

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))
_____)

ORIGINAL

REPORTER'S TRANSCRIPT OF PROCEEDINGS

COMMISSION HEARING

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

September 20th, 2002

Santa Fe, New Mexico

OIL CONSERVATION DIV
02 OCT -3 AM 8:12

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.

* * *

STEVEN T. BRENNER, CCR
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September 20th, 2002
 Commission Hearing
 CASE NO. 12,897

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A P P E A R A N C E S

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* * *

ALSO PRESENT:

MARY ANAYA
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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

* * *

1 WHEREUPON, the following proceedings were had at
2 9:07.m.:

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

5 This is a special meeting of the Oil Conservation
6 Commission to review some of the comments that we have
7 received on the H₂S Rule, and we hope to spend a little
8 time discussing some of those comments and some of the
9 continuing concerns that have been expressed about the Rule
10 as it exists in draft form.

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

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

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

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

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

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

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

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

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

22 Steve Brenner here will be recording the
23 proceedings today.

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

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

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

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

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

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

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

18 MR. BAYLISS: Randy Bayliss.

19 CHAIRMAN WROTENBERY: Thank you.

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

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

1 through Bob Gallagher.

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

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

7 (Laughter)

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

12 CHAIRMAN WROTENBERY: Thank you.

13 COMMISSIONER LEE: Mr. Noise and Water?

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

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

17 COMMISSIONER LEE: And water?

18 CHAIRMAN WROTENBERY: And what?

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

21 CHAIRMAN WROTENBERY: Oh, but now he's water?
22 And then we can say H₂S after today.

23 Okay, Dan?

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

1 something to say, but maybe not.

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

5 (Laughter)

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

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

10 CHAIRMAN WROTENBERY: Thank you, Mr. Maloney.
11 Roger, do you want to start off --

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

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

16 (Laughter)

17 MR. PRATHER: I'm John Prather with Safety
18 Consulting and Training out of Hobbs, New Mexico, and I've
19 been very active with a committee, the ANSI Z-390
20 Committee, which has written the training criteria for H₂S,
21 and we have some comments, if you'd like.

22 CHAIRMAN WROTENBERY: Thank you.

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

25 CHAIRMAN WROTENBERY: Thank you.

1 Randy, you've already introduced yourself.

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

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

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

13 CHAIRMAN WROTENBERY: Okay.

14 MR. MARSH: Ken Marsh, Controlled Recovery Ops.

15 MR. FORD: Jack Ford, Oil Conservation Division.

16 MS. ANAYA: Mary Anaya, Oil Conservation
17 Division.

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

21 (Thereupon, the witnesses were sworn.)

22 CHAIRMAN WROTENBERY: Okay --

23 COMMISSIONER LEE: Roger can't talk.

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

1 the Division's testimony.

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

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

5 MR. PRATHER: Prather.

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

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

11 MR. FELDEWERT: Okay.

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

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

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

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

22 Call Wayne Price.

23 Good morning.

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

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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.

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

7 A. Yes, I was.

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

10 A. Yes.

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

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

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

18 A. Yes, I was.

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

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

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

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

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

23 Do you accept that definition of consensus?

24 A. Yes, I do.

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

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

3 A. Yes.

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

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

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

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

22 Q. Now, Mr. Price, up in the upper left-hand corner
23 it says H₂S Threshold Chart. Explain to the Commissioners
24 what you mean by the term "threshold".

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

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

7 If you have an H₂S that's equal to or greater
8 than 100 parts per million in the system, that would be a
9 threshold.

10 If you have -- We had one instance or one part of
11 the Rule that pertained strictly to tanks. If H₂S was
12 equal to or greater than 300 parts per million in tanks,
13 then that was another threshold.

14 And we had, if the PHV -- which is defined as a
15 potentially hazardous volume -- if we had a PHV that
16 generated 500 parts per million of radius of exposure, and
17 that radius of exposure included a public road, then that
18 is a threshold. We had another threshold that is a PHV of
19 100 parts per million radius of exposure. If that radius
20 of exposure included a public area, that would be another
21 threshold.

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

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

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

12 A. That is correct.

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

15 A. Yes, it is.

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

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

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

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

6 A. That is correct.

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

10 A. That is correct.

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

13 A. That's correct.

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

19 A. That would be the radius of exposure.

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

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

1 Q. Correct, that is correct.

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

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

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

12 A. All right.

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

19 A. That's correct.

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

23 A. That is correct.

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

1 the gas stream?

2 A. That's correct.

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

6 A. That's correct.

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

12 A. That's correct.

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

18 A. That's correct.

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

23 A. True.

24 Q. But not the other way around?

25 A. But not the --

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

4 A. That is correct.

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

10 A. Yes.

11 Q. Now, which one is wider?

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

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

23 A. Yes.

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

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

5 A. I would think that's fairly accurate.

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

8 A. Yes.

9 Q. There might be a habitation that was --

10 A. Right.

11 Q. -- in the middle of a --

12 A. Right.

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

14 Now that we've explained those concepts --

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

19 THE WITNESS: That's true.

20 CHAIRMAN WROTENBERY: -- threshold levels, so --

21 THE WITNESS: Right, that is true.

22 MR. BROOKS: That is true.

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

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

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

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

6 A. They do.

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

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

16 X is OCD Environmental Bureau's recommendations
17 that we're presenting here at this hearing, and it also is
18 basically the same as what the original H₂S work group had
19 proposed.

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

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

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

2 Q. Excuse me, that's personnel --

3 A. I'm sorry, Personnel Protection and Training.

4 And also if you go across here and you see an X and if you
5 see a C together, that means that the comparisons between
6 the two -- between the proposed recommendations we have
7 here today and the Commission's present draft are basically
8 the same, or they're in agreement. And so anytime you see
9 an XC, there's basically no change between the two.

10 Now, if you go down under "H₂S Threshold Chart",
11 and one of the items, I'd like for you to look at the API
12 Standards. If you find the API Standards -- and I wish I
13 had my little --

14 Q. -- pointer?

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

17 CHAIRMAN WROTENBERY: That would be just fine.

18 THE WITNESS: Yeah, let me do that.

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

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

23 A. The present draft.

24 Q. Not present Rule.

25 A. Present draft, I'm sorry.

1 Q. Right.

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

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

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

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

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

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

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

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

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

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

18 Q. Whose comments?

19 A. It's the OCD's comments.

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

22 A. Yes, they were.

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

1 a lawyer.

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

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

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

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

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

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

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

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

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

21 A. That is true.

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

25 THE WITNESS: Okay.

1 CHAIRMAN WROTENBERY: You said if you have less
2 than 100 parts per million H₂S in your system, the Rule
3 does not apply to you. There are some provisions in the
4 Rule that require to make a determination about whether you
5 have 100 parts per million in your system or not --

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

9 CHAIRMAN WROTENBERY: Okay.

10 THE WITNESS: Yeah.

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

19 THE WITNESS: Yes.

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

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

1 don't know at this time.

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

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

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

10 A. Yes.

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

13 A. That is absolutely correct.

14 Q. Okay.

15 A. Yeah.

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

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

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

25 A. I think we had some language changes there.

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

4 A. Oh, yes, right.

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

9 A. That is correct.

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

11 A. Yes, there are some high-pressure -- intermediate
12 or medium-pressure sour gas lines that are prevalent in the
13 oilfield that do have some high H₂S concentrations, and
14 it's our intent to cover those.

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

18 A. That is correct.

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

20 A. Yes.

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

1 paragraph on page 3 of the Division's comments.

2 A. The present --

3 Q. The Division's comments --

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

5 Q. -- Exhibit 1.

6 A. Okay.

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

10 A. That is correct.

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

14 A. Yes, I believe there is.

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

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

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

21 A. After they make their determination.

22 Q. Right. Okay, thank you.

23 A. Right.

24 Q. Now, Subsection --

25 CHAIRMAN WROTENBERY: Before you leave -- Are you

1 about to leave the pipeline --

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

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

10 A. Correct.

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

13 A. That is correct.

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

17 A. That is.

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

24 A. No.

25 Q. And why not?

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

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

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

6 (Laughter)

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

11 A. That's correct.

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

13 A. Well, it's not --

14 Q. -- or necessary?

15 A. -- practical or appropriate.

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

18 A. Yes.

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

21 A. That is correct.

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

1 pipelines as well as to the facilities --

2 A. Right, right.

3 Q. -- named in the title? Okay.

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

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

11 MR. BROOKS: Paragraph H.1.

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

14 MR. BROOKS: That is correct.

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

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

18 CHAIRMAN WROTENBERY: -- as they apply to
19 pipelines?

20 MR. BROOKS: Yes.

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

1 MR. BROOKS: It's on page 3.

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

3 MR. BROOKS: Okay.

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

5 MR. BROOKS: Correct.

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

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

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

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

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

1 CHAIRMAN WROTENBERY: And what was your thinking?

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

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

9 COMMISSIONER BAILEY: Okay.

10 MR. BROOKS: You would not be --

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

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

15 A. Well, I wouldn't be.

16 (Laughter)

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

20 A. I believe that's correct.

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

25 A. Yes.

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

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

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

13 A. Yes, it did.

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

16 A. That is correct.

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

18 A. From the proposed Rule, that is correct.

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

22 A. Yes, that is correct.

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

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

3 A. They certainly contain requirements concerning
4 H₂S.

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

7 A. That is correct.

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

9 A. Yes, there is.

10 Q. Would you explain it to the honorable --

11 A. Surface waste management facilities have the
12 ability, an intermittent ability at times that you never
13 know when it could happen, is that they could generate H₂S
14 by virtue of mixing a certain waste that could possibly go
15 anaerobic or through physical/chemical reaction could cause
16 H₂S, and the generation -- that H₂S certainly could cause
17 some problems, safety problems, and even possibly public
18 health problems.

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

22 Q. This rule --

23 COMMISSIONER LEE: Excuse me, name one condition
24 that can generate H₂S in a very, very rapid manner.

25 THE WITNESS: Well, if you have produced water,

1 let's say, in a disposal tank or pond, and then you have a
2 load of acid that comes in and you dump a load of acid --
3 or H₂S-laden mud, and actually there's been some fatalities
4 where this has happened, worker fatalities -- and you
5 actually mix those, in that chemical reaction you'll have a
6 release of some high quantities of H₂S.

7 COMMISSIONER LEE: I thought your concern for the
8 facilities' long-term health -- if you say they can produce
9 the H₂S like this, then shouldn't it be treated the same as
10 the other wells?

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

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

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

21 COMMISSIONER LEE: You're not?

22 THE WITNESS: No, we were not --

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

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

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

5 (Laughter)

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

8 THE WITNESS: Yeah.

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

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

17 THE WITNESS: Yes.

18 COMMISSIONER LEE: -- H₂S.

19 THE WITNESS: Yes, that's correct.

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

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

25 COMMISSIONER LEE: I think --

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

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

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

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

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

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

1 their permits as issued under existing Rule 711.

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

4 MR. BROOKS: Well, the point is that if this Rule
5 were adopted and we have these facilities that are out
6 there, they're operating, they have permits, Rule 711
7 authorizes us to impose permit conditions relating to H₂S.
8 We have done so. Those permit conditions might require the
9 facilities to do things that this Rule does not require
10 them to do.

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

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

17 We think that if the permit requires them to do
18 things that this Rule doesn't do, that they should not be
19 allowed to argue that by adopting this Rule we have,
20 without reference to our existing Rule 711, repealed the
21 existing Rule and its permit conditions insofar as they
22 relate to H₂S management at waste management facilities.

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

1 MR. BROOKS: That's correct.

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

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

7 COMMISSIONER LEE: Oh.

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

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

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

18 COMMISSIONER LEE: Okay.

19 CHAIRMAN WROTENBERY: The Commission is going to
20 have to decide how to approach the H₂S that is either
21 brought into or generated at Rule 711 surface waste
22 management facilities. We're going to have to decide,
23 based on everything that we hear, and we've got several
24 options, I'd say.

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

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

4 COMMISSIONER LEE: Yes.

5 CHAIRMAN WROTENBERY: -- of H₂S. That is the
6 purpose of that Rule.

7 COMMISSIONER LEE: All right.

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

10 COMMISSIONER LEE: Right.

11 CHAIRMAN WROTENBERY: -- from H₂S that might be
12 brought into or generated at surface waste management
13 facilities.

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

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

1 Mr. Price, can you comment on that?

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

8 CHAIRMAN WROTENBERY: May I rephrase my
9 question --

10 THE WITNESS: Yes.

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

15 THE WITNESS: Right.

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

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

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

1 THE WITNESS: One of the things is that these
2 type of facilities can have tanks, and these tanks can have
3 high levels of H₂S in the tank. And we have a specific
4 tank provision that requires certain safety practices for
5 those tanks.

6 CHAIRMAN WROTENBERY: Okay.

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

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

18 THE WITNESS: Yes, I do.

19 CHAIRMAN WROTENBERY: -- this Rule?

20 THE WITNESS: Yes.

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

24 THE WITNESS: Yes, that's...

25 COMMISSIONER LEE: Thank you.

1 THE WITNESS: Thank you.

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

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

14 A. No, I do not.

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

22 A. No, I do not.

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

25 A. That's correct.

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

3 A. Right.

4 Q. Mr. Ross was kind enough to explain to us why he
5 created a new Subsection F here, and his explanation was,
6 because that signage area was triggered by the presence of
7 100 parts per million, whereas other requirements have
8 higher thresholds, correct?

9 A. Correct.

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

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

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

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

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

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

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

8 Q. Well, just tell us which items --

9 A. Okay.

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

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

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

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

1 A. Right.

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

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

6 Q. Right.

7 A. Yeah.

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

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

17 A. That is correct.

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

22 A. That would be --

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

24 A. Yes.

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

1 threshold level for that training provision?

2 A. Under which -- under --

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

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

9 Q. Okay, so at least one arguable reading of the
10 present draft is that H₂S training for operational
11 personnel on the site is only required if a PHV is present,
12 correct?

13 A. Yes.

14 Q. And you don't like that?

15 A. No, I don't.

16 Q. Okay, tell us why.

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

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

21 CHAIRMAN WROTENBERY: Yes.

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

24 CHAIRMAN WROTENBERY: Yes.

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

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

5 CHAIRMAN WROTENBERY: Uh-huh.

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

8 CHAIRMAN WROTENBERY: Okay.

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

12 CHAIRMAN WROTENBERY: Right.

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

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

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

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

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

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

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

9 CHAIRMAN WROTENBERY: Yeah.

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

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

14 CHAIRMAN WROTENBERY: Okay.

15 (Laughter)

16 CHAIRMAN WROTENBERY: So in the chart where it
17 says personal protection and training, if you go across on
18 that row, under the column H₂S greater than or equal 100
19 ppm, you should strike the C from that --

20 THE WITNESS: Yes.

21 CHAIRMAN WROTENBERY: -- item, right?

22 THE WITNESS: Yes, that is correct.

23 Q. (By Mr. Brooks) Now, you believe that personal
24 protection and training -- that the H₂S training should be
25 given wherever 100 parts per million is present, correct?

1 A. Absolutely.

2 Q. Tell us why.

3 A. Well, when you're working in the oilfield, you
4 must be trained before you ever encounter H₂S. You must be
5 trained on the hazards of it, you know, you have awareness
6 training, you must be trained on the physical aspects of
7 it, the chemical aspects of it and -- because you really
8 never know when you're out there, is when you're going to
9 experience an H₂S concentration that could be hazardous.

10 A 100-part-per-million -- Well, the best example
11 is that you could have a well that doesn't qualify as --
12 under a PHV, but you could have 10,000, 15,000 parts per
13 million H₂S, and if you're not trained how to work around
14 H₂S, then you would be in serious danger of hurting
15 yourself or other people, or losing control of a well.

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

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

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

25 A. Yes.

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

2 A. Yes, they did.

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

4 A. 100 parts per million.

5 MR. BROOKS: Okay.

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

14 Do OSHA regulations require this training?

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

16 Chairman Wrotenbery, I'd like to read something
17 to you, and I found this in Rule 36 of Texas's H₂S rule.
18 And they make a comment right up front and they say, "Rule
19 36 is designed for the protection of the general public
20 from the hazards of hydrogen sulfide in oil and gas
21 operations and does not pertain to industrial safety as
22 such. The Commission, however, believes that education and
23 safety training are the best defense against the hazards of
24 hydrogen sulfide and that industry workers must be able to
25 protect themselves if they are to help the general public,"

1 with the emphasis added on the last part.

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

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

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

12 CHAIRMAN WROTENBERY: Sure.

13 MR. BROOKS: -- Commissioner?

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

18 A. That is correct.

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

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

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

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

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

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

19 A. Okay.

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

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

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

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

7 A. That's correct.

8 Q. People hunting, fishing, camping?

9 A. Correct.

10 Q. People going to another well for another
11 operator?

12 A. That is correct.

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

15 A. Right.

16 Q. -- but there might be people?

17 A. That's correct.

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

22 A. That's correct.

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

1 A. Right.

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

6 A. That is correct.

7 Q. -- a fair summary?

8 A. Right.

9 CHAIRMAN WROTENBERY: Thank you, I understand
10 your --

11 MR. BROOKS: Any further questions?

12 CHAIRMAN WROTENBERY: -- point.

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

16 A. Okay.

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

19 A. Well, the American Petroleum Institute -- that's
20 what API stands for -- is a professional trade organization
21 that maintains, develops, maintains standards for the
22 industry. I might add that they're excellent, they're very
23 good. It's kind of like the way that industry can regulate
24 itself. And the API standards have many, many different
25 recommended practices concerning H₂S or hydrogen sulfide.

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

3 A. That's correct.

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

7 A. I believe that's correct.

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

10 A. Yes, they are.

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

13 A. No, the API standards basically can apply
14 anywhere there's H₂S, but it's been an industry practice to
15 apply API standards when you have 100 parts per million of
16 H₂S in the system.

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

21 A. Yes, they do.

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

25 A. Our recommendation is that the API standards

1 apply if you have 100 parts per million or greater of H₂S
2 in your system.

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

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

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

15 A. Yes, they did.

16 Q. And what was that consensus?

17 A. The consensus was that the API standards would
18 apply where there's H₂S in the system that's 100 parts per
19 million or greater.

20 Q. Now, the next item is Egress Routes.

21 CHAIRMAN WROTENBERY: May I ask a question
22 about --

23 MR. BROOKS: Yes.

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

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

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

8 CHAIRMAN WROTENBERY: How much is that fee?

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

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

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

18 CHAIRMAN WROTENBERY: Thank you.

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

22 A. Yes.

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

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

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

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

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

11 Q. Yeah.

12 A. Very similar to what we talked about.

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

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

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

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

1 and people are doing this.

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

7 A. What page are you on?

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

10 A. Right.

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

12 A. Okay, got you.

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

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

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

23 A. That is correct.

24 Q. Lower than 1 part per million?

25 A. That is correct.

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

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

5 Q. We'll address it to him.

6 A. Right.

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

10 A. That is correct.

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

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

16 Q. And what is the area?

17 A. That's around 50 parts per million.

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

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

23 (Laughter)

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

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

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

4 Q. Okay, I understand. Let us proceed.

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

7 A. That is correct.

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

13 A. That is correct.

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

16 A. That's absolutely correct.

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

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

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

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

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

3 A. Yes, 100 parts per million.

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

6 A. Yes, it does.

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

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

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

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

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

20 A. Yes.

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

23 A. Okay.

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

1 A. Well, once again, flaring of large quantities, or
2 even small quantities, of dangerous H₂S gas can provide a
3 severe threat to both on-site workers and the public.

4 Q. Well now, wait a minute. Didn't you tell me that
5 flare systems were a -- that flaring H₂S was a way to
6 render it less dangerous?

7 A. Oh, yes, that is correct.

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

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

14 Q. Well, sulfur dioxide is pretty dangerous?

15 A. Sulfur dioxide is a very dangerous gas, just like
16 hydrogen sulfide. But when you flare something, you cause
17 a convection, thermal agitation, and it readily disperses.
18 And also, the sulfur dioxide and trioxide will readily
19 combine with moisture in the water and make it an acid gas,
20 which can be irritating but not near as dangerous as the
21 SO₂ itself.

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

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

1 standard pieces of equipment is a flare gun. It's in the
2 contingency plan, if you do have a blowout or something,
3 and you have large quantities of H₂S gas coming out, it's a
4 standard practice to set that on fire to render that less
5 hazardous.

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

8 A. The API does recommend flare systems.

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

12 A. That is correct.

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

16 A. Yes, it would be.

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

20 A. Yes.

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

23 A. Yes, the recommendation I have is to have flare
24 systems on site when you have an H₂S threshold of 100 parts
25 per million or greater.

1 Q. Did the work group address this issue?

2 A. Yes.

3 Q. And did they reach a consensus?

4 A. Yes.

5 Q. And what was that consensus?

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

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

10 A. No.

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

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

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

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

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

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

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

14 A. Yes, it could.

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

16 A. Yes.

17 Q. And did they reach a consensus?

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

20 Q. Anything else you would like to --

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

25 THE WITNESS: Yeah, it is a standard for the

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

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

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

10 COMMISSIONER LEE: Go get them.

11 THE WITNESS: We will.

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

16 A. That is correct.

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

19 A. Okay.

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

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

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

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

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

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

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

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

16 Q. Okay.

17 A. Yeah, I lumped that under Blowout Controls.

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

20 A. Okay --

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

23 A. Okay.

24 Q. -- so you need to explain.

25 A. I should have brought a picture of a typical

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

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

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

15 Q. Well now, hold on a minute.

16 A. Okay.

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

19 A. Okay.

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

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

1 do that.

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

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

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

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

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

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

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

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

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

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

1 secondary controls?

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

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

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

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

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

9 A. And G is the blowout controls.

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

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

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

16 A. Yes.

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

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

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

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

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

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

7 A. That is correct.

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

12 A. That is correct.

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

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

18 Q. Which is also what the Division recommends?

19 A. Which is also what the Division recommends.

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

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

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

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

6 A. I don't understand that question.

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

9 A. Any PHV.

10 Q. -- a PHV, right?

11 A. Any PHV, right.

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

16 A. Yes, that's right.

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

20 A. That is true.

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

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

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

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

9 COMMISSIONER LEE: Yeah, I'm thinking about the
10 economics for the industry. Suppose I have infill
11 drilling. I know there's no H₂S there. Should I bring all
12 this equipment?

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

15 COMMISSIONER LEE: How do you know?

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

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

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

1 what Wayne is saying, I would not have to.

2 MR. BROOKS: Commissioner, I believe under the
3 present draft, if you were drilling a well where you did
4 not have sufficient information to be able to predict the
5 extent of H₂S in your gas stream --

6 COMMISSIONER LEE: Then you need --

7 MR. BROOKS: -- then you would have to have this
8 secondary well-control equipment, because the present draft
9 says that under those conditions you assume a 3000-foot,
10 100-parts-per-million radius of exposure, and if you have a
11 3000-foot, 100-parts-per-million radius of exposure, you
12 have a potentially hazardous volume. If you have a
13 potentially hazardous volume, under the present draft
14 you're required to have --

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

19 MR. GANTNER: Pictured Cliff --

20 COMMISSIONER LEE: No, above the three zones
21 there are four of H₂S. Do you need to bring the equipment?

22 THE WITNESS: If there's -- I'd like to answer
23 that, Commissioner Lee. If there is known H₂S and H₂S has
24 been encountered in the past, then yes, they would be
25 required to bring that equipment in, if it included a

1 public area, if it included a public area.

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

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

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

10 MR. GANTNER: Yeah, we drill through it.

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

17 COMMISSIONER LEE: But they are only bringing a
18 small amount of H₂S coming up. And you drill it, no, they
19 are not going to come in. Okay.

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

21 COMMISSIONER LEE: Sure.

22 MR. BROOKS: Thank you.

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

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

3 A. That is correct.

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

6 A. Yes, very expensive.

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

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

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

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

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

4 A. That is correct.

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

7 A. That is correct.

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

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

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

25 CHAIRMAN WROTENBERY: Oh, you are going on to

1 that? Okay.

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

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

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

8 CHAIRMAN WROTENBERY: Just for ten minutes here.

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

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

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

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

20 A. Yes, we do.

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

22 A. Yes.

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

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

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

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

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

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

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

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

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

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

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

19 THE WITNESS: Yes.

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

22 THE WITNESS: No, it should not be there.

23 CHAIRMAN WROTENBERY: It should not be there.

24 THE WITNESS: Yeah.

25 MR. BROOKS: Unless it pertains to the last

1 antecedent rule, it's not --

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

4 THE WITNESS: Let me explain --

5 CHAIRMAN WROTENBERY: Okay.

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

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

18 THE WITNESS: Well --

19 CHAIRMAN WROTENBERY: -- you need to --

20 THE WITNESS: Right.

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

24 THE WITNESS: That is correct.

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

1 Safety Equipment?

2 CHAIRMAN WROTENBERY: Yes, please.

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

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

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

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

21 A. It could vary substantially.

22 Q. Depending, perhaps, on the remoteness of the area
23 or the amount of H₂S that might be present?

24 A. That's correct.

25 Q. And does the technology within this area change?

1 A. Yes, it does.

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

4 A. Yes.

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

6 A. That's correct.

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

10 A. That's correct.

11 Q. However, do you believe we would be remiss in our
12 policy and our responsibility to protect the public if we
13 did not include a requirement that they have appropriate
14 safety equipment on locations where H₂S could be a problem?

15 A. I agree with that.

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

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

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

23 A. Yes.

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

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

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

9 A. I agree.

10 Q. Okay --

11 CHAIRMAN WROTENBERY: I have some more
12 questions --

13 MR. BROOKS: Go ahead.

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

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

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

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

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

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

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

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

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

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

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

13 CHAIRMAN WROTENBERY: Okay.

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

20 A. That's correct.

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

23 A. Yes, they do.

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

1 too often, correct?

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

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

10 A. Yes, that is correct.

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

14 A. That's correct.

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

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

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

22 A. Yes.

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

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

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

6 A. H.2.a.

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

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

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

23 The intent of the work group, any -- basically,
24 any facility, well, system that has 100 parts per million
25 or more of H₂S and tanks that have 300 parts per million or

1 more of H₂S, and they're located in these public areas or
2 close to public areas, they should be fenced for the
3 protection of the public.

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

6 A. No, it does not.

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

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

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

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

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

19 A. Yes.

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

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

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

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

3 A. Okay.

4 Q. I thought whenever you were in close proximity to
5 a public area that you had potentially hazardous volume.

6 Am I wrong about that? Is that not true?

7 A. That's not necessarily true.

8 Q. And why? Why not?

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

12 Q. Now, why would that be?

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

14 Q. Please do.

15 A. Example would be, for example, a tank battery.

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

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

24 A. Yes.

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

1 right in the middle of a public area?

2 A. That is correct.

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

5 A. Yes.

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

11 A. Yes, it certainly would be.

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

14 A. Yes.

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

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

19 Q. Well, a significant number.

20 A. Yeah, there are significant numbers, yes.

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

23 THE WITNESS: They're atmospheric-pressure tanks,
24 .5 p.s.i. is the maximum.

25 COMMISSIONER LEE: Do they pose a danger for

1 this? Suppose I crush it. What will happen?

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

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

7 COMMISSIONER LEE: I thought you --

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

13 COMMISSIONER LEE: Two feet.

14 THE WITNESS: That's possible.

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

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

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

3 THE WITNESS: It would be pretty low, yes.

4 COMMISSIONER LEE: Okay, thank you.

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

8 A. Right.

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

11 A. Right, that is correct.

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

16 A. That is correct.

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

19 A. That is correct.

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

23 A. Yes.

24 Q. And what was that consensus?

25 A. It would be 100 parts per million of hydrogen

1 sulfide or greater.

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

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

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

9 A. That is correct.

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

14 A. Yes.

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

18 A. Correct.

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

21 A. That's correct.

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

1 producing wells?

2 A. That is correct, it was.

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

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

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

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

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

12 A. Okay, I have it here.

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

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

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

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

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

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

5 A. It starts on page 10.

6 Q. Ten and 11 of our draft.

7 A. Ten and 11.

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

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

13 A. That's correct.

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

16 A. Correct.

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

20 A. On this recommendation?

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

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

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

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

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

15 A. That is correct.

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

18 A. Yes.

19 Q. And what are we now recommending?

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

21 Q. Okay, please do.

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

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

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

8 Q. Okay, the reason for that specific comment?

9 A. Yes.

10 Q. Okay, I will ask him that question.

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

18 A. That is correct.

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

23 A. That's my understanding.

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

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

4 A. That's correct.

5 Q. It may be or it may not be?

6 A. It may or may not be.

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

9 A. That is correct.

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

13 A. That is correct.

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

15 A. I would think so.

16 Q. Unless you have a blowout?

17 A. Yes.

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

19 A. You have no idea sometimes.

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

24 A. They can be very arbitrary.

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

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

6 A. That is correct.

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

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

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

15 A. Absolutely.

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

20 A. That's absolutely right.

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

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

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

3 A. Yes, I do.

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

5 A. Yes, I would.

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

9 A. No, I don't think so.

10 Q. Okay, I will -- Well, let me ask you, do Exhibits
11 1 and Exhibit 2 -- were these prepared by you or under your
12 direction, and do they represent your opinions and
13 conclusions?

14 A. Yes.

15 MR. BROOKS: Thank you.

16 Madame Chairman, I will offer Exhibits 1 and 2.

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

19 MR. BROOKS: And I will pass the witness.

20 EXAMINATION

21 BY CHAIRMAN WROTENBERY:

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

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

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

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

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

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

12 THE WITNESS: Yes.

13 MR. ROSS: And that provides for activation at
14 500 p.p.m. at any public road?

15 THE WITNESS: But we would --

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

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

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

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

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

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

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

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

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

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

15 A. Yes.

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

18 MR. BROOKS: Yes, your Honor.

19 THE WITNESS: Yes.

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

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

24 MR. FELDEWERT: Madame Chairperson --

25 CHAIRMAN WROTENBERY: Yes.

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

4 CHAIRMAN WROTENBERY: Go ahead.

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

7 CHAIRMAN WROTENBERY: It is, go ahead.

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

10 CHAIRMAN WROTENBERY: That's okay, go ahead.

11 EXAMINATION

12 BY MR. FELDEWERT:

13 Q. Mr. Price, in reading over the Division's
14 comments today and listening to your testimony here this
15 morning, I understand now that the Division is in agreement
16 that the purpose of this Rule is to address public safety
17 in areas where H₂S may exist in concentrations that are
18 greater than 100 parts per million; is that correct?

19 A. That is correct.

20 Q. All right. And that this decision to develop a
21 rule to address areas where H₂S may exist in concentrations
22 greater than 100 parts per million was a product of study
23 and industry input in your work group; is that right?

24 A. That is correct.

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

1 per-million threshold was developed?

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

12 Q. And is that 100 --

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

15 Q. Well, my question --

16 A. -- or health, there could be an issue there with
17 100 parts per million too, so...

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

23 A. Yes, it would be.

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

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

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

9 Q. Were the H₂S concerns -- Or let me ask you this.
10 were surface waste management facilities discussed at any
11 time during the work group sessions?

12 A. Not -- I don't recall.

13 Q. Do you recall --

14 A. I don't recall.

15 Q. Do you recall whether the work group addressed
16 any specific H₂S concerns associated with surface waste
17 management facilities?

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

20 Q. So I assume, then, there was no studies
21 undertaken to ascertain the particular H₂S concerns that
22 may or may not be associated with surface waste management
23 facilities?

24 A. That is correct.

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

1 does it set forth the concerns about surface waste
2 management facilities that the Division has when it comes
3 to H₂S?

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

6 Q. Page 2 of Exhibit 1 --

7 A. Right.

8 Q. -- okay, does that page set forth the concerns
9 that the Division has when it comes to H₂S with respect to
10 surface waste management facilities?

11 A. Yes.

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

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

18 Q. Well now, you testified this morning about some
19 concerns that you thought existed at H₂S facilities. Are
20 you telling me you're not authorized or --

21 A. No --

22 Q. -- qualified --

23 A. No, no, what --

24 Q. -- to address those concerns?

25 A. I must have misunderstood your question. I

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

3 Q. Okay.

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

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

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

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

13 Q. (By Mr. Feldewert) All right. Now, this
14 document sets forth in the second paragraph that "waste
15 management facilities generate H₂S as wastes decompose."
16 Do you see that?

17 A. Yes.

18 Q. First sentence of the second paragraph.

19 A. Yes.

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

21 A. Previous experience.

22 Q. What previous experience?

23 A. The Division has experienced H₂S being generated
24 at waste disposal facilities.

25 Q. When?

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

4 Q. When did your tenure with the OCD begin?

5 A. 1993.

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

8 A. Yes, we do.

9 Q. What type of documentation?

10 A. It just -- I know that there's a file concerning
11 that facility, and there is some sort of court case
12 concerning the generation of H₂S, and that's about all I
13 really know about that in detail. I do know it's out
14 there, I know that we've had a problem, and that's
15 available for public record.

16 Q. Do you know the name of the facility?

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

18 Q. Do you know the nature of the problem?

19 A. Not in detail.

20 Q. Do you know the level of H₂S that was involved?

21 A. No, I don't.

22 Q. Do you know how the decomposure process led to a
23 release of H₂S?

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

25 Q. Do you know whether there was a release of H₂S?

1 A. I understand there was.

2 Q. From what?

3 A. From the facility.

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

6 A. Yes.

7 Q. You did review the file?

8 A. Parts of the file.

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

10 A. Well, I recall that that particular waste
11 management facility had some problems, and there was some
12 H₂S that was generated, it was measured and appeared to be
13 causing some problems with nearby neighbors and so forth.

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

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

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

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

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

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

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

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

3 A. That's correct.

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

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

8 Q. Is Mr. Anderson going to testify today?

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

10 Q. The third line of that second paragraph talks
11 about "unpredictable changes in H₂S emissions". Do you see
12 that?

13 A. Yes.

14 Q. And it goes on to say that "the regulatory scheme
15 of the present rule, premised on an historically
16 ascertained volume and concentration of H₂S that is
17 presumed to be essentially constant, is not adequate to
18 address safety concerns at these facilities."

19 Can you describe for me the basis for that
20 statement?

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

1 modeling of that.

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

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

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

17 A. I don't.

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

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

22 Q. Have you looked at Rule 711?

23 A. Yes, I have looked at Rule 711.

24 Q. Are you familiar with the requirements in Rule
25 711?

1 A. Vaguely.

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

4 A. Vaguely.

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

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

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

15 A. Yes, I am aware of that.

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

19 A. Yes.

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

24 A. That one I was not familiar with.

25 Q. Okay. Is it your opinion that those operational

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

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

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

12 A. Yes, it would.

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

15 A. Right.

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

19 A. That's correct.

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

24 A. Yes, I do.

25 Q. Could you articulate your concern about produced

1 water with respect to surface waste management facilities?

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

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

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

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

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

19 A. That is correct.

20 Q. Okay. Now, the way that --

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

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

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

4 Q. That go directly to the facility?

5 A. I believe that's correct.

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

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

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

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

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

21 A. Yes.

22 Q. Okay, is it your --

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

25 Q. I understand.

1 A. -- that might have a pipeline.

2 Q. And is it your testimony that a truck and
3 authorization of transport by the Division is going to be
4 hauling produced water that has 100 parts per million of
5 H₂S in it?

6 A. I'm just saying that transport by truck could
7 possibly have H₂S in it.

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

10 A. It's hard for me to say. I'd have to sit down
11 and do some engineering calculations on the solubility of
12 H₂S in water and so forth. But it's possible.

13 Q. You don't have any studies today, though, to
14 indicate that we've got trucks out there hauling produced
15 water that have 100 parts per million in it of H₂S?

16 A. Well, actually I think if you would measure the
17 vapor space above that water, then you certainly could have
18 100 parts per million.

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

22 A. Correct.

23 Q. Okay. And right now, this Rule has provisions in
24 it for the testing of those tanks and pits to ensure that
25 they do not maintain a level of H₂S that exceeds 100 parts

1 per million?

2 A. That is correct.

3 Q. Okay --

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

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

8 COMMISSIONER LEE: So we -- But we take a lot of
9 time on this one.

10 MR. FELDEWERT: Let me be a little more direct,
11 then. I apologize.

12 Q. (By Mr. Feldewert) The Division at this point is
13 recommending that the language within Paragraph B of the
14 Rule that's underlined at the end of the Rule, that that
15 language be maintained within the Rule?

16 A. Yes, that's correct.

17 Q. Okay, and the reasons you're requesting that
18 language be maintained are set out in page 2 of Exhibit 1,
19 correct?

20 A. Yes, that's correct.

21 Q. All right. Can you identify for me the more
22 stringent conditions that you are referencing here that
23 exist in Rule 711?

24 A. I'm sorry, I didn't understand the question --

25 Q. Would you --

1 A. -- or didn't hear it.

2 Q. Okay, this latter part of this Rule, in paragraph
3 B, addresses more stringent conditions on the handling of
4 hydrogen sulfide required for such facilities by Rule 711.
5 Do you see that?

6 A. Okay, let me go through it here. Okay, you're at
7 the --

8 Q. I'm at the draft Rule.

9 A. The present draft Rule, under B, right?

10 Q. Correct. In my draft it's underlined. Let me
11 back up.

12 Do you have in front of you the draft that the
13 Commission circulated on August 30th?

14 A. I have the version that does not have the
15 strikeout on it.

16 Q. Okay, does your version have within it any
17 underlined language?

18 A. No.

19 Q. Okay, the last sentence of your version begins
20 with "This section shall not..."

21 A. Yes, "This section shall not..."

22 Q. Okay, and it goes on to talk about more stringent
23 conditions on the handling of hydrogen sulfide required of
24 such facilities by Rule 711. Do you see that?

25 A. Yes, I do.

1 Q. Okay. Are you aware of any more stringent
2 conditions within Rule 711?

3 A. I'm not familiar enough with Rule 711, since I
4 don't write permits with it, to answer that question.

5 Q. Do you know what the Division is referencing when
6 they talk about more stringent conditions in Rule 711?

7 A. Actually, I do not know.

8 Q. It goes on to talk about "or more stringent
9 conditions existing in permits issued thereunder." Do you
10 see that?

11 A. Yes.

12 Q. Okay. Are you aware of what the Division is
13 referencing with respect to more stringent conditions
14 existing in permits issued thereunder?

15 A. Well, it's my understanding that this proposed
16 Rule will cover -- the proposed H₂S Rule will cover 711
17 facilities, but it will not by any manner supersede the
18 authority that's given under Rule 711. In other words, not
19 undermined that authority that's given under Rule 711.
20 That's my understanding of the way this reads.

21 Q. Okay, I'm trying to figure out -- and maybe -- I
22 don't know if you can help me out --

23 A. And actually, to me it's a statement that the
24 Division has put in there, is that we may require more
25 stringent conditions in existing permits. That's how that

1 reads to me.

2 Q. Okay. Do you know what they're referencing with
3 respect to more stringent conditions?

4 A. I answered a while ago, I didn't know.

5 Q. Okay, let me hand you -- I don't know if I need
6 to mark this. I mean, I can just refer to it on the
7 record.

8 CHAIRMAN WROTENBERY: What is it?

9 MR. FELDEWERT: It's a letter that was submitted
10 by Loco Hills.

11 CHAIRMAN WROTENBERY: We've got that in the
12 record, already.

13 MR. FELDEWERT: Okay. Well, if I may approach
14 the witness --

15 CHAIRMAN WROTENBERY: Certainly.

16 MR. FELDEWERT: Do you have copies?

17 CHAIRMAN WROTENBERY: It's a letter that came in
18 on August 8th, 2002.

19 MR. FELDEWERT: Do you have --

20 CHAIRMAN WROTENBERY: Yes, I've got it.

21 MR. FELDEWERT: Do you need a copy?

22 MR. BROOKS: Yeah, I guess, if you're going to be
23 referring to it.

24 Q. (By Mr. Feldewert) Mr. Price, have you seen this
25 letter before?

1 A. This is a letter to the Commissioners?

2 Q. Yes.

3 A. Actually, I may not have seen this.

4 Q. Okay. For the record, this is a letter that Loco
5 Hills submitted to the Commissioners. It's dated August
6 8th, 2002, and has an attachment to it. Do you see that?

7 A. Yes, I do.

8 Q. Okay, and it has what purports to be H₂S
9 prevention and contingency plan. Do you see that?

10 A. Yes.

11 Q. And Loco Hills indicates that this was attached
12 or part of their Rule 711 permit.

13 A. Okay.

14 Q. That's in the second paragraph.

15 A. Okay.

16 Q. Okay. Now, I want to go through this very
17 briefly. Paragraph 1 talks about, apparently, the tests
18 that are required to be conducted on a weekly basis. Do
19 you see that?

20 A. I see it.

21 Q. And then it goes on in the second sentence to
22 indicate that the tests must be conducted at four
23 locations.

24 A. Right.

25 Q. Okay. Then it goes on in Paragraph A to say that

1 if an H₂S reading of 1 part per million or greater is
2 obtained, certain actions have to be taken.

3 A. Yes.

4 Q. That threshold is roughly what, 1 percent of the
5 100-part-million threshold that the Division is
6 recommending today, is it not?

7 A. Mathematically, that's right.

8 Q. Do you know any -- do you have any reason -- Are
9 you aware of any basis for requiring Loco Hills or any
10 other surface waste management facility to take action if a
11 reading is received at 1 part per million?

12 A. Yes, because it's a condition of their permit.

13 Q. Do you know any for imposing that condition on
14 anyone's permit?

15 A. It's my understanding it's based on public health
16 versus public safety.

17 Q. Isn't it the Division's position today that 100
18 parts per million covers public health and public safety?

19 A. No, it's not.

20 Q. It's not?

21 A. It's strictly a public safety rule.

22 Q. Which is a public safety rule?

23 A. The new proposed H₂S -- It's a public safety
24 rule.

25 Q. What's the purpose of this provision in an H₂S

1 contingency plan for a surface waste management facility?

2 A. It's my understanding it's for public health.

3 Q. Same reason?

4 A. No, this is for public health, and the H₂S Rule,
5 proposed Rule, is for public safety.

6 Q. What is the level that OSHA has determined to be
7 harmful to human beings?

8 A. That's a question that should be, probably,
9 addressed to our expert in that area, but I can --

10 Q. Well, don't you say on page 10 of your Exhibit 1
11 that it's 50 parts per million?

12 A. Where are you at, now?

13 Q. The Division's Exhibit 1, on page 10?

14 A. Oh, yes, uh-huh, right.

15 Q. Down at the bottom it says that "50 parts per
16 million for ten minutes is the level at which OSHA requires
17 to wear respiratory protection equipment, if this level is
18 present, since it has been scientifically determined that
19 this level is harmful to human beings." Do you see that?

20 A. Yes, and that's based upon what's called PEL, or
21 permissible exposure limit, that's been set.

22 Q. Okay. Are you aware of any study or basis for a
23 determination that 100 parts per million presents a health
24 or safety issue for the public?

25 A. Yes, there's a number of studies, number of

1 references, number of documents. API documents the number
2 of trade organizations that indicate -- that reflect that
3 100 parts per million could be harmful.

4 Q. I'm sorry, I misspoke, 1 part per million.

5 A. Oh, okay.

6 Q. I apologize.

7 A. I'm not aware of any. There is -- Just a second,
8 let me look something up, and I can maybe answer that a
9 little bit better. There's an emergency response guidebook
10 that talks about low levels of hydrogen sulfide, and -- I
11 do have it, it's going to take me a while to find it.

12 CHAIRMAN WROTENBERY: Mr. Price, if you need some
13 more time to look for that, we can have you come back later
14 and provide that information.

15 THE WITNESS: Okay.

16 CHAIRMAN WROTENBERY: I will note that we're
17 getting into questions about Rule 711 and the purposes of
18 Rule 711, which are not really part of this proceeding here
19 today. I hope we can focus on Rule 52 as it's been
20 proposed and address those issues.

21 THE WITNESS: Okay.

22 CHAIRMAN WROTENBERY: Why don't you look for that
23 over the lunch break --

24 THE WITNESS: Okay, very good.

25 CHAIRMAN WROTENBERY: -- and then you can come

1 back and present it.

2 MR. FELDEWERT: My purpose, madame Chairperson,
3 is to try to indicate -- or try to find out why the
4 Division feels that this additional language is necessary
5 in this Rule, in light of the ability of the Commission
6 under Section E.4 -- let me get my cite correct here --
7 E.4.d, the Commission has the ability under the present
8 draft of this Rule, under this section, to impose
9 additional requirements or modify requirements based on
10 site-specific conditions, population density or special
11 circumstances.

12 In light of that language, I'm trying to
13 understand why the Division feels that it needs this
14 additional language in Paragraph B and exactly what they're
15 referencing when they talk about more stringent conditions,
16 either in Rule 711 or in permits that are issued.

17 CHAIRMAN WROTENBERY: I think you've given an
18 example of the more stringent conditions that the draft
19 language is referencing when you point out the conditions
20 in Loco Hills' permit, which are pretty consistent with
21 conditions that are in other -- similar permits for other
22 facilities.

23 MR. FELDEWERT: I think they're identical.

24 CHAIRMAN WROTENBERY: Uh-huh.

25 MR. FELDEWERT: My concern, if I may, is that we

1 have an industry group that has gotten together here, along
2 with regulatory authorities, in taking a very close
3 examination of this H₂S issue for New Mexico and has come
4 up with a threshold that they feel is appropriate to
5 protect the public health and environment, and in the
6 process of that have come up with a threshold at which
7 there should be a level of concern. And as I read this
8 Rule and the Division's comments, that threshold is either
9 50 parts per million or 100 parts per million.

10 Yet when it comes to surface waste management
11 facilities, we have a threshold that is roughly 1 percent
12 of what this work group has determined to be the
13 appropriate level for action. And I guess I'm wondering
14 why the Division feels that they need language within this
15 Rule that continues to incorporate what I would call this
16 disparate treatment.

17 CHAIRMAN WROTENBERY: Mr. Brooks, would you like
18 to address that issue?

19 MR. BROOKS: Madame Chairman, honorable
20 Commissioners, I think -- since the Chair has raised this
21 and because of the discussion, I believe that this is
22 essentially irrelevant, the justification for these
23 detailed requirements in all 711 permits.

24 The reason this came -- And Mr. Price has just
25 testified that the work group did not discuss specifically

1 the issue of waste management facilities.

2 The reason this issue arose was because it became
3 apparent that there could be a contention that by adopting
4 this Rule, that the Commission had intended to supersede
5 the permit requirements that had already been developed
6 under Rule 711, and that was never intended.

7 And that's basically the reason why we're here,
8 not to address specifically why those particular
9 requirements in Rule 711 permits are justified, but just
10 that surface waste management facilities are a different
11 type of facility. They were not specifically -- their
12 specific concerns had not been addressed previously, and it
13 was not intended by adoption of this Rule to throw out the
14 existing regulatory standard with regard to surface waste
15 management facilities.

16 So going into the details of what that regulatory
17 scheme is and what the justification for it is, I believe
18 that's basically irrelevant to this proceeding.

19 CHAIRMAN WROTENBERY: Okay.

20 MR. FELDEWERT: My concern here is that as I read
21 this Rule, despite the Division's statements to the
22 contrary, the way the Rule reads now it appears that we are
23 going to have one level of threshold for action for all
24 facilities regulated by the Division except surface waste
25 management facilities.

1 I hope that is not the intent, but that's
2 certainly the way the language -- With the language as it
3 is in paragraph B, that is the apparent effect of the Rule.

4 CHAIRMAN WROTENBERY: It's definitely the effect.
5 Even under the current Rules, there are separate provisions
6 for surface waste management facilities and the H₂S
7 associated with those facilities that differ from the H₂S
8 requirements for other facilities under Rule 118. There
9 are reasons for those differences.

10 We really are -- In 118 and the new Rule we're
11 talking about replacing Rule 118, proposed Rule 52, we are
12 focused on acute public health effects of sudden releases
13 of H₂S. That may be oversimplifying a little bit, but that
14 is, I think it's fair to say, the focus of the current Rule
15 118 and the proposed Rule 52.

16 Rule 711 has some different objectives. There
17 are some concerns about long-term effects on public health
18 of lower levels of exposure of H₂S, and there may be some
19 other reasons for the provisions that are in Rule 711 that
20 are really beyond the scope of this particular proceeding.

21 Commissioner Lee, you had suggested in your
22 comments earlier that you thought it would be appropriate
23 to take a look again at the H₂S provisions under Rule 711?

24 COMMISSIONER LEE: And we are going to do that.

25 CHAIRMAN WROTENBERY: Yeah, I think that may be

1 the best way to address some of these issues that you're
2 trying to get at about the H₂S requirements in 711 permits,
3 is to go ahead and docket a separate proceeding where we
4 hear from the Division staff on the H₂S requirements for
5 711 facilities and perhaps some of the other provisions of
6 Rule 711 that might need to be clarified. I know --

7 MR. BROOKS: Yes, I believe --

8 CHAIRMAN WROTENBERY: -- through experience there
9 have been some --

10 MR. BROOKS: I believe we have been directed to
11 do a study, again, revising Rule 711. That's down the
12 agenda from this proceeding. It probably will be some
13 months in the future.

14 CHAIRMAN WROTENBERY: Do you have any idea when
15 we might be prepared to bring those forward?

16 MR. BROOKS: I do not. Roger, do you know where
17 we are with that or --

18 MR. ANDERSON: I think, madame Chairman, that was
19 one that was scheduled to begin sometime next summer.

20 CHAIRMAN WROTENBERY: Commissioners, what's your
21 sense? Would you like to see the Division accelerate that
22 process, or is that time line adequate for you?

23 MR. ANDERSON: The Division is at the
24 Commission's pleasure.

25 COMMISSIONER LEE: What does the industry think?

1 MR. FELDEWERT: If I may comment briefly, here's
2 the concern and here's what I do not understand, and this
3 is what we're trying to understand today.

4 The Division has undertaken a lot of effort to
5 come up with a rule that applies to all regulated
6 facilities that sets forth a threshold for when action must
7 be taken.

8 CHAIRMAN WROTENBERY: To address certain types of
9 risk, that's --

10 MR. FELDEWERT: That's fine, I understand.

11 CHAIRMAN WROTENBERY: -- it's not trying to
12 address every possible risk associated with H₂S. We're
13 trying to make sure that the people who live and work in
14 the vicinity of operations involving H₂S are protected from
15 sudden releases of H₂S.

16 MR. FELDEWERT: And I think this Rule does a very
17 good job of doing that. The concern I have is, we have now
18 this language in Paragraph B and a sudden effort by the
19 Division to exclude just surface waste management
20 facilities from the operation of this Rule.

21 And it's my understanding, in looking at the
22 types of permits that have been issued, which are uniform
23 and which contain an H₂S contingency plan, that while the
24 remainder of the industry is required to take action,
25 develop plans and follow the rule with a 100-part-per-

1 million threshold, when it comes to surface waste
2 management facilities, if you look at this, it says if you
3 get an H₂S reading of 1 percent of 100 parts per million, 1
4 part per million, you've got to do a second reading and
5 you've got to do a test at the fenceline.

6 And if you get two consecutive H₂S readings of 1
7 part per million at the fenceline of the facility, you've
8 got to notify the OCD office, you've got to commence 24-
9 hour monitoring, you've got to -- must obtain daily
10 analysis of the dissolved sulfides in the pond.

11 And if you get a reading of 10 parts per million,
12 one-tenth of the threshold that they are using under this
13 Rule, then you've got to notify the OCD, you've got to
14 notify the State Police, you've got to notify the Eddy
15 County Sheriff, you've got to notify the fire marshall,
16 you've got to notify the Loco Hills Fire Department and all
17 persons within a half mile of that fenceline. And it goes
18 on to impose additional requirements.

19 I don't understand, I do not understand the basis
20 for that, or the desire by the Division to maintain a 1-
21 part-per-million threshold for surface waste management
22 facilities, when everybody else is subject to a 100-part-
23 per-million threshold. That is what we're trying to find
24 out here today.

25 MR. BROOKS: Madame Chairman, we have offered in

1 our comments the reasons why we believe surface waste
2 management facilities should be subject to special
3 consideration, that there are different considerations
4 applicable to them than there are to other facilities.

5 We respectfully do not believe that it's part of
6 the Division's burden in proposing a Rule to show why some
7 other existing rule that we're not proposing to amend
8 should not be amended. We do not propose that surface
9 waste management facilities be -- that the existing
10 regulation of surface waste management facilities under
11 Rule 711 be changed. We may propose that at some future
12 time, but we're not proposing that at this time.

13 We're simply asking that this Rule be clarified
14 to show that it does not intend to repeal the existing
15 regulatory scheme under Rule 711. So we do not feel that
16 we're obligated to -- at this point, to justify the details
17 of that regulatory scheme, because we're not proposing any
18 change in it, and it is in accordance with the present
19 Rule.

20 COMMISSIONER BAILEY: We're not here to justify
21 the permit requirements for Loco Hills. I think this is
22 inappropriate discussion. We are here to discuss this
23 Rule, not the specific requirements for 711. So I suggest
24 that we move on.

25 CHAIRMAN WROTENBERY: We will. We will review

1 the H₂S requirements of Rule 711 in a separate proceeding.
2 That particular matter is on the Division's agenda. I
3 think the Commission can expect to hear back from the
4 Division on that particular issue next summer, unless
5 there's a request to hear it earlier.

6 But the Division will be bringing that issue back
7 to the Commission, but that discussion is beyond the scope
8 of this particular proceeding, which is about the
9 requirements of Rule 52.

10 MR. FELDEWERT: I understand, and my comment is
11 this. If this Rule is enacted with the language existing
12 -- as it exists in Paragraph B, if that underlying language
13 is not taken out, then what you have done in enacting this
14 Rule is, you have enacted a rule where there is 100-part-
15 per-million threshold for every other facility in New
16 Mexico and a 1-part-per-million threshold for surface waste
17 management facilities.

18 I understand today that you do not want me to go
19 further into the reasons for that -- that was what I was
20 hoping to find out here today -- and I will respect the
21 Commission's decision. But we do have a serious concern
22 about the disparate treatment of surface waste management
23 facilities if this Rule is put into effect as it presently
24 is drafted.

25 Thank you for your time.

1 CHAIRMAN WROTENBERY: Thank you, Mr. Feldewert.

2 Does anybody else have questions of Mr. Price at
3 this point?

4 Then Mr. Price, you're excused. Thank you very
5 much --

6 THE WITNESS: Thank you.

7 CHAIRMAN WROTENBERY: -- for your testimony.

8 And we will take a lunch break now. So we'll
9 start back up at 1:30.

10 (Thereupon, a recess was taken at 12:30 p.m.)

11 (The following proceedings had at 1:35 p.m.)

12 CHAIRMAN WROTENBERY: Okay, I think you're on,
13 Mr. Brooks?

14 MR. BROOKS: Very good. We call Randy Bayliss.
15 Good afternoon.

16 MR. BAYLISS: Good afternoon.

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

20 DIRECT EXAMINATION

21 BY MR. BROOKS:

22 Q. Mr. Bayliss, would you state your name for the
23 record, please?

24 A. Randolph Bayliss.

25 Q. And by whom are you employed, Mr. Bayliss?

1 A. The New Mexico Oil Conservation Division.

2 Q. And in what office are you employed?

3 A. The Santa Fe Office, Environmental Bureau.

4 MR. BROOKS: Once again, Mr. Bayliss's
5 credentials were placed in the record at the previous
6 hearing, and I take it it's unnecessary to do that again?

7 CHAIRMAN WROTENBERY: That's right.

8 Q. (By Mr. Brooks) Very good. Mr. Bayliss, are you
9 familiar with the literature concerning the hazards of
10 hydrogen sulfide?

11 A. Yes, I am.

12 Q. And can you tell us what is -- Well, you were
13 here in the hearing room during Mr. Price's testimony, were
14 you not?

15 A. Yes.

16 Q. And you heard that there was a lot of discussion
17 about whether or not it is appropriate to impose certain
18 requirements in a situation where you have a hydrogen
19 sulfide gas stream or mixture that contains 100 parts per
20 million concentration or greater, correct?

21 A. Yes.

22 Q. Can you tell us, according to studies that have
23 been done in the industry literature, what is the
24 significance of 100 parts per million concentration?

25 A. The rational basis for 100 parts per million can

1 be thought of in two respects, or can be visualized in two
2 respects: first of all, what happens to human beings for
3 various periods of time, and secondly, what it is you have
4 to do be in 100 parts per million to protect yourself.

5 The safety standard generally is, 100 parts per
6 million is something that's called IDLH or immediately
7 dangerous to life and health, which is exactly what it
8 says.

9 "Immediate" is sort of an ambiguous word, and the
10 regulations give you 30 minutes to escape a concentration
11 of 100 parts per million. That isn't to say you're allowed
12 30 minutes, it means you have to get out of an atmosphere
13 that is that contaminated. You can suffer irreversible
14 health effects, or you could even die at that level.

15 It's been previously said that you lose your
16 ability to smell hydrogen sulfide gas at that odor. I've
17 testified before that we call it rotten-egg gas because it
18 smells like decomposing, rotten eggs.

19 The other effects are that you don't see very
20 well, you get dizzy, you don't think very well, it's very
21 hard for you to protect yourself, it's very hard to start
22 getting into escape mode.

23 Now, if you're on the outside of a 100-part-per-
24 million cloud of hydrogen sulfide, to go back in you have
25 to be suited up with Scott air packs, you know, the tanks

1 that firefighters wear, or with the supplied air with a
2 long hose.

3 Q. Now, when you say you have to be, is this in
4 accordance with Occupational Safety and Health
5 Administration regulations?

6 A. Yes, it is.

7 Q. Okay, continue.

8 A. So to go back into an IDLH atmosphere, to go back
9 into 100 parts per million, you have to have your supplied
10 air, you have to have a radio, you have to have some sort
11 of device to drag you out in case you fall over or get
12 overcome, you have to have a rescue team ready.

13 So 100 parts per million is a pretty serious
14 level.

15 Q. Now, is it not true that the effects of hydrogen
16 sulfide gas on individuals may vary?

17 A. The effects of hydrogen sulfide depend upon five
18 or six factors, you know, your bodyweight, previous
19 exposure, whether you're on some sort of drugs, whether
20 you're an alcoholic, whether you've been around the
21 oilfield too long, because repeated exposures start
22 inducing certain effects at lower levels at lower times.

23 In any -- As some of the questions earlier today
24 indicated, the concentration and the time both have to be
25 considered as two separate factors in determining what the

1 effects are.

2 Q. Okay. Is it possible that a particular
3 individual might lose consciousness or even become a
4 fatality in less than 30 minutes at 100 p.p.m.
5 concentration?

6 A. There's no recorded instance of that. And the
7 problem with that, of course, is the problem with the
8 records. I mean, somebody falls over, you drag them out.
9 You don't go over and measure the concentration. The
10 lowest -- The most lethal dose on record is 600 parts per
11 million for ten minutes.

12 Again, you have to do a concentration and time to
13 get an effect.

14 Q. Now, let me reiterate -- let me go back again.
15 You said that the people who are in the area, if there's
16 100 parts per million, that they're required in accordance
17 with OSHA regulations to get out within 20 minutes unless
18 they have this special protective equipment you're talking
19 about?

20 A. That's correct. The way I would say is that you
21 should stop what you're doing immediately and walk and
22 don't run till you can get out of the exposure, get out of
23 the cloud.

24 Q. And that's even if you have a respirator?

25 A. Yes, if you are wearing -- Between 50 and 100

1 parts per million, you're required to wear a respirator,
2 and that can be one of these self-purifying things that
3 essentially filters or absorbs the H₂S out of the air, so
4 you're essentially breathing purified air. Between 50 and
5 100 you can use one of those things.

6 But once it goes over 100, even though you might
7 have a respirator on, you've got to get out.

8 Q. And you have testified already that at any given
9 concentration level of hydrogen sulfide, the adverse health
10 effects are increased as the time of exposure increases,
11 correct?

12 A. Correct.

13 Q. So that if a hydrogen sulfide leak is occurring
14 and there is a continuing emission, the longer that
15 continues to be emitted, the greater danger it presents to
16 the public?

17 A. Correct.

18 Q. And that would be even more true when you take
19 into consideration that you're in a remote area at any
20 given instance in time, there might not be anybody in the
21 area, but the longer you have the substance present, the
22 more likely it is that there will be somebody in the area
23 within the time it's there? That's a rational assumption,
24 right?

25 A. Yes.

1 Q. Okay. If the people on the site that are
2 responsible for the well or facility have to evacuate, they
3 have to immediately stop what they're doing, that's going
4 to present a control problem, right?

5 A. Correct.

6 Q. And so that it's going to increase the length of
7 time that -- if there's control actions that are necessary,
8 it's going to increase the length of time before those
9 control actions can be taken?

10 A. Correct.

11 Q. Okay. Now, you've said a little bit about the
12 level of 50 parts per million. Now, what is the
13 significance of 50 parts per million?

14 A. In the OSHA Rules, 50 parts per million for ten
15 minutes is the exposure at which you're required to take
16 some sort of respiratory protection. And as I said, the
17 most common at this low of an exposure is an air-purifying
18 respirator. So you're required to put on a respirator.
19 That's the level at which OSHA has determined some harm is
20 going to happen.

21 And the harm in this case is clearly expressed by
22 eye and throat irritation. So you can't see very good and
23 you're coughing all the time. You're not going to be
24 working very efficiently, your thinking processes are going
25 to be impaired by your distress.

1 Q. And under OSHA regulations, the personnel on site
2 at that level of exposure would have to don protective
3 equipment?

4 A. Under current OSHA regulations, yes.

5 Q. Now, are there any other circumstances under
6 which they would be required to don protective gear,
7 protective equipment?

8 A. Well, I'd like to note that many site-specific
9 safety plans that employers adopt are triggered at lower
10 levels --

11 Q. Okay.

12 A. -- and there are many industrial hygiene
13 organizations that recommend lower levels for putting on
14 respirators. NIOSH, for example recommends 10 parts per
15 million on an eight-hour day as a level to require
16 respiratory protection.

17 Q. Now, these levels that we've been talking about,
18 these are not the minimum levels at which hydrogen sulfide
19 may possibly be dangerous to health?

20 A. That is correct. These are levels, you know, for
21 the -- simply the workplace, for a work period, for people
22 who understand that that's an exposure, that's a hazard,
23 people who've been trained to react to it, yes.

24 MR. BROOKS: I believe that's all my questions
25 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

1 that would be the venue for requirement. But as far as
2 requirement by a federal or state agency, 50 at ten is one
3 that's a possible.

4 Q. I guess I'm a little unclear, then, why we would
5 have that second phrase in there.

6 A. Well, once a person puts on -- you know, suppose
7 your air monitor goes off at 10 parts per million, which
8 many of them do. Many safety plans say that that's when
9 you start putting on your equipment, and that's when the
10 contingency plan would be activated.

11 Q. So it would be up to the operator to --

12 A. Right, I guess the question --

13 Q. Really, the Rule requires that if there's 50
14 parts per million -- or the language you're proposing here,
15 I should say, requires that if there's 50 parts per million
16 for ten minutes. But the additional phrase here indicates
17 that if the operator wants to subject themselves to a more
18 stringent requirement --

19 A. Right.

20 Q. -- they could by incorporating a lower level into
21 their safety plan?

22 A. And it's also likely that OSHA standards, even,
23 will be made more stringent in upcoming years. That's the
24 trend of the regulations right now. It used to be the IDLH
25 was 300. Now it's 100. A few years from now it's likely

1 to be 60. So that things -- You know, things are changing,
2 so it could be that the OSHA Regs could change.

3 Q. Okay. And again, I'm still having a little
4 trouble figuring out why we would require something below
5 50.

6 MR. BROOKS: Maybe if I ask a follow-up question
7 I can --

8 CHAIRMAN WROTENBERY: Uh-huh.

9 MR. BROOKS: Whatever is required on the site by
10 the operator's operating procedure, at the time when the
11 people have to put on their protective gear they're going
12 to be focusing on that requirement, right?

13 THE WITNESS: Yeah, that's correct.

14 MR. BROOKS: And if you're going to avoid
15 procrastination and confusion in an emergency situation, it
16 makes sense to require them to activate the contingency
17 plan at a time when they're focused on that, rather than
18 say, Well, it's gotten up to 40 so we've got to put on our
19 gear, but we've got to keep watching that gauge so we know
20 if it got up to 50, then we have to activate our
21 contingency plan, correct?

22 THE WITNESS: That's correct.

23 MR. BROOKS: Would that be a rational approach to
24 a regulation in an emergency situation?

25 THE WITNESS: It could be.

1 MR. BROOKS: Thank you.

2 Q. (By Chairman Wrotenbery) Was that your rationale
3 for putting it in there?

4 A. I wasn't responsible for drafting that language,
5 so I'm really not the -- I'm really trying to figure out
6 what the rationale is at this very moment, so --

7 Q. Should I ask Mr. Price?

8 A. Well, I think Mr. Brooks could probably direct me
9 on the right path, if that's possible.

10 MR. BROOKS: Well, that seems like a good
11 rationale to me. Now, Mr. Price might have a different
12 opinion.

13 CHAIRMAN WROTENBERY: Mr. Price, did you have a
14 different rationale?

15 MR. PRICE: Well, my rationale was that if a
16 company has a site safety and health plan and if they have
17 a lower limit, and if you have to suit up, then just by
18 virtue of the fact that you're having to suit up, in
19 essence you're beginning to lose control of that well. And
20 I'll tell you -- or the situation.

21 In the work group we talked about -- we had a lot
22 of discussion concerning what the trigger level should be.
23 And I remember we talked about 10, we talked about 20, then
24 we went to 30. And we were trying to find, you know, what
25 is the best number.

1 And Gene with OXY had mentioned that, well, they
2 might have a number lower than what the State has, and they
3 might choose to activate their plan sooner. And so we were
4 just trying to put some language in there that is going to
5 satisfy an early activation, but yet if someone -- if you
6 have to suit up, obviously you have a problem. And if you
7 have a problem, then I think it warrants some early
8 notification for the public.

9 Because what you don't want to happen, if you're
10 having to suit up and you have a situation where you're
11 fixing to lose control of the situation, you don't want to
12 waste that valuable time to notify -- or go ahead and
13 activate the contingency plan.

14 So you know, it's really going to be up to the
15 company. I mean, they can go higher, but if they wish to
16 do it lower, then it would activate it.

17 MR. ROSS: But that's not the way you've got it
18 written.

19 MR. PRICE: Well, right now it's written if they
20 have to -- The way it's written, if they have to don life-
21 support equipment to stay on site, okay, so if they have to
22 do that to stay on site, then they should be activating
23 their contingency plan.

24 MR. ROSS: But the way it's written they don't
25 have a choice. If they have to don protection equipment,

1 then the plan gets activated. But it sounded like you were
2 implying, at least, that the companies had some choice in
3 the matter, in which case you want whichever is greater
4 language.

5 MR. PRICE: Well, they would have a choice,
6 because they can set their activation limit up to anywhere
7 between 10 to 50.

8 MR. BROOKS: Well, they don't have a choice of
9 having an activation level above 50 --

10 MR. PRICE: Above 50.

11 MR. BROOKS: -- because they would be violating
12 OSHA Regulations. So it's required by OSHA, whether it's
13 required by the operator or not.

14 MR. PRICE: Yeah.

15 CHAIRMAN WROTENBERY: Okay, thanks. I think I
16 understand.

17 Any questions of Mr. Bayliss from anybody in the
18 back?

19 Okay, thank you, Mr. Bayliss.

20 THE WITNESS: Thank you.

21 MR. BROOKS: With that, the Division rests.

22 CHAIRMAN WROTENBERY: Thank you, Mr. Brooks.

23 Okay, Mr. Gantner?

24 MR. GANTNER: Where should I go? Right --

25 CHAIRMAN WROTENBERY: That would be great.

1 BRUCE A. GANTNER,

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

4 DIRECT TESTIMONY

5 BY MR. GANTNER:

6 MR. GANTNER: My name is Bruce Gantner, I'm a
7 manager of environmental health and safety for Burlington
8 Resources. I'm here today representing a joint effort with
9 the New Mexico Oil and Gas Association, as well as the
10 Independent Producers Association of New Mexico, have gone
11 through this quite deliberately, and we have a proposed
12 alternative.

13 Just to give you an idea about my background,
14 I've got 25 years' experience in the environmental health
15 and safety field. I've been in the oil and gas industry
16 for 15 years. Registered professional engineer, certified
17 safety professional, certified industrial hygienist. So
18 very intimately familiar with the issue of hydrogen sulfide
19 and its hazards and how to protect the public.

20 We appreciate this opportunity to be here and
21 give you some of our thoughts about how this Rule should
22 be. In fact, what we've done as a part of our heavy effort
23 Wednesday and yesterday, we have a total rewrite for you,
24 which we have copies for an exhibit.

25 CHAIRMAN WROTENBERY: Please.

1 MR. GANTNER: Now I'm missing one color copy.

2 CHAIRMAN WROTENBERY: Kate had one, I saw it in
3 her hand earlier.

4 MR. GANTNER: Is that right? I left it up here.
5 Maybe that's where it went.

6 MS. MCGRAW: I'll give it back to you.

7 MR. GANTNER: Why have we chosen to rewrite the
8 Rule? Well, one of our efforts, to us, is, we've worked in
9 the working group and worked with this. It was kind of
10 awkward and cumbersome as we worked through it, so we
11 wanted to reorganize it.

12 Secondly, in some areas we feel that the Division
13 proposal was overly prescriptive, and we felt it should be
14 written more as a performance standard, laying clear what
15 the performance objective is, and then allow industry a
16 little more flexibility in certain areas to meet it. And
17 we'll go through those parts.

18 Third, we've incorporated in our proposed rule
19 the very same consensus and other state standards that the
20 Division has mentioned: Texas Railroad Commission Rule 36,
21 we've also incorporated API RP-55 which deals with
22 production operations in hydrogen sulfide areas, and we've
23 also incorporated API 49 which deals with drilling, well-
24 servicing operations.

25 The other thing we did is, this is a consensus

1 between NMOGA and IPANM, those who deal with this on a day-
2 to-day basis. So we feel what we've written here is
3 protective of the public, but it is a Rule we can comply
4 with in a consistent and effective manner.

5 Also, we've incorporated some of the comments
6 that Wayne had sent out to us. We got it early enough that
7 we could incorporate some of those in ours, so we'll
8 mention those in particular.

9 So to move forward with this -- And then, of
10 course, if I mis-speak on anything, there are both -- both
11 Gene and Dan will have a chance to correct me.

12 CHAIRMAN WROTENBERY: Does everybody have a copy?

13 THE WITNESS: They're right out there.

14 CHAIRMAN WROTENBERY: Okay.

15 THE WITNESS: First of all, I think it would be
16 good to just go through the summary.

17 Basically the summary we have is, this is a
18 public-protection rule, and we need to keep that in our
19 focus. I think we've heard a lot of testimony earlier that
20 kind of crossed the border of being public protection and
21 dealt with worker protection, and so we want to -- we just
22 stand firm that this is designed to be a public-protection
23 Rule. It applies to all oil and gas operations, subject to
24 the jurisdiction of the OCD.

25 And obviously the very first things that those

1 are subject to this Rule would be that we have to test, we
2 have the obligation to test our system or operation to see
3 if it has above the threshold which we've discussed at
4 length at 100 parts per million.

5 But we also have the ability under our proposal,
6 and which was in OCD's as well, that we can use process
7 knowledge, where there is existing data that's valid and
8 reliable, that that can be used. So that is in the
9 proposal we have as well.

10 If it's less than 100 parts per million, you've
11 met that test or process knowledge, then you fall out,
12 there are no further requirements. If above the 100-part-
13 per-million threshold, there are what I call some general
14 requirements that deals with signs and markers, wind-
15 direction indicators, for drilling there are certain
16 detection and monitoring systems that are required.

17 And then there are security provisions, and we've
18 changed the title of our section on that to Security
19 instead of Fencing. Fencing gets pretty absolute, it says
20 you've got to put up fencing. Well, we feel the issue is
21 security. How are you securing the facility from public
22 access?

23 The next step, if it's greater than 100 parts per
24 million, is, you have to determine if there's a potentially
25 hazardous volume, a PHV. If it is above that threshold,

1 then you have some additional steps that you may need to
2 do, which includes your contingency plan. And there's a
3 whole host of things mentioned there.

4 There's an activation level. And we have some
5 differences of opinion there on activation; we'd like to
6 discuss those.

7 Notification of the Division is important.

8 And then of course the plan availability, both to
9 OCD and the operators.

10 If the 100-p.p.m.-radius-of-exposure threshold is
11 crossed -- in other words, if the potential exists for a
12 100-part-per-million radius of exposure to incorporate a
13 public area -- then we believe that there are some
14 additional requirements for drilling and production areas.
15 This gets into your well control, as well as possibly some
16 safety device on the production facility. And not just
17 production, because some of this applies to gas plants and
18 that.

19 So that's basically a summary, and you'll see
20 that summary really depicted in the flow chart. That flow
21 chart is basically how we envision this Rule being
22 effective for the protection of the public.

23 Obvious first decision there is the operation or
24 facility that is subject to OCD jurisdiction. If it is,
25 then we move to the right. If it's not, it falls outside

1 the scope.

2 The obligation to test for hydrogen sulfide.

3 That's an act.

4 The next decision point, is it above 100 parts
5 per million? If it is, then there's a whole path to go
6 through. If it's not, then it falls down to no compliance
7 requirements. If it is above the 100, then the compliance
8 base, those general requirements are signage and general
9 requirements for your type of operation or system. That
10 could be the wind indicator that we talked about earlier,
11 also to have the detection system for drilling and a host
12 of other things.

13 You next move down to determine the radius of
14 exposure for the operation or system. You make that
15 determination and then you determine, does the ROE result
16 in a PHV? If it does not, then you're through because
17 you've met those general requirements. But if it does
18 cross that threshold, then as the standard we've written
19 you will have some additional requirements, contingency
20 plan, as well as for certain types of operations and
21 systems there are some additional measures for controlling
22 the well.

23 This follows that tiered approach. Like we said,
24 obviously, if you fall only in the early tier, you've met
25 your obligation to test. But once you pass -- once you

1 increasingly have additional tests that you don't pass, you
2 have to do additional requirements.

3 I'd like now to go into the Rule itself, and I'll
4 explain. What this is, is, we downloaded the last draft
5 that we got from the Commission. Anything struck out in
6 red -- and I'm sorry we didn't have color copies for
7 everyone, but you'll see it struck out. Anything that's
8 struck out is what we're recommending to be struck out.

9 Then there's some additional verbiage we've
10 added, which is just underlined, and so we can go through
11 those.

12 The first part that just has the general phrase
13 -- I mean, it doesn't hurt anything, but it really doesn't
14 add anything to the Rule. Those that work with H₂S know it
15 smells like rotten eggs. Really, I think it serves us well
16 to just get right into who it applies to and who it
17 doesn't. So we would propose to starting the Rule with
18 applicability. It's already common knowledge, all the
19 general things stated there.

20 Applicability, the only thing we would add to
21 what the Division had is "this section is a public safety
22 standard", just make it very clear that we're dealing with
23 public safety. The rest of the verbiage, as you see there,
24 was not changed. We left it as the Commission had left.

25 Within the next section, which we call

1 Definitions, the first change is down there on Escape Rate,
2 and this gets down to clarity. It was very confusing to
3 read what the escape rate had before, so we have broken it
4 out into three sections:

5 One for existing gas operations and facilities,
6 of which we have just addressed there the very same
7 requirement that was already there. The escape rate is
8 calculated using the maximum daily rate of the gas mixture
9 produced, and the word "handled, or the best estimate
10 thereof."

11 Now, for a well that needs to be different -- so
12 "For an existing natural gas well, the escape rate shall be
13 calculated by using the current daily absolute open flow
14 rate against atmospheric pressure..." So there we've just
15 added a separate breakout to make it clear that applies to
16 existing.

17 The next section would apply to new gas
18 operations and facilities, and there we've just taken some
19 verbiage that was below and brought it up to the middle,
20 and "the escape rate will be calculated as the maximum
21 anticipated flow rate through the system." Now, "For a new
22 natural gas well, the escape rate shall be calculated using
23 the maximum open-flow rate of offset wells, or the field
24 average of current maximum open-flow rates." That just
25 makes sense that where you're in a new well, if you have

1 some offset wells you can use that information.

2 Then item c), we just broke out to be the oil
3 well and the escape rate, left that verbiage the same as
4 what was in the original Rule.

5 If there's no question to that, we'll go on to
6 Potentially Hazardous Volume, which is 11 under the
7 Definition. We just would like to reintroduce the acronym
8 -- we don't have enough acronyms in the Rule, so we thought
9 it's very clear to those of us that deal with this that we
10 call it a PHV, and we'd just like to use that for
11 simplicity, so we introduced that back in.

12 CHAIRMAN WROTENBERY: Could you stop for just a
13 second?

14 THE WITNESS: Sure.

15 CHAIRMAN WROTENBERY: I'm still back at -- trying
16 to make sure I've got it, just need a second.

17 Okay in c), where you struck the last two
18 sentences --

19 THE WITNESS: Yeah.

20 CHAIRMAN WROTENBERY: -- could you tell me again
21 why you thought those were unnecessary?

22 THE WITNESS: Well, actually I think what we did,
23 Commissioner Wrotenbery, is that we brought that one up
24 into the one above, c), for an existing -- "For an oil or
25 natural gas well drilled in a developed area..." we

1 actually brought that up to the middle, maybe changed the
2 verbiage a little bit.

3 CHAIRMAN WROTENBERY: Well, that talks about
4 gas --

5 THE WITNESS: Yes.

6 CHAIRMAN WROTENBERY: -- gas wells.

7 THE WITNESS: Yeah, we wanted it -- We felt it
8 clear to break it out into three sections --

9 CHAIRMAN WROTENBERY: Okay.

10 THE WITNESS: -- existing gas wells and
11 operations, new gas wells and operations, and then oil
12 wells separate.

13 CHAIRMAN WROTENBERY: Okay, but what about new
14 oil wells? Do you address that?

15 THE WITNESS: You're right, we have not. And
16 probably it should have the same language -- either that,
17 or we go back to the way it was before. But it ought to
18 have the very same thing for a new oil. You should be able
19 to use the same thing for an offset.

20 CHAIRMAN WROTENBERY: Would you be able to read
21 some language to us --

22 THE WITNESS: Sure, I would say --

23 CHAIRMAN WROTENBERY: -- for a new oil well?

24 THE WITNESS: I would say for a new oil well, the
25 escape rate shall be calculated using -- by multiplying the

1 producing gas-oil ratio by the maximum open flow rate of
2 offset wells or the field average of current maximum open
3 flow rates.

4 We do have a disk, by the way.

5 CHAIRMAN WROTENBERY: Okay, great. Thanks.

6 THE WITNESS: Steve, I'll give this to you.

7 MR. ROSS: Oh, okay. Do you want me to project
8 it?

9 THE WITNESS: You're welcome to, if you want.
10 I think that's how that language would read,
11 Lori.

12 CHAIRMAN WROTENBERY: Okay.

13 THE WITNESS: Basically for a new oil well, the
14 escape rate shall be calculated by multiplying the
15 producing gas-oil ratio by the maximum daily production
16 rate of offset wells, or the field average of current
17 maximum open-flow rates.

18 COMMISSIONER LEE: Open-flow rates only apply for
19 gas wells.

20 THE WITNESS: You're right, yeah.

21 COMMISSIONER LEE: So flow rates.

22 THE WITNESS: So it would just be the open flow
23 rate of offset wells, right.

24 CHAIRMAN WROTENBERY: Okay.

25 THE WITNESS: Okay, can I continue?

1 CHAIRMAN WROTENBERY: Did you get that, Steve?

2 MR. ROSS: No, I'm not even close.

3 CHAIRMAN WROTENBERY: Okay, let's hold up just a
4 second.

5 THE WITNESS: Sure.

6 CHAIRMAN WROTENBERY: We'll just --

7 THE WITNESS: There you go.

8 CHAIRMAN WROTENBERY: We'll type in a note there,
9 if you wouldn't mind reading that again.

10 THE WITNESS: Okay, what I had would be for a --

11 CHAIRMAN WROTENBERY: And where would that go?

12 THE WITNESS: That would go at c) --

13 CHAIRMAN WROTENBERY: At c).

14 THE WITNESS: -- right after that sentence.

15 CHAIRMAN WROTENBERY: Okay.

16 THE WITNESS: For a new oil well, the escape rate
17 shall be calculated by multiplying the producing gas-oil
18 ratio by the maximum daily production rate -- I'm sorry,
19 the maximum open -- no, it would be the maximum daily
20 production rate, back to what we said, of offset wells, or
21 the field average of current wells.

22 Does that make sense?

23 CHAIRMAN WROTENBERY: Does that make sense to
24 you?

25 THE WITNESS: Multiplying...producing by the

1 maximum daily production rate or the field average of
2 current wells, yes.

3 CHAIRMAN WROTENBERY: Okay.

4 THE WITNESS: Okay?

5 CHAIRMAN WROTENBERY: Thanks.

6 THE WITNESS: All right. We're past PHV, now we
7 go into item c. under PHV. I guess we're not real clear
8 when the Commission did their redraft of why they inserted
9 "equal to". The Texas Rule 36 has "greater than". We
10 felt, consistent with that, that --

11 MR. BROOKS: I'm sorry, where are we?

12 THE WITNESS: The 11.c., the 100-ppm radius of
13 exposure. It looked like in the Commission's draft that
14 they had inserted an "equal to or in excess", and we would
15 strike out "equal to", which is consistent with Rule 36.
16 It would appear to us that when you're in excess of 3000
17 feet as a PHV, there is a default, as we all know, that
18 when you drill a wildcat, that you consider the default, if
19 you don't have other knowledge as being equal to 3000, but
20 it didn't appear to us necessary that you make an area a
21 PHV unless it's in excess of 3000 feet.

22 CHAIRMAN WROTENBERY: I don't remember how that
23 language got in there, do you, Steve?

24 MR. ROSS: Well, it has to do with the structure
25 of the Rule. There's another thing that's triggered by it.

1 I'm trying to find it right now.

2 THE WITNESS: Well, you're probably talking the
3 wildcat provision, what I call it. If you're going to
4 drill in an area that you don't know what the formation is,
5 by default you have to consider the radius of exposure,
6 100-p.p.m. radius of 3000 feet. But that doesn't
7 necessarily mean that you need to make that a PHV.

8 Anyway, that would be our recommendation, and
9 that's consistent with Rule 36.

10 With respect to the Public Area, we would
11 recommend adding the word "occupied". I think in some of
12 our earlier drafts we had "occupied" in the definition.
13 Somehow it's missing, but we would like to re-introduce
14 that, being "A public area is any occupied building or
15 structure".

16 COMMISSIONER BAILEY: Would that eliminate horse
17 barns or horse arenas or feed barns or something along that
18 lines that --

19 THE WITNESS: Right, that would be --

20 COMMISSIONER BAILEY: -- ranchers would need to
21 have, but yet are only used occasionally but still are used
22 on a regular, consistent basis.

23 THE WITNESS: I would say if it's occupied by
24 people -- I mean, if it's somebody's cabin and it's
25 something that they occupy frequently enough, it would be.

1 But if it's something that's a building out there that
2 people don't occupy with any frequency, then it would
3 exclude it.

4 COMMISSIONER BAILEY: I have a problem with that,
5 because of the storage needs for ranchers and other people
6 who are living out there. People may not spend the night
7 there, but they have to use it in their course of business.

8 THE WITNESS: Okay, I guess I would ask, are we
9 out -- is that considered part of the public, then, as far
10 as barns and --

11 COMMISSIONER BAILEY: And that may be a question
12 that needs to be resolved.

13 THE WITNESS: Right. We considered this a people
14 standard, because you could have cattle grazing, goodness,
15 out in pastures anywhere, and we couldn't incorporate them.
16 So I guess, you know, the difference between a barn where
17 animals would be -- yet a pasture, they could be right up
18 against the wellsite, and they wouldn't be afforded
19 protection.

20 COMMISSIONER BAILEY: Right, but in the barn
21 people will go to work the cattle or feed the cattle or get
22 the equipment that's used.

23 THE WITNESS: I guess if it's somebody's farm and
24 it's a building or structure that they go frequent enough,
25 I think it would be. But if it's something that's just out

1 there, it's just like an abandoned structure, they go like
2 once a year or something like that, I think the intent
3 would be it wouldn't.

4 COMMISSIONER BAILEY: So we need to make that
5 distinction somehow.

6 CHAIRMAN WROTENBERY: Yeah, let me ask you, right
7 now public area only includes certain types of buildings
8 and structures: dwellings, offices, places of business,
9 churches, schools --

10 THE WITNESS: Right.

11 CHAIRMAN WROTENBERY: -- hospitals or government
12 building.

13 COMMISSIONER BAILEY: But see, a barn could be
14 considered a place of --

15 CHAIRMAN WROTENBERY: -- a place of business?
16 Okay. So if it is the kind of facility you're talking
17 about, it would be considered a place of business.

18 THE WITNESS: And see, that second part of
19 that --

20 COMMISSIONER BAILEY: That is not occupied.

21 CHAIRMAN WROTENBERY: That is not -- Then I have
22 a question of Mr. Gantner.

23 THE WITNESS: Right.

24 CHAIRMAN WROTENBERY: In this draft the way we
25 addressed the occupied issue was to add the language "that

1 is used as". That was not in the previous version. Is
2 there a difference between occupied and being used as? We
3 thought we were covering the occupied issue with the
4 language "being used as".

5 THE WITNESS: I guess it gets down to just what
6 our mutual understanding is --

7 CHAIRMAN WROTENBERY: Uh-huh.

8 THE WITNESS: -- to make sure we're consistent.
9 I think what we're all trying to do is eliminate ambiguity,
10 right --

11 CHAIRMAN WROTENBERY: Right.

12 THE WITNESS: -- of what is covered --

13 CHAIRMAN WROTENBERY: Right.

14 THE WITNESS: -- and what is not --

15 CHAIRMAN WROTENBERY: Right.

16 THE WITNESS: -- and we would all like to be
17 players so that when we do that assessment we know that
18 this is a legitimate public area and that it's crossed,
19 versus this is not.

20 CHAIRMAN WROTENBERY: Okay.

21 THE WITNESS: And I guess in our minds protection
22 of the public -- what this was about, that was of paramount
23 importance.

24 So if either that it's occupied -- and I think
25 the next part of that sentence catches that as well, "or

1 any portion of a park, city...village...where...the public
2 may reasonably be expected to be present."

3 CHAIRMAN WROTENBERY: Uh-huh.

4 THE WITNESS: And so that gets into, you know, if
5 people are there and they're there often enough, that needs
6 to be included. But if they aren't, then it shouldn't be.
7 And it gets down to us just both being clear of what that
8 means.

9 CHAIRMAN WROTENBERY: My sense at this point is
10 that you're saying that it's used as this kind of facility,
11 that means you're not covering abandoned facilities --

12 THE WITNESS: Okay, I --

13 CHAIRMAN WROTENBERY: -- but --

14 THE WITNESS: That was just one of our early
15 thoughts that --

16 CHAIRMAN WROTENBERY: Yeah.

17 THE WITNESS: -- occupied -- But if we're both
18 having the same understanding that that's what that means,
19 then I think we're okay with that.

20 We put "school bus stop" up above which -- the
21 way it was, it was down below where it was kind of modified
22 by any portion of a school bus stop. To me, a school bus
23 stop is a school bus stop, it ought to be included. So it
24 was just a matter of where it falls.

25 CHAIRMAN WROTENBERY: Is a school bus stop always

1 a building structure --

2 THE WITNESS: No.

3 CHAIRMAN WROTENBERY: -- because you've moved it
4 into the building or structure section. And that's why it
5 was put in the portion of a park, city, town, village or
6 school bus stop or other similar area. We didn't think
7 that a bus stop was always a structure --

8 THE WITNESS: Uh-huh.

9 CHAIRMAN WROTENBERY: -- or a building, so...

10 THE WITNESS: Okay. We feel it's covered, you
11 know, so I guess wherever it falls --

12 CHAIRMAN WROTENBERY: Okay.

13 THE WITNESS: -- legitimately is fine.

14 CHAIRMAN WROTENBERY: Okay.

15 THE WITNESS: Next one on Public Roads, we don't
16 feel a postal route is a valid consideration there. That
17 is not something that's marked out there that's a
18 maintained road or that -- it wasn't in earlier drafts. I
19 think it suddenly appeared in the June draft that we saw.
20 That was not the agreement of our consensus group, and we
21 don't believe that a postal route is appropriate.

22 MR. ROSS: You may not know this, but there's a
23 federal statute that says any postal route is a public
24 road.

25 THE WITNESS: Is that right? Well, that's news

1 to me.

2 MR. MONTGOMERY: Just ignore it.

3 (Laughter)

4 THE WITNESS: But I guess as an operator, how
5 would I know when I'm making this plan and reviewing my
6 provisions, I'm going to drill a well, how would I know
7 what an established postal route would be? I mean, call
8 the Post Office, say do you run out this road?

9 And let's say they run out a lease road to go
10 take out somebody. Is that part of their route? We feel
11 that this should really apply to public roads.

12 CHAIRMAN WROTENBERY: Or you feel like a postal
13 route shouldn't be considered public roads for purposes of
14 this --

15 THE WITNESS: That's right.

16 CHAIRMAN WROTENBERY: Yeah, okay.

17 THE WITNESS: All right. Now, part of our re-
18 crafting, move down to -- which was originally in the
19 Commission's draft that said Determination of Hydrogen
20 Sulfide Risk, we've split that up into two sections. So C
21 would be Testing for Hydrogen Sulfide, just making it clear
22 what you're requiring the operator to do.

23 And then under that there would be basically
24 three sections -- or actually there's four: Determination
25 of Hydrogen Sulfide Concentration, testing concentrations

1 if they're below 100, testing if it's above 100, and then
2 Retesting.

3 We just feel that that flows clearly, that the
4 very next step is, once you're covered is, do the testing.

5 CHAIRMAN WROTENBERY: Would you have any
6 objection to using a different word than testing? Because
7 we've decided that you don't actually have to do a test if
8 you can use process knowledge or --

9 THE WITNESS: Determination --

10 CHAIRMAN WROTENBERY: -- something --

11 THE WITNESS: -- or hydrogen sulfide
12 concentration would be fine, you're right.

13 We noticed in the Commission's draft that you
14 inserted a number of times -- I tried to get my word search
15 to find them all -- wells. We felt wells all along were
16 covered under operations and systems, and by inserting
17 wells you're almost implying to an operator that we have to
18 test every well, and we don't believe that's the case, that
19 where wells serve similar formations and similar areas, you
20 should be able to use common, you know, process knowledge.

21 So we feel it's clear to us that wells are
22 included in operations or systems, and so it's not needed.
23 That's just our opinion.

24 CHAIRMAN WROTENBERY: And there wasn't any
25 statement intended by adding the term "wells" there. It

1 was inconsistent, the way the Rule was drafted. Sometimes
2 it talked about wells and operations --

3 THE WITNESS: Right.

4 CHAIRMAN WROTENBERY: -- or wells and systems,
5 sometimes it talked about operations and systems --

6 THE WITNESS: Right. Well, I hope we did a good
7 job with our word search, because all the wells are out of
8 ours.

9 CHAIRMAN WROTENBERY: Okay, you're recommending
10 that the magic phrase for purposes of this Rule be
11 operations and systems --

12 THE WITNESS: That's right.

13 CHAIRMAN WROTENBERY: -- and that that be
14 understood to include wells?

15 THE WITNESS: Right. Okay, under 1.c. we've
16 rephrased that to be more clear, that if a valid,
17 representative sample from an operation or system was
18 tested at any time prior to the effective date of this
19 section, then new testing would not be required.

20 What you had before, it said if it was tested
21 within one year of the effective date of this section no
22 new testing was required.

23 Then it went on to say, "provided, however, new
24 testing shall not be required for a producing well that was
25 tested at any time prior to the effective date..." So it

1 was unclear whether it was one year or at any time. In our
2 opinion, if it's a valid, representative sample, no matter
3 what time period it was done before, it should be still
4 valid.

5 CHAIRMAN WROTENBERY: And no matter what type of
6 operation or system?

7 THE WITNESS: That's right.

8 CHAIRMAN WROTENBERY: I wasn't sure what was
9 intended by that language, but it appeared to me what it
10 intended to say was that for wells, if you've ever tested
11 it, you don't have to re-test it. But for other types of
12 operations and facilities --

13 THE WITNESS: -- it had to be within a year.

14 CHAIRMAN WROTENBERY: -- it had to be within a
15 year.

16 THE WITNESS: I guess I question why. I mean, if
17 you have a valid, representative sample and it hasn't
18 changed and you know that your process is very similar,
19 then why should you have to re-test? That would be our
20 position.

21 If it's not valid, then it needs to be re-tested.
22 I guess that's our point.

23 The next one, we kept the wording that was there
24 for below 100 parts per million, just deleted the word
25 "well".

1 Tested Concentrations Above 100 parts per
2 million, we struck "radius of exposure" because we've
3 created a whole new section for that, so that's why that
4 was struck.

5 And basically we said "If the concentration of
6 hydrogen sulfide in a given operation or system is 100
7 parts per million or greater, then the...operator...must
8 calculate the radius of exposure pursuant to Paragraph
9 D..." I'm not sure that's the right verbiage there,
10 paragraph, subsection. "...and comply with the signage
11 requirements outlined in paragraph F." Those are basically
12 the things that are required.

13 Then we added a section for that same -- on
14 Retesting, basically that "If any change or alteration to
15 an operation or system can materially increase the
16 concentration of hydrogen sulfide, then the operator must
17 retest that operation or system." And that's what you're
18 really focusing on.

19 Okay, to move forward?

20 CHAIRMAN WROTENBERY: Uh-huh.

21 THE WITNESS: Okay. The next section is, again,
22 added for clarity, Determination of Radius of Exposure. So
23 to probably consistent, like you said earlier, make that
24 Determination of Hydrogen Sulfide.

25 "For all operations subject to this section, the

1 radius of exposure shall be determined by following the
2 definition given in B.14." That seems clear.

3 The next sentence was left the same, just
4 renumbered.

5 Then for 3, renumbered, "For an operation or
6 system existing on the effective date of this section, the
7 determination, calculation and submission required herein
8 shall be accomplished within..." we would recommend "360
9 days of the effective date of this section". There's going
10 to be a good number of these out there that are going to
11 need to be done, and at least the consensus between NMOGA
12 and IPANM was to ask for a year to do that.

13 "...for any operation or system that commences
14 operations after the effective date...the determination,
15 calculation and submission required herein shall be
16 accomplished, preferably before operations begin but no
17 later than..." and that shouldn't be minus 60 days, it's
18 60. I couldn't get rid of that scratch mark. "...60 days
19 after initial production..." And let me explain why.

20 If it's a new well and you frac that well and now
21 you're going to flow back and you're putting that well on
22 production, you can't possibly have an idea of what the
23 true H₂S level is until that well gets to stable
24 production. And we feel that within 60 days you should be
25 able to do that. Granted when you drilled it, you had a

1 presumed level. But only when you get the true level can
2 you calculate what that radius of exposure would be.

3 So we feel that since a new operation or system
4 could be -- like a gas plant, you would have that data, and
5 they should be able to measure that gas. But for a new
6 well, you need that 60-day period. So that's why we said
7 "preferably before operations begin but no later than 60
8 days..."

9 CHAIRMAN WROTENBERY: Okay, and you indicated
10 that certainly you would do your -- make your determination
11 for a new drill before you begin drilling. What --

12 THE WITNESS: Right.

13 CHAIRMAN WROTENBERY: What about this language
14 says that? I guess I'm -- you've indicated -- you've
15 explained --

16 THE WITNESS: Okay.

17 CHAIRMAN WROTENBERY: -- the need to have some
18 flexibility --

19 THE WITNESS: Right.

20 CHAIRMAN WROTENBERY: -- before you start
21 production operations.

22 THE WITNESS: Well --

23 CHAIRMAN WROTENBERY: This language seems to
24 cover more than just production operations.

25 THE WITNESS: Uh-huh.

1 CHAIRMAN WROTENBERY: Are there any other
2 circumstances where you think you'd need that flexibility
3 besides putting the well on production?

4 THE WITNESS: That's the only one we could think
5 of, wasn't it? Yeah.

6 MR. MONTGOMERY: Yeah, I guess the possibility if
7 you set up some operations like a satellite or something
8 like that, and you're not sure until you get stabilized
9 operations -- because we're talking about facilities as
10 well, so you could have a new facility that's coming on and
11 you're not sure exactly what the downstream -- at that
12 facility or downstream, what the H₂S concentration is going
13 to be until after you get it into stable operation. That
14 could happen as well.

15 THE WITNESS: Probably we need to add some
16 verbiage as far as a new drill --

17 CHAIRMAN WROTENBERY: Uh-huh.

18 THE WITNESS: -- that basically said, again, to
19 differentiate between a drilling, completion or workover
20 versus an operation.

21 MR. MONTGOMERY: The most important aspect here
22 is, you've got to have good concentration data in order to
23 do a good ROE calculation. So sometimes you may not have
24 that before you begin operating.

25 THE WITNESS: I know we've stated later on the

1 contingency plan that that needs to be in prior to
2 drilling, but we didn't, obviously, state that here.

3 CHAIRMAN WROTENBERY: Okay.

4 THE WITNESS: Recalculation, basically we just
5 said the operator -- We kept pretty much the language that
6 was there, that you had the obligation to recalculate the
7 radius of exposure, with the same language that you had,
8 and if that recalculation reveals that a PHV is present,
9 the person or facility shall provide the results to the
10 Division "as soon as possible but no later than 60 days."

11 All right, Contingency Plan. This was a pretty
12 substantial change. In the General section, we changed the
13 verbiage in the General section to say that "A hydrogen
14 sulfide contingency plan is a written document that
15 provides a plan of action that will be used to alert and
16 protect persons at risk in the event of a significant
17 release of hydrogen sulfide gas that could produce a
18 potentially hazardous volume."

19 I think the way it was worded before, you could
20 have a release but not be a PHV. And so we wanted to make
21 it clear, all of our understandings. And we all understand
22 that if it could produce a PHV it needs to have a
23 contingency plan.

24 CHAIRMAN WROTENBERY: Okay, that doesn't address
25 one of the concerns I have.

1 THE WITNESS: Okay.

2 CHAIRMAN WROTENBERY: And I'm going to have to
3 explain it and I might have a hard time, so bear with me.

4 My concern about limiting the scope here to the
5 PHV is that the potentially hazardous volume is a worst-
6 case kind of scenario, because you're basically looking at,
7 you know, total anticipated flow --

8 THE WITNESS: Right.

9 CHAIRMAN WROTENBERY: -- through the system. And
10 that makes sense when you're trying to decide whether to do
11 a contingency plan or not, to look at the worst-case
12 scenario --

13 THE WITNESS: Right.

14 CHAIRMAN WROTENBERY: -- but there may be lesser
15 releases from the system that still have the potential to
16 affect the public area or a public road --

17 THE WITNESS: Uh-huh.

18 CHAIRMAN WROTENBERY: -- because, yeah, you may
19 have this broader radius caused by the potentially
20 hazardous volume, but you could have a lesser release that
21 had a smaller radius but still encompassed a public area.
22 Am I making myself clear?

23 THE WITNESS: Yeah. And I guess I'm trying to
24 understand, if I do a worst-case analysis --

25 CHAIRMAN WROTENBERY: Uh-huh.

1 THE WITNESS: -- my umbrella stretches very
2 big --

3 CHAIRMAN WROTENBERY: Right.

4 THE WITNESS: -- right?

5 CHAIRMAN WROTENBERY: Uh-huh.

6 THE WITNESS: So if I have a less significant
7 release than that, my umbrella is really smaller. And I've
8 already got it big to cover all those areas, so aren't I
9 already covering those things from smaller releases?

10 CHAIRMAN WROTENBERY: Well, my difficulty, it
11 says the plan "will be used to alert and protect persons at
12 risk in the event of a" PHV, a potentially hazardous
13 volume. So you would be only covering the worst-case
14 releases. You wouldn't be giving people -- alerting people
15 if there were a lesser release that still affected a public
16 area. Would it help to draw it?

17 THE WITNESS: Well, what you're saying -- I think
18 what you're saying is, let's say my 100-part-per-million
19 piece stretched a mile --

20 CHAIRMAN WROTENBERY: Uh-huh.

21 THE WITNESS: -- but I have somebody that's half
22 a mile.

23 CHAIRMAN WROTENBERY: A half mile, right.

24 THE WITNESS: Okay, am I not protecting those
25 too? And this verbiage doesn't say that --

1 CHAIRMAN WROTENBERY: Right --

2 THE WITNESS: -- is what you're saying?

3 CHAIRMAN WROTENBERY: -- right. You'd need to be
4 alerting them even if there were a lesser release that
5 wouldn't affect them. And that's why we didn't use the PHV
6 language in that provision.

7 THE WITNESS: Okay.

8 CHAIRMAN WROTENBERY: And I'll say, I think I
9 checked Rule 36 on this one, and I think that potentially
10 significant release language comes from Rule 36. I don't
11 know that for sure.

12 THE WITNESS: I don't think so, because I think I
13 looked at the same thing, Lori --

14 CHAIRMAN WROTENBERY: Did you look at the same
15 thing? Okay.

16 THE WITNESS: -- but -- I have it right here.
17 Let's see, the Texas rule says the purpose of the
18 contingency plan shall be to provide an organized plan of
19 action for alerting and protecting the public prior to an
20 intentional release or following the accidental release of
21 a potentially hazardous volume of hydrogen sulfide.

22 CHAIRMAN WROTENBERY: Okay.

23 THE WITNESS: All right?

24 CHAIRMAN WROTENBERY: Uh-huh.

25 THE WITNESS: I don't think it's ever our

1 intention in these to not protect people within the
2 umbrella --

3 CHAIRMAN WROTENBERY: Right.

4 THE WITNESS: -- no matter where they are.

5 CHAIRMAN WROTENBERY: Okay.

6 THE WITNESS: Obviously, it's -- you have to have
7 some threshold at which you know you have to do it --

8 CHAIRMAN WROTENBERY: Uh-huh.

9 THE WITNESS: -- and then you need to protect all
10 the people within that umbrella.

11 CHAIRMAN WROTENBERY: Uh-huh.

12 THE WITNESS: So maybe that --

13 CHAIRMAN WROTENBERY: Maybe if you worded it in
14 terms of protecting persons --

15 THE WITNESS: -- within the exposure area.

16 COMMISSIONER BAILEY: Yeah --

17 THE WITNESS: Okay.

18 CHAIRMAN WROTENBERY: -- maybe just, yeah,
19 reference the --

20 THE WITNESS: Okay.

21 CHAIRMAN WROTENBERY: -- area of exposure.

22 THE WITNESS: All right. We added the API
23 standard there as guidance. We think it's valid for us to
24 consider that standard. In fact, we've incorporated some
25 of that in our comments.

1 When Required, we kept the language you had, but
2 I think we added the language that Wayne had mentioned.
3 You can see it in red, "in the case of a well being
4 drilled, deepened, or re-entered, may reasonably be
5 expected to be encountered." Because it wasn't clear that
6 a well was covered from that sense, so we added that
7 language based on some of Wayne's comments.

8 MR. BROOKS: Yeah, actually that was my comment.

9 THE WITNESS: Okay, your comments, yeah, I heard
10 you say that. But -- I called it the Wayne Price clause,
11 but I'll change it to your clause.

12 MR. ROSS: The David Brooks clause.

13 THE WITNESS: The David Brooks clause.

14 The biggest change in our proposal really gets
15 down to the next one -- well, the one, Input of Emergency
16 Response Authorities and the Division. It's been our
17 practice, experience, in all the states we operate that
18 we're responsible for preparing those plans. And so we
19 prepare those plans and provide a copy to the Division.

20 Where, obviously, we're in the city limits or
21 things like that, the cities basically require us to have
22 that in our approval from them to do it.

23 But we feel that those are unique circumstances,
24 and it shouldn't be stated just categorically that we
25 always have to seek input of all those entities into the

1 plan. We may choose to do so based on the circumstances,
2 but we don't feel it should be a condition, you know, in
3 the rule.

4 We feel that, obviously, between OCD and
5 ourselves, we're responsible for, you know, drilling,
6 production within all these areas, and it's incumbent upon
7 us to have good plans in place.

8 The next section, Plan Contents, we have changed
9 this to be more of a performance standard versus the
10 prescriptive standard that was there before.

11 This verbiage almost verbatim comes out of the
12 RP-55, the API standard for recommended practices for oil
13 and gas producing. Obviously, it covers all the same
14 elements that were previously in the OCD draft, but it's
15 less prescriptive.

16 It just basically says that as an operator I have
17 the obligation to address all of these areas, but it
18 doesn't tell me prescriptively how many people I need to
19 have, it doesn't address verbatim how I have to write that
20 plan.

21 Obviously to get a well done, that would have to
22 go in with the APD, and if the OCD is not satisfied with
23 that plan there would be some dialogue back and forth. But
24 we're pretty experienced in writing these plans, and we
25 feel that we can do them with less prescriptiveness

1 required in the standard.

2 So the Plan Contents would cover Emergency
3 Procedures, Characteristics of Hydrogen Sulfide and Sulfur
4 Dioxide, Maps and Drawings, and then Training and Drills.
5 And based upon our review, all of those bullets and sub-
6 bullets outlined there address all of the issues that were
7 in the original draft, but in a less prescriptive, more
8 performance-based --

9 COMMISSIONER BAILEY: But since the OCD will not
10 either approve or disapprove any contingency plan, setting
11 these standards may or may not address the issues that they
12 have felt are important, such as having the telephone
13 numbers.

14 THE WITNESS: Well, we've put there the telephone
15 numbers, I guess you see in 3, "Telephone numbers and
16 communication methods for Public agencies, emergency
17 response organizations, and public authorities..." But it
18 was up to the operator to determine who the appropriate
19 ones were. And not have this prescriptiveness that you
20 have to include this, this and this and this these pieces,
21 that we feel that we feel a good job of doing that now
22 without having that all specified.

23 Ultimately, you do have approval, because when
24 that plan is submitted, if it's with a permit to drill you
25 can deny the permit, saying that it's not adequate. If

1 it's with an existing facility, you have the current
2 statutory right to say, you know, with allowables or that
3 to say this is an adequate change to be adequate.

4 The key there is that we've been writing these
5 plans for years in all the jurisdictions we operate, OCD,
6 BLM, and that we can write those without having the
7 prescriptive nature that's given. But as a minimum we have
8 to address those key bullets.

9 Okay, we added a section. Actually, we pulled
10 that Activation that was out at the end of your original --
11 of the Commission's draft and put Activation into this
12 document. And there's been some discussion about what
13 activation should be, and we can have that discussion. But
14 our opinion is that "The hydrogen sulfide contingency plan
15 shall be activated in the event of a significant release of
16 hydrogen sulfide gas that could produce a PHV."

17 And I think that kind of addresses some of what
18 you mentioned, that could produce. If you're going to
19 produce --

20 CHAIRMAN WROTENBERY: No -- Well, I'm sorry, I
21 didn't mean to interrupt you.

22 THE WITNESS: No, it's --

23 CHAIRMAN WROTENBERY: If it could produce a
24 lesser volume that would cause a 100-part-per-million
25 hydrogen sulfide level at a public area --

1 THE WITNESS: Right.

2 CHAIRMAN WROTENBERY: -- or a 500-part-per-
3 million hydrogen level --

4 THE WITNESS: -- at a public road.

5 CHAIRMAN WROTENBERY: -- at a public road --

6 THE WITNESS: Right.

7 CHAIRMAN WROTENBERY: -- then I think the plan
8 needs to be activated, even if there's no possibility that
9 you're going to have a PHV, a full-blown PHV. And again,
10 it's because the PHV, that particular volume is the worst-
11 case volume.

12 THE WITNESS: That's the worst case, that sets
13 the outer limits of the umbrella.

14 CHAIRMAN WROTENBERY: Right.

15 THE WITNESS: But if I have a public area within
16 that umbrella --

17 CHAIRMAN WROTENBERY: Uh-huh.

18 THE WITNESS: -- and I could potentially cause
19 that PHV in that area, I'm going to implement the plan.

20 CHAIRMAN WROTENBERY: Well, maybe what's hanging
21 me up is, the way PHV is defined it's based on that escape
22 rate, which is a worst-case kind of volume.

23 THE WITNESS: That's correct.

24 CHAIRMAN WROTENBERY: So the PHV, that volume is
25 that maximum volume --

1 THE WITNESS: Right.

2 CHAIRMAN WROTENBERY: -- that we're talking
3 about.

4 THE WITNESS: Yeah.

5 CHAIRMAN WROTENBERY: We've got to figure out a
6 way to define it so that it's activated even if there's a
7 lesser volume that would have an impact on a public area.

8 THE WITNESS: Yeah, I guess that's what we
9 thought we had because, see, it says "...shall be activated
10 in the event of a significant release..." So that gets
11 down to significant. What is significant?

12 CHAIRMAN WROTENBERY: Uh-huh.

13 THE WITNESS: Well, it's significant if it could
14 produce a PHV.

15 CHAIRMAN WROTENBERY: Okay, and again I think
16 it's a question of how you define PHV. PHV is defined as
17 that maximum volume, basically --

18 THE WITNESS: Yeah.

19 CHAIRMAN WROTENBERY: -- and so only if you are
20 going to have that worst-case release would this say you'd
21 activate the plan.

22 THE WITNESS: See, I --

23 CHAIRMAN WROTENBERY: You need to set it so that
24 you activate it -- And, you know, that's what we, in our
25 very inelegant way, tried to do in our draft --

1 THE WITNESS: Sure.

2 CHAIRMAN WROTENBERY: -- of the activation
3 language, was to say you activate the plan if you're going
4 to have a 100-part-per-million at any public area or a 500-
5 part-per-million at a public road. Now, I understand the
6 Division's point that that's pretty --

7 THE WITNESS: See, that's how --

8 CHAIRMAN WROTENBERY: -- site-specific, and it's
9 going to be hard for an operator to know when to activate
10 the plan, based on that kind of definition.

11 THE WITNESS: But a PHV is, by definition, 100
12 p.p.m. in any public area.

13 CHAIRMAN WROTENBERY: Well --

14 THE WITNESS: See, the radius of exposure is what
15 incorporates into volume. But if I have a PHV in any
16 public area of 100 parts per million, no matter where that
17 is in my window, I have had a release that fit. So --

18 CHAIRMAN WROTENBERY: Well, but you have to look
19 back at the definition of a 100-part-per-million radius of
20 exposure. That refers to the escape rate, which is the
21 maximum volume.

22 THE WITNESS: That's in the ROE.

23 CHAIRMAN WROTENBERY: Yeah.

24 THE WITNESS: Right.

25 CHAIRMAN WROTENBERY: So the --

1 THE WITNESS: But the definition of a PHV reads,
2 a 100-p.p.m. radius of exposure includes any public area.

3 CHAIRMAN WROTENBERY: Uh-huh. And if you look at
4 radius of exposure, it's that radius --

5 THE WITNESS: Maybe it needs to be --

6 CHAIRMAN WROTENBERY: -- that uses the escape
7 rate, which is the maximum volume.

8 THE WITNESS: Right, right. Maybe it needs to be
9 area of exposure or something of that nature.

10 CHAIRMAN WROTENBERY: Yeah.

11 MR. MANTHEI: We're basically going to consider
12 any release is a maximum rate.

13 CHAIRMAN WROTENBERY: Okay, and I can understand
14 that's what you want to do when you're deciding whether you
15 have to do --

16 MR. MANTHEI: If we --

17 CHAIRMAN WROTENBERY: -- a -- develop a
18 contingency plan --

19 THE WITNESS: Right.

20 CHAIRMAN WROTENBERY: -- but --

21 MR. MANTHEI: If we have a small release, we're
22 not going to measure it and say this is a small release and
23 it's not -- We're going to assume that it's the worst.

24 COMMISSIONER LEE: No matter what the release,
25 they would say it's a maximum release.

1 MR. MANTHEI: Right, we're going to respond --

2 THE WITNESS: Okay, maybe --

3 CHAIRMAN WROTENBERY: I understand that, and
4 that's what you're going to do when you're deciding what
5 the full radius of exposure is and what the full area of
6 exposure is, and it's appropriate to look at the worst-case
7 scenario there --

8 THE WITNESS: It doesn't --

9 CHAIRMAN WROTENBERY: -- but --

10 THE WITNESS: Yeah.

11 CHAIRMAN WROTENBERY: -- again, you're defining
12 your potentially hazardous volume as being that worst-case
13 volume.

14 THE WITNESS: Right, it wouldn't hurt to go back
15 to the language you had --

16 MR. MONTGOMERY: I agree.

17 THE WITNESS: -- of 100 p.p.m., you know, in a
18 public area or 500 on a public road.

19 CHAIRMAN WROTENBERY: Yeah.

20 THE WITNESS: Wouldn't hurt to put that back.

21 CHAIRMAN WROTENBERY: Okay. Now, address for me
22 the issue that the Division has raised about the need for
23 some more certainty in setting an activation level.

24 THE WITNESS: Well, the real world out there is
25 that, granted if you're drilling, you have sensors out

1 there all the time, but most other facilities do not. Most
2 other facilities out there -- We have a solid-waste
3 disposal facility that has one fixed monitor and a couple
4 portable monitors. They're not going to know until they
5 get a release or so of what's going on. They're going to
6 evacuate.

7 That's their first order, whether it's drilling,
8 a production facility or whatever, their first order is to
9 evacuate and get to an upwind location, call in the
10 emergency? And then they're going to be look at do we need
11 to activate the plan? Do I have enough of a release to --
12 They aren't going to have a device out there, frankly,
13 measuring 50 parts per million.

14 The only time you have a fixed system is
15 generally on a drilling location where you have a reading,
16 and those alarm at a certain point. Now, I don't know, do
17 they even measure up to that level? You would know. How
18 high do they measure? 200 is the highest, right?

19 MR. PRATHER: The sensors max out at 300 parts
20 per million.

21 THE WITNESS: Okay, the sensors max out --

22 MR. PRATHER: The technology won't go over 300.

23 THE WITNESS: Right, so --

24 MR. PRATHER: That's the reason all these levels
25 are ridiculous.

1 THE WITNESS: Right. So in my mind, the key is
2 that when you've had a release, the people out there are
3 going to do the right thing. They're going to get out and
4 get upwind, call in, and they're going to start making
5 decisions. Do I have a public exposure here that I need to
6 activate the plan, or do I not.

7 And so it's inherent in our logic that we're
8 going to look through and make the right decision as to
9 whether it just needs to be activated or not.

10 You could have a release that frankly could occur
11 that shouldn't alarm people. You don't want to alarm and
12 alert people to do something that there's no need to do. I
13 mean, that causes, I think, the wrong kind of action,
14 because then it makes it seem like that we're poisoning or
15 that.

16 But I think there is a threshold, though, at
17 which you're going to want to make those decisions, and I
18 don't know that you can really quantify that in a number.
19 See, that's why in our mind a significant release that
20 could produce, you know, that needs to be left in that
21 judgment, and we need to just be making the right judgments
22 out there.

23 A 50 part per million at a boundary or that, to
24 me, doesn't necessarily mean that you're going to have
25 public exposure, and yet you're going to implement your

1 contingency plan, you're going to start calling out folks
2 and that, when you might not need to do it.

3 CHAIRMAN WROTENBERY: Is the activation level
4 something that should be addressed in the contingency plan
5 itself, maybe?

6 THE WITNESS: In the ones I write, it is.

7 CHAIRMAN WROTENBERY: So that might be a way to
8 address the concern about needing a little more certainty,
9 is to --

10 THE WITNESS: Just --

11 CHAIRMAN WROTENBERY: -- include a --

12 THE WITNESS: -- require that they --

13 CHAIRMAN WROTENBERY: -- a requirement --

14 THE WITNESS: -- need to address the --

15 CHAIRMAN WROTENBERY: -- that they need to
16 include a requirement that the contingency plan addresses
17 the activation level.

18 THE WITNESS: Sure.

19 Okay, moving on. The next section, because we
20 deleted so much of the piece that was in there, is on page
21 7, Submission.

22 "A hydrogen sulfide contingency plan for a system
23 or operation existing on the effective date...shall be
24 submitted to the Division within 360 days..." That was
25 consistent with our recommendation on our ROE. So if you

1 agreed with the one, you need to agree with the other. If
2 you didn't agree with that, then we need to change this to
3 whatever you would agree to.

4 "A hydrogen sulfide contingency plan for a new
5 system or operation shall be submitted preferably before
6 operations begin..." A little typo there, it should be
7 "preferably" "...but no later than 60 days of commencing
8 operations."

9 This gets back again to our well situation.
10 Until you can really determine the ROE, you really can't
11 develop a plan. So you need to have a good, solid
12 production information and then make your plan and then
13 implement it.

14 Then the next sentence addresses "For a drilling,
15 completion, workover or well servicing operation, the
16 hydrogen sulfide contingency plan must be on file with the
17 Division prior to commencing work. The plan may be
18 submitted separately or along with the application for
19 permit to drill or must be on file from a previous
20 submittal."

21 And maybe that same type of language needs to be
22 back there on the ROE.

23 CHAIRMAN WROTENBERY: You struck the sentence
24 about encroachment and how you address an encroachment. Do
25 you address that elsewhere?

1 THE WITNESS: Encroachment meaning where a --

2 CHAIRMAN WROTENBERY: Where a --

3 THE WITNESS: -- where people move in?

4 CHAIRMAN WROTENBERY: -- public area or -- yeah,
5 or a road is built.

6 THE WITNESS: The thing I struggle with that is,
7 how could I keep up with roads or people moving into areas?
8 Maybe as I've become aware of it, I might, but the guy that
9 -- frankly, the person that's first going to know that is
10 my lease operator out there in the field. He's going to
11 notice that somebody's moved in on it, and it's not going
12 to even cross his mind to think that I've got to do a
13 contingency plan or that.

14 So I couldn't come up with a good answer for
15 that, other than, once we're made aware of it, we know we
16 need to do it. But I wouldn't like it to be, Gee, this
17 guy's moved in, you don't have a plan, you're in violation
18 of Rule 52 because you didn't have a plan when somebody
19 moved in.

20 CHAIRMAN WROTENBERY: If you strike that
21 language, though, I don't think there's anything in here
22 that requires the development of a contingency plan if
23 somebody moves in.

24 THE WITNESS: Well, I think there is, once I
25 become aware that I have a public area, that could be. But

1 I guess it's a matter of me --

2 CHAIRMAN WROTENBERY: Well, what --

3 THE WITNESS: -- becoming aware, that's what I
4 mean. We just struggled with that. I couldn't come up
5 with an easy way.

6 CHAIRMAN WROTENBERY: Okay.

7 THE WITNESS: I mean, I like it when Wayne calls
8 me and tells me I have to have a plan, but --

9 MR. PRATHER: To give you an example of what he's
10 talking about, and especially when we start talking
11 pipelines, most of our operations are located on BLM,
12 public -- very seldom do we have any type of title to this
13 land at all, and there's dozens of other entities who
14 control things.

15 And we've got pipeline pilots go out and fly the
16 line and come back and report that somebody just put a
17 double wide right across our line, in our right-of-way.
18 And the only time we know it's there is when we find it
19 there.

20 THE WITNESS: I wouldn't have a problem within so
21 many days of becoming aware, but then it's a matter of when
22 I became aware.

23 CHAIRMAN WROTENBERY: Okay.

24 MR. PRATHER: You'd expect to be reasonably
25 prudent --

1 THE WITNESS: Right.

2 MR. PRATHER: -- in becoming aware --

3 THE WITNESS: Right.

4 MR. PRATHER: -- but it sneaks in on us.

5 THE WITNESS: Right.

6 CHAIRMAN WROTENBERY: Okay.

7 THE WITNESS: Failure to Submit Plan, we left
8 that as it was.

9 Number 7, we changed that from Annual Review to
10 Updating Provisions. We don't feel that for a good plan
11 that has fairly repeatable gas levels or the public or
12 that, that you need to every year go through that process.
13 We just feel general language like the "Contingency Plan
14 shall be periodically reviewed and updated any time its
15 provisions or coverage materially change." That's
16 consistent with Rule 36 language, and we feel it's just
17 what a prudent operator should do.

18 CHAIRMAN WROTENBERY: What do you mean by
19 coverage? I'm having a little trouble with this sentence
20 because it's rather circular. It seems to say you'll
21 review it and update it anytime the provisions change, but
22 the provisions aren't going to change unless you review it
23 and update it, so --

24 THE WITNESS: Well, something could change
25 that --

1 CHAIRMAN WROTENBERY: -- what is it triggers the
2 review?

3 THE WITNESS: Obviously back on our re-testing,
4 if your re-testing showed that, you know, I needed the re-
5 test, then I need to do an ROE and I might need to amend my
6 plan.

7 CHAIRMAN WROTENBERY: Okay, so you agree there's
8 some external factors that --

9 THE WITNESS: Right.

10 CHAIRMAN WROTENBERY: -- warrant a change in the
11 plan?

12 THE WITNESS: Right.

13 CHAIRMAN WROTENBERY: Okay, that's what you're
14 referring to?

15 THE WITNESS: Right.

16 Retention and Inspection, no change.

17 Next section would be F, Signage. Take out the
18 "wells" again. We would re-do that basically to be more
19 performance-language-oriented. The three sections we'd
20 recommend for that would be where it's required, Signs and
21 Marker Specifications, and then Location.

22 Where Required, we would recommend "For every
23 operation or system to which this section applies that it
24 is determined to contain a hydrogen sulfide concentration
25 of 100 parts per million or greater, signs or makers

1 meeting the requirements outlined below must be installed
2 and maintained."

3 The Specification, this language came -- kind of
4 a hybrid between Rule 36 and the API Guidance: "The sign
5 or marker shall contain sufficient information and be
6 readily readable by the public to warn that a potential
7 danger exists and shall contain the words 'Poison Gas'.
8 Signs or markers that have been installed prior to the
9 effective date of this section and that are in compliance
10 with other applicable regulations (DOT, OSHA, etc.) shall
11 satisfy the requirements of this section. Other signs and
12 markers that have been installed prior to the effective
13 date of this section shall be acceptable provided that they
14 indicate the presence of a potential hazard."

15 Obviously, we've got a lot of wells out there
16 that already have some signage there, and if it does
17 warrant of a potential hazard we feel that they should be,
18 you know, acceptable.

19 Also if there's signs out there that meet --
20 going back to your pipeline question, if there are signs
21 out there along that road that warn of the hazard, then
22 they ought to be, if they meet DOT criteria.

23 "For drilling, workover, completion, and
24 recompletion operations, additional warning measures (e.g.,
25 red flags, signs, etc.) shall be prominently posted

1 whenever an imminent danger situation exists." And that
2 would keep people from driving up on a location that
3 they're having an episode.

4 The big difference in that is, what was in the
5 Division's draft -- it was very prescriptive, ANSI
6 standards, color, size. This is more performance oriented.

7 Location --

8 CHAIRMAN WROTENBERY: Before you go --

9 THE WITNESS: Yes.

10 CHAIRMAN WROTENBERY: -- off of number 2, the
11 last three sentences, I guess, where -- or the middle two
12 sentences, the one where you refer to "compliance with
13 other applicable regulations" --

14 THE WITNESS: Uh-huh.

15 CHAIRMAN WROTENBERY: -- and the one after that
16 where you talk about previously installed signs --

17 THE WITNESS: Right.

18 CHAIRMAN WROTENBERY: -- both of those sentences
19 are a little bit vague. They don't reference poison gas or
20 H₂S or anything like that. Is it your intent that the sign
21 would have to indicate that the potential danger is from
22 H₂S or poison gas or some sort of language like that?

23 THE WITNESS: It would need -- you know, presence
24 of a potential danger. If somebody just had a sign out
25 there that said caution --

1 CHAIRMAN WROTENBERY: Uh-huh.

2 THE WITNESS: -- it probably doesn't warn of a
3 potential hazard. I mean, caution is just -- you know,
4 don't trip over the stairs or something like that, whereas
5 danger relates more to a potential hazard.

6 So I guess, without getting into prescriptive,
7 what I would mean, what wording would, what wording
8 wouldn't, as long as the common-sense person would say that
9 relates to a potential hazard. And it needs to relate the
10 hazard to, you're right, the hydrogen sulfide gas.

11 CHAIRMAN WROTENBERY: Okay.

12 THE WITNESS: If it said danger, no smoking, I
13 would say no.

14 Okay, that would be our recommended change for
15 the signage.

16 Now the next section, this is again pretty
17 dramatic, but I think it just flows with what we said.
18 Right now the Rule reads, you've got to go to these various
19 sections. Well, we would like a section titled Compliance
20 Requirements. That's on page 9. And within that G
21 section, Compliance Requirements is where you would address
22 the drilling, production, training, notification to the
23 Division. And it's very clear that I've got a whole series
24 of compliance requirements I need to look at. It just
25 seems to flow to us.

1 So the first section there would be for drilling
2 -- Protection from Hydrogen Sulfide During Drilling,
3 Completion, Workover, and Well Servicing Operations.

4 The first paragraph we left intact, referencing
5 the API standards.

6 Then the next section to us would be Detection
7 and Monitoring Equipment. We have struck out Minimum
8 Standards, Before Commencing Operations, Egress Routes.
9 Actually, we'll address the Detection and Monitoring
10 Equipment in b. That was kind of redundant from what was
11 there before.

12 So for drilling, detection and monitoring
13 equipment, that would be triggered by the 100-part-per-
14 million in gas standard. That would not be triggered by
15 the public area, the radius of exposure.

16 "The person, operator or facility shall provide
17 hydrogen sulfide detection and monitoring equipment as
18 follows: i. Each drilling and completion site shall have
19 an accurate hydrogen sulfide..."

20 And the reason we stuck "accurate" there is,
21 we've deleted ii., which called for calibration at a
22 monthly frequency and required to write it down in the log.
23 To me, the performance standard is, it needs to be
24 accurate. If they aren't doing a good job of maintaining
25 the equipment or its accuracy, then it's not meeting your

1 standard. So we feel that by inserting "accurate" there
2 you take out the specificity of how often to calibrate and
3 how to record the data.

4 "...an accurate hydrogen sulfide detection and
5 monitoring system that is capable of automatically
6 activating visible and audible alarms when the ambient air
7 concentration of hydrogen sulfide is equal to or less than
8 20 parts per million."

9 I kind of address some of the issues Wayne was
10 talking earlier. What you're setting there is at least a
11 minimum sensitivity. I can go, you know, less and set a
12 lower threshold, but it can be no less than 20 parts per
13 million -- I mean, it can be no greater than 20 parts per
14 million. Basically, we're stating that this system needs
15 to be capable of alarming at equal to or less than 20.
16 It's a little different verbiage, but that was our attempt
17 to address the issue that you were raising.

18 The sensor locations we left the same.

19 The next two -- obviously we deleted ii., the
20 workover and servicing operations, we re-numbered that, and
21 then iii. So the only changes there, we're deleting the
22 calibration frequency but inserting language in i. that
23 called for it to be accurate and capable of alarming at
24 equal to or less than 20.

25 Next section on Wind Indicators, we left that

1 virtually the same, just re-labeled that.

2 Now we have a paragraph d., Special Requirements,
3 and this is replacing a lot of what's there below, and it's
4 written more in a performance base.

5 "Special Requirements. Where drilling, workover,
6 completion, and recompletion operations occur in areas
7 where the 100 p.p.m. ROE includes a public area, the
8 following additional measures are required: i., the
9 operator shall install a choke manifold, mud-gas separator,
10 and flare line and provide a suitable method for lighting
11 the flare."

12 What we've taken out there is the specificity
13 that was in the sections below.

14 And "A remote controlled choke and accumulator
15 shall be installed and operational."

16 I think from all the comments that have come from
17 Walt Dueease and others to the Commission, it's understood
18 that the kind of rigs and structure we have cannot support
19 all the additional things that were called for with the
20 current draft. We feel that this is protective of the
21 public and particularly is focused on public areas.

22 I think the reason on the mud program, like Dr.
23 Lee was mentioning earlier, that's a common practice in our
24 systems, we didn't feel it was necessary to specify,
25 although we did specify a mud-gas separator in our

1 recommendation.

2 So basically for Drilling the key requirements
3 are to have protection and and monitoring equipment, and
4 then when it's in a public area and -- I'm sorry, wind
5 indicators.

6 And then when it's in -- a 100-part-per-million
7 radius of exposure includes a public area, that we should
8 install choke manifolds, separators, flare lines and
9 remote-controlled chokes.

10 In areas that are more remote, we don't feel that
11 those are absolutely necessary. The operator may choose to
12 do that, but that would be a case-by-case basis.

13 You'll see there, there's no mention of safety
14 equipment. We see that as a requirement that deals with
15 occupational exposure and control for the employees.
16 That's a standard practice out there, and that's done --
17 that should be done more on the operator's sense of what's
18 right to protect the workers and get them out, and before
19 they would go back in to those areas that they would have
20 the right equipment. But that deals with worker exposure.

21 CHAIRMAN WROTENBERY: Are you finished with your
22 item i. on --

23 THE WITNESS: Yeah.

24 CHAIRMAN WROTENBERY: Can you back up a little
25 bit --

1 THE WITNESS: Sure.

2 CHAIRMAN WROTENBERY: -- on API standards?

3 THE WITNESS: Yes.

4 CHAIRMAN WROTENBERY: Are you intending to apply
5 that to any facility with 100-part-per-million hydrogen
6 sulfide, or -- you actually left the language in there --

7 THE WITNESS: That would be considered --

8 CHAIRMAN WROTENBERY: -- tied to a PHV.

9 THE WITNESS: Actually, yes --

10 CHAIRMAN WROTENBERY: The Division was
11 recommending --

12 THE WITNESS: -- that's -- We left that language
13 as it was.

14 CHAIRMAN WROTENBERY: Okay, the Division was
15 recommending that that apply to any operation where you
16 have 100-part-per-million H₂S.

17 THE WITNESS: Yeah. I don't think it's a
18 problem, as long as the language is left with due
19 consideration. I mean, I think most operators that do
20 drill in H₂S zones would consider.

21 CHAIRMAN WROTENBERY: And then the egress routes,
22 you struck that. Did you comment on striking that
23 language?

24 THE WITNESS: No. You know, I don't care, I
25 guess, if it's H₂S or -- Any well we drill, we try to leave

1 ourselves egress routes to get off, because it's not just
2 hydrogen sulfide. If we have a fire or a blowout, we need
3 to leave egress routes, and we do so as common practice.

4 Probably the most difficult egress situation is
5 when you're out there frac'ing a well, if you've ever been
6 out there and you've got 60 trucks and frac pumps and all
7 that, you'll trip over about 16 things before you get out.

8 So I just think that's industry practice, and we
9 didn't feel that it was necessary to have that specified.
10 When I go out and do rig inspections, that's one of my
11 biggest things I look for. Have they kept the location
12 cleaned and that to where our folks can escape?

13 So that's more -- I think just that that's
14 already industry standard.

15 CHAIRMAN WROTENBERY: And you may have commented
16 on this, I apologize if I didn't catch it. You struck the
17 language about calibration and testing under detection
18 system?

19 THE WITNESS: Yes, and the reason we stuck the
20 word "an accurate hydrogen sulfide detection system",
21 because if what we have out there is accurate and it's
22 maintained, then it doesn't need to be stated that you'll
23 calibrate it monthly or that. Our standard within
24 Burlington is to be monthly, and I think those that set up
25 these systems do that. But we don't feel that it's

1 necessary that that be stated in the Rule.

2 COMMISSIONER BAILEY: I guess where I have
3 questions with these compliance requirements --

4 THE WITNESS: Uh-huh.

5 COMMISSIONER BAILEY: -- these are specific to
6 drilling and completion, workover, well-servicing
7 operations.

8 THE WITNESS: Right.

9 COMMISSIONER BAILEY: However, this Rule is also
10 going to apply to many other types of operations --

11 THE WITNESS: Yes.

12 COMMISSIONER BAILEY: -- including gas plants,
13 refineries --

14 THE WITNESS: Yes, that will --

15 COMMISSIONER BAILEY: -- those types of
16 operations that --

17 THE WITNESS: We haven't got there.

18 COMMISSIONER BAILEY: Okay.

19 THE WITNESS: That will be my paragraph 2.

20 COMMISSIONER BAILEY: Okay, I'm waiting.

21 THE WITNESS: But you're right, we have a section
22 addressing those, right.

23 CHAIRMAN WROTENBERY: Okay, Flare System. We now
24 have testimony from the Division that that should apply to
25 any facility with 100 parts per million hydrogen sulfide.

1 You're striking the language that was in there and folding
2 that into the special requirements in areas where the 100-
3 parts-per-million radius of exposure includes a public
4 area?

5 THE WITNESS: Right, and that's where we feel
6 it's important to have. When you're in remote areas that
7 doesn't expose a public area or public road, that that's
8 really an operator discretion.

9 CHAIRMAN WROTENBERY: And then why did you strike
10 the provisions that address circumstances where you didn't
11 anticipate H₂S, but you encounter it?

12 THE WITNESS: If -- The way we have it written
13 now, and the way the Division's draft was, if I anticipate
14 H₂S I'm going to have a monitoring system out there when
15 I'm within 500 feet of the zone.

16 Where I don't anticipate H₂S, we'll never know.
17 The only time you would ever know you had H₂S is when
18 somebody complains about an odor that's coming up, and they
19 -- and that has happened on occasion, we have gotten called
20 up where somebody said, Hey, we've got a situation out the
21 well, come out and take a look at it for us. We've gone
22 out with detectors, we've taken measurements and said,
23 okay, you can continue going.

24 You're not going to have detection equipment out
25 there to where you would know that. The first sense of it

1 is, somebody complains of an odor and they think they have
2 a problem. And the specificity that you've had where in a
3 concentration of 100 p.p.m. or greater in the gaseous
4 mixture, you'll never know it.

5 So I have a problem, I guess, with saving that
6 level, because right now you wouldn't be required to have
7 systems out there to measure it when you didn't anticipate
8 it.

9 When we do wildcat wells, we have those systems.
10 But the scenario you were raising earlier, when we drill
11 Fruitland Coal wells, we don't have sensors out there for
12 those systems.

13 And I think that was one of the occasions we got
14 somebody called about it, we went out there, and it was
15 barely detectable on our sensor, less than one part.

16 CHAIRMAN WROTENBERY: I might ask you about this
17 again when we get to the last page where you strike the
18 corrective actions language. I could see -- I understand
19 what you're saying about not having the sensors, but I can
20 also see a need on the part of the Division to be able to
21 order some safety action --

22 THE WITNESS: Okay.

23 CHAIRMAN WROTENBERY: -- if -- in the kind of
24 circumstance you've described where --

25 THE WITNESS: Well, if we --

1 CHAIRMAN WROTENBERY: -- H₂S is encountered
2 and --

3 THE WITNESS: Well, let's say we did run into one
4 that was, we hit a pocket of gas nobody anticipated, they
5 called me out, or some of my people out, we went out and
6 tested it and it was high. I think right there we'd stop
7 the drilling, we'd call the Division and we'd say here's
8 what our drilling prog was, but now we've encountered this.
9 This is what we're going to need to do.

10 Some rigs are out there without mud systems, so
11 we'd have to maybe move that rig, bring in a different rig
12 that has a system to where we could start going back to
13 drilling. I mean, that would be a total surprise. We'd
14 have to shut that operation down, frankly, and go get a
15 different rig to do drill the well.

16 I have not encountered that. I don't know if
17 you've ever encountered that, Gene, in any of your wells to
18 where you've encountered something that got that high. I
19 think we know ahead to plan and we have the systems out
20 there when we need to.

21 CHAIRMAN WROTENBERY: Okay. Now number 2,
22 address Commissioner Bailey's --

23 THE WITNESS: Protection of those other areas.
24 For "Oil Pump Stations, Producing Wells, Tank Batteries and
25 Associated Production Facilities, Refineries, Gas Plants

1 and Compressor Stations." We left the same language that
2 was there before on API standards.

3 We struck the Minimum Standards paragraph there,
4 along the same lines as we did on the drilling site.

5 We changed the Fencing section to Security
6 Provisions and just made this more performance-based.

7 "Well sites or other unattended fixed surface
8 facilities shall be protected from public access when the
9 location is within 1/4 mile of a public area. This
10 provision shall be provided by fencing and locking, as
11 appropriate. A surface pipeline shall not be considered as
12 a fixed surface facility for this section."

13 Fencing and locking, when we get within a
14 standard we feel is appropriate, but it shouldn't be
15 specified as the type of fencing or what's there. We feel
16 that we have a good practice of doing what's the right
17 thing out on those locations, and each facility could be
18 different. If you're within the city limits, generally
19 we're prescribed of what it has to be, a certain height
20 with barbed-wire top and that. But in some areas it might
21 be sufficient to have a six-foot fence.

22 So without the specificity, basically we would
23 agree that "shall be provided by fencing locking" but "as
24 appropriate".

25 And that would be at a 100-part-per-million

1 threshold.

2 Wind Indicators, we actually changed the language
3 which was there and incorporated -- we liked the language
4 that you had earlier on drilling locations, so we just
5 copied that language down there and put it in that one.

6 Then we added again our section d., "Special
7 Requirements. For operations or systems occurring in areas
8 where the 100-p.p.m. radius of exposure includes a public
9 area, the following additional measures are required: i.,
10 Operators shall install safety devices and maintain them in
11 an operable condition or shall establish safety procedures
12 designed to prevent the undetected continuing escape of
13 hydrogen sulfide."

14 That language is a more performance-based version
15 of your automatic safety valve.

16 We've had some experience from some operators
17 that these automatic valves do not work. In fact, some
18 operators have removed them. They just don't, you know,
19 effectively do the job that they're intended to do. So in
20 some circumstances we may just recommend procedures.

21 But in some areas, though, where we can make
22 those work, we feel that it's appropriate to consider them
23 and use them.

24 Then the second part of that special requirement,
25 "Any well shall possess a secondary means of immediate well

1 control through the use of appropriate christmas tree or
2 downhole..." Actually, we just incorporated your language
3 up into there that was in c. below.

4 Then we kept the tanks and vessel piece that
5 called for "Each stair or ladder leading to the top of any
6 tank or vessel containing 300 parts per million or more of
7 hydrogen sulfide...shall be chained or marked to restrict
8 entry."

9 And we understand what the intent of that next
10 sentence was, but by virtue of the way it read, as you were
11 saying that only tanks or batteries that required fencing,
12 would you allow the substitution of a danger sign? And
13 frankly, it should be any tank or tank battery, to where
14 you could justify a danger sign, possibly, in lieu of a...

15 So either a -- Right now the way it's read, it's
16 "chained or marked to restrict entry." And we just deleted
17 that last sentence.

18 And then the Compliance Schedule we left the
19 same.

20 So the big changes there, we changed -- we took
21 out the paragraph on minimum standards, changed fencing to
22 security provisions and wrote that in a performance way.
23 Wind direction indicators, we think we improved the
24 language there to what you had in drilling, and then added
25 a section on special requirements that would apply in areas

1 where the 100-part-per-million radius of exposure included
2 a public area, to incorporate safety devices and a
3 secondary means of well control.

4 MR. PRICE: I'm sorry, Bruce, where are you at
5 now?

6 THE WITNESS: Page 11.

7 CHAIRMAN WROTENBERY: I think it's 10 on the copy
8 we have.

9 THE WITNESS: Oh, okay. Well, maybe my page is
10 different.

11 MR. PRICE: And you're where at on page 10?

12 THE WITNESS: Ten --

13 MR. PRICE: We just finished with tanks and
14 vessels.

15 THE WITNESS: Yeah, it starts at the top of the
16 page, it says production, hydrogen sulfide, crude oil pump,
17 stations, producing wells.

18 CHAIRMAN WROTENBERY: Oh, you must be on --

19 THE WITNESS: See, my page it was on the top of
20 the page.

21 MR. MONTGOMERY: What were you talking about? I
22 didn't understand either.

23 MR. PRICE: Yeah, because we've finished with
24 tanks and vessels. Then after that where did you go?

25 MR. MONTGOMERY: I think you skipped back.

1 THE WITNESS: Well, Compliance Schedule, we --

2 MR. PRICE: Oh, Compliance Schedule, okay, all
3 right.

4 THE WITNESS: And then I just summarized that our
5 summary -- What we've changed to that section is, we
6 eliminated the minimum standard paragraph --

7 CHAIRMAN WROTENBERY: Oh.

8 THE WITNESS: -- changed fencing to security
9 provisions --

10 MR. PRICE: Oh, okay.

11 THE WITNESS: -- wind direction indicators, we
12 actually took the language you had in drilling --

13 MR. PRICE: Okay.

14 THE WITNESS: -- and then incorporated a special
15 paragraph for special requirements that will apply in areas
16 that have a 100-p.p.m. ROE in a public area.

17 MR. PRICE: Right, I've got you. Okay, now
18 you're fixing to start on 3?

19 THE WITNESS: Now I'm ready to start on 3.

20 MR. PRICE: Okay.

21 THE WITNESS: We left the training requirements.
22 They're identical to what was in the Division draft. I
23 know there was some testimony earlier as to where that
24 applied. We considered that to apply at 100 parts per
25 million.

1 But again, this would apply for public safety
2 purposes to any worker who needs to implement a contingency
3 plan. And implementation, in my mind, is from the very
4 incidence of discovery until you start implementing a plan.
5 So those workers that we have out there that are lease
6 operators, if they have H₂S wells, they take this training.
7 And I would consider that that covers it, because they're
8 at the very earliest stage of implementing this plan.

9 The next section under that, which would be the
10 last compliance requirement, would be Notification of the
11 Division. And that language we left the same, except we
12 took out "preferably within one hour", and the way it would
13 read now, it would say, "The person, operator or facility
14 shall notify the Division upon a release of hydrogen
15 sulfide requiring activation of the hydrogen sulfide
16 contingency plan as soon as possible, recognizing that a
17 prompt response should supersede notification."

18 And the rest of the language we left the same.

19 The last two sections that we have -- and I don't
20 know that this is the right name. The next one is what I
21 call reciprocity. And basically what we're saying there
22 is, if we're subject to another jurisdiction -- 70-percent,
23 for example, of the surface of the leasing surface acreage
24 in the San Juan area is in federal, and they have Onshore
25 Order 6.

1 So "Any facility or operation that is subject to
2 another jurisdiction with respect to hydrogen sulfide
3 regulations..." as an example, BLM Onshore Order 6 "...and
4 is in compliance with those regulations, shall be deemed in
5 compliance with this section."

6 We don't think we should have to go back and
7 forth trying to duplicate the requirements of both.

8 CHAIRMAN WROTENBERY: What other jurisdictions
9 are you talking about?

10 THE WITNESS: That's the only one I could think
11 of, but I don't know if the City of Aztec ever comes out
12 and develops one. That's the only one I was aware of.

13 CHAIRMAN WROTENBERY: Okay, but if the City of
14 Aztec did --

15 THE WITNESS: Well, if somebody else --

16 CHAIRMAN WROTENBERY: -- write H₂S rules, you
17 would --

18 THE WITNESS: -- came up with one and we're
19 subject to that --

20 MS. SELIGMAN: Navajo nation, for instance.

21 THE WITNESS: Navajo nation.

22 MS. SELIGMAN: Or Jicarilla, which has the
23 potential to set their own rules.

24 THE WITNESS: And I don't know that's the right
25 name for that section, but --

1 CHAIRMAN WROTENBERY: Uh-huh.

2 THE WITNESS: -- I guess the intent is -- I know
3 there was some discussion about who had jurisdiction over
4 the issue of H₂S, and I guess we don't want to have to go
5 back and forth about having two separate plans, two
6 separate standards of control.

7 And we pulled Exemptions to the very end.

8 CHAIRMAN WROTENBERY: We don't have any testimony
9 on the record about the BLM requirements, so I don't know
10 that the Commission could make a decision on this
11 particular point without some information --

12 THE WITNESS: On Onshore Order 6 --

13 CHAIRMAN WROTENBERY: -- that BLM, Onshore Order
14 would satisfy the purposes for this rule.

15 THE WITNESS: Well, from their standpoint -- Who
16 was it we were talking with? According to BLM, they feel
17 they have jurisdiction over this and that you guys don't.

18 MR. GIRAND: Yes.

19 THE WITNESS: I'm just repeating --

20 MR. BROOKS: Your Honor, I believe that we
21 could -- I believe the Commission -- and of course, Mr.
22 Ross is your counsel and he'll advise you on these matters,
23 but I believe the Commission could, if they chose to do so,
24 take administrative notice of BLM Order 6 under the general
25 administrative notice provisions of the New Mexico Rules of

1 Evidence.

2 CHAIRMAN WROTENBERY: Did somebody from BLM
3 really say we don't have jurisdiction?

4 THE WITNESS: Who was it?

5 MR. GIRAND: I think it was yesterday, Gary
6 Stephens.

7 CHAIRMAN WROTENBERY: Gary Stephens in Carlsbad?

8 THE WITNESS: I guess we don't want to be caught
9 in double jeopardy. I guess to me, if we're meeting
10 Onshore Order 6 and this Rule now comes, do we have to now
11 go back through all our plans and re-do those?

12 FROM THE FLOOR: Thank you, Dr. Lee.

13 THE WITNESS: He's already trying to charge me
14 for my own water data.

15 And we feel there should be some provision there
16 that recognizes both sets of rules. And if you're
17 complying with one -- I mean, there's acreage there, as you
18 know, that they trade acreage, and it could move from
19 federal hands to the state hands, and you could already
20 have a provision -- a well in that area that you're already
21 meeting.

22 That kind of summarizes our effort. And as I've
23 mentioned, this is a joint effort between NMOGA and IPANM.
24 We feel that this meets the objective of protecting public
25 safety in areas where -- for acute releases of hydrogen

1 sulfide, as you've mentioned.

2 We've provided an electronic version that Steve
3 has. And we can discuss these further, you know, in a
4 working group if that becomes necessary.

5 CHAIRMAN WROTENBERY: Probably be a good time to
6 take a break, unless -- Let me ask first, do you have any
7 questions?

8 COMMISSIONER LEE: No.

9 CHAIRMAN WROTENBERY: Any further questions?

10 COMMISSIONER BAILEY: I don't think so.

11 CHAIRMAN WROTENBERY: Okay, do you want to --

12 COMMISSIONER BAILEY: Thank you for reorganizing
13 everything. You made it clearer for me.

14 THE WITNESS: Deborah wouldn't let me out of the
15 office till I got this thing done. It was either that or
16 stuff NMOGA meeting envelopes, and I wasn't going to do it,
17 so I stayed.

18 CHAIRMAN WROTENBERY: Okay, did the Division have
19 any questions?

20 MR. BROOKS: We don't have any questions of
21 Bruce.

22 We would respectfully request, since we didn't
23 have a chance to see this draft before today, that we go
24 ahead and take a break and that will allow me to visit with
25 the environmental people for a few minutes to see if we

1 want to present anything further in reference to their
2 draft.

3 CHAIRMAN WROTENBERY: Okay, we'll do that, then,
4 at this point, take a 15-minute break. Will that --

5 MR. BROOKS: Hopefully.

6 CHAIRMAN WROTENBERY: Okay, thanks.

7 MR. BROOKS: This late in the afternoon, I think
8 that will --

9 CHAIRMAN WROTENBERY: And we still need to hear
10 from Mr. Prather.

11 MR. BROOKS: Okay.

12 THE WITNESS: Thank you.

13 CHAIRMAN WROTENBERY: Thank you.

14 (Thereupon, a recess was taken at 3:35 p.m.)

15 (The following proceedings had at 4:00 p.m.)

16 CHAIRMAN WROTENBERY: Okay, Mr. Brooks?

17 MR. BROOKS: Okay. Madame Chairman, honorable
18 Commissioners, I conferred with Mr. Price and Mr. Anderson
19 during the recess. There are, of course, very substantial
20 changes in the proposed draft submitted by NMOGA, and some
21 of them we have no objection to.

22 Some of them we have some very serious concerns
23 about, basically in the area of enforceability. For
24 example, just to give an example, the detection equipment
25 provision, the elimination of the requirement for periodic

1 calibration and keeping the log. If that -- They propose
2 to eliminate that and substitute a provision that the
3 equipment be accurate.

4 And of course, Bruce said that his company does
5 calibrate them monthly, and that was our requirement.
6 Well, that was fine, but not every operator is going to do
7 that, and if we were to want to cite someone for violation
8 of this provision we would have to prove that their
9 monitoring system was actually inaccurate before they would
10 be in violation.

11 That's simply an illustration. There are many
12 situations like that within this Rule.

13 The bottom line, we believe that we do not have
14 time this afternoon to go through point by point, nor are
15 we prepared to do so, adequately prepared to do so. We
16 believe that if the Commission is inclined to go this
17 direction, that we would request -- reluctantly request an
18 opportunity to submit a further written response.

19 And actually, we're so far apart compared to this
20 latest draft that's been submitted that Mr. Anderson
21 indicated he thought it might be necessary to remand it to
22 the work group to attempt to resolve some of these
23 differences, get something that would be sufficiently
24 specific that it could be enforced without being overly
25 burdensome on the responsible operators. I'm sure that's

1 probably not a direction the Commission wants to go, but
2 I'm charged to represent that as being what we think might
3 be necessary.

4 Mr. Price and Mr. --

5 CHAIRMAN WROTENBERY: May I just ask, because I
6 have a low level of confidence at this point in the work-
7 group process on this Rule, and --

8 MR. BROOKS: I tend to share it, your Honor.

9 CHAIRMAN WROTENBERY: -- it may just be that I'm
10 in a little bit of a shock phase right now.

11 MR. BROOKS: I absolutely share your feelings,
12 madame Chairman, but I simply present that.

13 Mr. Anderson and Mr. Price are available for any
14 questions the Commission might wish to ask, for instance,
15 on their rationale for some provision that has now been
16 changed, or proposed to be changed in the NMOGA draft.

17 But I'm not going to offer any further testimony.
18 I feel like there's too much to talk about, and it's too
19 late in the afternoon.

20 Thank you very much.

21 CHAIRMAN WROTENBERY: Thank you.

22 Why don't we hear from Mr. Prather --

23 MR. BROOKS: Okay.

24 CHAIRMAN WROTENBERY: -- first, and then we can
25 talk about where to go from there.

1 MR. PRATHER: I guess I have the dubious
2 distinction of riding drag on a long day.

3 (Laughter)

4 CHAIRMAN WROTENBERY: Well, we're used to long
5 days, so we're still here, still alert.

6 JOHN PRATHER,
7 the witness herein, after having been first duly sworn upon
8 his oath, and testified as follows:

9 DIRECT TESTIMONY

10 BY MR. PRATHER:

11 MR. PRATHER: What I've put in front of you there
12 is something that hopefully I didn't scare you to death
13 with that I'm going to talk about all of this. It's simply
14 some things that the Commission probably can use as helpful
15 documentation in some of the things that I'm going to talk
16 about.

17 First off, who am I? I am currently the co-owner
18 of Safety Consulting and Training in Hobbs, New Mexico,
19 where for the last eight years I have conducted industrial
20 safety and compliance training for a number of oil and gas
21 service companies, as well as production companies,
22 refineries, and we use compliance standards, Department of
23 Transportation, OSHA, as well as Mine Safety and Health
24 Administration documents to design these programs.

25 I have 37-plus years of experience in the mining,

1 petrochemical refining, oil and gas industries, and as a
2 trainer I started several years ago as a hospital corpsman
3 with the U.S. Navy who had the dubious distinction of being
4 assigned to the United States Marine Corps and spent a
5 great deal of time in Southeast Asia.

6 But I have completed the Department of Labor
7 training, the requirements of the OSHA Training Institute,
8 and I have a certificate as a safety and health specialist,
9 I have a certificate as a construction safety and health
10 specialist, and also an environmental specialist.

11 So as far as the industrial hygiene side of it,
12 the OSHA Rules that I've heard referred to several times
13 today -- I have a very extensive background in that area.

14 There are four areas in this draft that I have
15 some concern about, the first being the level of 100 and
16 300 parts per million. I think it was established earlier
17 in the day that the current NIOSH immediately dangerous to
18 life and health level is now 100 parts per million. That
19 document I have included from NIOSH behind the third
20 colored page in your booklet.

21 This change took place approximately three and a
22 half years ago. Prior to this change, the IDLH for
23 hydrogen sulfide was 300 parts per million.

24 If you look at the standard, or the draft copy of
25 the standard, and you go back through some things I've

1 included here, which are actual copies of that rule we were
2 talking about from Minerals Management, both for their
3 Outer Continental Shelf Regulations and their Onshore
4 Regulations, you're going to find the level being 100 parts
5 per million, very regularly and very routinely.

6 But if you look at the date of these documents,
7 you're going to find that at the time the document was
8 written IDLH was 300 parts per million.

9 I think we all agree that the rattlesnake is a
10 very dangerous critter, but we don't wait till he bites us
11 before we do anything about it. When he rattles, we take
12 action. I think contingency plans should not be enacted
13 after the damage is already taking place, but before that
14 damage was taking place.

15 And back in 1995 when the RP 55 and the Mineral
16 Management Rules were written, that's exactly what they
17 did, because they took an action at one-third the IDLH
18 level, as opposed to the IDLH level.

19 Apparently, the new information has not been
20 passed along to this point. And today, the way the draft
21 is written, we're not taking action until we've already
22 been snakebit.

23 COMMISSIONER LEE: Wait a minute, how many bit do
24 we have before?

25 MR. PRATHER: Sir?

1 COMMISSIONER LEE: How many bites do we have?
2 You talk about it, you know, it's -- Right now, the New
3 Mexico producers and the regulatory agency come together to
4 come up with this plan, and you say this plan is not good.
5 And what is the past five years -- what is the accident
6 rate of the industry?

7 MR. PRATHER: Well, we've had several incidences
8 with H₂S.

9 COMMISSIONER LEE: How many fatalities in New
10 Mexico?

11 MR. PRATHER: I have that information in my
12 office. Let's see, I believe the year before last it was
13 nine.

14 COMMISSIONER LEE: Nine dead?

15 MR. PRATHER: Yes.

16 COMMISSIONER LEE: Guilt.

17 MR. GANTNER: That's surprising to me, because
18 I've downloaded stuff off of --

19 MR. MONTGOMERY: What did you say? Nine?

20 MR. PRATHER: Uh-huh.

21 MR. MONTGOMERY: Nine what?

22 MR. PRATHER: Fatalities.

23 MR. MONTGOMERY: From H₂S?

24 MR. PRATHER: Yes.

25 MR. GANTNER: I downloaded stuff off there, I

1 didn't see that.

2 MR. MONTGOMERY: There's been one incident in the
3 State of Texas of fatalities for H₂S -- public fatalities
4 from H₂S, there's only been one, and that was in Denver
5 City. That was 46 years ago.

6 CHAIRMAN WROTENBERY: Okay, we may have to
7 distinguish here between public fatalities and worker
8 fatalities.

9 MR. PRATHER: This was fatalities from H₂S,
10 period.

11 COMMISSIONER LEE: I didn't know that.

12 MR. GANTNER: That's news to me. I follow that
13 kind of stuff.

14 MR. GIRAND: Workers Comp Administration in New
15 Mexico indicates fatalities, and I can remember 1996, 1998,
16 1999 and 2000 there were zero.

17 MR. BROOKS: Denver City was not 46 years ago,
18 because I was employed by the firm that was hired to
19 represent ARCO, to defend their liability suit in that
20 incident, and I was not a lawyer 46 years ago.

21 CHAIRMAN WROTENBERY: Denver City was in the
22 1970s.

23 MR. BROOKS: It was thirty-something years ago.

24 CHAIRMAN WROTENBERY: Uh-huh. It was 1976, I
25 believe, sometime around there.

1 MR. PRATHER: In item 9 here, there is an article
2 on Denver City, the one titled "Death Came from a Cloud",
3 is the whole Denver City case.

4 MR. BROOKS: Yeah, that was approximately --
5 between 25 and 30 years ago.

6 MRS. PRATHER: 1975 is what --

7 CHAIRMAN WROTENBERY: 1975?

8 MR. BROOKS: I don't want people to think I'm any
9 older than I really am.

10 MR. MONTGOMERY: That's been the single incident.

11 MR. PRATHER: And go to the -- behind the second
12 colored tab. You'll find an article take from the *Hobbs*
13 *Daily News-Sun*, September 10th, 2002, which deals with a
14 person being seen by a doctor, in essentially the public.
15 He was employed by the City of Lovington, but he was not an
16 oilfield worker as such. He was not connected with the
17 release, as far as his employment. And that's happened
18 within the last 30 days.

19 Now, again, fatalities have a -- you know, these
20 make news. Injuries that do not produce death do not make
21 news.

22 I'll give you one item in the same area where
23 this leak occurred. There's a fellow in a nursing home in
24 Lovington who has been there 19 years now, in a total
25 vegetative state from the inhalation of hydrogen sulfide,

1 and he showed up on a fatality report nowhere because he's
2 still alive. He hasn't recognized a single family member
3 in 19 years, but he's still here.

4 So I mean, that again is my question. Are we
5 only going to base it on fatalities? You know, public
6 protection starts before we kill them.

7 So do we wait until we have reached an IDLH level
8 before we enact a contingency plan, or do we do something
9 before that starts to happen?

10 And one of the reasons I have a big concern is,
11 in my presentation on page 3 you find three pictures there,
12 and all of them are taken over the top of a wellhead,
13 looking at various buildings in the background, one of them
14 being Jefferson Elementary School, one of them being
15 Merrill Gardens Retirement Home, and another one being Good
16 Samaritan, again a retirement home. And if you notice, the
17 wellheads are located right literally in the front doors.

18 There is typically no monitoring systems
19 whatsoever on these wells, and the first responders, the
20 people who find the leaks, are not company people but Mrs.
21 Brown who smells something she don't like, and she calls
22 the police.

23 If you go back to the Hobbs article on the gas
24 leak, in the very last line, "The cause of the pipeline gas
25 leak is unknown at this time as well as the owner of the

1 pipeline. At press time, the gas leak was being prepared."

2 We have had leaks where things have appeared up
3 through city streets in communities in southeastern New
4 Mexico where it has taken as high as four days to figure
5 out who owned the line.

6 Now, if we wait till the line owner determines
7 that there's 100 parts per million there and enacts a
8 contingency plan, the contingency plan may not go in effect
9 for several days.

10 This is one of the reasons that I really have a
11 problem with taking anything out about monitoring
12 equipment. It's not stringent enough, because typically if
13 you go to Eunice, New Mexico, and go to Avenue M, there are
14 large tank batteries located on Avenue M, with residences
15 all the way around them. If you go to the north end of
16 those batteries and go over to Avenue O on that street,
17 you're going to find a city lot that is divided between the
18 front of the lot and the alley, with the house being on the
19 front of the lot and the producing well right literally in
20 the back yard.

21 But yet these facilities are, maybe, visited once
22 a day by the operator. That visit very seldom is more than
23 15 minutes. So the other 23 hours and 45 minutes of the
24 day that is an unmanned facility, that they have no idea
25 what's going on at that facility.

1 Now, we have talked all day long about various
2 facilities. We seem to have the idea that all of these are
3 located out in the country somewhere. But those
4 southeastern New Mexico and these wells are quite literally
5 on city lots, in parking lots, across the streets from
6 churches, hospitals, nursing homes.

7 And yet what we have proposed says that when the
8 H₂S level reaches 100 parts per million in the hallways of
9 Jefferson Elementary School, we're going to do something.

10 COMMISSIONER BAILEY: You've sat here all day and
11 listened to the testimony.

12 MR. PRATHER: Yes, ma'am.

13 COMMISSIONER BAILEY: What values would you
14 recommend instead of the 100/500?

15 MR. PRATHER: Those which are much more in line
16 with the IDLH document from NIOSH. NIOSH says the
17 permissible exposure limit, or that limit at which we can
18 go to without any physical harm is only 10 parts per
19 million.

20 COMMISSIONER BAILEY: So you would substitute 10
21 parts per million instead of 100 parts per million?

22 MR. PRATHER: Well, currently -- I think most
23 people are going to find this a real shock, that there are
24 H₂S detectors located in the hallways of Jefferson
25 Elementary School.

1 COMMISSIONER BAILEY: I'm trying to get to what
2 figure you would recommend, instead of the 100 parts per
3 million.

4 MR. PRATHER: Something less than half of the
5 IDLH.

6 COMMISSIONER BAILEY: So you would say five or
7 less?

8 MR. PRATHER: No, the IDLH being a hundred.

9 COMMISSIONER BAILEY: Okay, so you'd say 50 or
10 less.

11 MR. PRATHER: Fifty or less. And if you notice,
12 back in the old standard when it was 300, they took action
13 at 100, which was one-third of the IDLH. If you take that
14 same logic and reasoning, then we're going to do something
15 at 33 parts per million.

16 COMMISSIONER LEE: So if you set it at 50, then
17 your contingent plan -- is that going to be faster than 100
18 p.p.m.?

19 MR. PRATHER: Most definitely. That level could
20 go to 50, 60, 80 in that hallway, and we would never do
21 anything. We don't do anything until we reach that minimum
22 level. That's what a contingency plan and a radius of
23 exposure is all about. We calculate where it's possible to
24 have that exposure, and at that point is where we take
25 action.

1 COMMISSIONER LEE: The public buildings have
2 those H₂S --

3 MR. PRATHER: The nursing homes do not have the
4 H₂S detectors --

5 COMMISSIONER LEE: Yeah, okay --

6 MR. PRATHER: -- only this one school that I'm
7 aware of.

8 COMMISSIONER LEE: One school. They are worried
9 about a pipeline or they're worried about H₂S system?

10 MR. PRATHER: They're worried about a producing
11 well that's located in the school yard.

12 COMMISSIONER BAILEY: Let's get back to the
13 second half of my question. Instead of the 500 parts per
14 million, what is your recommendation?

15 MR. PRATHER: Other than -- I would say we never
16 go over 100 parts per million in anything. Why go to five
17 times something that we know is going to kill us? I mean,
18 100 parts per million has been known to produce fatalities.

19 Another thing you've got to figure is that this
20 is based on government lab information, typical dose, which
21 is based on a 150-pound healthy person. If I only weigh 50
22 pounds as a second grader, then I can only handle one-third
23 of the NIOSH dose, because it's per pound of bodyweight.

24 When we're talking about an oilfield worker,
25 we're talking about 210 pounds. But when we're talking

1 about protecting nursing homes and schoolyards that have
2 producing wells in them, we can't base that on the size and
3 physical condition of the average oilfield worker, we've
4 got to base it on the real world who is out there. And at
5 recess in this particular elementary school, these kids are
6 quite literally playing around the wellhead. Is that not
7 true, Mr. Price?

8 MR. PRICE: That is true.

9 MR. PRATHER: There are many producing wells
10 within the city limits of Hobbs, New Mexico. There are
11 literally no tank batteries. So where does the well go, or
12 how does it get to the tank battery? It has to go through
13 Mrs. Brown's front yard or under our city streets. So
14 anytime that this piping fails, the release is quite
15 literally in her yard.

16 She goes out to pick up the paper at seven
17 o'clock in the morning, and here's this brown, stinky,
18 gooey stuff in the front yard. Her next thing, she doesn't
19 call the producing company, because this line is not even
20 marked. She goes in and she calls the police.

21 And the next guy who shows up is the policeman,
22 who has no training whatsoever in H₂S. You know, brown,
23 sticky, gooey stuff. And they start trying to determine
24 who owns it. And like I said, historically -- and I can
25 document this through local newspapers that sometimes it's

1 took as high as four days to figure out who owns the brown,
2 gooey stuff in Mrs. Brown's front yard.

3 COMMISSIONER BAILEY: Has the City of Hobbs or
4 any of the other municipalities in the southeast enacted
5 laws to control this type of H₂S activity? Are there city
6 ordinances?

7 MR. PRATHER: The public awareness of what
8 they're dealing with -- Like today, I have never heard a
9 single person mention that we are dealing with the second
10 most toxic substance known to man.

11 CHAIRMAN WROTENBERY: That was covered during our
12 first hearing.

13 MR. PRATHER: It is only --

14 CHAIRMAN WROTENBERY: We did go through in great
15 detail --

16 MR. PRATHER: It is only superseded by hydrogen
17 cyanide, the gas used in the gas chamber. And if you look
18 at the permissible exposure limits for both gases, they are
19 the same.

20 So yeah, it is a second, but it is a very close
21 second. Yeah, we've laughed about it that, why have we not
22 marketed this a little better to Dr. Kevorkian, because
23 there's a lot better gas of choice, H₂S, than what he's
24 using.

25 COMMISSIONER BAILEY: But the question was, have

1 any of those municipalities enacted any ordinances
2 connected with --

3 MR. PRATHER: The City of Lovington, after a
4 large blowout roughly 24 months ago now --

5 MR. PRICE: No, it's been --

6 CHAIRMAN WROTENBERY: 1988 --

7 MR. PRICE: Yeah.

8 CHAIRMAN WROTENBERY: -- March.

9 MR. PRATHER: Okay. The City of Lovington
10 started enacting some, but it was more of a contingency
11 plan. But like this well, it's located outside the city
12 limits, and some of this stuff they don't have control
13 over.

14 Another thing we need to look at is, these
15 producing facilities and these lines that have been buried,
16 some of them date back to the late 1920s and early 1930s.
17 Hobbs currently is undergoing another tertiary recovery
18 project using CO₂, which historically has only increased
19 the corrosion and the H₂S problems.

20 Denver City was mentioned a while ago, but it's
21 surprising that most of these communities have not acted on
22 this. And one of the big reasons, I think, gets back to an
23 article I've included here from --

24 COMMISSIONER LEE: Let's talk about CO₂. So
25 what's your point, CO₂?

1 MR. PRATHER: CO₂ mixes in the gas stream,
2 increases the corrosiveness of the gases, and therefore
3 increases the potential for line failure.

4 COMMISSIONER LEE: But they are not going to
5 switch to the H₂S, right?

6 MR. PRATHER: Well, CO₂ is being put into the
7 ground to aid in the recovery of the oil.

8 COMMISSIONER LEE: CO₂ is not going to mix with
9 the hydrogen sulfide, right?

10 MR. PRATHER: Well, they're going to mix in the
11 gas stream, yes. They're not going to combine together to
12 make a third chemical, no, but the --

13 COMMISSIONER LEE: The corrosive --

14 MR. PRATHER: -- in the recovery process you --

15 COMMISSIONER LEE: The corrosive H₂S in the CO₂
16 is equally strong.

17 MR. PRATHER: But it's increased when you
18 introduce CO₂ into the wellbore, and the line failure is
19 what produces the emergency. So line failures are directly
20 related to the corrosiveness of the wellbore fluids.

21 COMMISSIONER LEE: Is that right? Eighty percent
22 of CO₂ and 20 percent of CO₂, the corrosivity is the same?

23 MR. GANTNER: I don't know that they're the same.

24 I mean, they operate differently, but they're corrosive.
25 But obviously operators are aware of that, and you inject

1 chemical controls and that to maintain your systems.

2 COMMISSIONER LEE: Okay, thank you.

3 MR. PRATHER: Okay, the other point is signage.
4 I have included 1910.145 in here, which is the OSHA
5 regulation for safety signs.

6 There are three words that are routinely used in
7 safety signs, "danger", "warning" and "caution", "danger"
8 being the most harmful. "Danger" indicates a situation
9 that has the potential for causing death or serious injury.

10 "Caution", which is an alternate sign mentioned
11 in the Rule, indicates a possibility of moderate injury.
12 And I think when we're dealing with CO₂, especially at 100
13 parts per million --

14 CHAIRMAN WROTENBERY: H₂S.

15 MR. PRATHER: -- it's totally inappropriate. Or
16 H₂S, excuse me, at 100 parts per million, that sign is
17 totally inappropriate. It does not meet the standard,
18 neither the ANSI standard nor the OSHA standard.

19 And adding that wording to the Rule only adds
20 confusion, because we've got enough "Caution H₂S" signs out
21 there which do not meet the standard to start out with.
22 The oilfield probably has 90 percent "Caution H₂S" signs
23 and 10 percent danger as we speak, and that is not in
24 compliance.

25 So to weaken that, as far as the danger part of

1 it, or to do anything as far as confusing it by allowing
2 a -- or the wording allowing a "Caution", although by
3 actual practice it shouldn't, I think that "Caution" should
4 be taken and thrown out of there.

5 One of the reasons that I base a lot of this is,
6 if you're aware that New Mexico is under a state OSHA plan,
7 as opposed to some other states being under a federal plan.
8 New Mexico OSHA has the right to write its own rules, but
9 they must be as stringent as any federal rule. We cannot
10 downgrade a rule at the state level. We must either make
11 it more stringent or leave it alone.

12 And several things in here, what we're doing is,
13 we're downgrading industry practices and rules, one being
14 adding a "Caution" sign in any H₂S facility containing 100
15 parts or more.

16 COMMISSIONER LEE: Excuse me, sir. You live in
17 Hobbs. How about across the border? Is the Texas rule
18 adequate?

19 MR. PRATHER: Well, again, the Texas rule was
20 written at that 300 -- The Texas rule is not too bad, but
21 again, the Texas rule was written when IDLH was still 300
22 parts per million. And the Railroad Commission of Texas
23 will tell you very quickly that the rule needs to be
24 revisited, and I think the plans are to revisit it next
25 year.

1 COMMISSIONER LEE: Thank you.

2 MR. PRATHER: As far as recommended practices
3 from API, in the beginning of all their documents they tell
4 you if the document is over five years that it's pretty
5 well dead.

6 Most of these documents mentioned in here have
7 not been revisited in that five-year period, so all of them
8 are in need of updating, and one of the things would be to
9 deal with the IDLH level being 100 parts per million today,
10 as opposed to 300 parts per million at the time they were
11 written.

12 And the other area, as far as training, training
13 is very briefly mentioned, and the only requirement in the
14 Rule is, those people dealing with a contingency plan
15 should be trained.

16 I've included in the back a document, ANSI
17 Z390.1-1995. By the way, it was revisited in 2000. This
18 document is the Accepted Practices for Hydrogen Sulfide
19 Safety Training and Programs, and one of the advantages
20 that it gives you if you comply with this document in your
21 training programs is, you constantly stay up with new and
22 emerging technology.

23 Somebody asked about 500 parts per million a
24 while ago. One of the reasons I have trouble with 500
25 parts per million -- We've heard a lot of talk about gas

1 detection equipment. I brought a few pieces of this
2 equipment along with me.

3 MR. PRICE: John, you're not going to gas us, are
4 you?

5 MR. PRATHER: No, no.

6 MR. ANDERSON: I tried to do that last time.

7 MR. PRATHER: Here is a typical detector used in
8 the industry. There are several different models out, but
9 in reality they all work very close on the same technology.

10 The sensors that are being used in the industry
11 today have a maximum of about 300 parts per million. In
12 other words, once we go over 300 parts per million we over-
13 range the electric sensors that are out there today.

14 Once you go over that sensor, here is the
15 technology that has to be used. And they are tubes that
16 have silica-gel granules in them. They are treated with
17 certain chemicals so that when they come in contact with
18 H₂S, they change color.

19 And what I do -- And you'll notice I have several
20 different ranges here. You have to match the range up with
21 the concentration. You take this little device, you pop
22 the ends off the tube, you plug them into the pump in the
23 correct direction so the airflow matches the scale, and you
24 pump this thing so many times. And you wait for that color
25 change to take place.

1 I'm out there trying to find 500 parts per
2 million, the chemical reaction in the tube takes two and a
3 half to three minutes, plus the time to load and do all of
4 this. I'm working in five times the IDLH area, and I can
5 probably get this sample in 15 minutes. And this is the
6 best technology for reading anything over 300 parts per
7 million that's available today.

8 So at 100 parts per million, how am I going to
9 know that that takes -- Okay, I've got to enact my
10 contingency plan at 100 parts per million. How am I going
11 to know when that takes place?

12 This is not a manned facility nor a monitored
13 facility. It's located beside a public road. And if that
14 leak in that facility occurs at 3:00 a.m. in the morning
15 with the gas leak blowing across a public road, how am I
16 going to know that it happens? Well, when a motorist or a
17 deputy on night patrol passes that and smells the odor and
18 calls in. If that place happens to be in a low-lying area
19 on a very calm, foggy morning, it may be he called in
20 because he found the body.

21 And I refer you again back to the Denver City.
22 That was one of the situations, that one of the pumpers,
23 who should have been fully aware of what he was dealing
24 with, passed through a low area and smelled H₂S, stopped
25 and died right there on the spot.

1 Another typical situation I can relate to you
2 from personal experience that has happened very recently,
3 happened about 90 days ago just south of Eunice when a gas
4 transmission line blew out about 4:30 in the evening. One
5 of the first people to report that was a truck driver who
6 called in to the dispatcher and said, Hey, we've got a heck
7 of a leak south of town.

8 The dispatcher said, How bad is it?

9 And he said, It's bad enough that the truck sped
10 up when I went through it.

11 This is what enacts contingency plans. These are
12 not monitored facilities, there's not detection equipment
13 out there to let you know that this is happening. It's
14 when somebody in the public finds it, and then the public
15 safety people try to locate the owner of the problem, track
16 him down, get him out of bed, get his boots on and get his
17 contingency plan enacted. And typically, we've had a lot
18 of public exposure before this ever takes place.

19 COMMISSIONER LEE: So how can we improve it?
20 Suppose I have a pipeline, it suddenly -- there's no fire,
21 and it just suddenly broke. Then your scenario, you say,
22 well it's too late. Okay? So what's your plan?

23 MR. PRATHER: Okay, other situations, typically
24 in that same facility where they are moving fluids from one
25 tank to another, when that tank gets full they have

1 automated equipment that tells them that tank is getting
2 full, and it starts pumps and moves it to another tank,
3 switches valves.

4 If it does not happen, then they have a second
5 alarm slightly above where that pump should have started,
6 that will communicate, usually with an answering service,
7 it will show up on a board that tank such-and-such has too
8 much water in it. She at two or three o'clock in the
9 morning will dial a telephone and get ahold of one of those
10 operators and say, Hey, you've got a tank out there that's
11 about to run over and cost you money. Or, You've got a
12 well down that's fixing to cost you money.

13 These people react to it very quickly. The
14 systems are out there, it just has not included leak
15 systems.

16 There are detectors that will detect a release
17 within the facility. Typically today, what few of them out
18 there, make a red light flash. And at two o'clock in the
19 morning nobody sees that red light. That could be hooked
20 up to a radio alarm that would notify an answering service
21 that's out there. But like we say, these people have not
22 seen fit to put it in there. It costs money, it's not
23 required by the law, so why do it?

24 I deal with people on a daily basis that all they
25 want to know is, what am I required by the standard to do,

1 and I will do that much?

2 We had a big discussion in new-employee
3 orientation a week ago about when the 10-part-per-million
4 alarm goes off on the rig. What do you do? Do they shut
5 down operations and do something else?

6 A large percentage of the time, the alarm gets
7 turned off, and they go right on working. Why? Because
8 the employer will run them off if they don't. Because
9 everything is dealing on a bottom line.

10 The oil and gas industry is much more interested
11 in profit margin than safety. The oil and gas industry has
12 been declared by OSHA to outdo mining and construction as
13 far as being a hazardous industry.

14 But OSHA knows so little about the industry that
15 they can't figure out how to regulate it, because the oil
16 and gas industry most definitely is a different world. And
17 they are somewhat dependent on state agencies who are much
18 more familiar with what's going on out there than they are,
19 to give them guidance.

20 Another thing I've heard several times, the OSHA
21 regulations and how they deal with H₂S. There are no OSHA
22 regulations that deal with H₂S. The OSHA regulations
23 typically in all situations revert back to 1910.6,
24 incorporated by reference, and they are incorporating the
25 same API standards, state standards and what-have-you that

1 you are doing.

2 One of the few states that is an oil and gas
3 producer that has any rules relating to the safety at all
4 is Wyoming. Wyoming has the state oil and gas rules, and
5 they are looked at as a recommended practice. Because
6 they're Wyoming law, not New Mexico law, there's no way to
7 enforce them.

8 CHAIRMAN WROTENBERY: Anything else, Mr. Prather?

9 MR. PRATHER: That's -- The rest of it I've
10 pretty much supplied you here. The documentation and the
11 documents I have referred to, I have supplied you with a
12 copy.

13 CHAIRMAN WROTENBERY: Thank you.

14 Did you have any more questions?

15 COMMISSIONER BAILEY: I don't think so.

16 CHAIRMAN WROTENBERY: Okay.

17 COMMISSIONER LEE: Thank you.

18 CHAIRMAN WROTENBERY: Did anybody in the audience
19 have questions? Yes.

20 MR. GIRAND: Go ahead.

21 CHAIRMAN WROTENBERY: For Mr. Prather.

22 MR. MONTGOMERY: I don't have a question, I
23 thought you were going to ask if anybody would like to make
24 a comment.

25 CHAIRMAN WROTENBERY: Oh, okay. Well, we can do

1 that in a minute as well.

2 MR. GIRAND: I just have a comment too.

3 CHAIRMAN WROTENBERY: Okay. Well, let's just do
4 a little record cleanup here. Would you like to offer this
5 document as an exhibit?

6 MR. PRATHER: Please.

7 CHAIRMAN WROTENBERY: Steve, could you mark your
8 copy as Prather Exhibit Number 1? Would that be
9 acceptable? And we'll do the same thing.

10 MR. GANTNER: Let me just ask him one more
11 question.

12 CHAIRMAN WROTENBERY: Oh, okay. Sure.

13 MR. GANTNER: What's your understanding of what
14 the IDLH means? Who sets that standard and what does that
15 mean?

16 MR. PRATHER: IDLH is set by NIOSH --

17 MR. GANTNER: Okay.

18 MR. PRATHER: -- and it means that at that point
19 when I consume that dosage, that I can expect to have
20 adverse and irreversible health effects.

21 MR. GANTNER: Over what period of time?

22 MR. PRATHER: Well, the dosage is based on time.

23 MR. GANTNER: No, I'm saying what is your
24 understanding, period of time that you would be exposed to
25 that level at which you would have an adverse --

1 MR. PRATHER: That's totally dependent on the
2 level.

3 MR. GANTNER: Would you believe the IDLH is
4 defined by NIOSH as the level at which a worker can escape
5 in less than 30 minutes and not incur irreversible health
6 effects?

7 MR. PRATHER: No, that's the permissible exposure
8 level.

9 MR. GANTNER: No, sir, that is the definition of
10 an IDLH.

11 MR. PRATHER: Well, is 100 parts per million
12 possibly fatal?

13 MR. GANTNER: By all this stuff I've read, it is
14 not. I have not seen any case that I have seen where it is
15 fatal. You should be aware that there are emergency
16 response planning guide levels that are set by AIJ, and the
17 EPA has set one called an AGEL in which they reference
18 levels of 100 parts per million as the level of maximum air
19 concentration below which it is believed that nearly all
20 individuals could be exposed for up to one hour without
21 experiencing or developing a life-threatening health
22 effect.

23 I'm just reading right off the definition.

24 MR. PRATHER: Also in this document -- and I
25 believe I have an extra copy here -- there is a document in

1 the very back, a New Alarm over Hydrogen Sulfide.

2 MR. GANTNER: I haven't seen your documents.

3 MR. PRATHER: Some very recent research where one
4 entity is saying that H₂S can be harmful in as low as parts
5 per billion.

6 We've looked at H₂S in the past as something I
7 inhale, and if I exhale it then it's gone. And we're
8 finding that that is not true at all, that there are
9 residual and long-term effects from low dosages.

10 MR. GANTNER: I just wanted to understand what
11 your understanding was of the IDLH versus what the
12 definition says.

13 MR. PRATHER: Well, it's exactly the definition
14 that's given here by NIOSH.

15 CHAIRMAN WROTENBERY: Anything else, Mr. Prather?

16 Okay, we've marked your document here as Prather
17 Exhibit Number 1, and we will accept this into the record.

18 And we'll also note that you have stated your
19 background and --

20 MR. PRATHER: One thing here -- and you know, if
21 I was sitting on that other side I would be highly offended
22 by some of the statements I've made. And I'm not saying
23 that every operator out there operates that way, but there
24 are operators out there today who do operate that way, and
25 we've got to deal with the worst-case scenario.

1 MR. BROOKS: Because of your last statement, may
2 I ask one question? Where in this NIOSH document is the
3 definition stated? You have this NIOSH document, which I
4 think I found in your booklet behind the third color tab,
5 but just scanning it, I don't see the definition.

6 MR. PRATHER: Right here in the middle. It's not
7 truly a definition, it's the basis for origin.

8 MR. BROOKS: Okay, thank you.

9 CHAIRMAN WROTENBERY: I just wanted to say that
10 we noted your background and experience and accept your
11 qualifications to testify here today.

12 And then likewise, we need to do some record
13 cleanup for Mr. Gantner. Do you wish to submit --

14 MR. GANTNER: All three.

15 CHAIRMAN WROTENBERY: -- the revisions that
16 you're proposing to the Rule as an exhibit?

17 MR. GANTNER: Yes, please.

18 CHAIRMAN WROTENBERY: And do you have a copy of
19 that, Steve?

20 MR. ROSS: I think we need a clean copy. I wrote
21 all over it.

22 CHAIRMAN WROTENBERY: Yeah, I wrote on mine too.
23 Do you have a clean copy by any chance?

24 MR. GANTNER: We have clean copies, but they
25 won't be the red --

1 CHAIRMAN WROTENBERY: That's fine, we can tell --
2 and we'll mark that as NMOGA/IPANM Exhibit Number 1, and
3 I'll also note that we accept this exhibit, it's admitted
4 into the record, and we also accept Mr. Gantner's
5 qualifications to testify as an expert here.

6 Any other information that needs to be -- Oh, I'm
7 sorry, that's right, Mr. Montgomery and Mr. Girand both had
8 comments they wanted to make.

9 MR. MONTGOMERY: Do I make comment here, or do
10 I --

11 CHAIRMAN WROTENBERY: Wherever you're
12 comfortable. We can hear you.

13 MR. MONTGOMERY: The Chair earlier expressed some
14 doubt about the process we went through as a work group,
15 and Mr. Brooks seconded that. And I'd like to say that
16 from my perspective -- I was on the work group -- that I
17 think it was a very good process. I think that Wayne did
18 an excellent job of organizing that process, getting
19 everybody together. I think there was a tremendous effort
20 put into this by everybody to gain consensus.

21 I think we approached this from the standpoint of
22 everybody wanting to do what was in the interest of public
23 safety, and I think overall we did a pretty good job of
24 identifying what the important aspects of the requirement
25 should be, although, you know, maybe the wording wasn't --

1 maybe needed improvement or whatever, but I think the work
2 group process was very effective.

3 And you know, we tried very hard to be inclusive
4 of anybody that wanted to participate in that process, and
5 I think the draft that we came up with in the end was a
6 workable draft. And so I guess I'm proud of the work
7 product we did, I'm proud of the process we used, and I
8 think we had good leadership. So I think overall the work
9 group process worked very well. I think that same work
10 group could come back together and -- if you all chose to
11 do that, and work on all of the different inputs here, to
12 be able to get something again that would satisfy everyone.

13 And I think there is a very high level of
14 commitment in the industry to safety, and of all Mr.
15 Prather's comments the only thing I took real offense at
16 was the fact that we put profit ahead of safety, and I do
17 not believe that for a minute.

18 So I'd like to publicly thank Wayne for all the
19 effort that he put into this and what he did to lead our
20 group. Thank you.

21 CHAIRMAN WROTENBERY: Thank you, Gene.

22 Dan?

23 MR. GIRAND: I'll second Mr. Montgomery's
24 comments.

25 But I just wanted to let you know that for about

1 ten years I carried a meter that was digital that read up
2 to 900 parts per million, and it had a calibration
3 procedure. And we checked every well we owned every year
4 and new ones as they came on. We had equipment that we
5 could read digital up to -- well, it went up to 1000 as I
6 recall, and it was a digital -- had long hose you put down
7 in the tank to check inside the battery. So there's other
8 meters out there. I used to use one. We have one at Mack.

9 MR. PRATHER: Now, this is based on what the
10 people who build meters are telling us.

11 MR. GANTNER: I think portable meters, that's
12 true, the type that the personnel wear. But the type he's
13 talking about is different, and it's not meant to be
14 carried into a confined space.

15 CHAIRMAN WROTENBERY: Okay, any other comments?

16 MR. PRATHER: And I do second Mr. Montgomery's
17 remarks about the 52 as it's written. It's some excellent
18 work.

19 CHAIRMAN WROTENBERY: Thank you, Mr. Prather. We
20 appreciate your testimony.

21 We've got to talk a little bit about where to go.
22 Let me ask you, if we do send it back to the work group,
23 how long do you think the work group will need to come back
24 -- and at this point I don't know whether we'll have total
25 consensus or not, but at least I would hope the work group

1 could come back with a report on what areas we can agree on
2 and highlight for us the areas of disagreement, so that the
3 Commission will have a clear idea where we need to make a
4 call.

5 MR. ANDERSON: Come back to the Commission in a
6 month?

7 COMMISSIONER LEE: In a month? Next week,
8 Friday.

9 MR. ANDERSON: Oh, you don't want to hear it in
10 the October hearing?

11 CHAIRMAN WROTENBERY: Yes, we do.

12 MS. SELIGMAN: Well, that's a nice three-day --

13 MR. ANDERSON: Oh, okay, that puts the other ones
14 off, then.

15 CHAIRMAN WROTENBERY: No, we would like to --
16 While it's still fresh on our minds, and we can remember
17 all that we heard today, we would like to hear back from
18 the work group in time so that we can publish notice for
19 the October hearing.

20 So Steve, what does that mean we would need to
21 do?

22 MR. ROSS: Well, publishing notice, if we know
23 we're going to do it and we schedule it now, that's not a
24 big deal.

25 CHAIRMAN WROTENBERY: Okay.

1 MR. ROSS: We don't have to publish the text of a
2 Rule or anything, we just have to advertise it for yet
3 another public hearing and possible adoption. And we can
4 do that now for the October hearing. It's about 15 to 30
5 days, depending on what time of the month you decide to
6 publish --

7 CHAIRMAN WROTENBERY: Well, I guess what I would
8 hope would be to get a written report from the work group
9 in time that we could prepare to take some action at the
10 October hearing. I mean, I don't know that we need
11 additional testimony, so what I would --

12 MR. ROSS: We can do either --

13 CHAIRMAN WROTENBERY: Yeah.

14 MR. ROSS: -- whatever you want to do.

15 CHAIRMAN WROTENBERY: I think what I'd like to do
16 is set some date in advance of the October hearing that
17 would be the deadline for the receipt of a written report
18 from the work group, and like to get it early enough so
19 that you would have time to sort through it and prepare
20 some draft language for the Commission to consider at the
21 October hearing.

22 COMMISSIONER LEE: What day?

23 CHAIRMAN WROTENBERY: The October meeting is the
24 25th.

25 MR. ANDERSON: How about a report by the 15th for

1 the hearing on the 25th?

2 CHAIRMAN WROTENBERY: Will that give you enough
3 time?

4 MR. ROSS: Oh, absolutely.

5 CHAIRMAN WROTENBERY: Okay, that sounds good.
6 What I would like to have from the work group is a report
7 that clearly identifies the areas of agreement. And then
8 for any issues that you can't resolve, I'd like some
9 information concerning the different perspectives on those
10 issues. What is it that is at the core of the
11 disagreement? So that the Commission will be able to
12 basically make a call in October, which way to go on each
13 of those areas of continuing disagreement.

14 And we will then leave the record open until the
15 15th so that we can take the work group's report.

16 Is that clear to everybody? Any ambiguity in
17 those instructions?

18 MR. PRICE: What time on the 15th?

19 CHAIRMAN WROTENBERY: The close of business, five
20 o'clock.

21 MR. PRICE: Five o'clock.

22 CHAIRMAN WROTENBERY: Is that clear enough,
23 Steve?

24 MR. ROSS: I could draft another notice and place
25 it on the website, you know, sort of like to get a draft of

1 these Rules, if you want.

2 CHAIRMAN WROTENBERY: What I'm really interested
3 in is getting the work group recommendations on the
4 evidence that we've already heard and the comments that
5 we've already received.

6 MR. ROSS: So you probably to limit holding the
7 record open just to receive this one report --

8 CHAIRMAN WROTENBERY: That's what I thought we
9 would do.

10 MR. ROSS: -- that and that alone?

11 CHAIRMAN WROTENBERY: Yeah. Does that sound
12 reasonable?

13 COMMISSIONER BAILEY: Can we ask them to explain
14 how the levels are determined, the 100/500. Because I
15 don't recall ever hearing the justifications or the reason
16 behind 100 or 500 parts per million --

17 CHAIRMAN WROTENBERY: Well, actually --

18 COMMISSIONER BAILEY: -- what that leads to.

19 CHAIRMAN WROTENBERY: -- they may be able to
20 comment on that right now.

21 COMMISSIONER LEE: Can you?

22 CHAIRMAN WROTENBERY: Wayne, would you like to --

23 MR. PRICE: I'm sorry, I didn't hear the
24 question.

25 COMMISSIONER BAILEY: I can't recall ever hearing

1 how the 100- and 500 parts-per-million levels were chosen.
2 What was that based on, and why were those the levels that
3 were chosen for the different activities, or locations?

4 MR. PRICE: I think I testified earlier on the
5 100, but not necessarily the 500.

6 COMMISSIONER BAILEY: Right.

7 MR. PRICE: We talked about the 100 being -- it
8 seems like it was a normal number that most states and the
9 federal government are currently using. And as part of our
10 objective is that we wanted to normalize our Rule with the
11 other states and the federal government, and that's why we
12 selected those numbers.

13 COMMISSIONER BAILEY: But the 500 is also --

14 MR. PRICE: The 500 is also -- it's in the Texas
15 rule and Onshore Order 6.

16 COMMISSIONER BAILEY: Okay.

17 CHAIRMAN WROTENBERY: And the reason that the
18 standard is higher for a public road than for a public
19 area, you might want to summarize that.

20 MR. PRICE: Well, the work group had a lot of
21 discussion concerning that. Obviously if you're -- the
22 exposure time going down a highway is not going to be the
23 same as if you're in a house.

24 So we kicked that around a considerable amount,
25 and we accepted the tiered approach that the BLM and the

1 State of Texas used.

2 CHAIRMAN WROTENBERY: Thank you.

3 MR. MONTGOMERY: I'd like to say one other thing
4 just to make sure it's clear. There's two different 100s.

5 There's 100 that causes you to implement the
6 Rule, and that's if you have 100 parts per million in the
7 equipment. It's not out of the air, it's the fact that
8 there's 100 parts per million in -- from the well, the gas
9 from the well or from the equipment.

10 And then there's the 100-part-per-million radius
11 of exposure and the 500-part-per-million radius-of-exposure
12 calculations.

13 And so recognize that this Rule goes into effect
14 if there's 100 parts per million in the pipe. That's when
15 the Rule starts to apply. I don't know if that's clear or
16 not, but there's two different 100s in the Rule.

17 MR. PRATHER: At 100 in the pipe you have to have
18 a plan. So you have to --

19 MR. MONTGOMERY: Yeah, the Rule is in effect at
20 100 in the pipe.

21 MR. PRATHER: Yeah, that's the reason. You have
22 to have a plan. You don't have to do anything except have
23 a plan.

24 MR. GANTNER: No, that's not true.

25 MR. PRATHER: When you get 100 in the atmosphere

1 is when you start making the plan work.

2 MR. MONTGOMERY: No, that's not the way it's
3 written.

4 MR. MANTHEI: The plan is assigned -- You have a
5 theoretical 100 in the atmosphere. We're not going out to
6 this leak or this incident and measuring the atmosphere and
7 not acting until we get to 100 parts. The plan is a
8 theoretical and worst-case scenario.

9 If that well had 100 parts per million and we had
10 a complete sever of the wellhead and all of that volume
11 escaped, that would create a large area, and that's that
12 100-part radius that we are going to try to protect.

13 That's worst-case scenario. Most leaks aren't that bad.

14 But when we know there's a leak, we don't wait
15 until we detect 100 parts or we wait until we detect 500
16 parts. When we know there is a leak, we act. Not when
17 we've got a measured rate, but if there is a release that
18 could, we act then.

19 MR. PRATHER: If it's in that 100-part-per-
20 million area. So if it's outside that and Mrs. Brown only
21 has a living room with 50 parts per million, then it's not
22 included.

23 MR. MANTHEI: We don't wait until the measure
24 gets to 50 parts per million.

25 MR. PRATHER: But I mean even on a calculated

1 distance. If we calculate Mrs. Brown is going to have 50
2 parts per million in her living room, then we do nothing
3 about it.

4 MR. GANTNER: No, that's not true.

5 MR. PRATHER: The way the Rule is written, that's
6 true --

7 MR. GANTNER: The way the Rule --

8 MR. PRATHER: -- it only deals with that radius
9 of exposure, and that would be outside that radius of
10 exposure.

11 MR. GANTNER: No, the Rule defines when a plan is
12 necessary and when you have to activate it. How you
13 activate that plan, how far downstream, how far downwind
14 you protect is a company's decision. And companies that I
15 know, when they activate that plan, they're going to get
16 with the police and they're going to jointly decide how
17 far --

18 MR. PRATHER: But we're not talking about those
19 company plans, we're talking about Rule 52. Rule 52 quits
20 at 100-parts-per-million exposure.

21 MR. GANTNER: Rule 52 says when you have to have
22 a plan. That's what Rule 52 says.

23 CHAIRMAN WROTENBERY: Okay, let me just
24 summarize, I think, what we decided we'd do as the next
25 step.

1 We will leave the record open until October 15th,
2 but only for the receipt of a report from the work group,
3 which will get together and review the information that has
4 been submitted today and the various proposals for changes
5 to the draft that is currently before the Commission, and
6 we'll summarize those areas on which you can reach
7 agreement and also identify those areas on which you cannot
8 agree, and provide the Commission a little bit of
9 information on the basis of the different positions on
10 those areas of disagreement.

11 And then the Commission will take that
12 information at its hearing on the 25th of October and work
13 towards issuing a final order, adopting a Rule 52.

14 And those comments -- the work group report will
15 be due at 5:00 p.m. on October 15th.

16 Any other area of uncertainty?

17 Okay, let me say thank you very much, everybody,
18 for sticking it out with us today. It was very helpful to
19 have the opportunity to see all of you here and ask
20 questions and hear from you on the provisions of the
21 proposed Rule. We appreciate the time it took, all of you,
22 but it was most helpful, and I'm looking forward to seeing
23 the work group report.

24 Thank you very much.

25 Is there anything else we need to do today? I

1 don't believe so.

2 COMMISSIONER BAILEY: Marks and Garner?

3 CHAIRMAN WROTENBERY: That will be next week.

4 MR. ROSS: Next week.

5 COMMISSIONER BAILEY: No, but do we need to
6 discuss the --

7 CHAIRMAN WROTENBERY: I don't, because I haven't
8 had a chance to look at it. So we'll do that next week.

9 COMMISSIONER BAILEY: Okay.

10 CHAIRMAN WROTENBERY: Good. Thank you very much.

11 (Thereupon, these proceedings were concluded at
12 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