozone Path Forward Plan, and that will be Department witness Michael Baca, and Mr. Knight is going to put on Mr. Baca.
HEARING OFFICER ORTH: Terrific. Let me look among the attendees for Mr. Baca. And oh, there you are right there. And Mr. Knight, if you would join us on screen. Oh, there you are. Terrific. We have Mr. Baca and Mr. Knight.
Mr. Baca, and it's standard spelling, Theresa. If you would, please, raise your right hand. Do you swear or affirm that you will tell the truth?
MR. BACA: I do.
HEARING OFFICER ORTH: Thank you very much. Mr. Knight, whenever you're ready.

MICHAEL BACA,

(Relating to Topic Order 7)

having been first duly sworn, was examined and testified as follows:

DIRECT EXAMINATION OF MICHAEL BACA

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BY MR. KNIGHT:
Q. Thank you, Madam Hearing Officer and Madam Chair, members of the Board, good afternoon.
Mr. Baca, could you tell us where you are employed?
A. Yes. Madam -- Madam Chair, members of the Board and Madam Hearing Officer, I'm employed with the New Mexico Environment Department Air Quality Bureau.
Q. And how long have you worked for NMED?
A. Approximately 17 years.
Q. And what is your current job title?
A. Control Strategies Manager.
Q. What are your job duties?
A. I manage the Bureau's Control Strategies Unit, overseeing a staff of six that are responsible for the development and -- of air quality plans and regulations, including the State Implementation Plan or SIP for the State of New Mexico. This unit also participates in regional air quality improvement groups and oversees mitigation projects, air quality grants and air quality studies, especially as they pertain to achieving and attaining the National Ambient Air Quality Standards.
Q. Thank you. Could you please describe your educational and professional qualifications?
A. Sure. I hold a Bachelor of Arts in Chemistry

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from Carleton College and I have worked for the Air Quality Bureau for over 13 years. I -- my positions have included staff manager and environmental analyst advanced in the control strategies unit of the planning section.

Q. And a copy of your resume has been provided as NMED Exhibit 2?

A. Yes.

Q. And have you submitted written, direct testimony in this proceeding?

A. Yes.

Q. And is your full, written, direct testimony -- does that appear as NMED Exhibit 1, and your full, written, rebuttal testimony appears as NMED Rebuttal Exhibit 22?

A. Yes.

Q. Do you have any changes to your written testimony?

A. No.

Q. And do you adopt that written testimony here today?

A. Yes, I do.

Q. Okay. I'm going to walk you through your direct testimony and rebuttal testimony, and have you summarize that testimony on the various topics that you covered. All right?

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MS. KATZ: Mr. Knight, sorry. Mr. Baca is very quiet for some of us. I don't know if that's an issue for others. So, Mike, if you could maybe get moved closer and speak a little louder.

MR. KNIGHT: Thank you.

Q. (BY MR. KNIGHT) All right. Can you summarize the Clean Air Act regulatory framework for ozone?

A. Sure. The Clean Air Act requires EPA to set National Ambient Air Quality Standards or NAAQS, for air pollutants that are determined by EPA to be harmful to the public health and environment. EPA has set NAAQS for six principal pollutants called criteria pollutants. The six criteria pollutants are ozone, carbon monoxide, nitrogen dioxide, sulfur dioxide, lead and particulate matter 10 microns or smaller and 2.5 microns and smaller or less, so that's PM10 and PM 2.5. The current --

HEARING OFFICER ORTH: Mr. Baca, sorry.

A. For the 2015 NAAQS -- (inaudible)

HEARING OFFICER ORTH: Mr. Baca. Mr. Baca, I'm sorry to interrupt you. You are still too quiet. Can you sit closer to the microphone maybe?

MR. BACA: I'm using ear buds, so let me see if I can adjust some settings on my microphone.

Okay. Is that any better?

HEARING OFFICER: It's a tiny bit better, but not

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enough better.

COURT REPORTER: If I turn him up on my end, Mr. Knight is screaming, so I need Mr. Baca to speak much louder, please.

HEARING OFFICER ORTH: Thank you, Ms. DuBois.

Mr. Baca, can you raise the volume any more?

MR. BACA: Yes. How does -- does that sound any better?

HEARING OFFICER ORTH: Oh, that's fantastic. Yes.

MR. BACA: Okay. Let me -- let me take these ear buds out and speak to you this way, through my microphone computer. Sorry about that.

HEARING OFFICER ORTH: Thank you.

Q. (BY MR. KNIGHT) Mr. Baca, you, I think -- well, maybe we should ask the court reporter how far back should we -- oh, she's good. Okay.

Okay. So you had just mentioned that -- what the six criteria pollutants were. Could you talk about the current ozone National Ambient Air Quality Standard?

A. Sure. So the current NAAQS is set at 70 parts per billion, and the standard was set in 2015, when they revised the previous standard, the 2008 standard, from 75 parts per billions down to 70 parts per billion.

Q. Thank you. These are health-based standards,

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correct?

A. That is correct. As I discussed in my prefiled testimony, the primary NAAQS are health -- health-based standards and are set at levels meant to prevent the public -- the public that are most at risk from being harmed from ozone in the ambient air, and that including asthmatics, children, older adults and people who are active outdoors, such as construction workers and others that work outdoors. So children are at the greatest risk from ozone exposure because their lungs are still developing and they are more likely to be active outdoors when ozone levels are high, so which increases their ozone exposure.

Health problems caused by ozone include coughing, sore throat, difficulty breathing, inflammation and damage to airways, increased frequency of asthma attacks and aggravation of lung diseases, such as asthma, emphysema and chronic bronchitis.

The EPA also set secondary NAAQS to protect public welfare, including protection against decreased visibility and damage to animals, crops, vegetation and buildings. The secondary standard is identical to the primary standard, in averaging time, level and form of the 2015 ozone NAAQS. The Clean Air Act under Section 108 requires EPA to re-evaluate the NAAQS on a periodic basis,

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which may result in the standards being revised, based on help and environmental criteria set by EPA.

Q. So what process is triggered when the national Ambient Air Quality Standard for a particular pollutant is revised?

A. The established or revision of a NAAQS triggers a review of all areas throughout the country to determine if pollutant concentrations are below or above the new standards. The culmination of the process results in EPA promulgating designations for all areas as an attainment of the standard or nonattainment of the standard for each pollutant.

So this process requires EPA to collaborate with states and tribes and take into consideration air quality data, emissions and emissions-related data, meteorology, geography and topography and areas -- and jurisdictional boundaries. If the air quality in a geographic region meets or is below the standard, it is designated as an attainment area. If the region is above the standard, it is designated as a nonattainment area.

And for areas that do not have monitoring or when modeling is not an appropriate tool for designation, EPA designates areas as unclassifiable or attainment/unclassifiable. EPA is required to make these designations within two years of promulgating a new or

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revised NAAQS with a one-year extension when insufficient information exists to promulgate such a designation.

So as discussed in the testimony of Mr. Ahr, the determination of whether concentrations of a criteria pollutant in an area are meeting or exceeding the NAAQS is based on the design value for that pollutant. For ozone, the design value is determined by calculating the three-year average of the annual or highest daily maximum 8-hour ozone concentration.

Q. All right. So what is the current designation of the areas where the source is at issue in this proposed rule, are located?

A. Most of the areas are designated as attainment areas. There is one ozone nonattainment area in the state and that is in Doña Ana County near Sunland Park, New Mexico. That's on the outskirts of El Paso, Texas.

Q. Okay. Thank you. Can the Board or the Department designate ozone nonattainment areas?

A. No. Neither the Clean Air Act, nor the Air Quality Control Act give the Board or the Department the authority to designate an area as nonattainment. It is fully within the EPA's authority to designate attainment and nonattainment areas.

Q. Okay. Who decides to designate or redesignate an area under an existing National Ambient Air Quality

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Standard?

A. Under the Clean Air Act, EPA is responsible for designating and redesignating areas -- excuse me -- within a state, with respect to the criteria of air pollutants. EPA may at any time notify the Governor of any state that available information indicates that the designation of an area or portion of an area within a state should be revised. Likewise, the Governor of any state may, on their own motion, request a redesignation of any area within the state.

A decision to redesignate is based on air quality data, findings and control considerations, or any other air quality-related considerations that EPA deems appropriate.

Q. In making that decision, can EPA consider measures being implemented by a state to address monitored exceedances?

A. Yes. Under the EPA's order and own guidance, when an area that is designated attainment has monitors showing violations of an existing NAAQS, EPA can consider measures being implemented by the state to address those monitored exceedances when determining whether or not the area should be designated nonattainment.

And emissions reductions that are achieved through the ozone advanced program could be credited in

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any future nonattainment SIPs developed under Part D of the Clean Air Act.

Q. Does the Air Quality Control Act define nonattainment area?

A. Yes, it does. That definition is at Section 74-2-2 (N) Air Quality Control Act, and it is the same as the current definition in the Clean Air Act.

Q. Okay. And how does the Air Quality Control Act direct the Board to act with respect to an area with elevated ozone?

A. So Section 74-2-5 of the Air Quality Control Act or AQCA mandates that the Board take action to control VOC and NOx emissions when the Board determines -- and this is quotes: "Determines that emissions from sources within its jurisdiction cause or contribute to ozone concentrations in excess of 95 percent of the primary ozone NAAQS."

So under the statutory provision, the Board is required to adopt a plan, including rules to control the NOx and VOCs to provide for the attainment and maintenance of the standard.

Q. And what is the Department doing to assist the Board in carrying out this duty under the Air Quality Control Act?

A. So NMED has undertaken the Ozone Advance

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Initiative and the Ozone Attainment Initiative, or the OAI, to propose the plan as well as regulations required by the statute.

Q. And can you discuss what the Department's Ozone Attainment Initiative entails?

A. Sure. There are currently nine counties under the Board's jurisdiction that have or are adjacent to monitoring sites registering ozone concentrations in excess of 95 percent of the standard.

To address this issue, and as required by the -- by law, the Department has undertaken its Ozone Attainment Initiative to develop a plan and a series of rules to bring before the Board, as well as other voluntary measures to mitigate the emissions of NOx and VOCs from all contributing sources.

The OAI is a plan the state is following in order to meet the statutory requirements of the Air Quality Control Act. So under the umbrella of the OAI, the Department is also participating in the EPA's Ozone Advance Program to promote proactive and early actions in designated attainment areas to reduce ozone for the continued maintenance of the standard.

The Department developed a draft Ozone Advance Path Forward as part of the program, which is included as NMED Exhibit 4, to demo -- to demonstrate to EPA how the

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state plans to address high ozone concentrations before EPA promulgates a nonattainment designation for any of the counties. Since the Air Quality Control Act does not prescribe what the plan should contain, the Department followed the EPA guidelines to develop the Ozone Advance Path Forward.

This plan is sufficient to satisfy the requirements of the Air Quality Control Act and the Department is proposing that the Board adopt the Ozone Advance Path Forward to comply with the Board's statutory duties. A fundamental aspect of the OAI is determining what sources are contributing to ozone concentrations.

To this end, the Department contracted with Western States Air Resources Council and Ramboll to conduct photochemical grid modeling for ozone to determine which sectors within the Board's regulatory jurisdiction are contributing to ozone concentrations and to support the rulemaking efforts.

The results of this modeling are presented in Ralph Morris's testimony at NMED Exhibit 106. The Air Quality Control Act also requires the Board to adopt regulations as part of its plan to address these rising ozone concentrations. So the proposed Part 50 is the first set of rules that the Department is bringing before the Board. These will be followed by regulations to

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control emissions from other mobile sources, which the Department will bring before the Board later this year.

These regulations will set standards for low emissions vehicles or LEV vehicles and zero-emission vehicles, or ZEV that will provide further mitigation of ozone precursors.

Q. Okay. Thank you for that. Is it possible that even with all of the regulatory efforts of the OAI, some areas may not be able to reach or stay in attainment of the ozone NAAQS?

A. Yes, that's -- that's definitely a possibility, especially with EPA currently reviewing the 2020 decision to retain the ozone NAAQS as is. The Biden Administration, if they lower the standards or these areas of New Mexico do not attain the standard in a timely fashion, the regulatory path forward could be an oral nonattainment designation by the EPA.

So the intent behind the Board's mandatory duties are outlined in the Air Quality Control Act, is to take these -- take actions to avoid a nonattainment designation, and the planning, regulatory and financial burdens of the obtaining of a nonattainment designation.

Generally, the Clean Air Act outlines a nonattainment process that will last a minimum of 25 years, so that gives five years for designations and an

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attainment standard, and two ten-year meetings periods before an area can be redesignated as attainment.

If an area fails to contain the standard by its attainment date, it is reclassified into a more stringent classification, to include additional planning requirements that progressively become more stringent with every class -- reclassification. So this prolongs an area of attainment date, to allow for the implementations of additional control strategies.

So the nonattainment process triggers planning and permitting requirements, including emission inventories, transportation conformity, reasonable further progress, permitting offsets and lowest achievable emission rate for equipment. All of these are time consuming and costly to both the industry and the Department and can cause competitive disadvantages to New Mexico businesses and communities.

Q. So is it likely that even if the proposed rule is adopted, some areas of the state would still go into nonattainment status?

A. Well, the Department acknowledges that the modeling indicates that the reduction in ozone concentrations achievable by the proposed rule would not be sufficient to bring some of the areas into compliance with the standard.

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However, incremental reductions can keep an area from receiving a higher classification in the future and avoid the more rigorous and costly requirements for such a classification.

MR. KNIGHT: Okay. Thank you, Mr. Baca.

Madam Hearing Officer, those are all the questions I have for this witness at this time. Mr. Baca will come back for surrebuttal testimony following the other parties on this topic.

HEARING OFFICER ORTH: Okay. Thank you very much, Mr. Knight.

MR. KNIGHT: And Madam Hearing Officer, I would also like to note that we have an amended Exhibit 4, which we have sent out earlier today to all of the other parties. And I don't know, perhaps it might be premature to see if anyone has an objection to it or not, but I just wanted to note that we are going to ask that -- that that amended Exhibit 4 be made part of the record subject to any objections and your ruling on those objections.

HEARING OFFICER ORTH: Okay. I believe it might have just been sent and so I'm not sure the other parties have had a chance to -- to review it. Maybe we'll take that up a little later.

MR. KNIGHT: I think that's fine

HEARING OFFICER ORTH: Okay.

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MR. ROSE: Madam Hearing Officer, if you would, the Amended Exhibit 4 doesn't appear as though it identifies the changes from the previously filed Exhibit 4. I was wondering if the Department either could explain it or have something that identifies the changes that they made. I'm not suggesting it's going to be objectionable, and probably won't, but I can't tell based on the submittal, exactly what was changed.

HEARING OFFICER ORTH: All right. Thank you, Mr. Rose.

MS. KATZ: Yeah, and Mr. Baca is going to be testifying about those changes in his surrebuttal. And we could identify them, but maybe Mike, can you maybe point to where they are in the document?

MR. BACA: The changes were made in response to rebuttal testimony provided by NMOGA and IPNME -- IPANM. And so the main changes were to the description of the photochemical modeling, that one section. There -- there was changes made to that, and that was it.

MS. KATZ: Do you have a page number or I don't have -- Lou, do you need a page number?

MR. ROSE: I'll see if I can find it, but it isn't -- even as those changes would be helpful, and I'm not suggesting you're required to do it, but if we had a redline version, it would certainly be a lot easier to

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determine whether there's a problem with any of that.

And since Mr. Baca is going to testify on surrebuttal after everyone else, if we're going to address the amended exhibit, we'll need to know what the changes are.

MS. KATZ: Sure. I can work on making a redline and sending that around.

MR. ROSE: That would be helpful. Thank you.

HEARING OFFICER ORTH: Thank you, Mr. Rose and Ms. Katz.

So time is now to ask questions of Mr. Baca. I'll start with the parties. Ms. Fox, do you have questions of Mr. Baca?

MS. FOX: None, Madam Hearing Officer. Thank you.

HEARING OFFICER ORTH: Thank you.

Ms. Paranhos? You may be muted again.

Professor Pacyniak?

PROFESSOR PACYNIAK: No questions at this time, Madam Hearing Officer

HEARING OFFICER ORTH: Thank you.

Ms. Devore? She may have stepped away.

Mr. Nykiel?

MR. NYKIEL: No questions -- no questions at this time. Thank you.

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HEARING OFFICER ORTH: All right. And I have a text from Ms. Paranhos saying she has no questions.

Mr. de Saillan?

MR. DE SAILLAN: No questions. Thank you.

HEARING OFFICER ORTH: Thank you.

Mr. Hiser.

MR. HISER: No questions. Thank you.

HEARING OFFICER ORTH: All right. Mr. Rose?

MR. ROSE: Yes, Madam Hearing Officer, I have a few questions of this witness

CROSS-EXAMINATION OF MICHAEL BACA

BY MR. ROSE:

Q. Mr. Baca, are you familiar with the state's current implementation plan provisions as they relate to ozone?

A. Yes, I am.

Q. And did you review those in developing the path forward and the ozone initiative?

A. Not as part of this, no.

Q. How does this plan differ from what's currently in the implementation plan?

A. Okay. This plan is in response to ozone events, so this is not a plan that's developed as required by the Clean Air Act. The provision that you're talking about, it sounds like -- it sounds like a SIP requirement.

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Q. Correct, under Section 110.
And are you familiar with what would be required in terms of a plan where an area's designated nonattainment by EPA?
A. Yes, I am.
Q. And would -- would the path forward or the ozone initiative satisfy the requirements of EPA if the areas were designated nonattainment?
A. As stated earlier, the Ozone Advance Path Forward is not to address any requirement of the Clean Air Act.
Q. In terms -- in terms of looking at the path forward, it appears as though the Department made a decision whether or not to regulate oil and gas first, and then transportation-related pollutants second.
Is there any explanation in this document about how those priorities were set and why the Department decided to regulate oil and gas first?
A. Can you -- can you maybe repeat that question so I can try to gather that all together.
Q. Sure. No, that's fine. And if you need clarification, just ask.
You testified in terms of the Department's decision to -- that it was regulating oil and gas, this proposal was the first, and that the Department intended to propose transportation-related requirements for mobile

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sources or cars and trucks later.
I was wondering whether or not the document which is Exhibit 4, explains how the Department made the decision to regulate oil and gas first, transportation-related pollutants second, and then any other controls after that?
A. Well, I guess we can discuss a little bit about how the Department arrived at regulating oil and gas first. Is that -- is that the main question?
Q. I was wondering if -- excuse me for interrupting -- whether Exhibit 4 explains that or if it's in some other exhibit that the Department -- or testimony the Department submitted?
A. That would probably be under another exhibit. The Ozone Advance Path Forward is not intended to justify the rulemaking or justify any of the source sectors included in the rulemaking. This -- the Ozone Advance Path Forward is intended to satisfy the requirements of the EPA program.
Q. Thank you.
A. It's mandatory. It's in an explanatory document.
Q. Okay. Thank you, Mr. Baca.
I think you also, in the document, discuss NOx emission reductions, and I was curious as to whether or not when you did that, whether you included potential

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reductions that would be necessitated by the Regional Haze Program, whether or not any of those anticipated reductions were factored into any of the decision making here.
A. Well, unlike this -- this matter, regional haze is required under the Clean Air Act. So any emissions reductions we do under regional haze have to be federally enforceable, which we are not doing here today. We are not adopting this as a SIP rule today.
Q. And so --
A. Any -- any emissions that we do achieve through regional haze would be through that Clean Air Act program.
Q. And were those factored into any of the analysis here, in terms of like the regulatory program that you're proposing looks like?
A. I'm not sure I understand what you're -- what you're asking as what it pertains to.
Q. Let me be -- (unintelligible)
A. The program -- (unintelligible) its focus, we're -- we're only looking at certain sources for control, so it's a whole different scope.
Q. And -- and are you aware of -- I take it the Department has not yet proposed to the Board its regional haze proposal, and that would have to go before the Board before it was submitted to EPA; is that correct?

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A. That is correct.
Q. And as you currently understand it, is the Department intending to regulate certain oil and gas sources as part of the Regional Haze Program as well?
A. The Department has not made a determination on that as of -- as of this time.
Q. I take it, though, that in terms of the facilities or the sources for which the Department required a four-factor analysis, those did include certain oil and gas sources, particularly in the Southeast, correct?
A. That is correct. So we screened about 23 sources under NMED's jurisdiction, and I believe 20 of those sources were oil and gas sources. So those represented the type of pollution sources that we screened, which are the largest sources in the state.
MR. ROSE: Thank you, Mr. Baca. I have no further questions.
HEARING OFFICER ORTH: Thank you, Mr. Rose.
Mr. Janoe?
MR. JANOE: No questions
HEARING OFFICER ORTH: Okay. Mr. Butzier?
MR. BUTZIER: No questions.
HEARING OFFICER ORTH: Thank you. Ms. Gutierrez?
MS. GUTIERREZ: No questions.

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HEARING OFFICER ORTH: All right. Mr. Neumann?
MR. NEUMANN: No questions. Thank you.
HEARING OFFICER ORTH: All right. Thank you.
And Ms. Witherspoon? She may have stepped away.
Mr. Knight, do you -- oh, I'm sorry. I'm going to turn to Board members now. And while I am doing that, if you are not a panelist and you have a question of this witness, please reach out in the Chat.
Madam Chair, do you have questions of Mr. Baca?
CHAIRPERSON SUINA: Madam Hearing Officer, I don't have any questions at this time. Thank you.
HEARING OFFICER ORTH: Thank you. Vice-Chair Trujillo-Davis?
VICE-CHAIR TRUJILLO-DAVIS: I don't have any questions at this time. Thank you.
HEARING OFFICER ORTH: All right. Thank you.
Member Cates?
BOARD MEMBER CATES: No questions.
HEARING OFFICER ORTH: Thank you. Member Bitzer?
BOARD MEMBER BITZER: No questions.
HEARING OFFICER ORTH: Okay. Thank you. Member Garcia?
BOARD MEMBER GARCIA: (Shaking head.)
HEARING OFFICER ORTH: I see you're shaking your head no.

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Member Honker?
BOARD MEMBER HONKER: I have no questions.
HEARING OFFICER ORTH: All right. Thank you. I see no one reaching out through the Chat.
Mr. Knight, did any of Mr. Rose's questioning raise in you a need to redirect Mr. Baca?
MR. KNIGHT: Yes, Madam Hearing Officer. I just have a few redirect questions.

REDIRECT EXAMINATION OF MICHAEL BACA

BY MR. KNIGHT:

Q. Mr. Baca, did Dr. Raso testify this morning that the oil and gas sector is the largest anthropogenic sources of VOCs in New Mexico?
A. Yes, she did. Yes, she did, that's correct.
Q. Okay. And does the Department have the resources to adopt -- to adopt multiple regulations under the OAI simultaneously?
A. No, we do not. So we -- we had to prioritize which sectors we are looking at based on which ones are the most impactful.
Q. And is the Department currently working on the -- developing the clean cars rules for the transportation sector right now, and preparing to petition the Board right within the next few months?
A. That is correct. The Department is currently

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undergoing early stakeholder engagement. I believe they have held at least one meeting and another one happening shortly, if not already. I do believe the plan is to propose their rule to the Board for a hearing in May.
MR. KNIGHT: Okay. Thank you very much. Okay. That's all the redirect questions I have, Madam Hearing Officer.
HEARING OFFICER ORTH: All right. Thank you very much. I had one question in the Chat.

EXAMINATION FROM CHAT QUESTION TO MICHAEL BACA

HEARING OFFICER ORTH: Asking for a repetition of Mr. Baca's job title, and so I'll just offer it. He testified he was the Control Strategies Manager for the Air Quality Bureau of the Environment Department.
Is there any reason not to excuse Mr. Baca?
MR. KNIGHT: No, he may be excused.
HEARING OFFICER ORTH: Thank you so much for your testimony, Mr. Baca.
All right. Where are we going from here, Mr. Knight?
MR. KNIGHT: Madam Hearing Officer, I will defer to my co-counsel, Ms. Katz.
MS. KATZ: So Madam Hearing Officer, there were rebuttal witnesses on this topic, so I believe Mr. -- NMOGA has Mr. Smitherman listed and IPANM has Mr. Blewitt,

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and so we would -- I believe those witnesses would go up and then the Department would do its surrebuttal.
HEARING OFFICER ORTH: All right.
MR. HISER: Madam, this is Eric Hiser for NMOGA and we are not going to call Mr. Smitherman for this issue.
HEARING OFFICER ORTH: All right. And is Mr. Smitherman with us? Shall I make him a panelist? Or I might have already done that.
MR. HISER: Madam Hearing Officer, we are not planning to ask Mr. Smitherman to say anything on this rebuttal issue.
HEARING OFFICER ORTH: Oh, I'm sorry. Oh, okay. I'm sorry. I didn't hear that correctly. All right. So we will not be hearing from Mr. Smitherman.
Mr. Rose, will we be hearing from Mr. Blewitt?
MR. ROSE: Madam Hearing Officer, I believe he is currently viewing this as an attendee, but not a panelist so you may have to admit him. He's available to testify this afternoon and he has some other topics which he'll testify on later as well.
Madam Hearing Officer, you're muted so...
HEARING OFFICER ORTH: I muted myself as I made Mr. Blewitt a panelist. We should be able to bring him up on screen. Mr. Blewitt, can you hear me?

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MR. BLEWITT: I can hear you. Can you hear me?
HEARING OFFICER ORTH: Oh, gosh, no. You sound like you're talking through a blanket.
MR. BLEWITT: I'm as close to my computer as I can -- I can get.
HEARING OFFICER ORTH: Is there a volume setting you might be able to control?
MR. BLEWITT: I'm at 100 percent volume.
HEARING OFFICER ORTH: Okay.
Theresa, are you going to be able to turn this up?
MS. BLEWITT: I'm not hearing you very well right now.
COURT REPORTER: I can turn it up, but Mr. Rose will need to speak a little lower.
MR. ROSE: Or softer. I'm not sure I can go lower.
HEARING OFFICER ORTH: Okay. All right. Mr. Rose, use your soft voice.
Okay. So Mr. Blewitt, if you would, please, spell your last name. Doug is the standard spelling?
MR. BLEWITT: B-L-E-W-I-T-T.
HEARING OFFICER ORTH: Thank you. And if you would raise your right hand, please. Do you swear or affirm to tell the truth?

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MR. BLEWITT: I'm not -- you're going to have to speak up.
HEARING OFFICER ORTH: Do you swear or affirm to tell the truth?
MR. BLEWITT: Yes.
HEARING OFFICER ORTH: All right. Thank you. Mr. Rose, if you would, please.

DOUG BLEWITT,

(Relating to Topic Order 3)

having been first duly sworn or affirmed, was examined and testified as follows:

DIRECT EXAMINATION OF DOUG BLEWITT

BY MR. ROSE:

Q. Yes. Mr. Blewitt, could you -- you've already identified yourself. Could you explain your educational and work background?

A. Yes. I have a Bachelor's Degree in Chemistry and Physics. I've done graduate work at the University of Wisconsin and the University of -- or University of Illinois Institute of Technology. I have over 45 years of air quality experience. I have been involved in development of accidental release models for dense gases that are specific to hydrogen fluoride. I've published numerous papers on modeling and monitoring and analysis of data.

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I have -- was a Colorado Air Commissioner. I served as secretary for six years. I've been involved in numerous research programs regarding air quality issues in the West. I think that concludes.

Q. Mr. Blewitt, did you -- did you prepare a written direct and rebuttal testimony for this proceeding?

A. Yes, I did.

Q. With respect to the direct testimony, do you have any corrections or -- to that written testimony?

A. No corrections.

Q. If you were asked those same questions that are in your written testimony, would your answers be the same here in person as they were in your written submittal?

A. Yes.

MR. ROSE: Madam Hearing Officer, I'd offer Mr. Blewitt's testimony -- I can't remember the Exhibit No. here, but as in this proceeding.
HEARING OFFICER ORTH: Okay, but I'll need an Exhibit No. Take a moment to find that.
MR. ROSE: I'll have to find that. I've got it somewhere.
MR. BLEWITT: Can you share the screen so I can present slides?
HEARING OFFICER ORTH: Yes, I can, just give me a sec.

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MR. BLEWITT: Okay.
MR. ROSE: Madam Hearing Officer, I don't seem to have the list here. I didn't expect to have Mr. Blewitt testify this afternoon, so I'm not quite as prepared as I might have been. We only have a handful of exhibits, so... Rather than trying to delay this even further, I was hoping someone would have that list handier than I do. I have it, I just can't immediately find it.
MR. BUTZIER: This is Stuart Butzier and this is Exhibit 12, I believe.
MR. ROSE: That's the direct testimony?
MR. BUTZIER: No, I'm sorry.
HEARING OFFICER ORTH: No, it's the rebuttal.
MR. ROSE: Right, we'll get to the rebuttal here in a sec.
HEARING OFFICER ORTH: You have too many boxes, Lou.
MR. ROSE: It's okay, I have more binders than I care to look at here, but...
HEARING OFFICER ORTH: So we'll -- we'll -- let's check on the right Exhibit No. so we can keep a clean record.
MR. HISER: Madam Hearing Officer, his direct is Exhibit 6.
HEARING OFFICER ORTH: Exhibit 6 and that was

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Mr. Hiser.
MR. HISER: That is correct.
HEARING OFFICER ORTH: So thank you.
MR. ROSE: I'm glad Mr. Hiser's more together than I am on this.
HEARING OFFICER ORTH: So thank you for that. All right. So the direct testimony is Exhibit 6. Were there any -- I don't believe there were any -- any objections to IPANM Exhibit 6, so unless someone speaks up right now, it's admitted.
(IPANM Exhibit 6 received into evidence at this time.)
MR. ROSE: Madam Hearing Officer, I'd note that Mr. Blewitt's direct and rebuttal relate to topics beyond just this one. So I assume that when it's admitted here I won't have to offer pieces later as to admission.
HEARING OFFICER ORTH: I agree with you.
MR. ROSE: Thank you, Madam Hearing Officer.
Q. (BY MR. ROSE) Mr. Blewitt, did you prepare written rebuttal testimony in this proceeding? I think he's adjusting his head gear here.
A. Can you hear me now?
Q. It's about the same.
A. Well, I can hear you much better.
Q. Okay. Did you -- did you prepare written

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rebuttal testimony in this proceeding?
A. Lou, are we ready to start this?
Q. Yes. Well, no, not the slides yet. I'm just trying to -- talking about your rebuttal testimony.
Did you prepare written rebuttal testimony in this proceeding?
A. Yes, I did.
Q. And do you have any corrections to your written rebuttal testimony?
A. No, I do not.
Q. And if I were to ask you the questions here that we asked in the written rebuttal, would your answers be the same as they were in your written testimony?
A. Yes.
MR. ROSE: Madam Hearing Officer, I would offer IPANM, I guess it's Exhibit 12 in this proceeding and ask that it be admitted.
HEARING OFFICER ORTH: All right. I don't remember any objections to IPANM Exhibit 12, so unless someone speaks up right now, it is admitted. Thank you.
(IPANM Exhibit 12 received into evidence at this time.)
Q. (BY MR. ROSE) Mr. Blewitt, could you briefly summarize your direct and rebuttal testimony? And Madam Hearing Officer, I believe he has a demonstrative exhibit

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which we circulated yesterday, that he's going to use for his summary.
MR. BLEWITT: Can you see my slides on your screens?
HEARING OFFICER ORTH: No.
MR. BLEWITT: How do I share my screen?
MR. ROSE: There should be a button there that allows you to share
HEARING OFFICER ORTH: There's probably a "share" button.
MR. ROSE: He's got it. It's now starting
HEARING OFFICER ORTH: There you go. There you go. It's happening.
MR. BLEWITT: Great.
Q. (BY MR. ROSE) You need to increase the size of that if you can. There we go. That's better.
A. Okay. Sorry for my technical ineptness. Let me start out by saying we're here to address ozone, and that's -- that's really what this is all about. And the Board has taken a very interesting position, wanting to protect air quality. And I think it's in some respects, it's a very good idea, that if concentrations get in excess of 95 percent of the -- of the NAAQS for ozone, that they need to develop a plan.
And the purpose of this regulatory action is to

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protect New Mexico from new violations of the current NAAQS, by sort of establishing a safety factor. And it basically establishes that NMED and the Board need to establish a plan to reduce ozone concentrations. This is not a regulatory action about reducing methane. And the plan really must develop a control strategy. And control strategies are difficult and they need to combine monitoring and modeling to try to draw out as much information as possible, to ensure that the NAAQS is -- is maintained.
I think it's also important to use modeling to identify culpable sources of what sources contribute to monitors, and those potential contributions must address significant impacts. And significant is a word here that has some regulatory meaning, so we want to make sure that the reductions we're -- we're achieving are meaningful. And I think that's -- that's part of the whole process, to identify how to achieve compliance.
I think from my perspective, I'm not sure that the plan and the modeling that have been developed satisfy these requirements. Let's -- we'll go to the next slide.
I think one of the things that's really important in reviewing the modeling is a discussion of emission inventories. Emission inventories are one of the main inputs to models. And Ramboll developed three emission

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inventories: A 2014 based case, which is based on the NEI inventory, and there were some adjustments made to that, which were appropriate. They also develop -- and the 2014 inventory was used basically to test the accuracy of the model. And I have no real objections to the model testing that was done.

They also developed a 2028 future-year base case. And this is -- this inventory is really important in this proceeding because it shows -- it demonstrates very significant reductions in NOx and VOC emissions, but, unfortunately, there's no documentation provided regarding what sources are included, calculation methods, future-year assumptions going from 2014 to 2028.

MS. KATZ: Madam Hearing Officer, I'm sorry to interrupt. I'm concerned that this is modeling testimony and not directed at Mr. Baca's. And if -- if that could be explained, because, to me, this seems to have to do with Mr. Morris's testimony.

MR. BLEWITT: It is -- Madam --

HEARING OFFICER ORTH: Mr. Rose? Let's -- I'm going to call on Mr. Rose.

MR. BLEWITT: Okay.

MR. ROSE: Yes, Madam Hearing Officer, I believe what -- what the witness is testifying to is the adequacies, or in his view the inadequacies of the plan.

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And the plan as it references the modeling and uses the modeling as a decisional tool in the plan, I believe is what he's addressing.

Now, I can't remember if Mr. Blewitt had other slides. Most of this will probably be addressed when the Department's modeling witness testifies, I think, tomorrow, as to the adequacy of the modeling itself. But as to the plan, I believe --

Mr. Blewitt, I thought you had other slides specifically addressed to the plan that we circulated yesterday, and this is really modeling-related.

HEARING OFFICER ORTH: Okay. Ms. Katz has drawn a distinction that's helpful here.

MR. ROSE: There it is. This looks like right -- now we've got the right slide there.

MS. KATZ: Thank you. Yes, I agree.

HEARING OFFICER ORTH: Okay.

MR. ROSE: Ms. Katz, I think you're muted.

HEARING OFFICER ORTH: Yeah. Okay. Go ahead.

A. I thought this was a modeling discussion, which is why I pulled up those slides. I'm sorry.

The first slide we really talked about, which was the same in both of them, and I think the plan also needs to address the cost to control in terms of ambient impacts. And this is -- this directly relates back to

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modeling, so it's very hard to separate all of these issues.

I think the procedural issue that we have -- and this really goes to the other presentation -- this future-year base case, which is really crucial in -- in the modeling and the impacts and the benefits, has no documentation whatsoever. There's some emission totals presented, but they're not -- they're very vague and we really can't address what's going on there.

That 2028 emissions inventory needs to talk about reductions from controls that will be implemented from recently promulgated sources. That's not discussed. Retired sources that have changed -- have changed fuel type from oil to natural gas, that's -- retired sources are not discussed.

Growth calculations, that's a very important issue for oil and gas because of the unique nature of oil and gas emissions, which I will talk about at another time in this. The calculation methodology that was used did not, in my opinion -- although I can't confirm this -- address the issue of decline from natural gas wells which affects both long-term VOC and NOx emissions.

Natural gas wells decline. The reason many new wells are being drilled is to offset the decline in production with new production, and these -- these wells

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decline exponentially. And some emission sources, such as compressors, dehydration units, tank emissions will -- are directly related to production rate.

There are some inconsistencies in VOC emissions presented in the Ramboll technical support document that need to be resolved. And the 2028 emission inventory really needs stakeholder and public review. I think those are all important issues that really pertain to spending some more time looking at what's been done to make sure we actually achieve what we're looking for.

If the 2028 future-year base case were implemented -- and we don't know what that is -- how would NMED address enforceability? The last thing we want to do is have sources have emission limits that are state-only emissions limits, versus federally enforceable emission limits.

And Mr. Baca sort of alluded to the fact that some of what we're talking about here might not be federally enforceable. And I think that's -- that's an important issue that has to be addressed. The modeling did not separate NOx and VOC emissions. And we have heard discussions about impacts from various oil and gas segments, but it's been combined.

And we really don't know the relative importance of NOx or VOCs. Mr. Morris's testimony that will be given

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tomorrow, he indicated there were only a few grid cells, areas where concentrations were computed that --

MS. KATZ: Objection. I'm sorry. Mr. Morris is not testifying and so it's inappropriate to be addressing his testimony here

HEARING OFFICER ORTH: I thought we had drawn that distinction, Mr. Rose.

MR. ROSE: Madam Hearing Officer, it relates to adequacy of the plan. And that's what I thought Mr. Baca's testimony was related to, that the modeling deficiencies and some of the information that Mr. Blewitt is identifying were not included in and they're not part of the plan, and, therefore, the plan itself was insufficient, in addition to the modeling having problems.

HEARING OFFICER ORTH: Okay. And, again, to the extent that he's expressly referring to testimony we haven't heard yet, I don't know that he's walking on the right side of that line. And I understand they're all interconnected, but we're now down to his last seven minutes of testimony, so I'm hoping he can get back to rebutting Mr. Baca's testimony.

A. Let me restate that. NMED needs to carefully review ozone formation of NOx versus VOCs, and that was -- and what was done in the modeling combined both NOx and VOCs together, and it is not possible to separate that.

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I think an iterative process needs to be established to resolve all of the identified technical issues that I've pointed out here, and that concludes my remarks.

MR. ROSE: Thank you, Mr. Blewitt.

HEARING OFFICER ORTH: Thank you.

MR. ROSE: I have no further questions of this witness.

HEARING OFFICER ORTH: All right. Thank you, Mr. Rose.

Ms. Katz, do you have questions of Mr. Blewitt at this time?

MS. KATZ: No, I do not and neither does Mr. Knight. He will be doing the -- the surrebuttal.

HEARING OFFICER ORTH: Oh, okay. Thank you. Ms. Fox?

MS. FOX: None, Madam Hearing Officer. Thank you.

HEARING OFFICER ORTH: Thank you. Ms. Paranhos?

MS. PARANHOS: No questions, Madam Hearing Officer.

HEARING OFFICER ORTH: Thank you. Professor Pacyniak?

PROFESSOR PACYNIAK: No questions right now, Madam Hearing Office.

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HEARING OFFICER ORTH: Thank you. Ms. Devore?

MS. DEVORE: No, thank you.

HEARING OFFICER: Oh, okay. Thank you. Mr. Nykiel?

MR. NYKIEL: No questions, Madam Hearing Officer.

HEARING OFFICER ORTH: All right. Mr. de Saillan?

MR. DE SAILLAN: No questions. Thank you.

HEARING OFFICER ORTH: Thank you. Mr. Hiser?

MR. HISER: No questions, Madam Hearing Officer.

HEARING OFFICER ORTH: Thank you. Mr. Janoe?

MR. JANOE: No questions, Madam Hearing Officer.

HEARING OFFICER ORTH: Thank you. Mr. Butzier?

MR. BUTZIER: No questions.

HEARING OFFICER ORTH: Thank you. Ms. Gutierrez?

MS. GUTIERREZ: No questions. Thank you.

HEARING OFFICER ORTH: Thank you. Mr. Neumann?

MR. NEUMANN: No questions. Thank you.

HEARING OFFICER ORTH: Thank you. And Ms. Witherspoon?

MS. WITHERSPOON: No questions.

HEARING OFFICER ORTH: Thank you. I'm going to turn now to see if the Board has any questions. While I'm doing that, in the event you are not a panelist and you have a question for Mr. Blewitt, please reach out in the

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Chat.

EXAMINATION BY THE BOARD OF DOUG BLEWITT

HEARING OFFICER ORTH: Madam Chair, do you have a question of Mr. Blewitt?

CHAIRPERSON SUINA: No questions from me, Madam Hearing Officer. Thank you.

HEARING OFFICER ORTH: Thank you. Vice-Chair Trujillo-Davis?

VICE-CHAIR TRUJILLO-DAVIS: Yes, I have a couple of questions. Thank you, Madam Hearing Officer. And my questions actually -- I had a very difficult time hearing the full testimony, so I just want to clarify. Is the basis of your testimony that the 2028 projections are too conservative in their calculation because they failed to account for well decline and recently promulgated rules?

MR. BLEWITT: Let me answer that in several parts. The emission -- I believe that the emissions in the 2028 inventory may be -- may not be accurate. They may be inflating NOx emissions and VOC emissions. I have reviewed the Mancos EIS emission inventories, and I saw that that was the case in those inventories.

And that this emission inventory was developed directly from the Mancos, I believe. This -- if emissions are -- are overstated, that means air quality will actually be better. And also, it will affect the cost to

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control calculations because you won't see as much of a reduction.

The good news is that the modeling shows very dramatic reductions in ozone from the 2028 case. So it's kind of an interesting situation. The -- there's tremendous reduction in ozone concentrations predicted by the model for this technical emission inventory. We think it may be biased on the high side, which would mean even lower -- lower emissions or lower ozone impacts. Does that answer your question?

VICE-CHAIR TRUJILLO-DAVIS: Yes, I think so. Thank you for clarifying your testimony.

HEARING OFFICER ORTH: All right. Thank you. Member Cates?

BOARD MEMBER CATES: No questions.

HEARING OFFICER ORTH: All right. Member Bitzer?

BOARD MEMBER BITZER: No questions.

HEARING OFFICER: Thank you. Member Garcia?

MEMBER GARCIA: (Shaking head.)

HEARING OFFICER: No. No questions. And Member Honker?

BOARD MEMBER HONKER: No questions.

HEARING OFFICER ORTH: Thank you very much.

Did any of that raise anything for you on redirect, Mr. Rose?

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MR. ROSE: No, I have no redirect questions for this witness.

HEARING OFFICER ORTH: All right. Thank you very much, Mr. Rose and Mr. Blewitt.

Let me encourage Mr. Blewitt to review his settings or perhaps find another computer. I have to say listening to technical modeling testimony is hard enough, you know, to really follow for those of us that are not air quality modelers without the challenge of listening to the sound from a -- from a distance.

MR. BLEWITT: I will do my best, Madam Chairman.

HEARING OFFICER ORTH: Thank you so much. All right. It is 4:57, we do have a 5:00 public comment session. I think we should take a five-minute stand-up break before we do that, just five minutes just to stand up.

Let me speak the names of those I have who have made requests to make public comment at 5. If I do not read your name and you wish to make public comment in the 5:00 slot, please reach out in the Chat. I have Sandra Ely, Ernie Carlson, Rob Rodriguez, Mary Ingam, Dora Luccini-Lucero, Richard Raynaud, and Nick King.

Let's take five minutes. Let's come back at 5:05 and I will begin with the names there.

And then I have a question for Ms. Gutierrez:

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After public comment, will we be discussing the forecasted schedule, or should we address that before public comment?

Ms. Katz, do you have an opinion about that.

MS. KATZ: Well, Madam Hearing Officer, Mr. Baca still needs to do his surrebuttal on this topic. So I'm not sure when -- did Kinder Morgan submit testimony on this or?

MS. GUTIERREZ: We did not submit testimony. I was just asking for, you know, the next couple of days, what the schedule would look like generally.

MS. KATZ: Oh, sorry. I didn't realize that that was the question.

HEARING OFFICER ORTH: All right. So let's come back at 5:05, we'll take some public comment.

(Recess taken from 4:59 p.m. to 5:05 p.m.)

HEARING OFFICER ORTH: All right. We have at the 5 p.m. public comment session for Monday, September 20th in the rulemaking on EIB Petition 21-27. I will ask you to collect your thoughts, as I'll be asking for your comments just once. In the event you have more to say, more than five minutes, I will ask you to put your comments in writing and submit them to Pamela Jones, whose contact information is on the EIB web page.

I do have to ask folks to be sworn to tell the truth, and I will, if you have a nonstandard spelling of

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your name, I will ask you to spell your name. And let me get my little stop-clock up. I will call you in this order. Sandra Ely, Ernie Carlson, Rob Rodriguez, Mary Ingam, Dora Luccini-Lucero, Richard Reynaud and Nick King.

If you can hear me and you would like to speak in this slot, rather than one of the three slots available every other day of the hearing, please reach out through the Chat and I will add you this evening.

So Sandra Ely, I am unmuting you. Ms. Ely, would you raise your right hand, please. Do you swear or affirm to tell the truth?

MS. ELY: Yes.

HEARING OFFICER ORTH: Thank you very much. I'm starting your five minutes now.

SANDRA ELY,

having been first duly sworn or affirmed, gave public comment as follows:

PUBLIC COMMENT BY SANDRA ELY

MS. ELY: Good afternoon, Madam Hearing Officer, members of the Board. My name is Sandra Ely and I am the Environmental Protection Division Director at the New Mexico Environment Department. Executive order 2019-003 to address climate change and energy waste prevention, sets a greenhouse gas emission reduction goal of at least 45 percent below 2005 levels by 2030.

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The order also established the interagency climate change task force and directed the agency to implement specific greenhouse gas emission reduction strategies. Some of these strategies have already been implemented, including passing of the Energy Transition Act by the legislature in 2019, and adoption of the -- of new energy conservation codes by the Regulation and Licensing Department in 2020. The order directed both the Environment Department and the Energy and Minerals Department to reduce methane emissions and energy waste in new and existing sources in the oil and gas industry, as soon as practicable.

The agencies worked together with stakeholders for a period of two years to draft separate, yet complimentary rules that do not duplicate, conflict, or leave regulatory gaps. The two sets of rules are designed to work together to provide full coverage of the industry, to achieve the waste and pollution reduction New Mexicans deserve.

While the Environment Department proposed rule focuses on NOx and VOC emission reductions as required by state law, reducing industry VOCs will also result in methane reductions. The Energy and Minerals Department natural gas waste reduction rules were adopted by the Oil Conservation Commission in March of this year. It is now

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time for the EIB to consider and adopt regulations to help the state fight climate change and reduce ozone pollution.

These rules are important for many reasons: One, because New Mexico's oil and gas industry accounts for 53 percent of the greenhouse gas emissions in the state, the vast majority of which is methane. We must curb emissions in this industry to meet our greenhouse gas reduction target.

Two, these rules provide an opportunity for New Mexico to do its part to reduce global temperatures in the short-term. While methane emissions -- methane is an extremely potent greenhouse gas, it is short-lived in the atmosphere compared to carbon dioxide. Reducing the atmospheric concentrations of methane now can slow temperature rise through midcentury.

Three, these rules will serve as an example to U.S. EPA as they move forward with regulations to reduce methane and VOC emissions in the oil and gas industry, as directed by President Biden on his first day in office. We anticipate EPA's proposal will also be released any day now. In developing and finalizing their rules, EPA has and will continue to look to states like New Mexico to see what is possible to achieve significant emission reductions.

Finally, these rules will represent ozone

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pollution in parts of the state close to exceeding federal health-based standards. Elevated levels of ozone pollution not only put the public health at risk from breathing unhealthy air, but could result in EPA stepping in to mandate that the state implement federal requirements to reduce ozone pollution.

Federal requirements will include newly-imposed and extensive permitting protocols that will be costly to industry and will require the Department to step up significantly.

Thank you for the opportunity -- opportunity to provide public comment today. And thank you in advance for your efforts to ensure that these complicated and highly technical rules are protective of public health and the environment.

HEARING OFFICER ORTH: Thank you very much, Ms. Ely. Ernie Carlson is next on my list, but I do not see him among the attendees under either Ernie or Carlson. Mr. Carlson, in the event that you are with us under a different name, please reach out through the Chat or reach out through text to (505)660-4305.

MR. ROSE: Madam Hearing Officer, I have a question with respect to Ms. Ely's testimony, was that intended to be part of the Department's affirmative case since Ms. Ely, in fact, is a Department employee? I

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noticed it was -- it was labeled as public comment, but it appears to be comment on behalf of the Department, as opposed to really public comment. And I was curious as to whether it will be considered part of the Department's case or will it be public comment and given the weight the Board normally does to just public comment?

HEARING OFFICER ORTH: All right. Ms. Katz or Mr. Knight, would you like to address that? It may have been designated as public comment because it was more policy than technical, but let's see. Ms. Katz, there you are.

MS. KATZ: I believe it was a statement by Ms. Ely -- a nontechnical statement by Ms. Ely.

MR. ROSE: Madam Hearing Officer, there were certainly technical representations as to impacts and how this ought to be regulated. It seemed to me this is much more akin to testimony that would normally come in under the Department's case-in-chief or rebuttal case, as opposed to public comment.

HEARING OFFICER ORTH: And so, let's say that it would be more typically part of the Department's or petitioner's affirmative case. Is it because you want to ask questions?

MR. ROSE: Well, in fact, we would normally -- if that were part of the Department's case, they would submit

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prefiled direct and rebuttal testimony that all of the parties would have the ability to respond to, as well as then ask questions. I think a lot of what Ms. Ely covered was actually covered by Ms. Bisbey-Kuehn in terms of her testimony that was prefiled, but it sort of deprives us of the real ability to question it.

I'm not sure I have any questions, but it's hard to -- it's hard to decide whether to ask questions based on the fly here without -- without having access to this prefiled testimony.

HEARING OFFICER ORTH: Okay. So I disagree with you about the prefiled testimony because it wasn't technical. And nontechnical testimony, that is to say more of the nature of policy is often not prefiled. But as I said, you are always entitled to question anyone testifying, so if you have a question of Ms. Ely, I will ask her to rejoin us.

MR. ROSE: I do not.

HEARING OFFICER ORTH: Okay.

MR. ROSE: It was more of a question of weight to be given it from the beginning of the statement as opposed to --

HEARING OFFICER ORTH: All right. My understanding is that the Board will be weighing all of the technical testimony and all of the nontechnical

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testimony as part of their deliberations, but thank you for speaking your concern.

We're going to move to Rob Rodriguez, but I do not see Mr. Rodriguez on the platform. Again, anyone who doesn't necessarily -- isn't necessarily able to join us at the exact time they said they wanted a slot can certainly choose any one of the other 28 opportunities to offer comment.

We move then to Mary Ingam. Do we see Mary Ingam? I do not. Dora Luccini-Lucero. Let me see if I -- it just takes a minute to scroll through 160 names so I don't see Dora. Let's see. Richard Reynaud, I believe I saw Richard Reynaud. There we go.

Mr. Reynaud, can you hear me?

MR. REYNAUD: Yes, I can.

HEARING OFFICER ORTH: Terrific. I can hear you, but you're a little soft. If you would keep your voice up, please.

MR. REYNAUD: Okay.

HEARING OFFICER ORTH: And if you would raise your right hand first. And do you swear or affirm to tell the truth?

MR. REYNAUD: Yes, I do.

HEARING OFFICER ORTH: And would you spell your last name, please?

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MR. RAYNAUD: Yes, it's R-E-Y-N-A-U-D.

HEARING OFFICER ORTH: All right. Your five minutes starts now.

RICHARD REYNAUD,

having been first duly sworn or affirmed, gave public comment as follows:

PUBLIC COMMENT BY RICHARD REYNAUD

MR. REYNAUD: Okay. I've got -- I've only got about a minute and a half, but can you guys see me on video or is it just my voice?

HEARING OFFICER ORTH: No, it's just your voice. The public comment is coming through audio, not video.

MR. REYNAUD: Okay. That's fine. I was just wondering, you know. Okay. All right. Hello, my name is Richard Reynaud, I'm a lifelong Las Cruces resident, except for three years in Roswell, New Mexico in oil pump development work. I graduated from NMSU in 1982 with a degree in ME. I'm retired now and am a small business owner and DE. Thank you to the New Mexico Environmental Improvement Board for allowing these hearings.

Now, I have been following this rule. I've read summaries from proponents and opponents of this rule, and the rule, the lengthy rule. I am not in favor of this rule. When I assess this situation, the economic impact -- impacts stand out to me. The State of New

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Mexico's own legislative finance committee expressed its concerns about future revenues, mainly affecting education in New Mexico, or largely affecting and the Small Business Exemption; $250,000 gross income, for employees less than ten just doesn't make any sense to me. To gross out $250,000 with ten employees, that's a lot of work for almost no profit. Does this simply mean no exemptions?

Now, unemployment: From today's Las Cruces Sun News, New Mexico was tied along with Connecticut and New Jersey for the nation's fourth highest unemployment rate. You go to page 4A, and you find that Lea County -- Hobbs, Lovington, has the second highest unemployment rate in New Mexico. Is this the right time to do this?

So, in summary, I recommend to not pass this rule. Let Southeast New Mexico residents decide if they want to go beyond EPA restrictions. You know, where is the complaints about air quality from Hobbs, Carlsbad, Lovington? I -- I haven't heard any. During my time in Roswell in the oil company business, I met people in Artesia, people who were working small module production wells. They are hard-working, honest people, making honest living, and have been painted in a bad light, in my opinion, and I will speak up for them.

Thank you again to the New Mexico Environmental Improvement Board.

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HEARING OFFICER ORTH: Thank you, Mr. Reynaud. All right. I see Mr. King, Nicholas King, standard spelling. I'm unmuting you, Mr. King. Can you hear me?

MR. KING: Yes, I can.

HEARING OFFICER ORTH: I can hear you very clearly. If you would raise your right hand, please. Do you swear or affirm to tell the truth?

MR. KING: I so affirm.

HEARING OFFICER ORTH: Thank you. Your five minutes starts now.

PASTOR NICHOLAS KING,

having been first duly sworn or affirmed, gave public comment as follows:

PUBLIC COMMENT BY PASTOR NICHOLAS KING

MR. KING: Well, first of all, I would like to thank all of this panel for the hard work on these life and death issues. It's no small thing to deal with all of these tedious issues and I thank you for doing that for all of us. My name is Nick King, and I'm pastor of the Carlsbad Mennonite Church.

Caring for God's creation is a God-given responsibility that we are all charged with. Caring for the health of our neighbors and caring for future generations in the middle of this climate change is what we are all obligated to, unless we just serve our own

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immediate economic interests, which Jesus would call selfishness; one of the most basic of sins. It's self-interest versus the best for all. That's the question.

In the last few years a lot has been improved in the oilfield as we see considerably fewer flaring in the area now, that's just one of the visible effects, so things can be changed. Improvements can be done, as we see in Colorado, but we need more monitoring. There's very little monitoring down here to see what the air quality is. And we need more regulation, although none of us likes regulation, but we need regulation of leakage, of pneumatic valves and of emissions for completion and redevelopment projects.

This may cost a little more or will cost a little more, but as in construction, there are all kinds of costs of doing business. The question is, do the companies for profit pay now, or do we, as taxpayers and healthcare providers, pay way more in the future for this upcoming fiasco. But we, as taxpayers, need to front the money for much more reasonable inspections or we will all certainly pay later, that there is way too little money for inspection and enforcement of that kind of stuff.

I've been out in the oilfield and leaks can easily be seen with the flare camera. We have the

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technology to do this. Although, we all need to do our part in consuming less, me included, and producing less carbon, we, as a society, need to make realistic regulations that manage the larger entities for the good of all.

May God give each of you wisdom and strength to move ahead, in spite of the strong opposition of some economic interests. Thank you.

HEARING OFFICER ORTH: Thank you, Pastor King. All right. Let me ask if there's anyone else who would like to make a public comment at this session. There are 28 more sessions at 9, 1 and 5, between now and October 1st. I see no one reaching out through the Chat.

Ms. Katz, it seems to me like it would be worthwhile, so long as it wouldn't be too lengthy, to return to Mr. Baca -- I'm sorry, Mr. Knight, to return to Mr. Baca for his surrebuttal unless you think that would be a more lengthy exercise.

MR. KNIGHT: We would like to do that, Madam Hearing Officer. Mr. Baca has prepared a demonstrative PowerPoint for this and I acknowledge that we were -- we should have sent it around to the other parties. I will represent that it consists of the figures and maps that were attached to some of his written testimony, so I don't think there's anything surprising or controversial in this

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PowerPoint. And so I would ask that he be allowed to present that PowerPoint along with his surrebuttal testimony if there is no objection. And I would say if -- you know, if someone -- I would ask that we be allowed to present it and if -- if any party has an objection along the way, we can, you know, we can deal with it at that time.

HEARING OFFICER ORTH: All right. I think that's a good strategy. Did I hear someone trying to say something? No? All right.

MR. ROSE: Just one question. I was wondering if Mr. Knight would make sure that the rest of us get a copy of that demonstrative exhibit. It doesn't have to be this evening, it could be tomorrow at some point, that would be fine.

MR. KNIGHT: Yes. I appreciate that and we will certainly -- certainly send that out to all the parties very soon.

MR. ROSE: Thank you, Madam Hearing Officer.

HEARING OFFICER ORTH: Thank you, Mr. Rose. Thank you, Mr. Knight.

To the extent any other party believes that they have been subjected to some unreasonable surprise as we go through Mr. Baca's surrebuttal, please -- I'll give you an opportunity to put that on the record at the right time.

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In the meantime, I'm going to make Mr. Baca a presenter.
MR. KNIGHT: Thank you.
HEARING OFFICER ORTH: Mr. Baca, you should have the privilege of sharing your PowerPoint.
MR. BACA: Thank you, Madam Hearing Officer. I do have that privilege now.

MICHAEL BACA,

having been previously duly sworn, was examined and testified as follows:

SURREBUTTAL DIRECT EXAMINATION OF MICHAEL BACA

BY MR. KNIGHT:

Q. Mr. Baca, let me know when you're ready for me to begin the questions for your surrebuttal.
A. Okay. Is my screen sharing at this time?
Q. Not yet.
There it is. All right. Shall we begin? Okay. Mr. Baca, now I'm going to have you address issues that were raised by Mr. McNally and Mr. Blewitt in their prefiled rebuttal testimony. So this is surrebuttal. Let's see.
Mr. McNally's -- just for everyone's information, Mr. McNally's rebuttal testimony was NMOGA Rebuttal Exhibit 45 and Mr. Blewitt's rebuttal testimony was IPANM Rebuttal Exhibit 12, as previously pointed out.
So, Mr. Baca, Mr. McNally contends that Chaves

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and Rio Arriba County should not be included in the geographic scope of the Ozone Attainment Initiative, the Ozone Advance and the proposed rule. Why did the Department decide to include those two counties in the proposed rule?
Mr. Baca, you are on mute.
HEARING OFFICER ORTH: I've unmuted him.
A. Can you hear me now?
Q. (BY MR. KNIGHT) Yes, much better. Go ahead.
A. Okay. Yes, in short, Madam Chair, members of the Board, Madam Hearing Officer, in short, these counties are widely recognized as part of the respective oil and gas basins and contain oil and gas sources that -- that emit precursor pollutants and thereby cause or contribute to ozone concentrations. The statute does not require an analysis to quantify the retrieving impacts from sources to determine if they cause or contribute to elevate ozone beyond any given threshold amount in any area of the state. Excuse me.
Q. Yes. So why are some of the assertions Mr. McNally -- or excuse me. What are some of the assertions that Mr. McNally makes in his prefiled rebuttal testimony to support his position?
A. Yeah, Mr. McNally's testimony is premised on the incorrect assertion that the Air Quality Control Act

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restricts the applicability of any regulations promulgated by the Board under this provision, to only those sources in counties with monitors. Therefore, he reasons that because Chaves County lacks an ozone monitor, sources in that county cannot be regulated under the Board's authority provided in 74-2-5 of the Air Quality Control Act.
He also assumes that the Board is limited to considering only monitoring in modeling data when determining the geographic scope of regulations that promulgate under the statutory provision. He points out that the most recent ozone design value for Rio Arriba County for 2018 through 2020 is 65 parts per billion, and that does not exceed the 95 percent of the standard. He also claims that the Department did not provide for photochemical modeling results to justify including Chavez County in the proposed rule.
Q. I see. And what does the statute say about this issue?
A. Yeah, the stated purpose of the regulations adopted by the Board under the statute is to provide for the attainment and maintenance of the standard. To achieve this, the purpose of the statute directs the Board to regulate sources within areas of the state that cause or contribute to ozone concentrations exceeding 95 percent

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of the NAAQS.
The statute does not say that the regulations can only apply to counties with monitors showing concentrations exceeding 95 percent, so, logically, the boundaries of any designated nonattainment area would not be restricted to county lines or counties with monitors.
Q. What factors are considered in determining the boundaries for a newly-designated nonattainment area?
A. Yeah, air quality agencies and EPA consider five factors when recommending and promulgating designations in nonattainment area boundaries. This includes --
COURT REPORTER: I'm sorry. Mr. Baca, you need to slow down. You're reading and you need to slow down. It's been a long day. Please. Okay?
MR. BACA: Okay.
COURT REPORTER: Thank you.
MR. BACA: Can you -- can you read back where I was at?
COURT REPORTER: Yes. "Air quality agencies and EPA consider five factors."
A. Air quality and EPA consider five factors when recommending and promulgating designations and nonattainment area boundaries, including the nearby areas that contribute to exceedances in violating or nonattainment areas. These factors include air quality

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data, emissions and emissions-related data, meteorology, geography, topography and jurisdictional boundaries.

So these are the appropriate factors for the Board to consider as they provide the information to build a conceptual model of how ozone is formed and transported in a region. So, although photochemical modeling data and source contribution data may be used, it has not been required for past nonattainment designations when including nearby areas in the nonattainment boundary.

So, social apportionment would generally be used only when evaluating nonattainment areas that span multiple -- multiple jurisdictions or states.

Q. Okay. So, how would you respond to Mr. McNally's testimony regarding the monitored readings at the Rio Arriba air monitor and the lack of a monitor in Chaves County?

A. So, regarding the most recent design value at the Rio Arriba monitor, you know, we -- they are correct in stating that the 2016 to 2000 -- or 2018 to 2020 design value is below the standard as we can see on the PowerPoint here.

So the Rio Arriba monitor is this green line here. So we can see over the past year, that that fell below, so the 95 percent is this orange line here, and we can see that for the two previous averaging periods that

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the monitor was actually exceeding 95 percent of the standard.

Q. Okay. Let's see. NMED -- well, okay.

A. I guess I can -- let me move on to this slide here. So NME -- NMED does not operate an ozone monitor in Chaves County; however, the statute requires that the Board regulate sources of emissions that cause or contribute to elevated concentrations greater than 95 percent of the standard. So we have two contiguous counties, Eddy and Lea County, that have monitoring sites of ozone concentrations above that threshold. The trend has been rise -- has been rising in concentrations at this site.

So if we take a look, I mean you can see that in Southeastern New Mexico, that, you know, over time, that ozone concentrations are actually rising, and this is very dramatic here. You can see in Carlsbad especially, concentrations are going up and also in Lea County.

Now, there was a dropoff in the past year, but if you look from the beginning of this chart, all the way to the end of the chart, there's a general direction upward. So, in one conclusion and in wrapping it up, although county level source apportionment modeling results do not exist, the photochemical modeling conducted by Ramboll clearly showed the influence of the oil and gas sector on

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ozone levels in New Mexico.

So the proposed rule targets the control of ozone precursor emissions from that sector. Chaves and Rio Arriba County have substantial oil and gas sector activity and are widely recognized as part of the Permian and San Juan production basins, respectively. So the emission profiles of these two counties do not differ significantly from the other counties in their respective basins. Including Chaves and Rio Arriba County, it acknowledges that they are part of the production basins and that the oil and gas sector contributes to regional formation.

A conceptual model of ozone in the two basins would not be complete without including these two counties. Without them, the nature and cause of elevated ozone would not be fully characterized, the scope and scale of the problem would not be identified, and a complete description of nearby emissions sources that contribute to the problem would not be complete.

Recognizing and disclosing formation and transport is not limited in geographic scope. EPA establishes nonattainment boundaries by evaluating relevant information for the entire area containing violating monitors, and any adjacent counties or nearby areas that have the potential to contribute to that nonattainment violation.

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Using a weight of evidence to determine the narrative boundaries allows both states and EPA to evaluate and determine on a case-by-case basis the specific facts and circumstances unique to the area.

NMED followed these principals when considering whether or not to propose the inclusion of these counties in the scope of the OAI, the Ozone Advance, and the proposed rule.

Q. Okay. Thank you for that. And so let's -- let's talk about some of the terms here. What are air quality control regions, or AQCRs, as we call them, and why did the Department choose to use county boundaries in this rule rather than AQCRs?

A. All right. So now I have a map of what we call air quality control regions just for illustration purposes. So NMED evaluated the boundaries of the state's air quality regions, as we can see there, there's approximately nine -- I'm sorry, eight air quality control regions in the state. And these air quality control regions share similar climate, meteorology, topography, vegetation, land use patterns, demographics. And so these are areas of the state that are highly similar in more ways than just one.

So, EPA, as I said earlier, we have eight air quality control regions in the state, and we have the

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counties in question -- Chaves County, in air quality control region 155, and we have Rio Arriba County split into two different air quality regions. So you can see that Rio Arriba, which is this county up here, is split between AQCR 157 and AQCR 14.

So the Carlsbad and Hobbs monitoring sites provide ozone data in the air quality control region that includes Chaves County. So down here, we have monitors in both Eddy and -- Lea and Eddy Counties here, that cover this air quality control region.

So in the Northwestern part of the state, we have three monitors that cover San Juan County that provides data for the air quality control region that contains more of Rio Arriba and the majority of the oil and gas in that county, so we have an air quality monitor up in San Juan right here, we have one in Farmington and we have one closer to the east. So we have three air quality monitors in close proximity.

We also have an air quality monitor in air quality control region 157, and that is the Rio Arriba monitoring site that's near the Coyote Ranger District in the national forest there.

So, you know, in closing, we chose to use county jurisdiction lines instead of air quality control regions because county boundaries are widely recognized by -- by

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everyone and they're well established -- well established lines that most of the oil and gas sources, whom we are targeting, are contained within these counties.

Q. Thank you. And regarding some of the testimony from Mr. Blewitt, I believe regarding the locations of monitors, is the Department required to have an ozone monitor in Chaves County, and who approves the number and siting of monitors for an area?

A. No, we do not have a monitoring -- a monitor in Chaves County. So NMED's monitoring network is fully approved by EPA. So the EPA takes the reins in approving -- reviewing and approving NMED's plans for monitoring the air quality. And as a matter of fact, the Department actually operates more ozone monitors than is required by EPA regulations.

Every year, the Department undertakes an annual review of their monitoring network to -- to evaluate the adequacy of the network and to document any changes that the Department would like to make to those -- make to any monitoring site.

In addition, that annual review includes a statement of purposes for each monitor and also includes evidence that the siting and operation of each monitor meets the requirement of the regulations. So, all of our plans are subject -- subject to public comment and we

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submit these to EPA first.

Q. So what about Mr. McNally's statements concerning the lack of photochemical modeling to -- that would justify including Chaves or Rio Arriba Counties -- what -- what about his statements concerning the lack of photochemical modeling?

A. Yeah, as I -- as I said before, technical assessments are supposed to define the magnitude or relative magnitude of contribution from nearby areas, but EPA does not set any threshold contribution level or bright-line test for determining whether the contributing area should be included within the boundaries of a given nonattainment area.

So Section 107(d) of the Clean Air Act does not require EPA to set this threshold contribution. And although the photochemical modeling results would be insightful, they are not required; they're just one of many tools available to an air quality agency or EPA to determine an area's influence on another nonattainment area.

So the statute does not require the Department to provide photochemical modeling results to justify inclusion in any of the areas, or county in this case, within the scope of our proposed plan. And EPA's past guidance for nonattainment boundary determination, which

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are the five factors I reviewed earlier, are considered the appropriate framework to determine which counties should be included in the OAI and the proposed rule.

So, although, the Department did not complete a five-factor analysis for each basin, the Board can consider those factors and include that, one, the available air quality data indicates that we have elevated ozone levels in excess of 95 percent of the standard, and that's in and nearby both of the counties in question.

As you can see by this slide, 12 of the 14 ozone monitors operated by the Department are greater than 95 percent of the standards. Two, we can say that there is significant oil and gas activity in both of these counties, and that they share similar emission profiles as either Eddy and Lea County, or San Juan County in the Northwest. So, with both their basins, they -- they do not differ significantly.

Three, I think we can say that the counties share climatological and meteorological condition, as demonstrated by them being within the same area quality control region within the respective basins. And, you know, we can also say, four, that the counties are adjacent to the monitors that are exceeding this threshold. So they're in close proximity to -- to the monitors that are reaching 95 percent of the standard.

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So, additionally, any of the topography or geographical features of the area do not allow for unrestricted air flow, or transfer of pollutants in the areas.

So, I think, five, you know, all of the areas that are considered right now are under the jurisdiction of the EIB. They're easily identifiable, and I think the Board should include Chaves and Rio Arriba County within the scope of this rule. This would probably address emissions from the oil and gas sector, and lower ozone concentrations across the state.

I think failing to include these areas and emissions would be contrary to the intent of the statute, and ignore the fact that these two counties are part of the common oil and gas production basins within their respective areas.

Q. Thank you, Mr. Baca.

Mr. McNally has concerns with the photochemical modeling section of our Ozone Advance Path Forward, which was, again, the NMED Exhibit 4 that was discussed a little earlier. Did you review his concerns with the Ozone Advance Path Forward, and how has the Department responded to those concerns?

A. I have reviewed Mr. McNally's rebuttal testimony in this regard and agree with his assessment, so in

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response to that, the Department revised the Ozone Advance Path Forward and have entered it as NMED's Exhibit No. 4 Amended.

Q. Okay.

A. So the discussion that was included in the original path forward is not -- was not ever intended to provide any technical support or justification of -- of the rule. It's only explanatory for EPA and the public, and the Department to provide information to -- to them on the modeling study and the important sectors that are contributing to ozone formation. It also outlines how the Department plans on addressing the issue.

So, some of the changes that I made to the Path Forward in NMED Exhibit 4 Amended includes a more complete description of the modeling, additional commentary to support the conceptual models of ozone formation in the state. I included the updated modeling and source apportionment results for the future-year oil and gas control scenario as proposed in the rule.

And I included a discussion of the sectors that will be addressed with the Ozone Attainment Initiative, including the impacts of the oil and gas sector throughout the state, as well as other sectors that impact ozone levels in the state, and that the Department intends to target for control strategies and future rulemaking.

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Q. Thank you.

MR. KNIGHT: And Madam Hearing Officer, we have made the Amended Exhibit 4 -- we have sent that to all of the other parties and after they've had a chance to look at it, maybe I can renew my motion to have that admitted into the record. Perhaps we can do that tomorrow morning after everyone has had a chance to review it. And now we have surrebuttal to Mr. Blewitt's rebuttal testimony.

And Mr. Baca, thank you.

Mr. Baca, IPANM witness, Mr. Blewitt, who testified earlier today, in his written rebuttal testimony he suggests that the Department should follow Sections 110 and 172 of the Clean Air Act to develop the plan to address ozone as required by the Air Quality Control Act. Do you agree?

A. No, I don't. Mr. Blewitt is trying to apply a State Implementation Plan and writing concepts to -- concepts and framework both to the Board's duties, to act under the Air Quality Control Act.

So these concepts and frameworks he has termed such as cause, contribute, and significant, but there's no context with what he was providing these terms in his -- in his rebuttal testimony.

So the concepts he describes and framework he suggests are inappropriate for determining the boundaries

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for this purpose, for the OAI, the Ozone Advance, and for the proposed rules. And what he is suggesting would be used to comply with requirements of the Clean Air Act, not the New Mexico Air Quality Control Act.

So when I say that, you know, I'm talking about he brought up Section 110(a) of the Clean Air Act, which requires states to develop SIPs for the implementation, maintenance and enforcement of new or revised standards. So these SIPs are commonly referred as a infrastructure SIPs or ISIPs because they ensure that the basic authorities and programs are in place to implement any new or revoked NAAQS that the EPA may promulgate.

The Department has submitted its ISIP to EPA under Section 110 of the 2015 Ozone NAAQS in two separate submissions. So the EPA has fully approved New Mexico's first ISIP submission that addressed all but one of the required elements under Section 110. The second submission this Board just considered this past summer and that -- that was for the interstate transport of ozone or what we commonly refer to as a Good Neighbor SIP. And this was adopted by the Board and submitted to EPA, I believe, in July of this year. So that -- that was just recently done. And the EPA is required to act on that submission on or before January 4th, 2022.

So in short, the plan described by Mr. Blewitt,

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already exists for the State of New Mexico and it is not intended to encourage any of the early and proactive measures to reduce emissions before a nonattainment designation, only to ensure that the Department has the capability of implementing, maintaining, and enforcing the standard.

Section 172, on the other hand, outlines the planning requirements for ozone nonattainment areas. So the Department also completed a SIP submission under Section 172, but only for the Sunland Park nonattainment area. So that this was submitted in three submissions to EPA this past summer, and it's of note that the Sunland Park area is the only designated ozone nonattainment area in the state. And I believe, in my opinion, that it's the only one where Section 172 requirements apply.

The OAI uses EPA's established framework for the Ozone Advance Program, to develop their moving forward. The program is a successor of the Early Action Compact that EPA was engaged in, in which NMED participated in, in the early 2000s in the San Juan Basin, as we started addressing rising concentrations in that area.

So, the Department feels that the intent of this statute closely aligns with the principles, practices and goals of the Advance Program and continues down that path.

Q. Now, Mr. Blewitt concludes in his rebuttal that

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the statutory requires a plan in Doña Ana County only since future-year modeling shows compliance with the ozone NAAQS in all other areas of the state. Is that your understanding of the statute?

A. No. Modeling is not a required component to demonstrate cause or contribute in this context of boundary determinations. So, you know, additionally, you know, the requirement for a plan is triggered when the ozone concentration is in excess of 95 percent of the standard, and could be reasonably attributed to sources within the Board's jurisdiction, including the oil and gas sector, any of the -- and any other sectors they determine to cause elevated ozone concentrations tracings.

Q. Okay. Thank you, Mr. Baca.

MR. KNIGHT: Madam Hearing Officer, those are all the questions that I have for this witness, and he is available for questions from anyone else.

HEARING OFFICER ORTH: All right. Thank you very much. I think there are so many of us, I will put the presentation screen away. There you go. Thank you.

Ms. Fox, do you have questions of Mr. Baca based on his surrebuttal testimony?

MS. FOX: No. Thank you, Madam Hearing Officer. Mr. Baca, thank you for your testimony today.

HEARING OFFICER ORTH: Thank you. Ms. Paranhos?

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MS. PARANHOS: No questions.

HEARING OFFICER ORTH: Thank you. All right. Professor Pacyniak. I think that was a no.

Ms. Devore?

MR. VIMONT: We have no questions.

HEARING OFFICER ORTH: All right. I think that was Mr. Vimont speaking.

MR. VIMONT: Yes, it was. Sorry.

HEARING OFFICER: Okay. It's all right.

Let's see here. Mr. Nykiel?

MR. NYKIEL: No questions. Thank you

HEARING OFFICER ORTH: Thank you. Mr. de Saillan?

MR. DE SAILLAN: No questions. Thank you.

HEARING OFFICER ORTH: Thank you. Mr. Hiser?

MR. HISER: Madam Hearing Officer, this is Eric Hiser. We are going to have multiple questions for Mr. Baca on this. And I must say that we're a little bit surprised to find that there's revisions to Exhibit 4 that we need to evaluate specifically in response to the comments from our witness, Dennis McNally.

As was known to the Department, Mr. McNally was in surgery today, and, hence, in no position at this point to review or provide any thoughts on the documents that are revisions, and ostensibly change it, so I would like

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to be able to not have to take up that exhibit right now because I don't have my expert that they're responding to, to provide me any thoughts on that.

HEARING OFFICER ORTH: All right. So we can certainly take up the question of the admissibility of the exhibit on another day. It seems like we're going to be together for a long time, but do you have questions of Mr. Baca?

MR. HISER: I do have questions of Mr. Baca, and I don't know that I can do my questions about his exhibit because I haven't had an opportunity to review it. So if I can reserve my questions on the changes to the exhibit until some -- you know, some time in the future, I'd appreciate it, but I do have questions on his other testimony otherwise.

HEARING OFFICER ORTH: All right. Go ahead.

SURREBUTTAL CROSS-EXAMINATION OF MICHAEL BACA

BY MR. HISER:

Q. Mr. Baca, in the development of the plan and of this rule, has not the Department itself stated that it's relying upon the design value?

A. Relying on the "design value"? Can you expand on that, to rely on the design value for what?

Q. To designate the areas of the state that are subject to the scope of this rule?

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A. We are using monitoring data as one of the factors to consider the boundaries of the rule, the scope of the rule, and the Ozone Attainment Initiative.
Q. So is it not true that in Section 20.2.50.2 of the Department's proposal that you specifically reference design value as the criterion that's being used, yes or no?
A. Yes.
Q. Now, in the files that you did, you talked about the statute that the legislature passed that is authorizing this action; is that correct?
A. Yes.
Q. And in that, you talked about the "cause and contribute," but if we look at that statutory provision, does the cause and contribute finding go to the areas that are subject to regulation, or does it go to the types of sources that are subject to regulation under this program?
A. No, it says that emissions sources within the environmental proving or its jurisdiction.
Q. Right.
A. Cause or contribute.
Q. Right. So in order for you to regulate a source, is it the Department's duty to show that they cause or contribute to ozone concentrations in excess of 95 percent of the standard?

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A. I do not believe so. I just believe that we have to show that there is a 95 percent -- an exceedance of 95 percent of the standard at the monitoring site.
Q. So is it your testimony that the Department's belief is that as long as some area of the state is in excess of 95 percent, you may regulate any source of any type?
A. If we have reason to believe that it's causing the impact, yes, we can.
Q. So you do believe that you have to show a cause or contribute in order to regulate under this program?
A. No, I don't. We can't -- I mean, it's part of the tools that you can use, but it's not the only tool. So we do have many other tools to show that emission sources or the magnitude of emissions could reasonably impact an adjacent area, let's say, or any other area in the state, for that matter.
Q. So what, then, does the first sentence of Section C of the statute direct the Department to do?
A. The first sentence, it doesn't direct the Department to do anything. It directs the Board to do -- to determine -- it determines that the emissions sources, that they have to adopt a plan.
Q. I accept your correction, that it doesn't direct the Department. But the Department is recommending to the

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Board, is it not, that the Board do something, correct?
A. Correct.
Q. Okay. And what are you recommending to the Board that it do under this first sentence of Subsection C?
A. So what we are planning to do is outlined in the Ozone Attainment Initiative. That has not changed from the initial Exhibit 4. The purpose of the Ozone Attainment Initiative and Ozone Advance is to take proactive steps to avoid a nonattainment area designation.
Q. So how do you know which sources to regulate under the Ozone Attainment Initiative or Ozone Advance?
A. Well, you would evaluate which sources are in the area, in the emissions, as we've provided in Exhibit 4, that are a part of what is being emitted. And I think I went over the five factors that we considered. And the five factors would be what we considered for including or determining which areas cause or contribute to exceedances of 95 percent of the standard.
Q. Okay. But does the statute speak to areas that cause or contribute, or does it speak about sources that cause or contribute?
A. Sources.
Q. Okay. So not areas.
With respect to areas, what does the last sentence of Subsection C of the statute speak to? And I

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can read it for you. It says, "Rules adopted pursuant to this subsection shall be limited to sources of emissions within the area of the state where the ozone concentrations exceed 95 percent of the primary National Ambient Air Quality Standards."
Does that establish a geographic limit to the area which regulations may be applied to sources?
A. No, it does not. It just says it's limited to sources with emissions, within any area of the state where ozone concentrations exceed. So it could be any emissions anywhere in the state that -- within the area of the state that the ozone concentrations exceed 95 percent, so...
Q. So is it your testimony that the first sentence of Subsection C has no bearing on the last sentence of Subsection C?
A. No.
Q. Then how do you -- how do you reconcile the first and last sentences of subsection C? How do they fit together, in your view?
A. So the rules are limited to the sources within the Department's jurisdiction that can -- within areas of the state where ozone concentrations are monitored at 95 percent. So the rules can apply to any part of any area of the state where monitoring -- and reasonably be attributed as exceeding 95 percent of the standard. So it

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would be -- an air quality control region would definitely be the first area you would look at, would be the air quality control region.

Q. But right now the Department has chosen to do counties for the moment?

A. Right. And in my surrebuttal, I said that we started evaluating from the air quality control regions, to come down.

Q. Okay. Now, in the testimony, you talked about the five-factor analysis for cause and contribute, I believe. That comes from the federal program; is that true, those five factors?

A. Right. This is not for cause and contribute, these five factors comes from EPA guidance on when they designate nonattainment areas.

So when EPA considers what nearby areas are causing exceedances of 95 percent of the standard, they will undertake these five factors, and not necessarily include control determinations.

Q. And is the Department's analysis of those five factors set forth in any place in its materials prior to your explanation today in your surrebuttal?

A. No. This is, I believe, a policy decision that was not technical testimony within the Ozone Advance Program and so we did not include that.

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We determined the appropriate method to develop the plan, in other words.

Q. Now, there was a question where you responded to Mr. Blewitt's interpretation of plan. And you said that you didn't agree with that, correct?

A. Correct.

Q. Did you -- did you provide any citation authority for what you suggested, or is that your interpretation, what plan means to you?

A. Can you restate that? Can you clarify that?

Q. In other words, were you -- when you gave your response to Mr. Blewitt, were you relying upon a Department policy or a regulation or a state statute or a guidance manual that you've developed within the Department that sets forth the view of what a plan is, or were you giving your feel for what it is, based on your position in the planning unit?

A. The Air Quality Control Act just states plan. That's all it states. It doesn't say State Implementation Plan, it just says plan.

Q. And what does "plan" mean to you, as an air quality professional in the regulatory field?

A. A plan?

Q. Yes.

A. Well, it could mean anything. It could mean

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education and outreach. It can mean any control strategy that you're taking to improve air quality.

MR. HISER: Okay. Madam Hearing Officer, that's all I have for him right now. Thank you.

HEARING OFFICER ORTH: Thank you very much, Mr. Hiser.

Mr. Rose, do you have questions of Mr. Baca?

MR. ROSE: Yes, Madam Hearing Officer, just a couple of questions, I hope.

SURREBUTTAL CROSS-EXAMINATION OF MICHAEL BACA

BY MR. ROSE:

Q. Mr. Baca, when you discussed the ozone levels potentially in Rio Arriba County, you indicated that there was a monitored location, I believe, somewhere in the middle of the county. Could you explain where that is and who maintains that monitor?

A. Yes, that is the Coyote Ranger District in Rio Arriba County, and that is maintained by the New Mexico Environment Department.

Q. And are there other monitors in Rio Arriba or is that the only one?

A. That's the only monitor.

MR. ROSE: Okay. Thank you, Madam Hearing Officer. I have no further questions.

HEARING OFFICER ORTH: Thank you, Mr. Rose.

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Mr. Janoe?

MR. JANOE: No questions, Madam Hearing Officer.

HEARING OFFICER ORTH: Thank you.

Mr. Butzier?

MR. BUTZIER: No questions.

HEARING OFFICER ORTH: Thank you. Ms. Gutierrez?

MS. GUTIERREZ: No questions. Thank you.

HEARING OFFICER ORTH: Thank you. Mr. Neumann?

MR. NEUMANN: No questions. Thank you.

HEARING OFFICER ORTH: Thank you. And Ms. Witherspoon? She may have stepped away.

All right. I'm going to turn now to the Board members to see if they have any questions of Mr. Baca. While I'm doing that, if you are not a panelist and you have a question of Mr. Baca, please reach out to me in the Chat.

EXAMINATION BY THE BOARD OF MICHAEL BACA

HEARING OFFICER ORTH: Madam Chair, do you have questions of Mr. Baca?

CHAIRPERSON SUINA: Madam Hearing Officer, I don't have any questions at this time

HEARING OFFICER ORTH: Thank you. Vice-Chair Trujillo-Davis?

VICE-CHAIR TRUJILLO-DAVIS: I don't have any questions at this time. Thank you.

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HEARING OFFICER ORTH: Thank you. Member Cates?
BOARD MEMBER CATES: No questions. Thank you for asking.
HEARING OFFICER ORTH: Okay. Thank you. Member Bitzer?
BOARD MEMBER BITZER: Probably a real simple, real quick question. My municipal level of government work is really dated, but is -- is the -- is there a difference between an AQMD and the AQCR? The old air quality management district that I dealt with in Bernalillo County, is that different than the AQCRs that you're talking about now?
MR. BACA: Member Bitzer, Madam Chair and Madam Hearing Officer, yes, an air quality management district generally refers to a local air quality control agency, such as Albuquerque/Bernalillo, but that term is much more applied in California, where they have a lot of local air quality jurisdictions, which they call air quality management districts.
BOARD MEMBER BITZER: They had one in Bernalillo County back in -- they probably still do.
MR. BACA: We still do.
BOARD MEMBER BITZER: Yeah. Once you're under those, it's hard to get out. So, thank you. That's all I had.

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HEARING OFFICER ORTH: Thank you, Member Bitzer.
Member Garcia?
BOARD MEMBER GARCIA: Yes, Madam Hearing Officer, I have one quick question.
Mr. Baca, you mentioned that there's no monitor in Chaves County. Could you tell me, does the Department have a plan to put an ozone monitor in Chaves County?
MR. BACA: I do not believe so at this time. As I mentioned in my -- my testimony, the requirements for ozone monitoring are far exceeded in that area of the state. We have more than required monitors throughout the state.
BOARD MEMBER GARCIA: Thank you, sir. That's all.
HEARING OFFICER: Thank you. Member Honker?
MEMBER HONKER: I have no questions.
HEARING OFFICER ORTH: All right. Thank you very much.
Mr. Knight, did that line of questioning earlier raise any need to do redirect for you?
MR. KNIGHT: Yes, Madam Hearing Officer. I think maybe just one or two redirect questions, if I may.
SURREBUTTAL REDIRECT EXAMINATION OF MICHAEL BACA
BY MR. KNIGHT:
Q. Mr. Baca, now, is it true that Chaves County is in the air quality -- the same air quality control region that the Carlsbad air monitor is in?
A. Yes, it is. It's within the same control region as the Carlsbad and Hobbs monitor.
Q. And is it true that the Rio Arriba County is -- or at least a portion of Rio Arriba County or half of it is in the air quality control region -- the same air quality control region as San Juan County?
A. That is correct. The three monitors in San Juan County are within the same air quality control region as the oil and gas sources in Rio Arriba County. So if you'll remember, the Rio Arriba County at the Continental Divide is split east and west. And then on the west side of the Continental Divide is heavy oil and gas activity right along the San Juan border and really close to our Navajo Lake San Juan monitor.
MR. KNIGHT: Okay. Thank you. That's all the questions I have for this witness.
HEARING OFFICER ORTH: All right. Thank you. Is there any reason not to excuse Mr. Baca? No?
Thank you very much, Mr. Baca. As I understand it, other parties may or may not have questions once they've had a chance to look at amended Exhibit 4, but so far as I know, that would be the only reason to recall him based on the events of the last hour. So, thank you, Mr. Knight, for that.
Two things: We should -- we should adjourn for the day, I believe, but two things: One is a request from the Board of all parties, which is when you call your witness, if you would please as part of your calling that witness, or in the earliest remarks of that witness, identify the exhibits that represent their testimony and the other exhibits they'll be talking about. It helps those of us who are surrounded by boxes and scrolling through thousands of pages of documents that are on the screen. So please do that.
The other thing is, Ms. Katz, if you would, please, address the topics we're going to be able to cover tomorrow. We have just a little bit of public comment, so far as I can tell right now, at 9. And then, as I understand it, we're going to be leaping into modeling.
MS. KATZ: Yes, Madam Hearing Officer. That's the plan, and I believe all of the parties -- I haven't heard any issues with that. I believe all of the modeling witnesses are available tomorrow except for EDS witness and perhaps she can be -- she can put on her testimony Wednesday at some point. And so, yes, I think modeling, the -- so the economic analysis and the small business facility definition, so topics 5 and 6 need to go on Wednesday, and, hopefully, first thing in the morning

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because of our -- the Department's witness who is in the UK. So I think what I would propose would be we do the modeling and then we maybe move it down into some of the topics on 8, 9, 10, and some of those, and see what we get through.

HEARING OFFICER ORTH: Thank you for that, Ms. Katz. Mr. Hiser, I see you on screen. Do you have a comment?

MR. HISER: Thank you, Madam Hearing Officer. I just had a question -- actually two questions for you. The first is, the order's a little bit unclear, but is it your intent that we circulate surrebuttal materials in advance as well, or not? We just need to know for purposes of timing and planning.

HEARING OFFICER ORTH: Yeah, I think it would -- things would go more smoothly if you could -- you could do that.

MR. HISER: Okay.

HEARING OFFICER ORTH: Any -- any comment on that, Ms. Katz?

MS. KATZ: Yes, ideally -- yes, ideally, that would be better than not, if they're -- if they're prepared.

MR. HISER: I think that -- we certainly understand that there may be times that parties run into

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problems. I just was trying to understand the expectation of us as well, so that we knew when we needed to have things available.

And then the second question is somewhat related to that, Madam Hearing Officer, is that Mr. Rose was a bit flustered as were you during the discussion with his witness, Blewitt, and I don't know if we actually touched on all of the exhibits that were related to Mr. Blewitt's testimony for today. And so I just wanted to make sure that we had appropriately put the record together for that.

HEARING OFFICER ORTH: Yeah. So we can clear that up tomorrow. I'm looking at the wrong -- when we pulled up the wrong slide stack, it was confusing and I wasn't sure why I was confused. But let's --

MR. HISER: Thank you.

HEARING OFFICER ORTH: Let's clear that up when we next see Mr. Blewitt. I'll try to make a note of all of these loose ends.

MR. HISER: Thank you.

HEARING OFFICER ORTH: Is there anything else that we can discuss while we're together this evening before we adjourn?

Otherwise, we'll see you at 9:00 tomorrow morning. Again, I don't have a lot of public commenters

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at this moment, and then we'll -- we'll leap into the modeling and go from there. Thank you, all. Have a good evening.

(Proceedings adjourned 09/20/2021 at 6:18 p.m.)

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STATE OF NEW MEXICO
BEFORE THE NEW MEXICO ENVIRONMENTAL IMPROVEMENT BOARD
PROPOSED ADOPTION OF RULE 21-27 NMAC
RULES HEARING

REPORTER'S CERTIFICATE

I, THERESA E. DUBOIS, RPR, CSR #29, DO HEREBY CERTIFY that on September 20, 2021, the Public Hearing of the New Mexico Environmental Improvement Board, was taken before me, that I did report in stenographic shorthand the Proceedings set forth herein, and the foregoing pages are a true and correct transcription to the best of my ability.

I FURTHER CERTIFY that I am neither employed by nor related to nor contracted with (unless excepted by the rules) any of the parties or attorneys in this matter, and that I have no interest whatsoever in the final disposition of this matter.

THERESA E. DUBOIS, RPR
New Mexico CCR #29
License Expires: 12/31/2021

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