### 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:

APPLICATION OF THE NEW MEXICO OIL
CONSERVATION DIVISION FOR REPEAL OF
EXISTING RULE 50 CONCERNING PITS AND
BELOW GRADE TANKS AND ADOPTION OF A
NEW RULE GOVERNING PITS, BELOW GRADE
TANKS, CLOSED LOOP SYSTEMS AND OTHER
ALTERNATIVE METHODS TO THE FOREGOING,
AND AMENDING OTHER RULES TO MAKE
CONFORMING CHANGES; STATEWIDE

CASE NO. 14,015

ORIGINAL

### REPORTER'S TRANSCRIPT OF PROCEEDINGS

### COMMISSION HEARING

BEFORE: MARK E. FESMIRE, CHAIRMAN

JAMI BAILEY, COMMISSIONER

WILLIAM OLSON, COMMISSIONER

Volume II - November 5th, 2007

Santa Fe, New Mexico

This matter came on for hearing before the Oil Conservation Commission, MARK E. FESMIRE, Chairman, on Monday, November 5th, 2007, at the New Mexico Energy, Minerals and Natural Resources Department, 1220 South Saint Francis Drive, Room 102, Santa Fe, New Mexico, Steven T. Brenner, Certified Court Reporter No. 7 for the State of New Mexico.

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### APPEARANCES

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FOR THE DIVISION:

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FOR NEW MEXICO OIL AND GAS ASSOCIATION; CONOCOPHILLIPS COMPANY; DUGAN PRODUCTION CORPORATION; and ENERGEN RESOURCES CORPORATION; and an INDUSTRY COMMITTEE comprised of BP America Production Company, Inc.; Benson-Montin-Greer Drilling Corporation; Boling Enterprises, Ltd.; Burlington Resources Oil and Gas Company; Chesapeake Energy Corporation; Chevron USA, Inc.; ConocoPhillips Company; Devon Production Company; Dugan Production Corporation; Energen Resources Corporation; Marathon Oil Company; Marbob Energy Corporation; Merrion Oil & Gas Corporation; Occidental Permian, which includes OXY USA, Inc., and OXY USA WTP Limited Partnership; Samson Resources Company; J.D. Simmons, Inc.; Williams Production Company, LLC; XTO Energy, Inc.; and Yates Petroleum Corporation:

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

(Continued...)

## APPEARANCES (Continued)

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(Continued...)

# APPEARANCES (Continued)

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Director of Governmental Affairs
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\* \* \*

WHEREUPON, the following proceedings were had at 1 2 9:00 a.m.: CHAIRMAN FESMIRE: At this time we're going to 3 call the special meeting of the New Mexico Oil Commission 4 to order. Let the record reflect that it is nine o'clock 5 on Monday, November 5th, 2007. 6 7 The only cause before the Commission is -- and the reason for this special meeting -- is Case Number 8 14,015, the Application of the New Mexico Oil Conservation 9 Division for repeal of existing Rule 50 concerning pits and 10 below grade tanks and the adoption of a new rule governing 11 12 pits, below grade tanks, closed loop systems and other 13 alternative methods to the foregoing, and amending other 14 rules to make conforming changes; statewide. Let the record that present are Commissioner 15 Bailey, Commissioner Olson and Commissioner Fesmire. 16 17 have a quorum present. This hearing was originally convened on Monday, 18 October 22nd, at which time we heard opening statements 19 20 from the parties that did not wish to waive their -- to reserve their opening statement until their case. 21 22 At this time we'll take the appearances of attorneys present. 23 Mr. Brooks? 24

MR. BROOKS:

25

Mr. Chairman, honorable

Commissioners, I'm David Brooks, of the Energy, Minerals and Natural Resources Department of the State of New Mexico, for the Oil Conservation Division.

CHAIRMAN FESMIRE: Mr. Carr?

MR. CARR: May it please the Commission, I'm
William F. Carr with the Santa Fe office of Holland and
Hart, L.L.P. We represent the New Mexico Oil and Gas
Association. Present with us today is Bob Gallagher, the
president of the association, and Stephanie Reed, Director
of Governmental Affairs.

We also represent a group called the industry committee, and so everyone here knows who we are I'd like to again provide the names of the companies, with your permission:

BP America Production Company; Benson-Montin-Greer Drilling Corporation; Boling Enterprises, Ltd.;
Burlington Resources Oil and Gas Company; Chesapeake Energy Corporation; Chevron USA, Inc.; ConocoPhillips Company;
D.J. Simmons, Inc.; Devon Energy Production Company; Dugan Production Corporation; Energen Resources Corporation;
Marathon Oil Company; Marbob Energy Corporation; Merrion
Oil & Gas Corporation; Occidental Permian, LTD, including
OXY USA, Inc., and OXY USA WTP Limited Partnership; Samson
Resources Company; Williams Production Company, LLC; XTO
Energy, Inc.; and Yates Petroleum Corporation.

We also independently entered appearances for 1 ConocoPhillips, Dugan Production Corporation and Energen 2 Resources Corporation. ConocoPhillips will present its own 3 testimony at the appropriate time during the course of the 4 hearing. 5 Thank you, Mr. Chairman. 6 CHAIRMAN FESMIRE: Thank you, Mr. Carr. 7 Mr. Hiser? 8 MR. HISER: Mr. Chairman, members of the 9 Commission, Eric L. Hiser, from Jorden, Bischoff and Hiser. 10 We are here to represent the New Mexico industry committee 11 12 in addition to Mr. Carr, and also separately represent Yates Petroleum Corporation. 13 CHAIRMAN FESMIRE: Okay. Mr. Moffett? 14 partner? 15 MR. HUFFAKER: Mr. Chairman, I'm Greg Huffaker 16 17 here instead of Mr. Moffett. I'm from the firm of Huffaker and Moffett and I represent Controlled Recovery, Inc. 18 Good morning. 19 CHAIRMAN FESMIRE: Mr. Jantz? 20 MR. JANTZ: Good morning, Mr. Chairman, members 21 22 of the Commission. My name is Eric Jantz. I'm a staff attorney with the New Mexico Environmental Law Center, here 23 on behalf of the Oil and Gas Accountability Project. 24 CHAIRMAN FESMIRE: Ms. Belin? 25

MS. BELIN: Lettie Belin of Belin and Sugarman, 1 here for New Mexico Citizens for Clean Air and Water. 2 CHAIRMAN FESMIRE: At our last meeting Karin 3 Foster also entered an appearance for the Independent 4 Petroleum of Association of New Mexico. 5 MR. MULLINS: Mr. Chairman, my name is Tom 6 Mullins, I'm the northwest New Mexico vice president of the 7 Independent Petroleum of Association of New Mexico. 8 Unfortunately, Ms. Foster is delayed 9 approximately an hour and a half from her attendance here 10 today at the meeting, but I would ask if you could defer 11 your legal arguments regarding her motions until her 12 13 arrival. 14 CHAIRMAN FESMIRE: Okay. Are there any other 15 attorneys present who wish to make an -- enter an 16 appearance? 17 Okay, as Mr. Mullins noted, there are two motions filed by Ms. Foster that are pending. There's also a third 18 19 motion pending that involves Ms. Foster, so we'll defer 20 action on those motions until Ms. -- at some time when Ms. 21 Foster is present. 22 Mr. Brooks, are you ready to begin your case-inchief? 23 MR. BROOKS: Mr. Chairman, members of the 24 Commission, we would respectfully request, if it's not 25

objectionable to anyone, a little bit different type of presentation order for our first two witnesses.

We would like to start off with a slide show that's approximately eight minutes long, then follow that with the testimony of Chief Price about his initial presentation and overview, and then follow with the unlined pit testimony from Mr. von Gonten, and then allow both Mr. Price and Mr. von Gonten to be cross-examined since those initial presentations will involve the same subject matter. Of course, if that is not acceptable to other counsel and the Commission, we will proceed with Mr. Price's testimony first and submit him for cross-examination, followed by Mr. von Gonten.

CHAIRMAN FESMIRE: Is there any objection?

MR. CARR: Mr. Chairman, I have no objection to what Mr. Brooks is proposing. I would suggest that once Ms. Foster gets here and we have all counsel present, that at some time today it would be helpful to sort of take a look at the case and see how many attorneys and how many witnesses and estimate time.

From the industry committee's perspective we have three experts who will be arriving today at noon, and not that this breaks anyone's heart, I'm sure, but it costs \$10,000 a day to just sit and listen, so -- in terms of expert fees and all. And so if we could at some point

today work out a schedule, that would be -- but we certainly do not object to Mr. Brooks presenting the case as he desires.

CHAIRMAN FESMIRE: Okay. Mr. Carr, we'll do our best because heaven knows, we want to make sure that the industry saves money in the presentation.

(Laughter)

MR. CARR: And Mr. Chairman, I would hope the Commission would be concerned about what the costs of this proposal are.

CHAIRMAN FESMIRE: We always are, Mr. Carr.

Is there any objection from the Commission to doing it that way?

Mr. Hiser?

MR. HISER: Mr. Chairman, one other thing that we may want to address in order to spare numerous objections throughout what is likely to be the presentation that Mr. Price and Mr. von Gonten will do. That is an objection to foundation and to whether the pits that we see, the approximate time of the photos, whether they are production pits or whether they are drilling or reserve pits, all that needs to be specified, because there are different types of pits.

And for the Commission -- or for the Division to -- must see them all together, I think, is to do a

disservice to the Commission as to what is the 1 2 environmental impact of each of the different types of 3 pits. So it seemed to me that perhaps the Commission 4 should direct the Division that they should distinguish as 5 to what type of pit and the dates of the photos and the 6 7 dates of the problems that they're going to speak about as part of their presentation, to spare us having to object to 8 each one on the basis of foundation. 9 CHAIRMAN FESMIRE: In essence, Mr. Hiser, you're 10 instituting a running objection prior to the introduction 11 of the evidence? 12 13 (Laughter) MR. HISER: That's correct. And that's just to 14 save us having to get up at every slide and do the same 15 16 thing. 17 CHAIRMAN FESMIRE: Okay, the record will reflect 18 Mr. Hiser's request. 19 Is there any other comments before we begin? MR. HISER: I take it the record is also 20 reflecting the Chairman's denial of my request? 21 22 CHAIRMAN FESMIRE: It's hard to rule on an objection before the evidence is presented. 23 MR. HISER: Fair enough, I will prepare to make 24 25 my objection when the first slide appears.

MR. BROOKS: Mr. Chairman, since the slides are going to be rotated electronically and they're going to each be only like -- what, a half a minute --

MR. VON GONTEN: Three to five seconds.

MR. PRICE: Three to five seconds.

MR. BROOKS: -- very short on the screen, we certainly would prefer that the Chair make a ruling. These are just a cross-section of pits, and Mr. Price will identify generally what they are, but there is no identification to each specific one.

We understand Mr. Hiser objects on that ground. We would prefer that the Chair make a ruling and give Mr. Hiser his running objection, if the Chair overrules it, rather than having to stop the projector during the presentation.

CHAIRMAN FESMIRE: Okay. Mr. Hiser, the Chair notes your running objection, the Chair will overrule your running objection at this point. If there are specific objections to an individual slide, we'd be glad to entertain it at that time.

Anything else before we begin?

Okay, we're going to change our procedure one slight way. Because this is going to be a several-day hearing, we're going to swear the witnesses in one at a time to make sure that, you know, everybody gets sworn in

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1
     prior to their testimony.
 2
               So at this time, Mr. Brooks go ahead and begin
 3
     your presentation.
               MR. BROOKS: Mr. Chairman, in the light of the
 4
 5
     manner in which we're presenting it, we'll request that Mr.
 6
     Price and Mr. von Gonten both be sworn at this time.
 7
               CHAIRMAN FESMIRE: Okay, Mr. Price, Mr. von
     Gonten, would you stand, please?
 8
               (Thereupon, Mr. Price and Mr. von Gonten were
 9
10
     sworn.)
11
               MR. BROOKS: Call Wayne Price.
               CHAIRMAN FESMIRE: Mr. Price?
12
13
               WITNESS PRICE: Actually, Mr. von Gonten for the
14
     slides.
15
               MR. BROOKS: Oh, Mr. Price has reminded me that
     Mr. von Gonten will provide the foundation for the slide
16
17
     show, so we'll call Glenn von Gonten.
18
               CHAIRMAN FESMIRE: Okay, Mr. von Gonten?
19
                          GLENN VON GONTEN,
20
     the witness herein, after having been first duly sworn upon
21
     his oath, was examined and testified as follows:
22
                          DIRECT EXAMINATION
23
     BY MR. BROOKS:
24
               Mr. von Gonten, before you start the show, would
          Q.
25
     you state your name, please, for the record?
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1	Α.	Glenn von Gonten.
2	Q.	And where do you reside?
3	Α.	Santa Fe.
4	Q.	In fact, you reside in de Vargas Heights, I
5	believe?	
6	Α.	Yes, I do.
7	Q.	Just a few blocks from me?
8	А.	That's correct.
9	Q.	Very honorable and prestigious place to reside?
10	Α.	Seems so to me.
11	Q.	Mr. von Gonten, would you explain to us what
12	we're abou	ut to see?
13	Α.	Yes, this is a slide show of approximately 106
14	slides. 1	These slides were photographs taken by OCD's
15	district i	inspectors.
16		These slides are, as far as we can tell, more
17	recent tha	an January 1, 2006. The inspectors do not
18	generally	take pictures of pretty pits, so what we are
19	focusing (	on here is problems that have been identified by
20	OCD staff.	•
21	i I	And again, these are more recent, either by the
22	date stamp	o on the slide or on the file itself, the
23	electronic	c file, our understanding is that these things are
24	more recer	nt than January 1, 2006.
	i	

And Mr. von Gonten, are these any particular type

25

Q.

1 of pit, or are they an assortment of different types of 2 pits? 3 Α. They are an assortment. I went through the 4 inspector's files that is on a server, and I identified 5 anything that looked like a pit. We winnowed it down to pits that were more recent 6 7 by date, and we also winnowed the pits down so that there 8 wouldn't be duplicates. 9 Q. And do you have the locations of these pits? 10 No, I do not. Α. Okay. You may proceed with your demonstration, 11 Q. 12 Mr. von Gonten. This presentation is intended to be a slide show. 13 Α. 14 I don't plan on interrupting it to make comments. 15 (Thereupon, the slides were shown.) 16 THE WITNESS: And that concludes the slides. 17 MR. BROOKS: Thank you. Could we have the 18 lights, please? At this time the Division will call Wayne Price. 19 20 CHAIRMAN FESMIRE: Mr. Price? 21 MR. HISER: Mr. Chairman, having now seen the 22 slides, and having seen that the Division is unable to meet 23 the foundational requirements of being unable to identify 24 where they are, and showing no relevance whatsoever, 25 because we don't know what types of pits they are, we don't

know any of that type of stuff, we would re-ask that -- the 1 motion that the entire slide presentation be stricken from 2 the record. 3 CHAIRMAN FESMIRE: Mr. von Gonten, were those 4 5 pictures taken in New Mexico? 6 THE WITNESS: Yes, sir. 7 CHAIRMAN FESMIRE: And are they of oil and gas pits? 8 THE WITNESS: As far as I know, they were all 9 taken by OCD district inspectors while conducting official 10 inspections at oil and gas operation sites. 11 CHAIRMAN FESMIRE: As far as you know, do you 12 believe that they were taken by oil and gas inspectors in 13 New Mexico? 14 THE WITNESS: Yes. 15 CHAIRMAN FESMIRE: I'm going to overrule your 16 17 objection, Mr. Hiser. 18 MR. HISER: Not the custodian of the records, he can't testify to that, respectfully, Mr. Chairman. 19 CHAIRMAN FESMIRE: Mr. Hiser, you understand that 20 we're not strictly bound by the rules of evidence here. 21 MR. HISER: I'm just trying to establish what 22 23 your evidentiary grounds are going to be. Thank you, Mr. 24 Chairman. 25 CHAIRMAN FESMIRE: Mr. Brooks?

1	MR. BROOKS: Call Wayne Price.		
2	WAYNE PRICE,		
3	the witness herein, after having been first duly sworn upon		
4	his oath, was examined and testified as follows:		
5	DIRECT EXAMINATION		
6	BY MR. BROOKS:		
7	Q. Good morning, Mr. Price.		
8	A. Good morning.		
9	Q. Somebody raised a question about the adequacy of		
10	the amount of water you brought with you. Do you feel		
11	comfortable that you have plenty?		
12	A. I do feel comfortable.		
13	Q. Very good. Would you state your name, please,		
14	for the record?		
15	A. Wayne Price.		
16	Q. And by whom are you employed, Mr. Price?		
17	A. The New Mexico Oil Conservation Division.		
18	Q. And what is your title?		
19	A. I'm the Environmental Bureau Chief.		
20	Q. And where do you reside, Mr. Price?		
21	A. I live in Rio Rancho, New Mexico.		
22	Q. And you work here in Santa Fe, correct?		
23	A. I do.		
24	Q. Mr. Price, would you briefly summarize your		
25	education and experience as an environmental engineer?		

- I have a degree from New Mexico State University, 1 Α. electrical engineering degree. As early as 1969 I was 2 working on environmental projects for the Goodyear Tire and 3 Rubber Company. Subsequently I worked for a large chemical 4 company as their environmental compliance manager. 5 I've had practical experience in the oilfield. 6 actually -- during my college summers I roughnecked during 7 8 those times. 9 0. How long have you worked for the Oil Conservation 10 Division? 11 A. Thirteen years. And did you work in the Hobbs District at one 12 Q. time? 13 I did, approximately five years. 14 A. And what did you do there? 15 Q. I was the environmental engineer. 16 A. And did your experience there include conducting 17 Q. the inspections? 18 A. Yes, it did. 19 And how long have you been here in Santa Fe? 20 Q.
- 21 A. Approximately eight years.
  - Q. And how long have you been Bureau Chief?
- A. Approximately two years, or a year and a half, two years.
  - Q. Time gets by.

22

What? 1 Α. Time gets by. 2 Q. Α. It does. 3 MR. BROOKS: Mr. Chairman, I will tender Mr. 4 Wayne Price as an expert in environmental engineering and 5 6 oil and gas inspections. 7 CHAIRMAN FESMIRE: Any objection? MR. CARR: No objection. 8 MR. HISER: No objection. 9 CHAIRMAN FESMIRE: Mr. Price's experience is so 10 11 admitted. (By Mr. Brooks) Okay, Mr. Price, you may begin 12 0. with your presentation, your overview of this Rule, and I 13 may -- I'm not going to proceed by strict question and 14 answer, if that's acceptable to counsel. I would expect 15 you to proceed through your presentation, and I will 16 interrupt you when I have questions that I want to ask --17 18 Α. Okay. -- if that's satisfactory with you? 19 Q. 20 Α. Okay, thank you. Good morning, Commissioners, my name is Wayne 21 Price, I'm the Environmental Bureau Chief of the OCD. 22 I'd like to take this opportunity to explain why 23 the Environmental Bureau is here before you today and 24

provide you a brief overview of what we're proposing.

In 2003, the OCD took the first step in this process and formulated a pit rule. The emphasis at that time was to collect a hodge-podge of orders, rules, memorandums, guidelines and merge those into one comprehensive rule. The primary reason for that, of course, was to make the rule more user friendly and -- by placing all the past regulations into one place.

The rulemaking back then followed the same process that it has now, and we did have a task force.

- Q. Okay. Now before you go on to your next slide, this pit that's shown on your cover sheet, is this a pit in New Mexico?
  - A. Yes, it is.
  - Q. And is this an oil and gas pit?
- 15 A. Yes, it is.

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- 16 Q. And is this unlined?
- 17 A. That's an unlined pit.
  - Q. And tell me some of the things this picture shows that you would take exception to.
    - A. Well, it's an unlined pit. However, I will have to say that it's in the so-called exempt area.
      - Q. So it's legal under present rules?
  - A. That is correct.
- Q. And it looks like the netting is kind of falling apart there?

A. That's correct.

- Q. And -- Okay, well then, let's move ahead to your next presentation.
- A. Okay. Well, it's been apparent to the OCD that while this was a first good step, the existing pit rule, we noted that it has deficiencies. These issues have been pointed out by land owners to general public, OCD's own personnel, and even the industry. And it's for that reason we decided to -- some time ago, to go ahead and have a rule rewrite, which was in order.

The following slides will provide a brief overview of the process and the proposed Rule.

Of course, I think the most important question that everyone should be asking, including ourselves, is revamp the current pit rule, and why? And I have three main reasons.

The Governor's Environmental Justice Mandate.

Under the mandate to the OCD, regulations shall be reviewed on a routine basis to ensure protection of the public. We feel that by rewriting this particular rule, that we're following that mandate.

It also notes that the State's rules and regulations should fall in line with the federal programs where appropriate. One of the things we'll be talking about is cumulative effect, and that's also mentioned in

the Governor's Environmental Justice Mandate.

That all voices be heard. Quality of life issues is part of the Governor's mandate.

In a recent Rhino decision it was noted that the public does not necessarily have to show permits would violate specific technical requirement. In this particular case, the public has expressed concern as to why the citizens of New Mexico should be required to be the beneficiary of a risk when there are other viable options to handle and dispose of waste.

Partnership with the public. A more balanced approach when developing natural resources, making sure the public has a say in this process.

Now it does not mean -- does not necessarily mean, not in my backyard. Now New Mexico depends heavily on the oil and gas industry, and our overall quality of life would suffer without it. I think we all recognize that.

Next slide.

Performance based standards are not working. Let me explain what a performance based standard is. If you would go out to the interstate and you get on the interstate and the speed limit sign would say, Drive at a safe speed, see guidelines, or --

(Laughter)

-- or, Don't drink and drive, see guidelines, 1 Α. that's a performance based standard. 2 Sadly, as you just saw, we have hundreds of 3 examples where performance based standards just aren't 4 And also sadly to say, not one time -- and I 5 repeat, not one time has industry come forth to the 6 Environmental Bureau and say, You know, this isn't working, 7 we need to change, we need to do something. 8 So therefore performance based standards have not 9 10 worked, and so therefore we feel that we have to go to a 11 prescriptive method. Now Mr. Price, I would like to ask you about a 12 couple of examples on this. First of all, the present pit 13 rule was adopted in -- was it 2003? 14 2003 --15 Α. 16 Q. Yeah ---- that's correct. 17 Α. -- this is Rule 50 in our present rulebook? 18 Q. 19 Α. Correct. And basically it consists of performance based 20 0. standards, correct? 21 It does. 22 Α.

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24

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Q. I want to read you some language from Rule 50 in regards to closure. It says, Where pit contents will likely migrate and cause ground water or surface water to

exceed Water Quality Control Commission Standards, the 1 pit's contents and the liner shall be removed and disposed 2 of in a manner approved by the Division. 3 Now is that an instance of one of these 4 5 performance based standards? 6 Α. Yes. 7 Is it also an instance of one that is not 0. 8 working? 9 Α. Correct. 10 Q. Do we know how to apply that? Do our inspectors 11 know how to apply that provision? It's fairly ambiguous. 12 Α. Does industry know how to comply with it? 13 Q. 14 Α. No. Okay, let me quote another one. 15 Q. Rule 50.C.(2).(b), The liner shall be designed, 16 constructed and maintained so as to prevent the 17 18 contamination of fresh water, public health and the environment. 19 20 Does that tell anybody what kind of liner they need to use? 21 22 No, it doesn't. A. Does it tell our inspectors what kind of liner 23 24 that they should require people to use?

25

Α.

No.

Rule 50.C.(2).(a) says, The Division may 1 0. Okay. require additional protective measures for pits located in 2 groundwater sensitive areas or wellhead protection areas. 3 Does that tell you what additional protective 4 measures the Division should require? 5 Not in my opinion, it does not. 6 A. 7 Does it tell you what groundwater sensitive areas Q. 8 are? 9 Α. No. 10 Q. Are these some of the defects with the present Rule that will be cured or significantly addressed in the 11 proposal? 12 Yes. 13 Α. 14 Q. Okay, you may continue. The other point I'd like to point out is the 15 Α. documented vadose zone and groundwater contamination cases. 16 OCD will show that the current regulations are not working 17 and we continue to see contamination, both in the vadose 18 zone and groundwater. 19 You will hear industry claim we're not using 20 sound science and we do not have data. We stand ready 21 22 today to show you real data and the sound science. 23 We had a process that we invoked, and Mr. von 24 Gonten, I think, is going to -- in his testimony will go

I will also.

into a little bit more detail on that.

The next slide.

This is one of the public outreach meetings that we had, and this particular one, I believe, was in Santa Fe. We had four meetings. We had one in Santa Fe, one in Hobbs, one in Farmington, and of course Santa Fe -- and Artesia.

Go back.

And I thought it would be very beneficial for the audience and the Commission to see exactly what we did in the public outreach meetings.

We're having a little bit of problem here, but we'll get it up.

CHAIRMAN FESMIRE: At this time I'd ask that everybody make sure that they've signed in, and if you want to make a comment, check the comment box over on the far right column.

THE WITNESS: Okay, we've seen that slide, so go to the next slide.

The purpose of the meeting was to point out possible deficiencies in OCD's current Pit Rule 50, was to stimulate public input. We had an objective as define the rulemaking process and receive public input, and we had a place where you send written comments to. We defined what the proposed rulemaking process was going to be.

Next slide.

Absolutely no pits -- or absolutely permits are required.

Now we did have an objection from industry. This slide was about five years old, and they had indicated that they don't operate this way anymore.

Drilling and workover pits, we wanted to take a look at those. Commercial pits, proper waste management, proper operation and closure of pits, surface restoration to prevent erosion and contamination from buried pits.

Go back.

This particular pit, as you can see, is out east of Artesia. There was salt coming up, we also have erosion going into a draw, which would eventually lead to the Pecos River.

Next slide.

Oilfield service companies, we want to address those.

Closed loop systems and sensitive groundwater areas. We think when you're in an area like this that you should be using a closed loop system.

Migratory bird protection, fencing requirements, protection of the public with fencing and so forth, best management practices.

Pit liners, types, thickness, seams, proper insulation and compatibility. Pit liner integrity, torn

1 pit liners. 2 Financial assurance to prevent this type of scenario. This particular slide has cost the people of New 3 Mexico approximately \$3 million as of to date, and we're 4 5 still not done. Wildlife-sensitive areas, groundwater/surface 6 7 water protection areas, unlined pits. We have to interface this rule with our other 8 9 rules, for example, the Otero Mesa rule. And of course, Valle Vidal, as you know, there 10 has been a moratorium on drilling in the Valle Vidal. 11 12 Below-grade tanks. And then guidelines versus the rule. Guidelines 13 14 are not enforceable, results in policy making that may 15 undermine due process. We had a matrix, a series of things, that we went through to -- we basically pointed out 16 17 to the audience to try to get input, and we had issues that we wanted to talk about. 18 19 Next slide. 20 And then same thing here. Next slide. 21 22 And then of course we wanted their input, and we 23 had the written comments here too. Go to permits now. 24 25 Permits --

Q. (By Mr. Brooks) Excuse me, Mr. Price, were you going to talk about the other matters on your slide entitled the process?

A. No, I was going to let Mr. von Gonten do that.

Q. Okay, very good. You may proceed.

A. Permits. In this particular Rule, we're -proposed Rule, we're of course requiring -- proposing
required permits for the following categories:

Permanent pits, temporary pits, which we'll classify as drilling workover pits, closed loop systems, below grade tanks, closure plans, sumps and emergency pits are exempt.

You see the asterisk up on the permanent pits.
We are proposing a statewide ban on unlined pits, no
exceptions, no size limit for permanent pits.

- Q. Mr. Price, are we also proposing a statewide ban on temporary pits, except on specific location, case-by-case exception?
  - A. That is correct.

- O. Please continue.
- A. Applications. We want to use the C-144 form instead of what we're doing right now. A good example of that, we have a 101, 103, 144s, and others are coming in, even by letters. And so we're having a hard time tracking all of these pits from a database standpoint. And so we

feel -- it's very important to track these, and so therefore we think the C-144 process will work in this manner.

Q. Have we encountered a lot of confusion with

- people not knowing what to file?
- A. I think that's probably a question for the District Supervisors, but it's my understanding that that is correct.
- Q. Okay. I forgot to ask you a question back here on permits, because there is one change -- all of these things require permits now, with the exception of sumps, which will not -- sumps and emergency pits will continue not to require permits -- except closed loop systems.

  Closed loop systems currently do not require permits. What is the reason for adding that requirement to the Rule?
- A. Well, as any system, closed loop systems generate a waste, and so therefore I think it should be required to be under the permit mechanism.
- Q. Okay, closed loop systems usually either have pits associated with them or they have drying pads; is that not correct? Is that an accurate statement?
- A. The closed loop systems that I have seen in New Mexico generally have drying pads. They could have pits.
  - Q. And these have to be closed in a proper manner?
  - A. That's correct.

Q. Okay, continue.

A. Prescriptive requirements. We talked quite a bit about that. We feel it's imperative now that we have to have prescriptive requirements.

Closure plans filed up front, that's in the Rule.

Permanent pits filed at the Santa Fe office, and then other

categories filed at the District Office.

Statewide ban on unlined permanent pits, it eliminates unlined permanent pits regardless of location, size and -- or groundwater. In other words, we're going to have a presentation just on unlined pits. So why?

RCRA classifies these as open dumps, it's not sensible, proper waste management in today's time to have unlined pits, and the liability is transferred to the people of New Mexico.

Highlights of siting requirements. We have new siting requirements. We're going to have additional protection for municipal and domestic water wells.

Contrary to some of the articles you've been reading in the newspapers, there have been a number of groundwater contamination cases, particularly the Lovington water well field has been contaminated. We just found out yesterday that we have another well that's being contaminated.

Prevent pits in proximity to public areas, for

73 protection of the public. 1 New setbacks required near watercourses and 2 wetlands. 3 Further details of the siting requirements. No pits located if groundwater is less than 50 5 feet. And it's in red because that was a -- it was a 6 nonconsensus item, but I'm hoping that we can all agree 7 upon that. We will justify the 50 feet. 8 300 feet from a river or stream, 200 feet from a 9 watercourse or a playa lake. 300 or 1000 feet from a 10 residence or school; the 1000 feet would be a permanent 11 pit, the 300 feet would be a drilling pit. 500 feet from a 12 domestic well, 1000 feet from a public water supply. 13 Within a municipal boundary or wellfield. 14 And that would be subject to the consent of the 15 Q. municipality, correct? 16 That is correct. 17 Α. 18 They could authorize it if they wanted to? Q. 19 Α. They could. 20 Q. Go ahead. 21 500 feet from a wetland. And then overlying any 22 mine or unstable area, and then within a 100-year 23 floodplain.

using closed loop systems or any other method where the

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We want to encourage and propose -- and require

siting requirements could not be met. And this particular 1 slide here is a closed loop system in which we gave a company the environmental merit award back in 2003.

- Now Mr. Price, I know we have another witness, Mr. Chavez, who's going to talk about closed loop systems more, but are there closed loop systems actually being used to drill wells in New Mexico?
  - Yes. Α.
  - Q. It's not an unheard of thing?
- No. 10 Α.

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- Continue. 11 Q.
- Additional construction design and operational 12 requirements. 13

Proper base for a liner insulation, minimum of 20-mil thickness liner and seaming requirements.

- Now that is an increase in the liner thickness compared to our present guidelines, is it not?
- That is correct. Α. 18
  - Q. And what do our present guidelines call for?
- 12 mil. 20 Α.
- Okay, and as we went into when I read the portion 21 Q. of the Rule a little bit ago, the actual current Rule does 22 not specify, it just says adequate, correct? 23
  - That's correct. Α.
- 25 Continue. Q.

A. And then of course we're going to have additional construction design requirements for signs, fencing, netting, water-loss detection, oil removal, retain topsoils, routine inspection, berms, et cetera.

So this is a very prescriptive rule.

- Q. I forgot to ask one follow-up question on that liner thickness. Mr. Chavez will present testimony, will he not, on that subject, the reasons for that liner requirement --
- 10 A. Yes.

- Q. -- the thickness requirement?
- 12 A. Yes, he will.
  - Q. Thank you.
    - A. As you know, we had a task force. And probably one of the hot topics, or number one topics that I think we all agreed upon was removing liquids in a timely fashion. I think it's just common sense, if you get the liquids off, it basically equates to no groundwater contamination. And once again, if you -- I'll say it again. If you remove the liquids, the probability of contaminating groundwater diminishes drastically.
    - Q. Now Mr. Price, you said that was a consensus item of the task force?
- A. No. No, on the last day it was not, it became a nonconsensus item.

Okay, and that 30 days is subject to the -- The 1 Q. 2 District Office can extend that for up to three months? 3 That's correct. Α. 4 Continue. Q. 5 New closure standards. Α. 6 Dig and haul. Disposal method is preferred, 7 that's what we're proposing. On-site deep trench burial is 8 an option. Other methods allowed through exceptions. 9 Okay, let me stop you here again. The dig and 10 haul method would be required in the absence of an 11 exception unless the facility -- unless the pit is located 12 a certain distance -- more than a certain distance from a 13 disposal facility; is that correct? 14 That is correct, and I have a slide for that. Α. And what is that distance? 15 0. 16 One hundred miles. 17 Okay, well I'll wait till you get to the slide to 18 ask you further about that. 19 And the on-site deep trench -- outside that 100-20 mile radius, then, the on-site deep trench burial is one of 21 the options that's permitted without the necessity to apply 22 for an exception, correct? 23 Α. That is correct.

But only outside the 100-mile radius?

That is correct.

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Q.

Α.

In the 100-mile radius you have to get a specific 1 Q. exception to be allowed to do trench burial? 2 Α. Correct. 3 And if you want to allow another -- want to use 4 0. another method, other than dig and haul or deep trench 5 6 burial, that requires an exception? That is correct. 7 Α. Proceed. 8 0. Once again, pits required to be closed in a 9 timely fashion. I would like to say on that particular 10 11 topic, that when we went to the field, when we talked to 12 industry reps, they all agreed that the faster you can get 13 these pits closed, the lower the probability of any sort of contamination. Time is detrimental to pits. 14 15 Chemical testing required under all pits. you're going to have a pit, we want to know if it has 16 17 leaked. 18 0. Now that is not required at the present, right, chemical testing under the pits? 19 It is not required in the Rule, it's recommended 20 in the guidelines. 21 22 Okay. So if it's not being done, would that mean Q. it would be hard to tell whether the pits that are --23

It would be virtually impossible to tell if

whether the pits are actually causing contamination or not?

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Α.

contamination is coming from a pit unless you test underneath it.

Q. Okay, continue.

A. And then of course, prescriptive treatment closure standards. We're going to have closure standards that are very prescriptive.

approval. In the task force we had land owners that were being represented there. We had -- in the previous task force we had landowners, and they had requested that -- and they didn't make it into the previous rule. We feel that landowners should have a say on -- if you're going to bury something on their property, they should have a say.

Next slide.

Okay, dig and haul. What is the issue here? Of course it's a highly contested topic about digging and hauling in the public outreach and the public -- or the task force meetings. It certainly was a nonconsensus item for people to dig and haul.

The general public appeared to want the oil and gas industry to dispose of their waste in the centralized landfills, just like we have to. For example, if you build a home, you have a dumpster out there. That dumpster — all that waste has to go to the local landfill. All of the industries has to take their waste to landfills.

And the environmental groups were totally against burying any waste on site unless it was benign, and they felt there were just too many ticking time bombs out there.

OCD heard issues from landowners about taking their land without permission, and so they would like to have the option to say, I don't want it on my property, dig and haul it away.

And then the other thing is, OCD sampling program definitely confirmed that there's toxic pollutants in these pits. Now you're going to hear industry come and say that they used what's called a TCLP test to sample their pits, and we used a total analysis.

Now a TCLP is a toxicity characteristic leaching procedure that's used -- that's recommended to classify hazardous waste. It is not used to determine what is in waste. And as a matter of fact, just to let you know, what a TCLP actually does, you take a waste and you dilute it 20 times before you actually run the test. And so naturally you're not going to see some of the constituents in there if it's diluted.

And we're saying that if you want to know what's in pits, run the total analysis. And so there will be a lot of discussion about how the agency run their analyses and how industry ran their analysis.

Industry has countered with, Show us the data, no

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harm has occurred and sound science issues and risk assessment. Those are things that we'll be talking about a lot.

So what was the possible solution to this? The

first draft Rule had some economic criteria to try to resolve this issue. Neither side liked that idea, nor did the OCD attorneys. And the primary reason was -- is that basically OCD would have had to look at the industry's books. We didn't want to do that. Industry certainly doesn't want us digging into their books and looking at their books. So therefore, that particular idea fell through.

The final draft issued what we thought was a common-sense approach. We set a 100-mile radius, so basically if you're in a 100-mile radius of an area that is highly congested or inundated with oil and gas properties, then we felt that you should dig and haul.

Mr. Carr, I'm going to shine this laser light, I don't want to --

MR. CARR: You better not.

THE WITNESS: -- hit you. I know.

(Laughter)

THE WITNESS: Could you turn, look at the screen?

MR. CARR: I'll flash it back at you.

THE WITNESS: So as you can see, the 100-mile

radius pretty well takes care of the Permian Basin and pretty well takes care of the San Juan Basin. And in our research we found that it's not uncommon that municipal landfills will set their business model up using the 100-mile radius. Some do it less, some actually have a higher mileage. But we felt that 100 miles was a common-sense approach, so we picked the 100-mile radius.

The concept of this practice is generally required for all other industries. Only the oil and gas industry, that I can think of, are allowed to bury their waste on site, where they're at. All other industries has to carry their waste to a bona fide, certified permitted landfill.

The New Mexico Environment Department requires waste to be disposed of in the large permitted landfills.

Of course they have exceptions, and we are going too.

The New Mexico Environment Department and the OCD will have an agreement -- or we do have an agreement, and we have statutory language to allow this.

Q. (By Mr. Brooks) Let me interrupt you, ask certain questions here that I think we need -- are generally know, but we need to be sure they're in the record here. On the slide that you have on the screen, which is slide 14 of your presentation --

A. Yes.

-- there are some red circles and some yellow 1 Q. The yellow circles are extremely hard to see. 2 Tell us first what the yellow circles are. 3 Well, basically the yellow circles that we have 4 on here is, in the southeast part of the state, and the red 5 circles is the number of landfills that can be used in the 6 7 northwest part of the state. Okay. Now these circles plot the 100-mile radius 8 around existing facilities that would qualify for disposal 9 10 of oil and gas waste? 11 Α. Yes, they do. And there are no dedicated oil and gas waste 12 facilities in the northwest, correct? 13 There is no OCD-permitted facility, landfill Α. 14 We do have OCD-permitted landfarms in the 15 facilities. northwest. 16 17 Yeah, but there are no disposal -- permanent Q. disposal facilities, landfills? 18 No, that's incorrect. We have -- there are 19 landfills in the northwest that can accept oil and gas 20 industry waste, they just happen to be permitted by the New 21 Mexico Environment Department. 22 These would be solid waste landfills that are 23 0. 24 authorized to accept oil and gas waste with our approval?

That is correct.

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Α.

Now if for any reason any particular Q. Okay. 1 facility were unable to take waste, then that facility --2 the 100-mile radius would not count as to that facility, 3 4 correct? That is correct. 5 Α. And if that was the only facility that was within 6 0. 7 100 miles of a particular pit, then that pit could be closed on site under our rules if it otherwise qualified? 8 9 Α. Correct. 10 0. Continue. Oh, I had a couple other questions, 11 sorry. Was the principal objection -- during the task 12 force procedure, was the principal objection to digging and 13 14 hauling a matter of cost? I would probably have to refer that question to 15 either Glenn von Gonten, Ed Hansen or Brad Jones. 16 17 Okay. Well, I know Brad Jones is going to talk Q. 18 extensively about the task force --Α. Right. 19 -- proceedings. But assuming that one of the 20 objections, at least, is a matter of cost, is a major 21 22 portion of the cost of digging and hauling pit contents the 23 actual haulage? 24 It's the hauling. Α.

And does that make a big difference how far you

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Q.

have to haul it?

- A. That is correct.
- Q. So that with the 100-mile radius -- the pits outside the 100-mile radius, would that eliminate from the dig-and-haul requirement those pits for which digging and hauling would be most expensive?
- A. I don't understand the question, repeat the question.
- Q. The fact that the Rule requires digging and hauling within 100 miles, does that eliminate from the requirement to dig and haul those instances in which it could be most expensive because of the distance?

Perhaps you're not understanding --

- A. I'm not understanding your question. Are you saying --
- Q. Would it be more expensive to dig and haul pits more than 100 miles from a facility, versus those less than 100 miles?
  - A. Yes.
- Q. And I realize there's no particular magic to a given number, but why did you choose 100 miles?
- A. Well, we got some very preliminary -- and I will say preliminary numbers, but we did some of the disposal companies, and we got a range from \$30,000 to \$80,000, using a 90-mile radius.

Q. And give what we know about the economics of the oil industry -- and like you say, we haven't seen their books, but given what we know, we thought that was within the range of a reasonable cost for waste management, correct?

- A. Yes, in today's term, particularly with the price of oil and gas where it's at, we feel that this is a small percentage.
- Q. But if it got to be substantially more than that, we thought, Well, maybe that might cause a hardship for some operator?
  - A. That's correct.

- Q. Okay, you may continue.
- A. So why centralized facilities? Better QA/QC, regulatory oversight for a single site than thousands of sites, closure cost, post-closure monitoring, and bonds and financial assurance.

For example, one site would possibly -- would be much easier to regulate than thousands of sites. And also, if there's centralized permitted facilities, then we have financial assurance and bonds on these in which the company has to put up. And so therefore, if there is a closure issue, it goes to the companies that have put the waste in there; it does not go to the people of New Mexico, and we'll have financial assurances for post-monitoring and to

take care of that.

Next slide.

This is an example of the inundation of oil and gas activity in a San Juan County unit. It's almost impossible -- if I point up here, it's almost impossible to not hit an oil and gas well.

And so why bury any more waste unless it's in an area that can be controlled and monitored? OCD has a limited staff. We have a total of eight environmental people for the whole state. There is absolutely no way we can get the thousands and thousands of sites.

If we have one or two sites, centralized disposal facilities, those can be monitored much easier than thousands of sites. It's better to have a few sacrificial areas of limited size and location, rather than thousands of many landfills.

Now when I say sacrificial, I'm not talking about sacrificing the whole county of Lea County or the whole county of San Juan County. In the last task force meeting, the task force meeting for Rule 53, one of the things that was very upsetting to me is that I remember one of the Sierra Club members basically pointing out that Lea County is a sacrificial area, and I take exception to that. I think the people in Lea County deserve the same amount of protection as they deserve in the Galisteo Basin or

anywhere else. So when I talk about sacrificial areas, I'm talking about very small, dedicated areas such as a municipal landfill.

When you have a town, you have a landfill, generally. If you have an oilfield you should have a landfill.

Now 20, 30 years ago, the southeastern part of the state saw a need for oil and gas landfills. And during that time there was a business model that companies actually got into the business, and so the southeast part of the state has four bona fide commercial landfills that are in operation. And we feel that the northwest could do the same, all we have to do is dangle the carrot out there and make it worthwhile for a company to put it in.

Because our Rules and Regulations is really what brought about the facilities in the southeast, is that we had -- back in those days they were putting BS&W and produced water basically on our roads and spread it all over the place. We saw there's a need in the southeast part of the state to stop that, and so therefore we required that these type facilities or this type of waste would go to treating plants, and those turned into commercial landfills.

And so we think it's very beneficial what the southeast has done, we just think it's time that the

northwest have a commercial landfill.

Now 100,000 wells, approximately, in the State of New Mexico -- if we wait 10, 15, 20, 30 years to go back and close these sites, we could be looking at a million dollars a site if there's groundwater contamination. We have one site that's -- we have two or three sites that there's groundwater contamination in which it's cost \$10 million to remediate, and which a \$2500 liner would have prevented that.

And so this type of closure could cost the taxpayers \$100 billion, and so it's just time to stop this madness. We just need to go ahead and take this waste and put it in a centralized landfill where we can have control of it.

Q. Okay, Mr. Price, we're going to go on to this later and with some other witnesses, but I'm just going to ask you a few overview questions here.

The time from the time that contamination escapes from a pit until it reaches the groundwater, it could be fairly lengthy, could it not?

- A. Yes.
- Q. Over a hundred years?
- A. Possible.
- Q. So would that suggest -- Well, how long has there been oil and gas activity in New Mexico?

- A. Since 1929, I believe.
- Q. Probably a little bit before that, but that's basically pretty accurate. You're talking about what, 80 years?
  - A. Eighty years.

- Q. And so, given the time frames, the fact that we -- if it be true, as some have suggested, that we haven't identified a lot of instances of groundwater contamination so far, does that indicate -- does that fact in itself mean that we will not have a lot of such instances in the future?
  - A. No, we're going to have.
- Q. Given the time, is it not entirely possible that it may just not have become apparent yet?
  - A. If you don't look, you're not going to find them.

MR. HISER: Mr. Chairman, I do hate to object, but this is now wholly speculative on the part of the expert. We haven't laid any type of thing about the types of pits, where they are, how much there is going to be or anything that, that would allow this type of speculation to have any bearing on this proceeding.

CHAIRMAN FESMIRE: He's been qualified as an environmental engineer. Isn't that within the purview of his expertise?

MR. HISER: It may be that he is qualified as an

environmental engineer. The question, though, is whether this is speculative as to whether this is going to happen or not. And here we have general discussions about -- we don't even know depths, we don't know it's designed and all that, which makes it extremely hard for anybody to respond to it. And so what's the probative value to you as the Commission?

CHAIRMAN FESMIRE: Mr. Brooks?

MR. BROOKS: Mr. Chairman, honorable

Commissioners, we will put on technical testimony through
another witness about the time frames involved. The

purpose of this question is merely to establish that -- one
of the reasons why Mr. Price is making the recommendations
he's making.

CHAIRMAN FESMIRE: Okay, for those purposes I'll go ahead and overrule the objection, but I'd ask you to change the subject now. You've covered that.

- Q. (By Mr. Brooks) Very good. Mr. Price, you may continue with your presentation.
- A. Okay, I want to talk about cumulative effects.

  And this is one you need to bring up a little bit. But basically, this is -- in your handouts, this is from the executive office of the President of the United States, and it talks about -- this is some guidelines for cumulative effects. They are guidelines, and I have provided a -- my

next slide will provide a slide presentation of...

Okay, go to the next slide. Excuse me, we're having some technical difficulties here. There, next slide. That one.

Okay, cumulative effects guidance.

Now this is from, like I say, from the Council on Environmental Quality. Agencies are required to analyze the environmental effects of past actions when implementing new regulations.

First -- next -- requires analysis, concise description, identifiable present effects. Show me the data. The industry is going to ask that, and it's a good question.

May conduct an adequate cumulative effects analysis by focusing on the current aggregate effects of past action without delving into historical details of individual past action. In other words, recent drilling pit liner failures, we think we can certainly substantiate that part of the guidelines.

Second, experience with and information about past direct and indirect effects of individual past actions may also be useful in illuminating or predicting the direct and indirect effects of a proposed action. We have 400 to 500 groundwater contamination cases caused by pits.

And then agencies should clearly distinguish the

analysis of direct and indirect effects based on information or past action. In other words, they've got to be linked. I think we will show that these are linked. Moving on into the Rule, we're going to require re-vegetation in the Rule. Exceptions: Allows promotion of new technology and tiered approaches for wildcat explorations, approval only by Santa Fe Environmental Bureau. Not allowed for the following: Unlined permanent pits, permits and modifications, exceptions and landowner approval. Now I want to talk about exceptions. You can't get an exception to an exception. There was a loophole in one of our recent cases in which a company tried that and of course we've closed that loophole in this particular Rule. Public involvement and landowner approval --Q. Excuse me a minute on the exceptions. I have a couple of other questions --Α. Okay. There are no exceptions to the Q. -- here. permitting requirement? In other words, you can't come in

Q. -- here. There are no exceptions to the permitting requirement? In other words, you can't come in and say, I want an exception to allow me to have a pit without a permit, correct?

A. Correct.

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1	Q. Other than that, and the exceptions to the
2	exceptions, there's basically only two things that you
3	can't get substantive, there are two things you can't
4	get an exception to: You can't get an exception for an
5	unlined permanent pit, correct?
6	A. Correct.
7	Q. And you can't get an exception to the requirement
8	for landowner approval for on-site burial?
9	A. Correct.
10	Q. And anything else that's substantive, you can get
11	an exception to, correct?
12	A. That is correct.
13	Q. If you follow the exception procedure.
14	A. Right.
15	Q. And the exception procedure requires an
16	application, notice to the surface owner, and public
17	notice?
18	A. And public notice.
19	Q. So there's a procedure for involving the public
20	in that exception procedure?
21	A. Correct.
22	Q. Continue.
23	A. Public involvement and landowner approval, we do
24	have a slight mistake or misnomer on this, and Mr. Brooks
25	had pointed this out to me. Public involvement is part of

this Rule, and landowner approval is part of this rule. 1 Any on-site burial and major exceptions -- if it's an on-2 site burial outside the 100-mile, it does not require 3 public notice. I just want to point that out. 4 Does not require public notice, but it still 5 0. requires landowner approval? 6 It still requires landowner approval, that's 7 Α. 8 correct. 9 Q. Okay. And of course, hearings may be required. 10 Α. Next slide. 11 We have transition provisions in the Rule. 12 13 have a provision that's allowing five years to close or retrofit with secondary containment, below-grade tanks. 14 15 Unlined permanent pits, we have two years to close existing 16 permitted or registered pits. We have 60 days to close 17 existing pits not permitted or registered. And then all below-grade tanks and pits must 18 eventually conform to permitting, siting, design, 19 operational and closure requirements. 20 And that's the end of this overview presentation. 21 Okay. Now do you propose to refer to Mr. von 22 Q. 23 Gonten? No, what I'd like to do is go into the next 24 Α.

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presentation --

1	Q. The unlined pit presentation?
2	A. The unlined pit one, where Mr. von Gonten will
3	help me. And then after that, we would be open for cross.
4	Q. You may continue.
5	CHAIRMAN FESMIRE: Yeah, what he said.
6	THE WITNESS: Mr. Commissioner, did I take that
7	as, we should get your
8	CHAIRMAN FESMIRE: Mr. Brooks said we could
9	continue, so
10	(Laughter)
11	CHAIRMAN FESMIRE: I guess we won't take
12	another break
13	THE WITNESS: I've got a feeling our attorney
14	should ask the Commission if we could
15	MR. BROOKS: I was instructing the witness that
16	he may continue with his presentation. Certainly if the
17	Commission wishes to do something else
18	CHAIRMAN FESMIRE: This is too early for a break,
19	go ahead and
20	THE WITNESS: This is a final appeal to the OCC
21	for a statewide ban on unlined permanent pits. I would
22	like to take it's going to take a little bit of time to
23	go through this, but I think it's well worth it. It's the
24	evolution of New Mexico pit regulations.
25	This all started back in 1931 where the State

Engineer declares Lea County a water basin.

1953, the State Engineer declared all water less than 10,000 milligrams per liter is protectible.

1956, the OCC through Order R-1224 -- State
Engineer requested from the OCC to enact rules governing
brine water disposal in parts of Lea County.

I went back and checked the old records. We had some contamination from produced water pits back in the '50s, up in the Tatum area, and of course the OCC ordered operators to perform due diligence study to see if this was actually happening.

1958, the OCC Order R-1224-A, once again the State Engineer requested that portions of Lea County, New Mexico, underground water basin be protected from oilfield brine discharges into unlined data [sic].

I read the testimony and the records. Kind of the same process that we're having here. You know, Show us the data. OCC ordered such protection with small quantity exemptions, allowed and rescinded protection studies for other parts of Lea County, southern parts of Lea County.

1963, OCC Order R-2526, OCC show-cause hearing to several operators who were discharging brine water in unlined pits in Lea County underground water basin. OCC orders operators to cease discharging in unlined pits.

1964, OCC R-2788, OCC heard a request from a Dr.

Sam Dunn to review a previous directive by the OCC on a moratorium on discharging salt water into unlined pits near the Pecos River. OCC ordered discharging within two miles of the Pecos River was prohibited in those area, but allowed limited quantities where operators were further than two miles.

1966 --

- Q. (By Mr. Brooks) Yeah, let me interrupt you here. 1965, which was in the middle of when all these things were going on that you have testified about, did the Legislature amend the Oil and Gas Act to expressly authorize the Oil Conservation Commission to make rules concerning the disposition of produced water?
  - A. Yes, they did.
  - Q. Okay, continue.
- A. In 1966, OCC R-3164, OCC held a show-cause hearing for operators that had been notified of discharging produced water in the Vacuum field located west of Hobbs, New Mexico, which was part of the declared water basin designated for protection, State Engineer's Office. OCC ordered all operators to cease by certain deadlines.

1967, OCC Order R-3221, commonly known as the exempted order, OCC files motion to prohibit discharge of produced waters in Lea, Eddy, Chaves, Roosevelt County.

25 The State Engineer had declared these areas to be

protected. Order noted issue of high chlorides.

occ orders protection -- prohibition of use of unlined pits in the four counties, with exceptions. These exceptions were, 16 barrels a day were allowed, District Supervisors could allow 30-day usage without liners, and of course mud and drilling pits and burn pits were exempted.

1967, R-3221 files -- OCC files motion to start the R-3221 prohibition at an earlier date for certain areas in Lea County. OCC ordered such.

1968, OCC Order R-3221-B, -B-1 and -C, application to amend the B to allow unlined pits in a large area between Hobbs and Carlsbad known as Nash Draw and Clayton Basin.

R-3221-C, application to require permits for lined pits. Now you didn't have to have a permit for an unlined pit, but you had to have a permit for a lined pit.

OCC amends R-3221 to allow unlined pits due to sparse groundwater in close proximity to potash mining areas and salt playa lakes. OCC requires permits for lined pits.

Now in 1978 the EPA made a report on surface impoundments and the effects on groundwater quality in the US. This was a nationwide report. The report summary was that New Mexico had 16,000 pits, the highest reported in the United States. The majority, 98 percent, was from oil

and gas operations.

Now drilling and workover pits were not included in this study, which would have added six to eighty-thousand additional pits. This study confirmed that pits present a high risk to groundwater.

Now I think it's ironic that New Mexico, of all the states, including Texas, we have more pits, the highest reported in the United States, than any state.

1985, OCC Order 7940. OCC files application to determine a vulnerable area for McKinley, Rio Arriba, San Juan and Sandoval Counties. OCC creates a vulnerable area in the northwest San Juan Basin. It primarily protected just the river valleys of San Juan, La Plata and the Animas, 29 section in addition where groundwater was less than 50 feet.

The OCC defined a vulnerable aquifer as less than 50 feet. I checked the record, there was -- This is based primarily on organics, not on TDS or chloride contamination. There was a 5-barrel-a-day exemption allowed with conditions. It created a short-term and long-term study group, required pit registration, approval for commercial facilities.

In 1968 to '85 numerous applications are filed for the R-3221 exception, which basically says you could have unlined pits in those areas.

1986, the OCC Order 7940-A, requires permits for 1 commercial and centralized facilities, exempts facilities 2 with less than 16 barrels per day. 3 1988, OCC Order R-3221-D. OCC application set 4 5 quideline for the following exceptions. There were a number of exempted pits issued without groundwater being 6 verified, and so therefore the agency saw a need that there 7 be some sort of quideline to protect groundwater in those 8 9 areas. Go back. 10 OCC approved the guidelines for filing 11 exceptions. 12 Now Mr. Price, in 1989 did the Legislature amend 13 14 the Oil and Gas Act again? MS. FOSTER: I would object to Mr. Brooks' 15 testifying. If the witness doesn't know that the Oil and 16 Gas Act was changed during these time periods, Mr. 17 18 Brooks can't ask him a question --19 CHAIRMAN FESMIRE: Ms. Foster, how do we know 20 till we get an answer? MS. FOSTER: Well, Mr. Brooks is clearly 21 testifying now. 22 23 CHAIRMAN FESMIRE: You mean he's leading him? MS. FOSTER: Well, yes. 24 25 CHAIRMAN FESMIRE: Overruled. Go ahead, answer

1 please. THE WITNESS: Question please? 2 3 Q. (By Mr. Brooks) In 1989 did the Legislature again amend the Oil and Gas Act? 4 5 Yes, they did. Α. And in that amendment did they give the Oil 6 0. 7 Conservation Division the power to make rules concerning 8 disposition of oil and gas waste? A. 9 Yes. 10 MS. FOSTER: Objection. CHAIRMAN FESMIRE: Overruled. 11 12 (By Mr. Brooks) Continue. Q. 13 Α. Okay, in -- of course in 1980, OCC Order R-3221-D. 14 15 Next slide please. 1992, OCC Order 7940-B. There's a lot of 16 17 information here. Mr. von Gonten will go into the issue of this particular order in a little bit more detail than I 18 19 am. 20 But bottom line here is that the order -- the 21 vulnerable area was expanded, but yet there were still 22 many, many areas that were outside of the vulnerable area 23 that has groundwater. Next slide. 24 1992, OCC Order 7940-C, OCC proposed an amendment 25

to 7940 and rescinded the previous order. OCD orders the following: Rescinded all small-quantity exemptions with the vulnerable area.

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There was a study done at that particular time that proved that small quantity exemptions should have been There was unrefuted evidence to show that these rescinded. small-quantity pits were causing groundwater contamination. That particular rule reduced the radius for domestic wellhead protection areas, maintained the vulnerable area expansion, vulnerable area lined pits and below-grade tanks would require approval, and the nonvulnerable areas registration of unlined pits greater than 5 barrels a day -- now this is something that everyone should realize. There are literally thousands of pits out there that did not have to be registered if they put in less than five barrels per day. And we will go into the number of pits, and we may not know how many pits are actually out there. And then pit closures were required if they met the conditions above, and of course variances were allowed.

Evolution of the pits.

In 1997 OCD did a pit survey, and we reported on our database that we have 11,614 pits were reported to us. 55 percent were unlined production pits, 90 percent were not permitted, and 95 percent were located in San Juan and Rio Arriba County.

Now I need to note that not all companies responded to the pit survey.

Now in 2003, I discussed that previously, OCC Order R-12,011-B, the current Pit Rule 50 as we know it. It repealed several orders and rules to combine in one comprehensive rule. It was so ordered with performance based standards and guidelines. It more or less grandfathered unlined pits, it had -- some siting requirements were unlimited, it allowed new unlined pits in areas of known protectible groundwater. It does not require technical sound science or guidance for permitting new unlined pits.

- Q. Okay, now let me interrupt you and talk about this grandfather thing. The unlined pits that were grandfathered, was that pits that had an order that authorized them, that -- where was an OCC order authorizing those pits to be unlined?
  - A. Correct.

- Q. So there were certain cases in which OCC had issued the order saying you could have an unlined pit in such and such a location?
  - A. That is correct.
  - Q. And those --

24 CHAIRMAN FESMIRE: Mr. Brooks, at least let's try
25 not to get too many leading questions in there, okay?

MR. BROOKS: Okay. Yes, sir. 1 (By Mr. Brooks) Now I believe you've already 2 Q. said that -- When you're talking about grandfathered 3 unlined pits, is that the category of pits you're talking 4 about? 5 6 A. Yes, I am. Separately and in addition to that, does 7 Q. Okay. 8 Rule 50 permit new unlined pits as well as existing ones in 9 certain areas? 10 Α. Yes. MS. FOSTER: Objection. 11 CHAIRMAN FESMIRE: Overruled. Go ahead. 12 (By Mr. Brooks) And what are those areas? 13 Q. Well, those areas could be in the exempted area 14 Α. or in the nonvulnerable area. 15 Now is the exempted area defined specifically by 16 Q. 17 township and range in the Rule? 18 Α. Yes. 19 Q. And the nonvulnerable area, is that -- you told 20 us a minute ago what the vulnerable area was. 21 Α. Yes, and Mr. von Gonten will describe it in detail. 22 23 Q. And is the nonvulnerable area the area that is not the vulnerable area? 24 25 Α. That's correct.

(Laughter) 1 MR. BROOKS: Thank you. 2 CHAIRMAN FESMIRE: That didn't get an objection? 3 (Laughter) 4 THE WITNESS: And of course monitor wells or 5 testing is not required. 6 Closure standard does not include protection of 7 public health and the environment for unlined pits. 8 the current ruling protects for groundwater. 9 10 And then of course there's no bonding or 11 financial assurances required. Of course, we can't -under single, individual pits like this, we don't have the 12 ability to bond them, so that's why this agency would like 13 to see a permitted landfill that we do have the ability to 14 provide financial assurances. If something goes wrong, 15 then we have money up front that we can close it properly 16 17 or have post-monitoring for a number of years. Next one. 18 So, pit groundwater contamination cases. 19 2005, we had an estimate of 400 confirmed pit 20 groundwater contamination cases. We have unknown other pit 21 22 cases, and I do mean unknown. 2007 --23 (By Mr. Brooks) Excuse me, what do you mean by 24 Q. 25 unknown? Why are there unknown other pit cases?

1	A. Okay, if you will think about the 11,000 in the
2	previous slide, there were a number of those pits that were
3	closed prior to Rule 50, and they were not required to
4	submit a closure report. So we do not know how many other
5	pit cases are out there. If they're unlined, then they
6	obviously cause contamination in the vadose zone, they
7	obviously could cause contamination in the future for
8	groundwater.
9	Q. So these are cases that have not been reported to
10	you?

- you?
  - They have not been reported. Α.
  - Q. And you don't know whether they're --
- A. We do not --
- -- contamination or not? Q.
- 15 We do not. Α.

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- But is it your professional opinion that there Q. could be contamination?
- It's my professional opinion that there is Α. contamination. If they're unlined, then they've contaminate the vadose zone.
  - Continue. Q.
- 2007, we had 150 abatement cases that we considered high priority but 154 pending cases, lower priority. We have an estimated 200 pit cases that are pending, and those 200 cases are literally setting on my

1	floor, Mr. von Gonten's floor and Mr. Hansen's floor.
2	Q. Now Mr
3	A. We just don't we haven't had time to get to
4	them.
5	Q. Mr. Price, how does the if my arithmetic is
6	correct, the 2007 number totals 504, correct?
7	MS. FOSTER: Objection.
8	Q. (By Mr. Brooks) What is the total of the 2007
9	numbers, Mr. Price?
10	A. Do you want me to add it up? Well, the actual
11	groundwater contamination cases that we have logged in, in
12	RBDMS, would be 304, and we have a 200 estimate more cases
13	that we haven't logged in.
14	Q. And what is the total of those two numbers?
15	A. That would be 504.
16	Q. Now how does that 504 number relate to the 400
17	number you've given for the year 2005?
18	A. Well, it's higher.
19	Q. Does it include those same 400 cases, or is it in
20	addition to those 400 cases?
21	A. No, it includes them.
22	Q. Okay, so the 400 cases, or the 400 cases for
23	(Electrical power failure at 10:20 a.m.)
24	(The following proceedings had at 12:30 p.m., in
25	Governor O.A. Larrazolo Auditorium, Harold Runnels

Building, 1190 South St. Francis Drive, Santa Fe, New Mexico.)

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CHAIRMAN FESMIRE: Well, good afternoon. Welcome back from lunch. We're going to go back on the record now. For the record, this is a continuation of Cause Number 14,015. It's 12:30 p.m. We are no longer in Porter Hall due to a power outage. We are in the Harold Runnels Building, in the main auditorium.

As promised prior to lunch, we're going to in just a minute give folks who signed up on the sign-in sheets a chance to make comments on the record. Due to a quirk in our Rules, you can do that one of two ways. can stand up and make an unsworn position statement, or you can stand up, get sworn and give testimony. However you want to do it is up to you. As long as people can hear you, I don't care whether you do it from your seat, as long as you're standing up, or come to the front. It's up to you all. If you come to the front it might be easier for the court reporter to hear you. The microphones we have in front of us are not part a PA system, they're part of his recording system. So if you really want to make sure that he gets everything you say absolutely correct, I'd come down front and use one of the microphones. But that's not essential unless we just absolutely can't hear you.

The way we're going to do it today, for the rest

of the day, is to go ahead and take public comments, then continue with the OCD's case. Then towards the end of the afternoon we've got some motions that we have to address and some scheduling matters that we have to address, so that we can truly minimize the cost, especially to experts and people who have to fly in, so we're going to have to address that and try to do as much scheduling as we can and get as close as we can.

The meeting tomorrow will not be in this room.

Don't know where it's going to be yet, but it won't be in this room. The transformer at the -- at Porter Hall, or actually the Wendell Chino Building, looks like it's going to be out. They tell me they might get it tomorrow, but I'm not betting on it.

So as of right now -- and we'll have an announcement towards the end of the meeting -- we will probably be meeting in the --

COMMISSIONER BAILEY: Morgan Hall.

CHAIRMAN FESMIRE: -- Morgan Hall in the State Land Office. The big problem there is that there's no parking. You're going to be asked to park in the PERA Building and walk over, and that's the way I would tentatively plan if you're going to attend the hearing tomorrow.

Let the record reflect that Commissioner Bailey,

Commissioner Olson and Commissioner Fesmire are present.
We therefore have a quorum.

And we're going to open the floor for comments. Those of you who signed in, I've been asked -- there are several members of the Legislature who would like to speak, and they apparently have another meeting this afternoon, so with the permission of those signed in we're going to give them the first chance. I hope that's okay with folks. But they, like I said, have other things that they need to do today, and they've been very patient, although all they got out of it so far is apparently a long lunch.

So of the members of the Legislature, who would like to go first? Mr. Bandy -- Representative Bandy? For the record, would you state your name and the district that you represent?

REPRESENTATIVE BANDY: My name is Paul Bandy, I'm representing District 3 from Aztec and Bloomfield and Blanco, New Mexico. I'm a cattle rancher, I ranch in the San Juan Basin which has been described by Tony Hillerman as the Persian Gulf of America. And it's my understanding, after different figures, that we produce between 6 and 10 percent of the natural gas in the United States.

And can I be sworn in, please?

CHAIRMAN FESMIRE: Sure.

(Thereupon, Representative Bandy was sworn.)

## REPRESENTATIVE PAUL BANDY,

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

## DIRECT TESTIMONY

## BY REPRESENTATIVE BANDY:

REPRESENTATIVE BANDY: And everything I said prior was true also --

(Laughter)

REPRESENTATIVE BANDY: -- so...

I'm a cattle rancher, I ranch in the San Juan Basin. We have, oh, in excess of 300 wells on our ranch. We have the combination of BLM and State land leases and fee land.

And I'd like to tell you a little bit about the history of what's been happening with us lately in the San Juan Basin so you can kind of understand where I'm coming from. The pictures that you had this morning about pits that are problems, I've seen a lot of those pictures, I've taken some of them myself, and I know how that can be a problem. We've had cows poisoned by drinking from unfenced pits, and there have been a lot of problems prior to probably -- prior to about 2000.

And in 2000 we started meeting with the BLM as the lead agency, the State Land Office, the oil companies, the Forest Service and OCD representatives, to come up with

some kind of solution to the problems that we've been having. And part of the problem was that no one knew what the regulations were, which I believe was brought out to some extent this morning.

The BLM, which manages most of that land, had different regulations, depending on when that well was completed and the APD, the application for petroleum development, was issued. So to find out what the find out what the regulations were about how that well was supposed to be managed, it would take them at least a day of sifting through old dusty boxes to find the original APD to find that out, and that just wasn't working.

And so we had these meetings between the oil companies and -- like I said, and all these different agencies and the ranchers. And at first it was pretty tense. There's a lot of hard feeling. But I really think that the oil companies stepped up and changed the way -- and were committed to change the way that they operate in the Basin.

And so over a period of maybe six or eight months to a year, we developed a set of uniform guidelines.

They're voluntary and went into effect about how things were supposed to be managed, how pits were supposed to be fenced, how they're supposed to be lined, how the wells are supposed to be developed and re-vegetated. And I think

they're working very well, and it's been a -- I think it's been a success story, what we've been doing out there.

And so what I -- there's two things I would like to comment upon.

One is the process and how I think that process maybe has a better outcome than -- to raising the Legislative whip -- I mean the regulative whip and saying, you know, this is the way you have to do it.

And also I'd like to comment about how the actual well is developed and re-vegetated, and so -- and the way that we operate now -- and this is kind of standard procedure throughout the Basin, and to my knowledge it's the way things operate. It's not perfect. I mean, every now and then somebody does something that's not in compliance with these uniform guidelines, but my experience is that it's really working and it's -- they're observed.

And so when they develop the well, the first thing that they do is, they -- Well, the first thing that they do is, they include the permittee in the on-site when they go to decide where the well is going to be and how it's going to be operated. So they get the input into that, and sometimes we can tell them something like, well, the water table is too high, or they can move the well up the hill a little bit, and things like that, that can be of benefit to protecting the land.

Secondly, they take the topsoil and they move it all off the location, they move the topsoil off the -- eight, 10 inches or a foot, pile it all up. They don't pile it behind where the flare pit is, where they burn the gas off when the first complete the well, because that would kill the life in the soil, so they pile it in a separate place.

Then they develop -- after they drill the well, they go in and re-conform -- well, first they let the reserve pit -- okay, I should probably go to that.

The reserve pits are always lined with some kind of rubberized liner, and then they -- after the well is completed they let that evaporate. Then they cover that, turn the liner in on itself, and then they go back and kind of re-form most of the location, over half of it, to kind of conform to the natural contours of the land. And then they go take topsoil and put it back on, and then plant grass seed and -- or brush seed, whatever is appropriate.

We've done research up there, the BLM has, and the oil companies have financed the New Mexico State's studies to see what kind of grass and what kind of brush grows well in this situation, and so they use that to determine what kind of grass seed to plant.

Generally, they -- almost always now, they mulch it. In other words, they put a straw mulch on top of the

ground. And that, in our country, is really helpful to establish the grass and vegetation after the well is -- after it's been re-vegetated.

They don't -- the standard procedure now is that they don't -- they do the whole location, so that the only part that hasn't been re-vegetated is the -- and it is the part that they drive on, you know -- they call it the teardrop; you drive in from one side then drive out the other -- and the roads, of course.

The oil companies have a voluntary program where for every acre of ground that they take out of production they contribute \$1000 to the -- what they call the offsite mitigation fund. This goes to the -- for the BLM land. And this goes to the permittee to use for whatever kind of range improvements that they think is best to create grass and to improve the land on areas where they're not using it. And to my knowledge, up to this time, they've spent about \$800,000 that's been contributed to that fund.

And we've used it on our own ranch for putting up fences, cross-fences to improve the rotation of the cows and for putting in stock ponds so we can spread out the cows and use more of the country more evenly.

And so the proposal that you have that would kind of across-the-board require all the digging and hauling away, the cuttings and the products of -- and the temporary

pits -- and I think it's important to distinguish between the production fluid pits and the temporary drilling pits.

The production fluid pits now -- and this is kind of the standard in our country, is to have them put in tanks, you know. Generally they're under the ground and they have access to them by pipe and they pump it out and take it somewhere.

But the production pits that are a lot bigger and a lot -- there's a lot more liquid involved, and they're -- the standard is to leave them in place. And you know, to me it doesn't seem to be hurting what we're doing there, because you can't really tell where the production -- where those temporary pits have been, because the grass grows on them just as well as they do on the rest of the locations. So I don't think that -- it doesn't seem like there's a lot that they're damaging to the country at all.

And if seems like if they have to take all that

-- dig it out and haul it away somewhere, or use the closed
loop system where they haul it all away, it's going to
increase our traffic, truck traffic, tremendously.

Probably double the truck traffic with water trucks, and
going to tear up the county roads and especially tear up
the back roads, the dirt back roads that we access on the
ranch. We get more cows run over, because there'll be more
traffic.

1	And it seems like, to me, that there needs to be
2	carefully considered about before that, that part of the
3	regulations are implemented, because it's I don't see
4	that the problems that we're going to have with traffic and
5	truck traffic is going to be offset by any improvement for
6	the environment there.
7	So I think that's my testimony.
8	CHAIRMAN FESMIRE: Mr. Brooks, do you have any
9	questions of this witness?
10	MR. BROOKS: No questions, your Honor.
11	CHAIRMAN FESMIRE: Mr. Carr?
12	MR. CARR: No questions.
13	CHAIRMAN FESMIRE: Mr. Hiser?
14	MR. HISER: No questions.
15	MS. FOSTER: No
16	CHAIRMAN FESMIRE: Anybody else? We can go
17	through it individually or Lettie, do you have any
18	questions?
19	Yes, ma'am?
20	FROM THE FLOOR: I'd just request that Could
21	we be miked here, or is it hard to hear?
22	CHAIRMAN FESMIRE: We'll have to speak up. We
23	don't have a public address system. I apologize for that.
24	This was kind of a last-minute deal.
25	FROM THE FLOOR: I understand.

REPRESENTATIVE BANDY: I'm sorry, I should speak 1 I thought that's what this was. 2 up more. CHAIRMAN FESMIRE: Representative, thank you very 3 much for your time. 4 REPRESENTATIVE BANDY: Thank you very much for 5 your time. 6 CHAIRMAN FESMIRE: Mr. Strickler? REPRESENTATIVE STRICKLER: I'd like to be sworn. 8 (Thereupon, Representative Strickler was sworn.) 9 REPRESENTATIVE JAMES STRICKLER, 10 the witness herein, after having been first duly sworn upon 11 his oath, was examined and testified as follows: 12 13 DIRECT TESTIMONY BY REPRESENTATIVE STRICKLER: 14 15 REPRESENTATIVE STRICKLER: I'm going to read from 16 a text, if that's okay. My name is James Strickler, I'm a State 17 Representative, District 2, Farmington and rural San Juan 18 County, and I'm here today to speak to you from the 19 perspective of someone who puts food on their family's 20 table by working in the oil and gas industry. I'm a 30-21 year veteran of the industry and currently practice as an 22 23 independent petroleum landman. As you know, the oil and gas industry is a boom-24 or-bust industry. At least that's been my experience. 25

Representative Bandy said, all interested parties in our area, oil and gas, land owners, BLM, State Land Office and others, have a positive working relationship in the San Juan Basin. These people have a vested interest in protecting the land around the state that provides goodpaying jobs with benefits and provides the vital tax and royalty revenues for state government to operate.

The Bureau of Land Management is the largest land owner in New Mexico, and it is my understanding that they've had somewhat little input in these Rules. I hope I'm wrong.

Incidentally, the oil and gas industry provides well over \$2.8 billion to the State's treasury. That amounts to 35 percent of the State's total budget.

Education is a benefactor of these funds, and education allocates about 60 percent of the entire state budget.

So who will suffer if we have a downturn in the industry? You know, I think the kids do.

We should conduct -- I believe we should conduct an economic impact study of these proposed Rules before putting them into effect.

The San Juan Basin is the largest producing natural gas field in the United States. Our local oil and gas industry safely produces vital, clean-burning natural gas as the fuel of choice for America. The dedicated lease

operators go out every day to check the wells on their weekly run. They usually number 50 to 75 wells. Their goal is to be sure that the wells are flowing properly and that high environmental standards are met. I don't know of an industry out there that monitors their operations as closely as the oil and gas industry.

Area producers already face drilling inflation, and these are higher costs for material, labor and services that have nearly doubled over the past years in the San Juan Basin. I believe in the southeast part of the state, with the deeper wells, some of those costs have tripled. And that's just the natural course of business. As a consequence, drilling permits are down by one-third in the San Juan Basin. I believe this is part of the economics, just the natural economics going on.

The added expense of meeting regulatory requirements hurts our industry. Oil and gas companies lose revenue, they will take their investments elsewhere, moving to friendlier states or overseas. The lack of new drilling will negatively impact our local economy. The service companies will feel the impact first, but the layoff of employees in all sectors is inevitable. Over-regulation stifles business and economic development.

The proposed new pit rules, along with other proposed rules, seriously damages the oil and gas business

in our state. These new rules, if adopted, will add anywhere between \$150,000 to \$300,000, depending on the depth of the well, in the areas drilled, northwest to the southeast part of the state.

In addition to these new drilling costs, what this will do with all the drilling inflation is that it will render 25 to 50 percent of the inventories uneconomic, so that means that fewer wells will be able to drill.

These excessive pit rules, if adopted, will devastate our state's economy with little or no environmental gain. San Juan County is a high desert country where we see less than eight inches of annual rain fall. Over 93 percent of the lands belong to the government. That leaves only seven percent in private hands.

Because we live in a desert -- I wish we had more groundwater -- most of our drinking water comes from our area rivers and reservoirs. The Governor has rightly emphasized the need for economic development throughout New Mexico. The Legislature has the privilege of reviewing these many business enterprises, and we actively promote their formation through easing taxes and providing loan guarantees. These new rules are counterproductive to those objectives and will damage the economic development of our state. I don't believe the Governor wants to drive away

our core industries to competing states such as Texas and Oklahoma. We don't want to kill the goose that laid the golden egg for our state.

Small mom and pop companies, those are the folks

I'm really worried about. They will be the hardest hit.

Who are these mom and pop companies? They're the ones that provide the surveyors, pipefitters, plumbers, electricians, the drivers, the water haulers, the roustabout crews and heavy equipment operators that serve the oil companies and their subcontractors. These people are working hard every day. And they don't have a voice with the regulators.

They rely on their managers and legislators to fight for them in Santa Fe.

Many of us remember the industry layoffs of 1987, 1996 and 2000. The industry layoffs that I have mentioned were caused because of poor economic conditions brought about by depressed oil and gas prices.

If these rules are implemented as is, this will be the first time in my career that a regulatory agency has caused layoffs, rather than natural economic factors.

The entire fuss is over the disposal of drilling fluids, and we want to make sure we have clean water, clean drinking water, and our water tables protected. The main ingredients of drilling fluids in our area are fresh water, clay, ground up cedar bark and drill cuttings, sand and

shale which makes up drill cuttings, all of which are natural or biodegradable. In fact, you could manufacture bricks out of this stuff.

ocd has been given legislative authority to adopt reasonable rules, not license to put a crucial industry out of business. These proposed pit rules are tantamount to requiring a builder to put four roofs on your house when one is sufficient. A one-size-fits-all approach to regulation rarely works, and I think we need some exceptions.

Right now the State is facing a budget crunch which will continue to grow in the future years, and it's looking to fund well over a billion dollars in program shortfalls. We're running short of funds for education, highways, prisons and the proposed government-run healthcare program.

There seems to be a disconnect between the OCD rulemaking and the goals and objectives of the Governor and the Legislature. This is not the time to place new stifling regulations on the industry that provides such a large portion of our state funds.

My good friends that work with me in the industry simply do not understand why the regulatory authorities is so hostile to our business that affects 22,000 workers throughout the state. They're trying to put them out of

business instead of working with us to find solutions to 1 these problems. 2 As a freshman legislator and a veteran in the oil 3 and gas industry, I know such regulation would never 4 5 survive the legislative process. It is poorly thought out, ineffective and a huge threat to our state economy. 6 7 the NMOCD approve the new pit rules, legislators will be 8 pressed to raise income, property and gross receipts tax in an effort to replace lost revenue. We don't want to do 9 that, and I hope you don't either. 10 Thank you. 11 CHAIRMAN FESMIRE: Any questions of this witness? 12 MR. BROOKS: No questions, your Honor. 13 MR. CARR: No questions. 14 CHAIRMAN FESMIRE: Ms. Foster? 15 MS. FOSTER: No questions. 16 COMMISSIONER BAILEY: I have a question. 17 **EXAMINATION** 18 BY COMMISSIONER BAILEY: 19 The Legislature passed the Surface Owner 20 0. Protection Act this past session. 21 Α. Yes, ma'am. 22 The question of this proposed Rule, which would 23 give surface owners the authority to disallow burying of 24

the pit wastes on their property, does that go beyond the

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legislative intent of that new law? 1 Commissioner Bailey, I believe that it does. Ι 2 Α. believe that needs to be addressed by the Legislature. 3 Ι was surprised to see that. I did read over the Rule. 4 rather lengthy, and that was a surprise to me today. 5 And I think it would be contrary to the intent of the 6 Legislature, and I think we would have to address that. 7 8 MR. BROOKS: Mr. Chairman, I hesitate to object 9 to anything that an honorable member of the Legislature says, but I believe I must preserve for the record that the 10 statements after enactment by one member of the Legislature 11 are not admissible for the purpose of showing the intent of 12 the statute. 13 CHAIRMAN FESMIRE: Mr. Brooks, your objection is 14 noted but overruled. 15 Representative, continue. 16 THE WITNESS: That's my honest opinion, but I 17 18 appreciate the counsel's comments. That was a little broadening of the pit rules from my earlier reading, and I 19 think it'll have to be addressed. 20 21 COMMISSIONER BAILEY: Thank you for your comment, for your personal opinion. 22 23 CHAIRMAN FESMIRE: Any other questions of this witness? 24 Thank you, Representative. 25

Representative Ezzell, are you next? 1 REPRESENTATIVE EZZELL: Mr. Chairman, I'd like to 2 3 be sworn in, please. (Thereupon, Representative Ezzell was sworn.) 4 5 REPRESENTATIVE CANDY SPENCE EZZELL, 6 the witness herein, after having been first duly sworn upon 7 her oath, was examined and testified as follows: 8 DIRECT TESTIMONY 9 BY REPRESENTATIVE EZZELL: REPRESENTATIVE EZZELL: Mr. Chairman, members of 10 the Commission, thank you for allowing me this opportunity. 11 I do have a prepared statement. 12 I am Candy Spence Ezzell, I am a State 13 Representative, District 58, which takes in southern Chaves 14 15 I am a rancher and a farmer, I'm an independent oil producer, and I'm a member of the legislature, and I 16 17 pay my share of taxes in the State of New Mexico. You have heard previous testimony concerning 18 landowners and oil producers, and we are here asking that 19 certain rules and regulations be reconsidered and to 20 closely review the facts, what the long-term impacts will 21 22 be, and the precedent it sets both legally and in process. 23 Every one of the Legislature knows that our recent budget surpluses have come to us courtesy of the oil 24 and gas industry, but it seems like only a few of us 25

appreciate this contribution to our state's welfare.

We strive to be a business-friendly state. We aren't.

If you look at the reported rig counts, New Mexico is decreasing while Texas and Colorado's rig counts are increasing dramatically. On the Baker Hughes website, New Mexico right now is down 23 rigs from December of '06. For the entire United States they are up 56 compared to November the 2nd, of 2006.

We are blessed with some of the largest oil and gas reserves in the nation, but our producers are being penalized for trying to make our country less dependent on foreign energy sources.

We are here to discuss the proposed pit rule, but that is only an example of our real problem. New Mexico is trying to implement an agenda that seeks to create change or generate revenue through regulation, not through legislation.

Elected officials, not political appointees, should direct our state's future. Even when regulation should be imposed, there should be legislative oversight.

The unintended consequences of the pit rule will result in marginal wells not being produced, reserves being left in the ground, lost economics, more illegal dumping and heightened risk of drivers on our roads. This is

another example of an unintended consequence, that by making rules without using sound economic studies the people of New Mexico will suffer, and therefore you are not fully informed to make these decisions.

The people of our state should be entitled to replace those who impose regulations that affect their lives. Bureaucrats are not elected, so people cannot vote them out of office. If the citizens of New Mexico are allowed to have a voice, there must be legislative oversight of agency regulations. Please give thoughtful consideration to the input from the industry that was excluded in the development of the mechanisms that affect their very lives and those of the citizens of our state.

We are asking you to allow flexibility. The magnitude of this rule makes it of the utmost importance to carefully consider all impacts now and into the future. We don't need to shoot the cash cow.

That's the end of my testimony, thank you.

CHAIRMAN FESMIRE: Mr. Brooks?

MR. BROOKS: No questions, your honor.

MR. HISER: No questions.

MR. CARR: No questions.

MS. FOSTER: No questions.

CHAIRMAN FESMIRE: Ms. Belin?

MS. BELIN: (Shakes head)

Commissioner Bailey? CHAIRMAN FESMIRE: 1 COMMISSIONER BAILEY: I won't ask the question 2 again. 3 CHAIRMAN FESMIRE: Commissioner Olson? 4 5 COMMISSIONER OLSON: No questions. CHAIRMAN FESMIRE: I do have one question, 6 7 Representative. **EXAMINATION** 8 9 BY CHAIRMAN FESMIRE: 10 0. You said that this is setting bad precedent, both 11 legally and in process. What did you mean by that? 12 Mr. Chairman, what we are seeing here, we are seeing not only this particular agency but other agencies 13 that are in our State's government that are coming up with 14 rules and regulations. And as the whole Commission knows, 15 that any time there's a new rule, regulation or law, it 16 17 will affect somebody's life, either on the good side or on the bad side. That's just the way it is. 18 The precedent that we are seeing here, it gives 19 the Commission the authority to -- Let's run with this, and 20 we're going to make up the rules as we go along. So each 21 22 week, quys, we might need to be sitting down, taking a look 23 at the new rules that have been set forth by each agency,

if you want to call it that. And therefore, it gives -- it

does not allow the industry the flexibility to make any

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	FCCC-
1	long-term plans, in my opinion. And that's just my
2	opinion.
3	CHAIRMAN FESMIRE: Thank you, Representative.
4	Any other questions?
5	Thank you, ma'am.
6	REPRESENTATIVE EZZELL: Thank you.
7	CHAIRMAN FESMIRE: Representative Foley? I don't
8	have to worry about who's next now.
9	REPRESENTATIVE FOLEY: Could I be sworn in?
10	CHAIRMAN FESMIRE: You bet.
11	(Thereupon, Representative Foley was sworn.)
12	REPRESENTATIVE DAN FOLEY,
13	the witness herein, after having been first duly sworn upon
14	his oath, was examined and testified as follows:
15	DIRECT TESTIMONY
16	BY REPRESENTATIVE FOLEY:
17	REPRESENTATIVE FOLEY: Thank you, Mr. Chairman,
18	members of the Commission. I want to begin by thanking you
19	for allowing me and my colleagues to address the Commission
20	today, and I want to thank the people in the audience for
21	letting us get to the front of the line. So thank you.
22	I also want to let you know that as the
23	Republican Whip in the New Mexico House of Representatives
24	that today I'm representing myself and Representative Tom
25	Taylor, the Republican leader in the House.

I want to do something that I think has been lacking lately from people in Santa Fe and state government, and that is thank the thousands of New Mexico citizens who get up every day and go to work in the oil and gas industry and provide this Administration, this Legislature and state government an enormous portion of the nearly six billion dollars we've spent and will spend again in this upcoming session.

The OCC is an appointed group that is charged with implementing the policies of this Administration.

Make no mistake about it, you serve at the pleasure of the Governor. And by accepting that role, you are directly responsible for implementing this Administration's policies. This role is serious. In carrying it out, as is the case with all regulatory bureaucracies and agencies, it is vital that regulators and employees leave aside any allegiance to special interest groups, political activists or idealogues. Those are not the people we serve. We serve the people of New Mexico.

I know all New Mexicans want a clean and safe state in which to live and raise their families. All New Mexicans, including the ones in this room and working today in the oil and gas fields.

This begs the question as to why am I here today. The answer is simple.

I believe you have unfairly placed the very industry that we depend on for the economic existence of this state on a path to destruction. Quite a number of observers -- a growing number, I might add -- believe the very policies that you are trying to implement are based on pandering to special interest groups.

Among the charges I have heard include, one, setting up committees that are stacked to get a predetermined decision before a single public comment is made or, two, decisions that are not based on any real, proven science.

It seems the OCD's very existence depends on the oil and gas industry, is spending a majority of its time and resources lately running the industry out of New Mexico.

There was once a cooperative relationship between the industry and OCD. By cooperative, we don't mean that the industry ran the OCD, we mean that the industry had a seat at the table with OCD. Today the industry is perceived as a threat to the state rather than an asset.

There is a difference between regulating and destroying. Today OCD is in a posture to destroy this industry.

Now these criticisms that I am bringing to light may be perceived as harsh, but certain facts indicate to me

that these independent assessments may be correct.

Why, for example, when the price of oil and gas has been reaching record highs, is the rig count in New Mexico down by eight last week?

Let me say this. If you end up setting up rules that are not based on science but are derived from political motivations to create impressions about New Mexico and New Mexico's Environment and about this Administrations, then those rules are achieved -- achieve the notoriety which is their goal but cripple our economy, you will have not lived up to your fiduciary responsibility. If such rules end up advancing the political agendas but add absolutely nothing to environmental protection, are you really living up to the oath of office? Are you serving the people of New Mexico, or are you serving an ideology?

These are serious questions, open questions. I pray the commentary -- the scientific commentary I've been privy to is false, that you do not have such designs and that you are going to be able to show everyone that everything you do is based on hard science and not politics or ideology.

Here's the reason. As Legislators, we are charged with funding the ongoing programs and priorities of the entire State of New Mexico. Where do you expect us as

Legislators to find the money to finance the important projects throughout the state? Where do you expect us to find the money to finance the education of our children, the -- finance the colleges and universities? Where do you recommend we find the money to provide health care to the poorest children of our state? How about funding the senior programs in each and every community that help feed, through the Meals on Wheels programs, those very individuals that cannot prepare the food they need for their very existence.

Let's talk about programs that are near and dear to the hearts of some of the special interest groups that I've been reading about, that we believe are also pushing us towards some nonscience-based decisions. If you end up traveling down this path, who's going to fund the research for finding alternative energy options for the State of New Mexico? Who's going to fund the housing programs to help those who cannot afford to pay rent or mortgages? And more importantly, who's going to pay to make sure that our state is safe in the future.

I'm troubled that during the very time this

Administration and this State have seen a surplus in money

because of our friends, neighbors and family members in the

oil and gas business, we've had no problem expanding the

role of government in several areas that are going to be

very, very costly in annual operating expenses for years to come.

This of course includes, first of all, the 11percent increase in the State budget last year. But it
also includes such cash guzzlers as the Rail Runner, the
Spaceport and the desire of this Administration to add a
full-blown, comprehensive, universal pre-K program.

Add to this the current discussion about expanding the rule of government-run healthcare programs or the desire to continue the GRIP programs, while simultaneously trying to find a way to pay for much-needed maintenance and upkeep of our current roads and bridges.

At a time when major industries from Intel to Eclipse are laying off hundreds if not thousands of New Mexicans, as well as the current discussion revolving around the expected shortfall in dollars for road projects, which now we're hearing is going to lead to thousands of unemployed construction workers around the State, the oil and gas industry is looking to hire New Mexicans in high-paying, long-term jobs with benefits. Why do we want that to end?

Now based on what I've read and heard discussed,

I would agree 100 percent if the policies we are discussing
were based on proven, sound science, and not talking points
from special interest groups that have no allegiance or

loyalty to the future of the State. I'm very concerned that these same groups who appear to be the authors of much of what we're talking about today in New Mexico spend their time criss-crossing the United States, taking credit for implementing anti-oil and gas policies that increase our dependency on foreign oil, which I must add seems contrary to the very goal that these groups advocate.

As reported in *The Hobbs News-Sun* on Saturday,

November 3rd, Mr. Fesmire -- Mr. Chairman, yourself -- made

reference to the pit rule changes relating to groundwater

contamination because of leaking pipes. This has nothing

to do with the new pit rules. The current climate with OCD

and the industry seems to be one of guilty until proven

guilty. Fining these industry people thousands of dollars

a day with no due process is not an American principle.

Another question that was brought to mind was the 100-mile rule. What science is this rule based on? How can you sit there today and tell us that this is going to contaminate groundwater if it's within 100 miles of a storage facility, so it has to be moved, but if it's within 102 miles of a storage facility we can bury it on site, because it's not going to contaminate that groundwater? That's another example, I believe, of how some of these rules are arbitrary and capricious.

I am concerned about all of these things. As

those of you who know me, I'm not one for pointing out problems and just walking away. I like to provide solutions as well.

The solution I have is simple. Let's stop
creating an environment of fear and business instability
that only encourages these New Mexicans to move their
businesses and, more importantly, their investment dollars
to other states and leaves the State wondering why is our
rig count down when Texas and everybody around us is up?

Let's reach out to the very industry we go to every year and depend on for funding everything from education to healthcare and work with them and not against them. I know from visiting with these very individuals that if -- and I place the emphasis on "if", Mr. Chairman -- if you find a so-called bad actor, get them. Current rules and laws allow you to do that. No one is more supportive of finding, punishing and getting rid of bad actors than the oil and gas community in New Mexico. They universally, to a man and to a woman I've spoken with, want the bad companies, the bad players, eliminated. They give an entire industry a black eye.

But with lawful, conscientious companies and businessmen and women, we have to make sure we don't use fear and intimidation tactics to implement policies that are, one, not based on science, two, have no beneficial

environmental impact on New Mexico at all, three, do not protect our citizens and families of our land in any way and, four, are detrimental to the financial future of our state.

We must constantly remind ourselves that if there is a problem that needs to be fixed, that it must be done. However, when something that has nothing to do with the new proposed pit rule, such as leaky pipes, makes its way into the discussion, we wonder why.

When it comes to making and implementing rules, we should gather New Mexicans to help the process. The pit rule task force, by some accounts, Mr. Chairman, includes people who live outside of New Mexico. Why are people who live outside of this state making rules for industry inside this state that represents our lifeblood? Shouldn't New Mexicans have the voice on the rulemaking committee and not outsiders?

I want to close, Mr. Chairman, by reminding you that there is a Legislative branch in state government, and you should respect the checks and balances we have in place. I would encourage you to work with the Legislature if you want to change statutes.

We should not try to implement changes of laws via regulations. This is undemocratic and antithetical to the American system. I can assure you, there is bipartisan

support, Mr. Chairman, for reigning in the out of control regulatory environment that we are creating. This is not the first time, but may be the last.

We are currently drafting bipartisan legislation that will require real economic impact studies, and if the study proves to affect a percentage of prior-year revenue it will require approval of the Legislature before rules like that may be adopted.

I'm here to work with you in making New Mexico a safer, better place, but you have to stop holding this industry hostage and stop making New Mexico an antibusiness state by creating this cloud of anxiety.

Let's show good faith and respect for science by bringing artificial pit rules to a close now and letting New Mexicans know you're going to move forward with decisions based only on sound, proven science.

Mr. Chairman, thank you for allowing me and my colleagues to be here today.

And again, thank you to the very people who get up every day and take the risk of investing in New Mexico and providing the thousands of jobs we need, we want, and we will all take credit for.

I also want to thank the thousands of individuals, Mr. Chairman, who get up every day and work in the fields and offices. I want them to know there are

those of us in elective office that know the contribution 1 2 they make every day to the state, and I want them to know 3 we're -- continue to work with you to make sure they can get up tomorrow and have the very job they had today. 4 5 With that, Mr. Chairman, I'll stand for any 6 questions. 7 CHAIRMAN FESMIRE: Thank you. Mr. Brooks? 8 9 MR. BROOKS: No questions, Mr. Chairman. 10 MR. CARR: Mr. Chairman, no questions. 11 MR. HISER: No questions. 12 CHAIRMAN FESMIRE: I guess we don't need to go 13 through this every time, do we? 14 Does anybody have any questions? Yes ma'am? 15 MS. BARNARD: How many oil and gas well owners in 16 17 the entire state are actually New Mexico citizens? 18 REPRESENTATIVE FOLEY: Mr. Chairman, do you want me to address you and them, or just turn to them? 19 20 you want me to do it? CHAIRMAN FESMIRE: That's traditional, Mr. 21 Representative. 22 23 REPRESENTATIVE FOLEY: Okay. Mr. Chairman, normally it depends on your definition of oil and gas well 24 25 If you're talking about drilling companies or owners.

you're talking about the land that's owned that they're 1 drilling on --2 MS. BARNARD: Drilling companies, people who 3 directly get their income from the well. 4 REPRESENTATIVE FOLEY: The people who directly 5 get their income from the well, Mr. Chairman, I would tell 6 7 you, are almost all New Mexicans because they live here, they own those rights to the land, they own those lease 8 rights. Some of the actual drilling companies may not be 9 10 from New Mexico, but I will tell you that overwhelmingly 11 the production that I'm finding in New Mexico, especially 12 now, Mr. Chairman, is very local companies. The bigger companies have left our state over the last few years. 13 MS. BARNARD: And can I just ask one more? 14 CHAIRMAN FESMIRE: Surely. 15 MS. BARNARD: So who gets most of this money? 16 17 it New Mexicans themselves, or is it out-of-towners? MS. FOSTER: Mr. Chairman, if I could ask this 18 woman to identify herself, please, before she asks the 19 20 question, just so we know where the question is coming from, for the record? 21 22 CHAIRMAN FESMIRE: Ma'am, do you mind doing that? I'm not going to make you --23 MS. BARNARD: Not all, no. My name is Leslie 24 25 Barnard and I'm a Santa Fe resident.

MS. FOSTER: Thank you.

CHAIRMAN FESMIRE: Representative, did you understand the question?

REPRESENTATIVE FOLEY: I think so. Could she repeat it again, Mr. Chairman? I'm sorry.

MS. BARNARD: I'm just wondering -- I guess what I'm getting at is where does most of this money go? Where is most of the money -- from the oil that is drilled here, where does most of that money go? Does anybody know?

REPRESENTATIVE FOLEY: Mr. Chairman, I would be --

MS. BARNARD: Does it stay in-state?

REPRESENTATIVE FOLEY: -- glad to -- I would be glad to answer to the best of my knowledge.

There is a long list of people involved, whether it's the landman that's doing the research, whether it's the State that's getting the royalties from the lease, whether it's the electrician, whether it's the guy that's out there laying the pipe, to the person checking it, to the roustabouts, to the people that are working on -- When you start counting in the taxes that are paid, the severance taxes that are paid, the lease royalties to the State that are paid, I would tell you that -- I'm willing to bet that -- I would venture to say that a large majority of the money directly benefits either the citizens of the

State of New Mexico or citizens who own companies, own the 1 rights, own the land or are working on those rigs directly, 2 Mr. Chairman. 3 MS. BARNARD: You bet, but you don't really know? 4 REPRESENTATIVE FOLEY: Mr. Chairman, I'm under 5 I mean, I don't want to say 74 percent and get told 6 7 it's 72 percent. But I bet you it's -- I would be willing to say that I'd bet it's over 60 percent on every dollar 8 that is being -- is staying here in New Mexico, Mr. 9 10 Chairman. I'll also add, if you use -- which is commonly 11 used in the Legislature, the factor where they take the 12 dollar that stays in New Mexico and times it times five, I 13 would tell you that it's a huge amount of revenue that is 14 staying and impacting the State of New Mexico. 15 MS. BARNARD: Thank you. 16 CHAIRMAN FESMIRE: Any other questions? 17 Thank you, Representative. 18 REPRESENTATIVE FOLEY: Mr. Chairman, thank you 19 for your time. 20 CHAIRMAN FESMIRE: Is there anybody else from 21 your group that would like to speak? 22 REPRESENTATIVE FOLEY: No, Mr. Chairman. Thank 23 24 you. 25 CHAIRMAN FESMIRE: Thank you.

I'd like to continue now, at least for a while, 1 2 on other folks who would like to make comments, who -you're going to be offered the opportunity to make comments 3 twice a day at -- before we break for noon and before we 4 5 break for the end of the work. We would ask that you not be repetitive in your 6 7 If you make comments today and don't have a 8 different comment to make tomorrow, we would ask that you 9 honor that non-repetition. But is there anybody else who would like to make 10 a comment today or who has a schedule conflict that might 11 12 prevent them from making a comment in the future? 13 Yes, sir? MR. McGARRH: Is this a position where I can go 14 15 up and --CHAIRMAN FESMIRE: Surely. 16 MR. McGARRH: -- say what I have in mind? 17 just a citizen? 18 CHAIRMAN FESMIRE: You bet. You also have the 19 option of making an unsworn position statement or being 20 sworn in and asked questions. 21 MR. McGARRH: I don't necessarily think I need to 22 be sworn in unless somebody's going to ask me a question 23 that -- if I need --24 It's entirely up to you, sir. 25 CHAIRMAN FESMIRE:

MR. McGARRH: Okay, I don't believe I need to be 1 2 sworn in. And I'm not a good public speaker, so if I turn bright red don't panic. I will breathe eventually. 3 (Laughter) 4 MR. McGARRH: I wasn't asked to be here by 5 anybody in particular, by an oil company or by an 6 7 environmentally concerned group. I came down here on my 8 own. I'm from Farmington. I made my speech as I was 9 going. CHAIRMAN FESMIRE: Hang on just a second. 10 MR. BROOKS: Mr. Chairman, could you ask the 11 12 gentleman to state his name for the record, please? CHAIRMAN FESMIRE: 13 Sure. 14 MR. McGARRH: My name is Dana McGarrh. I'm from Farmington, New Mexico, and I'm a small business owner that 15 16 has been in business in Farmington for 25 years. of these mom and pop companies. 17 And I -- This is my speech, okay? I wrote it as 18 I was listening. But thank you, Mr. Chairman, for letting 19 20 me speak. 21 As I said, I'm one of these small business owners 22 from Farmington, wasn't asked to be here. I came to voice 23 what my company and hundreds of small and medium-size companies across the state that know anything about this 2.4

are all thinking and would like to say, which is jobs.

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Now I understand that you need to be environmentally concerned. And like I said, in 25 years of doing this, in about the last seven or eight I have seen a gigantic push. As a service company I work for small oil companies as well as big, and we're all pushed every day to be good neighbors, be environmentally friendly. You almost cannot compete in this industry as an independent without a fulltime EH&S guy working for you. I have one on my staff.

But these rule changes, the way they're being proposed -- I said that I'm here concerned about jobs. Not only mine, but the 18 people that work for me, most of which have families. The rule changes, the way that these are being proposed today, from what I know of them, is going to cost an awful lot of them.

In these discussions you've got the OCD and the environmentally friendly people on one side, you've got the oil companies, large and small, on the other. I want you guys to know that in the middle there are hundreds across the state of medium to small business that are stuck right in the middle of this that, you know, don't have a say or don't know how to get it across. I would not have known that I would have had this opportunity had I not been here.

I've pulled my customers in around Farmington,
large and small -- and small I'm saying range from 10 wells
or so a year, to large companies that drill over 400, or

plan to drill over 400 in '08.

If these cuts go into effect, the way they're stated today, I've been told that as little as 25 percent of these wells will not be drilled, and as much as 100 percent of what a particular company had planned will not be drilled, which is none.

All these cuts will have a trickle down on the employees, the taxpayers, the working man, not only of San Juan County, Rio Arriba County, but other parts of the state. I don't even know about Hobbs and what goes on down there.

But like I said before, I've seen some positive changes in the last five to seven years. And just about everyone has, you know, an EH&S guy. And I heard the first gentleman that spoke mentioned that since 2000 they've been talking with land owners and ranchers and stuff. That coincides with what I just said, that about the last five to seven years I've seen these oil companies push to be, you know, better users of state land and the resources that we have.

It seems to me that these changes, the way they're proposed today, are awful drastic. It seems like to me that there could be, you know, a little more time and effort put into this to find out how big of an impact these companies are actually having on the environment and what

impact that's having on the citizens of the state.

A lot of these wells that are being drilled in and around Farmington are uneconomical. And when I say uneconomical, if you add another \$100,000 to \$150,000 per well they just won't drill them.

I've heard some talk, read some things on the Internet that says, well, these people that aren't working on the rigs, they can go work hauling these cuttings off, it'll create jobs. That won't happen. They're just not going to drill the wells. There'll be no trucking, there'll be no roughnecking going on. These wells are marginal at best, as it is.

I'm going to wrap up here pretty quick. You know, like I said, I'm one of these mom and pop companies, and I do believe -- when I heard another gentleman say that he believes there should be an environmental impact study, I do too.

I think that everybody in the state, including the workers, should know why these cuts are being made. This was contaminated, this water was contaminated and your children could be drinking it 10 or 20 years from now. This is why you lost your job, not a poli- -- It just seems like to me, not being involved in politics, not being an oil company owner, it just seems to me this is awfully political. I haven't, as just a citizen, been -- nobody's

convinced me that there is actually really anything that bad that has been done.

I saw the pictures of the pits, and I've also worked in Farmington for 25 years, and I don't -- I go out to the field on a regular basis and do not see that, that often, if often at all. You know, those are probably the worst case things that could have been presented.

But in any case, last thing I want to say is that in 1986, I saw a downturn in the oilfield that cost probably 80 percent of the jobs in Farmington. That particular downturn in the oilfield drove my father to bankruptcy. He went bankrupt. He had a lot of debt on a lot of equipment, and none of it was being used, and he went bankrupt.

In talking to the customers that I work for, and the estimates that I'm getting of the wells that won't be drilled in and around San Juan County, I could see this having the potential to be the worst thing that's happened in that part of the state since 1986.

Now I have 18 people working for me, as I said before. I know that if these are implemented by the beginning of 2008, I personally -- my one little company will probably be down to nine before the end of January, if this all happens as fast as the OCD is wanting it to.

Now I think a happy medium can be reached between

the State, what you guys do and what these oil companies 1 do, to where everyone can be happy and not so many jobs 2 have been lost. 3 And with that, that's all I have to say. 4 CHAIRMAN FESMIRE: Thank you, sir. 5 MR. McGARRH: You're quite welcome. 6 CHAIRMAN FESMIRE: Is there anybody else that 7 would like to make a comment at this time? 8 And as Mr. Brooks reminded me, would you please 9 start with your name? 10 (Thereupon, Mr. Eisenfield was sworn.) 11 MIKE EISENFIELD, 12 the witness herein, after having been first duly sworn upon 13 his oath, was examined and testified as follows: 14 DIRECT TESTIMONY 15 BY MR. EISENFIELD: 16 17 MR. EISENFIELD: Chairman, Commissioners, my name is Mike Eisenfield. I too live in Farmington, New Mexico. 18 Thank you for the opportunity to make a statement on the 19 20 pit rule proposed to repeal Rule 50. 21 I represent the San Juan Citizens Alliance, an organization with over 200 members in New Mexico, dedicated 22 23 to improving environmental, economic and social conditions in northwest New Mexico. 24 25 San Juan Citizen members are increasingly

concerned about the legacy of pit waste amidst the immense rate of new natural gas drilling in the San Juan Basin. There are extensive cumulative impacts in the San Juan Basin from tens of thousands of existing and proposed wells, pipelines, compressors and roads. Contamination to New Mexico's water, soil, wildlife and residence as a result of natural gas pit waste is unacceptable.

We thank the New Mexico Oil Conservation Division for taking action now to prevent further contamination from pits, as documented in almost 400 incidents of groundwater contamination in New Mexico in 2005 from pits.

We believe that New Mexico Oil Conservation

Division should prioritize closure requirements, implement enforcement actions for contamination from pits. Testing of each pit would resolve disputes concerning where contamination is occurring and to what extent.

We agree that we need to make our decisions based on science. Thus we are asking for clear accounting, systematic approach of pit testing on every well, closure of pits and the elimination of on-site disposal of wastes at every well.

Environmental regulations require enforceable actions for pits rather than continual reliance on voluntary compliance with guidelines. The cost of doing it right should be incurred by all of us concerned with a

clean environment and avoidance of toxic legacies. 1 We also acknowledge the boom or bust. Thus it is 2 even more important that environmental regulations are in 3 place to avoid contamination, legacy cost issues to 4 5 taxpayers to clean up contamination. We export billions of dollars from natural gas 6 7 from the San Juan Basin and deserve protection of our 8 natural systems, which in itself creates long-term economic 9 opportunities throughout northwest New Mexico. 10 Thank you. CHAIRMAN FESMIRE: Thank you, Mr. Eisenfield. 11 Mr. Brooks, do you have any questions of this 12 witness? 13 MR. BROOKS: No questions, Mr. Chairman. 14 CHAIRMAN FESMIRE: Mr. Carr? 15 MR. CARR: No questions. 16 17 CHAIRMAN FESMIRE: Are there any questions? MS. FOSTER: Yes, I have a few questions for this 18 19 gentleman. CROSS-EXAMINATION 20 BY MS. FOSTER: 21 Mr. Eisenfield, are you familiar with the 22 Q. conservation tax in the State of New Mexico? 23 A. To some extent. 24 25 And who puts the money into the conservation Q.

1	fund? Where does the money come from for the conservation
2	fund?
3	A. I believe that it comes from the revenue
4	generated by oil and gas.
5	Q. And within the conservation fund is there a
6	reclamation fund?
7	A. I believe there is.
8	Q. Yes.
9	A. Maybe you can tell me how much it is per year?
10	Q. Well, I will tell you how much it is. Are you
11	aware that the OCD asked for an increase in the reclamation
12	fund cap last year to the Legislature?
13	A. Yes.
14	Q. All right, and do you know how much that is?
15	A. I'm asking you that.
16	MS. FOSTER: I would ask the witness to answer my
17	questions.
18	CHAIRMAN FESMIRE: Mr. Eisenfield, if you know
19	the answer
20	THE WITNESS: I don't know the answer. Thank
21	you.
22	Q. (By Ms. Foster) Thank you. Okay, the
23	reclamation fund has \$2.5 million in it now. Okay?
24	And do you know why the reclamation fund was
25	created?

I'm sure it was to reclaim natural gas sites that A. 1 haven't been revegetated, restored or reclaimed in --2 3 throughout the state. MR. BROOKS: Mr. Chairman, I think counsel 4 5 misspoke, and I'm sure it was not intentional. 6 reclamation fund cap is \$2.5 million. It's not the amount currently in the fund, but I --7 (By Ms. Foster) Yes, I'm sorry, I misspoke. The 8 reclamation fund cap is \$2.5 million, meaning that the 9 money that comes in from the oil and gas industry can sit 10 in the reclamation fund and accumulate up to \$2.5 million? 11 12 Are you aware of that? 13 Α. Yes, I'm aware that it can accumulate to \$2.5 million. 14 And are you aware that it is the OCD, when they 15 do reclamation fund -- reclamation sites, that the money 16 comes out of that fund that comes directly from oil and 17 qas? 18 Yes. 19 Α. So that money does not come from the taxpayers, 20 Q. does it? 21 Evidently -- evidently there's a \$2.5-million 22 Α. fund that's used for reclamation. 23 So your statement earlier that the taxpaying 24 25 public is paying for reclamation of locations is not

1	accurate, is it?
2	A. I believe it is accurate.
3	Q. Okay, tell me why you think it's accurate, then.
4	A. Because there's
5	MR. FREDERICK: Excuse me, I'm Bruce Frederick of
6	the Oil and Gas Accountability Act $[sic]$ . These questions
7	are way beyond the scope of
8	MR. MULLINS: He has no standing. He cannot just
9	interrupt like that because he's one of these attorneys out
10	here
11	MR. FREDERICK: Sorry, I just
12	CHAIRMAN FESMIRE: He has
13	MR. MULLINS: Be quiet
14	CHAIRMAN FESMIRE: he has
15	MR. MULLINS: Be quiet
16	CHAIRMAN FESMIRE: Mr. Mullins
17	MR. MULLINS: take your turn.
18	CHAIRMAN FESMIRE: Mr. Mullins, he has entered
19	his appearance.
20	Mr. Frederick, you can continue if you would,
21	please.
22	MR. FREDERICK: Thank you, Mr. Chairman.
23	I just want to object that this is beyond the
24	scope of his testimony, and it seems to be becoming
25	argumentative.

CHAIRMAN FESMIRE: Ms. Foster, I do have a 1 tendency to want to agree with him. Why don't you go ahead 2 and finish up this line of questioning as quickly as 3 4 possible, okay? 5 MS. FOSTER: Okay. (By Ms. Foster) You state that your decision --Q. 6 that the decisions of the OCD need to be made on science. 7 8 You made that statement, correct? 9 Α. Yes. 10 Q. Okay. And your basis of science is that there needs to be more testing of locations to protect the people 11 of San Juan County, correct? 12 I believe that testing would then allow a 13 Α. determination as to where contamination is occurring, if it 14 is occurring, and how to resolve that contamination. 15 Okay, and what's your definition of 16 contamination? 17 Α. There are numerous chemicals that have been found 18 at natural gas sites. 19 What chemicals? 20 Q. Hydrocarbons, other sorts of chemicals. 21 not --22 23 Is a hydro- --Q. -- a scientist, so --24 Α. Is hydrocarbon a chemical on the periodic table? 25 Q.

1	A. I'm not going to answer that.
2	Q. Well, you know, then I would question the basis
3	of your statement.
4	CHAIRMAN FESMIRE: Okay, Ms. Foster, finish up
5	here, all right?
6	MS. FOSTER: Thank you, I have no further
7	questions, since the witness is leaving.
8	CHAIRMAN FESMIRE: Mr. Eisenfield, there are
9	let's stand for any other questions.
10	Are there any other questions of this witness?
11	Thank you, Mr. Eisenfield.
12	MR. EISENFIELD: Thank you.
13	CHAIRMAN FESMIRE: Yes, ma'am?
14	MS. ARCHULETA: I would like to testify.
15	CHAIRMAN FESMIRE: Come on up. Do you want to be
16	sworn and subject to cross-examination?
17	MS. ARCHULETA: No thank you!
18	(Laughter)
19	MS. ARCHULETA: Thank you very, very much, but
20	CHAIRMAN FESMIRE: State your name for the
21	record, please.
22	MS. ARCHULETA: Yes, my name is Deena Archuleta,
23	and I am with the Wilderness Society. I am a native New
24	Mexican, I'm also raising my children here in New Mexico,
25	and I want to thank you for having these hearings, first

and foremost, and I respect the job you do. It's a very difficult job, and Î thank you for your time and serving this community.

It's important for all of us to protect our land, our water and our wildlife. Banning unlined pits is a very important step in this direction.

To be truly protective, the pit rule needs some additional provisions. Our main concern is that there should be no contamination of water, soil or air from the pits. The best way to achieve this is to keep toxic liquids that can harm our water, soil and air safely away from them.

With pits there is always the risk of leaks, so we need to be very careful about where we permit them to be used and how dangerous materials in them are managed.

No on-site burial of toxic wastes. Where pits are used, companies should not be permitted to bury the waste on site. Toxic wastes from the pits should be hauled away and disposed of in approved facilities, which we know have a much more stringent regime of what -- where they can be hauled away to and the approved facilities.

The information that we've heard today highlights
-- that we heard earlier today, highlights the risks from
oil and gas to water and other resources. In addition to
supporting the need for stronger pit rules, the data

compiled and publicized by the OCD on the incredible amount of groundwater contamination from oil and gas operations shows the real risk to our water and certainly calls into question whether oil and gas development can be conducted without risk to our water supply.

This supports the argument for protecting such areas as Otero Mesa from drilling, by providing hard evidence that gas and oil development can harm our groundwater. Some places are just too vulnerable to use pits. The hundreds of cases of contamination from pits cataloged by the OCD also show that places with vulnerable water supplies, such as the salt basin under Otero Mesa are not safe places for use of pits. The OCD should identify other areas, as they have in Otero Mesa, where the presence of water sources required use -- should use the closed loop system.

OCD should provide fines and enforcement.

Through the proposed rule it is important -- it is an important tool for protection of our land, our water and our wildlife. It is imperative that the OCD guarantee that any new rules passed are enforced on the ground. Maybe this is where our legislature can come in handy and make sure that we have enough funding to provide folks on the ground.

We would like a clear statement on how the OCD

1	intends to enforce the rules, such as through fines and
2	shutting down the operations of pollutants or polluters,
3	excuse me, and commitment of staff to monitoring the
4	industry and holding it to new standards. Pits must not
5	only be lined but must also be bound to protect people and
6	animals. Pits should be constructed to protect our
7	environment and also additional fencing and netting
8	requirements to protect our wildlife and stock animals and
9	our people of New Mexico.
10	Thank you.
11	CHAIRMAN FESMIRE: Thank you, Ms. Archuleta.
12	Is there anybody else that would like to make a
13	statement? In the back there?
14	FROM THE FLOOR: No questions?
15	CHAIRMAN FESMIRE: Not when she just makes an
16	unsworn statement of position.
17	MR. MICOU: Commissioners, my name is Johnny
18	Micou.
19	CHAIRMAN FESMIRE: Would you like to be sworn, or
20	would you
21	MR. MICOU: No, I'd like not to be sworn in.
22	(Laughter)
23	CHAIRMAN FESMIRE: Okay.
24	MR. MICOU: I'm a resident of Santa Fe, and I'm
25	with Drilling Santa Fe.

I do not have prepared comments. I just wanted 1 to come forward and, as I've watched this proceeding today, 2 to note that oil and gas activity has not come into Santa 3 4 Fe County yet. People are alarmed in Santa Fe County about 5 this prospect. But watching these hearings, and watching the 6 animosity from the oil and gas industry to these proposed 7 rules is troublesome. It's going to be hard for citizens 8 of Santa Fe County to be welcoming the oil and gas industry 9 into the county with this sort of activity, or this 10 11 attitude, and I just thought I'd mention that. 12 And I'm concerned on the hundred mile radius, is 13 that since we're in central -- Santa Fe County is in the 14 central part of New Mexico, whether we would actually be covered. And I'd just like to make that either a comment 15 16 or a question. CHAIRMAN FESMIRE: Mr. Micou, I'm not able to 17 18 answer that right now. MR. MICOU: Okay. 19 CHAIRMAN FESMIRE: You might contact Mr. --20 MR. MICOU: All right --21 CHAIRMAN FESMIRE: -- Price --22 23 MR. MICOU: -- thank you. 24 CHAIRMAN FESMIRE: -- to get an answer to that.

I appreciate it, thank you.

MR. MICOU:

CHAIRMAN FESMIRE: Thank you, Mr. Micou.

Oscar?

MR. SIMPSON: I'll just make my statement from here, since I'm not going to be under sworn testimony.

Anyhow, I'm Oscar Simpson, native New Mexican, sportsman, conservationist. I speak for the New Mexico Wildlife Federation, who has 6000 supporters and members. I also represent the National Wildlife Federation, which is the largest conservation organization in the United States, but also they have an additional 6000 members in New Mexico.

We highly recommend and highly support the Oil Conservation Division's efforts to bring forth the real facts and science about contamination related to pits and unlined pits, and we fully support your endeavors to make sure that we protect our water resources which are our number-one -- I think it's more valuable than oil and gas. Without water you have nothing.

You look at the historical practices and efforts, which I have looked at for over 30 years as a former regulator and a state regulator protecting our public water systems, we need to take immediate action, we need to make sure that our water is protected, our air and also wildlife resources. And I commend you.

We will provide technical testimony and/or

statements later on, but we commend your efforts, and we 1 really appreciate getting this information out on the 2 website and showing the public the facts and information 3 about what's going on in New Mexico, especially related to 4 5 our water resources. 6 Thank you. CHAIRMAN FESMIRE: Rachel, did you have a 7 comment? 8 MS. JANKOWITZ: Yeah, I just wanted to 9 reiterate --10 CHAIRMAN FESMIRE: Start with your name. 11 MS. JANKOWITZ: -- earlier that the people at the 12 13 front of the room remember to speak up. CHAIRMAN FESMIRE: Okay. Is there anybody else 14 15 who would like to make a comment at this time? 16 Okay. Mr. Brooks, are you prepared to continue where we left off during the power failure? 17 MR. BROOKS: Yes, Mr. Chairman. I would like to 18 address one housekeeping matter first, if I may. 19 20 CHAIRMAN FESMIRE: You may, sir. MR. BROOKS: The reason for addressing this now 21 22 being that we have a witness who was instructed to be at 23 the hearing who is not present here but could be brought 24 here if necessary. I would like to tender into evidence Exhibits 25

Numbers 1 and 2, which are copies of the notices that were 1 prepared and published in the New Mexico Register and in 2 the Albuquerque Journal and also that were sent to various 3 4 persons by e-mail. If there is no objection to those notices being 5 admitted for whatever they state, I think that it would be 6 unnecessary for us to call a witness. If there's going to 7 be a foundational objection, we have a designated witness 8 9 we can call. 10 CHAIRMAN FESMIRE: Okay. MR. CARR: We have no objection. 11 CHAIRMAN FESMIRE: No objection? Mr. Hiser? 12 MR. HISER: Even though it's a foundation issue 13 and I'm tempted, I won't, if it's all right. 14 CHAIRMAN FESMIRE: It looks like we're going to 15 talk about foundation a lot. 16 17 (Laughter) CHAIRMAN FESMIRE: Ms. Foster? 18 MS. FOSTER: No objection at this time. 19 CHAIRMAN FESMIRE: Let's see, Ms. Belin? 20 MS. BELIN: No objection. 21 CHAIRMAN FESMIRE: Mr. Jantz? 22 MR. JANTZ: No objection. 23 CHAIRMAN FESMIRE: Okay. There being no 24 25 objection, we will go ahead and admit OCD Exhibits 1 and 2.

1	MR. BROOKS: Okay, with the Commission's
2	indulgence we will call Mr. Price back to the stand.
3	CHAIRMAN FESMIRE: Mr. Price, remembering that
4	you've been previously sworn; is that correct?
5	WITNESS PRICE: Yes, your Honor. I just wonder
6	if I could be de-sworn now
7	(Laughter)
8	WITNESS PRICE: But yes.
9	CHAIRMAN FESMIRE: Mr. Brooks, which tab are we
10	on? I closed my book.
11	MR. BROOKS: I think we were talking about the
12	400 and 500 pits.
13	CHAIRMAN FESMIRE: Right, and that was in Tab
14	MR. BROOKS: It may take me a minute to find
15	that. Yes, I believe it is in Tab 6, and I think it is
16	probably slide number 15.
17	And I have concluded my questioning of Mr. Price
18	about how many pits there are reported on slide 15, so
19	WAYNE PRICE,
20	the witness herein, having been previously duly sworn upon
21	his oath, was examined and testified as follows:
22	DIRECT EXAMINATION (Resumed)
23	BY MR. BROOKS:
24	WITNESS PRICE: Okay, next slide.
25	This is a slide that was put together by one of

my staff engineers. It -- Over on the left-hand side here, this is the price per barrel of oil. On the bottom is the years. And this curve here is the number of pits that were in New Mexico. And we only have three oints that we've actually plotted.

But my point here is to show, back in -- I read some of the testimony -- back in the early '70 and the '50s and the '60s in which the price of oil was extremely low, and there were a number of -- obviously, of unlined pits that companies were using, and they made some very valid points back then, is that the price of oil did not -- would not support putting infrastructure in such as pipelines, et cetera, et cetera.

And so I think it's kind of interesting to note, as the price of oil has gone up, and then we meet a deflection point right here and a deflection point right here as the price has gone up. And this only goes to \$60 a barrel. Of course, I guess we know it's now up around in the \$90's, and I'm not staying that it would stay there by any means.

I'm just trying to point out that as the price of oil goes up, it makes having no -- or basically having unlined pits -- they basically can afford not to have these unlined pits. Now I'm talking about unlined pits here.

And so I think it's just a good graphical

representation that as the price goes up -- of course we 1 know the cost of business goes up too, but you can see from 2 here that the number of pits are coming down. And I think 3 the industry is making a good effort in that area. 4 But along these lines, around '75 and then the 5 '80s and the of course the '90s and the recent pit rule, 6 which is about right in here, those were also added effects 7 to having pits to be reduced. 8 9 And so that's all this slide shows. To me it's just a good correlation: The more money we can get off the 10 oil and gas revenues, then we can afford some of the more 11 environmental protections that we have. 12 Next slide. 13 14 MR. HISER: Mr. Chairman, before Mr. Price goes on, I was just wondering if you could have him clarify 15 whether this was total pits or unlined pits. You said both 16 during the course of your presentation. 17 WITNESS PRICE: This is unlined pits. 18 MR. HISER: Okay, so it's just the number of 19 20 unlined pits. 21 WITNESS PRICE: This is unlined pits. 22 MR. HISER: Thank you. 23 WITNESS PRICE: Right. Next slide? 24 This was just the gas price versus pits, almost 25

the same thing.

Next slide.

Okay, modeling of small unlined pits. We've done some modeling for small unlined pits. We selected the San Juan Basin area. We used 5000 milligrams per liter of chloride as a tracer. We used small quantity discharges, less than a barrel a day.

We used typical input parameters. Mr. Ed Hansen will talk about those input parameters in more detail.

However, in your packet there are modeling input parameters and output sheets.

We varied the distance from the pits and we varied the pit sizes. We selected a distance to groundwater set at 50 feet, and then we looked at cumulative effects.

Next slide.

- Q. (By Mr. Brooks) Now Mr. Price, what were you trying to achieve? What question were you trying to answer with this modeling?
- A. Okay, what we're trying to show here in the modeling is that unlined pits, even though you put very, very small quantities in, it can travel to a distance of 50 feet and contaminate groundwater.

Remember, earlier in my slide presentation I had talked about the nonvulnerable area, a sensitive area that

169 was defined where groundwater was deeper than 50 feet. And 1 so what I'm trying to point out is that unlined pits, even 2 with very, very small quantities, will indeed contaminate 3 groundwater, and that's my point here. 4 Now were you trying to determine how long it 5 would take for the pit contents to migrate so as to 6 contaminate groundwater? Was that the purpose of --7 That wasn't my number one objective, but that's 8 -- I guess that's the result of -- the modeling will show 9 that. 10 Now the models that you used, are these Q. 11 modeling procedures that are standard in the environmental 12 engineering business? 13 Yes, they are. 14 Α. And have these models that you have used, have 15 Q. 16 they been peer-reviewed? Yes, by EPA. 17 A. Okay, you may continue. 18 Q. Next slide. 19 Α. Here's just an example of a pit with putting one 20

barrel per day in. 5000 milligrams per liter, that's a pretty low concentration of salts. 50 feet to groundwater.

And you know, it's no surprise here. It shows that the larger pit is going to contaminate more than the

smaller pit, and the time frame is fairly quickly.

21

22

23

24

1 Next slide.

- Q. Now here you're talking about unlined pits?
- A. These are all unlined pits.

Next slide. Next slide.

Okay, here I provided modeling of -- and we did cumulative effects, meaning two pits adjacent to each other. Of course, as you'll see here, the 30-by-30 pit contaminated more, and...

Now the dotted line is the cumulative, more than one pit, actually two pits. The solid line is one pit.

And I think what's really important to show here is, look at the time frame here. Of course, this is no surprise. The more waste you put into a stream, the more waste you put into water, groundwater, then the quicker you're going to exceed the standard.

And this line along the bottom here is the groundwater standard minus 50 parts per million, which is the typical background of most of the aquifers in New Mexico, freshwater aquifers.

- O. Now --
- A. And so my point here is that the cumulative impact is a lot quicker. It looks like around 15 years or so.
- Q. Now as you're modeling, you assumed that the two pits were adjacent to one another --

1	A. That's correct
2	Q you said?
3	A they are.
4	Q. Now if the pits were some short distance apart,
5	like say they were 10 feet apart. Would there still be
6	cumulative effects?
7	A. There would still be cumulative effects?
8	Q. But it would be less than if they were adjacent?
9	A. They would be.
10	Q. But you didn't model that
11	A. We did not model
12	Q scenario quantitatively?
13	A. We would have liked to model 50,000 pits, but we
14	didn't have the time to do that. Nor the manpower.
15	Q. Based on this concept of cumulative effects, I
16	know you can't say anything quantitatively because you
17	didn't do the modeling, but qualitatively would you say
18	that a large number the larger the number of pits
19	MS. FOSTER: Objection.
20	Q. (By Mr. Brooks) in a small area
21	CHAIRMAN FESMIRE: Hang on, there's an objection.
22	I don't know what it is yet.
23	MS. FOSTER: Well, it would seem that the
24	attorney is leading the witness again.
25	CHAIRMAN FESMIRE: Ms. Fos

MS. FOSTER: I would just ask that a question be 1 2 asked, as opposed to a statement. 3 MR. BROOKS: I would like to rephrase the 4 question, Mr. Chairman. 5 CHAIRMAN FESMIRE: Okay, we'll sustain the 6 objection. You'll rephrase the question, Mr. Brooks. 7 0. (By Mr. Brooks) If you had -- Can you make a statement as to whether or not a significant number of pits 8 in a small area would result in a higher probability of --9 unlined pits, we're talking about -- would result in a 10 11 higher probability of contamination than just one pit in a 12 given area, whatever the area might be? 13 MS. FOSTER: Objection. 14 CHAIRMAN FESMIRE: Want to try again, Mr. Brooks? 15 (Laughter) 16 MR. BROOKS: Okay. 17 CHAIRMAN FESMIRE: I think you can make it real simple. He probably knows what you're asking now. 18 MR. BROOKS: Okay. 19 20 (Laughter) 21 Q. (By Mr. Brooks) Is there a correspondence between the number of pits in the vicinity of a particular 2.2 groundwater source and the amount of contamination that 23 24 will reach that groundwater source from those pits? 25 Α. Yes.

Q. Thank you.

A. Next slide.

Here we modeled where the receptor, like a well, would be 200 feet away from the particular well. Of course you see the time frame is a lot longer now. It's around 50 years. But it still -- as you can see by these curves, it's still contamination to groundwater.

Now you've got to understnad that this is a very, very small quantity, one barrel per day with 80 percent evaporation of that. And so these are very, very small quantities going into unlined pits and traveling a distance of 50 feet and contaminating the groundwater.

Next slide.

Modeling conclusions. Three major points here.

Very small quantities may cause groundwater contamination over time.

when a continual source is available. I think that's really important right there, that we all understand. If you cut the source off, you probably won't have contamination. But if you continue to have a source of water and an unlined pit, the probability is extremely high you will have contamination.

And then of course cumulative effects compound the problem.

Next slide. 1 Now with regard to that water source, is it true 2 -- or, if I can state this in a nonleading manner to the 3 satisfaction of counsel, does contamination move to 4 groundwater faster if the pit is full of water? 5 MS. FOSTER: Objection. 6 CHAIRMAN FESMIRE: Overruled. 7 WITNESS PRICE: Yes. 8 (By Mr. Brooks) And is that what you're 9 Q. referring to when you say, When a source is available? 10 11 Α. Yes. Q. Thank you. 12 Α. Next slide. 13 14 So how many unlined pits are remaining? Our best estimate is 2000. That's unlined pits. Long-term impact 15 is unknown at this time. 16 Here is an example -- You've seen this slide 17 before, this is an unlined pit in the area between Hobbs 18 and Carlsbad. It's in the exempted, and --19 Next slide. 20 -- we're standing at a ranch house, and this red 21 circle shows where this pit is located. It's about 150 22 yards across there. 23 Next slide. 24 Here's one of the three or four houses that is at 25

They do have fresh water in this area, 1 this ranch house. and they're in close proximity to this unlined pit. 2 Now Mr. Price, as a matter of foundation, slides 3 0. 25, 26 and 27, were those pictures taken by you or by a 4 5 member of your staff in your presence? 25? Go back to them. 6 Α. 7 25 is the pit, 26 is the view --Q. These slides were taken by myself. 8 Α. 9 And were you present on that occasion? Q. 10 Α. Yes. And is slide 26 a view from --11 Q. -- the ranch house. 12 Α. -- the house that is depicted in slide number 27? 13 Q. 14 Α. Yes. 15 Q. Now is there a water well, an active water well, located at that ranch house? 16 17 A. Yes. 18 Q. Thank you. 19 Next slide. Go to -- Keep going. Α. 20 Okay, now we're going to have some groundwater evidence presented by Mr. von Gonten, our senior 21 22 hydrologist. 23 And Ed Hansen, do you want to -- would you like to drive for Glenn? Let Glenn come over here. I guess we 24 need another chair. 25

	X 4 2
1	MR. BROOKS: Okay, pursuant to the manner of
2	presentation that I announced to the Commission at the
3	beginning of our presentation this morning, I will now call
4	Mr. von Gonten for the purpose of making his presentation
5	that is relevant to the matters that Mr. Price has
6	testified to, after which both witnesses will be submitted
7	for cross-examination.
8	CHAIRMAN FESMIRE: Mr. von Gonten, you understand
9	that you've been previously sworn, have you not?
10	WITNESS VON GONTEN: Yes, sir.
11	CHAIRMAN FESMIRE: Continue.
12	GLENN VON GONTEN,
13	the witness herein, having been previously duly sworn upon
14	his oath, was examined and testified as follows:
15	DIRECT EXAMINATION (Resumed)
16	BY MR. BROOKS:
17	Q. Would you state your name, please, for the
18	record?
19	A. Glenn von Gonten.
20	Q. And by whom are you employed?
21	A. The Oil Conservation Division.
22	Q. And what is your title?
23	A. Senior Hydrologist.
24	Q. Are you a geologist, Mr. von Gonten?
25	A. Yes, I have a bachelor's and a master's degree in

geology.

- Q. Would you give a brief résumé of your work experience?
- A. Yes, sir. I started work with the Oil

  Conservation Division about the last day or so of January,

  2005, so I've been with the OCD in the Environmental Bureau

  over two and a half years now.

Prior to that, from November, '99, to January, 2005, I was a -- employed with the Environmental Bureau [sic]. I was a supervisor and dealt primarily with Department of Defense hazardous waste sites, hazardous waste regulated sites.

Prior to that, from '93 to when I joined the Environment Department in '99, I was working at a similar job with the Department of Environmental Quality for the Commonwealth of Virginia, in Richmond, Virginia. I dealt mostly with RCRA corrective action and permitting issues with a broader spectrum of industries, industries including manufacturing as well as the Department of Defense.

Prior to that, in 1977 through the next 14 years,

I worked in the oil and gas industry, a variety of

positions.

23 CHAIRMAN FESMIRE: Mr. von Gonten, would you 24 speak up, please?

WITNESS VON GONTEN: Yes, sir. From 1977 I

started work with a company called Exploration Logging. Ι 1 took a break to get my master's degree, and I went to work 2 for Conoco, and then I went to work for ARCO. (By Mr. Brooks) Mr. von Gonten, would you 4 summarize your experience in groundwater hydrology? 5 Well, I've been working mostly with groundwater 6 Α. contamination for the past 14 years, as I mentioned, with 7 the Department of Environmental Quality in Virginia, the 8 Hazardous Waste Bureau in the Environment Department, and 9 here with the Oil Conservation Division. I have 10 postgraduate training in hydrogeology from the University 11 of Houston and Oklahoma State University. 12 13 MR. BROOKS: Mr. Chairman, we tender Mr. von Gonten as an expert witness in geology and hydrology. 14 CHAIRMAN FESMIRE: Are there any objections? 15 16 MR. CARR: No objection. MR. HISER: No objection. 17 CHAIRMAN FESMIRE: Let the record reflect no 18 objection. Mr. von Gonten will be so admitted. 19 20 FROM THE FLOOR: Could the witness speak a little louder, please? 21 WITNESS VON GONTEN: I'll try. 22 CHAIRMAN FESMIRE: Okay. 23 24 (By Mr. Brooks) Mr. von Gonten, I believe you're Q. going to be making your presentation, which has been 25

identified as OCD Exhibit 12? 1 Α. Yes, sir. And we will proceed in the same way. I will not 3 Q. interrupt you unless I have questions. 4 I will be talking first about the hydrogeology of 5 6 the San Juan Basin and focusing on the so-called vulnerable 7 areas and the nonvulnerable areas. 8 Next slide. The San Juan Basin, of course, is located in the 9 northwest part of New Mexico and includes -- major part of 10 11 it is in San Juan County and Rio Arriba County. And the State Engineer declared the San Juan Basin an underground 12 water basin. 13 Next slide, please. 14 Now Mr. von Gonten, one question on that last 15 Q. 16 Is this a depiction of the declared groundwater basins in New Mexico that have been declared by the State 17 Engineer? 18 19 Yes, this published by the State Engineer's All of the basins have been declared in the State 20 21 of New Mexico. It looks like there's a declared basin 22 Q. 23 everywhere; is that correct? That's correct. 24

Mr. von Gonten, could you

CHAIRMAN FESMIRE:

speak up a little more? 1 WITNESS VON GONTEN: I'll try. 2 3 Q. (By Mr. Brooks) Continue. Next slide, please. 4 Α. This is a geologic map of the San Juan Basin. 5 I'll be talking here -- focusing on the tertiary aquifers. 6 7 The light brown -- I'm sorry, this is not working right. Okay, the light brown formation is the San Jose formation, 8 which overlies the Nacimiento and Animas formations, shown 9 10 in darker brown. These are two uppermost tertiary 11 aquifers. I'll be using them to illustrate my points. However, I should point out that there are older 12 Cretaceous and Jurassic aquifers in the San Juan Basin. 13 They're depicted in various colors of green to the west and 14 to the southwest. 15 16 Next slide, please. My primary reference is this publication, USGS 17 1990, which is the hydrologic atlas entitled the 18 Hydrogeology of the San José, Nacimiento and Animas 19 Formations in the San Juan Structural Basin, New Mexico, 20 Colorado, Arizona and Utah. 21 22 As I mentioned, there were a number of --23 Next slide, please. As I mentioned, there were a number of other, 24

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older aquifers, which are used as water supplies in the San

Juan Basin. They include the Ojo Alamo sandstone, the Kirtland shale, the Fruitland formation, the Pictured Cliff sandstone, the Cliff House sandstone, the Point Lookout sandstone, the Gallup sandstone, the Dakota sandstone, the Morrison formation, and the Entrada sandstones. These are Jurassic and Cretaceous age. They are older than the Tertiary aquifers that I'll be referring to next.

- Q. Okay --
- A. Next slide, please.
- Q. -- Mr. von Gonten, the absence -- does the absence of the San José, Nacimiento and Animas formations in some portions of the Basin mean that there's not any fresh groundwater in those areas?
- A. No, it means that the fresh water is in the older Cretaceous- and Jurassic-formation aquifers.
  - O. Continue.
- A. This slide depicts the uppermost San José formation in pink, the underlying Nacimiento formation in blue, and the Animas formation in purple. I would point out that only a small fraction of the Animas formation actually outcrops in northern New Mexico. It occurs primarily in southern Colorado.

This figure also depicts the location at that time of oil and gas wells and water wells.

Next slide, please.

This is a picture of the same formation, however 1 2 this well focuses on the water wells and springs, showing 3 the general distribution of water wells known to the USGS at the time of the publication. 4 Next slide, please. 5 There are two major databases which detail the 6 7 locations and designated uses of water wells permitted by 8 the Office of State Engineer. They are from the USGS and from the Office of the State Engineer. 9 These databases are available from the New Mexico 10 Resource Geographic Information System, and this is a GIS 11 12 clearing house of data for New Mexico. Next slide. 13 14 0. Is that what RGIS stands for? Yes, sir. 15 Α. I think everyone -- I'm assuming everyone 16 Q. 17 probably knows what OSE and USGS stand for, so I won't ask 18 you that. Go ahead. CHAIRMAN FESMIRE: Well, for the record let's go 19 20 ahead and put it on. WITNESS VON GONTEN: Okay the USGS is the United 21 States Geological Survey, and the Office of State Engineer 22 is OSE. 23 Next slide, please. 24 25 These two figures side by side show the coverage

of each database, from the OSE on the left to the USGS on the right. As with all databases, they are a work in progress, and they do not exactly have the same coverage.

I would point out that in the left-hand figure part of the San Juan County is showing a sparse distribution of water wells, whereas there's a much greater distribution depicted on the USGS database.

Also in Roosevelt County, to the north of Lea, there's shown to be a gap or a lack of water wells, whereas the other database shows a very high concentration.

The point here is that this is the best available data. I combined these two databases for the next few exhibits.

Next slide, please.

This map was generated using RGIS Explorer and the data derived from both the US and Office of State Engineer's database, and it depicts the locations of water wells in the San Juan Basin. The water wells are more visible, the closer that you zoom in.

I should point out that I also restricted the extent of the database that I was using a subset of, so that I would be able to work with the software faster.

Next slide, please.

Q. (By Mr. Brooks) I'm sorry, Mr. von Gonten, what are you trying to show with slide number 10?

These are the locations of water wells as 1 Α. 2 documented in the two databases that I referred to. 3 ο. Does this show anything about the location of these wells with reference to the topography? 4 5 It does. This is not a topographic map, it's a shaded-relief base map. You can see the major drainages in 6 7 This is the La Plata, the Animas and the San the north. Juan Rivers, and then you can see the other drainages which 8 feed into that drainage system. 9 Q. Now given the way the vulnerable area is defined, 10 does this show water wells that are not located in the --11 or that are located outside the vulnerable area? 12 I will get to that in a moment --13 14 Q. Okay. 15 -- but yes, there are water wells depicted on 16 this map that are located in the vulnerable area, and there 17 are water wells that are located in the so-called nonvulnerable area. 18 Okay, go ahead. 19 Q. 20 Next slide, please. Because of the way that the vulnerable area is 21 22 defined in Rule 50, it's very difficult to get an exact 23 number from querying the two databases on how many water wells are located in the nonvulnerable area or the 24

25

vulnerable area.

The point is that water wells occur in

both the vulnerable area and nonvulnerable areas. And the Office of the State Engineer was not involved in the designation of the nonvulnerable area where pits are permitted by Rule 50.

- Q. Okay, Mr. von Gonten, your slide says, An unknown but significant number of water wells are listed in the OSE iWATERS database in the vulnerable area. Would it also be fair to say that an unknown but significant number of water wells are located outside the vulnerable area?
- A. Yes, that would be fair to say, that they are located in the so-called nonvulnerable area.
  - Q. Continue.

A. The vulnerable area is defined in subparagraph (g), paragraph (2) of subsection C of 19.15.2.50 NMAC.

Next slide, please.

And that Rule 50 states that, Unlined pits shall be allowed in the following areas, provided that the operator has submitted and the Division has approved an application for a permit as provided in Section 50 of 19.15.2 NMAC, and provided that the pit site is not located in fresh water-bearing alluvium or in a wellhead protection area.

Then the regulation goes on to actually define what we refer to as the exempted area. But I'm focusing now on the nonvulnerable area, so for completeness it --

Next slide.

-- continues, ending with the area that's being defined, that -- This citation starts -- or ends the last section here with the exempted area, which is Township 23 South, Range 30 East, NMPM, Sections 1 through 19. And the next section has to do with the nonvulnerable, and it states --

- Q. Now Mr. von Gonten, what part of the state is the exempted area located --
  - A. That's located in Eddy and Lea Counties.
  - Q. That's in southeast New Mexico?
    - A. It is located in the southeast.
- Q. And in what part of the state is the vulnerable area located?
- A. The vulnerable area is primarily in San Juan and Rio Arriba Counties.
- Q. And is the nonvulnerable area -- how is that -- Well, you have the portion of the rule stated here?
  - A. That's the intent of this slide.
- Q. Okay, go ahead and describe it.
  - A. So the nonvulnerable area is that area within San Juan, Rio Arriba, Sandoval and McKinley counties that is outside the valleys of the San Juan, Animas, Rio Grande and La Plata Rivers, which are bounded by the topographic lines on either side of the rivers that are 100 vertical feet

above the river channels, measured perpendicular to the river channels, and is outside those areas that lie within 50 vertical feet, measured perpendicularly to the drainage channel of all perennial and ephemeral creeks, canyons, washes, arroyos and draws, and is --

Next slide.

- -- outside the areas between the above-named rivers and the Highland Park Ditch, Hillside Thomas Ditch, Cunningham Ditch, Farmers Ditch, Halford Independent Ditch, Citizens Ditch or Hammond Ditch, provided that no protectable ground water is present or if present, will not be adversely affected; or any area where the discharge into the pit meets the New Mexico Water Quality Control Commission ground water standards.
- Q. Now the vulnerable area, then, is entirely in San Juan, Rio Arriba -- the nonvulnerable, I'm sorry, is entirely in San Juan, Rio Arriba, Sandoval and McKinley Counties?
- A. Yes. Actually, we're -- technically, I think,
  Rule 50 talks about unlined pits. We refer to -- by
  earlier rulemaking or earlier orders, to the nonvulnerable
  area and the exempted area, but the actual language is as
  shown here. That is what is meant by the nonvulnerable
  area.
  - Q. Now it lists all these river valleys --

MS. FOSTER: Mr. Chairman, I believe that they 1 stated it, but I think I missed it, the specific section in 2 Rule 50 that this quote actually comes from. Could I just 3 have that? WITNESS VON GONTEN: Yes, it's on page 12 --5 6 MR. BROOKS: -- subparagraph (g) of paragraph (2) 7 of subsection C of 19.15.2.50 NMAC. MS. FOSTER: Thank you. 8 (By Mr. Brooks) Well, are these the upland areas 9 Q. of the San Juan Basin? 10 In general, they are the areas that are out of 11 A. the river drainages. 12 And this is the nonvulnerable area? 13 0. Α. Those would be the nonvulnerable areas. The 14 vulnerable areas would be below that area, which is either 15 50 or 100 feet above the river channel. 16 Continue. 0. 17 Α. Next slide. 15, please. 18 OCD drafted approximately 165 pits [sic] that 19 20 depict the vulnerable area. 21 CHAIRMAN FESMIRE: Pits or maps? 22 WITNESS VON GONTEN: Maps, 165 maps that depict the vulnerable area and also the nonvulnerable areas. 23 These maps are on file in the Santa Fe office and are 24 available to industry for review. No member of industry 25

has requested to review these maps for the past two years that I'm aware of.

How does the industry know which areas are vulnerable as defined? And I think my point here is, as defined is not as easily as the definition for the exempted area, which is defined by township, section and range.

Actually, industry doesn't. They'll have to determine for themselves, looking at topographic maps, whether a proposed wellsite location is in a vulnerable area or a nonvulnerable area.

Next slide, please.

This figure, which you have seen before, shows the area that I'll be discussing, that I am discussing, the vulnerable areas/nonvulnerable area. It's a very busy map. Of course, there's a lot of primarily gas wells. This is the -- I believe, the La Plata, the Animas, the San Juan River, plus the drainages that feed into the San Juan River system.

This map depicts the oil and gas wells, primarily gas wells, located in the northwest. OCD Rules specify in general approximately 160-acre spacing, but because there can be several pools collocated -- that is, that have stacked pay -- there can be more than four wells per square mile.

It is possible or even likely that each producing

well that you see on this map is associated with more than pit during its producing lifetime, one original drilling or reserve pit, one production pit, and maybe several workover pits.

OCD does not know how many pits are buried in the northwest.

Next slide, please.

This table is based on information from the State Engineer's Office. There's several things I want to point out, is that, again, because this is the State Engineer's Office which did not have complete coverage of the water wells in the western part of San Juan County, presumably because that's the Navajo nation and they don't share that information with the State Engineer, but they do share it to a greater degree with the USGS, you see that San Juan County has less than 1900 wells.

The two numbers here are showing that -- the first number is the number of wells reported in the database that are located with a depth to water of 60 feet or less. I think this is under-representation in San Juan County, but I think the percentages are probably about the same.

Approximately 90 percent of the wells in San Juan County are located at a depth to water of 60 feet or less.

This is important because, assuming that you have perhaps a

10-foot-deep pit and you have a 50-foot separation, you can see that the requirement in the proposed pit rule would say that approximately 90 percent of the time you would be unable to advance a well there using a lined pit, you would have to go closed loop.

The percentages in Rio Arriba are 81 percent.

And in the southeast -- this is a little bit out of order -- it's roughly 69 percent in Eddy County, and in Lea County, which has the Ogallala aquifer, it is a much higher percentage of 87.3 percent.

For reference, I also queried the database for information that would be relevant in representing the activity that's currently going on in the northeast in Colfax County. Smaller number of wells. The percentage is 64.7 percent.

This documents that most water wells in the area that we're concerned with are fairly shallow.

At this point, Mr. Brooks, I would like to hand out the replacement pages for the Commission.

MR. BROOKS: Mr. Chairman, honorable

Commissioners, because the black-and-white copies of some

of these slides are essentially illegible, Mr. von Gonten

has prepared copies in color of certain of these pictorial

slides. We would like to offer them for the Commissioners

to substitute, if they wish to do so.

	-17-46-45
1	CHAIRMAN FESMIRE: Okay. Mr. Carr, do you have
2	any objection?
3	MR. CARR: No, I do not.
4	CHAIRMAN FESMIRE: Mr. Hiser, Ms. Foster?
5	MR. HISER: (Shakes head)
6	MS. FOSTER: (Shakes head)
7	CHAIRMAN FESMIRE: Anybody have an any of the
8	attorneys have an objection?
9	MS. BELIN: (Shakes head)
10	MR. BROOKS: You'll need one for the Commission
11	counsel also.
12	WITNESS VON GONTEN: We won't have enough to
13	provide
14	MR. BROOKS: Okay, I guess Yeah, okay.
15	You may continue.
16	CHAIRMAN FESMIRE: Continue, please, sir.
17	WITNESS VON GONTEN: Next slide, please.
18	This is a figure that depicts the location of
19	selected water wells in the San Juan Basin. To enable the
20	software to work faster, I restricted the larger database
21	by latitude and longitude.
22	The Office of the State Engineer's database has
23	more than 148,000 water wells, and the USGS has more than
24	31,000 water wells. The blue dots are water wells
25	actually, both the blue, the red and that one single green

dot are water wells that were captured by the combination of the two databases. The larger red dots are water wells that are located in the nonvulnerable area.

I zoomed into an area for querying the database, to an area bounded by US 550 on the west and south, US 64 on the north, and State Highway 537 on the east, just for reference. I made no attempt to determine -- the thousands of water wells there, what percentage of them are in the nonvulnerable area. But I will use this information to illustrate the point.

Next slide, please.

There are water wells located in the nonvulnerable areas. When you zoom in closer, the topography layer of this mapping program becomes active, and you can begin to see the river and drainage valleys more clearly, which must be considered when determining whether any particular drilling site is located in a nonvulnerable area or a vulnerable area, and therefore whether industry would be eligible to use an unlined pit using the current pit rule 50.

In fact, to flag the red wells, I zoom in to the maximum extent, and the GIS elevation layer can be queried at that point to determine the elevation at the location of the water well. The topography is clear enough to determine whether the water well is located more than 100

feet vertically above the bottom of the stream channel. 1 Next slide. 2 The vulnerable area was defined partly based on 3 the presence of alluvium in major rivers and drainages. 4 5 The vulnerable area alluvial aquifers are indeed very sensitive areas, without a doubt. 6 Next slide. 7 However, protectible groundwater occurs in both 8 alluvial and bedrock aquifers. Protectible groundwater 9 occurs in both the vulnerable areas and the so-called 10 11 nonvulnerable areas. There is no hydrogeologic justification for the 12 assumption that groundwater will not or has not been 13 impacted from releases from unlined pits in the 14 nonvulnerable areas. 15 Next slide. 16 I'll be moving on to a discussion of the 17 18 hydrogeology of the exempted area of southeast New Mexico. Next slide. 19 20 COMMISSIONER BAILEY: Wait a minute, wait a 21 minute. What's the green dot? WITNESS VON GONTEN: Yes, of course. That was a 22 mistake on my part. 23 24 (Laughter) Ed, can you back up several slides? Yes, the one 25

green dot there, I was going to do something with that and ran out of time so I didn't. It should just be a red dot.

Okay, move forward to slide 23, please.

The area that we're going to be talking about with the exempted area is located on the boundary between the Capitan and -- the Carlsbad and Capitan Reef.

- Q. (By Mr. Brooks) Now is this another copy of the State Engineer's map that you --
- A. Yes, this is the State Engineer map depicting the location of the declared basins, and also depicting that there are no undeclared basins left in New Mexico.
  - Q. And what basins is the exempted area located in?
- A. That is located in the Carlsbad and Capitan Basins.

Next slide, please.

This is a geology map of the exempted area. And because of the regulations which I've cited earlier, define the exempted area by using township, section and range, it is relatively easy to pick the extent of the exempted areas. And that's shown here in the red outlines.

I should also point out -- and I'll be referring to it -- is, this is the boundary, the black line, darker black line, is the boundary between Eddy County on the west and Lea County on the right. For reference, there's the City if Carlsbad and the Hobbs highway.

In the northeast part of this map, the orange color is actually the Ogallala aquifer, the outlier to the Ogallala aquifer to the south.

The yellow, various colors of yellow, are Quaternary-age alluvium that have generally been reworked out of the Pecos River Valley or off the Ogallala caprock.

The blue coloring depicts older Permian-age formations which have been, in part, covered up by the reworked Quaternary alluvium.

The exempted area is as much as 30 miles north to south. It runs these five townships north and south, and it's three townships east and west, 18 miles across.

And I should point out for reference, although I did not include it on this figure, that this roughly overlies the potash area, which is larger, but there's more potash area as defined in Lea County. You can see that the exempted area only includes a small section of one township, the west half of one section of -- in Lea County. And as I'm pointing out -- and I'll be referring to it on other maps -- this jog in the offset of the county lines will be an important reference point for future maps.

Next slide, please.

This is a topographic base map of the exempted area, again approximately the same scale, and you'll see this offset in the county line for reference. And what

we're talking about is, the exempted area is running here, and it's 30 miles this way and 18 miles east to west.

Again, you can see perhaps better here the City of Carlsbad and the highway going to Hobbs, and you can also see these drainages here lined with salt lakes and playas.

And by the way, this map was generated using OCD's RBDMS database.

Next slide, please. This is the same map with the oil and gas wells plotted on it. Note that the various drainages again, running from that offset from the county line. And you can also note that the potash area and the exempt area have relatively few oil and gas wells because of restricted drilling in that area.

Next slide.

Earlier when talking about the nonvulnerable area and the vulnerable area, I was able to point out that there was a significant number, but one number I was unable to actually determine with accuracy, of water wells reported by the State Engineer's Office database. However, because in the southeast the exempted area is defined by township, section and range, it was relatively easy to query the database and determine that there was a total of 64 water wells are listed in the Office of State Engineers waters database in the exempted area as defined in subparagraph

(g), paragraph (2), subsection C, 19.15.2.50 NMAC.

There were a total of three domestic water wells, five exploration, five industrial, two mining, 22 monitor wells, 15 prospecting or development of natural resource wells, 11 stock wells and one well whose use was not specified.

I don't know, because the potash area is a more complicated definition, how many water wells are located in the potash area. I did not determine that.

Next slide, please.

This is a depictation, again combining both databases, showing the location of those 64 water wells in the exempted area. Again, here's the county line jog to orient you.

Next I'd like to talk about the water quality of the exempted area.

The next slide, please.

The data that I'll be presenting was obtained from the New Mexico Water and Infrastructure Data System, WAIDS.

The perception of many people is that the water quality in the San Juan Basin is excellent, and the water quality in the southeast is excellent in the Ogallala, Artesia and Pecos River alluvial aquifers. However, there seems to be a mistaken impression that the water quality

off of the Ogallala caprock and in the Pecos River is not of protectible quality. That is incorrect, as the next few slides will show.

Next slide, please.

11.

This is just showing the database where I went to this, and it shows that they generated, oh, perhaps 10 or 12 maps that are going to show the general water quality.

These chlorides depict this.

The numbers that you'll see on the next few maps -- you'll see dots that are color-coded to relate to a specific water quality. This is a little bit confusing slide, and you should not consider that these things really have anything -- these intervals that they mapped have anything to do, necessarily, with these numbers over to the right. They should just be considered two separate columns. This does not correspond to the column on the right.

Next slide, please.

This is the shallowmost -- this is going to go from the most recent aquifer to older aquifers, and we'll start off with the Quaternary alluvium aquifers. They're depicted as being all over Eddy and Lea County, and Chaves County as well. This base map, I'll spend a moment explaining it to you.

You of course see that this is Eddy County on the

west and Lea County on the east, Texas down to the south and east. You can see the location of the Capitan Reef shown in this yellow-shaded pattern. You don't really see with this one too many urban areas. Carlsbad is kind of buried by the dots, the information, but you can see Hobbs to the east. You can also see what they refer to as the Central Basin Platform on the east bordering Texas.

So what we're looking at here is, this is the Permian Basin, this is the Capitan Reef, and this is an older -- what's referred to as the Abo shelf edge, and then this is referred to as the northwest shelf.

- Q. And it looks like maybe that jog in the county line is hidden by the Capitan Reef --
  - A. It is --

- Q. -- is that correct?
- A. -- it is. For most of these slides you can see the offset in the county boundaries, but that actual east-west-running portion is buried underneath the symbol for the Capitan Reef.

This shows -- now they're lumping together the Ogallala -- or excuse me, the Quaternary alluvium found along the drainage of the Pecos River, but there's also a Quaternary alluvium which has worked off of the Ogallala.

You can see with the purple coloration here that this is zero to 300 parts per million chlorides. This

means that in general that would be drinking water quality. The water quality standard for drinking water for chlorides is 250, and of course the standard for protection of groundwater is 10,000 parts per million TDS, so you cannot use these maps to determine right off whether the area contains protectible groundwater or not as defined by the State Engineer.

Next slide, please.

This is the Ogallala aquifer. Of course, it's very high-quality water. It's located mostly in northern Lea County, there's an outliner in southern Lea County, and the data here is generally very -- the data -- the water quality here is generally very, very good. And the next blue color shows that the water quality may be still protectible, probably still is protectible, but is not as high quality as the purple.

Next slide, please.

This is a map of the Triassic aquifers from

Chaves County in the north to Eddy County in the south, and

Lea County in the east. Again, here's the location of the

exempted area, in this area where the county lines jog and

offset by one township. You can see a lot of purple here,

which means this is, generally speaking, pretty good water.

There is variable water quality as shown by some of the

other colored dots.

One more slide, please?

The late Permian or Ochoan interval includes the Rustler and Salado formations. Again, in the area we're looking for is now moving a little bit off to the west, but you can see that there's some water quality here that looks like it's protectible water quality. And again in this interval, you have generally speaking some overall very good water quality.

Next slide, please.

This slide of the Artesia group is included just for completeness. This shows the underling Artesia group. And according to the database there's only one well that's particularly near the exempted area that produces from this interval, shown by this one outstanding dot here.

Next slide.

Okay, to summarize, then, the exempted area contains 64 permitted water wells, wells that were permitted by the Office of the State Engineer, that are being used for beneficial use and that may be impacted by the release of oilfield waste from unlined pits. There is no hydrogeologic justification for the assumption that groundwater will not or has not been impacted from releases from unlined pits in the exempted areas.

Next slide, please.

Finally, this is a list of pending and active

groundwater contamination cases where the operator has 1 submitted to the OCD verbal and written notification via 2 phone call and Form C-141 that it has impacted groundwater 3 from a release from a drilling pit. The more drilling pit 4 closures that OCD inspects, the more drilling pit cases --5 contamination cases we are finding. 6 7 OCD district inspectors Mike Bratcher and Brandon Powell will be offering testimony on their experiences with 8 9 drilling pits. That concludes Exhibit 12. 10 MR. BROOKS: Okay, Mr. Chairman, Mr. Price wants 11 12 to offer one further slide here, and then we will pass these witnesses. 13 CHAIRMAN FESMIRE: 14 Okay. 15 WITNESS PRICE: Your Honor, may I approach the 16 video machine? 17 CHAIRMAN FESMIRE: Why don't we go ahead and take a 10-minute break while Mr. Price finds that last slide he 18 wants to use and come back at 20 till 3:00 by that clock? 19 20 (Thereupon, a recess was taken at 2:30 p.m.) (The following proceedings had at 2:45 p.m.) 21 22 CHAIRMAN FESMIRE: Okay, let's go back on the record. Let the record reflect that it is November 5th at 23 We're reconvening Case Number 14,105, before the 24 2:45 p.m. 25 New Mexico Oil Conservation Commission. Again, let the

record reflect that all three Commissioners are still present, there is a quorum.

And we will proceed now with the testimony of Mr. Wayne Price. You had one more exhibit, I believe you said?

## WAYNE PRICE,

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

## DIRECT EXAMINATION (Resumed)

## BY MR. BROOKS:

- Q. Proceed.
- A. Okay, this is the last slide in the evolution of unlined pits, and you've seen all of our slides, you've seen the evidence that there is groundwater in both the exempted area and the nonvulnerable area, and we think it's time that we finally closed the book on unlined pits in New Mexico, with over 50 years of documented vadose zone and groundwater contamination cases.

There's concerns from environmental and wildlife groups, general public and landowners.

And it was a task force consensus item, and so -during the task force I think it was 100-percent unanimous
and was a task force consensus item in which we should not
have unlined pits in New Mexico, permanent pits.

And that's all that we have for that particular slide.

1	Q. Mr. Price, were OCD Exhibits 4, 5 and 6 prepared
2	by you or assembled by you from published sources?
3	A. Yes.
4	Q. Mr. von Gonten, were Exhibits 11 and 12 prepared
5	by you or assembled by you from published sources?
6	A. (By Mr. von Gonten) Yes, they were.
7	MR. BROOKS: Mr. Chairman, honorable
8	Commissioners, we will tender in evidence Exhibits 4, 5, 6,
9	11 and 12.
10	CHAIRMAN FESMIRE: What about 3?
11	MR. BROOKS: Exhibit 3 is merely a copy of the
12	Rule, and it is before the Commission by virtue of being
13	attached to the Application, so we included it in the
14	binder for illustrative purposes rather than as an
15	evidentiary
16	WITNESS PRICE: 13A.
17	MR. BROOKS: I'm sorry?
18	WITNESS VON GONTEN: The slide show was 13A.
19	MR. BROOKS: Well, I will defer putting that into
20	evidence until we do the other slide shows. So at this
21	time I'll offer Exhibits, 4, 5, 6, 11 and 12.
22	CHAIRMAN FESMIRE: Is there any objection from
23	any of the parties?
24	MR. HISER: We have no objection if we can have a
25	copy of Exhibit 12, which we don't have.

1	CHAIRMAN FESMIRE: Mr. Brooks, you'll provide
2	counsel with a copy of Exhibit 12?
3	MR. BROOKS: Was it not included in the
4	MR. HISER: At least neither Mr. Carr nor I have
5	it, so
6	MR. BROOKS: And that was your presentation?
7	We'll be happy We have extra copies here of the exhibits
8	pursuant to the rule that says we must have five extra
9	copies in the room, so I believe
10	WITNESS VON GONTEN: How many copies do you need?
11	Here's one.
12	MR. BROOKS: Okay, that's Exhibit 12 only?
13	MR. HISER: Yes.
14	MR. BROOKS: Okay. We apologize for that. I
15	thought all the exhibits were on the disc that we sent to
16	Mr. Carr.
17	MR. HISER: Thanks.
18	CHAIRMAN FESMIRE: Okay, seeing that there is no
19	objection, OCD Exhibits 4, 5 and 6, 11 and 12 will be
20	admitted into evidence.
21	Mr. Brooks, do you have anything further with
22	these witnesses?
23	MR. BROOKS: We'll pass these witnesses for this
24	purpose. We'll be recalling Mr well, we'll be
25	recalling both of them for additional testimony, but we'll

1 pass them for this purpose. 2 CHAIRMAN FESMIRE: Mr. Carr? 3 MR. CARR: May it please the Commission. 4 CROSS-EXAMINATION (of witnesses Price and von Gonten) BY MR. CARR: 5 6 0. Mr. Price, are you the person who is responsible 7 for the drafting of the proposed rule that we're 8 considering here today? 9 Α. (By witness Price) I'm sorry, Mr. Carr, repeat 10 the question. Are you the person who was responsible for the 11 Q. drafting of the proposed rule that we're considering here 12 13 today? (By witness Price) Well, I was very instrumental 14 Α. in being part of a team member that did it. 15 And who was on that team? 16 Q. (By witness Price) It was myself, Brad Jones on 17 18 my staff, Glenn von Gonten, Carl Chavez, Ed Hansen, and 19 Leonard Lowe. Is that all of your staff? 20 Q. 21 (By witness Price) Yes. Α. 22 Did you also use field representatives or people Q. from the District offices to do this? 23 (By witness Price) 24 Α. 25 How long have you actually been working on this Q.

draft? 1 (By witness Price) Approximately two months. 2 Α. And how much of your time has that entailed? 3 Q. Most of the last two months? 4 (By witness Price) A hundred percent. 5 Α. Have you reviewed the exhibits and the summaries 6 Q. 7 provided on behalf of the industry committee? 8 Α. (By witness Price) Yes. You understand that the industry committee does 0. 9 not have concern with the rules you're proposing for 10 permanent pits? 11 (By witness Price) I was hoping you'd say that. 12 Α. (Laughter) 13 Our concerns -- our concerns are focused on the 14 0. provisions as they relate to temporary drilling pits; do 15 16 you understand that? (By witness Price) I do understand that. 17 At the beginning of today's hearing you showed 0. 18 over a hundred photographs of pits in New Mexico. 19 (By witness Price) Yes. 20 Α. Do which of those are permanent pits and which 21 Q. are temporary pits? 22 (By witness Price) Do I know where -- if we went 23 Α. through each individual one and if you were to be asking 24

me, Is that a permanent pit or is that a temporary pit? I

could make a good, educated guess.

- Q. Could you make just a guess, and only that? Were most of those permanent pits?
  - A. (By witness Price) No.
  - Q. Those were temporary pits?
- A. (By witness Price) That's my opinion. And you know, we're not talking -- I don't know what percentage you're looking for. I really don't know what percentage. But I would say that a lot of those were temporary --
  - Q. Temporary drilling pits?
  - A. (By witness Price) Yes.
- Q. And when we look at those temporary drilling pits, I think you testified these were recent photographs, in the last couple of years?
- A. (By witness Price) I'll refer to Mr. von Gonten on that one.
- 17 Q. Is that right, Glenn?
  - A. (By witness von Gonten) Yes, sir, they were dated -- They were part of the administrative record of OCD. They were either date-stamped on the slide itself as being more recent than January 1, 2006, or was -- the file header gave that date.
  - I should point out that those slides were compiled between -- Well, I actually did the exercise in February and March of this year, so at that time they

represented 13 or 14 months' worth of photos from the OCD 1 inspectors. 2 Do any of those photographs show situations that 3 Q. would be authorized or permitted by current OCD rule? 4 (By witness von Gonten) I think that the answer 5 6 is yes. 7 (By witness Price) Yes. Α. (By witness von Gonten) Not all of those 8 photographs show a core problem that would be prohibited 9 and not meet the general performance standards. 10 Did most of those show situations that violated 11 Q. 12 current rule? (By witness von Gonten) Α. Yes. 13 14 Q. If you were enforcing those rules, and if they were followed, most of those situations would not occur; 15 16 isn't that fair to say? 17 (By witness von Gonten) I'm not sure that I A. agree with that. I think that the language in Rule 50 is 18 ambiguous enough, especially where the area -- Well, that's 19 20 not true. I think that the language here with the general 21 22 performance standards allows it always to be argumentative whether that was allowed or not allowed. 23 You told us, I believe, that you had 200 of them 24 Q.

sitting on your floor at this time; was that --

1	A. (By witness Price) That was an estimate. Could
2	be more.
3	Q. Could be more, could be less.
4	A. (By witness von Gonten) You're talking about
5	contamination cases?
6	Q. Yes.
7	A. (By witness von Gonten) I don't know how many
8	there are, but there's a sizeable number.
9	Q. And those are situations that are
10	contamination situations under current rule that you're not
11	able to get to now and enforce your current rules?
12	A. (By witness Price) That is correct.
13	Q. Isn't it fair to say that in addition to
14	proposing a new rule change, that what you need to do is be
15	able to enforce the rules you've got?
16	A. (By witness Price) Are you Are you offering
17	more help?
18	(Laughter)
19	Q. I'm asking you Well, we'll talk about that in
20	a minute, but
21	A. (By witness Price) I'm sure we will.
22	Q but isn't it true that part of the problem is
23	enforcement?
24	A. (By witness Price) Yes, sir, it is.
25	Q. Now you showed a very bad picture of a I think

you called it a 2005 slide. It was separate from the slide show at the beginning, and Mr. Price, you said this is an example of a pit that had cost the State of New Mexico a huge amount of money to clean up. Do you recall that? (By witness Price) I do. Α. That's clearly -- that pit was clearly in Q. violation of existing rules, was it not? (By witness Price) Yes. Α. To clean that up, were you able to get the Q. operator to pay for it? Α. (By witness Price) No. Why not? Q. (By witness Price) We didn't have records to A. identify which operator had put the waste in there. And if you'd had the new rules in place, you Q. still -- it wouldn't have changed, that you'd still have a pit, that is an old pit that falls to the state to clean up? Α. (By witness Price) Mr. Carr, if you're saying that under -- if we had a new rule, from the day the new rule is -- whatever, forward, yes, we would know. But for past activities, you're correct. Q. If we look at the list of, say, 10 operators or

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whatever one of the later exhibits was that listed current

pending problems with drilling pits --

1	A. (By witness Price) Yes.
2	Q it listed, it looked to me like a number of
3	members of the industry committee who had reported those
4	pits to you on C-141s.
5	A. (By witness Price) That was are you talking
6	about the 1997 pit
7	Q. There was an exhibit at the end that listed a
8	number of problems now that you said were related to
9	temporary drilling pits, and it was one of the later
10	exhibits.
11	A. (By witness Price) Oh, the drilling pit
12	groundwater contamination cases?
13	Q. Yes.
14	A. (By witness Price) That's what Mr. von Gonten
15	had shown, that was his slide. But I'll try to be more
16	than happy to answer questions, or he can.
17	Q. Well, the only question is, those were reported
18	to you on the C-141?
19	A. (By witness von Gonten) They were referred to
20	they were either reported verbally to either Mr. Price or
21	to myself, and then we at that time we always remind
22	them of their obligation to submit a written C-141 in a
23	timely fashion.
24	MR. BROOKS: For the record here, are we talking
25	about page 37 of Exhibit 12?

WITNESS PRICE: Yes. 1 WITNESS VON GONTEN: 2 Yes. MR. CARR: Yes, we are. 3 4 MR. BROOKS: Thank you. (By Mr. Carr) My question is that your system 5 Q. 6 works when operators report these problems with drilling 7 pits; isn't that correct? (By witness Price) I'm sorry, say that again? 8 Α. Your system works when an operator will report 9 Q. these problems to you on the C-144 or verbally follow with 10 11 a C-14- --(By witness Price) When you say the system 12 Α. works, I don't understand what you mean. 13 You know that these are pits that you need to 14 Q. 15 address? (By witness Price) 16 Α. Yes. Because they've been reported to you? 17 Q. (By witness Price) Yes. 18 Α. 19 0. And when we look at your Exhibit Number 5 and see that pit, that's not reported to you at all, is it? 20 just find those? 21 (By witness Price) That's correct. 22 A. And no matter what you do to the rule, the good 23 Q. operators are going to continue to report and the bad 24 25 operators are going to be nonlocatable; isn't that,

generally speaking, true?

- A. (By witness Price) In today's time with all the eyes and ears and the landowners and their awareness, most cases are -- generally come to our attention.
- Q. Now another thing that we as the industry committee are not advocating, and I hope you understand, is that we are not advocating unlined pits. You knew that, did you not?
- A. (By witness Price) Once again, I'm really glad to hear you say that.
- Q. But there's nothing in the material file that would suggest we were advocating unlined pits in New Mexico?
- A. (By witness Price) I would have to -- the information that I read, that you sent in, you represent NMOGA and Mr. Hiser and Mrs. Foster, I believe that is correct. I think, though, there might have been a couple letters that came in. I don't know if --
  - Q. Right.
- A. (By witness Price) -- if you were representing them or not, that may not agree with what you're asking.
- Q. I filed, with Mr. Hiser, statements for the industry committee. And to be sure there's no misunderstanding, we are not advocating an unlined pit anywhere in New Mexico.

A. (By witness Price) Thank you.

- Q. Now under the system that you're proposing, as I listen to what you were describing, basically you're expecting operators to use a closed-loop system and dig and haul if they're within 100 miles of an OCD-approved disposal facility; is that fair?
- A. (By witness Price) I think it's fair on the 100 miles for the dig-and-haul. And the closed loop system would be a matter of the depth to groundwater. So there's two different issues there.
- Q. When we -- If we are under this system, there are provisions for operators to get exceptions, are there not, to these requirements, if they're outside the hundred miles on the dig-and-haul?
  - A. (By witness Price) If they're --
  - Q. My question --
  - A. (By witness Price) -- outside the 100-mile --
- Q. There are provisions -- I'm sorry, there are provisions in the rule to give exceptions to the general rule; isn't that fair?
  - A. (By witness Price) Yes, that's correct.
- Q. And isn't the standard with these exceptions that you have to show to you that -- the Division, that you will have -- I believe the term is -- it's not comparable, but it's better or equivalent protection to the dig-and-haul?

- 217 (By witness Price) Correct. 1 Α. In your opinion, is there really anything that 2 Q. would be the equivalent or better than digging and hauling? 3 (By witness Price) I would have to answer yes. 4 A. What would that be? 5 Q. 6 Α. (By witness Price) Well, that would be a 7 situation where groundwater would be maybe nonexistent or very deep, it could be a new type of stabilization program, 8 it could be a vertification [sic], it could be some sort of 9 new treatment program. So I didn't want to shut the door 10 11 on any sort of new, viable alternative that may come up in the future that we don't know about. 12 0. When you say equivalent protection in the rule, 13 do you mean something more than a showing that it is 14 protective of groundwater, human health and the 15 16 environment? 17 (By witness Price) If it's equivalent to that, we would accept it. If it's better, we certainly would 18 accept it. 19 But is there something less than dig-and-haul 20 that could be protective of groundwater, human health and 21 the environment? 22
  - A. (By witness Price) Yes.

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Q. Now Mr. Price, if we're digging and hauling, we're taking it to an approved landfill; isn't that right?

A. (By witness Price) Yes.

- Q. And there was an exhibit that was presented, and I think it was Tab 6, but it's page 19, it showed two curves. And if I understood the testimony, this was used to show that a larger pit would, in fact, contaminate more than a smaller pit.
- A. (By witness Price) That's the way the model results came out, that's correct.
- Q. Now my question is -- And then you followed this with some exhibits on cumulative effect. In other words, if you have a number of small pits close together you would have a greater effect than if they're farther apart; is that what you're trying to show?
- A. (By witness Price) What I'm trying to show there, if -- What I was trying to show, Mr. Carr, is that more than one pit represents a cumulative impact. If you have thousands of pits, then of course you would have more contamination.
- Q. And if you have larger pits, if I look at this exhibit, you'd have more contamination?
  - A. (By witness Price) That is correct.
- Q. Now when we take our wastes and take them to a landfill, aren't we just moving them to what is, in fact, a larger pit?
  - A. (By witness Price) You are taking them to a

1 larger pit. And are the landfills lined in New Mexico? 2 0. 3 Α. (By witness Price) I'm sorry? Are landfills that approved by the Division lined 4 ο. 5 in New Mexico? (By witness Price) We have two that are lined 6 Α. 7 and two unlined. And even if they're lined, those liners sometime 8 will fail; isn't that right? 9 (By witness Price) That's correct. 10 Α. And so aren't we really -- in your opinion, would 11 Q. those landfills be contaminating the vadose zone as huge, 12 unlined pits? 13 (By witness Price) 14 Α. No. And they're not? 15 Q. (By witness Price) No, no, I said -- I said they 16 Α. won't. 17 Why not? 18 Q. (By witness Price) Because the new unlined --19 Α. I'm sorry, the new lined pits under part 36 has double wall 20 -- or double lining with leak detection and leachate 21 22 recovery. 23 But when we're looking at an unlined landfill, 0. are they not potentially contaminating the vadose zone? 24 (By witness Price) 25 Α. That's correct.

That's correct, what? They are, or they are not? 1 Q. 2 Α. (By witness Price) They are. 3 Okay. And so aren't what you're really doing by 0. 4 making everyone dig and haul is getting rid of a number of 5 smaller pits and just transferring the risk to a large landfill? 6 7 Α. (By witness Price) May I answer more than a yes? You may answer any way you want, because if I 8 0. object the Chairman will tell you you can answer. 9 10 (Laughter) (By witness Price) The answer to your question 11 Α. is yes, but as with all centralized landfills -- and I had 12 pointed this out earlier -- we know where the waste is at. 13 14 Generally these landfills are situated in a geographic 15 location where there's very little if any groundwater, and they're usually remote. And so I think it's a net plus for 16 17 the environment, rather than having 100,000, rather than 18 one. 19 0. Are those -- You just gave some general 20 conditions that, as I understood, apply to these landfills 21 that were remote, not close to groundwater. Are those 22 standards that the Division applies in approving new 23 applications for landfills?

Yes.

They have to be remote, they have to be far from

(By witness Price)

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Α.

Q.

groundwater?
A. (B)
Q. And

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- A. (By witness Price) Yes.
- Q. And those are then sort of -- because of that, they don't represent the potential to contaminate that -- is that your testimony? -- that number of smaller pits might represent?
  - A. (By witness Price) Yes.
- Q. If I understand your proposal, you are adverse to unlined pits now, anywhere in New Mexico. Isn't that what this proposed rule would do?
  - A. (By witness Price) Yes, for unlined pits.
- Q. And we're not going to have any areas that are exceptions?
  - A. (By witness Price) For permanent unlined pits, that's correct.
    - Q. Not in the potash area, not anywhere?
- A. (By witness Price) That's correct.
  - Q. And so the unlined pits for which there are exceptions in the state are the landfills?
    - A. (By witness Price) Two of them that were --
- 21 Q. Okay.
  - A. (By witness Price) -- permitted pursuant -- a number of years ago by order.
- Q. And those would be the only two facilities or places that we can dispose that are unlined.

(By witness Price) That are unlined? 1 A. 2 Q. Yes. (By witness Price) Yes. 3 Α. When you look at this new rule, if it is adopted, 4 Q. 5 do you anticipate that the rule would increase the workload in the Santa Fe office? 6 (By witness Price) Yes. 7 A. 8 Q. And if you're 200, perhaps more, behind now, do 9 you have the ability to handle these applications? 10 Α. (By witness Price) The applications for ---- for whatever the -- I mean, the workload that 11 Q. you see coming in, applications for exceptions, 12 notification of problems. Do you have the work force to 13 handle this? 14 (By witness Price) Well, if we quit making 15 A. rules, I will. 16 17 (Laughter) (By witness Price) I'm not being facetious 18 A. there, I --19 But you do have -- you currently do have staff to 20 Q. administer it? 21 22 Α. (By witness Price) Yes. 23 0. You wouldn't need to add additional people? 24 (By witness Price) We would have to add 25 additional people.

And how would you do that? 1 Q. (By witness Price) Well, currently I think our 2 Α. 3 budget is going to allow us to have two additional people. Q. And that's a budget function? 4 (By witness Price) Yes. A. 5 Will two additional people be enough to handle 6 Q. 7 it? (By witness Price) 8 Α. Yes. The proposed rule provides that -- and correct me 9 Q. if I'm wrong -- that if an operator has complied with all 10 the OCD rules and regulations, and if you are doing 11 something that is a reasonable oil and gas related 12 activity, that before we could dispose on site, we'd still 13 have to have the approval of the landowner; is that 14 15 correct? (By witness Price) If you dispose --16 Α. 17 Q. -- on site. (By witness Price) -- any waste on site, you 18 Α. 19 would have to have the approval of the landowner, that is 20 correct. 21 Q. So the landowner now has a veto over whether or not an operator can dispose on his property, if this rule 22 23 is adopted? (By witness Price) Yes. 24 Α.

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Q.

Are you assuming that the landowner would say no

because of an environmental reason?

A. (By witness Price) We don't know what percentage

of the landowners will accept waste to be put on their

property.

Q. And would this apply -
A. (By witness Price) We anticipate, though, that

- A. (By witness Price) We anticipate, though, that some will.
  - Q. Will permit it?

- A. (By witness Price) Yes.
- Q. Will -- and you wouldn't -- and it's not your concern what conditions they impose or what they ask for in return for that authority?
- A. (By witness Price) That would be between the landowner and the company, if you're talking about some sort of monetary contract between them.

However, I do want to point out that if any waste is buried -- if any waste is buried, then we're going to make sure that that buried waste is going to meet all the closure standards to protect groundwater, public health and the environment.

- Q. And even if you're satisfied it does all of that, the landowner can say no?
  - A. (By witness Price) Yes.
- Q. And does this include a landowner, do you know, who doesn't even own the mineral rights?

(By witness Price) Yes. A. 1 Would this include a landowner who had leased the 2 Q. 3 mineral rights to someone under a lease that gave them a right to make reasonable use of the surface? 4 (By witness Price) Is he the landowner? 5 Uh-huh. 6 0. 7 (By witness Price) When you do this, did you discuss, you know, what 8 0. 9 authority the OCD has to pass this function to the landowner? 10 11 (By witness Price) We did discuss that in-house 12 with our attorneys. 13 And you're satisfied that that's within the 14 purview --15 (By witness Price) Yes. Α. 16 0. -- Mr. Brooks? 17 MR. BROOKS: I'll object that he's -- this is attorney-client privilege as to anything he understands 18 based on the advice of counsel. 19 20 CHAIRMAN FESMIRE: Mr. Carr, I'll sustain that 21 one. (By Mr. Carr) You did discuss that? You said 22 Q. that? 23 (By witness Price) Yes. 24 Α. 25 Q. If we no longer have any exempted areas, Mr. von

Gonten, this would mean under the rule, if adopted, that 1 these rules governing pits would apply if we were drilling 2 a well on the bank of a potash tailing pond; isn't that 3 right? 4 (By witness von Gonten) 5 Α. Does the Oil Conservation Division have 6 Q. 7 environmental regulatory authority over potash companies? (By witness von Gonten) I'm not sure about the 8 Α. 9 regulatory authority over potash. I do know that it is part of the Oil and Gas Act, but it's not something I am 10 personally familiar with. 11 In your experience with the agency, have you ever 12 13 looked into what's happening in the potash tailing pond? 14 Α. (By witness von Gonten) No, sir, I have not. 15 Q. I think you testified that companies hadn't asked 16 you about where the vulnerable areas were? 17 Α. (By witness von Gonten) That's correct. And you assumed that because of that, that we 18 Q. 19 didn't know where they were? 20 (By witness von Gonten) I think I made the observation that they would have to make that determination 21 by looking at their own topographic maps, rather --22 23 Q. Are you aware that certain --

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had prepared.

(By witness von Gonten) -- than the ones the OCD

1	Q. Are you aware that certain oil and gas companies
2	worked with the Aztec office of the OCD in mapping these
3	vulnerable areas?
4	A. (By witness von Gonten) I was under the
5	impression that the 165 maps were constructed by OCD's
6	Santa Fe office, not the Aztec office.
7	Q. Do you understand that certain companies have
8	these in their computer systems and constantly monitor
9	them?
10	A. (By witness von Gonten) It would be new to me.
11	MR. CARR: That's all I have. Thank you, Mr.
12	Chairman.
13	CHAIRMAN FESMIRE: Mr. Hiser?
14	MR. HISER: Thank you, Mr. Chairman. I will
15	endeavor not to cross too much ground that Mr. Carr has
16	already covered.
17	CROSS-EXAMINATION (of witnesses Price and von Gonten)
18	BY MR. HISER:
19	Q. Mr. Price, you gave a simple model where you
20	presented two pits, one 10 by 10 and the one 30 by 30.
21	What model did you actually use to do that? You said that
22	it was an EPA model, but you didn't specify which one?
23	A. (By witness Price) Well, actually the modeling
24	was the modeling was done by Ed Hansen of my staff, and
25	he would probably be more in line to answer that question

than I would be. He is coming up in front of you. I don't 1 know if we'll make it today or not, but... 2 Okay, so that's a question that Ed would be able 3 Q. 4 to answer? 5 Α. (By witness Price) Yes. And the models that you presented assumed in all 6 Q. 7 cases an unlined pit, correct, with no liner? (By witness Price) Yes, of the ones that I 8 Α. 9 presented. The ones that you did? 10 Q. (By witness Price) Yes. 11 A. Going now to your presentation 5, which was the 12 Q. overview of the proposed pit rule, just so you know -- this 13 one --14 (By witness Price) 15 Α. Okay. -- where we're going to start, I have just a 16 Q. couple of minor questions for you on this, mostly in the 17 nature of clarification. 18 One of those is a discussion which I'm sure is 19 20 near and dear to your heart, and that's on page 9 of your slide, which is the siting requirements details --21 (By witness Price) Okay. 22 Α. 23 Q. -- and on here you have a 300 feet from a river or stream, but only 200 feet from a watercourse, playa 24

lake, et cetera. What's the rationale for using a smaller

distance to a dry streambed than you are using for one 1 that's a perennial streambed? 2 (By witness Price) This was a topic -- are you 3 talking about the 300 feet from a river or stream? 4 I'm talking about why the distinction between the 5 dry watercourses that are 200 foot, and then 300 foot. 6 MR. BROOKS: Mr. Chairman, let the record reflect 7 that the reference is to slide 9 of OCD Exhibit Number 5. 8 MR. HISER: I'm sorry, is it 5? You're correct, 9 10 it is 5. 11 Q. (By Mr. Hiser) So you chose a smaller distance 12 because those are dry watercourses; is that the basic idea? (By witness Price) The 300 feet was a task force 13 consensus number --14 Okay. 1.5 Q. (By witness Price) -- that industry, landowners, 16 A. 17 OCD, all the parties of the task force agreed about. The 200 feet was a nonconsensus item. 18 from 30 feet -- I'm thinking something more than 200. 19 OCD had to -- as we've pointed out in the task force, if 20 the task force couldn't come up with the number, then the 21 burden was on the agency. It seems like there was more of 22 a consensus for 200 feet than there was for the 30 feet, 23 and so we selected the 200 feet. And the reason --24

Q.

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And --

(By witness Price) Can I go ahead and explain A. 1 the reason for that? 2 Yes. 3 Q. (By witness Price) -- is, the 30 feet, most of 4 Α. the industry committee members wanted 30 feet. But several 5 of the landowners, the other people, indicated -- and even 6 7 the OCD felt that you couldn't get a D9 Cat and a backhoe 8 and everything within 30 feet, and so we felt 200 feet is 9 just a more appropriate distance, because you can actually work in that area. 10 So there was a practicality concern --11 Q. (By witness Price) There's a practicality to it, 12 Α. 13 right. -- that you were concerned about? 14 Q. 15 Now -- and you know this question is coming, 16 because you've heard it in all the previous proceedings. 17 In your mind, what constitutes a watercourse, and at what point does a rivulet or an erosion feature become a 18 19 watercourse that triggers this prohibition? (By witness Price) Excellent question. 20 you know, that's probably been one of the most highly 21 22 discussed topics in the task force and all the companies and we've all talked about. 23 And I can just tell you, we're trying to be 24

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consistent with using the definition of watercourse with

the Environment Department. And so what we tried to do is, we tried to put some common sense into this and put this decision back out to the district offices where they have field people, they can go out there and you can show them so -- you know, like you take your hand and draw a line in the sand, I guess you could consider that to be a watercourse if it rains and a little bit of water runs down it.

So we were trying, and we kicked it around over and over and over in the task force, and no one could really come up with a definitive definition to cover all the aspects of this. And so we decided to stick with our original definition of watercourse and try to help our district offices help make this decision, a common sense approach.

O. And --

- A. (By witness Price) We don't anticipate going out there and saying, There's this wide of a channel or this wide of a channel, water is -- therefore that you can't drill. That wasn't our intent at all.
- Q. And so your intent is, given that the rule right now provides little guidance?
- A. (By witness Price) Right, our intent is -- is that you don't -- the siting requirement shall be from what I would call a major watercourse or a playa lake. Major

watercourses, I think, could be well defined by looking at 1 2 a USGS map. They have all the well defined watercourses on 3 there. Okay, so looking at a USGS and seeing whether it 4 Q. 5 appears? (By witness Price) Exactly. 6 Α. 7 Q. Okay, thank you. And the next slide, two slides back on slide 11, 8 9 you talked about additional construction design and operational requirements, and many of these, I believe, 10 11 came out of the task force recommendations; is that 12 correct? 13 (By witness Price) That's correct. Α. In one of these you talk about water loss 14 Q. detection. Is that out of the task force --15 (By witness Price) It was out of the task force. 16 Α. 17 As a practical matter, how do you anticipate Q. that's going to work? 18 19 Α. (By witness Price) I only served on the task force about two times, and that had already been 20 determined, that they thought they could -- that there 21 could be some sort of float or level device that could be 22

And so I wasn't actually part of that agreement

put in there and that they could monitor the levels with

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24

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that particular device.

at the task force, but I certainly accept it because it was a consensus item.

- Q. Right. Do you agree that that to some extent may be driven in part by the formations through which the drilling is being done and how much water or liquids, drilling fluids, are accepted by the formation as that goes through, and that that may make that a somewhat difficult measure?
  - A. (By witness Price) I agree.

- Q. Moving on to slide number 13, this is the new closure standards. And the very last one -- Mr. Carr briefly touched upon it -- is, the on-site burial requires landowner approval. And I just wanted to clarify for myself that at this point you don't have an environmental rationale for that; this is a policy choice that the Division is recommending to the Commission?
  - A. (By witness Price) Yes.
- Q. In the next slide, on slide 14, you present your map that is showing the areas around a number of landfills that are located both in the southeast and the northwest areas of the state. Now are all these landfills presently permitted by the OCD to accept oilfield waste?
  - A. (By witness Price) No.
- Q. Some of them are approvable but not presently approved; is that correct?

Α. (By witness Price) That's correct. 1 And do any of those landfills have the option of 2 0. declining to accept oilfield waste? The ones that are 3 approvable, but not yet approved? 4 5 (By witness Price) That's a question that I may 6 not be able to answer. However, I think one of my staff members could, Ed Hansen or Brad Jones, because --7 8 0. That would be an Ed Hansen question? (By witness Price) Yeah, or -- probably an Ed 9 Α. Hansen question. 10 11 Q. And --(By witness Price) And the reason I say that, he 12 Α. used to be a program manager that authorized such wastes to 13 go into those type of facilities at the Environment 14 Department. 15 16 Okay, thank you. Continuing on with that, did 17 you evaluate as part of your thinking of using the approvable, which would be those landfills that are 18 19 approved by ED, for example, but not yet by OCD, as to what 20 the impact of collocation of oilfield waste and municipal 21 waste would be on the waste contents? 22 Α. (By witness Price) Mr. Hiser, repeat the 23 I didn't understand that. 24 Did you evaluate the environmental impact of 0. 25 collocating oilfield waste with municipal solid waste in a

municipal landfill that might be permitted by ED, rather than an industrial monofill as is permitted by OCD?

A. (By witness Price) No.

- Q. Do you agree that the constituent mixture in a municipal landfill might be different from those found in an OCD industrial landfill?
  - A. (By witness Price) Yes.
- Q. In the rationale that you advanced for the 100-mile distance you said basically that it seemed that the cost of \$30,000 to \$90,000 seemed appropriate in light of today's oil prices; is that correct?
  - A. (By witness Price) \$30,000 to \$80,000.
- Q. I'm sorry, \$30,000 to \$80,000?
- A. (By witness Price) Yes.
- Q. And what would be the impact if the oil prices were to substantially decline?
  - A. (By witness Price) Obviously it would impact it.
- Q. Now you also said as part of your rationale for why the 100-mile rule was reasonable was that it would diminish some of the transport costs from facilities that might be located greater than 100 miles from a landfill. You said we're going to -- because we know that transit is more expensive the further you go, beyond 100 miles we're going to say that that may be a cost more than we want to do, so we're going to draw a 100-mile line?

Α. (By witness Price) It could even be an 1 2 exponential curve. 3 Q. Okay. (By witness Price) 4 Α. Yes. 5 Q. And doesn't the relief, if any, that the 100-mile 6 rule gives depend upon whether the landfill -- or the pit, 7 would otherwise meet your closure standards to be closed in place with deep trench burial? 8 (By witness Price) I'm going to not answer your 9 question the way you're wanting me, and then I'll try to 10 answer it. 11 12 0. Okay. 13 (By witness Price) I think what I was trying to point out is the cumulative effect of all of the waste 14 that's in the present San Juan Basin and the Permian Basin. 15 16 And we felt that by transferring this waste to a central 17 location it would certainly reduce the probability of the 18 cumulative effect adding up. Now -- Now to answer your other question, I think 19 20 it's yes. Okay, and the answer -- I'm going to restate my 21 Q. question and make sure that it's clear for the Commission 22 and everyone else --23 24 (By witness Price) Okay. Α.

-- what it is we're talking about.

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Q.

My question is that you said if you're located 1 over 100 miles from a landfill, you have the option in some 2 cases to do deep trench disposal or an on-site disposal, 3 under your proposed rule, correct? 4 (By witness Price) If you meet the siting 5 6 requirements, that's correct. 7 If you meet the siting requirements. And aren't 0. there additional requirements in terms of the quality of 8 the material to be disposed? 9 (By witness Price) There's closure requirements, Α. 10 prescriptive closure requirements. 11 And so if in fact the material doesn't meet those 12 13 closure requirements, then it would still have to be hauled 14 to a landfill, regardless of its distance from that 15 landfill? (By witness Price) No, that's not correct. 16 Α. 17 That's not correct? Q. (By witness Price) That's not correct. 18 Α. What would one do in that case? 19 Q. (By witness Price) Well, then you could -- an 20 Α. operator could come back, propose another treatment method, 21 propose some other method for closure. 22 But that's discretionary with the Department and 23 Q. 24 not of right, correct?

(By witness Price) No, that's discretionary upon

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Α.

the operator. The operator could come back and modify its permit and say, you know, we're 10 parts per million off, and a little bit more treatment and we feel we can get it down, and we certainly would allow them to do that.

- Q. But it is -- but if that's not achievable, either by your granting an amendment to the permit or us being able to achieve those closure standards, the only remedy or the only option right now for an operator is to dig that material out and haul it to a landfill?
- A. (By witness Price) If you cannot achieve the closure standards in any form or fashion, then the answer to your question is yes.
- Q. Okay. In your presentation you put up a communication from the Office of the President of the United States, from the Council of Environmental Quality, on cumulative impact analysis under this EQ regulation; is that correct?
  - A. (By witness Price) Correct.
  - Q. Does that apply to you?
- A. (By witness Price) It's guidelines for federal agencies.
  - Q. Are you a federal agency or --
  - A. (By witness Price) No.
  - Q. -- are you a state agency?
    - A. (By witness Price) State agency. However, we do

get federal funds. So therefore, we do have to abide by 1 some federal quidelines. 2 3 If it's a major federal action? 0. (By witness Price) That's correct. 4 Α. 5 Mr. Carr has covered the Environmental Bureau. Q. Okay, I want to switch, then, to your Exhibit 6 7 Number 6. Give me just a second. 8 (By witness Price) Mr. Carr has already said A. 9 he's agreed to all this. 10 MR. CARR: And he hit me when I did. 11 (Laughter) (By Mr. Hiser) I want to go back to your slide 12 Q. on this exhibit, on page 15 which is the number of 13 groundwater cases. And here you list 2005 and 2007 with an 14 15 approximate total of 504 cases; is that correct? 16 (By witness Price) These are pit groundwater 17 contamination cases, that's correct. And is it your agreement that the ones that you 18 Q. 19 know of that might be related to drilling pits are 20 comprised on page 37 of this exhibit? 21 Α. (By witness Price) 22 And how many drilling pits is it, I believe you 0. 23 testified to, that there have been in the State of New 24 Mexico? 25 (By witness von Gonten) I believe that I --Α.

Maybe it was Mr. von Gonten. 1 Q. (By witness Price) Yeah. 2 A. (By witness von Gonten) One of my slides was --3 Α. I was referring to the San Juan Basin, that there was 4 probably a pit, a drilling and reserve pit for each well. 5 Could have been a production pit that might have serviced 6 several wells. And there might have been one or more 7 workover pits; these are very long-lived wells. 8 Right now our database reports 99,000-plus wells 9 -- I think Wayne referred to 100,000 -- that are in our 10 database, that is, where we have an API number or have 11 12 assigned an API number retroactively and have a location 13 for it. So Mr. Price, in light of Mr. von Gonten's 14 Q. 15 statement, would you agree that there are somewhere in the arena of probably about 100,000 drilling pits have been --16 or maybe 80,000, somewhere in the 80,000 to 100,000 17 18 range --(By witness Price) 19 Α. Yes. -- all that? 20 Q. And what percentage of those pits right now have 21 presented a problem? 22 (By witness Price) We don't know. 23 Α. But of the ones that you know, which are these 10 24

Q.

which are right here --

(By witness Price) Yes. 1 A. -- over 80,000 or 100,000, what percentage would 2 Q. that be? 3 4 A. (By witness Price) Low, very low. 5 Would you agree with me it's about .001 or one-0. 6 thousandth of a percent? (By witness Price) We can do the math. 7 Α. Okay. Now on the 10 cases that you've presented 8 Q. here, is it your professional opinion that all these are 9 documented cases, or are some of these still in the initial 10 11 investigatory phase? (By witness Price) Oh, they're still in initial 12 investigatory stage. 13 And how many of the 10 that you've presented are 14 Q. still in that initial investigatory phase? 15 16 (By witness Price) Have to ask Glenn. A. Mr. von Gonten? 17 Q. (By witness von Gonten) I would say all of them. 18 Α. Okay. So it may be less than 10 here, you just 19 Q. 20 don't know yet, but it may be certainly --21 Α. (By witness von Gonten) What we have right now is, we have an indication from the operator that when they 22 were closing their pit, that the soil contamination reached 23

down to the top of groundwater and that they had sampled

the groundwater and were making a presumptive report,

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1 pending the results from the lab. 2 And when you used the term "contamination", am I 0. to assume that that in most cases means some sort of 3 4 chloride levels --(By witness von Gonten) I think most of these 5 Α. are from the southeast, and it would be chloride 6 7 contamination as opposed to hydrocarbon contamination. (By witness Price) I would like to -- Can I add 8 A. to that, Mr. Hiser? Those are groundwater contamination 9 There are many more vadose zone contamination cases 10 cases. out there that we don't have the numbers for. 11 And Mr. Price, if we're talking about a vadose 12 Q. zone contamination, what is the receptor of concern in the 13 vadose zone? 14 (By witness Price) Well, it could be 15 Α. groundwater, it could be the surface. 16 17 0. So you would be looking at things either 18 migrating downward or migrating upwards? 19 Α. (By witness Price) Yes. 20 Q. But you don't have an idea of the number of those 21 things --(By witness Price) Well, another receptor could 22 Α. 23 be if somebody builds a house or something in a pit, which

Let me flip the page here.

we've had happen before.

Okay.

Q.

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Mr. Price, in your modeling conclusions on the 1 unlined pits, which is on pages 23 and 24 of your exhibit, 2 those presumed a continual source; is that correct --3 4 Α. (By witness Price) Yes. -- of contamination? 5 0. (By witness Price) Yes, of less than a barrel 6 Α. 7 per day. And what would happen to those plumes that you 8 0. showed us if that source were to be removed? 9 (By witness Price) I'm sorry? 10 Α. If the source of the contamination, the one 11 0. 12 barrel a day, were to be removed after, say, six months to 13 two years? (By witness Price) The contamination would 14 Α. eventually migrate to groundwater, but the shift of the 15 16 curves would be way far to the right. Okay. And do you have a sense of the number of 17 0. years that we're looking at --18 (By witness Price) 19 Α. -- for that type of shift? 20 0. (By witness Price) 21 Α. Now on your own graphs, though, just looking at 22 Q. 23 that continual impact, you show that the main impact occurred somewhere between 40 and 60 years, or 50 to 100 24 25 years; is that correct?

(By witness Price) On page 22? 1 Α. On page 21 and 22? 2 0. (By witness Price) Correct. 3 Α. And -- Now as part of the rationale for the rule 4 0. and the idea that we want to haul material to the landfills 5 is your belief that this is a more protective solution. We 6 7 have a couple of known places where the material goes and we put them there, and some of them have liners, some of 8 them do not. Correct? 9 (By witness Price) We're following the national 10 Α. trend in the United States. All industries except the oil 11 and gas industries take their waste, that I know, to some 12 sort of centralized landfill. 13 That's an interesting statement, Mr. Price. 14 Q. So it's your testimony then to the Commission that, for 15 example, the mining industry takes its tailings and waste 16 17 rock to a centralized landfill? (By witness Price) Well, the mining industry is 18 Α. 19 the oil and gas industry, that's --Mining is oil and gas? 20 Q. (By witness Price) Well, it's energy, minerals, 21 Α. mining, oil and gas. It's a mining -- I mean, you're 22 23 mining -- it's been interpreted as a mining --So you're saying mining --24 Q. (By witness Price) -- with the exception --25 Α.

1	Q and oil and gas
2	A. (By witness Price) yes, mining.
3	Q. What about the silvicultural industry? Do they
4	take all of the slash from their operations and take that
5	to a centralized landfill?
6	A. (By witness Price) If it meets a certain amount
7	of hazardous wastes, they certainly do. If it's hazardous
8	waste, they would.
9	Q. Well, are we talking about hazardous waste in the
10	oil and gas context, within the regulatory
11	A. (By witness Price) We're talking about hazardous
12	materials, that the only reason it's not hazardous waste
13	is, they have received an exemption from the federal
14	government.
15	Q. But one could equally well say that the reason
16	that silvicultural waste is not hazardous waste is because
17	it has not been regulated by the federal government?
18	A. (By witness Price) Same scenario.
19	Q. And what about agriculture?
20	A. (By witness Price) It's my understanding, for
21	example, dairy waste, that has to be disposed of in a
22	landfill.
23	Q. But that's true only for certain concentrating
24	animal-feeding operations and not for typical ranching or

farming operations; is that not true?

- A. (By witness Price) If you're talking about if someone raises tomatoes and he plows the tomato plants under the old plants, then for bio- -- for some sort of bioremediation of the plants, you might want to say, to help the nitrogen levels in the -- I wouldn't consider that to be a waste.
  - Q. I guess I'll get off this digression and come back to my main point. But anyway, your belief is that putting these things in the landfill is going to be more protective --
    - A. (By witness Price) That is --
    - Q. -- than having a number of small pits --
    - A. (By witness Price) -- yes, that is the --
    - Q. -- located around --

- A. (By witness Price) Yes, that's the national trend.
- Q. Okay. Under the Department's just-approved surface waste rules, what is the post-closure care period that you're proposing to regulate the landfills for?
  - A. (By witness Price) Thirty years.
- Q. And so is it not true, Mr. Price, that the postclosure care that you relied upon is less than the period that your uncontained continual source would show to reach the groundwater, and so in fact the protections that you're relying upon will not be present at the time that the

landfill would putatively leak and cause contamination --1 (By witness Price) The answer to your question 2 A. 3 is yes. Thank you. No further questions for you, Mr. 4 Q. 5 Price. I have one question for Mr. von Gonten. Now you 6 7 gave a -- testimony about pits that were located in the socalled exempt area in the southeast, correct? 8 (By witness von Gonten) Yes, I did. 9 10 Q. And you made a presentation about the fact that 11 there's, in fact, in your opinion, protectible groundwater within the exempt area; is that correct? 12 13 Α. (By witness von Gonten) That's correct. 14 Is it not true that each one of the pits that Q. would have been located in that without liners would have 15 16 been done under an approval from the Commission? 17 (By witness von Gonten) Those -- yes, any pits Α. in the exempted area of the southeast would have been 18 approved by Rule 50, or there were probably approvals under 19 20 Order R-3221, I believe, and --21 And didn't that generally require a showing of no 22 groundwater? (By witness von Gonten) I'm not sure about the 23 A. requirements of that order. 24 25 A. (By witness Price) I would like to answer that.

1	Q. Mr. Price?
2	A. (By witness Price) Yes, but if you go look at
3	the old orders, not one not one monitor well was ever
4	put in to prove that.
5	Q. So it's the Bureau's position now that the
6	Commission has entered those orders in error?
7	A. (By witness Price) It's an evolution of pit
8	rules, evolution of sound science. We all learn.
9	Q. So at this point, then, the Bureau is prepared to
10	challenge the findings that the Commission entered in each
11	of those orders?
12	A. (By witness Price) No, sir.
13	Q. Okay.
14	A. (By witness Price) We're willing to ask the
15	Commission to upgrade the technology to a point where we
16	can determine if the groundwater is going to be
17	contaminated.
18	MR. HISER: No further questions. Thank you, Mr.
19	Chairman.
20	CHAIRMAN FESMIRE: Thank you, Mr. Hiser.
21	Ms. Foster?
22	MS. FOSTER: Thank you.
23	CROSS-EXAMINATION (of witnesses Price and von Gonten)
24	BY MS. FOSTER:
25	Q. Mr. Price, I'm sorry I missed the beginning of

your testimony this morning, but I just wanted to ask you a 1 couple of questions. 2 First, what is your title over at the OCD? 3 (By witness Price) Environmental Bureau Chief. 4 A. And as a bureau chief, you are in control of the 5 Environment Bureau of which Mr. von Gonten, Mr. Chavez, Mr. 6 7 Hansen and Mr. Brad Jones are your -- under you? 8 Α. (By witness Price) Did you say control? 9 (Laughter) 10 In the organizational structure? Q. (By witness Price) Well, I'm the boss. 11 Α. Okay, you're the boss. And who is your boss? 12 0. (By witness Price) My boss is Mr. Sanchez. 13 All right, and does Mr. Sanchez have a boss 14 0. within the OCD? 15 (By witness Price) 16 Α. And who is that? 17 Q. 18 Α. (By witness Price) Mr. Fesmire. Okay, and is that the same Mr. Fesmire who's the 19 Q. Chairman of the OCC? 20 21 Α. (By witness Price) Yes, it is. And does Mr. Fesmire have a boss? 22 Q. 23 A. (By witness Price) Yes. 24 And who's that? Q. 25 (By witness Price) Well, it's either Reese Α.

250 Fullerton or Joanna Prukop. 1 All right, and Joanna Prukop is the Secretary of Q. 2 Energy and Minerals in the State of New Mexico --3 (By witness Price) Yes. 4 -- correct? 5 Q. (By witness Price) Yes. 6 Α. All right, so she is a Cabinet Secretary, that's 7 Q. correct? 8 (By witness Price) Yes. 9 Α. Now in terms of deciding to revamp some rules, Q. 10 the pit rule, where does that decision come from? 11 makes that decision? 12 (By witness Price) That decision was made by the 13 Environmental Bureau some time ago, and I think I testified 14 15 to that, that right after Rule 50 was put in place the 16 previous bureau chief had indicated to me that we need to recommend to the new Director that had come in that we 17 probably need to have a rule rewrite. 18 Q. All right. And did you hear Mr. Brooks' opening 19 statement? 20 (By witness Price) The other day? Α. 21 22

Q. The other day, yes.

- (By witness Price) Α. Yes.
- And I believe at that time he stated that one of 24 the reasons that your division was redoing this rule was 25

pursuant to RCRA; is that correct? 1 (By witness Price) Reference to RCRA, yes. 2 Α. Yes, and what is RCRA? Q. 3 (By witness Price) It's the Resource 4 Α. 5 Conservation and Recovery Act, and it's a federal program 6 that covers solid waste. 7 Q. And it covers solid waste disposal and 8 management, correct? 9 Α. (By witness Price) Yes. All right. And are you now saying that oilfield 10 Q. wastes is a solid waste under RCRA? 11 12 A. (By witness Price) Yes. All right, is there not an exemption under RCRA? 13 Q. 14 A. (By witness Price) For hazardous waste only. For oilfield waste under Section C, I believe it 15 Q. is? 16 (By witness Price) No, you're incorrect. 17 A. 18 Q. Okay. (By witness Price) It is -- There's an exemption 19 for hazardous waste under RCRA for oilfield waste. 20 that is normally hazardous is not hazardous under RCRA for 21 the oilfield. 22 23 But there's still Subtitle D regulation, which basically regulates nonhazardous waste, and those 24 regulations -- it's the driving mechanism for landfarms and 25

1 landfills in the State of New Mexico. And one of the parties in this case is the Oil 2 0. 3 and Gas Accountability Project; is that correct? (By witness Price) One of the parties? 4 Α. The parties in this case, represented by an 5 Q. attorney, is the Oil and Gas Accountability Project, 6 7 correct? 8 Α. (By witness Price) OGAP. 9 Q. Yes. (By witness Price) 10 Yes. A. 11 Yes, I'm sorry. Q. (By witness Price) Yes, right. 12 Α. You know them as OGAP and I --13 Q. (By witness Price) Yeah, right. 14 Α. 15 Q. -- know them as Oil and Gas Accountability --16 A. (By witness Price) Yeah, yeah. 17 Okay. And OGAP is based in Durango, Colorado, Q. 18 correct? (By witness Price) You know, I don't know that. 19 Α. I really don't know the answer to that. I don't know where 20 they're based. 21 All right. And -- Well, you worked with Bruce 22 Q. 23 Baizel, who is the OGAP attorney on the task force, did you 24 not? 25 (By witness Price) Yes, I did. Α.

All right. And are you aware that OGAP -- you 1 0. 2 know, the Oil and Gas Accountability Project -- they put documents out on the Web concerning oil and gas production? 3 (By witness Price) Yes, I do. 4 A. And are you aware that in October, 2007, they 5 0. 6 actually issued a document concerning RCRA and closure of 7 oilfield facilities pursuant to RCRA? 8 (By witness Price) I'm not aware of that. So you didn't read that document from OGAP 9 Q. 10 pursuant to this hearing? (By witness Price) I don't think I did, I'm 11 Α. 12 sorry. 13 0. Under the Oil and Gas Act, one of the mandates 14 for the OCD is to be protective of groundwater, health and the environment, correct? 15 (By witness Price) Yes. 16 17 And in order to be protective of groundwater, health and the environment, when you go over a rule what do 18 19 you consider? (By witness Price) Gosh, that's such a broad 20 Α. question, Karin -- or Mrs. Foster. 21 Well, let me rephrase that then. 22 Q. When you are in the process of creating a new 23 rule --24 25 Α. (By witness Price) Right.

-- do you review each provision of the rule to Q. 1 ensure that it will be protective of groundwater? 2 3 A. (By witness Price) Yes. And do you review each provision of the rule to 4 ensure that it will be protective of the health of the 5 6 citizens of New Mexico? 7 (By witness Price) Yes. Α. And do you review each provision of the rule to 8 ensure that it will be protective of the environment? 9 (By witness Price) I hope we did. 10 Α. Now do you review the rule to consider whether Q. 11 there's any economic impact on small businesses? 12 (By witness Price) I did not. 13 A. 14 Q. Are you familiar with the Small Business 15 Regulatory Relief Act? (By witness Price) Yes, I am. 16 17 0. And that was passed by the Legislature in 2005, correct? 18 (By witness Price) I don't know. 19 Α. And -- Did you say you're familiar with that act? 20 0. (By witness Price) I know of it. 21 A. And does that act talk about -- or mandate that 22 0. agencies have to review their rules for impact on small 23 businesses? 24 (By witness Price) It's my understanding. 25 Α.

And pursuant to this rule, did you or anyone in 1 your division determine or have any discussion as to impact 2 3 on small businesses? MR. BROOKS: Mr. Chairman, I have no objection to 4 the witness answering the question, except that the 5 predicate of the question seems to suggest that it was the 6 responsibility of the Environment Bureau to that effect, 7 8 and we disagree with that -- to perform such a review, and we disagree with that interpretation of the act. As to 9 10 whether they did do such a review or not, I have no objection to the witness answering. 11 CHAIRMAN FESMIRE: Okay, with that notation, go 12 13 ahead and answer the question. WITNESS PRICE: I did not do a --14 (By Ms. Foster) Okay, so your bureau did not do 15 0. a review? 16 (By witness Price) No, we did not. 17 Α. Okay, but Mr. Brooks just reminded me that there 18 Q. 19 might be another division within the Oil Conservation 20 Division who might have followed the mandates of the Small Business Regulatory Relief Act and done an economic review, 21 correct? 22 Objection, misstated my observation. 23 MR. BROOKS: CHAIRMAN FESMIRE: I'll sustain that objection. 24 25 Ms. Foster, are you familiar with the law you're

quoting? 1 2 MS. FOSTER: Yes, I am. CHAIRMAN FESMIRE: Okay, you understand that it 3 is not the responsibility to make those determinations or 4 5 those notices, correct? MS. FOSTER: Pursuant to the act -- If you'd like 6 7 to have a legal argument, I'd be more than happy to stand 8 in front of you and make a legal argument. 9 CHAIRMAN FESMIRE: Well, you have briefed that in your motion, have you not? 10 11 MS. FOSTER: Yes, I have. CHAIRMAN FESMIRE: Okay, and we had to postpone a 12 decision on your motion because you weren't here this 13 morning when we started. We'll cover that later, but I 14 15 don't believe after reviewing the motions and the responses 16 to the motion that we're going to sustain that motion. I have no problem with the witness answering the question, 17 but I need you to understand that we don't believe that the 18 19 predicate that you're basing those questions on is correct. 20 MS. FOSTER: Okay. And Mr. Chairman, would I ask 21 -- could I ask you if you're giving me that ruling as the 22 Chairman of the OCC or as Mr. Wayne Price's and Mr. 23 Brooks's boss? 24 CHAIRMAN FESMIRE: I don't believe that --25 MS. FOSTER: Are you --

CHAIRMAN FESMIRE: I will go ahead and answer 1 that question, but it's the last one I'll answer from you 2 on that subject. It is not -- This is my position as 3 Chairman of the Commission. I am making that ruling as 4 Chairman of the Commission. 5 MS. FOSTER: Okay, thank you. 6 7 CHAIRMAN FESMIRE: I don't think it's proper for 8 you to raise that. 9 Mr. Price, you can answer the question if you 10 want. MS. FOSTER: I'll withdraw the question. 11 MR. BROOKS: Let the record reflect also that my 12 13 boss is Ms. Carol Leach, the general counsel of the Energy, Minerals and Natural Resources Department. 14 15 CHAIRMAN FESMIRE: Okay. 16 MS. FOSTER: Thank you, Mr. Brooks, for that 17 clarification. (By Ms. Foster) Mr. Price, there was some 18 Q. discussion previously concerning the dig-and-haul 19 provisions of the proposed rule, correct? 20 (By witness Price) Yes. 21 Α. All right. And the concern of the Independent 22 0. Petroleum Association proposed with the dig-and-haul was 23 24 that this would put additional trucks on the road in New Mexico; is that correct? 25

(By witness Price) I understand that, yes. 1 Α. 2 Q. Okay. And obviously there are many different 3 factors when drilling a well, and those different factors 4 will feed into the amount of waste that needs to be hauled 5 from a location, right? (By witness Price) Correct. 6 Α. 7 And the amount of waste that will need to be Q. 8 hauled from a location will obviously go on the roads of 9 New Mexico, correct? To be hauled off? (By witness Price) Oh, to -- not put on the 10 Α. 11 roads? (Laughter) 12 Yeah, I'm sorry, I misspoke. To be put on trucks 13 Q. to go on the roads. 14 (By witness Price) Some part of the rule that I 15 didn't understand. 16 17 (Laughter) (By witness Price) To be hauled off. 18 Α. 19 Q. Yes. 20 Α. (By witness Price) Yes. And did you consider as part of the protection of 21 Q. 22 the people of the State of New Mexico and also protection of the environment, the impact of putting additional trucks 23 on the roads? 24 (By witness Price) No, I did not. 25 Α.

And did you consider -- so basically, just so I'm 1 0. clear, your focus on protection of the groundwater, health 2 and environment is of the location, the drilling location? 3 That is your only concern, correct? Would that be a fair 4 5 statement? (By witness Price) Well, I'm always concerned 6 Α. about public health and the environment, you know, if it 7 has to do anything with oil and gas activity. But I think 8 -- I think what you're saying is probably correct, yes. 9 All right. Now you stated earlier that the 10 Q. 11 general public wants -- wants centralized landfills. in fact, you -- I think you stated that this was following 12 a national trend, to put wastes in landfills? 13 14 Α. (By witness Price) Yes. And I believe you stated earlier that there was 15 Q. two lined and two unlined landfills in southeast New 16 Mexico, correct? 17 A. (By witness Price) Permitted by OCD. 18 Permitted by OCD. What are the names of the two 19 Q. unlined landfills? 20 Α. (By witness Price) The two unlined -- One of 21 them is Sundance Parabo, located east of Eunice, New 22 23 The other is CRI, Controlled Recovery, located 24 halfway between Hobbs and Carlsbad.

And if those two are unlined, would it be

25

Q.

Okay.

correct to assume that it's because those are older 1 landfills? 2 3 Α. (By witness Price) And therefore under the new surface waste 4 management rule that you passed, were they grandfathered 5 in? 6 7 Q. Okay. (By witness Price) They still have to meet 8 9 certain requirements of part 36 for closure and so forth. For closure, But as long as they're still open, 10 Q. 11 they don't have to meet the -- I think you said before, double-lining and leachate-testing, et cetera, requirements 12 of the new surface waste management rule? 13 (By witness Price) As long as they don't make a 14 Α. major modification in building a new cell and so forth, 15 that's correct. 16 And how large is the Sundance facility? 17 Q. Α. (By witness Price) I'm thinking a half a 18 19 section. A half a section? Q. 20 (By witness Price) -- section, I'm thinking --21 Α. 2.2 Q. Okay. (By witness Price) -- for their total amount of 23 Α. 24 property. But I could -- I could be missing that.

Okay, I -- it's just --

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Q.

A. (By witness Price) -- it's rather large.

- Q. All right. And how large is the CRI location?
- A. (By witness Price) I would have to guess, same thing. We can get those numbers, exact numbers, for you, though, if you -- we can look those up and find out.
- Q. Okay. Well, if I understand your testimony earlier, you were saying that the landfill areas, you were willing to have them be -- and I think you used the word "sacrificial areas". You used that word earlier; is that correct?
  - A. (By witness Price) I did.
  - Q. And what did you mean by that?
- A. (By witness Price) Well, I thought I explained that. What I meant by that was, these were local landfill permitted areas, that that waste would be there forever. There's no question about it. But they're very -- They're small in comparison to thousands of mini-pits all over the countryside.

And when I meant "sacrificial", I certainly didn't mean to imply that we're willing to sacrifice a whole county, like the Sierra Club guy had pointed out to me that Lea County is sacrificial as far as they're concerned. I totally disagree with that. I'm from Lea County, and I think it's worth protecting.

Q. All right. Now, but these areas, these two

1	landfills which put together amount to one whole section,		
2	okay? These were close to a half, okay?		
3	A. (By witness Price) Yeah, once again, I would		
4	have to really look it up and see what the acres		
5	Q. All right, but they're large		
6	A. (By witness Price) they're a number of		
7	acres		
8	Q they're large landfills?		
9	A. (By witness Price) They are large.		
10	Q. Okay. And they're accepting oilfield waste which		
11	you maintain has high levels of chlorides, right?		
12	A. (By witness Price) Yes.		
13	Q. And I believe, if I correctly understand your		
14	testimony, that your concern is the migration of chlorides		
15	through the vadose zone into the groundwater, correct?		
16	A. (By witness Price) Yes.		
17	Q. And so I don't want to put words in your mouth		
18	here, but its okay for you in the sacrificial area to put		
19	oilfield waste and have it migrate to groundwater in that		
20	one-section area of New Mexico? Is that okay?		
21	A. (By witness Price) Is that a leading question?		
22	(Laughter)		
23	Q. This is cross, leading is allowed.		
24	CHAIRMAN FESMIRE: You can ask leading questions.		
25	MR. BROOKS: Cross-examination, leading questions		

are okay, but --1 2 (Laughter) 3 Q. (By Ms. Foster) Well, Mr. Price, if you don't want to answer --4 5 CHAIRMAN FESMIRE: Mr. Price, I will overrule your objection. 6 7 (Laughter) Question again, please. 8 WITNESS PRICE: 9 sorry. 10 0. (By Ms. Foster) All right, in this large area, the CRI which is a one-half section and the Sundance which 11 is one-half section, that accepts oilfield waste with 12 chlorides --13 (By witness Price) Yes. 14 Α. -- is it okay in those areas to have those 15 16 chlorides migrate to the vadose zone and the groundwater? (By witness Price) No. 17 All right. Well, how is it that you will prevent 18 0. the migration of chlorides in those areas if they're not 19 lined? 20 (By witness Price) In those two particular 21 Α. 22 locations, geographically there is -- and particularly for 23 Sundance, there's several hundred feet of redbed underneath 24 Sundance. And there's also monitor wells that ring the 25 whole facility to make sure that it's not leaving the

facility.

CRI is built on similar lithology.

- Q. All right. Now CRI is located near what town?
- A. (By witness Price) It's Halfway, New Mexico, which there's not a town there.
- Q. Okay, is there any oil and gas production near CRI?
  - A. (By witness Price) Yes.
- Q. All right. And I believe you stated earlier that when the OCD -- or when your department permitted the surface waste management facilities, that you preferred them to be remote and far from groundwater, correct?
  - A. (By witness Price) Yes, that's preferable.
- Q. So are you saying that any oil and gas locations that are close to or adjacent to CRI or Sundance should not be allowed to have any on-site burial at all, even though right next door you have Sundance and CRI that does?
  - A. (By witness Price) That's what we're proposing.
  - Q. And is there science to support that?
- A. (By witness Price) Once again, it's the cumulative effect -- Mr. von Gonten pointed out that in some of those areas that you're talking about, there is groundwater there. And so it's our position that we think the national trend is to haul all waste to a centralized facility, and that's what we're proposing here

So if there's a well located, let's say, half a 1 Q. mile from the CRI facility, for example, and it's in the 2 same topography as CRI which you stated, I believe, was in 3 redbed, that you would still require as the environmental 4 department in this rule -- you would still feel more 5 comfortable forcing them to haul all those wastes to CRI? 6 7 Α. (By witness Price) We didn't differentiate in that particular instance. We did mention one time about 8 9 the salt playa issues in which the same scenario could 10 There's just really no way that we could write the rule to make it perfect and make it not include those 11 12 I mean, it -- we just didn't know how to do that. So what you're saying, then, is that wells 13 Q. that are close to these landfills that have the same 14 general geography -- I'm sorry, topography -- as these 15 landfills, they still have to have the \$30,000 to \$80,000 16 expense to haul because you just didn't know how to write 17 the rule that way? 18 (By witness Price) 19 Α. No. MR. BROOKS: Objection, argumentative. 20 CHAIRMAN FESMIRE: Overruled. Go ahead and 21 22 answer, Mr. Price. WITNESS PRICE: Okay. Mrs. Foster, that's not 23 24 what I'm really saying. What I'm really saying is that,

yes, there is oil and gas activity around these facilities,

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there's no question about it.

But these facilities are very unique, very unique. These companies -- I've gone back and looked at the records, and they spent a tremendous amount of time trying to find these locations. And they're hard to find, there's no question about it.

And so I'm not saying that just because there's a well a mile or two or ten miles away that it's the same geology. I'm not saying that at all.

As a matter of fact, there's -- as Mr. von Gonten pointed out, there's groundwater in some of those areas.

- Q. (By Ms. Foster) Groundwater next to CRI?
- 13 A. (By witness Price) I didn't say that.
  - Q. Okay, well then clarify your answer.
  - A. (By witness Price) Okay, what I'm saying is in the vicinity, in the exempted area, because CRI is located close to the exempted area.
  - Q. Okay. Now let's talk about this exempted area, Mr. Price. It's my understanding that in the northwest there is no current OCD-permitted landfill; is that correct?
  - A. (By witness Price) There is no OCD-permitted landfill, that is correct.
    - Q. In the northwest?
  - A. (By witness Price) Yes. There is landfarms but

not landfills.

2.2

- Q. Right. But the requirements of this rule will be that we bring our waste to a landfill, correct?
  - A. (By witness Price) Correct.
- Q. And I believe that on the map you showed there was the San Juan regional landfill, the northern New Mexico landfill and the regional -- and the Rio Rancho landfill that was 100 miles from the San Juan Basin, correct?
  - A. (By witness Price) Correct.
- Q. Now do you have an agreement with each one of these landfills to dispose oilfield waste?
- A. (By witness Price) We have the statutory language, and we also have Rule 712 that allows this.
- Q. All right. Concerning the San Juan landfill, is it large enough to accept all the oilfield waste that will come off if this rule passes --
  - A. (By witness Price) We --
- 18 Q. -- from the San Juan Basin?
  - A. (By witness Price) The only way I can really answer that is, we have never had the San Juan landfill turn any oilfield waste down pursuant to 712 because of capacity.
  - Q. Okay. Is it not true that you had -- this past year, after the surface waste management rule passed, you had to have an agreement, a one-year agreement, with that

landfill for disposal of oilfield waste?

A. (By witness Price) We didn't have to have that agreement, but what we did, that was an agreement primarily to notify all the parties. There was a lot of fear and outrage out there because of the 1000 parts per million chloride, and we wanted to make sure that they had a place to take this, and it was the way that we did that, and so...

The environment requirement also, we had an MOU that we had with them, and two of our -- two of the people that work for me had worked over in that section and knew the language of -- the statutory language, knew the rules very well, and so we thought it was beneficial to have an MOU out there so all the parties could understand that they could take their wastes there.

- Q. And that MOU was really only for the period of one year; is that not the case?
  - A. (By witness Price) That's correct.
- Q. All right, and what happens after one year? Can there no longer be disposal at the San Juan location?
- A. (By witness Price) Because of what they dispose, but there can be disposal there.
- Q. Okay, it depends on what they dispose. I'm talking -- I'm concerned about where operators are going to dispose of the waste if this rule passes.

(By witness Price) What waste? 1 Α. The waste from these locations? 2 0. (By witness Price) You've got to be more 3 Α. specific on what waste. 4 Okay, then --5 0. 6 (By witness Price) I mean, I can't answer the 7 question unless you do. 8 -- correct me if I'm wrong, then. It's my 9 understanding, then, that all waste that comes out of these oil and gas locations can be disposed of at a permitted 10 landfill, for example the CRI or Sundance facilities? 11 (By witness Price) Mrs. Foster, when you say all 12 wastes, there are some wastes that are out on site that are 13 14 hazardous wastes that are generated, that do not fall 15 underneath the exemption. And so the answer to that 16 question is no if it's hazardous, not always. 17 If you're talking about specific waste such as drilling waste that's in a drilling pit, then it can go to 18 the San Juan County landfill. 19 20 Q. Okay, let's talk about drilling wastes, then. (By witness Price) Okay. Α. 21 22 Q. It can go to the San Juan County landfill for the 23 next year; is that correct? (By witness Price) It's our -- with our 24 understanding -- we've had several conversations and

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meetings with the Environment Department's understanding 1 2 that we can continue to use Rule 712 and they don't have a 3 problem with it. And actually, Ed Hansen and Brad Jones both 4 5 worked on that, and so we'd like to refer -- defer that 6 question to them. But I mean, I know the situation is that 7 we certainly are allowed to use that particular landfill you're talking about. 8 9 And do you have an MOU with the northern New Q. Mexico regional landfill? 10 11 Α. (By witness Price) Where is that one located at? Well, that was going to be my next question. 12 Q. 13 (Laughter) 14 WITNESS PRICE: Northern New Mexico. I'd have to 15 refer to one of my staff members. They would know where 16 that's at. (By Ms. Foster) Okay, I believe that was on your 17 map. Unfortunately I didn't have the exhibit number. 18 19 will review that and ask that again. But how about the Rio Rancho landfill? 20 Α. (By witness Price) Yes. 21 22 Q. Do you have an MOU with them for disposal of the waste? 23

What we have is, we have the ability under Rule 712 to

(By witness Price) No, we don't have an MOU.

24

25

1 dispose of waste there. And those facilities are under NMED jurisdiction 2 Q. 3 or --(By witness Price) 4 A. 5 -- OCD jurisdiction? Q. 6 Α. (By witness Price) No, NMED. 7 Q. All right. So then an operator would be 8 disposing at those facilities, and the waste would then be 9 managed, or that facility would then be managed by the 10 Environment Department, not the Oil Conservation Division 11 any longer? 12 (By witness Price) Well, it would actually be Α. 13 managed by the company who owns the facility, but the 14 Environment Department would have oversight because they 15 have the permits on that. 16 All right. So then you would have no more Q. 17 oversight over that waste, once it goes into the NMED landfill? 18 19 Α. (By witness Price) That's correct. 20 Q. And I believe on the same map you mentioned that 21 there was a couple of facilities on Colorado; is that 22 correct --23 A. (By witness Price) Correct. -- for the northwest? 24 Q. 25 Α. (By witness Price) Correct.

1	Q. And do you have user agreements with those
2	landfills to dispose there?
3	A. (By witness Price) No.
4	Q. So could I ask you the basis for putting those
5	landfills on the map as potential disposal locations
6	A. (By witness Price) Yes.
7	Q for oilfield waste?
8	A. (By witness Price) Yes. We had One of my
9	staff members had called those particular landfills, and
10	they are currently taking waste from oilfield waste like
11	you're talking about, from New Mexico into those landfills.
12	Q. Okay. So based on what they're currently doing,
13	you
14	A. (By witness Price) Now.
15	Q they will
16	A. (By witness Price) Yes.
17	Q. Did you have any sort of a conversation or
18	indication at all that they will continue to accept
19	oilfield waste?
20	A. (By witness Price) My staff Carl Chavez is
21	the member of my staff that checked that out. Probably we
22	need to ask him that question.
23	Q. Okay, I will make a notation to ask him.
24	Now I believe it was Exhibit $[sic]$ 19 where you
25	did vour modeling for your small unlined pits.

1		WITNESS VON GONTEN: 19, no.
2		WITNESS PRICE: Exhibit
3	Q.	(By Ms. Foster) I'm sorry, page 19
4	Α.	(By witness Price) Page 19.
5	Q.	yeah.
6	А.	(By witness Price) Okay.
7	Q.	I want to make sure that I understand that model.
8	That is fo	or the disposal of one barrel of contaminant; is
9	that corre	ect?
10	А.	(By witness Price) Per day.
11	Q.	Per day.
12	А.	(By witness Price) Per day.
13	Q.	Okay.
14	Α.	(By witness Price) Every day.
15	Q.	So it's one barrel of pure chloride that you're
16	putting in	nto a pit?
17	Α.	(By witness Price) It's one barrel of water that
18	has a cond	centration of 5000 milligrams per liter of
19	chloride.	
20	Q.	And I believe you stated earlier that it's a
21	continual	disposal of the one barrel per day over a long
22	period of	time?
23	A.	(By witness Price) Over 50 years.
24	Q.	Over 50 years?
25	Α.	(By witness Price) Yes.

Now reserve and drilling pits, how long are those Q. 1 pits open? 2 (By witness Price) Well, under the current rule 3 Α. -- this is probably a better question for our district 4 supervisors, but it's my understanding that those have been 5 6 -- we have some open as long as three, four, five years. 7 Okay, but that would be the exception as opposed Q. to the norm, correct? 8 9 (By witness Price) It would be the -- Yes, it A. 10 would be the exception. 11 All right. Wouldn't it be fair to say that most 12 drilling pits are open a matter of days, at most months, 13 depending on the project that they're actually drilling? 14 Α. (By witness Price) Months. All right. In other words, there is a 15 0. 16 distinction in your rule between permanent pits and temporary pits? 17 (By witness Price) Yes. 18 Α. All right. And I guess what I'm getting at is, 19 ο. temporary pits and the migration of chlorides from those 20 temporary pits, all right? 21 2.2 A. (By witness Price) Yes. This model does not cover that discussion, 23 0. correct? 24 25 Α. (By witness Price) It does not.

1	Q. All right. This model really talks about
2	permanent pits that are open for years and years?
3	A. (By witness Price) Yes.
4	Q. All right, with a continual disposal of the
5	chlorides in that level?
6	A. (By witness Price) That is correct.
7	Q. All right. Could you please describe a reserve
8	pit?
9	A. (By witness Price) I've got a picture of one, if
10	you'd like to see one.
11	Q. Well, just conceptually, if you could just
12	describe, you know, how deep it is, how big it is.
13	A. (By witness Price) May I tell Ed to put it up on
14	there? Ed, would you go to
15	MR. YAHNEY: You haven't put any other ones up.
16	Why put this one up?
17	CHAIRMAN FESMIRE: You know, there's a place for
18	public comment in this procedure and this isn't it, okay?
19	Thanks.
20	MS. FOSTER: Well, if it'll take him too long to
21	look for it
22	WITNESS PRICE: It won't, it won't take just
23	it won't take just a minute.
24	MS. FOSTER: Okay, that's fine.
25	O. (By Ms. Foster) All right, so this is a working

reserve pit, correct?

- A. (By witness Price) Yes.
- Q. All right. And under the current Rule 50, when that is closed what's the process for closing that pit?
- A. (By witness Price) The process is that they let the water evaporate, and then once it's evaporated then they -- depending upon which company it is, depending upon where it's located, but generally it's -- Let's talk about the southeast. A lot of times they'll take that pit contents and put it in a deep-trench burial and cover it up.
- Q. And when you say cover it up, how much -- Do they put topsoil on it? What do they cover it up with?
- A. (By witness Price) Generally the soil that they have on location, that they use to help dig these pits.

  They dig the deep trench, they have soil, they put something in it, you're always going to have some soil left over, and they'll push that on top.
- Q. Okay. And is there a requirement under the current Rule 50 on how much cover has to be on there?
  - A. (By witness Price) I would have to look --
- 22 Q. Okay.
- A. (By witness Price) -- but I believe it's in the quidelines.
  - Q. Okay. Well, would it surprise you that it's four

feet? Does that number sound familiar at all? 1 (By witness Price) If you say it is, it is. I'm 2 Α. drawing a blank on that. 3 Okay, maybe I'll just defer this line of 4 5 questioning to an operations person then. All right, moving on then. 6 7 I believe that you stated that oil and gas companies can afford to have a \$30,000 to \$80,000 hauling 8 cost, and that was your justification for the 100-mile 9 10 rule? (By witness Price) It's the only economics that 11 Α. we're able to get. We had called some disposal companies, 12 and that was a range that we got --13 14 Q. All right --(By witness Price) -- \$30,000 to \$80,000. 15 Α. -- but it's a hundred miles, basically, based on 16 Q. -- I don't know what you want to call it, but --17 18 Α. (By witness Price) Radius. Well, yeah, as the crow flies --19 Q. 20 (By witness Price) Yes. Α. -- as opposed to driving miles? 21 Q. (By witness Price) Yes. 22 A. All right. So in places in southern -- in 23 Q. northern New Mexico in particular, there might not be 24 25 direct routes to get to some of these locations, correct?

1 A. (By witness Price) You're correct. 2 All right. And I believe you also stated on Q. 3 cross-examination that you understand that the oil and gas industry is a cyclical industry? 4 5 (By witness Price) Yes. 6 Q. And do you know how many small producers there are in the state? 7 8 (By witness Price) I can't tell you the number. Could you venture a guess at how many producers 9 0. there are in the state? 10 11 A. (By witness Price) Small producers? 12 Q. Producers. 13 A. (By witness Price) It would be a guess. 14 All right. Q. 15 (By witness Price) Do you want a guess? Α. Well, based on the OCD numbers I believe it was 16 Q. 17 711? Does that sound about right? Different companies? 18 CHAIRMAN FESMIRE: Don't look at me. 19 (Laughter) WITNESS PRICE: 20 No, I'm not looking, I'm just trying to think. I don't know the answer to that question. 21 22 (By Ms. Foster) All right. In terms of the Q. 23 regulatory costs or shifting to do regulations, would you agree that it's more difficult for smaller producers to 24 25 shift when there's a change in regulations, or adjust to

those regulations? 1 (By witness Price) Not necessarily. 2 Α. All right, why is that? 3 Q. (By witness Price) They're lean and mean, and 4 they do things a lot cheaper than some of the bigger 5 6 companies do it. 7 Q. All right, but small companies generally don't 8 have -- I believe there was a gentleman who testified earlier today that they finally have had to hire E&S safety 9 10 personnel --11 (By witness Price) Environmental --A. -- in order to follow --12 Q. 13 (By witness Price) Environmental health and A. 14 safety. -- the regulations. 15 Q. (By witness Price) 16 Α. Uh-huh. 17 Q. Correct? (By witness Price) Right. 18 Α. 19 And generally the smaller companies don't have Q. 20 the excess personnel, for example, regulatory affairs folks 21 or lawyers, even, on staff, correct? 22 A. (By witness Price) Oh, that's true. All right. And are you aware that oil and gas in 23 Q. particular is what would be considered a commodity on the 24 markets? 25

A. (By witness Price) Yes. 1 2 All right. And based on your work -- You worked Q. in oil and gas for a while, correct? 3 4 A. (By witness Price) I have. 5 Q. And you understand that oil and gas companies 6 generally don't set the price of a barrel for oil, correct? 7 (By witness Price) Well, they're not supposed Α. 8 to. 9 (Laughter) 10 Unless you're in Saudi Arabia? Q. (By witness Price) Yes, they --11 Α. 12 Generally --Q. (By witness Price) -- don't set the price --13 Α. 14 Yes. Q. 15 (By witness Price) -- it's done --Α. New Mexico --16 Q. 17 (By witness Price) -- by the market. Α. -- producers generally don't? 18 Q. 19 Α. (By witness Price) Yes, it's market-driven. 20 Q. It is market-driven --21 Α. (By witness Price) Yes. 22 And therefore for selling a commodity that is Q. 23 market-driven companies generally have to absorb regulatory costs? 24 Yes. 25 (By witness Price) Α.

Q. All right. 1 CHAIRMAN FESMIRE: Ms. Foster, how much longer do 2 3 you think you're going to be? MS. FOSTER: About five minutes. 4 CHAIRMAN FESMIRE: 5 Okay. MS. FOSTER: All right? 6 (By Ms. Foster) Okay, thank you, Mr. Price. 7 Q. Mr. van [sic] Gonten, I had a couple questions 8 9 for you concerning your mapping of the San Juan. I believe one of those -- the maps discussed the outcrops of San 10 Juan; is that correct? 11 12 (By witness von Gonten) Are you referring to 13 page 3 of my Exhibit 12? 14 Q. I believe so. Yes. The mapping that you demonstrated has topography 15 16 on that map, correct? (By witness von Gonten) Well, that would be a 17 different exhibit. This is a geologic base map on page 3. 18 Just to make sure we're on the same page, the maps that I 19 generated using the RGIS Explorer do have -- depending on 20 21 what scale, how close in you're zooming in, they will either just -- they can be manipulated to display a shaded 22 relief or a topographic map, yes. 23 Okay. I believe I was looking at, let's see, 24

25

page 6 of your Exhibit 12 --

(By witness von Gonten) Okay --1 Α. -- page 6 and 7 --2 Q. 3 (By witness von Gonten) Okay, now those are geologic maps focusing on just the upper three tertiary 4 formation aquifers. 5 Okay. And I believe that the heading on this map Q. 6 7 discusses outcrop of San Juan formation, outcrop of the --I'm sorry, I can't read this, it starts with an N --8 (By witness von Gonten) Nacimiento. 9 -- formation and the Animas formation. 10 0. (By witness von Gonten) Yes, ma'am. 11 Α. Okay. And what is the definition of an outcrop? 12 Q. 13 Α. (By witness von Gonten) It's a geologic formation that actually -- we have circular logic, but it 14 crops out. 15 Okay, crops out of what? 16 0. (By witness von Gonten) It's a term. It means 17 that it is exposed at the surface, as opposed entirely 18 buried and not visible, it's only known from the 19 subsurface. Surface geology versus subsurface geology. 20 Thank you. And the geology also -- that same 21 Q. geology also goes under -- the subsurface geology is 22 intersected when a company drills for oil and gas --23 (By witness von Gonten) 24

25

Q.

-- correct?

And when a company intersects the geology, do -is that commonly what's known as drill cuttings that comes
up to the surface when they cut through the rock?

A. (By witness von Gonten) Yes.

- Q. And that geology is composed of different minerals; is that correct?
  - A. (By witness von Gonten) That's right.
- Q. And -- I'm not the geologist, so I'm asking you this question for real because I don't know the answer. The geology that you have and the names of the different formations, is that related to the mineral contents that are in the different formations, or is that the year -- the time period in which they were formed?
- A. (By witness von Gonten) That's a bit complicated. If I can take just a moment, there's at least two ways of looking at that.

There's time-stratigraphic equivalents, and that has to do with things all being deposited at the same time. For example, if you look at what's currently happening today, the Rio Grande is flowing down through the Rio Grande valley, it's depositing bed load alluvium, and that goes all the way down through Texas, and at the other end there's a Rio Grande delta and it goes offshore. If you were to map all that, you would see a change from very coarse alluvium in New Mexico through sands in Texas, to

finer sands in the delta offshore, to muds and into the deep water. All that would be dated November 5th, 2007.

That's not very practical if you're trying to find oil and gas, so you look for things that are of the same lithology. So a lot of those aquifers that are referred to are referred to as sandstone units, and those would be fine-grain -- generally fine to coarse-grain quartzose sandstones.

- Q. Okay, and the fine-grain quartzose sandstone is what basically would come up in drill cuttings?
- A. (By witness von Gonten) Well, when you encounter it, yes. But you could also go through -- at least in the Cretaceous, there's a lot of shaly section in there, and so you would be seeing mudstones that were ground up and they're coming to the surface as these same cuttings, but a different lithology.
- Q. So the rock -- just so I understand this correctly, the rock subsurface is the same rock that -- what you could possibly have in the outcrops?
  - A. (By witness von Gonten) It could.
- Q. And do the minerals wash off or anything when you have rainstorms on outcrops?
  - A. (By witness von Gonten) Yes.
- Q. And the minerals that are in the outcrops, would those end up, for example, in rivers?

1 Α. (By witness von Gonten) Yes. 2 And then is it possible, then, to have rivers in Q. the State of New Mexico that might have higher mineral 3 4 content than in other parts of the country? 5 (By witness von Gonten) Α. 6 All right. Would it surprise you to know that in Q. 7 the San Juan River the arsenic content is 70 parts per 8 billion? 9 Α. (By witness von Gonten) I wasn't aware of that. 10 All right. And the San Juan River basically runs 0. 11 by the San Juan outcrops? 12 (By witness von Gonten) Well, the San Juan River drains the San Juan Basin, yes. 13 14 Q. Right, okay. 15 Just a question concerning the slides, I believe, 16 that you gave us that were in color. Let's see, slide --17 same exhibit -- Here we go. I believe it's slide 31. 18 (By witness von Gonten) Yes, I'm with you. Α. 19 Q. Determining -- just looking at your key for the 20 Ogallala, the Triassic and the Ochoan and the Artesian 21 group, the quantification that you had here, zero to 300, 22 300 to 3000, is that set by USGS or was that a number that 23 you picked?

This map was published by the water and

(By witness von Gonten) I did not generate this

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map.

1 infrastructure data system on the Web. 2 0. All right. So -- But I believe that you stated on direct examination that 250 -- was it parts per million? 3 -- is considered drinkable water standards? 4 5 (By witness von Gonten) That is the Water Quality Control Commission standard for fluorides, yes, 250 6 7 milligrams per kilogram --8 Q. Okay, so --(By witness von Gonten) -- milligrams per liter. 9 Α. Q. -- so these pictures that you showed us here, 10 every purple dot is for a well that is effectively close to 11 drinking water standards? 12 (By witness von Gonten) Yes, it would be --13 well, yes, that's correct. Some of them are going to 14 exceed, it's zero to 300 rather than zero to 250. 15 16 Q. Okay, but this is for water and not for dirt in 17 reserve pits? 18 Α. (By witness von Gonten) That's right. 19 Q. All right, this is depiction of water wells? 20 Α. (By witness von Gonten) That's right. 21 MS. FOSTER: Okay. All right, I have no further questions, thank you. 22 CHAIRMAN FESMIRE: 23 Okay. The other attorneys, are you all going to have questions for these witnesses? 24 Mr. Huffaker? 25

MR. HUFFAKER: No, at this time. 1 2 CHAIRMAN FESMIRE: Okay. Mr. Jantz, or Bruce? 3 MR. FREDERICK: Yeah, I think we're just going to 4 have a couple. CHAIRMAN FESMIRE: Okay, but you are going to 5 have some? 6 MR. FREDERICK: Yes. I'll take less than five 7 minutes. 8 Okay. We're going to have to 9 CHAIRMAN FESMIRE: do something different. The power outage that caused our 10 problem in the other building also knocked out the security 11 system and the locks, so they're going to chain-lock the 12 building closed at 5:15, which means unless you all want to 13 14 adopt an OCD staffer for the night, they're going to have 15 to go back home and get their car keys and everything. So I did promise folks that we'd have another 16 17 chance to make public statements this evening. Sir, if you have a statement that you'd like to make we can do it at 18 this time. 19 20 And then we'll have to take up the housekeeping 21 matters at nine o'clock in the morning at the -- Morgan Hall in the State Land Office. Again, I've been asked 22 repeatedly to point out that there is no parking there. 23

You press the button there, you'll get the nicest lady

Don't try to park in the parking lot, they won't let you

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in.

in the world but she won't let you in. So you're going to 1 2 have to park in the PERA building. 3 So before we adjourn, we will now accept -- is 4 there anyone else who wants to make a public statement this 5 evening? Yes, sir? 6 7 MR. HAWKINS: Bill Hawkins with BP. CHAIRMAN FESMIRE: Come on down, Mr. Hawkins. 8 9 Mr. Hawkins, I think you were here when we went through the ritual before. You can either make an unsworn statement of 10 11 position, or you can be sworn and present testimony. 12 MR. HAWKINS: I'm going to make an unsworn 13 statement. BP has submitted some written comments, and so I 14 don't want to make this a long statement but I did want to 15 make a statement for BP. 16 17 We're a participant in the New Mexico industry committee, and we support the general comments and their 18 recommendations to the Commission. 19 But in addition to that, we also believe that the 20 current pit rule, if it's properly implemented, would be 21 22 adequate to protect public health and safety and the

environment. We think if the proposed rule is adopted as

adverse -- broader adverse impacts on public safety with

it's currently written that there will be a number of

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additional trucks on the road and potential impacts to the 1 environment. 2 So we are concerned that making a change that may 3 not be needed to protect the environment could actually 4 make things worse. 5 6 Finally, we would note that the rule as it's 7 drafted is going to have a significant adverse financial 8 impact on not only industry but on the State of New Mexico. And so we think that the potential financial impact should 9 also be considered before a new rule is adopted. 10 And that's all I have. 11 CHAIRMAN FESMIRE: Okay, thank you, Mr. Hawkins. 12 13 Is there anyone else who would like to make an unsworn -- make a public comment? Doesn't have to be 14 sworn, doesn't have to be unsworn. 15 Okay. With that, we are going to reluctantly 16 adjourn, to reconvene tomorrow morning in Morgan Hall in 17 the State Land Office at nine o'clock in the morning. 18 19 (Thereupon, evening recess was taken at 4:21 20 p.m.) 21 22 23 24 25

## 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 November 19th, 2007.

STEVEN T. BRENNER

CCR No. 7

My commission expires: October 16th, 2010