STATE OF NEW MEXICO

ENERGY, MINERALS AND NATURAL RESOURCES DEPARTMENT

OIL CONSERVATION COMMISSION

IN THE MATTER OF THE HEARING CALLED BY THE OIL CONSERVATION COMMISSION FOR THE PURPOSE OF CONSIDERING:	)	CASE NO. 12,897
APPLICATION OF THE NEW MEXICO OIL CONSERVATION DIVISION THROUGH THE ENVIRONMENTAL BUREAU CHIEF FOR THE ADOPTION OF AMENDMENTS TO DIVISION RULE 118 (HYDROGEN SULFIDE GAS)	)	

REPORTER'S TRANSCRIPT OF PROCEEDINGS

COMMISSION HEARING

BEFORE: LORI WROTENBERY, CHAIRMAN
JAMI BAILEY, COMMISSIONER
ROBERT LEE, COMMISSIONER

September 20th, 2002

Santa Fe, New Mexico

This matter came on for hearing before the Oil Conservation Commission, LORI WROTENBERY, Chairman, on Friday, September 20th, 2002, at the New Mexico Energy, Minerals and Natural Resources Department, 1220 South Saint Francis Drive, Room 102, Santa Fe, New Mexico, Steven T. Brenner, Certified Court Reporter No. 7 for the State of New Mexico.

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I N D E X

September 20th, 2002
Commission Hearing
CASE NO. 12,897

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E X H I B I T S

Division	Identified	Admitted
Exhibit 1	27	109
Exhibit 2	16	109

* * *

Gantner/NMOGA/IPANM	Identified	Admitted
Exhibit 1	157, 260	260

* * *

Prather	Identified	Admitted
Exhibit 1	232, 256, 258	258

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Additional submission, not offered or admitted:

	Identified
Letter dated 9-17-02 to Wrotenbery from Dueease	211

* * *

A P P E A R A N C E S

FOR THE COMMISSION:

STEPHEN C. ROSS
Assistant General Counsel
Energy, Minerals and Natural Resources Department
1220 South Saint Francis Drive
Santa Fe, New Mexico 87505

FOR THE DIVISION:

DAVID K. BROOKS
Attorney at Law
Energy, Minerals and Natural Resources Department
Assistant General Counsel
1220 South St. Francis Drive
Santa Fe, New Mexico 87505

FOR CONTROLLED RECOVERY, INC.:

HOLLAND & HART, L.L.P., and CAMPBELL & CARR
110 N. Guadalupe, Suite 1
P.O. Box 2208
Santa Fe, New Mexico 87504-2208
By: MICHAEL H. FELDEWERT

* * *

ALSO PRESENT:

MARY ANAYA
NMOCD

ROGER C. ANDERSON
Environmental Bureau Chief, NMOCD

RANDY BAYLISS
Hydrologist
Environmental Bureau, NMOCD

JACK FORD
NMOCD

(Continued...)

ALSO PRESENT (Continued):

EDWIN E. MARTIN
Bureau Chief
Data Information and Management Systems NMOCD

WAYNE PRICE
Environmental Engineer
Environmental Bureau, NMOCD

BRUCE A. GANTNER
Burlington Resources

DAN GIRAND
Mack Energy, IPANM

DICK MALONEY
Loco Hills Water Disposal

BOB MANTHEI
BP America

KEN MARSH
Controlled Recovery, Inc.

GENE MONTGOMERY
OXY Permian

JOHN PRATHER
PATRICIA PRATHER
Safety Consulting and Training
Hobbs, New Mexico

DEBORAH D. SELIGMAN
NMOGA

* * *

WHEREUPON, the following proceedings were had at 9:07.m.:

CHAIRMAN WROTENBERY: Well, thanks, everybody, for joining us here today. We can underway here, I think.

This is a special meeting of the Oil Conservation Commission to review some of the comments that we have received on the H_2S Rule, and we hope to spend a little time discussing some of those comments and some of the continuing concerns that have been expressed about the Rule as it exists in draft form.

And then we'll just have to see how it goes over the course of the day. We've gotten some written comments that were filed by the deadline on Wednesday, and then we're, I know, going to have some additional testimony today. We may get some additional exhibits for the record through that process.

After we hear from everybody, then I think we'll sort of see where we are and maybe open it up for some discussion of some particular issues and just see how far we get today, and then we can decide where we need to go from here.

We do have a regularly scheduled meeting next Friday, the 27th, and we had originally planned to take final action on the rule-making at that time. We may still be in a position to do that, but I think it's probably

premature to say until we've heard what people have to say here today.

Just for the record, I'll say it's ten after 9:00 on September 20th, 2002. We're in Porter Hall. All three Commissioners are present.

I think most everybody knows us, but just in case there's somebody who doesn't, I'm Lori Wrotenbery, I serve as Chairman of the Commission, also Director of the Oil Conservation Division.

To my right is Jami Bailey who represents Land Commissioner Ray Powell on the Commission.

And to my left is Dr. Robert Lee who's Director of the Petroleum Recovery Research Center at New Mexico Tech, also serving as Commissioner.

To Dr. Lee's left is Steve Ross, the Commission's counsel and the keeper of the draft Rule at this point. So he's go the working version of the Rule. Any changes that are made will be made to his version of the Rule from here on out. He's got his computer set up, and at some point during the day we may find it useful to project his draft on the screen and work from there.

Steve Brenner here will be recording the proceedings today.

And then of course, the far right is Florene Davidson, the Commission Secretary.

Now that we've introduced ourselves, let's see who all is here today. And if you would also note if you plan to make a statement or submit testimony today, I'd appreciate that.

MR. BROOKS: Madame Chairman, Honorable Commissioners, I'm David Brooks, Assistant General Counsel, Energy, Minerals and Natural Resources Division of the State of New Mexico, appearing for the New Mexico Oil Conservation Division.

We plan to make an evidentiary proceeding. We have two witnesses.

CHAIRMAN WROTENBERY: Thank you. And your two witnesses are -- ?

MR. BROOKS: Yes, would the witnesses each stand and identify themselves? Mr. Price?

MR. PRICE: I'm Wayne Price, the Oil Conservation Division.

MR. BAYLISS: Randy Bayliss.

CHAIRMAN WROTENBERY: Thank you.

And then we'll just start over here. Gene, do you want to introduce yourself?

MR. MONTGOMERY: I'm Gene Montgomery with OXY Permian from Houston, and I guess I may want to say something. I think Bruce is going to make the presentation for the NMOGA, but -- and I did send in some comments

through Bob Gallagher.

CHAIRMAN WROTENBERY: We've got those. We do have those, yes.

MR. GANTNER: Hi, I'm Bruce Gantner with Burlington Resources. I'm Manager of Environmental Safety. Not manager of noise, Bob.

(Laughter)

MR. GANTNER: Anyway, I will be presenting some testimony and have some exhibits representing a joint effort between NMOGA and the Independent Petroleum Producers of New Mexico, IPANM.

CHAIRMAN WROTENBERY: Thank you.

COMMISSIONER LEE: Mr. Noise and Water?

MR. ROSS: He's not Mr. Noise and Water.

CHAIRMAN WROTENBERY: He's not Mr. Noise and Water.

COMMISSIONER LEE: And water?

CHAIRMAN WROTENBERY: And what?

COMMISSIONER LEE: And water? We used to call him Mr. Noise.

CHAIRMAN WROTENBERY: Oh, but now he's water? And then we can say H_2S after today.

Okay, Dan?

MR. GIRAND: Dan Girand with Mack Energy and Independent Association of New Mexico. I might have

something to say, but maybe not.

MS. SELIGMAN: Deborah Seligman, New Mexican Oil and Gas Association, and I have all the people with me that need to be commenting.

(Laughter)

MR. MANTHEI: I'm Bob Manthei with BP America, and I'm out of southeast New Mexico.

MR. MALONEY: Dick Maloney, Loco Hills Water Disposal.

CHAIRMAN WROTENBERY: Thank you, Mr. Maloney.

Roger, do you want to start off --

MR. ANDERSON: Roger Anderson, New Mexico Oil Conservation Division. And for once, I plan to keep quiet.

CHAIRMAN WROTENBERY: We'll see how long that lasts.

(Laughter)

MR. PRATHER: I'm John Prather with Safety Consulting and Training out of Hobbs, New Mexico, and I've been very active with a committee, the ANSI Z-390 Committee, which has written the training criteria for H_2S, and we have some comments, if you'd like.

CHAIRMAN WROTENBERY: Thank you.

MS. PRATHER: I'm Patricia Prather with Safety Consulting.

CHAIRMAN WROTENBERY: Thank you.

Randy, you've already introduced yourself.

MR. MARTIN: Ed Martin with the Oil Conservation Division.

MR. FELDEWERT: Michael Feldewert with the law firm of Holland and Hart here in Santa Fe. We've submitted some comments on behalf of Controlled Recovery, Inc.

I'm not sure where we are with those comments. I'll just try and scan through the Division's comments to our comments, I guess, this morning. And so we may have a statement here today. We may need to present testimony, I don't know. It all depends on where we are with respect to the draft.

CHAIRMAN WROTENBERY: Okay.

MR. MARSH: Ken Marsh, Controlled Recovery Ops.

MR. FORD: Jack Ford, Oil Conservation Division.

MS. ANAYA: Mary Anaya, Oil Conservation Division.

CHAIRMAN WROTENBERY: Okay. Just so we cover the bases, would everybody who may present some testimony here today please stand and be sworn?

(Thereupon, the witnesses were sworn.)

CHAIRMAN WROTENBERY: Okay --

COMMISSIONER LEE: Roger can't talk.

CHAIRMAN WROTENBERY: -- so if I've got this right in terms of how we'll proceed here, we'll start with

the Division's testimony.

And then Bruce, would you be ready to step up at that point?

And then, I'm sorry, Mr. -- did you say Pri- --

MR. PRATHER: Prather.

CHAIRMAN WROTENBERY: Prather, okay. I'm sorry, I misunderstood. Mr. Prather, then you present your testimony.

And then Mr. Feldewert, if at that time you want to --

MR. FELDEWERT: Okay.

CHAIRMAN WROTENBERY: -- step up, you're welcome to.

Did I miss anybody? Does that cover everybody who wants to talk to the Commission today? I think so.

Okay, then we'll turn it over to Mr. Brooks at this point.

MR. BROOKS: Very good. Because Mr. Bayliss's testimony relates to an issue the significance of which needs to be explained in Mr. Price's testimony, I will call Mr. Price first.

Call Wayne Price.

Good morning.

MR. PRICE: Good morning. Good morning, Commissioners.

WAYNE PRICE,

the witness herein, after having been first duly sworn upon his oath, was examined and testified as follows:

DIRECT EXAMINATION

BY MR. BROOKS:

Q. Mr. Price, would you state your name, please, for the record?

A. My name is Wayne Price.

Q. By whom are you employed?

A. The New Mexico Oil Conservation Division.

Q. And in what office do you work these days?

A. I work in the Santa Fe office.

Q. And would you tell us your education and then chronologically your professional experience?

A. Okay --

CHAIRMAN WROTENBERY: Mr. Brooks, I'm thinking we already went through this in this same proceeding, and so we could --

MR. BROOKS: Okay, has the Commission accepted his credentials for purposes of this proceeding?

CHAIRMAN WROTENBERY: Yes, we have.

MR. BROOKS: Thank you very much, we will skip over those parts of his testimony.

CHAIRMAN WROTENBERY: I think everybody knows Mr. Price.

Q. (By Mr. Brooks) Mr. Price, were you heavily instrumental in the drafting of the proposed Rule which the Commission back in July requested the -- I mean the Division, the Oil Conservation Division back in July requested the Commission to adopt on the subject of hydrogen sulfide?

A. Yes, I was.

Q. Were you, in fact, the primary draftsman of that Rule?

A. Yes.

Q. Now, would you explain the background of how the Division's proposed Rule was evolved?

A. Okay, the OCD came up with a starting point or a basic Rule, and we formed a work group that comprised of members of industry, members of governmental agencies, and members that represented the public.

Q. Okay, were you the chairman of that work group?

A. Yes, I was.

Q. And can you tell us some of the organizations that were represented? I won't ask you to name the specific individuals, but some of the organizations that sent representatives to the work groups?

A. Right, there was the New Mexico Oil and Gas Association, there was the Independent Petroleum Association of New Mexico, there were three representatives

that represented the public from municipalities, there was the BLM, was on the work group, and the Department of Public Safety.

Q. Now, in some of the questions that I'm going to ask you, I'm going to ask about work group consensus, and I recognize that consensus means different things to different people. When I used to preside over trials and I wanted to get consensus of the jury on what time we adjourned in the afternoon, I used to say that it meant that the majority wanted to do it one way and that the minority that wanted to do it the other way didn't care too strongly. But -- And in a recent work group we had consensus defined, in effect, as unanimity.

Now, when I say consensus, when I ask you about consensus, what I'm going to mean by it is that a majority, more than mere bare majority, but a substantial majority, including one or more representatives from each major interest group that was involved. And by interest group I mean not necessarily each association but each industry, being one side, the municipalities, et cetera. So I'm talking about a substantial majority, not a mere bare majority, but not necessarily every individual.

Do you accept that definition of consensus?

A. Yes, I do.

Q. Okay. So when I ask you whether or not the work

group reached consensus on a particular point, we will all understand that it's used in that sense?

A. Yes.

Q. Very good. And honorable Commissioners, what I plan to do is to go through the Rule subsection by subsection and ask Mr. Price to explain the Division's comments which have been filed.

However, since a very large number of the Division's comments relate to a particular issue, I'm first going to ask -- we're first -- which is the issue of the threshold or trigger level at which various requirements apply, I'm first going to present a chart of that so that the Commissioners will have it in front of them, and it will be up on the screen while we to through the individual items.

Mr. Price, I will ask you to identify what has been marked as OCD Exhibit Number 2.

A. Yes, OCD Exhibit Number 2 is a chart that compares the Environmental Bureau recommendations that we're going to have here today and compares it to the Commission's present draft that's in front of us.

Q. Now, Mr. Price, up in the upper left-hand corner it says H_2S Threshold Chart. Explain to the Commissioners what you mean by the term "threshold".

A. Okay. Throughout the OCD-proposed rules, or

Rule, there are a number of trigger levels or thresholds, just -- I'd like to call them, that require different actions to be taken. And so at the top of the chart you will see we have listed the thresholds that you will find in the Rule, and I'll just go across the top from left to right.

If you have an H_2S that's equal to or greater than 100 parts per million in the system, that would be a threshold.

If you have -- We had one instance or one part of the Rule that pertained strictly to tanks. If H_2S was equal to or greater than 300 parts per million in tanks, then that was another threshold.

And we had, if the PHV -- which is defined as a potentially hazardous volume -- if we had a PHV that generated 500 parts per million of radius of exposure, and that radius of exposure included a public road, then that is a threshold. We had another threshold that is a PHV of 100 parts per million radius of exposure. If that radius of exposure included a public area, that would be another threshold.

And then we had another threshold that -- a quarter mile within a public area. That's a very specialized one that we'll talk about at the end, and I'll try to explain how that comes in.

There is another threshold that's in our Rule that I did not list -- it appears that it very seldom would be used -- and that would be the threshold of 100 parts per million radius of exposure if it exceeded 3000 feet. And the reason I left it off of this chart is, once again, it seldom comes into play.

Q. Well, but actually that's somewhat duplicative, is it not? Because if the 100-parts-per-million radius of exposure equals to or exceeds 3000 feet, then by definition of potentially hazardous volume, you have potentially hazardous volume, correct?

A. That is correct.

Q. So that's part of the definition of a potentially hazardous volume?

A. Yes, it is.

Q. Okay. Now, I want to concentrate on three of those columns, because the other two don't have many X's in them, and there's not a lot of point in spending a lot of time with columns that don't have a lot of X's in them.

The 100 parts per million in the gas stream, the first -- column one, or I guess it's -- you number lines and head columns with letters, so that's going to be column B, because column A is the left-hand column. Column B there -- Column D, the PHV column, 500 parts per million ROE and the PHV 100 p.p.m. ROE, and I want you to -- We

went over this last time, but just so everybody understands the way this chart is constructed.

When we say 100 parts hydrogen sulfide, greater than or equal to 100 parts per million, what we're talking about is the volume measured in the gas stream, correct?

A. That is correct.

Q. And that's just a measurement of the concentration of whatever is there, regardless of how much there may be there, correct?

A. That is correct.

Q. And it also does not depend on where the facility is located? The facility may be anywhere?

A. That's correct.

Q. Okay. Now, the PHV is determined by a mathematical formula based on if the entire volume -- or if a leak equal to the volume and concentration measured in the gas stream were to occur, what would be the area that would be affected by that -- by a given concentration?

A. That would be the radius of exposure.

Q. Right. Now, if a facility has 100 parts per million in the gas stream, it is capable of -- well, let's --

A. Let me back up on that. I answered that as radius of exposure. It also would be defined as area of exposure too.

Q. Correct, that is correct.

Now, every -- well, let me say it -- I'm getting confused. If a facility does not have 100 parts per million in the gas stream, then even if its entire gas stream were venting, it would not generate 100-parts-per-million radius of exposure, correct, according to the formula?

A. Well, that's right, if -- well, first of all, if a facility has less than 100 parts per million in the gas stream, it would be exempted from this Rule.

Q. Well, I understand, but I'm trying --

A. All right.

Q. -- I'm trying to understand how these various thresholds interrelate. And if it has less than 100 parts per million in the gas stream, it could not under the formula generate a potentially hazardous volume, because there would be no 100-parts-per-million radius of exposure, right? By virtue of the way the formula works?

A. That's correct.

Q. Okay. But if it has 100 parts per million in the gas stream, it might generate a potentially hazardous volume?

A. That is correct.

Q. So we can't necessarily say that a potentially hazardous volume is greater than 100 parts per million in

the gas stream?

A. That's correct.

Q. However, some facilities that have 100 p.p.m. in the gas stream would not generate a potentially hazardous volume, correct?

A. That's correct.

Q. And that might occur for two reasons. One would be because they're so far from a public area or a public road that they simply would not generate -- those installations would not be within the radius of exposure, correct?

A. That's correct.

Q. And another reason might be that there was insufficient volume; while there was more than 100 parts per million concentration in the gas stream, there was not sufficient volume to generate a 100-parts-per-million radius of exposure, even if it were leaking out, correct?

A. That's correct.

Q. So to talk in terms of set notation, the set of all facilities that have 100 p.p.m. in the gas stream includes the set of all facilities that have a potentially hazardous volume?

A. True.

Q. But not the other way around?

A. But not the --

Q. There are some facilities that have 100 parts per million in the gas stream that do not have a potentially hazardous volume; is that correct?

A. That is correct.

Q. Okay. Now, the 100 parts per million -- I'm sorry, the potentially hazardous volume is defined by two different criteria. One is the 500-parts-per-million radius of exposure, and one is the 100-parts-per-million radius of exposure, correct?

A. Yes.

Q. Now, which one is wider?

A. Okay, the 100-parts-per-million radius of exposure would always be the larger one.

Q. Okay, but because there are a lot of areas where there are roads but there aren't any public areas, it's entirely possible that even though the 500-parts-per-million radius of exposure is smaller than the 100-parts-per-million radius of exposure, it's entirely possible that there might be a road within the 500-parts-per-million radius of exposure, but there might be no public area within the 100-parts-per-million radius of exposure, even though that radius of exposure is wider?

A. Yes.

Q. Okay. But if, since there are usually public roads around habitations, businesses, churches, et cetera,

it's fair to say that if there is a public area within the radius of exposure, there is always going to be a public road within the radius -- virtually always going to be a public road within the radius of exposure; is that right?

A. I would think that's fairly accurate.

Q. There's a possibility that that might not be true, but it would be just coincidental if --

A. Yes.

Q. There might be a habitation that was --

A. Right.

Q. -- in the middle of a --

A. Right.

Q. -- large private tract, but -- Okay.

Now that we've explained those concepts --

CHAIRMAN WROTENBERY: Although there might be a public area in the 100-part-per-million radius of exposure but not be a public road in the 500-part-per-million radius of exposure. You've got different --

THE WITNESS: That's true.

CHAIRMAN WROTENBERY: -- threshold levels, so --

THE WITNESS: Right, that is true.

MR. BROOKS: That is true.

Q. (By Mr. Brooks) Okay, now what do you mean by the term "threshold"? I think I asked you that, did I not?

A. Well, it's -- you can consider it a trigger

level, an action level. It's a level that requires you to perform certain actions pursuant to our proposed rules.

Q. And when I have used the term "trigger level" in the Division comments and the term "threshold level" is used in the chart, do those mean the same thing?

A. They do.

Q. Okay. Now, would you explain how the chart presentation works?

A. Okay, if -- Steve, if I could get you to scroll down to where we could see the footer, the notes in the footer -- Okay, I'd like to point out I have some footnotes here. D stands for drilling, completion, workover. P stands for production facilities in general, downstream facilities. X and C, I'd like for everyone to concentrate on X and C.

X is OCD Environmental Bureau's recommendations that we're presenting here at this hearing, and it also is basically the same as what the original H_2S work group had proposed.

And C is the Commission's present draft. And then I'll talk about that -- the double asterisk a little bit later.

Now, if we could scroll back up to the top. I'd like to start off with, for example, the Personal [*sic*] Protection and Training, and look on that line or row, and

let's just kind of go across here. Any time you see --

Q. Excuse me, that's personnel --

A. I'm sorry, Personnel Protection and Training. And also if you go across here and you see an X and if you see a C together, that means that the comparisons between the two -- between the proposed recommendations we have here today and the Commission's present draft are basically the same, or they're in agreement. And so anytime you see an XC, there's basically no change between the two.

Now, if you go down under "H_2S Threshold Chart", and one of the items, I'd like for you to look at the API Standards. If you find the API Standards -- and I wish I had my little --

Q. -- pointer?

A. -- pointer, but I don't. I could get up there and point out. Would that be better or --

CHAIRMAN WROTENBERY: That would be just fine.

THE WITNESS: Yeah, let me do that.

Okay, anytime you see an XC here, that means both the Commission-proposed -- or present Rule, and then X is the proposed working-group draft, are basically --

Q. (By Mr. Brooks) Now, present draft.

A. The present draft.

Q. Not present Rule.

A. Present draft, I'm sorry.

Q. Right.

A. The present draft is the same. Now, if you come down -- and I just want to pick one here to show you -- to learn how to read the chart. If you key in on the API Standards here, for example, then you notice that when you have a threshold of anything greater than 100 parts per million, then the work group and the -- what we're recommending today would be recommended by us, but not by the Commission's present draft.

So that's what you look for. If you see an XC, there's basically no change. If you see an X, an X means that the recommendations that we're bringing forth today were recommended for this threshold.

And for example, if -- Steve, if you'll scroll up, I'll show you one where it goes the other way.

Here we have -- for Secondary Well Controls, here we have under the 100 parts per million, a public area, both the Commission's present draft and the recommendations we have here today agree. But under the PHV of 500 parts per million, the Commission's present draft would require secondary well controls, but our work group did not make that recommendation.

And so that's kind of how you read the chart. I will say, the double asterisk is something a little bit different with fencing. It's a little bit complicated, and

I'll try to get to that in the end.

So the chart is fairly simple to read. If you see XC, that means they agree. If you see an X, that means that was a recommendation that was made by the work group, but the latest Commission -- or the present Commission-proposed draft does not agree with that.

And so just a -- It's a comparison chart, and it tries to give -- I'm trying to give everyone an idea of how the two -- It's a very complex Rule, and so I'm trying to give everyone a general idea of what is in agreeance and what is not.

Q. Okay. Now, I'll also ask you to identify at this time, and then we're going to go through it, but identify for us OCD Exhibit Number 1.

A. Okay, OCD Exhibit Number 1 are the Comments to be Submitted to the OCC Concerning Hydrogen Sulfide draft Rule at this hearing, it's Case Number 12,897.

Q. Whose comments?

A. It's the OCD's comments.

Q. Now, these were co-authored by you and me, were they not?

A. Yes, they were.

Q. And of course the information is primarily yours, because as you can testify I don't understand these engineering matters, correct? They're too complicated for

a lawyer.

Okay, let us look -- let us talk, then, about going through the Rule subsection by subsection, and I call the attention of the Commission to the areas where the Division would like to see changes made in the draft that's -- and when we refer to the present draft, we're talking about the draft of August 30, 2000, that was sent to the Division by Commission counsel with a request for the Division's comments.

We are requesting some changes, and we begin with Subsection B, which is the section with regard to Applicability.

You have suggested that an opening sentence that was included in the previous Division draft be reinserted. And for the benefit of everybody, so they will know what that is -- it's not present in the -- of course, in the draft, nor is it in the comments. So I will read that into the record.

The sentence we're requesting to be reinserted reads, "This section provides for public safety in areas where hydrogen sulfide gas may exist in concentrations greater than 100 parts per million or in a potentially hazardous volume."

Now, would you explain why you believe that sentence should be reinserted?

A. Well, somewhere along the drafting process and changes and so forth, the 100 parts per million somehow or another was taken out, I think inadvertently.

We know that the 100 parts per million is the major -- is the first threshold step that we have, and if you have 100 parts per million in the gas stream, then certain things could and should happen. And it's prudent to put it right up front, rather than to put it in language further down in the Rule, because if it's right up front and then someone can immediately pick up the Rule and within a couple subsections determine if the Rule applies to them or not. Otherwise, they have to go through several sections of the Rule to make a determination whether that Rule is going to apply, and that 100 parts per million is the threshold.

If you have 100 parts per million in your system, then -- or greater, then the Rule would apply to you. If you don't, then the Rule doesn't apply to you.

Q. Okay. Now, substantively that's still true under the present draft, correct?

A. That is true.

CHAIRMAN WROTENBERY: May I ask some questions here, because I think you said something that's not quite true.

THE WITNESS: Okay.

CHAIRMAN WROTENBERY: You said if you have less than 100 parts per million H_2S in your system, the Rule does not apply to you. There are some provisions in the Rule that require to make a determination about whether you have 100 parts per million in your system or not --

THE WITNESS: Absolutely correct, Commission, that -- notwithstanding the determination part of the Rule. I'm sorry about that. That is correct.

CHAIRMAN WROTENBERY: Okay.

THE WITNESS: Yeah.

CHAIRMAN WROTENBERY: And that may explain it. It was not an inadvertent omission; it was stricken because it created some confusion. And however it's drafted, you wouldn't want somebody reading that first sentence of the Rule and then putting it down because they think it doesn't apply to them when, in fact, there are some provisions later that would require them to do some testing or analysis --

THE WITNESS: Yes.

CHAIRMAN WROTENBERY: -- to make a determination about the hydrogen sulfide content of their system.

THE WITNESS: Yes, Subsection B of both of the proposed Rules require a person to do a determination to see if they have the 100 parts per million; that is absolutely. And maybe that should be up front also. I

don't know at this time.

Q. (By Mr. Brooks) In proposing reinsertion of this opening sentence, you are not -- or the Division is not proposing any substantive change in the Rule as the Division understands it, correct?

A. That -- well, we're proposing -- The way you read it is what we're proposing.

Q. Well, but you're proposing that merely for purposes of clarification --

A. Yes.

Q. -- you do not intend to change the substance of the rule; is that --

A. That is absolutely correct.

Q. Okay.

A. Yeah.

Q. In terms of applicability, the Commission counsel has raised a question about the application of the Rule to pipelines. What do you understand to be the application of the Rule to pipelines?

A. Well, my understanding, the intent is to cover pipelines.

Q. And do you believe that the present Rule as drafted, both the present draft and the Division's recommended draft, in fact do so?

A. I think we had some language changes there.

Q. Well, we do have. I'll get to that in a minute. But in terms of the applicability section, do you believe they --

A. Oh, yes, right.

Q. Now, many pipelines -- probably the largest -- the most familiar group of pipelines is the transmission lines, and they do not normally have hydrogen sulfide in their stream, correct?

A. That is correct.

Q. But there are some pipelines that do, correct?

A. Yes, there are some high-pressure -- intermediate or medium-pressure sour gas lines that are prevalent in the oilfield that do have some high H_2S concentrations, and it's our intent to cover those.

Q. Now, we believe that the pipelines should be covered by the determination and preparation, if applicable, of contingency plan requirements, correct?

A. That is correct.

Q. And we believe they are under the present draft?

A. Yes.

Q. Now, a specific change is made with -- or is being recommended in our comments with regard to Subsection F, Signage, that relates to pipelines, and even though that's another subsection I will go ahead and deal with that now. I call your attention, then, to the last

paragraph on page 3 of the Division's comments.

A. The present --

Q. The Division's comments --

A. Oh, the Division's comments, okay.

Q. -- Exhibit 1.

A. Okay.

Q. Subsection F.2 has a requirement for signs to be placed wherever a flow line or gathering line crosses a public road, correct?

A. That is correct.

Q. Now, do you believe there's some ambiguity as to whether or not that applies to some pipelines that might not be characterized as flow lines of gathering lines?

A. Yes, I believe there is.

Q. And what is it that we recommend in that regard?

A. Well, I think by just adding the words "or other pipeline" would cover that.

Q. Okay, it would still not apply to long-distance transmission lines, because they would not meet the 100-parts-per-million threshold, right?

A. After they make their determination.

Q. Right. Okay, thank you.

A. Right.

Q. Now, Subsection --

CHAIRMAN WROTENBERY: Before you leave -- Are you

about to leave the pipeline --

MR. BROOKS: No, I was going to go into the applicability of Subsection H to pipelines.

Q. (By Mr. Brooks) In Subsection H there are a number of specific requirements, and those requirements apply, under the title, to Crude-Oil Pump Stations, Producing Well, Tank Batteries, and Associated Production Facilities, Refineries, Gas Plants and Compressor Stations. Right?

A. Correct.

Q. Now, there's nothing in that title about pipelines?

A. That is correct.

Q. Unless they're associated production facilities, which a gathering line might be said to be, but it's ambiguous, right?

A. That is.

Q. Okay. But was it the intention of the Division that these requirements with regard to fencing -- that this requirement -- that the requirements in that section which relate to fencing, wind-direction indicators, automatic shut-down valves -- was it the intention of the Division that those requirements apply to pipelines?

A. No.

Q. And why not?

A. Well, it would just be virtually impossible to fence every pipeline in the oilfield. I mean, it --

Q. And because a pipeline may go for miles --

A. If we're going to do that, I'm going to get in the fencing business.

(Laughter)

Q. (By Mr. Brooks) And because a pipeline may go for miles, if we have them to have wind-direction indicators they'd have to have them every little way, right? And --

A. That's correct.

Q. And you don't believe that's appropriate --

A. Well, it's not --

Q. -- or necessary?

A. -- practical or appropriate.

Q. Okay. Now, the API standards really should apply to pipelines, shouldn't they?

A. Yes.

Q. But the present does not -- at least does not unambiguously apply them, correct?

A. That is correct.

Q. Okay. So even though we haven't really addressed that in our comments, we would certainly not take offense if the Commission were to add a sentence saying that the API standards as set forth in Paragraph H.1 should apply to

pipelines as well as to the facilities --

A. Right, right.

Q. -- named in the title? Okay.

MR. BROOKS: Any other questions, Madame Chairman? You indicated you might have some more questions about pipelines.

CHAIRMAN WROTENBERY: Okay, I just want to make sure I understand. You're suggesting that of the provisions in Subsection H, the only one that you would consider applicable to pipeline would be Subsection 1 --

MR. BROOKS: Paragraph H.1.

CHAIRMAN WROTENBERY: -- Paragraph H.1, the paragraph concerning the API standards?

MR. BROOKS: That is correct.

CHAIRMAN WROTENBERY: Okay. May I ask another question about signs --

MR. BROOKS: Please do -- Oh, yeah.

CHAIRMAN WROTENBERY: -- as they apply to pipelines?

MR. BROOKS: Yes.

CHAIRMAN WROTENBERY: You've suggested that this should -- this last sentence of Paragraph F.2 should read, "a sign shall be placed at each point where a flow line, gathering line..." I'm trying to find your language, and I've lost it here.

MR. BROOKS: It's on page 3.

CHAIRMAN WROTENBERY: "...or other pipeline..."

MR. BROOKS: Okay.

CHAIRMAN WROTENBERY: "...crosses a public road."

MR. BROOKS: Correct.

CHAIRMAN WROTENBERY: What is it about a road crossing that necessitates a sign when, say, just a pipeline running along a road would not necessitate a sign, or a pipeline in any other area would not necessitate a sign?

THE WITNESS: Well, Number one, the highway or county road department, which normally maintains those roads, they certainly need to know where pipelines are located, because a lot of -- most of the utilities are run along the roads, highways. And so therefore it's prudent, every time they cross those, is to have some sort of marker there.

Otherwise, they could dig into them, and if they're not identified they could certainly dig into them and cause a problem.

CHAIRMAN WROTENBERY: Okay, so you've got this sign at the crossing point. What about a pipeline that runs along the road, it does not cross it?

THE WITNESS: We have not put that language in there.

CHAIRMAN WROTENBERY: And what was your thinking?

THE WITNESS: I'm not sure, Commissioner. We might have missed that. However, I'm not sure how you would practically do that. You could start where the pipeline starts or maybe where it ends or put, you know, some sort of intermediate marker in there.

That's a good point, and we might have overlooked something there.

COMMISSIONER BAILEY: Okay.

MR. BROOKS: You would not be --

CHAIRMAN WROTENBERY: Mr. Gantner, I might ask you about that particular issue as well.

Q. (By Mr. Brooks) You would not be offended if the Commission were to insert such a requirement, I take it?

A. Well, I wouldn't be.

(Laughter)

Q. (By Mr. Brooks) But I gather you can't speak for the work group, because the work group did not address that question; is that right?

A. I believe that's correct.

Q. Okay. There have been some comments directed to the applicability of the Rule to waste disposal or waste-treatment facilities that are regulated under the existing OCD Rule 711?

A. Yes.

Q. Both the Division's draft and the proposed draft have treated such facilities differently from other facilities regulated by OCD, even though the two drafts treat them differently, but they both treat them differently from other facilities, correct?

A. Let me back up here. I remember in my last testimony, the original intent was for us to cover all facilities. There was some questions raised about surface waste management facilities, and it was our intent to clarify that language.

Q. Okay. Well, the OCD filed an amendment to its original proposal, did it not?

A. Yes, it did.

Q. And in that amendment proposed to exempt surface waste management facilities from the present Rule, correct?

A. That is correct.

Q. Or, I'm sorry, from the proposed Rule?

A. From the proposed Rule, that is correct.

Q. Now, the surface waste facilities are subject to a permit, they're required to be permitted by OCD, correct? Under Rule 711?

A. Yes, that is correct.

Q. And the permits that are issued to the existing surface waste facilities pursuant to the authorization of Rule 711 contain requirements that are more stringent than

those set forth in the proposed Rule in many cases, do they not?

A. They certainly contain requirements concerning H_2S.

Q. And those requirements may require things that are not required in this proposed Rule?

A. That is correct.

Q. And is there a reason why that is true?

A. Yes, there is.

Q. Would you explain it to the honorable --

A. Surface waste management facilities have the ability, an intermittent ability at times that you never know when it could happen, is that they could generate H_2S by virtue of mixing a certain waste that could possibly go anaerobic or through physical/chemical reaction could cause H_2S, and the generation -- that H_2S certainly could cause some problems, safety problems, and even possibly public health problems.

And the biggest problem is that you cannot anticipate or calculate when that's going to happen. There's not a formula out there that would do that for you.

Q. This rule --

COMMISSIONER LEE: Excuse me, name one condition that can generate H_2S in a very, very rapid manner.

THE WITNESS: Well, if you have produced water,

let's say, in a disposal tank or pond, and then you have a load of acid that comes in and you dump a load of acid -- or H_2S-laden mud, and actually there's been some fatalities where this has happened, worker fatalities -- and you actually mix those, in that chemical reaction you'll have a release of some high quantities of H_2S.

COMMISSIONER LEE: I thought your concern for the facilities' long-term health -- if you say they can produce the H_2S like this, then shouldn't it be treated the same as the other wells?

THE WITNESS: Well, the problem is, Commissioner Lee, is, there's --

COMMISSIONER LEE: You see, you're talking about -- as far as I know, for the waste treatment facility your worry is for the long-term health. If you worry about short-term health and then you say you've excluded them, then the whole Rule is for the short-term. They why do you want to exclude them?

THE WITNESS: Well, under our present recommendation we would not be excluding them.

COMMISSIONER LEE: You're not?

THE WITNESS: No, we were not --

COMMISSIONER LEE: But your scenario for them is for the short term, it's not for the long term? You see, there's some ambiguity here.

THE WITNESS: Right. I might have to refer to Roger Anderson on this issue. Roger is probably --

COMMISSIONER LEE: You didn't swear him, he cannot talk.

(Laughter)

COMMISSIONER LEE: So I just bring it up because you have to be consistent. If you have to --

THE WITNESS: Yeah.

COMMISSIONER LEE: -- regulate it, that's fine. But you think about it, this whole rule is for the emergency, for the well -- They have a blowout, and you have some plan for this, right? And I think industry will accept that.

But if you say that you have excluded the waste treatment, the waste treatment, your example to me is for the sudden, very fast --

THE WITNESS: Yes.

COMMISSIONER LEE: -- H_2S.

THE WITNESS: Yes, that's correct.

COMMISSIONER LEE: I'm more worried about a long term. If you say it's long-term, then you can exclude them. If you say it's a short-term effect, then why should you exclude them?

THE WITNESS: We wouldn't be excluding them --

COMMISSIONER LEE: I think --

THE WITNESS: -- under the -- under our proposed regulations.

COMMISSIONER LEE: Well, this Rule is not applying to them, as far as --

MR. BROOKS: Commissioner, the intent of our comments, what -- We've been through several stages here. The first Rule had no reference to -- no specific reference to these facilities at all. And then we amended our proposal, our first proposal. Then we amended our proposal to say we exclude them.

The reason we amended our proposal to exclude them is that we believe they were already regulated under Rule 711.

Then in the 8-30 draft that we're working from now, they're not excluded but there is a specific provision that this Rule does not pre-empt the existing Rule -- or permit regulation under Rule 711.

We're happy with that, we want to keep it that way, but some of the public comments have indicated they wanted to know why we continue our existing regulation under Rule 711, which may be more stringent upon those facilities than this regulation, and we are addressing this testimony to that point. That is, why these facilities -- not why they should be exempted from this Rule, but why they should also be subject to more stringent Rules under

their permits as issued under existing Rule 711.

COMMISSIONER LEE: I don't think you've convinced me.

MR. BROOKS: Well, the point is that if this Rule were adopted and we have these facilities that are out there, they're operating, they have permits, Rule 711 authorizes us to impose permit conditions relating to H_2S. We have done so. Those permit conditions might require the facilities to do things that this Rule does not require them to do.

COMMISSIONER LEE: But they would like to have this Rule.

MR. BROOKS: Well, they'll be subject to this Rule also, but they may also be subject to more stringent conditions that are in their permits. We think that should be continued.

We think that if the permit requires them to do things that this Rule doesn't do, that they should not be allowed to argue that by adopting this Rule we have, without reference to our existing Rule 711, repealed the existing Rule and its permit conditions insofar as they relate to H_2S management at waste management facilities.

COMMISSIONER LEE: This Rule is for the well. If you have a sudden accident, then what are you going to do? Is that true?

MR. BROOKS: That's correct.

COMMISSIONER LEE: And the 711, you're excluding the waste treatment facility?

MR. BROOKS: At one point we did propose to exclude the waste treatment facilities. We're not making that proposal now, today.

COMMISSIONER LEE: Oh.

MR. BROOKS: We're only making the proposal that this Rule specify that it does not preclude OCD from exercising its existing authority under Rule 711 to make specific requirements applicable to these facilities, in addition to and more stringent than the rules contained in the proposed Rule.

COMMISSIONER LEE: So they still have to follow this Rule?

MR. BROOKS: That is the way under the present draft as we understand it, and we like that.

COMMISSIONER LEE: Okay.

CHAIRMAN WROTENBERY: The Commission is going to have to decide how to approach the H_2S that is either brought into or generated at Rule 711 surface waste management facilities. We're going to have to decide, based on everything that we hear, and we've got several options, I'd say.

I'll note that the purposes of the two Rules are

different, just as you've highlighted. The Rule that we're talking about today is designed to prevent harm to the public from sudden releases --

COMMISSIONER LEE: Yes.

CHAIRMAN WROTENBERY: -- of H_2S. That is the purpose of that Rule.

COMMISSIONER LEE: All right.

CHAIRMAN WROTENBERY: The Rule 711 provisions are there to protect public health --

COMMISSIONER LEE: Right.

CHAIRMAN WROTENBERY: -- from H_2S that might be brought into or generated at surface waste management facilities.

And it may or may not be that you need to address the surface waste facilities in both Rules. We've got to decide whether the current provisions in Rule 711 are adequate to address the public health issues and public safety issues together.

I think the staff's recommendation at the last hearing, or following the last hearing, was based on their conclusion at that time that if the surface waste management facilities complied with the permit conditions under Rule 711, there wasn't a need to address them under this Rule. I don't know if that's still the thinking of the staff.

Mr. Price, can you comment on that?

THE WITNESS: Well, no, I just want to agree with what Mr. Brooks just said, is that -- is, our intent is to have this Rule cover all facilities and, notwithstanding the fact that Rule 711 also puts additional requirements on there, and we did not want this Rule to undermine that, so --

CHAIRMAN WROTENBERY: May I rephrase my question --

THE WITNESS: Yes.

CHAIRMAN WROTENBERY: -- and ask you to answer it? You have stated that you wouldn't object, or Mr. Brooks has stated that you wouldn't object if surface waste management facilities were covered under this Rule?

THE WITNESS: Right.

CHAIRMAN WROTENBERY: I'm still trying to understand whether you think there is a need to cover surface waste management facilities under this Rule if they are already covered under Rule 711 and the permits issued under Rule 711.

THE WITNESS: Oh, I definitely think they should be covered under this Rule.

CHAIRMAN WROTENBERY: Okay. What hazard is it that is addressed under this Rule that is not addressed through the permit conditions of Rule 711?

THE WITNESS: One of the things is that these type of facilities can have tanks, and these tanks can have high levels of H_2S in the tank. And we have a specific tank provision that requires certain safety practices for those tanks.

CHAIRMAN WROTENBERY: Okay.

THE WITNESS: So if they would not be covered under this Rule, then we would have a facility out there that could have possibly hazardous levels of hydrogen sulfide in the tank, but they wouldn't be covered under the Rule, and they wouldn't have to enact the provisions that we put in this Rule.

CHAIRMAN WROTENBERY: Okay. So you had recommended at one point that the facilities be excluded from this Rule, but on further consideration you think that surface waste management facilities should be covered under --

THE WITNESS: Yes, I do.

CHAIRMAN WROTENBERY: -- this Rule?

THE WITNESS: Yes.

COMMISSIONER LEE: So this waste treatment, it's under this Rule and also has to under 711, and we are going to revisit the 711 later, in the future, right?

THE WITNESS: Yes, that's...

COMMISSIONER LEE: Thank you.

THE WITNESS: Thank you.

Q. (By Mr. Brooks) Okay, let us move on. The change recommended in Subsection E that's covered on page 2 I'm not going to ask Mr. Price about, because that is merely a language change based on what we believe the present draft language intended. It is a response to some public comments that found some of the language confusing, and we're suggesting a revision of that language. That is my suggestion and not Mr. Price's so I will not ask him about that.

When I say it's not Mr. Price's suggestion, I don't mean to suggest he disagrees with it. You don't disagree with it, do you?

A. No, I do not.

Q. Okay. Subsection F which deals with sign requirements, page 3 of the comments, we've talked about the third paragraph on that page. Other than the change of language as to the pipeline requirements that we've already discussed, do you disagree with any of the signage requirements that are set forth in Subsection 5? With what is in there, not with what is not in there?

A. No, I do not.

Q. Okay. Now, what you think should be in there that isn't doesn't relate to signs, correct?

A. That's correct.

Q. Okay. Now, this goes back to the issue of thresholds, right?

A. Right.

Q. Mr. Ross was kind enough to explain to us why he created a new Subsection F here, and his explanation was, because that signage area was triggered by the presence of 100 parts per million, whereas other requirements have higher thresholds, correct?

A. Correct.

Q. And you believe that from a regulatory standpoint that should not be the case, correct?

A. That's correct, it should not be.

Q. Okay, you would like to see some of the requirements in Subsection G and Subsection H, some of the operational requirements somehow specified, whether they're moved within the Rule, or whether the language -- other language is changed, somehow specified that they also are triggered by the threshold level of 100 parts per million in the gas stream, correct?

A. Yes, that is correct. And the reason, to build upon that, is that that's what the work group had also agreed upon.

Q. Okay. Well, now we're going to go into that whole issue in regard to Subsection G, which is the drilling well provisions. I have attempted to group the

items, but what I am going to ask you to do at this point is to go through and explain by reference to the chart which requirements under the drilling well section should be moved, in your opinion and in the Division's opinion, from the third column there over to the first column.

A. Okay. Number one, looking at the chart, the API standards, the way the present --

Q. Well, just tell us which items --

A. Okay.

Q. -- and then we'll go back and go over these.

A. All right, the API standards. And then Minimum Standards, it says Egress Route; Safety, Detection and Monitor Equipment; Wind Indicators; Flare Systems; Mud Program; Well Testing; Fencing and Gates.

Q. Okay. Now, Fencing and Gates is in Subsection H, so we'll discuss that under Subsection H. But first of all, I want to call the attention of the Commission to the fact there's actually one omission in the chart, as you and I determined, because there's some -- as you and I determined this morning.

If you look at line 1 up at the top of the chart where it says Personnel Protection and Training -- would you scroll up just a tad there, Steve? Thanks. -- the chart indicates that Personnel Protection and Training is required at 100 parts per million?

A. Right.

Q. But didn't you and I find that that's not totally true when we went over the Rule this morning?

A. Yeah, the Personnel Protection and Training actually refers to Subsection I, is what --

Q. Right.

A. Yeah.

Q. And the Personnel Protection and Training provision in Subsection I, I will read for the record: "All persons responsible for the implementation of any hydrogen sulfide contingency plan shall be provided training in hydrogen sulfide hazards, detection, personal protection and contingency procedures."

That does not, at least does not unambiguously, refer to operating personnel at the facility; is that correct?

A. That is correct.

Q. Okay. Now, there is a training provision included in the opening paragraph of -- well, let's see, where is it? Oh, there is a training provision included in --

A. That would be --

Q. -- Subparagraph 2.a of Subsection G --

A. Yes.

Q. -- and that training provision -- what is the

threshold level for that training provision?

A. Under which -- under --

Q. Under the Commission's proposed draft of 8-30-02.

A. Well, if you look at the minimum standards, under the present Commission draft is that the minimum standards would -- it's my interpretation the minimum standards would only apply if there was a PHV or potentially hazardous volume present.

Q. Okay, so at least one arguable reading of the present draft is that H_2S training for operational personnel on the site is only required if a PHV is present, correct?

A. Yes.

Q. And you don't like that?

A. No, I don't.

Q. Okay, tell us why.

CHAIRMAN WROTENBERY: Explain first why that would be an arguable reading.

MR. BROOKS: I guess that's a lawyer's expertise, is it not, Madame Chairman?

CHAIRMAN WROTENBERY: Yes.

MR. BROOKS: Okay, if you look at Paragraph I, Subsection I of the present draft --

CHAIRMAN WROTENBERY: Yes.

MR. BROOKS: -- it says, "All personnel

responsible for implementation of any hydrogen sulfide contingency plan shall be provided training in hydrogen sulfide hazards, detection, personal protection and contingency procedures."

CHAIRMAN WROTENBERY: Uh-huh.

MR. BROOKS: Now, a contingency plan is only required if a PHV is present.

CHAIRMAN WROTENBERY: Okay.

MR. BROOKS: So arguably that provision does not apply to persons operating on a location where a PHV is not present.

CHAIRMAN WROTENBERY: Right.

MR. BROOKS: On the other hand, the provision of G.2.a, which does apply to any well operating personnel, is only applicable if a PHV is present, because it appears under that section of Paragraph G, which is only applicable if a PHV is present.

CHAIRMAN WROTENBERY: I think it's pretty clear that the way the draft is written right now, the training requirements only apply when you have a PHV.

MR. BROOKS: Okay, you accept that. I thought you were saying that was --

CHAIRMAN WROTENBERY: Well, I just was trying to understand the distinction between the two places where the concept appears, and --

MR. BROOKS: Okay, and it was my -- There was some confusion as to the interpretation of the Subsection I, so --

CHAIRMAN WROTENBERY: Okay, on your chart up here, I think actually the personal protection and training --

MR. BROOKS: I believe there's an error on the chart.

CHAIRMAN WROTENBERY: Yeah.

THE WITNESS: The chart's in error. The chart -- You should say that's contingency up there on the chart.

MR. BROOKS: I didn't want to tell my client he'd made a mistake.

CHAIRMAN WROTENBERY: Okay.

(Laughter)

CHAIRMAN WROTENBERY: So in the chart where it says personal protection and training, if you go across on that row, under the column H_2S greater than or equal 100 ppm, you should strike the C from that --

THE WITNESS: Yes.

CHAIRMAN WROTENBERY: -- item, right?

THE WITNESS: Yes, that is correct.

Q. (By Mr. Brooks) Now, you believe that personal protection and training -- that the H_2S training should be given wherever 100 parts per million is present, correct?

A. Absolutely.

Q. Tell us why.

A. Well, when you're working in the oilfield, you must be trained before you ever encounter H_2S. You must be trained on the hazards of it, you know, you have awareness training, you must be trained on the physical aspects of it, the chemical aspects of it and -- because you really never know when you're out there, is when you're going to experience an H_2S concentration that could be hazardous.

A 100-part-per-million -- Well, the best example is that you could have a well that doesn't qualify as -- under a PHV, but you could have 10,000, 15,000 parts per million H_2S, and if you're not trained how to work around H_2S, then you would be in serious danger of hurting yourself or other people, or losing control of a well.

Q. Would it be fair to characterize the operating personnel on the location as being the front-line troops in the public-safety defense?

A. You bet. The industry workers are the ones that really protect the public. And so you have to protect them, and they have to be trained properly in order that the public can be protected.

Q. Now, did the work group address this issue of what should be the threshold for the training requirement?

A. Yes.

Q. And did they reach a consensus on this issue?

A. Yes, they did.

Q. And what did they think the threshold should be?

A. 100 parts per million.

MR. BROOKS: Okay.

CHAIRMAN WROTENBERY: May I follow up again, just because we had some discussion on this at the first hearing, and we get into the worker-protection issue and the extent to which the Commission should be adopting rules that duplicate OSHA requirements, because as a general matter, the worker-protection issue is addressed by OSHA, not by the Oil Conservation Commission or the Oil Conservation Division.

Do OSHA regulations require this training?

THE WITNESS: It's my understanding that they do.

Chairman Wrotenbery, I'd like to read something to you, and I found this in Rule 36 of Texas's H_2S rule. And they make a comment right up front and they say, "Rule 36 is designed for the protection of the general public from the hazards of hydrogen sulfide in oil and gas operations and does not pertain to industrial safety as such. The Commission, however, believes that education and safety training are the best defense against the hazards of hydrogen sulfide and that industry workers must be able to protect themselves if they are to help the general public,"

with the emphasis added on the last part.

And so we certainly -- it's my opinion that we certainly need to keep in our regulations at least generic language to make sure that it's re-emphasized that this safety training is required.

CHAIRMAN WROTENBERY: I guess I'm still having difficulty understanding why we would need to get into the training area if there is not a public area, or maybe perhaps a public road within the calculated radius of exposure.

MR. BROOKS: May I ask some more questions --

CHAIRMAN WROTENBERY: Sure.

MR. BROOKS: -- Commissioner?

Q. (By Mr. Brooks) Just because there's not a public area in the radius of exposure does not necessarily mean that members of the public might not be at risk if there was a release; is that not correct?

A. That is correct.

Q. Can you explain some reasons why that might be true?

A. Well, you know, particularly in New Mexico, there's a lot of public land, there's a lot of public roads out there, and if you have --

Q. Now, if we have a public road, we're probably going to have a PHV?

A. Well, that's right, you'd have a PHV. Let's say that there's not a public area or there's not a public road out there. There certainly could be, if you have -- if you have a well out there that your workers are not trained, are not required to be trained, they certainly could lose control of that well, and then that well -- If they lost control of that well, then that well itself could generate a PHV by the virtue of the fact of the -- and it's unfortunate, I didn't put it up there, we do have another threshold, and that threshold is 100 parts per million radius at 3000 feet.

Now, admittedly, we don't have a whole lot of wells in New Mexico that will generate those type of radius of exposures. There's some out there. However, we do have some gas plants and large transmission lines that could do that.

Q. Well, I think we're digressing a little bit from the Commissioner's question.

A. Okay.

Q. What I'm suggesting is, is it not possible that there might well be people from time to time that are not associated with the operation of this well that would be within an area of hazard of the well, even though there is not a public area within the radius of exposure?

A. That's correct, if your workers are not trained

-- One of the things I can think about is, you have a contractor come on site, and if your workers aren't trained to forewarn him, you certainly -- that individual certainly could be injured, and so could the workers --

Q. And there could be ranchers out tending their cattle, right?

A. That's correct.

Q. People hunting, fishing, camping?

A. Correct.

Q. People going to another well for another operator?

A. That is correct.

Q. There could be lots of people there. There would not be as many as there would be in a public area --

A. Right.

Q. -- but there might be people?

A. That's correct.

Q. And the protection of the public -- Like you said a minute ago, if the workers don't know what they're doing they might lose control of their well and there might be a large volume of hydrogen sulfide escape --

A. That's correct.

Q. -- and they might not know how to alert people and protect the public under those circumstances; is that correct?

A. Right.

Q. Okay. So we're not focusing on protecting the workers as workers, we're focusing on protecting the workers so they can do their job and protect any people who might be in the area; is that --

A. That is correct.

Q. -- a fair summary?

A. Right.

CHAIRMAN WROTENBERY: Thank you, I understand your --

MR. BROOKS: Any further questions?

CHAIRMAN WROTENBERY: -- point.

Q. (By Mr. Brooks) Okay. Minimum Standards. Well, first API Standards, that seems to be the next line on which there's a discrepancy.

A. Okay.

Q. Tell us about the API standards for hydrogen sulfide operations.

A. Well, the American Petroleum Institute -- that's what API stands for -- is a professional trade organization that maintains, develops, maintains standards for the industry. I might add that they're excellent, they're very good. It's kind of like the way that industry can regulate itself. And the API standards have many, many different recommended practices concerning H_2S or hydrogen sulfide.

Q. And when you say it's a trade organization, does that mean it comes from the industry?

A. That's correct.

Q. And the people that formulate those standards, they're industry people, basically, or people hired by the industry, by the industry organization?

A. I believe that's correct.

Q. And these people are specialists in their field and they know what they're doing, correct?

A. Yes, they are.

Q. Now, the API standards themselves, do they apply only in the vicinity of a public road or public area?

A. No, the API standards basically can apply anywhere there's H_2S, but it's been an industry practice to apply API standards when you have 100 parts per million of H_2S in the system.

Q. And I think that Mr. Bayliss's testimony will go into the reasons for that threshold, but do some of the specific requirements of the API standards have their own threshold levels where they're applicable?

A. Yes, they do.

Q. Okay, and now, what is the position of the Division as to under what circumstances the API standards should be applicable?

A. Our recommendation is that the API standards

apply if you have 100 parts per million or greater of H_2S in your system.

Q. And would you like to add anything as to why -- that you haven't already said, as to why that should be the case?

A. Well, once again, there are a number of recommendations and practices. The API documents are very good, and they cover all aspects of hydrogen sulfide. And if we -- The way the present draft is written is that the API standards would only apply if there was a PHV present, and I don't believe that was the intent for the API standards or recommendations.

Q. Now, did the work group reach a consensus on this issue?

A. Yes, they did.

Q. And what was that consensus?

A. The consensus was that the API standards would apply where there's H_2S in the system that's 100 parts per million or greater.

Q. Now, the next item is Egress Routes.

CHAIRMAN WROTENBERY: May I ask a question about --

MR. BROOKS: Yes.

CHAIRMAN WROTENBERY: -- API standards? We have a number of comments from individual companies and one

association, I believe, that indicated that the API standards are hard to get. Can you address the accessibility of those documents?

THE WITNESS: These documents, you can go to the API website, and for the average person you can get those either downloaded or have them sent to you, but there's a fee for that.

CHAIRMAN WROTENBERY: How much is that fee?

THE WITNESS: They range from $50 to $200, so it's -- there is a range there, but I can't tell you what that range is.

CHAIRMAN WROTENBERY: Are those standards available in our offices in Santa Fe and in our District Offices?

A. They're certainly available in the Santa Fe Office. I can't speak for the District Offices, I'm not sure.

CHAIRMAN WROTENBERY: Thank you.

Q. (By Mr. Brooks) Okay, the next item on which there appears to be a difference between the drafts is Egress Routes.

A. Yes.

Q. Explain why egress routes are important on a location where hydrogen sulfide is present.

A. Well, it's -- One of the most important things

that you can do is, if you have a problem at a well or a facility is to get away from that problem. And so it's very important that egress routes be maintained.

You actually drill and practice how you leave the site. And there are certain ways, the training will teach you certain ways how you should leave a site and other ways how you should not, for your personal protection.

If you can't get away from the site properly, then obviously you're going to lose control of the situation, which can endanger the public.

Q. Yeah.

A. Very similar to what we talked about.

Q. If it's a remote site and the workers don't get away and they're all dead, then it may be a while before anybody else finds out about it, right?

A. Well, and the people who find out about it might also become a fatality also.

Q. Okay. And so we need -- for the protection of the public, we need those people on the site to be able to get away so that they can alert other people so the situation can be controlled before it becomes a hazard to the public, right?

A. Right. And I think you'll find when you go into the oilfield, I think you'll find that the practices are already in place, even in remote areas. They're there now,

and people are doing this.

Q. Okay, let's talk about detection and monitoring equipment. It says Safety, Detection and Monitor Equipment, but we have a special issue with safety equipment, we're going to talk about that later. So let's talk about detection and monitoring equipment.

A. What page are you on?

Q. Well, on the chart, you know, we're on the next line down --

A. Right.

Q. -- on the comments, we're on pages 4 to 5.

A. Okay, got you.

Q. Is an individual sense of smell a reliable means of determining whether there's a hazardous volume of hydrogen sulfide present in a location?

A. A person's olfactory senses generally, depending upon your metabolism, is very keen. However, it certainly is not the method that you use to detect hydrogen sulfide. Actually, that could be very dangerous if you just used your olfactory senses to do that.

Q. Most people can detect it by sense of smell at very low concentrations; is that right?

A. That is correct.

Q. Lower than 1 part per million?

A. That is correct.

Q. And it wouldn't be dangerous at that concentration, right? Or wouldn't be materially dangerous?

A. I'd probably have to refer that question whether it would be dangerous to Mr. Bayliss, but I --

Q. We'll address it to him.

A. Right.

Q. Okay, and if it gets to higher concentrations, then one ceases to be able to detect it by sense of smell at some point, right?

A. That is correct.

Q. And can you tell us why that would be, or should we refer that to Mr. Bayliss also?

A. We probably should refer that to Mr. Bayliss, but I do know the answer to that because of the training and just the fact that, you know, I've lived in the oilfield.

Q. And what is the area?

A. That's around 50 parts per million.

Q. Yeah, I imagine the Commission can take administrative notice that you're from Hobbs and that there's a lot of hydrogen sulfide around Hobbs, right?

A. Yes, and my boss continues to remind me, that's what's my problem. But I disagree with him.

(Laughter)

Q. Okay. Well, you say "him", so you're talking about your little boss, not your big boss? If you were

talking about your big boss you'd say "her"?

A. No, no, I'm not talking about the Commissioner, I'm talking about my other boss.

Q. Okay, I understand. Let us proceed.

If you can't rely on your sense of smell, then you need detection equipment, right?

A. That is correct.

Q. And once again, our comments, the Division's comments, are premised on the assumption that the workers, the on-site personnel, need to be alerted so that they can alert other people, so that the situation can be controlled before it becomes a hazard to the public, correct?

A. That is correct.

Q. And that may not happen if you do not have reliable detection and monitoring equipment on the site?

A. That's absolutely correct.

Q. Now, do you have a recommendation as to the threshold level at which detection and monitoring equipment should be required on the site?

A. Well, we do have, and actually it's in both -- the actual detection limit is in our recommendation and the Commission's present draft.

Q. Well, we're not talking here about the level at which the alarm should go off --

A. Oh, okay, you're talking about the pressure.

Q. -- we're talking about the threshold level at which that equipment should be on the site.

A. Yes, 100 parts per million.

Q. And does that reflect a consensus achieved by the work group?

A. Yes, it does.

Q. And is there anything you want to add that we haven't already said about why that should be the Rule?

A. No, I think it's just good, prudent practice to have your safety detection and monitoring equipment working. You'll also find that, you go out in the oilfield, it doesn't really matter where you go: You're going to find that equipment out there.

Q. And if there's somebody that doesn't have it, you think they ought to?

A. Well, I see Mr. Prather shaking his head, and he's probably right. It should be out there, I'll put it that way.

Q. You're talking about the more prudent operators?

A. Yes.

Q. Okay. There doesn't seem to be any disagreement on Signs, so let's go on to Flare Systems.

A. Okay.

Q. Why are flare systems important where there's hydrogen sulfide?

A. Well, once again, flaring of large quantities, or even small quantities, of dangerous H_2S gas can provide a severe threat to both on-site workers and the public.

Q. Well now, wait a minute. Didn't you tell me that flare systems were a -- that flaring H_2S was a way to render it less dangerous?

A. Oh, yes, that is correct.

Q. And tell me what are the combustion products of hydrogen sulfide?

A. The basic combustion products is sulfur dioxide, sulfur trioxide, there's some NOX, nitrous oxide, and then of course the standard by-products of the hydrocarbons that are there.

Q. Well, sulfur dioxide is pretty dangerous?

A. Sulfur dioxide is a very dangerous gas, just like hydrogen sulfide. But when you flare something, you cause a convection, thermal agitation, and it readily disperses. And also, the sulfur dioxide and trioxide will readily combine with moisture in the water and make it an acid gas, which can be irritating but not near as dangerous as the SO_2 itself.

Q. Does the flaring of hydrogen sulfide render it substantially less dangerous than the hydrogen sulfide itself is?

A. Absolutely. And as a matter of fact, one of the

standard pieces of equipment is a flare gun. It's in the contingency plan, if you do have a blowout or something, and you have large quantities of H_2S gas coming out, it's a standard practice to set that on fire to render that less hazardous.

Q. Does the API recommend flare systems where you're dealing with hydrogen sulfide?

A. The API does recommend flare systems.

Q. Now, if you have a release of hydrogen sulfide, the longer that release goes on, the more likely it is that it will create a danger; is that a fair assessment?

A. That is correct.

Q. And in the meantime, between the time that it starts and the time that it is controlled or remedied, wouldn't it be a good idea to be flaring that stream?

A. Yes, it would be.

Q. Is there anything else you would like to add about why flare systems -- Well, first of all, do you have a recommendation as to what threshold --

A. Yes.

Q. -- level should be imposed for the requirement that flare systems be on site?

A. Yes, the recommendation I have is to have flare systems on site when you have an H_2S threshold of 100 parts per million or greater.

Q. Did the work group address this issue?

A. Yes.

Q. And did they reach a consensus?

A. Yes.

Q. And what was that consensus?

A. That consensus was that we would have flare systems at 100 parts per million.

Q. Is there anything else you would like to add about why that should be, that we haven't already said?

A. No.

Q. Okay, then let's go on -- Let's skip over well controls for the moment, because while we have a disagreement on that for the present draft it's a different disagreement, and we want to finish talking about the 100-parts-per-million threshold before we go back to that.

Mud Program. Explain to us why you need to have special mud program requirements in hydrogen sulfide conditions.

A. Well, of course, anytime you're drilling a well you certainly need an adequate mud program, even more so when you're drilling into a system that has hydrogen sulfide, because you really never know what quantities are going to be coming out of that mud. And so therefore it's prudent to have a proper designed mud system that's ready for hydrogen sulfide and to handle hydrogen sulfide when

you're drilling in areas where you have more than 100 parts per million.

Q. Okay. And what could happen if you don't have an adequate mud program and you have hydrogen sulfide in your production stream?

A. Well, if you don't have a proper mud program you could lose control of the well, if you lose -- you could actually cause harm to the workers on site, which would cause losing control of the situation. Those are the two main factors right there.

Q. And if you lose control of the well, that could create a hazard to members of the public, even outside of a public area, correct?

A. Yes, it could.

Q. Okay. Did the work group address this issue?

A. Yes.

Q. And did they reach a consensus?

A. Yes, the work group agreed that the mud program was to be left under 100 parts per million.

Q. Anything else you would like to --

COMMISSIONER LEE: Is there any mud program right now, they don't worry about 100 p.p.m.? If Burlington drilled a well, they don't care about this one? I think it's -- This is a standard for the industry.

THE WITNESS: Yeah, it is a standard for the

industry. They have mud programs that address this anytime there are hydrogen sulfide concentrations of 100 or more. And they probably have it -- a lot of prudent operators might even have it when there's less than 100 parts per million.

COMMISSIONER LEE: Well, I don't think anybody doesn't have it. That's my problem, my question.

THE WITNESS: I don't know, Commissioner Lee. I don't know the answer.

COMMISSIONER LEE: Go get them.

THE WITNESS: We will.

Q. (By Mr. Brooks) Now, there's a difference between the drafts on the threshold for the drill stem testing requirements, but we decided we weren't very concerned about that; is that correct?

A. That is correct.

Q. Okay. So let us then go on to the issue of Secondary Well Control.

A. Okay.

Q. Explain to us what is meant by secondary well control.

A. Okay, secondary well control is the ability to re-enter a well under pressure so you can extinguish the problem -- the term is called kill a well in the oilfield.

For example, if you have a well that you've lost

control of, if you don't have the ability to be able to connect and pump into that well, then it would be very difficult to control the well. You would probably have to call in a well-control specialist, someone like Boots or Coots or someone like that, to assist you in that matter.

Q. Now, does this relate to equipment to control the well from a location off-site? Is that what we're concerned with here?

A. Well, I have a (P) by that, and so we're basically concerned about secondary well controls at production facilities.

Q. Well, we also have some requirements in case of workovers or -- do we not, completion workovers, servicing?

A. Yes, but I've got that included under Blowout Controls.

Q. Okay.

A. Yeah, I lumped that under Blowout Controls.

Q. And what, really, are you -- Well, is that a different requirement?

A. Okay --

Q. You're dealing with a lawyer who doesn't understand this equipment --

A. Okay.

Q. -- so you need to explain.

A. I should have brought a picture of a typical

christmas tree or a well that has secondary master valves on it where you could re-enter the well under pressure. And it was our intent that these type of wells would only have to have these special secondary well controls.

And there's also downhole well control equipment in which they can actually be activated, or they can work automatically; if there's an upset in the well, the well will actually shut itself in. And of course, those type of controls are very expensive, but if you're in a real sensitive area, such as a public area, then we felt it was certainly prudent to have this type of secondary well control.

If you will look over there, you will see the -- the fourth column over, you'll see an XC by that --

Q. Well now, hold on a minute.

A. Okay.

Q. I'm going to go into the threshold requirements in a minute --

A. Okay.

Q. -- but I just want you to explain each of those three items, Secondary Well Control, Automatic Shutdown Controls and Blowout Controls. In concept, what are those?

A. Okay, the secondary well control is equipment that can actually shut a well in, either automatically or by a manual means, and you have the equipment available to

do that.

Automatic shutdown controls is controls that will automatically shut itself down to control either a well or a system.

And then blowout controls are controls that put on drilling, completion workovers to actually let you control a blowout, or a possible blowout.

COMMISSIONER LEE: Is there any drilling that doesn't have a blowout control?

THE WITNESS: Our current -- We do have a rule that requires blowout controls in certain situations.

MR. BROOKS: We're required to have a blowout preventer on --

THE WITNESS: To answer your question, yes, there are some projects out there, there are some workovers that, if they're anticipating absolutely no gas at all --

COMMISSIONER LEE: So you're talking about the workover, right?

THE WITNESS: Commissioner Lee, you know, I know that there are drilling rigs out there that there is a possibility that they may not have blowout controls.

Q. (By Mr. Brooks) We are talking, are we not, though, for this purpose about the equipment described in clause G.2.f.ii and -ii of the proposed draft, are we not?

A. G.2.f -- no, for -- Are you talking about for

secondary controls?

Q. Well, I'm trying to understand here --

A. Okay, secondary controls are covered under Subsection -- in the present draft, Subsection H.2.c.

Q. Okay. Now, where are automatic shutdown controls covered?

A. Okay, they are covered under H.2.d.

Q. Aren't these things covered also under G?

A. And G is the blowout controls.

Q. Okay, and is that in G.2.f.i?

A. G.2.f.i and ii, I guess.

Q. Now, in response to Commissioner Lee's questions, don't the blowout controls described in that equipment -- isn't that a lot more extensive than the blowout preventers that would normally be required?

A. Yes.

Q. Okay, that's what I'm trying to establish, the universe of what we're talking about.

Now, the requirements of G.2.f, under the Commission's draft what is the threshold for those requirements?

A. Okay, G.2.f is what I have listed as blowout controls.

Q. And what is the threshold under the Commission's draft for those requirements?

A. Okay, under the Commission's present draft, the threshold is that you would have to have these special controls if you were in a PHV area that included a road and if you're in a PHV area that included a public area.

Q. Okay, wherever you have a PHV those would apply, correct?

A. That is correct.

Q. Okay. Now, the same is true, is it not, of the requirements of H -- let me be sure I'm specifying the right portion of the Rule -- the requirements of H.2.d, H.2.c and -d?

A. That is correct.

Q. Now, is this a more extensive requirement -- that is, this equipment would be required in more instances than what the Division had recommended; is that correct?

A. That is correct. The present draft is more stringent than what the work group had recommended.

Q. Which is also what the Division recommends?

A. Which is also what the Division recommends.

Q. And under what circumstances did the Division recommend that the equipment that we've so carefully tried to describe here would be required?

A. The Division recommends that secondary well controls, automatic shutdown controls and special blowout controls would only be applicable if you were in a 100 --

if the radius of exposure of 100 parts per million includes a public area.

Q. That would include all of the circumstances under which it would be required under the Commission's present draft, correct?

A. I don't understand that question.

Q. Well, the Commission's present draft requires this equipment whenever there is a --

A. Any PHV.

Q. -- a PHV, right?

A. Any PHV, right.

Q. Now, the area -- By the way the PHV is defined, if you have a public area in the 100-parts-per-million radius of exposure, you're going to have a PHV in every instance, right?

A. Yes, that's right.

Q. But the contrary doesn't necessarily apply. You could have a PHV, but there might not be a public area within the 100-parts-per-million radius of exposure?

A. That is true.

Q. So the Commission's present draft would require this equipment in some circumstances, i.e., where there's a public road in the 500-parts-per-million radius of exposure, or where the 100-parts-per-million radius of exposure is equal to or greater than 3000 feet but where

there is not a public area within the radius of exposure, correct?

A. No, the Commission's present draft is requiring that secondary well controls -- I think the answer to your question is yes, but let me -- I didn't quite understand it.

MR. BROOKS: Well, Dr. Lee had a question. Do you want to ask --

COMMISSIONER LEE: Yeah, I'm thinking about the economics for the industry. Suppose I have infill drilling. I know there's no H_2S there. Should I bring all this equipment?

MR. GANTNER: You wouldn't be required to, as long as your levels were less than 100 parts per million.

COMMISSIONER LEE: How do you know?

MR. GANTNER: Well, we know by process knowledge, past sampling, that it's less.

COMMISSIONER LEE: Whenever you're drilling, okay, infill drilling, how about I go to some place, I just lease some place on the edge of the reservoir, I go there? Do I have to bring this?

MR. GANTNER: I don't know, I guess it would depend. If I have enough other information where I could use good knowledge, probably not. But if I didn't, I -- Well, no, if I didn't have it in a public area, which is

what Wayne is saying, I would not have to.

MR. BROOKS: Commissioner, I believe under the present draft, if you were drilling a well where you did not have sufficient information to be able to predict the extent of H_2S in your gas stream --

COMMISSIONER LEE: Then you need --

MR. BROOKS: -- then you would have to have this secondary well-control equipment, because the present draft says that under those conditions you assume a 3000-foot, 100-parts-per-million radius of exposure, and if you have a 3000-foot, 100-parts-per-million radius of exposure, you have a potentially hazardous volume. If you have a potentially hazardous volume, under the present draft you're required to have --

COMMISSIONER LEE: Well, suppose in the San Juan Basin you want to drill to the coalbed, Fruitland. Then you're going through those three zones, you know. What are those three zones? Well anyway --

MR. GANTNER: Pictured Cliff --

COMMISSIONER LEE: No, above the three zones there are four of H_2S. Do you need to bring the equipment?

THE WITNESS: If there's -- I'd like to answer that, Commissioner Lee. If there is known H_2S and H_2S has been encountered in the past, then yes, they would be required to bring that equipment in, if it included a

public area, if it included a public area.

COMMISSIONER LEE: Well, the tertiary -- which one? I'm not a geologist. Do you know what I'm saying?

MR. GANTNER: I know right now we don't do any hydrogen sulfide protection for zones above the Fruitland Coal. Now, whether that's there or not, I don't know. I know we don't produce anything in those zones.

COMMISSIONER LEE: Yeah, we don't produce it, but we drill through it.

MR. GANTNER: Yeah, we drill through it.

THE WITNESS: Commissioner Lee, there is a subparagraph in the Rule -- and this is why it's important to have your monitoring equipment out there all the time. If you happen to drill into something and your monitors go off, you get an alarm, then they're required under this Rule to basically shut down and re-evaluate the situation.

COMMISSIONER LEE: But they are only bringing a small amount of H_2S coming up. And you drill it, no, they are not going to come in. Okay.

MR. BROOKS: Okay, may I resume, Commissioner?

COMMISSIONER LEE: Sure.

MR. BROOKS: Thank you.

Q. (By Mr. Brooks) The Commission's present draft would require this equipment, secondary well control and automatic shutdown equipment and so forth, would be

required under some circumstances where it would not be required in the Division's draft, right?

A. That is correct.

Q. Now, is this equipment that is required in this rule, is this very expensive equipment?

A. Yes, very expensive.

Q. And was the Division's decision and the work group's decision not to require it merely because of the presence of a public road in 500-parts-per-million radius of exposure based -- taking into consideration the expense of this equipment?

A. Well, no, it was actually taking into consideration -- we kind of did an informal, a round-table cost-benefit analysis. It was both, is it practical? how much is it going to cost to equip every well that's in close proximity to a road with all of these controls, and then plus the fact that you've got to remember that we would also have -- we have an adequate contingency plan that's going to handle traffic diversion, and the road is -- contingencies built in there.

Q. Correct, if there's a road in the radius of exposure but there's not a public area, then once there's a release, that contingency plan is going to be implemented and you're going to get people off those roads, right?

A. And stop people from coming in on those roads.

Q. And that's going to be an alternative means of protecting the public, so during the time it would be necessary to get that well under control, right?

A. That is correct.

Q. So that is a reason why this very expensive equipment might not be required in those circumstances?

A. That is correct.

Q. Okay. Is there anything further you would like to add on these equipment requirements that you have imposed only in the vicinity of a public area?

A. Well, I just urge the Commission to consider what we're proposing here. I just think it's going to be extremely expensive, and I'm not even sure if it would be practical or feasible that it could all done within the time frame under compliance, and we just have to look at the number of hundreds or maybe even thousands of wells that would have to have these controls, when -- you could be in a remote location, but there goes a road right beside your well, they would have to have these automatic controls. And it was our intent for us not to have that placed upon the industry.

MR. BROOKS: Okay. Now, are there any questions on this subject? Because I'm going on to the specific equipment requirements on page 7 now.

CHAIRMAN WROTENBERY: Oh, you are going on to

that? Okay.

MR. BROOKS: If you have any questions on these threshold areas, before I go to that, I thought you might want to --

CHAIRMAN WROTENBERY: Did you all have any questions on those -- Why don't we take a short break?

MR. BROOKS: I think that would be a good idea.

CHAIRMAN WROTENBERY: Just for ten minutes here.

(Thereupon, a recess was taken at 10:56 a.m.)

(The following proceedings had at 11:10 a.m.)

Q. (By Mr. Brooks) Now, Mr. Price, I'm going to go to another subject now. In talking about this -- well, still well-control equipment. In talking about well-control equipment so far, I have attempted to refer -- to make clear that I was referring my questions to specific well-control equipment that is described in the Rule.

However, we have some recommendations, do we not, to change those detailed provisions wherein the well-control equipment is described?

A. Yes, we do.

Q. And those are on page 7 of our comments?

A. Yes.

Q. Now, from the comments that the honorable Chairman read at the beginning of the proceeding, it should be apparent to everyone that I do not understand this

equipment very well. So you essentially are going to be on your own in explaining the reasons.

But would you tell the Commission what changes we're recommending in the well-equipment requirements of subparagraph G.2.f, and why.

A. Okay, due to the number of comments that we received from industry, and after we re-evaluated the use of well-control equipment in potentially hazardous areas where it involves the public, we would like for the Commission to consider the language that's in the recommendations on page 7. We feel that this language clears up the issue of the concern that most of the industry people had.

A drilling rig has a substructure, and that's basically just a frame that the equipment sits on, and underneath that frame, of course, you have the drilled hole that you're drilling out.

And then you have this equipment underneath there that does various things. It's blowout equipment, it's equipment that you can control your drilling fluids under certain situations, and the common terms for those are called kill and choke lines.

And anyway, so this drilling equipment has to be placed underneath this substructure. And the majority of the rigs that are operating in New Mexico are a certain

size of rig. And our previous requirements, it was noted that we had one extra piece of equipment, one extra ram, which is a device that can actually help control drilling fluids under upset conditions. It was just physically impossible for that equipment to be fit underneath that particular substructure.

After reviewing the API specifications, it appeared that we were being a little bit too stringent in that area. And so we have rewritten the language, and so we request the Commission to take a look at that and accept that language. I believe it will satisfy other concerns of industry.

MR. BROOKS: Are there any questions about this subject?

CHAIRMAN WROTENBERY: A drafting question. If you'll look at the -- I think it's the eighth line of f.i where it says, "shall have at least one spool, or integral BOP spool for the kill and choke lines" --

THE WITNESS: Yes.

CHAIRMAN WROTENBERY: Is that comma after "one spool" supposed to be there? This may be a --

THE WITNESS: No, it should not be there.

CHAIRMAN WROTENBERY: It should not be there.

THE WITNESS: Yeah.

MR. BROOKS: Unless it pertains to the last

antecedent rule, it's not --

CHAIRMAN WROTENBERY: I was wondering if it did. Okay.

THE WITNESS: Let me explain --

CHAIRMAN WROTENBERY: Okay.

THE WITNESS: I'd like to explain that, is that the new BOPs that are out there nowadays have a spool actually built into the BOP, and so what we're saying here is, in order to have your kill and choke lines you have to have a pool, but what we're saying is, you could use -- in lieu of a spool you could use a BOP that has an integral spool built into it. That's what we're saying.

CHAIRMAN WROTENBERY: Okay. And then in f.ii you've got a little bit of a dangler there at the end. The "before commencing work" would seem to suggest that you have to have all this equipment before you start work but not during work, so --

THE WITNESS: Well --

CHAIRMAN WROTENBERY: -- you need to --

THE WITNESS: Right.

CHAIRMAN WROTENBERY: The intent is, it should be installed before commencing work and operational at all times during work; is that what you're saying?

THE WITNESS: That is correct.

MR. BROOKS: Okay, are we ready to move on to

Safety Equipment?

CHAIRMAN WROTENBERY: Yes, please.

Q. (By Mr. Brooks) The Commission counsel in his cover letter addressed a question about the fact that the Division's draft contained in several places requirements for safety equipment but did not include any specification of any particular safety equipment. Would you like to explain why that was done?

A. Well, the work group was quick to point out that there can be numerous different types of safety equipment that's required on different types of jobs. And so it just wouldn't have been prudent for us to try to list every type of -- piece of safety equipment in the Rules.

However, the work group agreed that generic language that give both OCD and the industry flexibility on this should be put in there, because it definitely needs to be pointed out that safety equipment needs to be part of the Rule.

Q. Would the particular safety equipment that might be needed on a location vary from place to place?

A. It could vary substantially.

Q. Depending, perhaps, on the remoteness of the area or the amount of H_2S that might be present?

A. That's correct.

Q. And does the technology within this area change?

A. Yes, it does.

Q. And are there other agencies that have safety-equipment requirements?

A. Yes.

Q. Including OSHA and including, perhaps, the BLM?

A. That's correct.

Q. And in view of these considerations, then, did the work group reach a consensus that OCD should not attempt a listing of the required safety equipment?

A. That's correct.

Q. However, do you believe we would be remiss in our policy and our responsibility to protect the public if we did not include a requirement that they have appropriate safety equipment on locations where H_2S could be a problem?

A. I agree with that.

Q. In view of the Commission's articulated concern about having references to safety equipment without any specification, do you have a recommendation as to how the draft should be rewritten?

A. Well, actually, on page 8 I think we have a recommendation here. Is that --

Q. That is what I'm asking you to suggest.

A. Yes.

Q. The language that we had recommended was that the safety-equipment references be re-inserted and that they

read, "safety equipment required by industry standards and good operating practice".

Do you believe that would be adequate to address both their concern about there being no reference to safety equipment and the concern about -- the concern that there should be some reference to safety equipment, and the concern that a purely generic reference would be wholly unenforceable?

A. I agree.

Q. Okay --

CHAIRMAN WROTENBERY: I have some more questions --

MR. BROOKS: Go ahead.

CHAIRMAN WROTENBERY: -- because I'm not sure that I understand yet what kind of safety equipment you're talking about. There are a number of things in the rule that could be called safety equipment, like well-control equipment. Or you could be talking about personal-protection equipment, specifically.

What was it that you had in mind here? Because somebody who didn't participate in the work-group discussions couldn't tell.

THE WITNESS: Thank you, Chairman. I think you just said it, is that there are many different types of safety equipment that can be on site, should be on site. I

believe our intent here was to have the proper safety equipment to carry out the function of implementing the contingency plan.

Now, if you go back and look at the API recommendations for a contingency plan, it talks about an immediate action plan. And in that immediate action plan you have to do certain things. And in order to do those certain things, you have to have certain pieces of equipment on site, such as SCBAs, which would be self-contained breathing apparatus. You have to have, you know, certain types of flare guns, ignition devices and things like that.

And they're just too numerous for us to even attempt to list, and we felt that we wanted to really be flexible in this area, but yet we wanted some strength in the Rule to make sure that it spells out that safety equipment shall be on-site.

And we certainly could -- you know, could ask companies to -- if they were deficient in certain area, we could ask them to provide that safety equipment, particularly in sensitive areas where the public is involved.

Communication equipment is another one. There's a whole list of these things that we could start talking about. We have a safety expert here today. He can

probably list you all kinds of safety equipment that you need out there.

But there are some standard recommendations in the API manuals for this, but we just didn't want to spell each piece of equipment out, because you might be forcing a company to have a piece of equipment out there that they don't need, or the improper piece of equipment or something. So we just felt it was necessary to have the word safety, safety equipment, involved.

And I might add that, looking at Texas Rule 36 and BLM's Onshore Order 6, they both have similar generic language concerning this.

CHAIRMAN WROTENBERY: Okay.

Q. (By Mr. Brooks) Very good. Now, the next comment we have relates to Subparagraph G.2.c.i, Detection Equipment Activation Level. Both the Commission's draft and our draft require -- both the present draft and the one we originally submitted, require that the alarms go off, in effect, at 20 parts per million, correct?

A. That's correct.

Q. Now, do some operators, as a matter of policy, have alarms that activate at lower levels than that?

A. Yes, they do.

Q. Now, it wouldn't be prudent to have the alarm activated to too low a level, because it would be going off

too often, correct?

A. Well, that's right. The work group spent a lot of time on this activation level. One of the things that came out in the work group is that you don't want to cry wolf. If you do that too often, you actually lose protection for the public and the workers.

Q. On the other hand, the 20-parts-per-million level as we've evolved it is a maximum rather than a minimum level; is that right?

A. Yes, that is correct.

Q. We believe that it's not imprudent -- if a company has a policy to set it at a somewhat lower level, it's not imprudent to do so?

A. That's correct.

Q. So have we suggested language that would incorporate that concept without giving everybody *carte blanche* to set it too low?

A. Yes, and that language is on page 9 at the top.

Q. Okay. And do you believe that that language incorporates a prudent standard for the exercise of regulatory discretion?

A. Yes.

MR. BROOKS: Okay, now I'm going to be going on to another subject. Any questions on this provision?

Q. (By Mr. Brooks) Okay, let us go on, then, to

Paragraph H. Now, the threshold levels that are discussed in Paragraph H have, for the most part, already been discussed, and I won't go over them again. But there is a particular provision in H.2.i -- H.2.a.i, I believe, is where it's going to come down. No, it's just H.2.a.

A. H.2.a.

Q. I got confused in these various designations. H.2.a., there's a particular provision regarding fencing which did not appear in Subsection G and therefore has not been heretofore discussed. It is on our chart, however.

Explain the threshold requirements for facilities to be fenced as they appeared in the Division's draft that was submitted with the Application.

A. Okay, as they appear in the Division's draft, the Division's draft would require "fencing and gates shall be required when crude oil pump stations, producing wells, tank batteries, associated production facilities, are located in a public area, are within a quarter mile of a residence, school, church, park, playground, school bus stop or place of business." And there were some fencing requirements to go along with that, along with gating requirements and that the gates be locked.

The intent of the work group, any -- basically, any facility, well, system that has 100 parts per million or more of H_2S and tanks that have 300 parts per million or

more of H_2S, and they're located in these public areas or close to public areas, they should be fenced for the protection of the public.

Q. Okay. Now, this requirement does not apply to drilling wells, right?

A. No, it does not.

Q. And why is that? Why do you not require fence around a drilling well?

A. Well, I think -- I'm not sure if I can really answer that.

Q. Was it related to the fact that you're going to have personnel and operations going on at all times during the --

A. Oh, that's right, yes, that is correct.

Q. Okay. Now, let's see. You say the Division's recommendation was that fencing be required if there is a public area within a quarter of a mile of a facility; is that correct?

A. Yes.

Q. Now, what is the threshold requirement for fencing under the Commission's present draft?

A. Well, under the Commission's draft, since fencing is under H.2, and H.2 has a stipulation that everything to the minimum standards and under would only pertain if there's a potentially hazardous volume present.

And so therefore, for example, a tank battery --

Q. Okay, well, let me interrupt here a minute.

A. Okay.

Q. I thought whenever you were in close proximity to a public area that you had potentially hazardous volume. Am I wrong about that? Is that not true?

A. That's not necessarily true.

Q. And why? Why not?

A. Well, because the flow of gas and a concentration of gas, calculated using the Pasquill-Gifford equation, might be zero.

Q. Now, why would that be?

A. Well, and I'd like to use an example.

Q. Please do.

A. Example would be, for example, a tank battery. Tank batteries generally do not have the ability to flow volumes of gas like a gas well or a pipeline would, and so therefore you would basically plug a zero in for the flow, no matter what the concentration is, and you would not get a PHV there, even though you might have dangerous levels in that tank battery.

Q. But the actual concentration might exceed 100 parts per million?

A. Yes.

Q. But there would not be a PHV, even though you're

right in the middle of a public area?

A. That is correct.

Q. Now, are tank batteries a major concerning this fencing requirement?

A. Yes.

Q. Would that 100-parts-per-million volume, if there were a leak there and that volume were to escape, would that be a danger to people that were on the facility or people that were in the immediate vicinity of the facility, even though it wouldn't generate a PHV?

A. Yes, it certainly would be.

Q. Now, is there a possibility that people might intrude upon those facilities who didn't belong there?

A. Yes.

Q. Are there a lot of tank batteries in public areas?

A. I don't know how you define a lot, but I would certainly say --

Q. Well, a significant number.

A. Yeah, there are significant numbers, yes.

COMMISSIONER LEE: What's the average pressure for those tank batteries?

THE WITNESS: They're atmospheric-pressure tanks, .5 p.s.i. is the maximum.

COMMISSIONER LEE: Do they pose a danger for

this? Suppose I crush it. What will happen?

MR. BROOKS: You'll have to ask the engineer; I'm a lawyer.

THE WITNESS: Well, if the tank explodes or if the tank loses all of its contents, then you certainly wold have a --

COMMISSIONER LEE: I thought you --

THE WITNESS: -- large release of liquid. Now, whether that large release of liquid -- you would have to put that in some sort of puff model or something, to determine what your radius of exposure would be. And Dr. Lee, I'm not --

COMMISSIONER LEE: Two feet.

THE WITNESS: That's possible.

COMMISSIONER LEE: I think the soul of this Rule is your continuous coming up, so that's when you calculate that equation, is when you're assuming that there's continuous coming up.

THE WITNESS: Correct. Most of the API tanks have pressure vacuum controls on them, so they don't normally -- They can relieve during periods of high temperature with the sun shining on it, and the tank might pop off a little bit, but they don't have a continuous release. If they do, there's something wrong with their equipment.

COMMISSIONER LEE: Right, so the hazard -- the level is pretty low.

THE WITNESS: It would be pretty low, yes.

COMMISSIONER LEE: Okay, thank you.

Q. (By Mr. Brooks) Well, is not the point of a fencing requirement primarily for the protection of people that might enter the premises --

A. Right.

Q. -- rather than for the protection of people outside the premises?

A. Right, that is correct.

Q. And we're talking about people that might enter the premises, so we're talking about people that probably shouldn't be entering those premises. We're not talking about workers?

A. That is correct.

Q. Because they would have a key. If there was a fence, they could go through the gate.

A. That is correct.

Q. Okay. Based on these considerations, did the work group reach a consensus as to what the threshold level should be for fencing requirements?

A. Yes.

Q. And what was that consensus?

A. It would be 100 parts per million of hydrogen

sulfide or greater.

Q. If it was within a quarter of a mile of a public area?

A. If it was within a quarter of a mile of a public area.

Q. And if it was not within a quarter of a mile of a public area but it had 100 parts per million, it would not be required for the fence, right?

A. That is correct.

Q. Now, there is another thing we need to comment on in H.2, and that is, we believe that there is what may have been an inadvertent change made with regard to automatic safety valve or shutdown in H.2.d, correct?

A. Yes.

Q. Subsection H applies to producing wells, tank batteries, associated production facilities, refineries, gas plants and compressor stations, right?

A. Correct.

Q. However, H.2.d begins with the phrase "any well", correct?

A. That's correct.

Q. Now, at least with regard to the Division's formulation of this Rule and the work group's formulation of this Rule, was it contemplated to require automatic safety valve or shutdown for facilities other than

producing wells?

A. That is correct, it was.

Q. And would the language I just read change that so that they would only be required on wells?

A. I'm sorry, please read it again.

Q. Any well shall possess an automatic safety valve or shutdown, et cetera, at the facility or wellhead. It starts out, "any well".

A. Yes, we are recommending that that language be changed.

Q. Okay, and how would you recommend that it read?

A. Okay, I have it here.

Q. It's on page 10 of our comments.

A. Right. Our recommendation is on page 10, in the middle of the page: "Any well or facility shall possess..." So we would like to put the word "facility" in there.

Q. Okay. Is there automatic shutdown equipment that would normally be -- Is that a reasonable requirement, to require automatic-shutdown valves at production facilities, refineries, gas plants and compressor stations?

A. If they're in proximity, or within public areas, yes.

Q. Okay, thank you. Now I'm going to go on to the issue of the level at which a contingency plan should be

activated, the conditions under which a contingency plan should be activated. And everybody will be relieved to know this is the last subject we're going to discuss. This is on pages 11 and 12 of our draft.

A. It starts on page 10.

Q. Ten and 11 of our draft.

A. Ten and 11.

Q. Yeah, 12 is just the signature, conclusion and signature. Pages 10 and 11 of our draft.

Now, the Division draft would have required activation of the contingency plan in two differently defined sets of circumstances, correct?

A. That's correct.

Q. One of those is where a release of a PHV took place, or a potentially hazardous volume occurred, right?

A. Correct.

Q. And the other -- What was the other one, what was the other circumstance in which we, the Division, recommended that the contingency plan be activated?

A. On this recommendation?

Q. Well, let's start with what we originally recommended.

A. Originally recommended, okay. We originally recommended -- and the work group spent a lot of time on these trigger levels. We felt that it was essential that

we have some sort of trigger level to activate the contingency plan.

And our thinking here was that we would take the guesswork out of on-site workers and to assist them in some sort of number. And that number bounced all over the place, and we finally agreed upon 50 parts per million at the property line of any well facility, operation. However, I can say that the word "property line" just doesn't fit. We talked about "boundary line"; that didn't seem to fit either. And so we have a recommendation --

Q. We initially recommended that a contingency plan be implemented whenever there was a concentration of 50 parts per million at the property line of the well or facility, right?

A. That is correct.

Q. And we are now modifying that recommendation, correct?

A. Yes.

Q. And what are we now recommending?

A. Okay, I'd like to read the language.

Q. Okay, please do.

A. I would say -- just put, "In addition, any facility that is required to maintain a contingency plan for a public area shall activate the plan if there is a measured release of hydrogen sulfide gas on-site in a

concentration of 50 parts per million for a period of ten minutes, or if the on-site personnel are required to don personal protection equipment, i.e., life-support systems, in order to remain on site."

That's what we're recommending, and I would like to defer the comment for the 50 parts per million for ten minutes to Randy Bayliss.

Q. Okay, the reason for that specific comment?

A. Yes.

Q. Okay, I will ask him that question.

Now let me ask you, though, this question. The Commission draft -- or the present draft; I am reluctant to call it the Commission draft because I think the Commission has not acted yet, but the present draft which we are discussing today, which is the focus of this work session today, does not have any equivalent of this 50-parts-per-million trigger level, right?

A. That is correct.

Q. In other words, under the present draft, the only time when a contingency plan would be required to be activated would be when there is a release of a potentially hazardous volume, right?

A. That's my understanding.

Q. Okay. Now, if you have a facility that has a potentially hazardous volume in its gas stream, and it

experiences a leak such that there is a release, that doesn't necessarily mean you're experiencing a release of a potentially hazardous volume, does it?

A. That's correct.

Q. It may be or it may not be?

A. It may or may not be.

Q. Now the question whether there's a PHV is determined on the basis of a worst-case scenario, right?

A. That is correct.

Q. It assumes that the volume and concentration released are the maximum that that facility is capable of generating?

A. That is correct.

Q. And most releases are going to be less than that?

A. I would think so.

Q. Unless you have a blowout?

A. Yes.

Q. But you don't know how much less?

A. You have no idea sometimes.

Q. And when the on-site personnel become aware that they have a release, they're not going to know whether they have a release of a potentially hazardous volume or a lesser release, right?

A. They can be very arbitrary.

Q. So was it felt by you and the work group that

there was a need to have some more objective standard so we could be sure that when we needed to have a contingency plan activated we wouldn't be wasting time trying to figure out whether or not the actual release was a potentially hazardous volume or not?

A. That is correct.

Q. And is that the primary focus of this requirement that we're discussing?

A. Yes, it is. It's to prevent procrastination and confusion during these emergency times, whether they should implement the contingency plan or not.

Q. Now, when you need a contingency plan implemented, is it not very important to get it implemented quickly?

A. Absolutely.

Q. And if you don't need a contingency plan activated, if people start activating the contingency plans when they don't need to be activated, there's a good chance that people will cease to pay any attention to them, right?

A. That's absolutely right.

Q. So defining precisely when a contingency plan ought to be activated is a very critical issue?

A. I think it is, and I think the work group realized that also. We had a lot of discussion concerning that.

Q. And you believe that the requirement in here is a reasonable requirement?

A. Yes, I do.

Q. And you would urge the Commission to adopt it?

A. Yes, I would.

MR. BROOKS: I think that concludes everything I have to offer, but is there anything you would like to say further on the subject that I may have left out, Mr. Price?

A. No, I don't think so.

Q. Okay, I will -- Well, let me ask you, do Exhibits 1 and Exhibit 2 -- were these prepared by you or under your direction, and do they represent your opinions and conclusions?

A. Yes.

MR. BROOKS: Thank you.

Madame Chairman, I will offer Exhibits 1 and 2.

CHAIRMAN WROTENBERY: Exhibits Number 1 and 2 are admitted into record.

MR. BROOKS: And I will pass the witness.

EXAMINATION

BY CHAIRMAN WROTENBERY:

Q. I do have a question on the activation level. What about situations where you have a public road, and that's the reason you have a contingency plan? What would be the activation level then?

A. Well, if -- anytime you have -- the way we had it drafted --

Q. It just refers to a public area, it doesn't refer to a public road.

A. Let me think about that for just a little bit. Let me go back to the way we had it drafted before.

I think that was an oversight. It was certainly our intent to activate the plan for any PHV.

MR. ROSS: Aren't you proposing to add the language you have in your draft there to the language that's in the Commission's draft?

THE WITNESS: Yes.

MR. ROSS: And that provides for activation at 500 p.p.m. at any public road?

THE WITNESS: But we would --

MR. ROSS: I'm not sure how you would --

THE WITNESS: No, we would want the 50 parts per million to be activated for public areas and public roads.

Q. (By Chairman Wrotenbery) So you did not intend to have that phrase, "for a public area"?

A. No, that should have been a PHV area. Thanks for pointing that out.

MR. ROSS: So you're proposing to replace the present language with the language we have here in the draft?

MR. BROOKS: No, we propose to add this language, but with the change that Wayne just noted.

THE WITNESS: Yeah, rather than a public area it would be a PHV, any PHV, by definition. In other words, public areas and public roads.

MR. BROOKS: Wouldn't it say what we need to say if we simply deleted the words "for a public area"?

THE WITNESS: Yes, actually that would be better. Okay, yeah, if we delete the word "public area", if we say in addition any facility that is required to maintain a contingency plan shall -- XO -- if we delete a public area, then that would...

Q. (By Chairman Wrotenbery) And is Mr. Bayliss going to address the last part of that addition --

A. Yes.

Q. -- concerning when personnel are required to don personal-protection equipment?

MR. BROOKS: Yes, your Honor.

THE WITNESS: Yes.

CHAIRMAN WROTENBERY: That's all I have. Any more questions?

COMMISSIONER LEE: Thank you, a lot of work. A lot of work for Roger.

MR. FELDEWERT: Madame Chairperson --

CHAIRMAN WROTENBERY: Yes.

MR. FELDEWERT: -- if I may, in listening to Mr. Price's presentation today, I think we do have some questions of Mr. Price.

CHAIRMAN WROTENBERY: Go ahead.

MR. FELDEWERT: I don't know whether now is the appropriate time or not.

CHAIRMAN WROTENBERY: It is, go ahead.

MR. FELDEWERT: Okay, because it may take -- I have a number of questions.

CHAIRMAN WROTENBERY: That's okay, go ahead.

EXAMINATION

BY MR. FELDEWERT:

Q. Mr. Price, in reading over the Division's comments today and listening to your testimony here this morning, I understand now that the Division is in agreement that the purpose of this Rule is to address public safety in areas where H_2S may exist in concentrations that are greater than 100 parts per million; is that correct?

A. That is correct.

Q. All right. And that this decision to develop a rule to address areas where H_2S may exist in concentrations greater than 100 parts per million was a product of study and industry input in your work group; is that right?

A. That is correct.

Q. Okay. Can you outline for me how this 100-parts-

per-million threshold was developed?

A. From the standpoint of development of it, the 100 parts per million has appeared to be an industry standard for some time. I can reference the federal regulations, I can reference some state regulations that also require this. I can say that our original objective was to try to normalize our regulations so the industry would not have to have several different types of thresholds from different agencies, and the work group basically adopted the 100 parts per million that other agencies have been using for quite some time.

Q. And is that 100 --

A. I'd like to refer your question also, if the question is a question of safety, there --

Q. Well, my question --

A. -- or health, there could be an issue there with 100 parts per million too, so...

Q. Okay. I was trying to find out how and why this was developed. I understand that one of the purposes was to provide uniformity and regulation across the board for the industry when it comes to a level that is considered to be a threshold for action. Would that be appropriate?

A. Yes, it would be.

Q. Okay. Now, you touched briefly this morning on surface waste management facilities in New Mexico. Am I

correct in assuming that most, if not all, of these surface waste management facilities are located in rural areas, as opposed to urban areas?

A. You know, I really don't know the true answer to that because I'm not the permit writer for those facilities. I've been to a number of those facilities. But I think in general your statement there, or question, is probably correct, that it is in more remote areas.

Q. Were the H_2S concerns -- Or let me ask you this. were surface waste management facilities discussed at any time during the work group sessions?

A. Not -- I don't recall.

Q. Do you recall --

A. I don't recall.

Q. Do you recall whether the work group addressed any specific H_2S concerns associated with surface waste management facilities?

A. I think the answer to that question is, no, we did not.

Q. So I assume, then, there was no studies undertaken to ascertain the particular H_2S concerns that may or may not be associated with surface waste management facilities?

A. That is correct.

Q. Now, does page 2 of the Division's Exhibit 1,

does it set forth the concerns about surface waste management facilities that the Division has when it comes to H_2S?

A. Okay, I'm sorry, would you ask the question again?

Q. Page 2 of Exhibit 1 --

A. Right.

Q. -- okay, does that page set forth the concerns that the Division has when it comes to H_2S with respect to surface waste management facilities?

A. Yes.

Q. Okay. Are there any additional concerns that the Division has that are not set forth in this document?

A. That question may be inappropriate for me to answer, and the reason that it is, is that I'm not the permit writer for 711 facilities, and I generally don't handle or work with a lot of 711 facilities, so...

Q. Well now, you testified this morning about some concerns that you thought existed at H_2S facilities. Are you telling me you're not authorized or --

A. No --

Q. -- qualified --

A. No, no, what --

Q. -- to address those concerns?

A. I must have misunderstood your question. I

thought you said that, are there any other concerns that I have with 711 facilities --

Q. Okay.

A. -- myself, and I was trying to --

CHAIRMAN WROTENBERY: Actually, I think he asked you if there were any other concerns that the Division has.

THE WITNESS: Oh, that the Division -- Oh, okay, I'm sorry. Then that's all right.

Then I would say, I think the language that we have in here should -- I know it certainly satisfies Mr. Brooks and I, and we've recommended for this to be incorporated.

Q. (By Mr. Feldewert) All right. Now, this document sets forth in the second paragraph that "waste management facilities generate H_2S as wastes decompose." Do you see that?

A. Yes.

Q. First sentence of the second paragraph.

A. Yes.

Q. Now, what is the basis for that statement?

A. Previous experience.

Q. What previous experience?

A. The Division has experienced H_2S being generated at waste disposal facilities.

Q. When?

A. There is a well-known case up in the Four Corners area. It was before my tenure with the OCD, but we do have documentation to that effect.

Q. When did your tenure with the OCD begin?

A. 1993.

Q. And you say you have documentation to that effect?

A. Yes, we do.

Q. What type of documentation?

A. It just -- I know that there's a file concerning that facility, and there is some sort of court case concerning the generation of H_2S, and that's about all I really know about that in detail. I do know it's out there, I know that we've had a problem, and that's available for public record.

Q. Do you know the name of the facility?

A. Yeah, I believe it's called Basin Disposal.

Q. Do you know the nature of the problem?

A. Not in detail.

Q. Do you know the level of H_2S that was involved?

A. No, I don't.

Q. Do you know how the decomposure process led to a release of H_2S?

A. Not in that instance, I don't.

Q. Do you know whether there was a release of H_2S?

A. I understand there was.

Q. From what?

A. From the facility.

Q. Okay, and what's that understanding based on? Is it your review of the file?

A. Yes.

Q. You did review the file?

A. Parts of the file.

Q. What do you recall from your review of the file?

A. Well, I recall that that particular waste management facility had some problems, and there was some H_2S that was generated, it was measured and appeared to be causing some problems with nearby neighbors and so forth.

Q. You don't know the level of the release, though?

A. I'm sorry, I can't recall exactly what those levels were.

Q. Can you give us any indication today about the process that led to that release?

A. I can't tell you, I don't know.

Q. What other previous experience has the Division had to support this sentence?

A. That's probably a question -- That's all my experience that I've had. That might be a question better for someone else in the Division.

Q. Well, I'm trying to ascertain what the basis is

for the Division to make this statement. I understood you're the witness to do that. Am I incorrect?

A. That's correct.

Q. Who's the more appropriate witness to identify the basis for this statement?

A. I would think probably Roger Anderson, the Bureau Chief, would --

Q. Is Mr. Anderson going to testify today?

A. I don't know if he is or not.

Q. The third line of that second paragraph talks about "unpredictable changes in H_2S emissions". Do you see that?

A. Yes.

Q. And it goes on to say that "the regulatory scheme of the present rule, premised on an historically ascertained volume and concentration of H_2S that is presumed to be essentially constant, is not adequate to address safety concerns at these facilities."

Can you describe for me the basis for that statement?

A. Yeah, I can. The basis of radius of exposures that are calculated under our current rule is a well-known dispersion equation. It's called the Pasquill-Gifford equation. And that equation -- I also might add that Mr. Bayliss is -- you might ask him a few questions concerning

modeling of that.

But anyway, the Pasquill-Gifford equation is based upon flow rate, concentration. And so you put that into the equation and you get some sort of radius of exposure.

Now, there are models out there that could model unpredictable changes, but you would have to know certain input parameters. And anytime you have unknown wastes that are in a facility that's been mixed and then it's -- it would be practically impossible for anyone to determine what chemical reactions or what physical reactions could take place in those particular situations. And that was the intent that we're trying to make here.

Q. Do you have any experience to draw upon that would indicate that you've had this problem at surface waste management facilities?

A. I don't.

Q. Do you know whether the Division has any experience to draw on?

A. I'm sorry, I don't know the answer to that question.

Q. Have you looked at Rule 711?

A. Yes, I have looked at Rule 711.

Q. Are you familiar with the requirements in Rule 711?

A. Vaguely.

Q. Are you familiar with the operational requirements of Rule 711?

A. Vaguely.

Q. Have you taken that into account prior to making this statement?

A. Yes, Rule 711 was taken into account, and it was not just me alone that made that decision; it was the Division as a whole. And so I relied upon a lot of expertise from other members of our group.

Q. Okay. Are you aware that Rule 711 requires in paragraph 711.C.5 that any such facility maintain for inspection records that document and indicate the nature of the disposals at the facility?

A. Yes, I am aware of that.

Q. And are you familiar that in Paragraph 6 Rule 711 requires a surface waste management facility to have an attendant on duty to monitor disposals at the facility?

A. Yes.

Q. And are you aware that Rule 711 does not allow any produced water to be transported to the facility unless the transporter first has a valid form issued by the Oil Conservation Division?

A. That one I was not familiar with.

Q. Okay. Is it your opinion that those operational

provisions in Rule 711 are not sufficient to protect against the type of waste-mixing that you are concerned about in this paragraph?

A. Yes, because I think I've mentioned earlier that such waste management facilities might have tanks that have high concentrations of hydrogen sulfide that's not addressed in Rule 711. And under the proposed hydrogen sulfide Rule, they would be addressed for protection of workers and the public.

Q. So the proposed Rule is going to cover the tank issue?

A. Yes, it would.

Q. Okay, because you're going to have testing of those tanks?

A. Right.

Q. Okay. And so the proposed rule would address any concerns that the Division has with respect to tanks that are located at surface waste management facilities?

A. That's correct.

Q. All right. Earlier in your testimony this morning, you talked about a concern about produced water when you were referencing surface waste management facilities. Do you remember that?

A. Yes, I do.

Q. Could you articulate your concern about produced

water with respect to surface waste management facilities?

A. Well, produced water certainly can have hydrogen sulfide in it. I might add too, a rule of thumb is that if the liquid has 1 part per million in it, then the vapor that comes off of that liquid could have 50 parts per million. That's an engineering rule of thumb.

So if produced water has 1000 parts per million, if that's possible, then you could have, you know, 50,000 parts per million in the vapor. But I would think it would be more like 100 parts per million, and then multiply that times 50, you get 5000 parts per million.

So the vapor phase, once you liberate the H_2S out of the water, then you can have some really high concentrations of H_2S.

Q. So your concern, as is the -- Let me back up.

Both you and the Rule address and are concerned about a level of 100 parts per million in produced water; is that correct?

A. That is correct.

Q. Okay. Now, the way that --

A. Or in any system, that's what the threshold is for the proposed Rule.

Q. Now, produced water, the only way it could get to a surface waste management facility would be to be transported by truck, right?

A. Well, I don't know if we have any -- I think there's some surface waste management facilities that actually have pipelines.

Q. That go directly to the facility?

A. I believe that's correct.

Q. Do you know what facility -- which facility that is?

A. Well, I can't recall the name of it, but I do know that we had -- I think actually some of those are closed, but we actually had a pipeline that went directly to those facilities. Or we didn't, but the operator did.

Q. Okay. Are you aware of any surface waste management facility that is permitted by the Division today that has a pipeline going directly to that facility for produced water?

A. I don't know the answer to that.

Q. Okay. Would you agree with me, then, that with respect to surface waste management facilities what we are dealing with is a situation where the water is transported to the facility by truck?

A. Yes.

Q. Okay, is it your --

A. Notwithstanding the fact that there might be some out there that I'm not aware of --

Q. I understand.

A. -- that might have a pipeline.

Q. And is it your testimony that a truck and authorization of transport by the Division is going to be hauling produced water that has 100 parts per million of H_2S in it?

A. I'm just saying that transport by truck could possibly have H_2S in it.

Q. 100 parts per million? That's not very likely, is it?

A. It's hard for me to say. I'd have to sit down and do some engineering calculations on the solubility of H_2S in water and so forth. But it's possible.

Q. You don't have any studies today, though, to indicate that we've got trucks out there hauling produced water that have 100 parts per million in it of H_2S?

A. Well, actually I think if you would measure the vapor space above that water, then you certainly could have 100 parts per million.

Q. When that water is transported to a surface waste management facility, it's going to be disposed of, either into a tank or a pit, correct?

A. Correct.

Q. Okay. And right now, this Rule has provisions in it for the testing of those tanks and pits to ensure that they do not maintain a level of H_2S that exceeds 100 parts

per million?

A. That is correct.

Q. Okay --

COMMISSIONER LEE: I think your point is, your tank may have 100 p.p.m. So if you test it lower than p.p.m., you're free of this Rule?

MR. FELDEWERT: That's the way we understand it.

COMMISSIONER LEE: So we -- But we take a lot of time on this one.

MR. FELDEWERT: Let me be a little more direct, then. I apologize.

Q. (By Mr. Feldewert) The Division at this point is recommending that the language within Paragraph B of the Rule that's underlined at the end of the Rule, that that language be maintained within the Rule?

A. Yes, that's correct.

Q. Okay, and the reasons you're requesting that language be maintained are set out in page 2 of Exhibit 1, correct?

A. Yes, that's correct.

Q. All right. Can you identify for me the more stringent conditions that you are referencing here that exist in Rule 711?

A. I'm sorry, I didn't understand the question --

Q. Would you --

A. -- or didn't hear it.

Q. Okay, this latter part of this Rule, in paragraph B, addresses more stringent conditions on the handling of hydrogen sulfide required for such facilities by Rule 711. Do you see that?

A. Okay, let me go through it here. Okay, you're at the --

Q. I'm at the draft Rule.

A. The present draft Rule, under B, right?

Q. Correct. In my draft it's underlined. Let me back up.

Do you have in front of you the draft that the Commission circulated on August 30th?

A. I have the version that does not have the strikeout on it.

Q. Okay, does your version have within it any underlined language?

A. No.

Q. Okay, the last sentence of your version begins with "This section shall not..."

A. Yes, "This section shall not..."

Q. Okay, and it goes on to talk about more stringent conditions on the handling of hydrogen sulfide required of such facilities by Rule 711. Do you see that?

A. Yes, I do.

Q. Okay. Are you aware of any more stringent conditions within Rule 711?

A. I'm not familiar enough with Rule 711, since I don't write permits with it, to answer that question.

Q. Do you know what the Division is referencing when they talk about more stringent conditions in Rule 711?

A. Actually, I do not know.

Q. It goes on to talk about "or more stringent conditions existing in permits issued thereunder." Do you see that?

A. Yes.

Q. Okay. Are you aware of what the Division is referencing with respect to more stringent conditions existing in permits issued thereunder?

A. Well, it's my understanding that this proposed Rule will cover -- the proposed H_2S Rule will cover 711 facilities, but it will not by any manner supersede the authority that's given under Rule 711. In other words, not undermined that authority that's given under Rule 711. That's my understanding of the way this reads.

Q. Okay, I'm trying to figure out -- and maybe -- I don't know if you can help me out --

A. And actually, to me it's a statement that the Division has put in there, is that we may require more stringent conditions in existing permits. That's how that

reads to me.

Q. Okay. Do you know what they're referencing with respect to more stringent conditions?

A. I answered a while ago, I didn't know.

Q. Okay, let me hand you -- I don't know if I need to mark this. I mean, I can just refer to it on the record.

CHAIRMAN WROTENBERY: What is it?

MR. FELDEWERT: It's a letter that was submitted by Loco Hills.

CHAIRMAN WROTENBERY: We've got that in the record, already.

MR. FELDEWERT: Okay. Well, if I may approach the witness --

CHAIRMAN WROTENBERY: Certainly.

MR. FELDEWERT: Do you have copies?

CHAIRMAN WROTENBERY: It's a letter that came in on August 8th, 2002.

MR. FELDEWERT: Do you have --

CHAIRMAN WROTENBERY: Yes, I've got it.

MR. FELDEWERT: Do you need a copy?

MR. BROOKS: Yeah, I guess, if you're going to be referring to it.

Q. (By Mr. Feldewert) Mr. Price, have you seen this letter before?

A. This is a letter to the Commissioners?

Q. Yes.

A. Actually, I may not have seen this.

Q. Okay. For the record, this is a letter that Loco Hills submitted to the Commissioners. It's dated August 8th, 2002, and has an attachment to it. Do you see that?

A. Yes, I do.

Q. Okay, and it has what purports to be H_2S prevention and contingency plan. Do you see that?

A. Yes.

Q. And Loco Hills indicates that this was attached or part of their Rule 711 permit.

A. Okay.

Q. That's in the second paragraph.

A. Okay.

Q. Okay. Now, I want to go through this very briefly. Paragraph 1 talks about, apparently, the tests that are required to be conducted on a weekly basis. Do you see that?

A. I see it.

Q. And then it goes on in the second sentence to indicate that the tests must be conducted at four locations.

A. Right.

Q. Okay. Then it goes on in Paragraph A to say that

if an H_2S reading of 1 part per million or greater is obtained, certain actions have to be taken.

A. Yes.

Q. That threshold is roughly what, 1 percent of the 100-part-million threshold that the Division is recommending today, is it not?

A. Mathematically, that's right.

Q. Do you know any -- do you have any reason -- Are you aware of any basis for requiring Loco Hills or any other surface waste management facility to take action if a reading is received at 1 part per million?

A. Yes, because it's a condition of their permit.

Q. Do you know any for imposing that condition on anyone's permit?

A. It's my understanding it's based on public health versus public safety.

Q. Isn't it the Division's position today that 100 parts per million covers public health and public safety?

A. No, it's not.

Q. It's not?

A. It's strictly a public safety rule.

Q. Which is a public safety rule?

A. The new proposed H_2S -- It's a public safety rule.

Q. What's the purpose of this provision in an H_2S

contingency plan for a surface waste management facility?

A. It's my understanding it's for public health.

Q. Same reason?

A. No, this is for public health, and the H_2S Rule, proposed Rule, is for public safety.

Q. What is the level that OSHA has determined to be harmful to human beings?

A. That's a question that should be, probably, addressed to our expert in that area, but I can --

Q. Well, don't you say on page 10 of your Exhibit 1 that it's 50 parts per million?

A. Where are you at, now?

Q. The Division's Exhibit 1, on page 10?

A. Oh, yes, uh-huh, right.

Q. Down at the bottom it says that "50 parts per million for ten minutes is the level at which OSHA requires to wear respiratory protection equipment, if this level is present, since it has been scientifically determined that this level is harmful to human beings." Do you see that?

A. Yes, and that's based upon what's called PEL, or permissible exposure limit, that's been set.

Q. Okay. Are you aware of any study or basis for a determination that 100 parts per million presents a health or safety issue for the public?

A. Yes, there's a number of studies, number of

references, number of documents. API documents the number of trade organizations that indicate -- that reflect that 100 parts per million could be harmful.

Q. I'm sorry, I misspoke, 1 part per million.

A. Oh, okay.

Q. I apologize.

A. I'm not aware of any. There is -- Just a second, let me look something up, and I can maybe answer that a little bit better. There's an emergency response guidebook that talks about low levels of hydrogen sulfide, and -- I do have it, it's going to take me a while to find it.

CHAIRMAN WROTENBERY: Mr. Price, if you need some more time to look for that, we can have you come back later and provide that information.

THE WITNESS: Okay.

CHAIRMAN WROTENBERY: I will note that we're getting into questions about Rule 711 and the purposes of Rule 711, which are not really part of this proceeding here today. I hope we can focus on Rule 52 as it's been proposed and address those issues.

THE WITNESS: Okay.

CHAIRMAN WROTENBERY: Why don't you look for that over the lunch break --

THE WITNESS: Okay, very good.

CHAIRMAN WROTENBERY: -- and then you can come

back and present it.

MR. FELDEWERT: My purpose, madame Chairperson, is to try to indicate -- or try to find out why the Division feels that this additional language is necessary in this Rule, in light of the ability of the Commission under Section E.4 -- let me get my cite correct here -- E.4.d, the Commission has the ability under the present draft of this Rule, under this section, to impose additional requirements or modify requirements based on site-specific conditions, population density or special circumstances.

In light of that language, I'm trying to understand why the Division feels that it needs this additional language in Paragraph B and exactly what they're referencing when they talk about more stringent conditions, either in Rule 711 or in permits that are issued.

CHAIRMAN WROTENBERY: I think you've given an example of the more stringent conditions that the draft language is referencing when you point out the conditions in Loco Hills' permit, which are pretty consistent with conditions that are in other -- similar permits for other facilities.

MR. FELDEWERT: I think they're identical.

CHAIRMAN WROTENBERY: Uh-huh.

MR. FELDEWERT: My concern, if I may, is that we

have an industry group that has gotten together here, along with regulatory authorities, in taking a very close examination of this H_2S issue for New Mexico and has come up with a threshold that they feel is appropriate to protect the public health and environment, and in the process of that have come up with a threshold at which there should be a level of concern. And as I read this Rule and the Division's comments, that threshold is either 50 parts per million or 100 parts per million.

Yet when it comes to surface waste management facilities, we have a threshold that is roughly 1 percent of what this work group has determined to be the appropriate level for action. And I guess I'm wondering why the Division feels that they need language within this Rule that continues to incorporate what I would call this disparate treatment.

CHAIRMAN WROTENBERY: Mr. Brooks, would you like to address that issue?

MR. BROOKS: Madame Chairman, honorable Commissioners, I think -- since the Chair has raised this and because of the discussion, I believe that this is essentially irrelevant, the justification for these detailed requirements in all 711 permits.

The reason this came -- And Mr. Price has just testified that the work group did not discuss specifically

the issue of waste management facilities.

The reason this issue arose was because it became apparent that there could be a contention that by adopting this Rule, that the Commission had intended to supersede the permit requirements that had already been developed under Rule 711, and that was never intended.

And that's basically the reason why we're here, not to address specifically why those particular requirements in Rule 711 permits are justified, but just that surface waste management facilities are a different type of facility. They were not specifically -- their specific concerns had not been addressed previously, and it was not intended by adoption of this Rule to throw out the existing regulatory standard with regard to surface waste management facilities.

So going into the details of what that regulatory scheme is and what the justification for it is, I believe that's basically irrelevant to this proceeding.

CHAIRMAN WROTENBERY: Okay.

MR. FELDEWERT: My concern here is that as I read this Rule, despite the Division's statements to the contrary, the way the Rule reads now it appears that we are going to have one level of threshold for action for all facilities regulated by the Division except surface waste management facilities.

I hope that is not the intent, but that's certainly the way the language -- With the language as it is in paragraph B, that is the apparent effect of the Rule.

CHAIRMAN WROTENBERY: It's definitely the effect. Even under the current Rules, there are separate provisions for surface waste management facilities and the H_2S associated with those facilities that differ from the H_2S requirements for other facilities under Rule 118. There are reasons for those differences.

We really are -- In 118 and the new Rule we're talking about replacing Rule 118, proposed Rule 52, we are focused on acute public health effects of sudden releases of H_2S. That may be oversimplifying a little bit, but that is, I think it's fair to say, the focus of the current Rule 118 and the proposed Rule 52.

Rule 711 has some different objectives. There are some concerns about long-term effects on public health of lower levels of exposure of H_2S, and there may be some other reasons for the provisions that are in Rule 711 that are really beyond the scope of this particular proceeding.

Commissioner Lee, you had suggested in your comments earlier that you thought it would be appropriate to take a look again at the H_2S provisions under Rule 711?

COMMISSIONER LEE: And we are going to do that.

CHAIRMAN WROTENBERY: Yeah, I think that may be

the best way to address some of these issues that you're trying to get at about the H_2S requirements in 711 permits, is to go ahead and docket a separate proceeding where we hear from the Division staff on the H_2S requirements for 711 facilities and perhaps some of the other provisions of Rule 711 that might need to be clarified. I know --

MR. BROOKS: Yes, I believe --

CHAIRMAN WROTENBERY: -- through experience there have been some --

MR. BROOKS: I believe we have been directed to do a study, again, revising Rule 711. That's down the agenda from this proceeding. It probably will be some months in the future.

CHAIRMAN WROTENBERY: Do you have any idea when we might be prepared to bring those forward?

MR. BROOKS: I do not. Roger, do you know where we are with that or --

MR. ANDERSON: I think, madame Chairman, that was one that was scheduled to begin sometime next summer.

CHAIRMAN WROTENBERY: Commissioners, what's your sense? Would you like to see the Division accelerate that process, or is that time line adequate for you?

MR. ANDERSON: The Division is at the Commission's pleasure.

COMMISSIONER LEE: What does the industry think?

MR. FELDEWERT: If I may comment briefly, here's the concern and here's what I do not understand, and this is what we're trying to understand today.

The Division has undertaken a lot of effort to come up with a rule that applies to all regulated facilities that sets forth a threshold for when action must be taken.

CHAIRMAN WROTENBERY: To address certain types of risk, that's --

MR. FELDEWERT: That's fine, I understand.

CHAIRMAN WROTENBERY: -- it's not trying to address every possible risk associated with H_2S. We're trying to make sure that the people who live and work in the vicinity of operations involving H_2S are protected from sudden releases of H_2S.

MR. FELDEWERT: And I think this Rule does a very good job of doing that. The concern I have is, we have now this language in Paragraph B and a sudden effort by the Division to exclude just surface waste management facilities from the operation of this Rule.

And it's my understanding, in looking at the types of permits that have been issued, which are uniform and which contain an H_2S contingency plan, that while the remainder of the industry is required to take action, develop plans and follow the rule with a 100-part-per-

million threshold, when it comes to surface waste management facilities, if you look at this, it says if you get an H_2S reading of 1 percent of 100 parts per million, 1 part per million, you've got to do a second reading and you've got do a test at the fenceline.

And if you get two consecutive H_2S readings of 1 part per million at the fenceline of the facility, you've got to notify the OCD office, you've got to commence 24-hour monitoring, you've got to -- must obtain daily analysis of the dissolved sulfides in the pond.

And if you get a reading of 10 parts per million, one-tenth of the threshold that they are using under this Rule, then you've got to notify the OCD, you've got to notify the State Police, you've got to notify the Eddy County Sheriff, you've got to notify the fire marshall, you've got to notify the Loco Hills Fire Department and all persons within a half mile of that fenceline. And it goes on to impose additional requirements.

I don't understand, I do not understand the basis for that, or the desire by the Division to maintain a 1-part-per-million threshold for surface waste management facilities, when everybody else is subject to a 100-part-per-million threshold. That is what we're trying to find out here today.

MR. BROOKS: Madame Chairman, we have offered in

our comments the reasons why we believe surface waste management facilities should be subject to special consideration, that there are different considerations applicable to them than there are to other facilities.

We respectfully do not believe that it's part of the Division's burden in proposing a Rule to show why some other existing rule that we're not proposing to amend should not be amended. We do not propose that surface waste management facilities be -- that the existing regulation of surface waste management facilities under Rule 711 be changed. We may propose that at some future time, but we're not proposing that at this time.

We're simply asking that this Rule be clarified to show that it does not intend to repeal the existing regulatory scheme under Rule 711. So we do not feel that we're obligated to -- at this point, to justify the details of that regulatory scheme, because we're not proposing any change in it, and it is in accordance with the present Rule.

COMMISSIONER BAILEY: We're not here to justify the permit requirements for Loco Hills. I think this is inappropriate discussion. We are here to discuss this Rule, not the specific requirements for 711. So I suggest that we move on.

CHAIRMAN WROTENBERY: We will. We will review

the H_2S requirements of Rule 711 in a separate proceeding. That particular matter is on the Division's agenda. I think the Commission can expect to hear back from the Division on that particular issue next summer, unless there's a request to hear it earlier.

But the Division will be bringing that issue back to the Commission, but that discussion is beyond the scope of this particular proceeding, which is about the requirements of Rule 52.

MR. FELDEWERT: I understand, and my comment is this. If this Rule is enacted with the language existing -- as it exists in Paragraph B, if that underlying language is not taken out, then what you have done in enacting this Rule is, you have enacted a rule where there is 100-part-per-million threshold for every other facility in New Mexico and a 1-part-per-million threshold for surface waste management facilities.

I understand today that you do not want me to go further into the reasons for that -- that was what I was hoping to find out here today -- and I will respect the Commission's decision. But we do have a serious concern about the disparate treatment of surface waste management facilities if this Rule is put into effect as it presently is drafted.

Thank you for your time.

CHAIRMAN WROTENBERY: Thank you, Mr. Feldewert.

Does anybody else have questions of Mr. Price at this point?

Then Mr. Price, you're excused. Thank you very much --

THE WITNESS: Thank you.

CHAIRMAN WROTENBERY: -- for your testimony.

And we will take a lunch break now. So we'll start back up at 1:30.

(Thereupon, a recess was taken at 12:30 p.m.)

(The following proceedings had at 1:35 p.m.)

CHAIRMAN WROTENBERY: Okay, I think you're on, Mr. Brooks?

MR. BROOKS: Very good. We call Randy Bayliss.

Good afternoon.

MR. BAYLISS: Good afternoon.

RANDOLPH BAYLISS,

the witness herein, after having been first duly sworn upon his oath, was examined and testified as follows:

DIRECT EXAMINATION

BY MR. BROOKS:

Q. Mr. Bayliss, would you state your name for the record, please?

A. Randolph Bayliss.

Q. And by whom are you employed, Mr. Bayliss?

A. The New Mexico Oil Conservation Division.

Q. And in what office are you employed?

A. The Santa Fe Office, Environmental Bureau.

MR. BROOKS: Once again, Mr. Bayliss's credentials were placed in the record at the previous hearing, and I take it it's unnecessary to do that again?

CHAIRMAN WROTENBERY: That's right.

Q. (By Mr. Brooks) Very good. Mr. Bayliss, are you familiar with the literature concerning the hazards of hydrogen sulfide?

A. Yes, I am.

Q. And can you tell us what is -- Well, you were here in the hearing room during Mr. Price's testimony, were you not?

A. Yes.

Q. And you heard that there was a lot of discussion about whether or not it is appropriate to impose certain requirements in a situation where you have a hydrogen sulfide gas stream or mixture that contains 100 parts per million concentration or greater, correct?

A. Yes.

Q. Can you tell us, according to studies that have been done in the industry literature, what is the significance of 100 parts per million concentration?

A. The rational basis for 100 parts per million can

be thought of in two respects, or can be visualized in two respects: first of all, what happens to human beings for various periods of time, and secondly, what it is you have to do be in 100 parts per million to protect yourself.

The safety standard generally is, 100 parts per million is something that's called IDLH or immediately dangerous to life and health, which is exactly what it says.

"Immediate" is sort of an ambiguous word, and the regulations give you 30 minutes to escape a concentration of 100 parts per million. That isn't to say you're allowed 30 minutes, it means you have to get out of an atmosphere that is that contaminated. You can suffer irreversible health effects, or you could even die at that level.

It's been previously said that you lose your ability to smell hydrogen sulfide gas at that odor. I've testified before that we call it rotten-egg gas because it smells like decomposing, rotten eggs.

The other effects are that you don't see very well, you get dizzy, you don't think very well, it's very hard for you to protect yourself, it's very hard to start getting into escape mode.

Now, if you're on the outside of a 100-part-per-million cloud of hydrogen sulfide, to go back in you have to be suited up with Scott air packs, you know, the tanks

that firefighters wear, or with the supplied air with a long hose.

Q. Now, when you say you have to be, is this in accordance with Occupational Safety and Health Administration regulations?

A. Yes, it is.

Q. Okay, continue.

A. So to go back into an IDLH atmosphere, to go back into 100 parts per million, you have to have your supplied air, you have to have a radio, you have to have some sort of device to drag you out in case you fall over or get overcome, you have to have a rescue team ready.

So 100 parts per million is a pretty serious level.

Q. Now, is it not true that the effects of hydrogen sulfide gas on individuals may vary?

A. The effects of hydrogen sulfide depend upon five or six factors, you know, your bodyweight, previous exposure, whether you're on some sort of drugs, whether you're an alcoholic, whether you've been around the oilfield too long, because repeated exposures start inducing certain effects at lower levels at lower times.

In any -- As some of the questions earlier today indicated, the concentration and the time both have to be considered as two separate factors in determining what the

effects are.

Q. Okay. Is it possible that a particular individual might lose consciousness or even become a fatality in less than 30 minutes at 100 p.p.m. concentration?

A. There's no recorded instance of that. And the problem with that, of course, is the problem with the records. I mean, somebody falls over, you drag them out. You don't go over and measure the concentration. The lowest -- The most lethal dose on record is 600 parts per million for ten minutes.

Again, you have to do a concentration and time to get an effect.

Q. Now, let me reiterate -- let me go back again. You said that the people who are in the area, if there's 100 parts per million, that they're required in accordance with OSHA regulations to get out within 20 minutes unless they have this special protective equipment you're talking about?

A. That's correct. The way I would say is that you should stop what you're doing immediately and walk and don't run till you can get out of the exposure, get out of the cloud.

Q. And that's even if you have a respirator?

A. Yes, if you are wearing -- Between 50 and 100

parts per million, you're required to wear a respirator, and that can be one of these self-purifying things that essentially filters or absorbs the H_2S out of the air, so you're essentially breathing purified air. Between 50 and 100 you can use one of those things.

But once it goes over 100, even though you might have a respirator on, you've got to get out.

Q. And you have testified already that at any given concentration level of hydrogen sulfide, the adverse health effects are increased as the time of exposure increases, correct?

A. Correct.

Q. So that if a hydrogen sulfide leak is occurring and there is a continuing emission, the longer that continues to be emitted, the greater danger it presents to the public?

A. Correct.

Q. And that would be even more true when you take into consideration that you're in a remote area at any given instance in time, there might not be anybody in the area, but the longer you have the substance present, the more likely it is that there will be somebody in the area within the time it's there? That's a rational assumption, right?

A. Yes.

Q. Okay. If the people on the site that are responsible for the well or facility have to evacuate, they have to immediately stop what they're doing, that's going to present a control problem, right?

A. Correct.

Q. And so that it's going to increase the length of time that -- if there's control actions that are necessary, it's going to increase the length of time before those control actions can be taken?

A. Correct.

Q. Okay. Now, you've said a little bit about the level of 50 parts per million. Now, what is the significance of 50 parts per million?

A. In the OSHA Rules, 50 parts per million for ten minutes is the exposure at which you're required to take some sort of respiratory protection. And as I said, the most common at this low of an exposure is an air-purifying respirator. So you're required to put on a respirator. That's the level at which OSHA has determined some harm is going to happen.

And the harm in this case is clearly expressed by eye and throat irritation. So you can't see very good and you're coughing all the time. You're not going to be working very efficiently, your thinking processes are going to be impaired by your distress.

Q. And under OSHA regulations, the personnel on site at that level of exposure would have to don protective equipment?

A. Under current OSHA regulations, yes.

Q. Now, are there any other circumstances under which they would be required to don protective gear, protective equipment?

A. Well, I'd like to note that many site-specific safety plans that employers adopt are triggered at lower levels --

Q. Okay.

A. -- and there are many industrial hygiene organizations that recommend lower levels for putting on respirators. NIOSH, for example recommends 10 parts per million on an eight-hour day as a level to require respiratory protection.

Q. Now, these levels that we've been talking about, these are not the minimum levels at which hydrogen sulfide may possibly be dangerous to health?

A. That is correct. These are levels, you know, for the -- simply the workplace, for a work period, for people who understand that that's an exposure, that's a hazard, people who've been trained to react to it, yes.

MR. BROOKS: I believe that's all my questions for Mr. Price -- Mr. Bayliss. Pass the witness.

EXAMINATION

BY CHAIRMAN WROTENBERY:

Q. I just wanted to ask one question about the draft language that you're proposing here on page 10 of Exhibit 1. It states right now that "any facility that is required to maintain a contingency plan...shall activate the plan if there is a measured release of hydrogen sulfide gas on-site in a concentration of 50 ppm for a period of ten minutes, or if the on-site personnel are required to don personal protection equipment i.e. life-support systems in order to remain on site."

Is there any difference between the hydrogen sulfide gas on site being in a concentration of 50 p.p.m. for a period of ten minutes, and the second element, if the personnel must don personal protection equipment?

A. Yeah, I was thinking about that as well. The instance in which I could foresee that as being different might be the case where a site-specific safety plan requires people to put on equipment at, say, 10 parts per million. And many safety plans have 10 parts per million, it's quite commonly encountered. So I could see a case where, say -- or sometimes a ceiling of 20 parts per million is enough to trigger it.

So there might be certain operators who would require of their employees and their safety plans this, and

that would be the venue for requirement. But as far as requirement by a federal or state agency, 50 at ten is one that's a possible.

Q. I guess I'm a little unclear, then, why we would have that second phrase in there.

A. Well, once a person puts on -- you know, suppose your air monitor goes off at 10 parts per million, which many of them do. Many safety plans say that that's when you start putting on your equipment, and that's when the contingency plan would be activated.

Q. So it would be up to the operator to --

A. Right, I guess the question --

Q. Really, the Rule requires that if there's 50 parts per million -- or the language you're proposing here, I should say, requires that if there's 50 parts per million for ten minutes. But the additional phrase here indicates that if the operator wants to subject themselves to a more stringent requirement --

A. Right.

Q. -- they could by incorporating a lower level into their safety plan?

A. And it's also likely that OSHA standards, even, will be made more stringent in upcoming years. That's the trend of the regulations right now. It used to be the IDLH was 300. Now it's 100. A few years from now it's likely

to be 60. So that things -- You know, things are changing, so it could be that the OSHA Regs could change.

Q. Okay. And again, I'm still having a little trouble figuring out why we would require something below 50.

MR. BROOKS: Maybe if I ask a follow-up question I can --

CHAIRMAN WROTENBERY: Uh-huh.

MR. BROOKS: Whatever is required on the site by the operator's operating procedure, at the time when the people have to put on their protective gear they're going to be focusing on that requirement, right?

THE WITNESS: Yeah, that's correct.

MR. BROOKS: And if you're going to avoid procrastination and confusion in an emergency situation, it makes sense to require them to activate the contingency plan at a time when they're focused on that, rather than say, Well, it's gotten up to 40 so we've got to put on our gear, but we've got to keep watching that gauge so we know if it got up to 50, then we have to activate our contingency plan, correct?

THE WITNESS: That's correct.

MR. BROOKS: Would that be a rational approach to a regulation in an emergency situation?

THE WITNESS: It could be.

MR. BROOKS: Thank you.

Q. (By Chairman Wrotenbery) Was that your rationale for putting it in there?

A. I wasn't responsible for drafting that language, so I'm really not the -- I'm really trying to figure out what the rationale is at this very moment, so --

Q. Should I ask Mr. Price?

A. Well, I think Mr. Brooks could probably direct me on the right path, if that's possible.

MR. BROOKS: Well, that seems like a good rationale to me. Now, Mr. Price might have a different opinion.

CHAIRMAN WROTENBERY: Mr. Price, did you have a different rationale?

MR. PRICE: Well, my rationale was that if a company has a site safety and health plan and if they have a lower limit, and if you have to suit up, then just by virtue of the fact that you're having to suit up, in essence you're beginning to lose control of that well. And I'll tell you -- or the situation.

In the work group we talked about -- we had a lot of discussion concerning what the trigger level should be. And I remember we talked about 10, we talked about 20, then we went to 30. And we were trying to find, you know, what is the best number.

And Gene with OXY had mentioned that, well, they might have a number lower than what the State has, and they might choose to activate their plan sooner. And so we were just trying to put some language in there that is going to satisfy an early activation, but yet if someone -- if you have to suit up, obviously you have a problem. And if you have a problem, then I think it warrants some early notification for the public.

Because what you don't want to happen, if you're having to suit up and you have a situation where you're fixing to lose control of the situation, you don't want to waste that valuable time to notify -- or go ahead and activate the contingency plan.

So you know, it's really going to be up to the company. I mean, they can go higher, but if they wish to do it lower, then it would activate it.

MR. ROSS: But that's not the way you've got it written.

MR. PRICE: Well, right now it's written if they have to -- The way it's written, if they have to don life-support equipment to stay on site, okay, so if they have to do that to stay on site, then they should be activating their contingency plan.

MR. ROSS: But the way it's written they don't have a choice. If they have to don protection equipment,

then the plan gets activated. But it sounded like you were implying, at least, that the companies had some choice in the matter, in which case you want whichever is greater language.

MR. PRICE: Well, they would have a choice, because they can set their activation limit up to anywhere between 10 to 50.

MR. BROOKS: Well, they don't have a choice of having an activation level above 50 --

MR. PRICE: Above 50.

MR. BROOKS: -- because they would be violating OSHA Regulations. So it's required by OSHA, whether it's required by the operator or not.

MR. PRICE: Yeah.

CHAIRMAN WROTENBERY: Okay, thanks. I think I understand.

Any questions of Mr. Bayliss from anybody in the back?

Okay, thank you, Mr. Bayliss.

THE WITNESS: Thank you.

MR. BROOKS: With that, the Division rests.

CHAIRMAN WROTENBERY: Thank you, Mr. Brooks.

Okay, Mr. Gantner?

MR. GANTNER: Where should I go? Right --

CHAIRMAN WROTENBERY: That would be great.

BRUCE A. GANTNER,

the witness herein, after having been first duly sworn upon his oath, and testified as follows:

DIRECT TESTIMONY

BY MR. GANTNER:

MR. GANTNER: My name is Bruce Gantner, I'm a manager of environmental health and safety for Burlington Resources. I'm here today representing a joint effort with the New Mexico Oil and Gas Association, as well as the Independent Producers Association of New Mexico, have gone through this quite deliberately, and we have a proposed alternative.

Just to give you an idea about my background, I've got 25 years' experience in the environmental health and safety field. I've been in the oil and gas industry for 15 years. Registered professional engineer, certified safety professional, certified industrial hygienist. So very intimately familiar with the issue of hydrogen sulfide and its hazards and how to protect the public.

We appreciate this opportunity to be here and give you some of our thoughts about how this Rule should be. In fact, what we've done as a part of our heavy effort Wednesday and yesterday, we have a total rewrite for you, which we have copies for an exhibit.

CHAIRMAN WROTENBERY: Please.

MR. GANTNER: Now I'm missing one color copy.

CHAIRMAN WROTENBERY: Kate had one, I saw it in her hand earlier.

MR. GANTNER: Is that right? I left it up here. Maybe that's where it went.

MS. McGRAW: I'll give it back to you.

MR. GANTNER: Why have we chosen to rewrite the Rule? Well, one of our efforts, to us, is, we've worked in the working group and worked with this. It was kind of awkward and cumbersome as we worked through it, so we wanted to reorganize it.

Secondly, in some areas we feel that the Division proposal was overly prescriptive, and we felt it should be written more as a performance standard, laying clear what the performance objective is, and then allow industry a little more flexibility in certain areas to meet it. And we'll go through those parts.

Third, we've incorporated in our proposed rule the very same consensus and other state standards that the Division has mentioned: Texas Railroad Commission Rule 36, we've also incorporated API RP-55 which deals with production operations in hydrogen sulfide areas, and we've also incorporated API 49 which deals with drilling, well-servicing operations.

The other thing we did is, this is a consensus

between NMOGA and IPANM, those who deal with this on a day-to-day basis. So we feel what we've written here is protective of the public, but it is a Rule we can comply with in a consistent and effective manner.

Also, we've incorporated some of the comments that Wayne had sent out to us. We got it early enough that we could incorporate some of those in ours, so we'll mention those in particular.

So to move forward with this -- And then, of course, if I mis-speak on anything, there are both -- both Gene and Dan will have a chance to correct me.

CHAIRMAN WROTENBERY: Does everybody have a copy?

THE WITNESS: They're right out there.

CHAIRMAN WROTENBERY: Okay.

THE WITNESS: First of all, I think it would be good to just go through the summary.

Basically the summary we have is, this is a public-protection rule, and we need to keep that in our focus. I think we've heard a lot of testimony earlier that kind of crossed the border of being public protection and dealt with worker protection, and so we want to -- we just stand firm that this is designed to be a public-protection Rule. It applies to all oil and gas operations, subject to the jurisdiction of the OCD.

And obviously the very first things that those

are subject to this Rule would be that we have to test, we have the obligation to test our system or operation to see if it has above the threshold which we've discussed at length at 100 parts per million.

But we also have the ability under our proposal, and which was in OCD's as well, that we can use process knowledge, where there is existing data that's valid and reliable, that that can be used. So that is in the proposal we have as well.

If it's less than 100 parts per million, you've met that test or process knowledge, then you fall out, there are no further requirements. If above the 100-part-per-million threshold, there are what I call some general requirements that deals with signs and markers, wind-direction indicators, for drilling there are certain detection and monitoring systems that are required.

And then there are security provisions, and we've changed the title of our section on that to Security instead of Fencing. Fencing gets pretty absolute, it says you've got to put up fencing. Well, we feel the issue is security. How are you securing the facility from public access?

The next step, if it's greater than 100 parts per million, is, you have to determine if there's a potentially hazardous volume, a PHV. If it is above that threshold,

then you have some additional steps that you may need to do, which includes your contingency plan. And there's a whole host of things mentioned there.

There's an activation level. And we have some differences of opinion there on activation; we'd like to discuss those.

Notification of the Division is important.

And then of course the plan availability, both to OCD and the operators.

If the 100-p.p.m.-radius-of-exposure threshold is crossed -- in other words, if the potential exists for a 100-part-per-million radius of exposure to incorporate a public area -- then we believe that there are some additional requirements for drilling and production areas. This gets into your well control, as well as possibly some safety device on the production facility. And not just production, because some of this applies to gas plants and that.

So that's basically a summary, and you'll see that summary really depicted in the flow chart. That flow chart is basically how we envision this Rule being effective for the protection of the public.

Obvious first decision there is the operation or facility that is subject to OCD jurisdiction. If it is, then we move to the right. If it's not, it falls outside

the scope.

The obligation to test for hydrogen sulfide. That's an act.

The next decision point, is it above 100 parts per million? If it is, then there's a whole path to go through. If it's not, then it falls down to no compliance requirements. If it is above the 100, then the compliance base, those general requirements are signage and general requirements for your type of operation or system. That could be the wind indicator that we talked about earlier, also to have the detection system for drilling and a host of other things.

You next move down to determine the radius of exposure for the operation or system. You make that determination and then you determine, does the ROE result in a PHV? If it does not, then you're through because you've met those general requirements. But if it does cross that threshold, then as the standard we've written you will have some additional requirements, contingency plan, as well as for certain types of operations and systems there are some additional measures for controlling the well.

This follows that tiered approach. Like we said, obviously, if you fall only in the early tier, you've met your obligation to test. But once you pass -- once you

increasingly have additional tests that you don't pass, you have to do additional requirements.

I'd like now to go into the Rule itself, and I'll explain. What this is, is, we downloaded the last draft that we got from the Commission. Anything struck out in red -- and I'm sorry we didn't have color copies for everyone, but you'll see it struck out. Anything that's struck out is what we're recommending to be struck out.

Then there's some additional verbiage we've added, which is just underlined, and so we can go through those.

The first part that just has the general phrase -- I mean, it doesn't hurt anything, but it really doesn't add anything to the Rule. Those that work with H_2S know it smells like rotten eggs. Really, I think it serves us well to just get right into who it applies to and who it doesn't. So we would propose to starting the Rule with applicability. It's already common knowledge, all the general things stated there.

Applicability, the only thing we would add to what the Division had is "this section is a public safety standard", just make it very clear that we're dealing with public safety. The rest of the verbiage, as you see there, was not changed. We left it as the Commission had left.

Within the next section, which we call

Definitions, the first change is down there on Escape Rate, and this gets down to clarity. It was very confusing to read what the escape rate had before, so we have broken it out into three sections:

One for existing gas operations and facilities, of which we have just addressed there the very same requirement that was already there. The escape rate is calculated using the maximum daily rate of the gas mixture produced, and the word "handled, or the best estimate thereof."

Now, for a well that needs to be different -- so "For an existing natural gas well, the escape rate shall be calculated by using the current daily absolute open flow rate against atmospheric pressure..." So there we've just added a separate breakout to make it clear that applies to existing.

The next section would apply to new gas operations and facilities, and there we've just taken some verbiage that was below and brought it up to the middle, and "the escape rate will be calculated as the maximum anticipated flow rate through the system." Now, "For a new natural gas well, the escape rate shall be calculated using the maximum open-flow rate of offset wells, or the field average of current maximum open-flow rates." That just makes sense that where you're in a new well, if you have

some offset wells you can use that information.

Then item c), we just broke out to be the oil well and the escape rate, left that verbiage the same as what was in the original Rule.

If there's no question to that, we'll go on to Potentially Hazardous Volume, which is 11 under the Definition. We just would like to reintroduce the acronym -- we don't have enough acronyms in the Rule, so we thought it's very clear to those of us that deal with this that we call it a PHV, and we'd just like to use that for simplicity, so we introduced that back in.

CHAIRMAN WROTENBERY: Could you stop for just a second?

THE WITNESS: Sure.

CHAIRMAN WROTENBERY: I'm still back at -- trying to make sure I've got it, just need a second.

Okay in c), where you struck the last two sentences --

THE WITNESS: Yeah.

CHAIRMAN WROTENBERY: -- could you tell me again why you thought those were unnecessary?

THE WITNESS: Well, actually I think what we did, Commissioner Wrotenbery, is that we brought that one up into the one above, c), for an existing -- "For an oil or natural gas well drilled in a developed area..." we

actually brought that up to the middle, maybe changed the verbiage a little bit.

CHAIRMAN WROTENBERY: Well, that talks about gas --

THE WITNESS: Yes.

CHAIRMAN WROTENBERY: -- gas wells.

THE WITNESS: Yeah, we wanted it -- We felt it clear to break it out into three sections --

CHAIRMAN WROTENBERY: Okay.

THE WITNESS: -- existing gas wells and operations, new gas wells and operations, and then oil wells separate.

CHAIRMAN WROTENBERY: Okay, but what about new oil wells? Do you address that?

THE WITNESS: You're right, we have not. And probably it should have the same language -- either that, or we go back to the way it was before. But it ought to have the very same thing for a new oil. You should be able to use the same thing for an offset.

CHAIRMAN WROTENBERY: Would you be able to read some language to us --

THE WITNESS: Sure, I would say --

CHAIRMAN WROTENBERY: -- for a new oil well?

THE WITNESS: I would say for a new oil well, the escape rate shall be calculated using -- by multiplying the

producing gas-oil ratio by the maximum open flow rate of offset wells or the field average of current maximum open flow rates.

We do have a disk, by the way.

CHAIRMAN WROTENBERY: Okay, great. Thanks.

THE WITNESS: Steve, I'll give this to you.

MR. ROSS: Oh, okay. Do you want me to project it?

THE WITNESS: You're welcome to, if you want.

I think that's how that language would read, Lori.

CHAIRMAN WROTENBERY: Okay.

THE WITNESS: Basically for a new oil well, the escape rate shall be calculated by multiplying the producing gas-oil ratio by the maximum daily production rate of offset wells, or the field average of current maximum open-flow rates.

COMMISSIONER LEE: Open-flow rates only apply for gas wells.

THE WITNESS: You're right, yeah.

COMMISSIONER LEE: So flow rates.

THE WITNESS: So it would just be the open flow rate of offset wells, right.

CHAIRMAN WROTENBERY: Okay.

THE WITNESS: Okay, can I continue?

CHAIRMAN WROTENBERY: Did you get that, Steve?

MR. ROSS: No, I'm not even close.

CHAIRMAN WROTENBERY: Okay, let's hold up just a second.

THE WITNESS: Sure.

CHAIRMAN WROTENBERY: We'll just --

THE WITNESS: There you go.

CHAIRMAN WROTENBERY: We'll type in a note there, if you wouldn't mind reading that again.

THE WITNESS: Okay, what I had would be for a --

CHAIRMAN WROTENBERY: And where would that go?

THE WITNESS: That would go at c) --

CHAIRMAN WROTENBERY: At c).

THE WITNESS: -- right after that sentence.

CHAIRMAN WROTENBERY: Okay.

THE WITNESS: For a new oil well, the escape rate shall be calculated by multiplying the producing gas-oil ratio by the maximum daily production rate -- I'm sorry, the maximum open -- no, it would be the maximum daily production rate, back to what we said, of offset wells, or the field average of current wells.

Does that make sense?

CHAIRMAN WROTENBERY: Does that make sense to you?

THE WITNESS: Multiplying...producing by the

maximum daily production rate or the field average of current wells, yes.

CHAIRMAN WROTENBERY: Okay.

THE WITNESS: Okay?

CHAIRMAN WROTENBERY: Thanks.

THE WITNESS: All right. We're past PHV, now we go into item c. under PHV. I guess we're not real clear when the Commission did their redraft of why they inserted "equal to". The Texas Rule 36 has "greater than". We felt, consistent with that, that --

MR. BROOKS: I'm sorry, where are we?

THE WITNESS: The 11.c., the 100-ppm radius of exposure. It looked like in the Commission's draft that they had inserted an "equal to or in excess", and we would strike out "equal to", which is consistent with Rule 36. It would appear to us that when you're in excess of 3000 feet as a PHV, there is a default, as we all know, that when you drill a wildcat, that you consider the default, if you don't have other knowledge as being equal to 3000, but it didn't appear to us necessary that you make an area a PHV unless it's in excess of 3000 feet.

CHAIRMAN WROTENBERY: I don't remember how that language got in there, do you, Steve?

MR. ROSS: Well, it has to do with the structure of the Rule. There's another thing that's triggered by it.

I'm trying to find it right now.

THE WITNESS: Well, you're probably talking the wildcat provision, what I call it. If you're going to drill in an area that you don't know what the formation is, by default you have to consider the radius of exposure, 100-p.p.m. radius of 3000 feet. But that doesn't necessarily mean that you need to make that a PHV.

Anyway, that would be our recommendation, and that's consistent with Rule 36.

With respect to the Public Area, we would recommend adding the word "occupied". I think in some of our earlier drafts we had "occupied" in the definition. Somehow it's missing, but we would like to re-introduce that, being "A public area is any occupied building or structure".

COMMISSIONER BAILEY: Would that eliminate horse barns or horse arenas or feed barns or something along that lines that --

THE WITNESS: Right, that would be --

COMMISSIONER BAILEY: -- ranchers would need to have, but yet are only used occasionally but still are used on a regular, consistent basis.

THE WITNESS: I would say if it's occupied by people -- I mean, if it's somebody's cabin and it's something that they occupy frequently enough, it would be.

But if it's something that's a building out there that people don't occupy with any frequency, then it would exclude it.

COMMISSIONER BAILEY: I have a problem with that, because of the storage needs for ranchers and other people who are living out there. People may not spend the night there, but they have to use it in their course of business.

THE WITNESS: Okay, I guess I would ask, are we out -- is that considered part of the public, then, as far as barns and --

COMMISSIONER BAILEY: And that may be a question that needs to be resolved.

THE WITNESS: Right. We considered this a people standard, because you could have cattle grazing, goodness, out in pastures anywhere, and we couldn't incorporate them. So I guess, you know, the difference between a barn where animals would be -- yet a pasture, they could be right up against the wellsite, and they wouldn't be afforded protection.

COMMISSIONER BAILEY: Right, but in the barn people will go to work the cattle or feed the cattle or get the equipment that's used.

THE WITNESS: I guess if it's somebody's farm and it's a building or structure that they go frequent enough, I think it would be. But if it's something that's just out

there, it's just like an abandoned structure, they go like once a year or something like that, I think the intent would be it wouldn't.

COMMISSIONER BAILEY: So we need to make that distinction somehow.

CHAIRMAN WROTENBERY: Yeah, let me ask you, right now public area only includes certain types of buildings and structures: dwellings, offices, places of business, churches, schools --

THE WITNESS: Right.

CHAIRMAN WROTENBERY: -- hospitals or government building.

COMMISSIONER BAILEY: But see, a barn could be considered a place of --

CHAIRMAN WROTENBERY: -- a place of business? Okay. So if it is the kind of facility you're talking about, it would be considered a place of business.

THE WITNESS: And see, that second part of that --

COMMISSIONER BAILEY: That is not occupied.

CHAIRMAN WROTENBERY: That is not -- Then I have a question of Mr. Gantner.

THE WITNESS: Right.

CHAIRMAN WROTENBERY: In this draft the way we addressed the occupied issue was to add the language "that

is used as". That was not in the previous version. Is there a difference between occupied and being used as? We thought we were covering the occupied issue with the language "being used as".

THE WITNESS: I guess it gets down to just what our mutual understanding is --

CHAIRMAN WROTENBERY: Uh-huh.

THE WITNESS: -- to make sure we're consistent. I think what we're all trying to do is eliminate ambiguity, right --

CHAIRMAN WROTENBERY: Right.

THE WITNESS: -- of what is covered --

CHAIRMAN WROTENBERY: Right.

THE WITNESS: -- and what is not --

CHAIRMAN WROTENBERY: Right.

THE WITNESS: -- and we would all like to be players so that when we do that assessment we know that this is a legitimate public area and that it's crossed, versus this is not.

CHAIRMAN WROTENBERY: Okay.

THE WITNESS: And I guess in our minds protection of the public -- what this was about, that was of paramount importance.

So if either that it's occupied -- and I think the next part of that sentence catches that as well, "or

any portion of a park, city...village...where...the public may reasonably be expected to be present."

CHAIRMAN WROTENBERY: Uh-huh.

THE WITNESS: And so that gets into, you know, if people are there and they're there often enough, that needs to be included. But if they aren't, then it shouldn't be. And it gets down to us just both being clear of what that means.

CHAIRMAN WROTENBERY: My sense at this point is that you're saying that it's used as this kind of facility, that means you're not covering abandoned facilities --

THE WITNESS: Okay, I --

CHAIRMAN WROTENBERY: -- but --

THE WITNESS: That was just one of our early thoughts that --

CHAIRMAN WROTENBERY: Yeah.

THE WITNESS: -- occupied -- But if we're both having the same understanding that that's what that means, then I think we're okay with that.

We put "school bus stop" up above which -- the way it was, it was down below where it was kind of modified by any portion of a school bus stop. To me, a school bus stop is a school bus stop, it ought to be included. So it was just a matter of where it falls.

CHAIRMAN WROTENBERY: Is a school bus stop always

a building structure --

THE WITNESS: No.

CHAIRMAN WROTENBERY: -- because you've moved it into the building or structure section. And that's why it was put in the portion of a park, city, town, village or school bus stop or other similar area. We didn't think that a bus stop was always a structure --

THE WITNESS: Uh-huh.

CHAIRMAN WROTENBERY: -- or a building, so...

THE WITNESS: Okay. We feel it's covered, you know, so I guess wherever it falls --

CHAIRMAN WROTENBERY: Okay.

THE WITNESS: -- legitimately is fine.

CHAIRMAN WROTENBERY: Okay.

THE WITNESS: Next one on Public Roads, we don't feel a postal route is a valid consideration there. That is not something that's marked out there that's a maintained road or that -- it wasn't in earlier drafts. I think it suddenly appeared in the June draft that we saw. That was not the agreement of our consensus group, and we don't believe that a postal route is appropriate.

MR. ROSS: You may not know this, but there's a federal statute that says any postal route is a public road.

THE WITNESS: Is that right? Well, that's news

to me.

MR. MONTGOMERY: Just ignore it.

(Laughter)

THE WITNESS: But I guess as an operator, how would I know when I'm making this plan and reviewing my provisions, I'm going to drill a well, how would I know what an established postal route would be? I mean, call the Post Office, say do you run out this road?

And let's say they run out a lease road to go take out somebody. Is that part of their route? We feel that this should really apply to public roads.

CHAIRMAN WROTENBERY: Or you feel like a postal route shouldn't be considered public roads for purposes of this --

THE WITNESS: That's right.

CHAIRMAN WROTENBERY: Yeah, okay.

THE WITNESS: All right. Now, part of our re-crafting, move down to -- which was originally in the Commission's draft that said Determination of Hydrogen Sulfide Risk, we've split that up into two sections. So C would be Testing for Hydrogen Sulfide, just making if clear what you're requiring the operator to do.

And then under that there would be basically three sections -- or actually there's four: Determination of Hydrogen Sulfide Concentration, testing concentrations

if they're below 100, testing if it's above 100, and then Retesting.

We just feel that that flows clearly, that the very next step is, once you're covered is, do the testing.

CHAIRMAN WROTENBERY: Would you have any objection to using a different word than testing? Because we've decided that you don't actually have to do a test if you can use process knowledge or --

THE WITNESS: Determination --

CHAIRMAN WROTENBERY: -- something --

THE WITNESS: -- or hydrogen sulfide concentration would be fine, you're right.

We noticed in the Commission's draft that you inserted a number of times -- I tried to get my word search to find them all -- wells. We felt wells all along were covered under operations and systems, and by inserting wells you're almost implying to an operator that we have to test every well, and we don't believe that's the case, that where wells serve similar formations and similar areas, you should be able to use common, you know, process knowledge.

So we feel it's clear to us that wells are included in operations or systems, and so it's not needed. That's just our opinion.

CHAIRMAN WROTENBERY: And there wasn't any statement intended by adding the term "wells" there. It

was inconsistent, the way the Rule was drafted. Sometimes it talked about wells and operations --

THE WITNESS: Right.

CHAIRMAN WROTENBERY: -- or wells and systems, sometimes it talked about operations and systems --

THE WITNESS: Right. Well, I hope we did a good job with our word search, because all the wells are out of ours.

CHAIRMAN WROTENBERY: Okay, you're recommending that the magic phrase for purposes of this Rule be operations and systems --

THE WITNESS: That's right.

CHAIRMAN WROTENBERY: -- and that that be understood to include wells?

THE WITNESS: Right. Okay, under 1.c. we've rephrased that to be more clear, that if a valid, representative sample from an operation or system was tested at any time prior to the effective date of this section, then new testing would not be required.

What you had before, it said if it was tested within one year of the effective date of this section no new testing was required.

Then it went on to say, "provided, however, new testing shall not be required for a producing well that was tested at any time prior to the effective date..." So it

was unclear whether it was one year or at any time. In our opinion, if it's a valid, representative sample, no matter what time period it was done before, it should be still valid.

CHAIRMAN WROTENBERY: And no matter what type of operation or system?

THE WITNESS: That's right.

CHAIRMAN WROTENBERY: I wasn't sure what was intended by that language, but it appeared to me what it intended to say was that for wells, if you've ever tested it, you don't have to re-test it. But for other types of operations and facilities --

THE WITNESS: -- it had to be within a year.

CHAIRMAN WROTENBERY: -- it had to be within a year.

THE WITNESS: I guess I question why. I mean, if you have a valid, representative sample and it hasn't changed and you know that your process is very similar, then why should you have to re-test? That would be our position.

If it's not valid, then it needs to be re-tested. I guess that's our point.

The next one, we kept the wording that was there for below 100 parts per million, just deleted the word "well".

Tested Concentrations Above 100 parts per million, we struck "radius of exposure" because we've created a whole new section for that, so that's why that was struck.

And basically we said "If the concentration of hydrogen sulfide in a given operation or system is 100 parts per million or greater, then the...operator...must calculate the radius of exposure pursuant to Paragraph D..." I'm not sure that's the right verbiage there, paragraph, subsection. "...and comply with the signage requirements outlined in paragraph F." Those are basically the things that are required.

Then we added a section for that same -- on Retesting, basically that "If any change or alteration to an operation or system can materially increase the concentration of hydrogen sulfide, then the operator must retest that operation or system." And that's what you're really focusing on.

Okay, to move forward?

CHAIRMAN WROTENBERY: Uh-huh.

THE WITNESS: Okay. The next section is, again, added for clarity, Determination of Radius of Exposure. So to probably consistent, like you said earlier, make that Determination of Hydrogen Sulfide.

"For all operations subject to this section, the

radius of exposure shall be determined by following the definition given in B.14." That seems clear.

The next sentence was left the same, just renumbered.

Then for 3, renumbered, "For an operation or system existing on the effective date of this section, the determination, calculation and submission required herein shall be accomplished within..." we would recommend "360 days of the effective date of this section". There's going to be a good number of these out there that are going to need to be done, and at least the consensus between NMOGA and IPANM was to ask for a year to do that.

"...for any operation or system that commences operations after the effective date...the determination, calculation and submission required herein shall be accomplished, preferably before operations begin but no later than..." and that shouldn't be minus 60 days, it's 60. I couldn't get rid of that scratch mark. "...60 days after initial production..." And let me explain why.

If it's a new well and you frac that well and now you're going to flow back and you're putting that well on production, you can't possibly have an idea of what the true H_2S level is until that well gets to stable production. And we feel that within 60 days you should be able to do that. Granted when you drilled it, you had a

presumed level. But only when you get the true level can you calculate what that radius of exposure would be.

So we feel that since a new operation or system could be -- like a gas plant, you would have that data, and they should be able to measure that gas. But for a new well, you need that 60-day period. So that's why we said "preferably before operations begin but no later than 60 days..."

CHAIRMAN WROTENBERY: Okay, and you indicated that certainly you would do your -- make your determination for a new drill before you begin drilling. What --

THE WITNESS: Right.

CHAIRMAN WROTENBERY: What about this language says that? I guess I'm -- you've indicated -- you've explained --

THE WITNESS: Okay.

CHAIRMAN WROTENBERY: -- the need to have some flexibility --

THE WITNESS: Right.

CHAIRMAN WROTENBERY: -- before you start production operations.

THE WITNESS: Well --

CHAIRMAN WROTENBERY: This language seems to cover more than just production operations.

THE WITNESS: Uh-huh.

CHAIRMAN WROTENBERY: Are there any other circumstances where you think you'd need that flexibility besides putting the well on production?

THE WITNESS: That's the only one we could think of, wasn't it? Yeah.

MR. MONTGOMERY: Yeah, I guess the possibility if you set up some operations like a satellite or something like that, and you're not sure until you get stabilized operations -- because we're talking about facilities as well, so you could have a new facility that's coming on and you're not sure exactly what the downstream -- at that facility or downstream, what the H_2S concentration is going to be until after you get it into stable operation. That could happen as well.

THE WITNESS: Probably we need to add some verbiage as far as a new drill --

CHAIRMAN WROTENBERY: Uh-huh.

THE WITNESS: -- that basically said, again, to differentiate between a drilling, completion or workover versus an operation.

MR. MONTGOMERY: The most important aspect here is, you've got to have good concentration data in order to do a good ROE calculation. So sometimes you may not have that before you begin operating.

THE WITNESS: I know we've stated later on the

contingency plan that that needs to be in prior to drilling, but we didn't, obviously, state that here.

CHAIRMAN WROTENBERY: Okay.

THE WITNESS: Recalculation, basically we just said the operator -- We kept pretty much the language that was there, that you had the obligation to recalculate the radius of exposure, with the same language that you had, and if that recalculation reveals that a PHV is present, the person or facility shall provide the results to the Division "as soon as possible but no later than 60 days."

All right, Contingency Plan. This was a pretty substantial change. In the General section, we changed the verbiage in the General section to say that "A hydrogen sulfide contingency plan is a written document that provides a plan of action that will be used to alert and protect persons at risk in the event of a significant release of hydrogen sulfide gas that could produce a potentially hazardous volume."

I think the way it was worded before, you could have a release but not be a PHV. And so we wanted to make it clear, all of our understandings. And we all understand that if it could produce a PHV it needs to have a contingency plan.

CHAIRMAN WROTENBERY: Okay, that doesn't address one of the concerns I have.

THE WITNESS: Okay.

CHAIRMAN WROTENBERY: And I'm going to have to explain it and I might have a hard time, so bear with me.

My concern about limiting the scope here to the PHV is that the potentially hazardous volume is a worst-case kind of scenario, because you're basically looking at, you know, total anticipated flow --

THE WITNESS: Right.

CHAIRMAN WROTENBERY: -- through the system. And that makes sense when you're trying to decide whether to do a contingency plan or not, to look at the worst-case scenario --

THE WITNESS: Right.

CHAIRMAN WROTENBERY: -- but there may be lesser releases from the system that still have the potential to affect the public area or a public road --

THE WITNESS: Uh-huh.

CHAIRMAN WROTENBERY: -- because, yeah, you may have this broader radius caused by the potentially hazardous volume, but you could have a lesser release that had a smaller radius but still encompassed a public area. Am I making myself clear?

THE WITNESS: Yeah. And I guess I'm trying to understand, if I do a worst-case analysis --

CHAIRMAN WROTENBERY: Uh-huh.

THE WITNESS: -- my umbrella stretches very big --

CHAIRMAN WROTENBERY: Right.

THE WITNESS: -- right?

CHAIRMAN WROTENBERY: Uh-huh.

THE WITNESS: So if I have a less significant release than that, my umbrella is really smaller. And I've already got it big to cover all those areas, so aren't I already covering those things from smaller releases?

CHAIRMAN WROTENBERY: Well, my difficulty, it says the plan "will be used to alert and protect persons at risk in the event of a" PHV, a potentially hazardous volume. So you would be only covering the worst-case releases. You wouldn't be giving people -- alerting people if there were a lesser release that still affected a public area. Would it help to draw it?

THE WITNESS: Well, what you're saying -- I think what you're saying is, let's say my 100-part-per-million piece stretched a mile --

CHAIRMAN WROTENBERY: Uh-huh.

THE WITNESS: -- but I have somebody that's half a mile.

CHAIRMAN WROTENBERY: A half mile, right.

THE WITNESS: Okay, am I not protecting those too? And this verbiage doesn't say that --

CHAIRMAN WROTENBERY: Right --

THE WITNESS: -- is what you're saying?

CHAIRMAN WROTENBERY: -- right. You'd need to be alerting them even if there were a lesser release that wouldn't affect them. And that's why we didn't use the PHV language in that provision.

THE WITNESS: Okay.

CHAIRMAN WROTENBERY: And I'll say, I think I checked Rule 36 on this one, and I think that potentially significant release language comes from Rule 36. I don't know that for sure.

THE WITNESS: I don't think so, because I think I looked at the same thing, Lori --

CHAIRMAN WROTENBERY: Did you look at the same thing? Okay.

THE WITNESS: -- but -- I have it right here. Let's see, the Texas rule says the purpose of the contingency plan shall be to provide an organized plan of action for alerting and protecting the public prior to an intentional release or following the accidental release of a potentially hazardous volume of hydrogen sulfide.

CHAIRMAN WROTENBERY: Okay.

THE WITNESS: All right?

CHAIRMAN WROTENBERY: Uh-huh.

THE WITNESS: I don't think it's ever our

intention in these to not protect people within the umbrella --

CHAIRMAN WROTENBERY: Right.

THE WITNESS: -- no matter where they are.

CHAIRMAN WROTENBERY: Okay.

THE WITNESS: Obviously, it's -- you have to have some threshold at which you know you have to do it --

CHAIRMAN WROTENBERY: Uh-huh.

THE WITNESS: -- and then you need to protect all the people within that umbrella.

CHAIRMAN WROTENBERY: Uh-huh.

THE WITNESS: So maybe that --

CHAIRMAN WROTENBERY: Maybe if you worded it in terms of protecting persons --

THE WITNESS: -- within the exposure area.

COMMISSIONER BAILEY: Yeah --

THE WITNESS: Okay.

CHAIRMAN WROTENBERY: -- maybe just, yeah, reference the --

THE WITNESS: Okay.

CHAIRMAN WROTENBERY: -- area of exposure.

THE WITNESS: All right. We added the API standard there as guidance. We think it's valid for us to consider that standard. In fact, we've incorporated some of that in our comments.

When Required, we kept the language you had, but I think we added the language that Wayne had mentioned. You can see it in red, "in the case of a well being drilled, deepened, or re-entered, may reasonably be expected to be encountered." Because it wasn't clear that a well was covered from that sense, so we added that language based on some of Wayne's comments.

MR. BROOKS: Yeah, actually that was my comment.

THE WITNESS: Okay, your comments, yeah, I heard you say that. But -- I called it the Wayne Price clause, but I'll change it to your clause.

MR. ROSS: The David Brooks clause.

THE WITNESS: The David Brooks clause.

The biggest change in our proposal really gets down to the next one -- well, the one, Input of Emergency Response Authorities and the Division. It's been our practice, experience, in all the states we operate that we're responsible for preparing those plans. And so we prepare those plans and provide a copy to the Division.

Where, obviously, we're in the city limits or things like that, the cities basically require us to have that in our approval from them to do it.

But we feel that those are unique circumstances, and it shouldn't be stated just categorically that we always have to seek input of all those entities into the

plan. We may choose to do so based on the circumstances, but we don't feel it should be a condition, you know, in the rule.

We feel that, obviously, between OCD and ourselves, we're responsible for, you know, drilling, production within all these areas, and it's incumbent upon us to have good plans in place.

The next section, Plan Contents, we have changed this to be more of a performance standard versus the prescriptive standard that was there before.

This verbiage almost verbatim comes out of the RP-55, the API standard for recommended practices for oil and gas producing. Obviously, it covers all the same elements that were previously in the OCD draft, but it's less prescriptive.

It just basically says that as an operator I have the obligation to address all of these areas, but it doesn't tell me prescriptively how many people I need to have, it doesn't address verbatim how I have to write that plan.

Obviously to get a well done, that would have to go in with the APD, and if the OCD is not satisfied with that plan there would be some dialogue back and forth. But we're pretty experienced in writing these plans, and we feel that we can do them with less prescriptiveness

required in the standard.

So the Plan Contents would cover Emergency Procedures, Characteristics of Hydrogen Sulfide and Sulfur Dioxide, Maps and Drawings, and then Training and Drills. And based upon our review, all of those bullets and sub-bullets outlined there address all of the issues that were in the original draft, but in a less prescriptive, more performance-based --

COMMISSIONER BAILEY: But since the OCD will not either approve or disapprove any contingency plan, setting these standards may or may not address the issues that they have felt are important, such as having the telephone numbers.

THE WITNESS: Well, we've put there the telephone numbers, I guess you see in 3, "Telephone numbers and communication methods for Public agencies, emergency response organizations, and public authorities..." But it was up to the operator to determine who the appropriate ones were. And not have this prescriptiveness that you have to include this, this and this and this these pieces, that we feel that we feel a good job of doing that now without having that all specified.

Ultimately, you do have approval, because when that plan is submitted, if it's with a permit to drill you can deny the permit, saying that it's not adequate. If

it's with an existing facility, you have the current statutory right to say, you know, with allowables or that to say this is an adequate change to be adequate.

The key there is that we've been writing these plans for years in all the jurisdictions we operate, OCD, BLM, and that we can write those without having the prescriptive nature that's given. But as a minimum we have to address those key bullets.

Okay, we added a section. Actually, we pulled that Activation that was out at the end of your original -- of the Commission's draft and put Activation into this document. And there's been some discussion about what activation should be, and we can have that discussion. But our opinion is that "The hydrogen sulfide contingency plan shall be activated in the event of a significant release of hydrogen sulfide gas that could produce a PHV."

And I think that kind of addresses some of what you mentioned, that could produce. If you're going to produce --

CHAIRMAN WROTENBERY: No -- Well, I'm sorry, I didn't mean to interrupt you.

THE WITNESS: No, it's --

CHAIRMAN WROTENBERY: If it could produce a lesser volume that would cause a 100-part-per-million hydrogen sulfide level at a public area --

THE WITNESS: Right.

CHAIRMAN WROTENBERY: -- or a 500-part-per-million hydrogen level --

THE WITNESS: -- at a public road.

CHAIRMAN WROTENBERY: -- at a public road --

THE WITNESS: Right.

CHAIRMAN WROTENBERY: -- then I think the plan needs to be activated, even if there's no possibility that you're going to have a PHV, a full-blown PHV. And again, it's because the PHV, that particular volume is the worst-case volume.

THE WITNESS: That's the worst case, that sets the outer limits of the umbrella.

CHAIRMAN WROTENBERY: Right.

THE WITNESS: But if I have a public area within that umbrella --

CHAIRMAN WROTENBERY: Uh-huh.

THE WITNESS: -- and I could potentially cause that PHV in that area, I'm going to implement the plan.

CHAIRMAN WROTENBERY: Well, maybe what's hanging me up is, the way PHV is defined it's based on that escape rate, which is a worst-case kind of volume.

THE WITNESS: That's correct.

CHAIRMAN WROTENBERY: So the PHV, that volume is that maximum volume --

THE WITNESS: Right.

CHAIRMAN WROTENBERY: -- that we're talking about.

THE WITNESS: Yeah.

CHAIRMAN WROTENBERY: We've got to figure out a way to define it so that it's activated even if there's a lesser volume that would have an impact on a public area.

THE WITNESS: Yeah, I guess that's what we thought we had because, see, it says "...shall be activated in the event of a significant release..." So that gets down to significant. What is significant?

CHAIRMAN WROTENBERY: Uh-huh.

THE WITNESS: Well, it's significant if it could produce a PHV.

CHAIRMAN WROTENBERY: Okay, and again I think it's a question of how you define PHV. PHV is defined as that maximum volume, basically --

THE WITNESS: Yeah.

CHAIRMAN WROTENBERY: -- and so only if you are going to have that worst-case release would this say you'd activate the plan.

THE WITNESS: See, I --

CHAIRMAN WROTENBERY: You need to set it so that you activate it -- And, you know, that's what we, in our very inelegant way, tried to do in our draft --

THE WITNESS: Sure.

CHAIRMAN WROTENBERY: -- of the activation language, was to say you activate the plan if you're going to have a 100-part-per-million at any public area or a 500-part-per-million at a public road. Now, I understand the Division's point that that's pretty --

THE WITNESS: See, that's how --

CHAIRMAN WROTENBERY: -- site-specific, and it's going to be hard for an operator to know when to activate the plan, based on that kind of definition.

THE WITNESS: But a PHV is, by definition, 100 p.p.m. in any public area.

CHAIRMAN WROTENBERY: Well --

THE WITNESS: See, the radius of exposure is what incorporates into volume. But if I have a PHV in any public area of 100 parts per million, no matter where that is in my window, I have had a release that fit. So --

CHAIRMAN WROTENBERY: Well, but you have to look back at the definition of a 100-part-per-million radius of exposure. That refers to the escape rate, which is the maximum volume.

THE WITNESS: That's in the ROE.

CHAIRMAN WROTENBERY: Yeah.

THE WITNESS: Right.

CHAIRMAN WROTENBERY: So the --

THE WITNESS: But the definition of a PHV reads, a 100-p.p.m. radius of exposure includes any public area.

CHAIRMAN WROTENBERY: Uh-huh. And if you look at radius of exposure, it's that radius --

THE WITNESS: Maybe it needs to be --

CHAIRMAN WROTENBERY: -- that uses the escape rate, which is the maximum volume.

THE WITNESS: Right, right. Maybe it needs to be area of exposure or something of that nature.

CHAIRMAN WROTENBERY: Yeah.

MR. MANTHEI: We're basically going to consider any release is a maximum rate.

CHAIRMAN WROTENBERY: Okay, and I can understand that's what you want to do when you're deciding whether you have to do --

MR. MANTHEI: If we --

CHAIRMAN WROTENBERY: -- a -- develop a contingency plan --

THE WITNESS: Right.

CHAIRMAN WROTENBERY: -- but --

MR. MANTHEI: If we have a small release, we're not going to measure it and say this is a small release and it's not -- We're going to assume that it's the worst.

COMMISSIONER LEE: No matter what the release, they would say it's a maximum release.

MR. MANTHEI: Right, we're going to respond --

THE WITNESS: Okay, maybe --

CHAIRMAN WROTENBERY: I understand that, and that's what you're going to do when you're deciding what the full radius of exposure is and what the full area of exposure is, and it's appropriate to look at the worst-case scenario there --

THE WITNESS: It doesn't --

CHAIRMAN WROTENBERY: -- but --

THE WITNESS: Yeah.

CHAIRMAN WROTENBERY: -- again, you're defining your potentially hazardous volume as being that worst-case volume.

THE WITNESS: Right, it wouldn't hurt to go back to the language you had --

MR. MONTGOMERY: I agree.

THE WITNESS: -- of 100 p.p.m., you know, in a public area or 500 on a public road.

CHAIRMAN WROTENBERY: Yeah.

THE WITNESS: Wouldn't hurt to put that back.

CHAIRMAN WROTENBERY: Okay. Now, address for me the issue that the Division has raised about the need for some more certainty in setting an activation level.

THE WITNESS: Well, the real world out there is that, granted if you're drilling, you have sensors out

there all the time, but most other facilities do not. Most other facilities out there -- We have a solid-waste disposal facility that has one fixed monitor and a couple portable monitors. They're not going to know until they get a release or so of what's going on. They're going to evacuate.

That's their first order, whether it's drilling, a production facility or whatever, their first order is to evacuate and get to an upwind location, call in the emergency? And then they're going to be look at do we need to activate the plan? Do I have enough of a release to -- They aren't going to have a device out there, frankly, measuring 50 parts per million.

The only time you have a fixed system is generally on a drilling location where you have a reading, and those alarm at a certain point. Now, I don't know, do they even measure up to that level? You would know. How high do they measure? 200 is the highest, right?

MR. PRATHER: The sensors max out at 300 parts per million.

THE WITNESS: Okay, the sensors max out --

MR. PRATHER: The technology won't go over 300.

THE WITNESS: Right, so --

MR. PRATHER: That's the reason all these levels are ridiculous.

THE WITNESS: Right. So in my mind, the key is that when you've had a release, the people out there are going to do the right thing. They're going to get out and get upwind, call in, and they're going to start making decisions. Do I have a public exposure here that I need to activate the plan, or do I not.

And so it's inherent in our logic that we're going to look through and make the right decision as to whether it just needs to be activated or not.

You could have a release that frankly could occur that shouldn't alarm people. You don't want to alarm and alert people to do something that there's no need to do. I mean, that causes, I think, the wrong kind of action, because then it makes it seem like that we're poisoning or that.

But I think there is a threshold, though, at which you're going to want to make those decisions, and I don't know that you can really quantify that in a number. See, that's why in our mind a significant release that could produce, you know, that needs to be left in that judgment, and we need to just be making the right judgments out there.

A 50 part per million at a boundary or that, to me, doesn't necessarily mean that you're going to have public exposure, and yet you're going to implement your

contingency plan, you're going to start calling out folks and that, when you might not need to do it.

CHAIRMAN WROTENBERY: Is the activation level something that should be addressed in the contingency plan itself, maybe?

THE WITNESS: In the ones I write, it is.

CHAIRMAN WROTENBERY: So that might be a way to address the concern about needing a little more certainty, is to --

THE WITNESS: Just --

CHAIRMAN WROTENBERY: -- include a --

THE WITNESS: -- require that they --

CHAIRMAN WROTENBERY: -- a requirement --

THE WITNESS: -- need to address the --

CHAIRMAN WROTENBERY: -- that they need to include a requirement that the contingency plan addresses the activation level.

THE WITNESS: Sure.

Okay, moving on. The next section, because we deleted so much of the piece that was in there, is on page 7, Submission.

"A hydrogen sulfide contingency plan for a system or operation existing on the effective date...shall be submitted to the Division within 360 days..." That was consistent with our recommendation on our ROE. So if you

agreed with the one, you need to agree with the other. If you didn't agree with that, then we need to change this to whatever you would agree to.

"A hydrogen sulfide contingency plan for a new system or operation shall be submitted preferably before operations begin..." A little typo there, it should be "preferably" "...but no later than 60 days of commencing operations."

This gets back again to our well situation. Until you can really determine the ROE, you really can't develop a plan. So you need to have a good, solid production information and then make your plan and then implement it.

Then the next sentence addresses "For a drilling, completion, workover or well servicing operation, the hydrogen sulfide contingency plan must be on file with the Division prior to commencing work. The plan may be submitted separately or along with the application for permit to drill or must be on file from a previous submittal."

And maybe that same type of language needs to be back there on the ROE.

CHAIRMAN WROTENBERY: You struck the sentence about encroachment and how you address an encroachment. Do you address that elsewhere?

THE WITNESS: Encroachment meaning where a --

CHAIRMAN WROTENBERY: Where a --

THE WITNESS: -- where people move in?

CHAIRMAN WROTENBERY: -- public area or -- yeah, or a road is built.

THE WITNESS: The thing I struggle with that is, how could I keep up with roads or people moving into areas? Maybe as I've become aware of it, I might, but the guy that -- frankly, the person that's first going to know that is my lease operator out there in the field. He's going to notice that somebody's moved in on it, and it's not going to even cross his mind to think that I've got to do a contingency plan or that.

So I couldn't come up with a good answer for that, other than, once we're made aware of it, we know we need to do it. But I wouldn't like it to be, Gee, this guy's moved in, you don't have a plan, you're in violation of Rule 52 because you didn't have a plan when somebody moved in.

CHAIRMAN WROTENBERY: If you strike that language, though, I don't think there's anything in here that requires the development of a contingency plan if somebody moves in.

THE WITNESS: Well, I think there is, once I become aware that I have a public area, that could be. But

I guess it's a matter of me --

CHAIRMAN WROTENBERY: Well, what --

THE WITNESS: -- becoming aware, that's what I mean. We just struggled with that. I couldn't come up with an easy way.

CHAIRMAN WROTENBERY: Okay.

THE WITNESS: I mean, I like it when Wayne calls me and tells me I have to have a plan, but --

MR. PRATHER: To give you an example of what he's talking about, and especially when we start talking pipelines, most of our operations are located on BLM, public -- very seldom do we have any type of title to this land at all, and there's dozens of other entities who control things.

And we've got pipeline pilots go out and fly the line and come back and report that somebody just put a double wide right across our line, in our right-of-way. And the only time we know it's there is when we find it there.

THE WITNESS: I wouldn't have a problem within so many days of becoming aware, but then it's a matter of when I became aware.

CHAIRMAN WROTENBERY: Okay.

MR. PRATHER: You'd expect to be reasonably prudent --

THE WITNESS: Right.

MR. PRATHER: -- in becoming aware --

THE WITNESS: Right.

MR. PRATHER: -- but it sneaks in on us.

THE WITNESS: Right.

CHAIRMAN WROTENBERY: Okay.

THE WITNESS: Failure to Submit Plan, we left that as it was.

Number 7, we changed that from Annual Review to Updating Provisions. We don't feel that for a good plan that has fairly repeatable gas levels or the public or that, that you need to every year go through that process. We just feel general language like the "Contingency Plan shall be periodically reviewed and updated any time its provisions or coverage materially change." That's consistent with Rule 36 language, and we feel it's just what a prudent operator should do.

CHAIRMAN WROTENBERY: What do you mean by coverage? I'm having a little trouble with this sentence because it's rather circular. It seems to say you'll review it and update it anytime the provisions change, but the provisions aren't going to change unless you review it and update it, so --

THE WITNESS: Well, something could change that --

CHAIRMAN WROTENBERY: -- what is it triggers the review?

THE WITNESS: Obviously back on our re-testing, if your re-testing showed that, you know, I needed the re-test, then I need to do an ROE and I might need to amend my plan.

CHAIRMAN WROTENBERY: Okay, so you agree there's some external factors that --

THE WITNESS: Right.

CHAIRMAN WROTENBERY: -- warrant a change in the plan?

THE WITNESS: Right.

CHAIRMAN WROTENBERY: Okay, that's what you're referring to?

THE WITNESS: Right.

Retention and Inspection, no change.

Next section would be F, Signage. Take out the "wells" again. We would re-do that basically to be more performance-language-oriented. The three sections we'd recommend for that would be where it's required, Signs and Marker Specifications, and then Location.

Where Required, we would recommend "For every operation or system to which this section applies that it is determined to contain a hydrogen sulfide concentration of 100 parts per million or greater, signs or makers

meeting the requirements outlined below must be installed and maintained."

The Specification, this language came -- kind of a hybrid between Rule 36 and the API Guidance: "The sign or marker shall contain sufficient information and be readily readable by the public to warn that a potential danger exists and shall contain the words 'Poison Gas'. Signs or markers that have been installed prior to the effective date of this section and that are in compliance with other applicable regulations (DOT, OSHA, etc.) shall satisfy the requirements of this section. Other signs and markers that have been installed prior to the effective date of this section shall be acceptable provided that they indicate the presence of a potential hazard."

Obviously, we've got a lot of wells out there that already have some signage there, and if it does warrant of a potential hazard we feel that they should be, you know, acceptable.

Also if there's signs out there that meet -- going back to your pipeline question, if there are signs out there along that road that warn of the hazard, then they ought to be, if they meet DOT criteria.

"For drilling, workover, completion, and recompletion operations, additional warning measures (e.g., red flags, signs, etc.) shall be prominently posted

whenever an imminent danger situation exists." And that would keep people from driving up on a location that they're having an episode.

The big difference in that is, what was in the Division's draft -- it was very prescriptive, ANSI standards, color, size. This is more performance oriented.

Location --

CHAIRMAN WROTENBERY: Before you go --

THE WITNESS: Yes.

CHAIRMAN WROTENBERY: -- off of number 2, the last three sentences, I guess, where -- or the middle two sentences, the one where you refer to "compliance with other applicable regulations" --

THE WITNESS: Uh-huh.

CHAIRMAN WROTENBERY: -- and the one after that where you talk about previously installed signs --

THE WITNESS: Right.

CHAIRMAN WROTENBERY: -- both of those sentences are a little bit vague. They don't reference poison gas or H_2S or anything like that. Is it your intent that the sign would have to indicate that the potential danger is from H_2S or poison gas or some sort of language like that?

THE WITNESS: It would need -- you know, presence of a potential danger. If somebody just had a sign out there that said caution --

CHAIRMAN WROTENBERY: Uh-huh.

THE WITNESS: -- it probably doesn't warn of a potential hazard. I mean, caution is just -- you know, don't trip over the stairs or something like that, whereas danger relates more to a potential hazard.

So I guess, without getting into prescriptive, what I would mean, what wording would, what wording wouldn't, as long as the common-sense person would say that relates to a potential hazard. And it needs to relate the hazard to, you're right, the hydrogen sulfide gas.

CHAIRMAN WROTENBERY: Okay.

THE WITNESS: If it said danger, no smoking, I would say no.

Okay, that would be our recommended change for the signage.

Now the next section, this is again pretty dramatic, but I think it just flows with what we said. Right now the Rule reads, you've got to go to these various sections. Well, we would like a section titled Compliance Requirements. That's on page 9. And within that G section, Compliance Requirements is where you would address the drilling, production, training, notification to the Division. And it's very clear that I've got a whole series of compliance requirements I need to look at. It just seems to flow to us.

So the first section there would be for drilling -- Protection from Hydrogen Sulfide During Drilling, Completion, Workover, and Well Servicing Operations.

The first paragraph we left intact, referencing the API standards.

Then the next section to us would be Detection and Monitoring Equipment. We have struck out Minimum Standards, Before Commencing Operations, Egress Routes. Actually, we'll address the Detection and Monitoring Equipment in b. That was kind of redundant from what was there before.

So for drilling, detection and monitoring equipment, that would be triggered by the 100-part-per-million in gas standard. That would not be triggered by the public area, the radius of exposure.

"The person, operator or facility shall provide hydrogen sulfide detection and monitoring equipment as follows: i. Each drilling and completion site shall have an accurate hydrogen sulfide..."

And the reason we stuck "accurate" there is, we've deleted ii., which called for calibration at a monthly frequency and required to write it down in the log. To me, the performance standard is, it needs to be accurate. If they aren't doing a good job of maintaining the equipment or its accuracy, then it's not meeting your

standard. So we feel that by inserting "accurate" there you take out the specificity of how often to calibrate and how to record the data.

"...an accurate hydrogen sulfide detection and monitoring system that is capable of automatically activating visible and audible alarms when the ambient air concentration of hydrogen sulfide is equal to or less than 20 parts per million."

I kind of address some of the issues Wayne was talking earlier. What you're setting there is at least a minimum sensitivity. I can go, you know, less and set a lower threshold, but it can be no less than 20 parts per million -- I mean, it can be no greater than 20 parts per million. Basically, we're stating that this system needs to be capable of alarming at equal to or less than 20. It's a little different verbiage, but that was our attempt to address the issue that you were raising.

The sensor locations we left the same.

The next two -- obviously we deleted ii., the workover and servicing operations, we re-numbered that, and then iii. So the only changes there, we're deleting the calibration frequency but inserting language in i. that called for it to be accurate and capable of alarming at equal to or less than 20.

Next section on Wind Indicators, we left that

virtually the same, just re-labeled that.

Now we have a paragraph d., Special Requirements, and this is replacing a lot of what's there below, and it's written more in a performance base.

"Special Requirements. Where drilling, workover, completion, and recompletion operations occur in areas where the 100 p.p.m. ROE includes a public area, the following additional measures are required: i., the operator shall install a choke manifold, mud-gas separator, and flare line and provide a suitable method for lighting the flare."

What we've taken out there is the specificity that was in the sections below.

And "A remote controlled choke and accumulator shall be installed and operational."

I think from all the comments that have come from Walt Dueease and others to the Commission, it's understood that the kind of rigs and structure we have cannot support all the additional things that were called for with the current draft. We feel that this is protective of the public and particularly is focused on public areas.

I think the reason on the mud program, like Dr. Lee was mentioning earlier, that's a common practice in our systems, we didn't feel it was necessary to specify, although we did specify a mud-gas separator in our

recommendation.

So basically for Drilling the key requirements are to have protection and and monitoring equipment, and then when it's in a public area and -- I'm sorry, wind indicators.

And then when it's in -- a 100-part-per-million radius of exposure includes a public area, that we should install choke manifolds, separators, flare lines and remote-controlled chokes.

In areas that are more remote, we don't feel that those are absolutely necessary. The operator may choose to do that, but that would be a case-by-case basis.

You'll see there, there's no mention of safety equipment. We see that as a requirement that deals with occupational exposure and control for the employees. That's a standard practice out there, and that's done -- that should be done more on the operator's sense of what's right to protect the workers and get them out, and before they would go back in to those areas that they would have the right equipment. But that deals with worker exposure.

CHAIRMAN WROTENBERY: Are you finished with your item i. on --

THE WITNESS: Yeah.

CHAIRMAN WROTENBERY: Can you back up a little bit --

THE WITNESS: Sure.

CHAIRMAN WROTENBERY: -- on API standards?

THE WITNESS: Yes.

CHAIRMAN WROTENBERY: Are you intending to apply that to any facility with 100-part-per-million hydrogen sulfide, or -- you actually left the language in there --

THE WITNESS: That would be considered --

CHAIRMAN WROTENBERY: -- tied to a PHV.

THE WITNESS: Actually, yes --

CHAIRMAN WROTENBERY: The Division was recommending --

THE WITNESS: -- that's -- We left that language as it was.

CHAIRMAN WROTENBERY: Okay, the Division was recommending that that apply to any operation where you have 100-part-per-million H_2s.

THE WITNESS: Yeah. I don't think it's a problem, as long as the language is left with due consideration. I mean, I think most operators that do drill in H_2S zones would consider.

CHAIRMAN WROTENBERY: And then the egress routes, you struck that. Did you comment on striking that language?

THE WITNESS: No. You know, I don't care, I guess, if it's H_2S or -- Any well we drill, we try to leave

ourselves egress routes to get off, because it's not just hydrogen sulfide. If we have a fire or a blowout, we need to leave egress routes, and we do so as common practice.

Probably the most difficult egress situation is when you're out there frac'ing a well, if you've ever been out there and you've got 60 trucks and frac pumps and all that, you'll trip over about 16 things before you get out.

So I just think that's industry practice, and we didn't feel that it was necessary to have that specified. When I go out and do rig inspections, that's one of my biggest things I look for. Have they kept the location cleaned and that to where our folks can escape?

So that's more -- I think just that that's already industry standard.

CHAIRMAN WROTENBERY: And you may have commented on this, I apologize if I didn't catch it. You struck the language about calibration and testing under detection system?

THE WITNESS: Yes, and the reason we stuck the word "an accurate hydrogen sulfide detection system", because if what we have out there is accurate and it's maintained, then it doesn't need to be stated that you'll calibrate it monthly or that. Our standard within Burlington is to be monthly, and I think those that set up these systems do that. But we don't feel that it's

necessary that that be stated in the Rule.

COMMISSIONER BAILEY: I guess where I have questions with these compliance requirements --

THE WITNESS: Uh-huh.

COMMISSIONER BAILEY: -- these are specific to drilling and completion, workover, well-servicing operations.

THE WITNESS: Right.

COMMISSIONER BAILEY: However, this Rule is also going to apply to many other types of operations --

THE WITNESS: Yes.

COMMISSIONER BAILEY: -- including gas plants, refineries --

THE WITNESS: Yes, that will --

COMMISSIONER BAILEY: -- those types of operations that --

THE WITNESS: We haven't got there.

COMMISSIONER BAILEY: Okay.

THE WITNESS: That will be my paragraph 2.

COMMISSIONER BAILEY: Okay, I'm waiting.

THE WITNESS: But you're right, we have a section addressing those, right.

CHAIRMAN WROTENBERY: Okay, Flare System. We now have testimony from the Division that that should apply to any facility with 100 parts per million hydrogen sulfide.

You're striking the language that was in there and folding that into the special requirements in areas where the 100-parts-per-million radius of exposure includes a public area?

THE WITNESS: Right, and that's where we feel it's important to have. When you're in remote areas that doesn't expose a public area or public road, that that's really an operator discretion.

CHAIRMAN WROTENBERY: And then why did you strike the provisions that address circumstances where you didn't anticipate H_2S, but you encounter it?

THE WITNESS: If -- The way we have it written now, and the way the Division's draft was, if I anticipate H_2S I'm going to have a monitoring system out there when I'm within 500 feet of the zone.

Where I don't anticipate H_2S, we'll never know. The only time you would ever know you had H_2S is when somebody complains about an odor that's coming up, and they -- and that has happened on occasion, we have gotten called up where somebody said, Hey, we've got a situation out the well, come out and take a look at it for us. We've gone out with detectors, we've taken measurements and said, okay, you can continue going.

You're not going to have detection equipment out there to where you would know that. The first sense of it

is, somebody complains of an odor and they think they have a problem. And the specificity that you've had where in a concentration of 100 p.p.m. or greater in the gaseous mixture, you'll never know it.

So I have a problem, I guess, with saving that level, because right now you wouldn't be required to have systems out there to measure it when you didn't anticipate it.

When we do wildcat wells, we have those systems. But the scenario you were raising earlier, when we drill Fruitland Coal wells, we don't have sensors out there for those systems.

And I think that was one of the occasions we got somebody called about it, we went out there, and it was barely detectable on our sensor, less than one part.

CHAIRMAN WROTENBERY: I might ask you about this again when we get to the last page where you strike the corrective actions language. I could see -- I understand what you're saying about not having the sensors, but I can also see a need on the part of the Division to be able to order some safety action --

THE WITNESS: Okay.

CHAIRMAN WROTENBERY: -- if -- in the kind of circumstance you've described where --

THE WITNESS: Well, if we --

CHAIRMAN WROTENBERY: -- H_2S is encountered and --

THE WITNESS: Well, let's say we did run into one that was, we hit a pocket of gas nobody anticipated, they called me out, or some of my people out, we went out and tested it and it was high. I think right there we'd stop the drilling, we'd call the Division and we'd say here's what our drilling prog was, but now we've encountered this. This is what we're going to need to do.

Some rigs are out there without mud systems, so we'd have to maybe move that rig, bring in a different rig that has a system to where we could start going back to drilling. I mean, that would be a total surprise. We'd have to shut that operation down, frankly, and go get a different rig to do drill the well.

I have not encountered that. I don't know if you've ever encountered that, Gene, in any of your wells to where you've encountered something that got that high. I think we know ahead to plan and we have the systems out there when we need to.

CHAIRMAN WROTENBERY: Okay. Now number 2, address Commissioner Bailey's --

THE WITNESS: Protection of those other areas. For "Oil Pump Stations, Producing Wells, Tank Batteries and Associated Production Facilities, Refineries, Gas Plants

and Compressor Stations." We left the same language that was there before on API standards.

We struck the Minimum Standards paragraph there, along the same lines as we did on the drilling site.

We changed the Fencing section to Security Provisions and just made this more performance-based.

"Well sites or other unattended fixed surface facilities shall be protected from public access when the location is within 1/4 mile of a public area. This provision shall be provided by fencing and locking, as appropriate. A surface pipeline shall not be considered as a fixed surface facility for this section."

Fencing and locking, when we get within a standard we feel is appropriate, but it shouldn't be specified as the type of fencing or what's there. We feel that we have a good practice of doing what's the right thing out on those locations, and each facility could be different. If you're within the city limits, generally we're prescribed of what it has to be, a certain height with barbed-wire top and that. But in some areas it might be sufficient to have a six-foot fence.

So without the specificity, basically we would agree that "shall be provided by fencing locking" but "as appropriate".

And that would be at a 100-part-per-million

threshold.

Wind Indicators, we actually changed the language which was there and incorporated -- we liked the language that you had earlier on drilling locations, so we just copied that language down there and put it in that one.

Then we added again our section d., "Special Requirements. For operations or systems occurring in areas where the 100-p.p.m. radius of exposure includes a public area, the following additional measures are required: i., Operators shall install safety devices and maintain them in an operable condition or shall establish safety procedures designed to prevent the undetected continuing escape of hydrogen sulfide."

That language is a more performance-based version of your automatic safety valve.

We've had some experience from some operators that these automatic valves do not work. In fact, some operators have removed them. They just don't, you know, effectively do the job that they're intended to do. So in some circumstances we may just recommend procedures.

But in some areas, though, where we can make those work, we feel that it's appropriate to consider them and use them.

Then the second part of that special requirement, "Any well shall possess a secondary means of immediate well

control through the use of appropriate christmas tree or downhole..." Actually, we just incorporated your language up into there that was in c. below.

Then we kept the tanks and vessel piece that called for "Each stair or ladder leading to the top of any tank or vessel containing 300 parts per million or more of hydrogen sulfide...shall be chained or marked to restrict entry."

And we understand what the intent of that next sentence was, but by virtue of the way it read, as you were saying that only tanks or batteries that required fencing, would you allow the substitution of a danger sign? And frankly, it should be any tank or tank battery, to where you could justify a danger sign, possibly, in lieu of a...

So either a -- Right now the way it's read, it's "chained or marked to restrict entry." And we just deleted that last sentence.

And then the Compliance Schedule we left the same.

So the big changes there, we changed -- we took out the paragraph on minimum standards, changed fencing to security provisions and wrote that in a performance way. Wind direction indicators, we think we improved the language there to what you had in drilling, and then added a section on special requirements that would apply in areas

where the 100-part-per-million radius of exposure included a public area, to incorporate safety devices and a secondary means of well control.

MR. PRICE: I'm sorry, Bruce, where are you at now?

THE WITNESS: Page 11.

CHAIRMAN WROTENBERY: I think it's 10 on the copy we have.

THE WITNESS: Oh, okay. Well, maybe my page is different.

MR. PRICE: And you're where at on page 10?

THE WITNESS: Ten --

MR. PRICE: We just finished with tanks and vessels.

THE WITNESS: Yeah, it starts at the top of the page, it says production, hydrogen sulfide, crude oil pump, stations, producing wells.

CHAIRMAN WROTENBERY: Oh, you must be on --

THE WITNESS: See, my page it was on the top of the page.

MR. MONTGOMERY: What were you talking about? I didn't understand either.

MR. PRICE: Yeah, because we've finished with tanks and vessels. Then after that where did you go?

MR. MONTGOMERY: I think you skipped back.

THE WITNESS: Well, Compliance Schedule, we --

MR. PRICE: Oh, Compliance Schedule, okay, all right.

THE WITNESS: And then I just summarized that our summary -- What we've changed to that section is, we eliminated the minimum standard paragraph --

CHAIRMAN WROTENBERY: Oh.

THE WITNESS: -- changed fencing to security provisions --

MR. PRICE: Oh, okay.

THE WITNESS: -- wind direction indicators, we actually took the language you had in drilling --

MR. PRICE: Okay.

THE WITNESS: -- and then incorporated a special paragraph for special requirements that will apply in areas that have a 100-p.p.m. ROE in a public area.

MR. PRICE: Right, I've got you. Okay, now you're fixing to start on 3?

THE WITNESS: Now I'm ready to start on 3.

MR. PRICE: Okay.

THE WITNESS: We left the training requirements. They're identical to what was in the Division draft. I know there was some testimony earlier as to where that applied. We considered that to apply at 100 parts per million.

But again, this would apply for public safety purposes to any worker who needs to implement a contingency plan. And implementation, in my mind, is from the very incidence of discovery until you start implementing a plan. So those workers that we have out there that are lease operators, if they have H_2S wells, they take this training. And I would consider that that covers it, because they're at the very earliest stage of implementing this plan.

The next section under that, which would be the last compliance requirement, would be Notification of the Division. And that language we left the same, except we took out "preferably within one hour", and the way it would read now, it would say, "The person, operator or facility shall notify the Division upon a release of hydrogen sulfide requiring activation of the hydrogen sulfide contingency plan as soon as possible, recognizing that a prompt response should supersede notification."

And the rest of the language we left the same.

The last two sections that we have -- and I don't know that this is the right name. The next one is what I call reciprocity. And basically what we're saying there is, if we're subject to another jurisdiction -- 70-percent, for example, of the surface of the leasing surface acreage in the San Juan area is in federal, and they have Onshore Order 6.

So "Any facility or operation that is subject to another jurisdiction with respect to hydrogen sulfide regulations..." as an example, BLM Onshore Order 6 "...and is in compliance with those regulations, shall be deemed in compliance with this section."

We don't think we should have to go back and forth trying to duplicate the requirements of both.

CHAIRMAN WROTENBERY: What other jurisdictions are you talking about?

THE WITNESS: That's the only one I could think of, but I don't know if the City of Aztec ever comes out and develops one. That's the only one I was aware of.

CHAIRMAN WROTENBERY: Okay, but if the City of Aztec did --

THE WITNESS: Well, if somebody else --

CHAIRMAN WROTENBERY: -- write H_2S rules, you would --

THE WITNESS: -- came up with one and we're subject to that --

MS. SELIGMAN: Navajo nation, for instance.

THE WITNESS: Navajo nation.

MS. SELIGMAN: Or Jicarilla, which has the potential to set their own rules.

THE WITNESS: And I don't know that's the right name for that section, but --

CHAIRMAN WROTENBERY: Uh-huh.

THE WITNESS: -- I guess the intent is -- I know there was some discussion about who had jurisdiction over the issue of H_2S, and I guess we don't want to have to go back and forth about having two separate plans, two separate standards of control.

And we pulled Exemptions to the very end.

CHAIRMAN WROTENBERY: We don't have any testimony on the record about the BLM requirements, so I don't know that the Commission could make a decision on this particular point without some information --

THE WITNESS: On Onshore Order 6 --

CHAIRMAN WROTENBERY: -- that BLM, Onshore Order would satisfy the purposes for this rule.

THE WITNESS: Well, from their standpoint -- Who was it we were talking with? According to BLM, they feel they have jurisdiction over this and that you guys don't.

MR. GIRAND: Yes.

THE WITNESS: I'm just repeating --

MR. BROOKS: Your Honor, I believe that we could -- I believe the Commission -- and of course, Mr. Ross is your counsel and he'll advise you on these matters, but I believe the Commission could, if they chose to do so, take administrative notice of BLM Order 6 under the general administrative notice provisions of the New Mexico Rules of

Evidence.

CHAIRMAN WROTENBERY: Did somebody from BLM really say we don't have jurisdiction?

THE WITNESS: Who was it?

MR. GIRAND: I think it was yesterday, Gary Stephens.

CHAIRMAN WROTENBERY: Gary Stephens in Carlsbad?

THE WITNESS: I guess we don't want to be caught in double jeopardy. I guess to me, if we're meeting Onshore Order 6 and this Rule now comes, do we have to now go back through all our plans and re-do those?

FROM THE FLOOR: Thank you, Dr. Lee.

THE WITNESS: He's already trying to charge me for my own water data.

And we feel there should be some provision there that recognizes both sets of rules. And if you're complying with one -- I mean, there's acreage there, as you know, that they trade acreage, and it could move from federal hands to the state hands, and you could already have a provision -- a well in that area that you're already meeting.

That kind of summarizes our effort. And as I've mentioned, this is a joint effort between NMOGA and IPANM. We feel that this meets the objective of protecting public safety in areas where -- for acute releases of hydrogen

sulfide, as you've mentioned.

We've provided an electronic version that Steve has. And we can discuss these further, you know, in a working group if that becomes necessary.

CHAIRMAN WROTENBERY: Probably be a good time to take a break, unless -- Let me ask first, do you have any questions?

COMMISSIONER LEE: No.

CHAIRMAN WROTENBERY: Any further questions?

COMMISSIONER BAILEY: I don't think so.

CHAIRMAN WROTENBERY: Okay, do you want to --

COMMISSIONER BAILEY: Thank you for reorganizing everything. You made it clearer for me.

THE WITNESS: Deborah wouldn't let me out of the office till I got this thing done. It was either that or stuff NMOGA meeting envelopes, and I wasn't going to do it, so I stayed.

CHAIRMAN WROTENBERY: Okay, did the Division have any questions?

MR. BROOKS: We don't have any questions of Bruce.

We would respectfully request, since we didn't have a chance to see this draft before today, that we go ahead and take a break and that will allow me to visit with the environmental people for a few minutes to see if we

want to present anything further in reference to their draft.

CHAIRMAN WROTENBERY: Okay, we'll do that, then, at this point, take a 15-minute break. Will that --

MR. BROOKS: Hopefully.

CHAIRMAN WROTENBERY: Okay, thanks.

MR. BROOKS: This late in the afternoon, I think that will --

CHAIRMAN WROTENBERY: And we still need to hear from Mr. Prather.

MR. BROOKS: Okay.

THE WITNESS: Thank you.

CHAIRMAN WROTENBERY: Thank you.

(Thereupon, a recess was taken at 3:35 p.m.)

(The following proceedings had at 4:00 p.m.)

CHAIRMAN WROTENBERY: Okay, Mr. Brooks?

MR. BROOKS: Okay. Madame Chairman, honorable Commissioners, I conferred with Mr. Price and Mr. Anderson during the recess. There are, of course, very substantial changes in the proposed draft submitted by NMOGA, and some of them we have no objection to.

Some of them we have some very serious concerns about, basically in the area of enforceability. For example, just to give an example, the detection equipment provision, the elimination of the requirement for periodic

calibration and keeping the log. If that -- They propose to eliminate that and substitute a provision that the equipment be accurate.

And of course, Bruce said that his company does calibrate them monthly, and that was our requirement. Well, that was fine, but not every operator is going to do that, and if we were to want to cite someone for violation of this provision we would have to prove that their monitoring system was actually inaccurate before they would be in violation.

That's simply an illustration. There are many situations like that within this Rule.

The bottom line, we believe that we do not have time this afternoon to go through point by point, nor are we prepared to do so, adequately prepared to do so. We believe that if the Commission is inclined to go this direction, that we would request -- reluctantly request an opportunity to submit a further written response.

And actually, we're so far apart compared to this latest draft that's been submitted that Mr. Anderson indicated he thought it might be necessary to remand it to the work group to attempt to resolve some of these differences, get something that would be sufficiently specific that it could be enforced without being overly burdensome on the responsible operators. I'm sure that's

probably not a direction the Commission wants to go, but I'm charged to represent that as being what we think might be necessary.

Mr. Price and Mr. --

CHAIRMAN WROTENBERY: May I just ask, because I have a low level of confidence at this point in the work-group process on this Rule, and --

MR. BROOKS: I tend to share it, your Honor.

CHAIRMAN WROTENBERY: -- it may just be that I'm in a little bit of a shock phase right now.

MR. BROOKS: I absolutely share your feelings, madame Chairman, but I simply present that.

Mr. Anderson and Mr. Price are available for any questions the Commission might wish to ask, for instance, on their rationale for some provision that has now been changed, or proposed to be changed in the NMOGA draft.

But I'm not going to offer any further testimony. I feel like there's too much to talk about, and it's too late in the afternoon.

Thank you very much.

CHAIRMAN WROTENBERY: Thank you.

Why don't we hear from Mr. Prather --

MR. BROOKS: Okay.

CHAIRMAN WROTENBERY: -- first, and then we can talk about where to go from there.

MR. PRATHER: I guess I have the dubious distinction of riding drag on a long day.

(Laughter)

CHAIRMAN WROTENBERY: Well, we're used to long days, so we're still here, still alert.

JOHN PRATHER,

the witness herein, after having been first duly sworn upon his oath, and testified as follows:

DIRECT TESTIMONY

BY MR. PRATHER:

MR. PRATHER: What I've put in front of you there is something that hopefully I didn't scare you to death with that I'm going to talk about all of this. It's simply some things that the Commission probably can use as helpful documentation in some of the things that I'm going to talk about.

First off, who am I? I am currently the co-owner of Safety Consulting and Training in Hobbs, New Mexico, where for the last eight years I have conducted industrial safety and compliance training for a number of oil and gas service companies, as well as production companies, refineries, and we use compliance standards, Department of Transportation, OSHA, as well as Mine Safety and Health Administration documents to design these programs.

I have 37-plus years of experience in the mining,

petrochemical refining, oil and gas industries, and as a trainer I started several years ago as a hospital corpsman with the U.S. Navy who had the dubious distinction of being assigned to the United States Marine Corps and spent a great deal of time in Southeast Asia.

But I have completed the Department of Labor training, the requirements of the OSHA Training Institute, and I have a certificate as a safety and health specialist, I have a certificate as a construction safety and health specialist, and also an environmental specialist.

So as far as the industrial hygiene side of it, the OSHA Rules that I've heard referred to several times today -- I have a very extensive background in that area.

There are four areas in this draft that I have some concern about, the first being the level of 100 and 300 parts per million. I think it was established earlier in the day that the current NIOSH immediately dangerous to life and health level is now 100 parts per million. That document I have included from NIOSH behind the third colored page in your booklet.

This change took place approximately three and a half years ago. Prior to this change, the IDLH for hydrogen sulfide was 300 parts per million.

If you look at the standard, or the draft copy of the standard, and you go back through some things I've

included here, which are actual copies of that rule we were talking about from Minerals Management, both for their Outer Continental Shelf Regulations and their Onshore Regulations, you're going to find the level being 100 parts per million, very regularly and very routinely.

But if you look at the date of these documents, you're going to find that at the time the document was written IDLH was 300 parts per million.

I think we all agree that the rattlesnake is a very dangerous critter, but we don't wait till he bites us before we do anything about it. When he rattles, we take action. I think contingency plans should not be enacted after the damage is already taking place, but before that damage was taking place.

And back in 1995 when the RP 55 and the Mineral Management Rules were written, that's exactly what they did, because they took an action at one-third the IDLH level, as opposed to the IDLH level.

Apparently, the new information has not been passed along to this point. And today, the way the draft is written, we're not taking action until we've already been snakebit.

COMMISSIONER LEE: Wait a minute, how many bit do we have before?

MR. PRATHER: Sir?

COMMISSIONER LEE: How many bites do we have? You talk about it, you know, it's -- Right now, the New Mexico producers and the regulatory agency come together to come up with this plan, and you say this plan is not good. And what is the past five years -- what is the accident rate of the industry?

MR. PRATHER: Well, we've had several incidences with H_2S.

COMMISSIONER LEE: How many fatalities in New Mexico?

MR. PRATHER: I have that information in my office. Let's see, I believe the year before last it was nine.

COMMISSIONER LEE: Nine dead?

MR. PRATHER: Yes.

COMMISSIONER LEE: Guilt.

MR. GANTNER: That's surprising to me, because I've downloaded stuff off of --

MR. MONTGOMERY: What did you say? Nine?

MR. PRATHER: Uh-huh.

MR. MONTGOMERY: Nine what?

MR. PRATHER: Fatalities.

MR. MONTGOMERY: From H_2S?

MR. PRATHER: Yes.

MR. GANTNER: I downloaded stuff off there, I

didn't see that.

MR. MONTGOMERY: There's been one incident in the State of Texas of fatalities for H_2S -- public fatalities from H_2S, there's only been one, and that was in Denver City. That was 46 years ago.

CHAIRMAN WROTENBERY: Okay, we may have to distinguish here between public fatalities and worker fatalities.

MR. PRATHER: This was fatalities from H_2S, period.

COMMISSIONER LEE: I didn't know that.

MR. GANTNER: That's news to me. I fcllow that kind of stuff.

MR. GIRAND: Workers Comp Administration in New Mexico indicates fatalities, and I can remember 1996, 1998, 1999 and 2000 there were zero.

MR. BROOKS: Denver City was not 46 years ago, because I was employed by the firm that was hired to represent ARCO, to defend their liability suit in that incident, and I was not a lawyer 46 years ago.

CHAIRMAN WROTENBERY: Denver City was in the 1970s.

MR. BROOKS: It was thirty-something years ago.

CHAIRMAN WROTENBERY: Uh-huh. It was 1976, I believe, sometime around there.

MR. PRATHER: In item 9 here, there is an article on Denver City, the one titled "Death Came from a Cloud", is the whole Denver City case.

MR. BROOKS: Yeah, that was approximately -- between 25 and 30 years ago.

MRS. PRATHER: 1975 is what --

CHAIRMAN WROTENBERY: 1975?

MR. BROOKS: I don't want people to think I'm any older than I really am.

MR. MONTGOMERY: That's been the single incident.

MR. PRATHER: And go to the -- behind the second colored tab. You'll find an article take from the *Hobbs Daily News-Sun*, September 10th, 2002, which deals with a person being seen by a doctor, in essentially the public. He was employed by the City of Lovington, but he was not an oilfield worker as such. He was not connected with the release, as far as his employment. And that's happened within the last 30 days.

Now, again, fatalities have a -- you know, these make news. Injuries that do not produce death do not make news.

I'll give you one item in the same area where this leak occurred. There's a fellow in a nursing home in Lovington who has been there 19 years now, in a total vegetative state from the inhalation of hydrogen sulfide,

and he showed up on a fatality report nowhere because he's still alive. He hasn't recognized a single family member in 19 years, but he's still here.

So I mean, that again is my question. Are we only going to base it on fatalities? You know, public protection starts before we kill them.

So do we wait until we have reached an IDLH level before we enact a contingency plan, or do we do something before that starts to happen?

And one of the reasons I have a big concern is, in my presentation on page 3 you find three pictures there, and all of them are taken over the top of a wellhead, looking at various buildings in the background, one of them being Jefferson Elementary School, one of them being Merrill Gardens Retirement Home, and another one being Good Samaritan, again a retirement home. And if you notice, the wellheads are located right literally in the front doors.

There is typically no monitoring systems whatsoever on these wells, and the first responders, the people who find the leaks, are not company people but Mrs. Brown who smells something she don't like, and she calls the police.

If you go back to the Hobbs article on the gas leak, in the very last line, "The cause of the pipeline gas leak is unknown at this time as well as the owner of the

pipeline. At press time, the gas leak was being prepared."

We have had leaks where things have appeared up through city streets in communities in southeastern New Mexico where it has taken as high as four days to figure out who owned the line.

Now, if we wait till the line owner determines that there's 100 parts per million there and enacts a contingency plan, the contingency plan may not go in effect for several days.

This is one of the reasons that I really have a problem with taking anything out about monitoring equipment. It's not stringent enough, because typically if you go to Eunice, New Mexico, and go to Avenue M, there are large tank batteries located on Avenue M, with residences all the way around them. If you go to the north end of those batteries and go over to Avenue O on that street, you're going to find a city lot that is divided between the front of the lot and the alley, with the house being on the front of the lot and the producing well right literally in the back yard.

But yet these facilities are, maybe, visited once a day by the operator. That visit very seldom is more than 15 minutes. So the other 23 hours and 45 minutes of the day that is an unmanned facility, that they have no idea what's going on at that facility.

Now, we have talked all day long about various facilities. We seem to have the idea that all of these are located out in the country somewhere. But those southeastern New Mexico and these wells are quite literally on city lots, in parking lots, across the streets from churches, hospitals, nursing homes.

And yet what we have proposed says that when the H_2S level reaches 100 parts per million in the hallways of Jefferson Elementary School, we're going to do something.

COMMISSIONER BAILEY: You've sat here all day and listened to the testimony.

MR. PRATHER: Yes, ma'am.

COMMISSIONER BAILEY: What values would you recommend instead of the 100/500?

MR. PRATHER: Those which are much more in line with the IDLH document from NIOSH. NIOSH says the permissible exposure limit, or that limit at which we can go to without any physical harm is only 10 parts per million.

COMMISSIONER BAILEY: So you would substitute 10 parts per million instead of 100 parts per million?

MR. PRATHER: Well, currently -- I think most people are going to find this a real shock, that there are H_2S detectors located in the hallways of Jefferson Elementary School.

COMMISSIONER BAILEY: I'm trying to get to what figure you would recommend, instead of the 100 parts per million.

MR. PRATHER: Something less than half of the IDLH.

COMMISSIONER BAILEY: So you would say five or less?

MR. PRATHER: No, the IDLH being a hundred.

COMMISSIONER BAILEY: Okay, so you'd say 50 or less.

MR. PRATHER: Fifty or less. And if you notice, back in the old standard when it was 300, they took action at 100, which was one-third of the IDLH. If you take that same logic and reasoning, then we're going to do something at 33 parts per million.

COMMISSIONER LEE: So if you set it at 50, then your contingent plan -- is that going to be faster than 100 p.p.m.?

MR. PRATHER: Most definitely. That level could go to 50, 60, 80 in that hallway, and we would never do anything. We don't do anything until we reach that minimum level. That's what a contingency plan and a radius of exposure is all about. We calculate where it's possible to have that exposure, and at that point is where we take action.

COMMISSIONER LEE: The public buildings have those H_2S --

MR. PRATHER: The nursing homes do not have the H_2S detectors --

COMMISSIONER LEE: Yeah, okay --

MR. PRATHER: -- only this one school that I'm aware of.

COMMISSIONER LEE: One school. They are worried about a pipeline or they're worried about H_2S system?

MR. PRATHER: They're worried about a producing well that's located in the school yard.

COMMISSIONER BAILEY: Let's get back to the second half of my question. Instead of the 500 parts per million, what is your recommendation?

MR. PRATHER: Other than -- I would say we never go over 100 parts per million in anything. Why go to five times something that we know is going to kill us? I mean, 100 parts per million has been known to produce fatalities.

Another thing you've got to figure is that this is based on government lab information, typical dose, which is based on a 150-pound healthy person. If I only weigh 50 pounds as a second grader, then I can only handle one-third of the NIOSH dose, because it's per pound of bodyweight.

When we're talking about an oilfield worker, we're talking about 210 pounds. But when we're talking

about protecting nursing homes and schoolyards that have producing wells in them, we can't base that on the size and physical condition of the average oilfield worker, we've got to base it on the real world who is out there. And at recess in this particular elementary school, these kids are quite literally playing around the wellhead. Is that not true, Mr. Price?

MR. PRICE: That is true.

MR. PRATHER: There are many producing wells within the city limits of Hobbs, New Mexico. There are literally no tank batteries. So where does the well go, or how does it get to the tank battery? It has to go through Mrs. Brown's front yard or under our city streets. So anytime that this piping fails, the release is quite literally in her yard.

She goes out to pick up the paper at seven o'clock in the morning, and here's this brown, stinky, gooey stuff in the front yard. Her next thing, she doesn't call the producing company, because this line is not even marked. She goes in and she calls the police.

And the next guy who shows up is the policeman, who has no training whatsoever in H_2S. You know, brown, sticky, gooey stuff. And they start trying to determine who owns it. And like I said, historically -- and I can document this through local newspapers that sometimes it's

took as high as four days to figure out who owns the brown, gooey stuff in Mrs. Brown's front yard.

COMMISSIONER BAILEY: Has the City of Hobbs or any of the other municipalities in the southeast enacted laws to control this type of H_2S activity? Are there city ordinances?

MR. PRATHER: The public awareness of what they're dealing with -- Like today, I have never heard a single person mention that we are dealing with the second most toxic substance known to man.

CHAIRMAN WROTENBERY: That was covered during our first hearing.

MR. PRATHER: It is only --

CHAIRMAN WROTENBERY: We did go through in great detail --

MR. PRATHER: It is only superseded by hydrogen cyanide, the gas used in the gas chamber. And if you look at the permissible exposure limits for both gases, they are the same.

So yeah, it is a second, but it is a very close second. Yeah, we've laughed about it that, why have we not marketed this a little better to Dr. Kevorkian, because there's a lot better gas of choice, H_2S, than what he's using.

COMMISSIONER BAILEY: But the question was, have

any of those municipalities enacted any ordinances connected with --

MR. PRATHER: The City of Lovington, after a large blowout roughly 24 months ago now --

MR. PRICE: No, it's been --

CHAIRMAN WROTENBERY: 1988 --

MR. PRICE: Yeah.

CHAIRMAN WROTENBERY: -- March.

MR. PRATHER: Okay. The City of Lovington started enacting some, but it was more of a contingency plan. But like this well, it's located outside the city limits, and some of this stuff they don't have control over.

Another thing we need to look at is, these producing facilities and these lines that have been buried, some of them date back to the late 1920s and early 1930s. Hobbs currently is undergoing another tertiary recovery project using CO_2, which historically has only increased the corrosion and the H_2S problems.

Denver City was mentioned a while ago, but it's surprising that most of these communities have not acted on this. And one of the big reasons, I think, gets back to an article I've included here from --

COMMISSIONER LEE: Let's talk about CO_2. So what's your point, CO_2?

MR. PRATHER: CO_2 mixes in the gas stream, increases the corrosiveness of the gases, and therefore increases the potential for line failure.

COMMISSIONER LEE: But they are not going to switch to the H_2S, right?

MR. PRATHER: Well, CO_2 is being put into the ground to aid in the recovery of the oil.

COMMISSIONER LEE: CO_2 is not going to mix with the hydrogen sulfide, right?

MR. PRATHER: Well, they're going to mix in the gas stream, yes. They're not going to combine together to make a third chemical, no, but the --

COMMISSIONER LEE: The corrosive --

MR. PRATHER: -- in the recovery process you --

COMMISSIONER LEE: The corrosive H_2S in the CO_2 is equally strong.

MR. PRATHER: But it's increased when you introduce CO_2 into the wellbore, and the line failure is what produces the emergency. So line failures are directly related to the corrosiveness of the wellbore fluids.

COMMISSIONER LEE: Is that right? Eighty percent of CO_2 and 20 percent of CO_2, the corrosivity is the same?

MR. GANTNER: I don't know that they're the same. I mean, they operate differently, but they're corrosive. But obviously operators are aware of that, and you inject

chemical controls and that to maintain your systems.

COMMISSIONER LEE: Okay, thank you.

MR. PRATHER: Okay, the other point is signage. I have included 1910.145 in here, which is the OSHA regulation for safety signs.

There are three words that are routinely used in safety signs, "danger", "warning" and "caution", "danger" being the most harmful. "Danger" indicates a situation that has the potential for causing death or serious injury.

"Caution", which is an alternate sign mentioned in the Rule, indicates a possibility of moderate injury. And I think when we're dealing with CO_2, especially at 100 parts per million --

CHAIRMAN WROTENBERY: H_2S.

MR. PRATHER: -- it's totally inappropriate. Or H_2S, excuse me, at 100 parts per million, that sign is totally inappropriate. It does not meet the standard, neither the ANSI standard nor the OSHA standard.

And adding that wording to the Rule only adds confusion, because we've got enough "Caution H_2S" signs out there which do not meet the standard to start out with. The oilfield probably has 90 percent "Caution H_2S" signs and 10 percent danger as we speak, and that is not in compliance.

So to weaken that, as far as the danger part of

it, or to do anything as far as confusing it by allowing a -- or the wording allowing a "Caution", although by actual practice it shouldn't, I think that "Caution" should be taken and thrown out of there.

One of the reasons that I base a lot of this is, if you're aware that New Mexico is under a state OSHA plan, as opposed to some other states being under a federal plan. New Mexico OSHA has the right to write its own rules, but they must be as stringent as any federal rule. We cannot downgrade a rule at the state level. We must either make it more stringent or leave it alone.

And several things in here, what we're doing is, we're downgrading industry practices and rules, one being adding a "Caution" sign in any H_2S facility containing 100 parts or more.

COMMISSIONER LEE: Excuse me, sir. You live in Hobbs. How about across the border? Is the Texas rule adequate?

MR. PRATHER: Well, again, the Texas rule was written at that 300 -- The Texas rule is not too bad, but again, the Texas rule was written when IDLH was still 300 parts per million. And the Railroad Commission of Texas will tell you very quickly that the rule needs to be revisited, and I think the plans are to revisit it next year.

COMMISSIONER LEE: Thank you.

MR. PRATHER: As far as recommended practices from API, in the beginning of all their documents they tell you if the document is over five years that it's pretty well dead.

Most of these documents mentioned in here have not been revisited in that five-year period, so all of them are in need of updating, and one of the things would be to deal with the IDLH level being 100 parts per million today, as opposed to 300 parts per million at the time they were written.

And the other area, as far as training, training is very briefly mentioned, and the only requirement in the Rule is, those people dealing with a contingency plan should be trained.

I've included in the back a document, ANSI Z390.1-1995. By the way, it was revisited in 2000. This document is the Accepted Practices for Hydrogen Sulfide Safety Training and Programs, and one of the advantages that it gives you if you comply with this document in your training programs is, you constantly stay up with new and emerging technology.

Somebody asked about 500 parts per million a while ago. One of the reasons I have trouble with 500 parts per million -- We've heard a lot of talk about gas

detection equipment. I brought a few pieces of this equipment along with me.

MR. PRICE: John, you're not going to gas us, are you?

MR. PRATHER: No, no.

MR. ANDERSON: I tried to do that last time.

MR. PRATHER: Here is a typical detector used in the industry. There are several different models out, but in reality they all work very close on the same technology.

The sensors that are being used in the industry today have a maximum of about 300 parts per million. In other words, once we go over 300 parts per million we over-range the electric sensors that are out there today.

Once you go over that sensor, here is the technology that has to be used. And they are tubes that have silica-gel granules in them. They are treated with certain chemicals so that when they come in contact with H_2S, they change color.

And what I do -- And you'll notice I have several different ranges here. You have to match the range up with the concentration. You take this little device, you pop the ends off the tube, you plug them into the pump in the correct direction so the airflow matches the scale, and you pump this thing so many times. And you wait for that color change to take place.

I'm out there trying to find 500 parts per million, the chemical reaction in the tube takes two and a half to three minutes, plus the time to load and do all of this. I'm working in five times the IDLH area, and I can probably get this sample in 15 minutes. And this is the best technology for reading anything over 300 parts per million that's available today.

So at 100 parts per million, how am I going to know that that takes -- Okay, I've got to enact my contingency plan at 100 parts per million. How am I going to know when that takes place?

This is not a manned facility nor a monitored facility. It's located beside a public road. And if that leak in that facility occurs at 3:00 a.m. in the morning with the gas leak blowing across a public road, how am I going to know that it happens? Well, when a motorist or a deputy on night patrol passes that and smells the odor and calls in. If that place happens to be in a low-lying area on a very calm, foggy morning, it may be he called in because he found the body.

And I refer you again back to the Denver City. That was one of the situations, that one of the pumpers, who should have been fully aware of what he was dealing with, passed through a low area and smelled H_2S, stopped and died right there on the spot.

Another typical situation I can relate to you from personal experience that has happened very recently, happened about 90 days ago just south of Eunice when a gas transmission line blew out about 4:30 in the evening. One of the first people to report that was a truck driver who called in to the dispatcher and said, Hey, we've got a heck of a leak south of town.

The dispatcher said, How bad is it?

And he said, It's bad enough that the truck sped up when I went through it.

This is what enacts contingency plans. These are not monitored facilities, there's not detection equipment out there to let you know that this is happening. It's when somebody in the public finds it, and then the public safety people try to locate the owner of the problem, track him down, get him out of bed, get his boots on and get his contingency plan enacted. And typically, we've had a lot of public exposure before this ever takes place.

COMMISSIONER LEE: So how can we improve it? Suppose I have a pipeline, it suddenly -- there's no fire, and it just suddenly broke. Then your scenario, you say, well it's too late. Okay? So what's your plan?

MR. PRATHER: Okay, other situations, typically in that same facility where they are moving fluids from one tank to another, when that tank gets full they have

automated equipment that tells them that tank is getting full, and it starts pumps and moves it to another tank, switches valves.

If it does not happen, then they have a second alarm slightly above where that pump should have started, that will communicate, usually with an answering service, it will show up on a board that tank such-and-such has too much water in it. She at two or three o'clock in the morning will dial a telephone and get ahold of one of those operators and say, Hey, you've got a tank out there that's about to run over and cost you money. Or, You've got a well down that's fixing to cost you money.

These people react to it very quickly. The systems are out there, it just has not included leak systems.

There are detectors that will detect a release within the facility. Typically today, what few of them out there, make a red light flash. And at two o'clock in the morning nobody sees that red light. That could be hooked up to a radio alarm that would notify an answering service that's out there. But like we say, these people have not seen fit to put it in there. It costs money, it's not required by the law, so why do it?

I deal with people on a daily basis that all they want to know is, what am I required by the standard to do,

and I will do that much?

We had a big discussion in new-employee orientation a week ago about when the 10-part-per-million alarm goes off on the rig. What do you do? Do they shut down operations and do something else?

A large percentage of the time, the alarm gets turned off, and they go right on working. Why? Because the employer will run them off if they don't. Because everything is dealing on a bottom line.

The oil and gas industry is much more interested in profit margin than safety. The oil and gas industry has been declared by OSHA to outdo mining and construction as far as being a hazardous industry.

But OSHA knows so little about the industry that they can't figure out how to regulate it, because the oil and gas industry most definitely is a different world. And they are somewhat dependent on state agencies who are much more familiar with what's going on out there than they are, to give them guidance.

Another thing I've heard several times, the OSHA regulations and how they deal with H_2S. There are no OSHA regulations that deal with H_2S. The OSHA regulations typically in all situations revert back to 1910.6, incorporated by reference, and they are incorporating the same API standards, state standards and what-have-you that

you are doing.

One of the few states that is an oil and gas producer that has any rules relating to the safety at all is Wyoming. Wyoming has the state oil and gas rules, and they are looked at as a recommended practice. Because they're Wyoming law, not New Mexico law, there's no way to enforce them.

CHAIRMAN WROTENBERY: Anything else, Mr. Prather?

MR. PRATHER: That's -- The rest of it I've pretty much supplied you here. The documentation and the documents I have referred to, I have supplied you with a copy.

CHAIRMAN WROTENBERY: Thank you.

Did you have any more questions?

COMMISSIONER BAILEY: I don't think so.

CHAIRMAN WROTENBERY: Okay.

COMMISSIONER LEE: Thank you.

CHAIRMAN WROTENBERY: Did anybody in the audience have questions? Yes.

MR. GIRAND: Go ahead.

CHAIRMAN WROTENBERY: For Mr. Prather.

MR. MONTGOMERY: I don't have a question, I thought you were going to ask if anybody would like to make a comment.

CHAIRMAN WROTENBERY: Oh, okay. Well, we can do

that in a minute as well.

MR. GIRAND: I just have a comment too.

CHAIRMAN WROTENBERY: Okay. Well, let's just do a little record cleanup here. Would you like to offer this document as an exhibit?

MR. PRATHER: Please.

CHAIRMAN WROTENBERY: Steve, could you mark your copy as Prather Exhibit Number 1? Would that be acceptable? And we'll do the same thing.

MR. GANTNER: Let me just ask him one more question.

CHAIRMAN WROTENBERY: Oh, okay. Sure.

MR. GANTNER: What's your understanding of what the IDLH means? Who sets that standard and what does that mean?

MR. PRATHER: IDLH is set by NIOSH --

MR. GANTNER: Okay.

MR. PRATHER: -- and it means that at that point when I consume that dosage, that I can expect to have adverse and irreversible health effects.

MR. GANTNER: Over what period of time?

MR. PRATHER: Well, the dosage is based on time.

MR. GANTNER: No, I'm saying what is your understanding, period of time that you would be exposed to that level at which you would have an adverse --

MR. PRATHER: That's totally dependent on the level.

MR. GANTNER: Would you believe the IDLH is defined by NIOSH as the level at which a worker can escape in less than 30 minutes and not incur irreversible health effects?

MR. PRATHER: No,that's the permissible exposure level.

MR. GANTNER: No, sir, that is the definition of an IDLH.

MR. PRATHER: Well, is 100 parts per million possibly fatal?

MR. GANTNER: By all this stuff I've read, it is not. I have not seen any case that I have seen where it is fatal. You should be aware that there are emergency response planning guide levels that are set by AIJ, and the EPA has set one called an AGEL in which they reference levels of 100 parts per million as the level of maximum air concentration below which it is believed that nearly all individuals could be exposed for up to one hour without experiencing or developing a life-threatening health effect.

I'm just reading right off the definition.

MR. PRATHER: Also in this document -- and I believe I have an extra copy here -- there is a document in

the very back, a New Alarm over Hydrogen Sulfide.

MR. GANTNER: I haven't seen your documents.

MR. PRATHER: Some very recent research where one entity is saying that H_2S can be harmful in as low as parts per billion.

We've looked at H_2S in the past as something I inhale, and if I exhale it then it's gone. And we're finding that that is not true at all, that there are residual and long-term effects from low dosages.

MR. GANTNER: I just wanted to understand what your understanding was of the IDLH versus what the definition says.

MR. PRATHER: Well, it's exactly the definition that's given here by NIOSH.

CHAIRMAN WROTENBERY: Anything else, Mr. Prather?

Okay, we've marked your document here as Prather Exhibit Number 1, and we will accept this into the record.

And we'll also note that you have stated your background and --

MR. PRATHER: One thing here -- and you know, if I was sitting on that other side I would be highly offended by some of the statements I've made. And I'm not saying that every operator out there operates that way, but there are operators out there today who do operate that way, and we've got to deal with the worst-case scenario.

MR. BROOKS: Because of your last statement, may I ask one question? Where in this NIOSH document is the definition stated? You have this NIOSH document, which I think I found in your booklet behind the third color tab, but just scanning it, I don't see the definition.

MR. PRATHER: Right here in the middle. It's not truly a definition, it's the basis for origin.

MR. BROOKS: Okay, thank you.

CHAIRMAN WROTENBERY: I just wanted to say that we noted your background and experience and accept your qualifications to testify here today.

And then likewise, we need to do some record cleanup for Mr. Gantner. Do you wish to submit --

MR. GANTNER: All three.

CHAIRMAN WROTENBERY: -- the revisions that you're proposing to the Rule as an exhibit?

MR. GANTNER: Yes, please.

CHAIRMAN WROTENBERY: And do you have a copy of that, Steve?

MR. ROSS: I think we need a clean copy. I wrote all over it.

CHAIRMAN WROTENBERY: Yeah, I wrote on mine too. Do you have a clean copy by any chance?

MR. GANTNER: We have clean copies, but they won't be the red --

CHAIRMAN WROTENBERY: That's fine, we can tell -- and we'll mark that as NMOGA/IPANM Exhibit Number 1, and I'll also note that we accept this exhibit, it's admitted into the record, and we also accept Mr. Gantner's qualifications to testify as an expert here.

Any other information that needs to be -- Oh, I'm sorry, that's right, Mr. Montgomery and Mr. Girand both had comments they wanted to make.

MR. MONTGOMERY: Do I make comment here, or do I --

CHAIRMAN WROTENBERY: Wherever you're comfortable. We can hear you.

MR. MONTGOMERY: The Chair earlier expressed some doubt about the process we went through as a work group, and Mr. Brooks seconded that. And I'd like to say that from my perspective -- I was on the work group -- that I think it was a very good process. I think that Wayne did an excellent job of organizing that process, getting everybody together. I think there was a tremendous effort put into this by everybody to gain consensus.

I think we approached this from the standpoint of everybody wanting to do what was in the interest of public safety, and I think overall we did a pretty good job of identifying what the important aspects of the requirement should be, although, you know, maybe the wording wasn't --

maybe needed improvement or whatever, but I think the work group process was very effective.

And you know, we tried very hard to be inclusive of anybody that wanted to participate in that process, and I think the draft that we came up with in the end was a workable draft. And so I guess I'm proud of the work product we did, I'm proud of the process we used, and I think we had good leadership. So I think overall the work group process worked very well. I think that same work group could come back together and -- if you all chose to do that, and work on all of the different inputs here, to be able to get something again that would satisfy everyone.

And I think there is a very high level of commitment in the industry to safety, and of all Mr. Prather's comments the only thing I took real offense at was the fact that we put profit ahead of safety, and I do not believe that for a minute.

So I'd like to publicly thank Wayne for all the effort that he put into this and what he did to lead our group. Thank you.

CHAIRMAN WROTENBERY: Thank you, Gene.

Dan?

MR. GIRAND: I'll second Mr. Montgomery's comments.

But I just wanted to let you know that for about

ten years I carried a meter that was digital that read up to 900 parts per million, and it had a calibration procedure. And we checked every well we owned every year and new ones as they came on. We had equipment that we could read digital up to -- well, it went up to 1000 as I recall, and it was a digital -- had long hose you put down in the tank to check inside the battery. So there's other meters out there. I used to use one. We have one at Mack.

MR. PRATHER: Now, this is based on what the people who build meters are telling us.

MR. GANTNER: I think portable meters, that's true, the type that the personnel wear. But the type he's talking about is different, and it's not meant to be carried into a confined space.

CHAIRMAN WROTENBERY: Okay, any other comments?

MR. PRATHER: And I do second Mr. Montgomery's remarks about the 52 as it's written. It's some excellent work.

CHAIRMAN WROTENBERY: Thank you, Mr. Prather. We appreciate your testimony.

We've got to talk a little bit about where to go. Let me ask you, if we do send it back to the work group, how long do you think the work group will need to come back -- and at this point I don't know whether we'll have total consensus or not, but at least I would hope the work group

could come back with a report on what areas we can agree on and highlight for us the areas of disagreement, so that the Commission will have a clear idea where we need to make a call.

MR. ANDERSON: Come back to the Commission in a month?

COMMISSIONER LEE: In a month? Next week, Friday.

MR. ANDERSON: Oh, you don't want to hear it in the October hearing?

CHAIRMAN WROTENBERY: Yes, we do.

MS. SELIGMAN: Well, that's a nice three-day --

MR. ANDERSON: Oh, okay, that puts the other ones off, then.

CHAIRMAN WROTENBERY: No, we would like to -- While it's still fresh on our minds, and we can remember all that we heard today, we would like to hear back from the work group in time so that we can publish notice for the October hearing.

So Steve, what does that mean we would need to do?

MR. ROSS: Well, publishing notice, if we know we're going to do it and we schedule it now, that's not a big deal.

CHAIRMAN WROTENBERY: Okay.

MR. ROSS: We don't have to publish the text of a Rule or anything, we just have to advertise it for yet another public hearing and possible adoption. And we can do that now for the October hearing. It's about 15 to 30 days, depending on what time of the month you decide to publish --

CHAIRMAN WROTENBERY: Well, I guess what I would hope would be to get a written report from the work group in time that we could prepare to take some action at the October hearing. I mean, I don't know that we need additional testimony, so what I would --

MR. ROSS: We can do either --

CHAIRMAN WROTENBERY: Yeah.

MR. ROSS: -- whatever you want to do.

CHAIRMAN WROTENBERY: I think what I'd like to do is set some date in advance of the October hearing that would be the deadline for the receipt of a written report from the work group, and like to get it early enough so that you would have time to sort through it and prepare some draft language for the Commission to consider at the October hearing.

COMMISSIONER LEE: What day?

CHAIRMAN WROTENBERY: The October meeting is the 25th.

MR. ANDERSON: How about a report by the 15th for

the hearing on the 25th?

CHAIRMAN WROTENBERY: Will that give you enough time?

MR. ROSS: Oh, absolutely.

CHAIRMAN WROTENBERY: Okay, that sounds good. What I would like to have from the work group is a report that clearly identifies the areas of agreement. And then for any issues that you can't resolve, I'd like some information concerning the different perspectives on those issues. What is it that is at the core of the disagreement? So that the Commission will be able to basically make a call in October, which way to go on each of those areas of continuing disagreement.

And we will then leave the record open until the 15th so that we can take the work group's report.

Is that clear to everybody? Any ambiguity in those instructions?

MR. PRICE: What time on the 15th?

CHAIRMAN WROTENBERY: The close of business, five o'clock.

MR. PRICE: Five o'clock.

CHAIRMAN WROTENBERY: Is that clear enough, Steve?

MR. ROSS: I could draft another notice and place it on the website, you know, sort of like to get a draft of

these Rules, if you want.

CHAIRMAN WROTENBERY: What I'm really interested in is getting the work group recommendations on the evidence that we've already heard and the comments that we've already received.

MR. ROSS: So you probably to limit holding the record open just to receive this one report --

CHAIRMAN WROTENBERY: That's what I thought we would do.

MR. ROSS: -- that and that alone?

CHAIRMAN WROTENBERY: Yeah. Does that sound reasonable?

COMMISSIONER BAILEY: Can we ask them to explain how the levels are determined, the 100/500. Because I don't recall ever hearing the justifications or the reason behind 100 or 500 parts per million --

CHAIRMAN WROTENBERY: Well, actually --

COMMISSIONER BAILEY: -- what that leads to.

CHAIRMAN WROTENBERY: -- they may be able to comment on that right now.

COMMISSIONER LEE: Can you?

CHAIRMAN WROTENBERY: Wayne, would you like to --

MR. PRICE: I'm sorry, I didn't hear the question.

COMMISSIONER BAILEY: I can't recall ever hearing

how the 100- and 500 parts-per-million levels were chosen. What was that based on, and why were those the levels that were chosen for the different activities, or locations?

MR. PRICE: I think I testified earlier on the 100, but not necessarily the 500.

COMMISSIONER BAILEY: Right.

MR. PRICE: We talked about the 100 being -- it seems like it was a normal number that most states and the federal government are currently using. And as part of our objective is that we wanted to normalize our Rule with the other states and the federal government, and that's why we selected those numbers.

COMMISSIONER BAILEY: But the 500 is also --

MR. PRICE: The 500 is also -- it's in the Texas rule and Onshore Order 6.

COMMISSIONER BAILEY: Okay.

CHAIRMAN WROTENBERY: And the reason that the standard is higher for a public road than for a public area, you might want to summarize that.

MR. PRICE: Well, the work group had a lot of discussion concerning that. Obviously if you're -- the exposure time going down a highway is not going to be the same as if you're in a house.

So we kicked that around a considerable amount, and we accepted the tiered approach that the BLM and the

State of Texas used.

CHAIRMAN WROTENBERY: Thank you.

MR. MONTGOMERY: I'd like to say one other thing just to make sure it's clear. There's two different 100s.

There's 100 that causes you to implement the Rule, and that's if you have 100 parts per million in the equipment. It's not out of the air, it's the fact that there's 100 parts per million in -- from the well, the gas from the well or from the equipment.

And then there's the 100-part-per-million radius of exposure and the 500-part-per-million radius-of-exposure calculations.

And so recognize that this Rule goes into effect if there's 100 parts per million in the pipe. That's when the Rule starts to apply. I don't know if that's clear or not, but there's two different 100s in the Rule.

MR. PRATHER: At 100 in the pipe you have to have a plan. So you have to --

MR. MONTGOMERY: Yeah, the Rule is in effect at 100 in the pipe.

MR. PRATHER: Yeah, that's the reason. You have to have a plan. You don't have to do anything except have a plan.

MR. GANTNER: No, that's not true.

MR. PRATHER: When you get 100 in the atmosphere

is when you start making the plan work.

MR. MONTGOMERY: No, that's not the way it's written.

MR. MANTHEI: The plan is assigned -- You have a theoretical 100 in the atmosphere. We're not going out to this leak or this incident and measuring the atmosphere and not acting until we get to 100 parts. The plan is a theoretical and worst-case scenario.

If that well had 100 parts per million and we had a complete sever of the wellhead and all of that volume escaped, that would create a large area, and that's that 100-part radius that we are going to try to protect. That's worst-case scenario. Most leaks aren't that bad.

But when we know there's a leak, we don't wait until we detect 100 parts or we wait until we detect 500 parts. When we know there is a leak, we act. Not when we've got a measured rate, but if there is a release that could, we act then.

MR. PRATHER: If it's in that 100-part-per-million area. So if it's outside that and Mrs. Brown only has a living room with 50 parts per million, then it's not included.

MR. MANTHEI: We don't wait until the measure gets to 50 parts per million.

MR. PRATHER: But I mean even on a calculated

distance. If we calculate Mrs. Brown is going to have 50 parts per million in her living room, then we do nothing about it.

MR. GANTNER: No, that's not true.

MR. PRATHER: The way the Rule is written, that's true --

MR. GANTNER: The way the Rule --

MR. PRATHER: -- it only deals with that radius of exposure, and that would be outside that radius of exposure.

MR. GANTNER: No, the Rule defines when a plan is necessary and when you have to activate it. How you activate that plan, how far downstream, how far downwind you protect is a company's decision. And companies that I know, when they activate that plan, they're going to get with the police and they're going to jointly decide how far --

MR. PRATHER: But we're not talking about those company plans, we're talking about Rule 52. Rule 52 quits at 100-parts-per-million exposure.

MR. GANTNER: Rule 52 says when you have to have a plan. That's what Rule 52 says.

CHAIRMAN WROTENBERY: Okay, let me just summarize, I think, what we decided we'd do as the next step.

We will leave the record open until October 15th, but only for the receipt of a report from the work group, which will get together and review the information that has been submitted today and the various proposals for changes to the draft that is currently before the Commission, and we'll summarize those areas on which you can reach agreement and also identify those areas on which you cannot agree, and provide the Commission a little bit of information on the basis of the different positions on those areas of disagreement.

And then the Commission will take that information at its hearing on the 25th of October and work towards issuing a final order, adopting a Rule 52.

And those comments -- the work group report will be due at 5:00 p.m. on October 15th.

Any other area of uncertainty?

Okay, let me say thank you very much, everybody, for sticking it out with us today. It was very helpful to have the opportunity to see all of you here and ask questions and hear from you on the provisions of the proposed Rule. We appreciate the time it took, all of you, but it was most helpful, and I'm looking forward to seeing the work group report.

Thank you very much.

Is there anything else we need to do today? I

don't believe so.

COMMISSIONER BAILEY: Marks and Garner?

CHAIRMAN WROTENBERY: That will be next week.

MR. ROSS: Next week.

COMMISSIONER BAILEY: No, but do we need to discuss the --

CHAIRMAN WROTENBERY: I don't, because I haven't had a chance to look at it. So we'll do that next week.

COMMISSIONER BAILEY: Okay.

CHAIRMAN WROTENBERY: Good. Thank you very much.

(Thereupon, these proceedings were concluded at 5:08 p.m.)

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CERTIFICATE OF REPORTER

STATE OF NEW MEXICO)
) ss.
COUNTY OF SANTA FE)

I, Steven T. Brenner, Certified Court Reporter and Notary Public, HEREBY CERTIFY that the foregoing transcript of proceedings before the Oil Conservation Commission was reported by me; that I transcribed my notes; and that the foregoing is a true and accurate record of the proceedings.

I FURTHER CERTIFY that I am not a relative or employee of any of the parties or attorneys involved in this matter and that I have no personal interest in the final disposition of this matter.

WITNESS MY HAND AND SEAL September 25th, 2002.

STEVEN T. BRENNER
CCR No. 7

My commission expires: October 14, 2002