

**Official Transcript of Proceedings**  
**NUCLEAR REGULATORY COMMISSION**

**CONFIDENTIAL**  
Title: Rulemaking for Groundwater Protection Requirements at In Situ Leach Uranium Recovery Facilities

**CONFIDENTIAL**  
Docket Number: Not provided

Location: Denver, Colorado

Date: Thursday, June 29, 2006

Work Order No.: NRC-1122

Pages 1-101

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P-R-O-C-E-E-D-I-N-G-S

9:05 a.m.

MR. MOORE: -- Ron Venton from uranium processing section. And we also want to thank Ron Sutlow, EPA for agreeing to make remarks.

The purpose of this workshop is to provide a forum for NRC to inform stakeholders about a new rule making effort that's being undertaken by NRC to ensure adequate ground water protection at 9:06:26 uranium recovery facilities and to limit -- limit dual regulation of these facilities.

In addition, NRC's soliciting comments and suggestions from stakeholders to be considered by NRC staff during the development of this rule making. We would however, appreciate that the comments and suggestions be focused on the specific issues related to this rule making.

The rule making originated from a communication written by Commissioner Merrifield (phonetic) in January to the other commissioners calling for ruling making to focus on eliminating dual regulation by the NRC and EPA, of groundwater protection.

In March the Commission issued an SRM to staff directing us to initiate a rule making effort.

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1 An SRM is a staff requirements memorandum that directs  
2 the staff to take action. It told us to address only  
3 those changes addressed by the SRM. It said we should  
4 share the job proposed language on NRC webpage and it  
5 said that we should actively engage interested  
6 stakeholders through public workshops. Public  
7 workshops such as this.

8 This is the first such opportunity for  
9 public input. We're beginning to have -- we're  
10 beginning to start the rule now. We have not written  
11 proposed rule language yet. We're starting our  
12 working group at NRC. We're on a very aggressive  
13 schedule to get out a proposed rule to the Commission  
14 by January '07. And we're looking for your input.

15 We have a very packed agenda. We're going  
16 to cover the background and description of ISLs. Ron  
17 Linton and Loren Sutler will talk a little bit about  
18 exiting regulatory requirements. Mike's going to go  
19 over -- Mike Fliegel's going to go over the history,  
20 a statement of the problem. Gary will cover the Gary  
21 Comfort, will cover the rule making process. We'll  
22 take a break around 10:30 and then Bill will talk  
23 about some of the -- those changes that we're thinking  
24 about. And then around 11:00 o'clock, or so, we'll  
25 have an open forum for stakeholder comments.

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1           As I mentioned, the Commission does want  
2 us to seek public input. Stakeholder input on this.  
3 This is the first such in -- opportunity for input.  
4 We are envisioning, at this point having another  
5 public workshop during the proposed rule stage. And  
6 we will also be making presentations as we go along  
7 that the Commission's directed us to put the proposed  
8 rule out on the web. The Commission's very specific  
9 in the SRM that we limit the changes to the proposed  
10 rule -- in the proposed rule to that -- that was  
11 directed in the SRM.

12           And with that, I'd like to turn it over to  
13 Bill and we'll move along with the public meeting.  
14 Bill.

15           MR. VON TILL: Thanks Scott. I just  
16 wanted to welcome everybody here. I'm glad we got a  
17 lot of people here. I just wanted to point out a  
18 couple things. By the way, I'm Bill Von Till the  
19 chief of the uranium processing section back in  
20 Washington. I just wanted to point out that we're  
21 early in the process and all we have at this point is  
22 some -- some proposed ideas. But the main focus of  
23 this meeting is to listen to you. And to get your  
24 ideas and comments on the process and what you think  
25 on this subject. So, I just wanted to point that out.

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My presentation is after the break where I'm going to go through some of the meat and potatoes of the -- the actual ideas and concepts of what we intend to do on this rule. And that's -- and after that we want to hear from you. So, I just wanted to point that out. Thanks. Gary.

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MR. COMFORT: Hello, I'm Gary Comfort. I'm the senior project manger for the rule making effort that we're doing.

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Basically, I want to run through a couple of administrative announcements before we start. As Bill said, I mean, the big key point is to try to get comments from -- from every -- all the stakeholders. As we said, the agenda is over on the table and there's a signup sheet. The agenda's basically, we're going to try to run through relatively quickly to provide, you know, opportunity -- times for comments and all on this subject.

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Basically, we're going to look for public comments. At the end of each presentation we'll allow some time for it. We want to leave most of them to the end, because that's again, as Bill said, where the meat and potatoes of the discussion is. And the agenda is, as was before, we're going to get a brief

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1 background as to what ISLs are. There may be some  
2 members of the public here that aren't as familiar.  
3 I'm sure there's a lot of industry who's going to be  
4 fairly familiar with it. So, we're going to keep it  
5 relatively brief. We're going to go over some of how  
6 we got to this point, needing to look at this rule.  
7 I'll go over -- eventually the rule making process and  
8 the steps NRC will be taking during the rule making  
9 process. And then as Bill said, he'll go through the  
10 proposed changes.

11 We're also, as I said, going to have the  
12 open forum, which is going to be the main time. We  
13 have a movable mic around so that if you do have  
14 comments, you know, somebody will bring the mic over  
15 to you so that we can do it. So, that everybody can  
16 hear it. It would make easier than people at the  
17 podium trying to restate the comment and all.

18 When we do, do the comments it would be  
19 useful if people will state their name and their  
20 affiliation. We're going to have -- we have a  
21 transcriber in the back that will make this a public  
22 record so that everybody will be able to get a copy of  
23 it off of our website.

24 I've also provide over on the table, on  
25 the side, some 5x8 cards that if people are not

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1 comfortable with, you know, wanting to make a comment,  
2 you know, in public, they can certainly write that  
3 down and provide it to use at the end of the forum.  
4 You can also at anytime go ahead and email either on  
5 or website or to me specifically if you want or  
6 provide written, by letter, comments on it.

7 In those case though, because we are on a  
8 very fast rule making pace, the faster you get those  
9 in the better because as we get farther into it, it  
10 will be hard to take those comments and get  
11 consideration at this stage.

12 As I'll mention in my presentation  
13 there'll be also -- also additional opportunities to  
14 get involved though, as we move along.

15 As I stated, the meeting is going to be  
16 transcribed, you know, we're -- I'd like you to,  
17 again, you know, it's important for the transcrip-  
18 tor (sic) to be able to, you know, hear your name and put  
19 it there appropriately if we can. The attendance list  
20 is on the side. I'll basically be providing that, you  
21 know, names -- the public record as to who, you know,  
22 who signed up on it. It's also will (sic) provide me  
23 a way to, you know, when the transcript is  
24 available -- these slides are also -- we don't have  
25 copies of them, we're going to make the publicly

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1 available on the same website. When they are  
2 available, anybody who signed up I'll, you know,  
3 directly where the link is, the direct link so you  
4 don't have to try to get through our website directly  
5 to find it at some point.

6 Finally, there's also some NRC feedback --  
7 meeting public feedback forms over on the table.  
8 Those are basically for us. If you can leave them  
9 after you fill them in, to go back and look at how can  
10 we run this meeting or this type of meeting better for  
11 people? They're not meant to provide comments on the  
12 specific technical subject matter. As I said, we've  
13 got the 5x8 cards and others. But, it's more just the  
14 administrative, you know, what could we have done  
15 better to improve these in the future?

16 Other than that, you know, we're going to  
17 move on with the background, which Ronald will speak  
18 to you about.

19 MR. LINTON: As Gary said, I'm going to  
20 try it brief. My names Ron Linton, I'm a hydrologist  
21 with the Uranium Processing Section at NRC. Again,  
22 I'll try to keep this as brief as possible because we  
23 want to make sure there's plenty of time for comments  
24 at the end.

25 I want to go over briefly, you know, what

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1 we're talking about here with in situ leach.  
2 Essentially, you know, what is an ISL? An ISL takes  
3 natural ground water, mixes in carbon dioxide, carbon  
4 gas, which is called a likciviant (phonetic). The  
5 likciviant is then pumped into the ground to -- via  
6 injection wells to dissolve the uranium. Oxidize the  
7 uranium, dissolve it, which is then pumped back to the  
8 surface, run through ion exchange column, which  
9 removes the uranium from the groundwater. One of the  
10 keys is -- one of the keys is, is here's the ore body.  
11 And again, we're -- this -- this particular shot here,  
12 we're looking at a cross-section, and we've got  
13 permeable rocks -- excuse me, permeable rocks in here,  
14 generally a sandstone unit with impermeable rock above  
15 and below which is -- are the confining units, which  
16 is key to the ISL process.

17 And then we show here the ISL -- excuse  
18 me, the ion exchange tanks here and this is where the  
19 likciviant or the carbon dioxide and oxygen gases is  
20 put into the system.

21 Again, cross-section, this is what the  
22 uranium row front deposit would like in a cross-  
23 section. What's key to note here is the semi-  
24 permeable or relatively impermeable rocks above and  
25 below with the permeable rocks here, generally being

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1 the sandstone -- sandstone unit. These generally  
2 being the shale units here.

3 Anybody having problems hearing me?

4 This is just a cross-section, I think just  
5 about everybody has this. I don't know where it came  
6 from, but it's a great picture of a cross-section of  
7 a row front deposit. Just to give you an idea of what  
8 it actually looks like in nature. Again, this  
9 probably came from a -- yes?

10 UNKNOWN SPEAKER: Can you dim the lights?  
11 I think we could see the slides better.

12 MR. LINTON: Yeah. I'll work on that.

13 (Simultaneous conversation)

14 MR. LINTON: Yeah. She -- Roberta had it  
15 but I don't know exactly where she got it from.

16 UNKNOWN SPEAKER: W-Mays (phonetic)  
17 website.

18 UNKNOWN SPEAKER: Yeah. That's where it's  
19 from.

20 MR. LINTON: Okay. I take it it's  
21 probably on a high wall somewhere

22 UNKNOWN SPEAKER: It's pathfinders --

23 UNKNOWN SPEAKER: Pathfinders --  
24 very good.

25 MR. LINTON: This shot here is going to

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1 show, essentially the well field with the monitoring  
2 well ring. Well field here, with the monitoring well  
3 ring going around it. In this particular case we're  
4 looking down at plan view, you know from the top down.  
5 I should mention these row front deposits can be many  
6 square miles in size. So, it's -- the one shot there  
7 might have given a little false sense of scale because  
8 it appears very small, but they can be very, very  
9 large. Many square miles.

10 Essentially, what happens with the ISL  
11 process is we have a series of, I'm probably fading  
12 out from the mic, here. Of -- there's a production  
13 series of production wells, oh, excuse me. Of  
14 production wells and injection wells here in this  
15 grid, and then we have the monitoring wells that go  
16 around the outside here, the monitoring well ring as  
17 well as -- it's going to be kind of hard for me to see  
18 at this angle, but I think there's one there,  
19 monitoring overlying aquifers and underlying aquifers,  
20 which would be either above those semi-permeable or  
21 impermeable shales that I was talking about and below  
22 that layer of impermeable shales below.

23 Again, the typical ISL well field layout,  
24 the -- here is showing where the grid would be, where  
25 the production and injection wells would be.

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1 Monitoring well ring, and then what's the other key,  
2 an aquifer exemption boundary. These may not -- this  
3 boundary may not be this shape at all. I just -- we  
4 just kind of put this together, it may be on a, you  
5 know, a square, a rectangle, it's hard to tell exactly  
6 what that shape would be.

7 Typical solution flow patterns in the ISL  
8 where we have production wells here -- well, we have  
9 injection wells injecting liquid. Again, we're  
10 looking down at plan view, looking down on top of the  
11 mine unit where we're injecting here, here, a series  
12 of injection wells in the blue and then the production  
13 well withdrawing the fluids out once the uranium has  
14 been leached and dissolved, and pumping it back to the  
15 surface. So, it's essentially just a big plumping  
16 project at these ISLs.

17 Uranium recovery sites currently -- and  
18 again, we didn't note in here any the sites in  
19 agreement states in Texas, Utah, Colorado, but the  
20 ones that actively regulated by NRC -- Highlands --  
21 and the new ISL, HRI, New Mexico.

22 And just to quickly move on, just a  
23 typical, you know, for those -- most of you in here,  
24 I know, have probably seen the site. Know exactly  
25 what we're talking about but other members of the

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1 public may not have -- that may be here may not have  
2 any idea of what conceptionaly this looks like, I  
3 mean, what the scale would be. But typical -- this  
4 would be a typical ISL well field, I think this is at  
5 Highlands. It's hard for me to even see it at this  
6 angle.

7 But, you can see a bunch of the little  
8 boxes here and these are either the injection or  
9 production well, a series of -- over here there's a  
10 series of header houses where a lot of the -- the  
11 plumbing all comes together where the -- to make sure  
12 the things won't freeze and thaw and some of the  
13 injection gets done there, which then gets distributed  
14 out to these -- the individual well heads here.

15 This is just a picture of an injection  
16 wellhead. Just to give you an idea of what all those  
17 little boxes out there look like, what's inside,  
18 that's your typical well. But, you know, one of the  
19 things to note here is -- is unless you know it's  
20 there, a lot of times unless drive right up to it,  
21 you're not going to generally see it. And this is the  
22 central processing plant at Highlands.

23 Just to give you -- again, just to size  
24 the scale, you can see a trailer here and this is the  
25 entire facility for the central processing plant. And

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1 all those -- the well heads that you saw, the header  
2 houses, all that is -- I believe, is all uranium --  
3 all the leachant that's been sent out that's all  
4 brought back to the central processing unit here.

5 Typical flow process schematic. The first  
6 slide that I showed was basically right in here. It  
7 showed the IX columns. It showed the injection of  
8 leachant. The -- here were the well field is and  
9 where the (indiscernible) is dissolved and the pump  
10 (indiscernible). And then the rest of this is just  
11 the process that goes through with stripping the  
12 resins and in the final production, over here of  
13 yellow cake. And I'm not going to go through this in  
14 a lot of detail. Just to say that if you want to see  
15 this it will be on our webpage. If you have any  
16 questions about it, we can talk about it a little  
17 later.

18 The final product, yellow cake. And then  
19 to move on quickly into what are our existing  
20 regulatory requirements.

21 Uranium Mill Tailings Radiation Control  
22 Act, UMTRCA, 1978, specified the Title I sites, which  
23 were the inactive Uranium Mill Tailings files, and  
24 then gave NRC the regulation for the existing sites,  
25 the Title II sites, so we break UMTRCA, we discuss in

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1 terms of Title I and Title II.

2 So, all the existing mills are regulated  
3 under Title II, UMTRCA.

4 The regulations are in 10 CFR Part 40.  
5 The material regulated, the source materials --  
6 product and levee 2 by-product material. The specific  
7 uranium recovery regulations are in 10 CFR Part 40,  
8 Appendix A.

9 Appendix A has 13 technical criteria. The  
10 criteria that are of interest to us here at this rule  
11 making are criterion 5, which is ground water  
12 protection standards and criterion 7, which is -- has  
13 a lot of preoperational monitoring criteria, in 5 and  
14 7 -- saved primarily was intended for the conventional  
15 mills. There is some discussion, there's a little bit  
16 of talk about ISLs that are mentioned but not a whole  
17 lot. Criterion 5, again, intended primarily for the  
18 conventional mills, the time, groundwater protection  
19 standards, or background or MCLs. And if those cannot  
20 be achieved then there is an option for alternate  
21 concentration limits, or, what we call ACLs.

22 Specific to ISLs, new reg. 1569, our  
23 guidance document on ISLs discusses restoration  
24 standards as primary standard restoration standard for  
25 ISLs being to background. Returning the mine unit to

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1 background. It's the primary restoration standard.

2 The secondary restoration standard is to  
3 a class of use. If the primary standard cannot be  
4 achieved, technically achievable after a good effort  
5 to achieve primary restoration standards.

6 And then finally, there is an alternate  
7 restoration standard. It's not an ACL, but it's an  
8 alternate standard which would provide that there's no  
9 threat to the public health and safety or the  
10 environment, or produces an unacceptable degradation  
11 to the water use of adjacent groundwater resources,  
12 i.e. essentially those outside of the exempted aquifer  
13 boundary.

14 So, that's it. I went through that  
15 relatively quickly but I think probably most of you in  
16 the audience know this but for members of the public  
17 that may not be here, this is essentially that  
18 background of ISLs and the history and I guess, Gary  
19 we'll turn it over to Loren who's going to talk a  
20 little bit --

21 MR. COMFORT: Does anybody have any  
22 questions?

23 Okay, we'll turn this over to Loren Sutlow  
24 from EPA.

25 MR. SUTLOW: Thank you, my name is --

1 thank you Gary and Scott. My name is Loren Sutlow.  
2 I'm with the EPA, Office of Radiation and Indoor Air  
3 in Washington. We have a couple of folks here from  
4 our Region 8 Office of Groundwater Protection. And  
5 they'll be here to answer any questions that I  
6 certainly can't.

7 As a preliminary comment the -- concerning  
8 the proposal by NRC as related to the under --  
9 underground injection control and UMTRCA standards,  
10 the UIC program exempts portions of the aquifer with  
11 the well field.

12 UMTRCA standards require restoration and  
13 prevention of pollution beyond the well field. NRC  
14 historically required ISLs SNC to meet UMTRCA within  
15 the well fields. Will this approach be continued --  
16 and who will have what responsibilities? I'm going to  
17 -- some slide here about the underground injection  
18 control program under the 1974 Safe Drinking Water  
19 Act. The regulations and the law establishes the  
20 underground injection control program. It requires  
21 EPA to promulgate regulations to protect drinking  
22 water sources from contamination -- ground injection.  
23 It defines endangerment of drinking water sources as  
24 designs to be implemented by the states. The mission  
25 of the UIC program is to protect underground sources

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1 of drinking water from contamination by regulating the  
2 construction and operation of injection wells.

3 The classification of the wells, there are  
4 five classes of wells in the UIC regulations. They  
5 are categorized based on common design and operating  
6 characteristics. Class 3 wells are the most pertinent  
7 to this particular rule making and our discussion  
8 today. Wells associated with solution mining, for  
9 example, extraction of uranium, copper and salts.

10 The pertinent regulations that are  
11 relevant to protecting underground sources of drinking  
12 water, ISL sites are laid out in 40 CFR Part 144, 12A  
13 and B, prohibition of movement of fluid into  
14 underground sources of drinking water.

15 No owner or operator shall construct,  
16 operate, maintain, convert -- or conduct any other  
17 injection activity in a manner that allows for  
18 movement of fluid containing any containments into  
19 underground sources of drinking water if the presence  
20 of that containment may cause a violation of any  
21 primary drinking water regulation. Or may otherwise  
22 adversely affect the heath of persons.

23 40 CFR 144.51 conditions applicable to a  
24 permits, proper operations and maintenance of the  
25 wells, record keeping, monitoring, plugging and

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1 abandonment. 40 CFR 144.7, identification of  
2 underground sources of drinking water and accepted  
3 aquifers. Allows the EPA to exempt aquifers or  
4 portions of aquifers from safe drinking act  
5 protection. It cannot and will not serve as a source  
6 of drinking water -- that is the waters which are  
7 being exempted in the future, because it contained --  
8 dissolved solids greater than 3000 milligrams per  
9 liter and that the water is not reasonably expected to  
10 be used for public water system or it contains oil or  
11 minerals. It's use economically not practical, it's  
12 contaminated or it is geologically unstable due to  
13 class activities.

14 Under 40 CFR 146.10(a)4. Plugging and  
15 abandoning. Plugging and abandonment plan, shall in  
16 the case of a Class III project, which underlies or is  
17 in an aquifer which has been exempted under 146.04,  
18 also has demonstrated adequate protection of  
19 underground sources of drinking water. The Director  
20 shall prescribe aquifer cleanup and monitoring where  
21 he deems it necessary and feasible to ensure adequate  
22 protection of underground sources of drinking water.

23 To move on to the UMTRCA program. Under  
24 the Uranium Mill Tailings Radiation Control Act, EPA  
25 developed an environmental protection standards for

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1 grading mill tailings and -- in 40 CFR 192 for Title  
2 I and Title II facilities. Under UMTRCA regulations,  
3 standards also apply to any processing site for which  
4 NRC issues license, after January of 1978, for  
5 production of uranium or thorium product from ore.  
6 This is has been interpreted by NRC to include ISLs.

7 The application of the EPA UMTRCA  
8 standards to ISLs. Congress directed NRC to manage  
9 byproduct material in a manner that conforms with EPA  
10 standards under UMTRCA -- the NRC definition of --  
11 byproduct is tailings or waste produced by extraction  
12 or concentration of uranium or thorium including  
13 surface wastes from ISLs.

14 Under it's own regulations, NRC regulates  
15 byproduct materials produced from ISLs. Milling and  
16 byproduct definitions from Atomic Energy Act have  
17 allowed NRC to regulate ISLs, even without explicit  
18 mention of them in the Atomic Energy Act or --

19 The current practice is that NRC regulates  
20 byproduct materials at ISLs to achieve compliance with  
21 the part 192 standard. The relevance is for  
22 restoration of well fields or prevent contamination of  
23 underground sources of drinking water.

24 UMTRCA required that groundwater  
25 protection standards be consistent with Solid Waste

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1 Disposal Act standards now embodied in -- standards,  
2 which are covered in EPA regulations 40 CFR 264. And  
3 this means the NCLs.

4 EPA's Office of Radiation and Indoor Air,  
5 is evaluating an update of those standards for uranium  
6 and arsenic to make them consistent with -- revised  
7 NCLs.

8 I should mention too that -- that under  
9 the 40 CFR 192 standards, we included additional  
10 standards for uranium and radium as well as -- under -  
11 - under the standards -- the standards applied to  
12 management of uranium of byproduct materials during  
13 the following processing of uranium ores --  
14 restoration of disposal sites. They're currently  
15 utilized by NRC and the agreement states for  
16 restoration of ISL well fields.

17 The regulatory agency meaning the NRC or  
18 the agreement state, may establish alternate  
19 concentration limits to be satisfied, at a point of  
20 compliance, provided that the standards as low as  
21 reasonably achievable in that the NCLs are met 500  
22 meters from the site boundary or before.

23 At this time I just wanted to -- to -- few  
24 points of consideration in the rule making. What EPA  
25 regulatory standards will be referred to by NRC in

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1 it's new rule making? How will the states and EPA  
2 regulate groundwater protection at existing facilities  
3 and all the new proposed ISLs?

4 Will EPA have to revise its UMTRCA and UIC  
5 regulations or issue new guidance to strengthen  
6 groundwater protection or restoration of an ISL well  
7 field to meet the NCLs outside the exempted area.

8 Budgetary and personal implications for  
9 EPA and the states. Who will approve EIs for  
10 groundwater at ISLs at the permit stage and  
11 decommissioning?

12 What are the impacts? NRC has  
13 historically required ISL licensees to meet UMTRCA  
14 standards within the well field. After this decision  
15 there may be multiple approving authorities for  
16 groundwater plans. What will be the license  
17 processing time impacts separating the permitting  
18 authorities. What will be the effects on  
19 decommissioning and license termination? Who's  
20 responsible for groundwater contamination after  
21 license termination?

22 That concludes my presentation and I'll --  
23 we at EPA, our primary mission here is to protect the  
24 groundwater and sources of -- potential sources of  
25 drinking water. So, we look forward to working with

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1 NRC -- thank you.

2 MR. VON TILL: Is there any questions for  
3 Loren?

4 MR. COMFORT: Before we go on, with Mike's  
5 presentation, can that side of the room see the slides  
6 or are we blocking you all's view, the people up  
7 there?

8 (No audible response)

9 MR. FLIEGEL: Can you hear me?

10 UNKNOWN SPEAKER: Yep.

11 MR. FLIEGEL: I'm Mike Fliegel, I'm  
12 Project Manger in uranium processing section at NRC.  
13 And I'm on the working group for the rule making.

14 I'm going to provide a little history, how  
15 we got to this point, and the development of  
16 regulations for ISLs groundwater protection within  
17 NRC.

18 As discussed, groundwater protection at  
19 ISLs are regulated both under UMTRCA and under the  
20 underground injection control program. They're  
21 currently regulated by NRC under its 11(a)2 authority  
22 and the states under their EPA underground injection  
23 control program authority.

24 Historically NRC and the states as Wyoming  
25 and Nebraska have worked to get a -- sharing insights

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1 and findings, etcetera to regulate ISL groundwater  
2 protection.

3 However, it would be advantages to develop  
4 a formal way to avoid dual regulations and we've been  
5 trying to do that for several years now. It would  
6 conserve government resources and it would be  
7 beneficial to ISL operators who would only have to  
8 deal with one regulating authority.

9 In 1998, the National Mining Association  
10 presented a white paper and raised -- that raised  
11 several issues related to uranium recovery, including  
12 the regulation of groundwater at ISLs. And that -- it  
13 -- the focus -- that issue was dual regulation and we  
14 talked about that that both NRC and EPA and the --  
15 states regulate groundwater protection at ISLs.

16 The staff wrote to the Commission in SecE  
17 990013. And for those of you who are not familiar  
18 with NRC, staff writes Commission papers and they're  
19 designate as SecE papers. That was in March of 1999  
20 and we addressed several issues, including dual  
21 regulation of groundwater at ISLs.

22 The Commission issued a staff memorandum,  
23 staff requirements memorandum, in July 2000 and the  
24 Commission determine in that that all waste from ISLs  
25 are 11(e)2 byproduct material. The Commission

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1 recognized that dual regulation would exist at ISLs  
2 between NRC and EPA or an EPA authorized state and the  
3 Commission approved NRC staff discussions with EPA and  
4 the states aimed at minimizing NRC review of ISL  
5 groundwater protection. And over the next several  
6 years, the NRC staff held meetings with EPA, Nebraska  
7 and Wyoming.

8 Just a brief discussion of NRC regulations  
9 and how we regulate ISLs. We regulate on the Uranium  
10 Mill Tailings Radiation Control Act of 1978. It  
11 defined 11(e)2 byproduct material and laid down a  
12 framework for its management. The framework had EPA  
13 promulgating the standard for the protection of public  
14 health safety and the environment and NRC must conform  
15 to -- to the EPA regulations in its regulations.

16 Now, EPA standards and NRC regulations  
17 focus primarily on the conventional mills, ISLs  
18 existed at that time by most uranium recovery was at  
19 conventional mills, and actually the impetus for  
20 UMTRCA were the unregulated tailings -- that existed  
21 at conventional mills and the groundwater  
22 contamination of conventional mills. So, when UMTRCA  
23 was promulgated, when the regulations were written by  
24 EPA and conformed by NRC it was focused primarily on  
25 conventional mills.

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1 ISL regulation relied more on staff  
2 guidance and licensing conditions. In 1999, the staff  
3 wrote to the Commission in SecE 99-011, and we  
4 proposed a rule making and that rule making would  
5 reorganize uranium recovery regulations -- part of 10  
6 CFR part 41. And one of the major purposes was to  
7 address the regulation of ISLs. That move forward for  
8 -- the industry raised an objection and that was  
9 because of the poor state of the uranium recovery  
10 industry at that time. It requested the rule making  
11 effort either be dropped or -- for those of you not in  
12 the industry, NRC fees are -- the fees to the industry  
13 would have paid for that ruling and the industry, at  
14 that point, really was not in a position to be paying  
15 additional fees.

16 The staff went back to the commission in  
17 January 2001, SecE 01-0026 and proposed some  
18 alternatives, actually, three alternatives. The  
19 Commission came back in a staff requirements  
20 memorandum of May -- in May of 2001 and directed the  
21 staff to discontinue the rule making and to update its  
22 guidance, and the guidance was updated in both -- both  
23 conventional and ISLs, the ISL guidance is new reg  
24 1569 which was finalized in June 2003.

25 The staff met several times with EPA and

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1 Wyoming and Nebraska, and then prepared SecE 03-0186  
2 in which the staff proposed to defer groundwater  
3 regulation to EPA authorized non-agreement states.  
4 EPA authorized, under the underground injection  
5 control program, in non-NRC agreement states. The  
6 mechanism proposed in that Commission paper was a  
7 memorandum of understanding with each of those states.  
8 And the staff's recommendation was based on its  
9 preliminary conclusion that both Wyoming and  
10 Nebraska's groundwater programs under the UIC program  
11 were essentially equivalent to the NRC program.

12 The Commission came back with a staff  
13 requirements memorandum in November 2003 that  
14 (indiscernible) that.

15 The staff evaluated both Nebraska's and  
16 Wyoming's program in the summer of 2004. The staff,  
17 however, found a major variance between NRC's program  
18 and the groundwater protection program in both states  
19 for restoration. In the NRC's program, the primary  
20 standard was restoration of groundwater to background  
21 and it's a preoperational baseline conditions. And if  
22 that's unachievable, the secondary standard is  
23 restoration to preoperational class of use, and that's  
24 in the mining -- and Loren had talked about that  
25 before.

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1           The state's primary standard was  
2 restoration to preoperational class of use, which is  
3 equivalent to NRC's secondary standards.

4           The staff then went back to the Commission  
5 in SecE 05-0123, and it essentially conveyed its  
6 findings to the Commission.

7           The Commission considered the situation  
8 and actually Commissioner Merrifield took the lead in  
9 that and wrote a paper to other Commissioners that  
10 designated as COM JSM 06-001. And all these  
11 Commission papers are on our website. And when he got  
12 the concurrence of other commissioners, the -- a staff  
13 requirements memorandum was issued in March of this  
14 year, and that directed the staff to institute a rule  
15 making efforts, that's where we are now. And it's  
16 specifically tailored to groundwater protection at  
17 ISLs. The purpose of that was the Commission wanted  
18 this to be done quickly and was aware, obviously, of  
19 the previous effort to -- to look at all of ISL  
20 regulations, and indeed at all of uranium recovery  
21 recommendations and didn't want this particular rule  
22 making to be that broad. It did not address whether  
23 or not another rule making could address that. But  
24 this particular rule making is only for groundwater  
25 protection at ISLs. And it could focus on eliminating

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1 the dual regulation between NRC and EPA or EPA  
2 authorized states, groundwater protection at ISLs  
3 through deferral to EPA or the EPA authorized states  
4 under the underground injection control program. And  
5 it proposed that the rule -- the proposed rule should  
6 be provided to the Commission by next January.

7 Any questions?

8 MR. THOMPSON: I think it's important --

9 MR. MOORE: Could you state your name?

10 MR. THOMPSON: Tony Thompson, sorry. In  
11 the presentation, Loren -- in Loren's presentation, he  
12 referred to the EPA UMTRCA standards, the requirement  
13 in UMTRCA for EPA to promote generally applicable  
14 standards to promulgate and -- and NRC conform to  
15 those. And then, Mike, in your presentation, you  
16 referred to the EPA standards and the NRC regulations.  
17 Now, those are both regulatory requirements that are  
18 based on rule making.

19 In 1569, we're talking about a primary  
20 restoration standard and that is not the same meaning  
21 as a standard that is a regulatory requirement. This  
22 is -- has always previously been referred to as a  
23 goal. But it clearly is not a standard that's gone to  
24 rule making.

25 And so, I think there could be some

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1 confusion, and certainly a point of confusion with the  
2 licensees -- and NRC -- issue. There's a difference  
3 between the regulatory standards of EPA with which NRC  
4 has conformed it's regulations, and rule making. And  
5 the 1569 "primary standard." It's not -- don't  
6 confuse it as being a mandatory regulatory standard.

7 MR. FIEGEL: And Tony, that's one of the  
8 reasons for the rule making --

9 MR. THOMPSON: Right.

10 MR. FIEGEL: -- to put down as a  
11 regulation what the groundwater protection standards  
12 are and the charge at this point is to use the  
13 underground injection control program standards as the  
14 basis for NRC standards.

15 MR. THOMPSON: I -- I -- I understand, I  
16 just -- we're talking, and there's some people in the  
17 audience who aren't familiar with the distinction. I  
18 just wanted to make sure that that was clear.

19 MR. VON TILL: (Simultaneous conversation)  
20 exactly right. We don't have standards in the  
21 regulations. The ISL facilities from the NRC  
22 perspective for restoration. What we have done is put  
23 license conditions for each licensee, which has  
24 standards within the license condition for them to  
25 achieve restoration. So, there is a difference and

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1 Tony pointed that out, thanks.

2 MR. CARLSON: David Carlson -- I'm with  
3 the Nebraska Department of Environmental Quality. I'd  
4 like to kind of add a bullet to your slides if I may?

5 We did -- well, the NRC came and did a  
6 comparability with their rules to our rules in 2004,  
7 and I -- we can concurred that yes, our underground  
8 injection permit required -- we had restoration  
9 standards that weren't -- some of them weren't back to  
10 baseline. You know, we had a restoration standard  
11 uranium -- instead of baseline was .03 or something,  
12 something very small.

13 I made comments back to the NRC in July of  
14 2004 that, yes, I concurred with their -- their  
15 findings but a simple modification to our UIC permit  
16 would solve the issue. And I did not get comments  
17 back from them.

18 So, yes, I agree, that there were some  
19 differences but they were very easily solved and we  
20 could have moved on from that point. So, I just kind  
21 of wanted to add that.

22 MR. FLIEGEL: Yeah. I think that was  
23 conveyed to the Commission when wrote -- we wrote to  
24 the Commission and said, here's where we are. The  
25 Commission choose that rather than going that route to

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1 actually do a rule making so they have a -- our  
2 standards as regulations --

3 MR. CARLSON: Right. Well, I just see in  
4 that slide that there's, you know, that there's some  
5 differences but I think we've solved those differences  
6 and that doesn't seem to -- and I just wanted --

7 MR. VON TILL: Any other questions for  
8 Mike? Thanks Mike.

9 MR. FLIEGEL: Thank you.

10 MR. MOORE: Thanks Mike. Our next  
11 presentation is by Gary Comfort and he's going to talk  
12 about the rule making processes. So, we're going to  
13 really shift gears here for a minute. Instead of  
14 talking about ISLs or the technology themselves or the  
15 regulations, Gary's going to talk about the process  
16 and how we'll go about the rule making itself.

17 It's an important discussion because it  
18 tells you where we are in the process now and tells  
19 you how you can get involved in the process. And it's  
20 important to know how you can influence the process if  
21 you're interested in doing so. How you can provide  
22 comments and when you can do that and how you can, you  
23 know, make your comments at the right state to provide  
24 the greatest influence. And so, with that, I'll turn  
25 it over to you.

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1 MR. COMFORT: Thank you, Scott. Basically  
2 we are just starting the rule making process. The  
3 Commission directed us to do this, as Mike said,  
4 shortly -- this spring. In order to get the steps  
5 moved on further, you know, we have a lot of  
6 administrative steps that we have to go through, such  
7 as forming a working group and getting the appropriate  
8 people to participate.

9 So, basically what I'm going to do in this  
10 presentation is give a little of idea (sic) of how our  
11 rule making process works. How people can  
12 participate. I'm going to go a little bit over the  
13 schedules also, that we have.

14 The first question for, you know, for a  
15 lot folks who may not be familiar is what is the rule  
16 making. And it's really just a process for developing  
17 rules by government agencies.

18 Sometimes this process can be very  
19 lengthy. I mean there are rules that take years and  
20 years to get finalized if they are ever all  
21 finalized. It's also important that rule --  
22 realize that the rules originate from the government  
23 agencies, themselves. Usually, you know, based on  
24 some sort of authority given to them by Congress to  
25 make such regulations.

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1           So, what do the rules and who do they  
2           apply to? Basically they impose requirements in  
3           particular in the case of NRC, on applicants and  
4           licensees and actually even individuals under certain  
5           parts of the regulations.

6           NRC has authority over basically anything  
7           that was in the Atomic Energy Act material. We have  
8           rules though, that will even exempt the use of some of  
9           those, but that is still the rule that people are  
10          following when they do that. So, rules cover all  
11          sorts of information and that these people who are  
12          using them have to meet, you know the requirements in  
13          order to continue to use them or to be in violation.

14          As part of the rule making process we'll  
15          also develop guidance that will basically provide  
16          better detail and support. As mentioned by Tony,  
17          guidance isn't necessarily the rule itself, so there  
18          is flexibility on that. Generally it's provided as  
19          way that we will accept a way to meet the regulation  
20          but it's not always the necessary way that you have to  
21          go to meet the regulation and alternatives will be  
22          considered.

23          Basically, our regulatory process -- NRC  
24          really has three parts. We have rule making, then we  
25          have, you know, which is what we're currently in. We

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1 have the actual licensing where somebody will apply  
2 for or be covered by the license. And then finally --  
3 you know, in that process, we basically determine, is  
4 the person adequately, you know, appropriate to handle  
5 the material under the regulations and do we believe  
6 they'll meet them, in general.

7 Then finally we have inspection and  
8 enforcement to make sure that they do continue to meet  
9 those regulations.

10 We're in the process of what's called a  
11 notice and comment rule making. NRC does act in a  
12 variety of other ways. There's things such as  
13 directed final rules and, you know, other methods that  
14 rule making can be done. But the common way is notice  
15 and comment. Basically it's three major steps. I  
16 mean, first of all we have to determine if there's a  
17 need for the rule itself. Then we'll go ahead and put  
18 out the proposed rule. After we develop it, it will  
19 go out for public comment. Get people to provide  
20 comments on it. Then we'll consider those comments as  
21 part of a final statement of considerations and  
22 develop a final rule out of that.

23 First of all, as I said, we've already  
24 gotten to the point for the need of the rule making.  
25 As Mike went through, we've developed papers, gone to

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1 the Commission, the Commission has come back with  
2 their direction and that they feel that there is a  
3 need for doing this rule making.

4 So, we're at the stage of developing the  
5 proposed rule. The proposed rule -- we basically do  
6 a lot of administrative steps to develop a proposed  
7 rule package.

8 First of all we'll develop, as I said, a  
9 working group, which we're in the process of doing.  
10 We've got most of the members on it. We're actually  
11 going to be seeking a couple of more members from some  
12 of the non-agreement states that will be impacted on  
13 this. Based on, you know, we'd already thought about  
14 that and was just trying to get it administratively  
15 provided, but we had some comments also to that point  
16 that we're going to follow up on from meetings that  
17 occurred yesterday with the National Mining  
18 Association.

19 The package that we develop in the working  
20 group will basically be the rule language in the form  
21 of a Federal Register Notice. In addition, this will  
22 all be going wrapped in a package that goes to the  
23 Commission for approval. The Federal Register Notice  
24 is -- has basically the background of why, you know,  
25 what's called the statements of consideration, why

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1 we're doing the rule. A little bit of the  
2 interpretation of why the actual -- what the actual  
3 rule language means and then that's also going to have  
4 some other supporting documents such as a regulatory  
5 analysis, which basically looks at things such as the  
6 cost benefit of why we're doing the regulation. For  
7 one of the aspects.

8 We also, if there's going to be any type  
9 of information collection requirements as part of the  
10 rule, we'll have to go to the Office of Management and  
11 Budget and provide them a package for their review  
12 also as part of this process.

13 One of the things we try to do as part of  
14 or rule making, particularly in our group, is to  
15 basically consider work -- we work with the agreement  
16 states a lot because we do have the program. The  
17 states a lot of times have to implement similar type  
18 rules, if not the same rules. So, we like to get  
19 their input early on in this stage. We already have  
20 a agreement state participant assigned to our working  
21 group that we're working with. We also in our process  
22 will give them, the agreement states, generally, an  
23 opportunity to comment on our regulations before they  
24 even go to the Commission, for 30 days. So, we'll get  
25 their comments and feedback, because they do have a

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1 big stake in how they have to regulate -- we want to  
2 make sure that we're not making any major  
3 inconsistencies or difficulties for their regulatory  
4 programs as part of this process.

5 MR. MOORE: Gary, we would treat any non-  
6 agreement states the same way.

7 MR. COMFORT: Yeah. And we'll treat non-  
8 agreement states the same way, as Scott just pointed  
9 out.

10 The proposed rule will be sent to the  
11 Commission. Basically will be reviewed by the  
12 Commission and then eventually the Commission will  
13 make a decision in the form of a staff requirements  
14 memorandum, or SRM. Hopefully, from the staff's  
15 opinion, they'll come back and say go ahead and  
16 publish the proposed rule in the -- in the Federal  
17 Register.

18 They can, however, come back with other  
19 comments as -- with direction, as to how to modify the  
20 Federal Register or the rule language in it. And  
21 sometimes, you know, they'll even come back and say  
22 that they want the rule completely changed or dropped.

23 After it is approved for publication in  
24 the Federal Register, it'll go out for public comment,  
25 which traditionally will be on this rule, a minimum of

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1 75 days, you know, so we'll have plenty of opportunity  
2 for public comment. Public comment can be provided in  
3 a variety of ways. You can write letters to the  
4 Commission at the address that are provided in the  
5 Federal Register Notice. You'll be able to upload  
6 comments onto our website also.

7 Now, currently, and I'll get further into  
8 the schedules in a few minutes. But the proposed rule  
9 is -- will probably be based on a schedule to be  
10 published sometime in -- early around Spring 2007.

11 And then after we do complete the, you  
12 know, published the -- the proposed rule and get  
13 comments back, we'll move to the final rules stage.  
14 In this stage, we'll basically develop a package that  
15 was similar to the proposed rule. In the best of all  
16 worlds we did a great job, nobody provided comments  
17 and we'll effectively go straightforward with the  
18 language that we already have.

19 Unfortunately, the -- or fortunately  
20 because we enjoy public participation, we're going to  
21 have comments that we have to address.

22 One of the big things that's important is  
23 that the final rule has to be a logical outgrowth of  
24 the proposed rule. Basically the major changes are --  
25 generally have to be in response to the comments that

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1 we receive during the public comment period and all.  
2 We can't turnaround and basically say, okay, we put  
3 out a proposed rule to go one path and then we're  
4 going to do a final rule that was, you know, a 180  
5 degrees the other way. If we did that we'd have to go  
6 out with a new proposed rule.

7 The packages, again, as I said, is going  
8 to be similar to the proposed rule package that we do  
9 containing a Federal Register Notice. That Federal  
10 Register Notice though, and the statements of  
11 consideration, will include addressing of all the  
12 public comments. It won't be on a one to one basis.  
13 What we'll generally do is -- similar comments or  
14 comments that, you know, we do get comments of, we  
15 don't like it, period. That kind of comment, there's  
16 not a lot we can with. It's really the comments that  
17 say we don't like because, you know, we have a problem  
18 with this. Those are the better type comments that we  
19 can actually deal with and try to respond to. And  
20 that's what we would do during the -- in the  
21 statements of consideration after we get all the  
22 comments.

23 (Indiscernible) will contain the final  
24 rule language. We'll also, again, as I said before,  
25 have agreement state participation and as appropriate

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1 advisory committee participation -- similar to the  
2 proposed rule, again for 30 days. And again we will  
3 include the non-agreement states.

4 It would be, again, sent to the Commission  
5 and approved by the Commission for publication as a  
6 final rule. And once that's done, you know, the rule  
7 will have some sort of implementation date where the  
8 rule becomes affective.

9 We're expecting that process from the  
10 proposed rule to take somewhere -- between I'd say  
11 nine months to a year after the proposed rule is put  
12 out for public comment.

13 Again, that date depends a lot on what  
14 types of comments that we get. You know, sometimes  
15 we, you know, unfortunately, we could be way off the  
16 wall and we'll get significant comments that say yes,  
17 NRC made a big mistake and we've got to go back and  
18 analyze a lot and that'll delay the rule making.

19 If in general, the comments are relatively  
20 straightforward, you know, correct this, or we've got  
21 a little bit of a problem with that. That we can  
22 handle pretty readily, there would be no problem  
23 meeting this kind of schedule.

24 NRC does hold a rule forum website that we  
25 offer that we put up all our rules. On that you'll

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1 find many types of petitions for rule making that we  
2 have. The proposed rules. It'll also include final  
3 rules up to 180 days after they've become final or  
4 they become effective, whichever's later.

5 The public comments that you do do on any  
6 of the rules can be uploaded at this site. The site,  
7 you can see at the bottom, is  
8 <http://ruleforum.llnl.gov>. And the links generally on  
9 that site are to rule making documents in pdf format.

10 As for the schedule, we, as I said, we  
11 started already assembling a working group. We've  
12 already had some preliminary working group meetings.  
13 The working group is really made up of a variety of  
14 technical experts. There's going to be some folks  
15 from our administrative groups, such as our admin  
16 department, our enforce -- you know, we'll have folks  
17 from our enforcement group to make sure that basically  
18 the rule includes everything that we need to make, you  
19 know, make sure that it goes forward and we try to  
20 cover all bases, that they're there.

21 We have participation, as I said, from the  
22 agreement states. We have some regional  
23 representation and we're also going to be seeking in  
24 the next couple of days some participation from some  
25 of the -- from non-agreement states.

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1           As I said, the -- we're going to issue the  
2 proposed rule for agreement state comment probably  
3 sometime, we're hoping in early November. There's a  
4 possibility, you know, that's one of the important  
5 reasons to put you name on the signup sheets with  
6 contact information is, you know, we may end up  
7 putting, you know, some draft language. The  
8 Commission's directed us to the extent we tend to put  
9 up draft language for public comment before we even  
10 get to the proposed rule stage. If that's  
11 appropriate, we can, you know, I'll send out emails to  
12 the, you know, to people notifying you that  
13 information is available and that we'd like to have  
14 comment on it.

15           Basically, we're going to -- the -- we're  
16 under direction right now to send the rule making  
17 package to the Commission by January 29th of 2007. I  
18 mean that is a fairly aggressive schedule based on our  
19 normal rule making processes.

20           Basically, we do have additional  
21 opportunities for stakeholder comment. As I said, you  
22 know, we're going to try to put up some draft  
23 language. As I said earlier, you know, if you do  
24 think up comments after the meeting you can email them  
25 or send them in to us for consideration, the earlier

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1 the better. Again, because we get too far --a this  
2 stage in the rule making process it would be difficult  
3 to incorporate a proposed rule package. But we're  
4 also -- you'll have the opportunity again to do formal  
5 comment on the proposed rule during the comment  
6 period, sometime early in 2007.

7 We're also looking and considering the  
8 additional -- you know, the opportunity for additional  
9 workshops, something similar to this, getting more  
10 into the direct -- what we're proposing, why we  
11 proposed it while the rule is out for comment. We try  
12 to do that relatively early in the comment period so  
13 people can factor that into their comments and ask  
14 clarifying questions, etcetera, on that.

15 And -- again, our issue will have that,  
16 you know, we'll have the workshops notified on our  
17 public website and again, if you've signed up on the  
18 signup sheets, I'll try to send out emails to all the  
19 people who would be involved. Or who are involved here  
20 so that they're aware that that meetings going on and  
21 where.

22 So, basically, that's a nutshell how our  
23 rule making process is going to be working for this  
24 proposed rule. Are there any comments?

25 MS. SWEENEY: Katie Sweeney, National

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1 Mining Association. Could you identify who -- is on  
2 the working group. I understand it may be expanded a  
3 bit.

4 MR. COMFORT: Well, currently we have  
5 members from our -- well, on the working group, I'm  
6 basically the head of the head of the rule making  
7 effort. We also have technical expertise. Ron  
8 Linton, Mike Fliegel are on the working group. We  
9 have Chuck Cain who's a regional 4 representative. We  
10 have -- I'm trying to -- oh, Bill -- I can't remember  
11 your last name.

12 MR. RODSON: Rodson.

13 MR. COMFORT: Rodson, who's in our Office  
14 of State Programs. We have a representative from our  
15 office enforcement, which is Sally Merchant. We have  
16 a person from our admin department. And then we have  
17 somebody from the State of Texas, and Ben --

18 MR. MOORE: Scott Moore, working groups,  
19 the rule making working groups, are by their nature,  
20 comprised of -- all rule making working groups, NRC  
21 and other governmental agencies.

22 MR. COMFORT: Next question.

23 MS. SWEENEY: You mentioned that the draft  
24 proposed rule making language would be available on  
25 NRC's website. I know that the Commission directed

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1 that to happen and you said if appropriate. What --  
2 how do you determine the appropriateness of putting it  
3 up there and would you anticipate that maybe it might  
4 be released at the same time it would be released to  
5 the agreement states?

6 MR. COMFORT: That would be my  
7 expectation, is that we would release language. I  
8 don't know if we would release all of the documents  
9 that surround the language, but we'd probably look  
10 this specific rule language itself that we're putting  
11 in with some background associated with it. That  
12 still has to be -- you know, worked out final -- when  
13 is it appropriate. And that's something the working  
14 group will, you know, and what amount is appropriate  
15 and that will be worked out as part of the working  
16 group as well our management.

17 Next question? Any other questions at  
18 this point? Okay.

19 MR. MOORE: I'd like to follow up on a  
20 question about releasing language on the website. As  
21 you mentioned, the SRM does say that we will -- will  
22 release information on the website. And so I do  
23 anticipate us releasing the language on the work -- on  
24 the website. I think the question is, when is the  
25 right time in the process to release it and we'll have

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1 to figure that out in coordination with the states  
2 that are involved in helping us develop the language.

3 But I do see us releasing on the website  
4 because the Commission's directed us to do so.

5 Okay. A few last comments about the rule  
6 making processing. As Gary mentioned, we're just  
7 starting it and so the time to get comments in, if you  
8 have opinions about what ought to be included in the  
9 rule is early, as Gary mentioned.

10 If you have things that ought to be  
11 considered in developing the rule that you want to see  
12 in the rule. Or if they're things that you don't want  
13 to see in the rule, get those comments into us now.  
14 Also, be aware that anything you do send to us will be  
15 publicly available. Any information that we get is  
16 made publicly available and it will be put into ADAMS  
17 (phonetic). You can send us comments, to Gary and  
18 we'll make an address available to you.

19 Be aware that on the -- at the point that  
20 it becomes a publicly available rule and that would be  
21 in the spring, next year after the Commission's voted  
22 on it. Gary said that they only thing that we can do  
23 in the final rule is make changes that were commented  
24 on in the public rule. So, in making comments on the  
25 proposed rule, be aware that any comments that we get

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1 are open -- open the door to future changes in the  
2 final rule. You can also comment on other's comments.  
3 That's something you have to think about, whether you  
4 -- you want to do (sic) or not. But, often times, you  
5 know, we get a single set of comments from people.  
6 And you can comment anytime during the public comment  
7 period. But any set of comments that we get, opens  
8 the door to potential changes in the final rule.

9 Gary said that we have a very aggressive  
10 schedule. It normally takes us a year to go from the  
11 start of the proposed rule to the end of the proposed  
12 rule and from the start of the final rule to the end  
13 of final rule. We have seven months to go from the  
14 start of this proposed rule, from now, actually till  
15 when we have the proposed rule to the Commission. So,  
16 we're moving very, very quickly.

17 And finally, we were told to hold public  
18 workshops. This is the first such public workshop and  
19 it's unusual for us to hold public workshops so early  
20 in the process. Normally we would hold public  
21 workshops when we have some proposed rule text to  
22 discuss with the public. When we have something to  
23 put out, a straw man or something to discuss with you.  
24 We wanted to engage the public early and so we'll be  
25 doing that after -- after Bills presentation. We're

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1 going to take a break in a couple minutes and then --  
2 and then Bill will give a presentation and then we  
3 have opportunity for you all to provide comments or  
4 ask questions or anything like that. We're going to  
5 pass out some note cards and we'll make that available  
6 during the break for everybody.

7 If you all have questions, if you want to  
8 ask them with -- you'll want to ask them just on the  
9 note cards, we would be interested in doing anything  
10 we can to answer you questions or -- or to take input  
11 now if you don't -- if you just want to make a point  
12 and give that to us.

13 Are there any questions before we take a  
14 break? Okay. I've got 10:10. We had a 20-minute  
15 break scheduled. What if we all just reconvene at  
16 10:30 here? Thank you very much.

17 (Off The Record from 10:11:10 to 10:37)

18 MR. COMFORT: -- written comments. And if  
19 you'd just provide them -- yeah, put them on the table  
20 when you make your -- when you finish we'll take them  
21 back and consider them as part of this.

22 The other item I wanted to do, is I got  
23 one good question regarding guidance as part of the  
24 rule making process. When is that developed and, you  
25 know, is there going to be any opportunity to take a

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1 look at that?

2 That will be developed as part of the  
3 proposed rule making package. It'll go as part --  
4 with the Commission. It'll probably be a revision,  
5 you know, of the existing guidance rather than a  
6 separate guidance documents I -- is what I'd expect.  
7 But that will also be a, you know, it's part of the  
8 package for comment, you know, I just wanted to make  
9 that clear to people.

10 And with that, I'll turn it over to Bill.

11 MR. VON TILL: Thanks Gary. Now we're  
12 going to get into kind of the meat and potatoes of  
13 this. As we mentioned before, we only have some real  
14 concepts at this point. And the main -- is to listen  
15 to your ideas. But I want to go through a few slides  
16 here just to get some groundwork.

17 First, as Ron mentioned, the existing  
18 regulations we have for Title II under UMTRCA and they  
19 were mainly designed for mill tailing sites not ISLs  
20 as far as all the criteria, especially for  
21 groundwater.

22 Just going through some of the technical  
23 criteria that we have, in our Appendix A, 10 CFR Part  
24 40, Appendix A, just focus here for a second on the  
25 ones --

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1 UNKNOWN SPEAKER: Bill can you kind of  
2 move back over there?

3 MR. VON TILL: Sure. Sure thing. The  
4 main ones here for groundwater are criterion 5 and  
5 criterion 7. But these mainly deal with conventional  
6 facilities. The standards or the goals that the  
7 cleanup end points that we have for ISL facilities,  
8 we've been doing through guidance and license  
9 conditions and through a -- process, not through the  
10 actual criterion 5 or criterion 7.

11 Our existing program is mainly depicted in  
12 our NUREG 1569 guidance document we have for ISL  
13 facilities. As Gary mentioned, our intent is after  
14 the rule making is complete we will revise this  
15 guidance based on the rule making and sent it out for  
16 comment and Commission approval.

17 Just to go through a few broad sections  
18 here in -- in the in the NUREG, things like site  
19 characterization, preoperational monitoring, and  
20 groundwater restoration, are the key components that  
21 we look at for ISL facilities.

22 The possible changes we're looking at.  
23 This rule making, as we mentioned before, is very  
24 narrow. It's only dealing with the groundwater  
25 aspects at our ISL facilities. It's not to revamp any

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1 regulations that deal with our conventional UMTRCA or  
2 even the surface components of the ISL program, just  
3 the groundwater aspects with the goal of elimination  
4 of dual regulations. So, it's not going to be a part  
5 41. It's going to be something along the lines of  
6 addition to criterion 5 or criterion 7 of our Appendix  
7 A or -- or our new criterion 14. That's probably what  
8 -- what we're going to do, that's our intent. Not a  
9 new part 41, that's much broader in scope. This would  
10 be more on the order of maybe a new criterion 14 to  
11 handle this -- this area. Again, we're also going to  
12 change and revise our NUREG 1569 after the final  
13 proposed rules are out.

14 Just a couple of main components here.  
15 The site characterization with these sites is one of  
16 the key components. Looking at the ore boundaries,  
17 the geochemical description of the mineralized zone.  
18 Things like fence diagrams, cross sections,  
19 hydrogeology, the confining units, the hydraulic  
20 isolation between the mining area and drinking water  
21 aquifers above and below or -- on the side.

22 Here's just an example where it's critical  
23 from the characterization end to characterize where  
24 your mining areas are. Where the confining areas are,  
25 and where there might be safe drinking water protected

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1 aquifers above, below and beside.

2 As was mentioned before, when the EPA  
3 exempts an aquifer for the uses of ISL mining, it  
4 don't exempt all 50 miles, a 100 miles of the aquifer.  
5 It only exempts a portion of the aquifer that will be  
6 used for mining purposes.

7 So, the areas -- the areas horizontally  
8 adjacent or the aquifers above and below will still be  
9 protected under the Safe Drinking Water Act. For  
10 drinking water purposes under the EPA's program.

11 Preoperational monitoring is a very  
12 important component of the ISL application to  
13 demonstrate baseline water quality, determining  
14 excursion indicator constituents, monitoring well  
15 locations, hydraulic connection of other aquifers,  
16 vertical confinement. Determination of excursions and  
17 methods to correct excursions. Mechanical integrity  
18 testing. Here's just a look again at a typical  
19 diagram. Again, we've got the ore zone that's going  
20 to be mined with injection and recovery wells. And  
21 then we have our network of monitoring wells to  
22 determine whether an excursion occurs from there. The  
23 outer ring and some wells that are in the aquifers  
24 above and below.

25 Groundwater quality restoration. As Ron

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1 mentioned before, our existing guidance and our  
2 existing program is to require the licensees to  
3 attempt to restore the groundwater in the mineralized  
4 zones, in the mining area, to background. If they  
5 can't get the background and demonstrate they tried,  
6 we fall back on secondary goals, class of use. And  
7 then we also have, in our current guidance a tertiary  
8 goal, which is kind of like an alternate concentration  
9 limit application type situation.

10 For the new proposed rule, and this gets  
11 to the meat and potatoes of the real crux of the  
12 issue. The Commission directed us, very clearly, to  
13 make this rule such that the restoration requirements  
14 from NRC are pretty much identical to what EPA has.  
15 So, that we can easily do license -- and while you or  
16 some other -- transfer the active regulation of  
17 groundwater requirements to the states. That's the  
18 main attempt here. Our intention would be, you know,  
19 kind of go through the process the way we would  
20 visualize the process occurring. We would first get  
21 an application from a new ISL, a potential licensee.

22 The NRC would review the application and  
23 would do the -- requirements under our Part 51. We  
24 would look at the groundwater surface reclamation,  
25 everything. Look at that part, then once we're

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1 through with the review of the initial license  
2 application, we would set up the license such that the  
3 license condition, through other means of MOU or  
4 something, we would take it and -- the active  
5 day-to-day operations of groundwater protection at  
6 these sites to the states.

7 The states would take care of all the  
8 aspects dealing with groundwater monitoring, excursion  
9 monitoring, excursion corrective action, things like  
10 MIT testing, and especially groundwater restoration.

11 The state would review the groundwater  
12 restoration. Of course, the NRC (indiscernible).

13 Now, the intent of the our -- proposed  
14 rule thoughts at this point in time would be to  
15 comport with what our understanding of the EPA UIC  
16 regulations is. And that would be more -- be a huge  
17 shift from what we have now. It would be a shift from  
18 a descriptive remediation in the mining area to  
19 background, to what I would refer to as more of a risk  
20 informed performance based restoration. And that  
21 would be -- the standard would be, to have our  
22 licensees demonstrate that they meet NCLs, or  
23 background, at the aquifer exemption boundary.

24 And so, it would be very much performance  
25 based, risk informed. Not prescriptive, the way we

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1 have it now. We think that, of course, with EPAs UIC  
2 program, the way we've interpreted part 144.

3 Now, we realize the states, at this time,  
4 are more stringent in this approach. Where they  
5 require restoration in the mining area. Our intent is  
6 that we would not do that because our direction is to  
7 make this equivalent to EPA's program, not the state's  
8 program, in our rule making. And so, it would be a  
9 performance based situation. The licensee would use  
10 modeling, monitoring, restoration -- studies, things  
11 like that to show us that they can fulfill the  
12 obligations of meeting the standard of not exceeding  
13 impact into the Safe Drinking Water Act regulated  
14 aquifers.

15 Now, you almost have to look at this from  
16 a three dimensional standpoint. We've always looked  
17 at this from a map -- we look at the area out here.  
18 This is just<sup>u</sup> on aspect. This is the aquifer that's  
19 being mined. And this is the area that's exempted.  
20 The area that is not exempted is protected under the  
21 Safe Drinking Water Act.

22 The aquifers that are below or above also  
23 are protected under the Safe Drinking Water Act. So,  
24 the goal would be to protect those aquifers. It's  
25 quite simple.

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1                   Now, as to how much we put in the rule.  
2                   How much we put in guidance on how you do that, how  
3                   you demonstrate that, that's to be determined, but  
4                   this is the crux of our intent, and what we feel is  
5                   the direction from our Commission on this -- on this  
6                   issue.

7                   At this point I'd be happy to take  
8                   questions.

9                   MR. THOMPSON:     Bill, Tony Thompson.  
10                  That's pretty much consistent with what your -- what  
11                  the rules require for the conventional mills. I mean  
12                  it's essentially at point of compliance as opposed to  
13                  the aquifer exemption boundary, but it's MCL  
14                  background, apparently it's MCL background whichever  
15                  higher or an ACL. And perhaps you ought to consider  
16                  -- ACL as well, and formalizing it in whatever you do  
17                  with the criterion. I think that's something that  
18                  would be of interest to the licensee.

19                  MR. VON TILL:   Yeah. I think the intent  
20                  is really, to start off with what I would consider an  
21                  ACL -- this is an ACL. What you're doing is you're --  
22                  you're trying to demonstrate that you can -- you do  
23                  whatever you do in the mining area to protect the  
24                  point of exposure, which is exactly the ACL, from the  
25                  start.

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1 MR. THOMPSON: Okay. Sort of, but not  
2 quite. I mean, you're saying MCL or --

3 MR. VON TILL: No, no. MCL -- see, the --  
4 what I'm talking about is inside the -- inside the  
5 mining area. Now, outside the mining area, the  
6 regulations for EPA don't have an ACL scenario.

7 MR. THOMPSON: I understand.

8 MR. VON TILL: And we can't --

9 MR. THOMPSON: You can't --

10 MR. VON TILL: -- we can't do that.

11 MR. THOMPSON -- you can't impact the --

12 MR. VON TILL: Correct.

13 MR. THOMPSON: -- nonexempt adjacent  
14 aquifers above, below or around.

15 MR. VON TILL: Exactly.

16 MR. THOMPSON: And we understand. And you  
17 have to clean it up under EPA regs, no matter what  
18 (indiscernible) says.

19 MR. VON TILL: Exactly.

20 MR. THOMPSON: Okay. I'm still --

21 MR. VON TILL: Yeah. Just to -- you just  
22 -- just so that, you know, that's clear. Again, right  
23 now, you're required to do the monitoring -- the wells  
24 -- the wells inside the mine -- inside the blue,  
25 you're required to return to baseline or secondary

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1 goals, or class of use. We would not do that. We  
2 would only require a demonstration such that when the  
3 aquifer -- where the contamination migrates out, it  
4 would not impact the adjacent aquifers, outside.

5 MS. SWEENEY: Katie Sweeney, National  
6 Mining. But that wouldn't -- I mean, to make that  
7 demonstration there might be some licensees that would  
8 actually have to do some restoration to make that  
9 showing. So, you're not within that mine site, right?

10 MR. VON TILL: Yes, depending on --  
11 depending on the site characteristics of the  
12 geochemical situation, I would say normally, in order  
13 for you -- depending on the buffer zone between the  
14 aquifer exemption and mining area, if you have no have  
15 no buffer zone, for example, I'm not sure how you  
16 could demonstrate not doing any restoration at all,  
17 achieving that goal. But the amount of restoration  
18 that would be necessary, would probably be much less  
19 than is now required.

20 Next question.

21 MR. THIESSE: I (indiscernible) Bill.  
22 Mark Thiesse, with --

23 MR. VON TILL: Hold on, hold on, please  
24 give him the mic --

25 MR. THIESSE: Mark Thiesse with -- DEQ.

1 Bill how -- who or how do you envision that exemption  
2 boundary being defined or who's going to make that  
3 selection? And under what criteria are they going to  
4 make that aquifer exemption boundary?

5 MR. VON TILL: The designation of the  
6 aquifer exemption boundary will have to be worked out  
7 with EPA. We would do that -- EPA makes that  
8 determination.

9 MR. THOMPSON: Why don't you ask Mark  
10 Pelizza to explain, there is --

11 MR. VON TILL: Sure.

12 MR. THOMPSON: -- technical mean for  
13 determining the area of review in -- and which is the  
14 area of impact.

15 MR. VON TILL: I think we have to do a lot  
16 of work on the aquifer exemption boundary. I think  
17 there's a number of issues. First of all, when we go  
18 in with one of these applications I think that we'll  
19 have to have a -- well, we'll have lease boundaries  
20 and in some places we'll have lease boundaries and  
21 that may be a simple way of dealing with what the  
22 exemption boundary is.

23 MR. PELIZZA: We don't want to be tied  
24 down with an aquifer exemption boundary that is --  
25 very simplistically deal with a monitor well ring when

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1 we begin one of these operations. We would also be  
2 doing delineation drilling and additional exploration  
3 throughout the life of the project. And in 2006 we  
4 may have an idea where the (indiscernible) throughout  
5 the countryside yet in 2016 may look very different.  
6 So, they'll have to be some flexibility there.

7 Also, EPA has in their rules now, a area  
8 of review criteria. I think that that area of review  
9 criteria could be dovetailed into what this area of  
10 influence will be, you know, down the road. So, we'll  
11 have a -- monitor well ring and then we'll have  
12 something beyond that monitor well ring that we --  
13 that we, you know, protection beyond  
14 that -- that's tied somehow with area if review,  
15 whether it be a quarter mile or -- which is the  
16 minimum. Or whether it be something else, depending  
17 on -- on other factors.

18 MR. VON TILL: Could you please state your  
19 name?

20 MR. PELIZZA: My name is Mark Pelizza, I'm  
21 with Uranium Resources.

22 MR. VON TILL: Thank you. Next question.

23 MR. JACOBI: I'm Rich Jacobi from Texas.  
24 I had a question. Did I hear you say you're going to  
25 abandon Part 41?

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1                   MR. VON TILL: Yes.

2                   MR. JACOBI: Your going to abandon it and  
3 just focus on this groundwater issue?

4                   MR. VON TILL: The -- the direction of the  
5 Commission, for this particular rule making was very  
6 narrow in scope. Commissioner Merrifield, in  
7 particular, wanted us to get to the meat of the issue  
8 here. The restoration and the deferral of groundwater  
9 regulation at these sites and not get encumbered by a  
10 huge rule making. So, we have specific direction from  
11 our Commission to make this very narrow.

12                   Now, well -- be a Part 41 in the future --  
13 look at a Part 41 -- for this. Right now, I think our  
14 understanding is it would not be a Part 41. It would  
15 narrow in scope, more like a criterion 14 or an  
16 addition to a criterion 5 or 7. Much more narrow in  
17 scope. So, that's our intent.

18                   MR. JACOBI: And I guess I had one other  
19 question and maybe I should know this answer, but I  
20 don't. If you -- if your rule is performance based  
21 would an agreement state be able to have a rule that  
22 was prescriptive and in that it was more restrictive?  
23 Or would they have to be strictly compatible?

24                   MR. VON TILL: The agreement states can be  
25 more stringent -- UIC --

1 MR. COMFORT: Mark, part of that will be  
2 worked out in the rule making. My understanding is  
3 most of the criteria in Appendix A, are compatibility  
4 -- compatibility, category C, which means that they  
5 have to be similar or more stringent than -- so, they  
6 could create a regulation that was more stringent but  
7 the final designation, that is part of the rule making  
8 effort.

9 MR. MOORE: The compatibility category C  
10 means that they have to meet the essential objectives  
11 of the rule. And so, under compatibility, category C,  
12 in layman's terms, they have to meet it or they can be  
13 more stringent. They have to meet the essential  
14 objectives. But an answer, a direct answer to your  
15 question, that would have to be worked out during the  
16 rule making.

17 MR. VON TILL: You know, the intent here,  
18 is that we make our restoration -- to with EPA's so  
19 that we don't have an obstacle for us referring the  
20 program to the states that we --

21 MR. JACKSON: Thank you. I'm Dan Jackson,  
22 I'm with the EPA, Region 8, UIC program. And I just  
23 wanted to -- just discuss this aquifer exemption  
24 boundary relative to the UIC rules.

25 At this point, our regulations require us

1 to look at the aquifer exemption boundary and there  
2 was some discussion about how that's delineated. The  
3 boundary, right now, is delineated by the mineable  
4 area. Okay. So, that -- I take in this slide, it  
5 would be analogous to the black part that is inside  
6 the monitoring well ring. Rather than the outside  
7 part that's shown there where the aquifer exemption  
8 boundary is shown outside of the monitor well ring.  
9 And that's because that's the way our regulations are  
10 -- are setup. They do show that it has to be for that  
11 part of the ore body that is mineable. And that's our  
12 aquifer exemption criteria.

13 MR. VON TILL: Thank you.

14 MR. JACKSON: (Simultaneous conversation)  
15 verification --

16 MS. RICHERS: My name is Donna Richers,  
17 I'm with Cogina (phonetic) Mining. The -- Mr.  
18 Jackson's interpretation, I believe, is a regional, a  
19 Region 8 interpretation because we have a different  
20 aquifer exemption boundary in Texas, which is  
21 compatible with the permit area that is issued by the  
22 state. And I believe that's also the same with  
23 Nebraska. So, we have different EPA region  
24 interpretations of what the exemption boundary is.  
25 And we also have new state rules in Wyoming that

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1 defines what that boundary is and it is outside of the  
2 monitor well ring. So, it does have a buffer beyond  
3 the monitor well ring. And the monitor well ring is  
4 an operational aspect of this. Because we -- we do  
5 have excursions. So, we do -- those are wells that  
6 are part of the operation.

7 MR. VON TILL: Dan, do you want to make  
8 any comment about --

9 MR. JACKSON: I will make just one quick  
10 response. And that is, yes, it may be that some of  
11 the other regions have had a different implementation  
12 of that but -- and it's certainly in Region 8, that is  
13 our interpretation of that. And I would also like to  
14 point out, as far as the -- my understanding is, as  
15 far as the Wyoming regulations -- the new rules, that  
16 we did comment on that particular aspect of those.  
17 And so, that's it.

18 MR. CHANCELLOR: Rick Chancellor with  
19 Wyoming DEQ. If you defer to the states to do the  
20 cleanup standards inside the well field, it may be  
21 important to actually place that language in the rule.  
22 Because some states have limitations on how  
23 (indiscernible) states -- inside a well field that  
24 they're being more stringent than the federal rule.  
25 So, you need to really make clear that the federal

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1 program recognize the state's ability to  
2 (indiscernible) inside the well field.

3 MR. MOORE: Scott Moore. Thanks. And I  
4 appreciate that comment. Those are exactly the types  
5 of comments that we need. And if there are other  
6 types of comments like that, we need to know that.  
7 So, if there are things that you believe need to be in  
8 the rule, we need to know that in constructing the  
9 rule. So, thank you.

10 MR. VON TILL: Just so I understanding  
11 what you're saying, we need to have in the rule a  
12 statement such that the states can be more stringent  
13 towards -- towards restoration --

14 MR. CHANCELLOR: Sort of. It's more  
15 recognition that the states can or may have standards  
16 inside the well field. Because, really we have --  
17 your standards are at the -- boundary and we will have  
18 standards inside the well field and just to -- a rule  
19 stating that the states may, will, whatever, have  
20 standards for cleanup inside the well field, outside  
21 of your program that is not a conflict with your  
22 program.

23 MR. COMFORT: I'm Gary Comfort. One the  
24 things the working group, you know, is trying to  
25 handle, is what are the best ways to implement these

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1 kinds of things. You know, do we do, you know, direct  
2 relation to EPA's, you know, to reference? Do we  
3 actually just try to copy what our intent of what we  
4 think the regulations are? And one of the things  
5 would be is what's the best way to allow this  
6 deferral. Do you do it strictly in the regulation  
7 that says, you know, you can do it halfway? Do we do  
8 it for a license condition? Is it through an MOU that  
9 says, NRC's basically going to, you know, allow the  
10 states requirements because they are more stringent,  
11 meaning that they meet what NRC has the overall intent  
12 for. If they can meet the state one, which they have  
13 to meet anyways, that's getting rid of the dual  
14 regulation or that's the intent of what we're trying  
15 to do here. So, part of what we're looking for is,  
16 you know, comments on what's the best methods to, you  
17 know, make these approaches and all. So, we  
18 appreciate that.

19 MR. COMFORT: Next question.

20 MR. VON TILL: One thing I should point  
21 out too, with existing facilities, there may need to  
22 be some licensing amendments -- analysis on some  
23 particular sites to take care of the discrepancy  
24 between the -- analysis to return the whole area to  
25 baseline -- restoration situation. For the new

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1 facilities that would come after the rule making, it  
2 would be straightforward.

3 MR. MOORE: Okay. Are there any other  
4 questions for Bill on his presentation? Okay. Thanks  
5 a lot Bill.

6 Okay. We'll move on to the next phase of  
7 the public meetings, which is an open forum for  
8 stakeholder comments. In doing that -- in doing that,  
9 I'd like to point out a couple things. One is, we'll  
10 be putting a meeting summary and slides that were used  
11 in this presentation up on NRC's website within ten  
12 days. So, the slides that were used here plus a  
13 summary will be put up on our website within the next  
14 ten days.

15 Gary's pulling up an address, if you have  
16 any specific comments that you'd like to make to us,  
17 you can send in comments to him. It'll also have his  
18 email address on it. You can send it by email or you  
19 can mail it to him directly. You can copy that down.  
20 It'll also be available on the website.

21 We've handed out cards during the break,  
22 I think, they should be available on all the tables.  
23 If you'd rather not make comments on the microphone,  
24 state your, you can turn in comments and we'll read  
25 them here in front of everybody and try to answer them

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1 to the best of our ability. If you'd like to write  
2 them down and just pass them or we can go around the  
3 room and collect them and try to answer them.

4 And this part of the meeting we'll use the  
5 forum to answer any questions anybody has about the  
6 rule. About ISLs, about where we're going with the  
7 rule, that we can. About the schedule. Anything you  
8 want to know at this point, about the rule. Or any  
9 comments you'd like to make about where we should be  
10 going. And with that, we'll turn it over to you all.  
11 This is your opportunity to provide us input. So, any  
12 questions? Sure, and we'll start over here.

13 MR. LOOMIS: Good morning, I'm Marion  
14 Loomis with the Wyoming Mining Association. Thanks  
15 for the opportunity to provide a couple comments.  
16 I've got a short written statement here that I'll just  
17 hand to you when we're done. But as -- as you know,  
18 we have two of the existing ISL operations in Wyoming.  
19 A number of companies that are doing active  
20 exploration and one of the remaining mills is still in  
21 Wyoming. The -- from the comments that you've made  
22 today, it sounds like you're going to defer to the  
23 states and the EPA and that's one of our strongest  
24 recommendations to you is -- and compliment you for  
25 that. We think that's absolutely the right way to go.

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1  
2 I would suggest that you would look at it  
3 as an incorporation of the -- an MOU or a -- just a  
4 deferral to the EPA rather than writing your own  
5 standards because sometimes people interpret things  
6 differently and even though you think you're trying to  
7 write them the same, you very well could be -- have  
8 major difference in -- from what EPA or the states  
9 have.

10 We would also encourage you that as you do  
11 this rule making effort, that it come out of the fees  
12 -- be paid out of the overhead and that you not turn  
13 around and bill all the existing companies for -- for  
14 these -- this rule making effort. And I'll be glad to  
15 hand in this<sup>v</sup> little written statement. Thank you.

16 MR. VON TILL: Thank you very much. I  
17 just wanted to address one of your comments there.  
18 The Commission was very sensitive on the fee structure  
19 situation. And -- in my understanding with their SRM,  
20 is that instead of penalizing the existing licensees  
21 that we have, to take on these fees for the whole rule  
22 making. They were able to have a situation where it  
23 spread out over the entire NRC, which they were not  
24 able to do before. So, that's already happened. The  
25 existing licensees<sup>v</sup> -- Highlands, HRI, will not have to

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1 shoulder the entire cost of this rule making. That's  
2 already been decided by our Commission. So, I just  
3 wanted to address that comment.

4 MR. MOORE: Thanks. And the way we'll  
5 handle written comments here, is we'll attach it as a  
6 publicly available comment received during the public  
7 meeting. Thanks.

8 MS. SWEENEY: (Indiscernible).

9 MR. MOORE: Yes, please state your name,  
10 for the court transcript. Thanks.

11 MS. SWEENEY: Katie Sweeney, National  
12 Mining Association. Obviously this is a rule making  
13 that we're very interested in. We appreciate the  
14 opportunity to provide you comments here today.

15 We support what the Commission has  
16 proposed, a very limited rule making to defer active  
17 jurisdiction over groundwater protection in, in situ  
18 leach facilities and glad to hear that they continued  
19 thinking is that this is -- the cost will be done  
20 through a surcharge to all NRC licensees.

21 A few suggestions on things that you --  
22 that could be included in this rule making. And I'm  
23 trying to comply with Scott's advice at the beginning,  
24 that they all have to be tied very closely to the main  
25 goal of the Commission here.

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1                   But, these are a couple ideas that we have  
2                   come up with.       One would be codification of  
3                   performance-based licenses through this rule making.  
4                   It's an opportunity that has been discussed in the  
5                   past and though we decided not to go forward with the  
6                   Part 41 that was something that's been put to the  
7                   side.    But I know at that juncture, the staff was  
8                   extremely supportive of codifying that to prevent any  
9                   challenges from interveners on that issue and also  
10                  just because the performance-based licenses have been  
11                  so effective in saving both industry and the  
12                  regulatory agencies resources by focusing on the non-  
13                  routine matters that come up.   Those -- regulatory  
14                  authority on and the licensees themselves can deal  
15                  with the more routine issues.   So, that's something we  
16                  think you ought to consider.

17                  Another issue that we think ought to be  
18                  addressed during this rule making is what Tony was  
19                  talking about just a few minutes ago, and that's  
20                  codifying what you have in the SRP for ISLs on --  
21                  well, I think you call it alternative restoration  
22                  standard, but I think for consistency's sake, it might  
23                  be nice to call that an ACL.   Just to be consistent  
24                  with the whole, you know, Appendix A language.

25                  For performance-based licenses, I'm trying

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1 to think how you could do this through this rule  
2 making but if you could codify it more broadly so it's  
3 codified also for the mills -- mill sites as well.  
4 You know, that's a little outside the scope of this  
5 rule making but I think it's -- it's doable because I  
6 think it's something that is not going to be to  
7 controversial, at least from staff and industry  
8 perspective.

9 The third one that I'm trying to figure  
10 out how I can tie it to the ISL facilities, in  
11 particular, is the surety issue that we talked about  
12 yesterday. We talked about the HRI litigation. We  
13 talked about the recent Commission decision on how  
14 that surety would be calculated and what the -- the  
15 basis for that is. And we think the Commission  
16 decision was very appropriate and perhaps could be  
17 codified somehow through this rule making.

18 So, those are our kind of three items in  
19 addition to achieving the main goal of the Commission.

20 MR. MOORE: Thanks. I guess I would offer  
21 a comment, well two comments. One is, it may be tough  
22 to approach these in this rule making, given the  
23 Commission's direction to us. They were specific to  
24 focus on addressing the dual regulation with EPA on  
25 the groundwater issue. I guess the second comment is

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1 this, one of your comments had to do with the --  
2 securing rights on licensing issues. It is important  
3 for everybody to know, just as a fact, that members of  
4 the public, anybody, has hearing rights on rule  
5 makings as well. And I guess the difference between  
6 rule makings and licensing actions is that in  
7 licensing actions it's each and every licensing action  
8 that takes place versus in rule makings they're all  
9 amalgamated into a single rule making. But there are  
10 hearing rights on rule makings and the public's  
11 offered, you know, ample opportunity for due process  
12 on rule making actions as well.

13 So, the agency is required to go through,  
14 under the Administrative Procedures Act, a number of  
15 steps in the rule making process. Thank you.

16 MS. SWEENEY: But through the rule making  
17 process it's all kind of dealt with at one -- one fell  
18 swoop that I think for -- especially on this  
19 performance-based licensing I think it'd be helpful to  
20 have that be regulatory versus policy, instead of  
21 having individual licensees having -- having to  
22 address that.

23 MR. MOORE: Okay. Thanks.

24 MR. VON TILL: Next question, comments?

25 MS. HOY: Thank you. I'm Roberta Hoy with

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1 the Wyoming Department of Environmental Quality, the  
2 Land Quality Division. And we appreciate NRC and EPA  
3 and everyone's efforts in the last few years as the  
4 discussions about, all kinds of uranium issues that --  
5 today, there's three items that I'd like to touch on  
6 that I think, in terms of background for this rule  
7 making, will be critical to understand.

8 The first of those is Wyoming has had a  
9 regulatory program in place for a considerable amount  
10 of time. Our Environmental Quality Act was passed in  
11 1973. Specific in situ rules came in place in 1979.  
12 And then in the 80s there were rules and guidance  
13 written about in situ and we've been using those for  
14 a long time, as Steve Ingle can attest to.

15 Recently in 2005, we got a new set of in  
16 situ rules applicable to all kinds of non-coal mining,  
17 not just uranium, in place. There was considerable  
18 discussion throughout that about restoration and our  
19 rules, our old rules, were very much like what NRC put  
20 into their guidance, the background primary goal,  
21 second in the -- class of use secondary goal. And  
22 there's considerable discussion about -- and why we  
23 changed that. It -- our new rules reflect our statute  
24 much more closely, which talks about restoring to  
25 equal to or better than the class of use and it also

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1 discusses where we get the class of use concept. And  
2 we specifically put a lot of detail in the statement  
3 of reasons for those rules. So, that people 20 years  
4 from now would understand the reasons behind that.

5 It also discusses the practical  
6 technology, which is also in our statutes as something  
7 that you need to be sure that you apply in trying to  
8 restore something. We've had considerable experience  
9 with that. I have to commend the operators for, in  
10 recent years, really trying to improve the restoration  
11 efforts as well and the technologies.

12 Then, the second thing that I want to  
13 touch on is the -- the on the ground situation in  
14 Wyoming. We have -- we chose a class of use and this  
15 comes out of the Water Quality Division. Much of the  
16 discussion today is centered around drinking water and  
17 human health and this sort of thing. And we have a  
18 classification scheme that recognizes more uses than  
19 that. Agricultural, industrial, livestock, because in  
20 our state, so much of our resources have -- are not  
21 being used yet, but they -- they will be and we are  
22 seeing increasing pressures on those resources and we  
23 need to keep that in mind in whatever we're doing.  
24 We're somewhat concerned in terms of discussion about  
25 carving out exemption areas since we have so much

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1 uranium resources in the state, this -- the perception  
2 about that may be somewhat negative.

3 The third thing, and to me this is the  
4 most critical aspect of this. For us, it's been much  
5 easier to restore when there has been efficient  
6 mining. I mean that's the key. To me the operators,  
7 I mean, efficient mining makes it better in terms of  
8 the resources recovery, the economics. It makes it  
9 better for the state or whoever owns that mineral  
10 because you're getting more of the resource out and  
11 based on our experiences over the years, the better  
12 the mining effort the easier and less time that  
13 restoration effort has taken.

14 So, with that in mind, I don't want to  
15 lose sight that this is a -- this is an operational  
16 thing too, and we really want to be sure that we're  
17 working on extracting one resources, protecting  
18 another, and not sacrificing one for the other. Thank  
19 you.

20 MR. GORANSON: Paul Goranson with  
21 (Indiscernible) Uranium, LLC and I'm also on the  
22 Uranium Environmental Subcommittee with the National  
23 Mining Association.

24 (Indiscernible) Uranium is a uranium  
25 operator in Texas, which is an agreement state, and so

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1 we won't be immediately affected by rule changes but  
2 we will eventually be affected by rule changes. And  
3 what I want to state is, is that as an operator, in  
4 situ leach operator, we believe that the -- the  
5 motivation of this rule making is something we  
6 support. The removal of -- groundwater dual  
7 jurisdiction of groundwater, it's consistent with the  
8 way the State of Texas handles things. And so, it  
9 makes it easier as an operator, even in an agreement  
10 state, to be consistent, all the operators are fairly  
11 consistent and everybody's on a similar playing field.

12 With that, also I want to echo Katie's  
13 suggestions on performance based licensing. I believe  
14 it's necessary to be codified and I think you can tie  
15 it to this rule making. Under a performance-based  
16 license, the licensee is required to do preoperational  
17 monitoring and to do restoration -- set restoration  
18 standards, which are submitted to the state, as  
19 authorized to that under a performance-based license  
20 as part of its process, and provides an annual report  
21 to the NRC. And so I believe it could be tied  
22 directly to -- and you're looking at the  
23 jurisdictional boundary between governmental agencies,  
24 but you also need to look at it from the licensee's  
25 perspective. The licensee is doing these things under

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1 performance-based license. The things you're already  
2 codifying under this rule change, it's easy to -- I  
3 don't see it as a stretch to include performance-based  
4 licensing as part of this. It is a critical part of  
5 this whole thing.

6 Secondly, on the surety issues, it does  
7 need to be clarified on groundwater issues. Every  
8 licensee with the NRC submits their annual surety  
9 update, even though the state holds the bond, and a  
10 key factor of that whole surety estimate is  
11 groundwater restoration. And how do you go about  
12 groundwater restoration? The expected volumes and  
13 everything is essential reviewed twice, once with the  
14 NRC and once with the state. And sometimes those  
15 priorities don't always match up. And so it's key to  
16 tie surety to this rule making. I don't see any of  
17 this as a stretch.

18 MR. MOORE: You make very interesting  
19 points. And they are ones that we should consider as  
20 we develop the rule language. I'd really encourage  
21 you to write in some comments. Here's the address.  
22 And I encourage you to submit them soon because the  
23 working group is, you know, just forming and beginning  
24 work. And the ideas that you just presented could  
25 present an avenue on how we could tie them to

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1 elimination of dual regulation with respect to the  
2 groundwater. And so, you know, I'd encourage you, and  
3 others in the audience that have ideas about how we  
4 should develop the rule to submit comments to Gary and  
5 the working group. Thank you very much.

6 MR. PAULSON: Good morning, my name is  
7 Oscar Paulson and I with Kennecott Uranium Company.  
8 I too represent Kennecott Uranium Company on the  
9 National Mining Association's Uranium Environmental  
10 Subcommittee and I'm also the chairman of the Wyoming  
11 Mining Association's Uranium Industry Committee.

12 Kennecott Uranium Company strong supports  
13 this proposed rule making effort and we believe that  
14 he should be kept as focused and unencumbered as  
15 possible. However, we also believe that the rule  
16 making effort should include codification of  
17 performance-based licenses for uranium recovery.

18 These performance-based licenses have been  
19 a tremendous boom, I know to us at the -- uranium  
20 project. Of course Kennecott Uranium Company owns the  
21 only remaining conventional uranium mill in Wyoming,  
22 currently on standby. But this performance based  
23 licensing system has really been beneficial to us and  
24 very useful to us. As I'm sure it is to other  
25 licensees as well. And is something that would be

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1 very beneficial to the industry to have formally  
2 codified. And with that, that ends my comments.  
3 Thank you.

4 MR. VON TILL: Thanks Oscar.

5 MS. WICHERS: Thank Bill. Again, my name  
6 is Donna Wichers, I'm the General Manager for Cogina  
7 (phonetic) Mining, Inc, in Wyoming and Texas.

8 I also will reiterate what the other  
9 industry people have been saying. Although we're not  
10 a big fan of rule making in general, we -- we  
11 certainly like to see this type of rule making where  
12 we're clarifying certain issues with other state  
13 agencies and EPA and also to clarify and codify, you  
14 know, some existing issues that we have.

15 I would also agree with what Paul Goranson  
16 said regarding the surety. We're having some -- some  
17 issues right now where the State of Wyoming has  
18 released us on our surety -- portions of our surety  
19 for groundwater restoration. Even to the extent of a  
20 particular phase of restoration. Once we finish phase  
21 1 groundwater sweep, then we're allowed to reduce our  
22 surety at that point because we know that we're going  
23 into a more aggressive phase of restoration. The NRC  
24 has not -- has written us several letters that the  
25 will not do that until we get full approval of the

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1 restoration and even so far as -- as perhaps license  
2 termination. So, I think the surety is a big portion  
3 of the groundwater issues. So is criterion 9, maybe  
4 where we could insert some language that would take  
5 care of that. But thank you again, for taking on this  
6 initiative and having this hearing.

7 MR. VON TILL: Thanks.

8 MR. MILMINE: Ken Milmine with Energy  
9 Metals Corporation and I will sound like a stuck  
10 record.

11 Two words that scare operators to death  
12 are dual regulation. So, I commend the NRC and the  
13 commissioners for a -- with this rule making,  
14 eliminating that -- the portion of the operations that  
15 can be a very frustrating and -- for both sides. So,  
16 I do -- another facet of operations is the  
17 performance-based licensing and what we can -- the  
18 efficiencies that it induces for all of us. And so I  
19 also agree with what's been said as far as I do think  
20 this is a good platform for that issue to be put in  
21 and codified.

22 Also, as what's been said about surety, in  
23 my mind that goes -- that's going right along with  
24 dual regulation. I mean it's -- it's -- we submit one  
25 thing here and you submit another thing -- it's

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1 approved, here doesn't get approved here. It's the  
2 same thing as groundwater restoration issue, you can  
3 satisfy one agency and not satisfy the other agency.  
4 And in my mind that's -- it falls in line with the  
5 dual regulation concept as far as the surety issue  
6 that we're talking about. And that's all I have.

7 MR. VON TILL: Okay. Thanks. Thanks Ken.

8 MR. PELIZZA: Thank you, Mark Pelizza,  
9 with Uranium Resources. I'll speak from the Texas  
10 perspective. We're a little bit different because  
11 we're -- and agreement. Both agencies were agreement  
12 states so we do not have the dual jurisdiction issue  
13 to deal with but we are a major ISL state, so  
14 regulations that come out of NRC are important to our  
15 agreement state regulators.

16 The -- I don't think the performance-based  
17 issue is a stretch at all. If we're going to do  
18 the -- the groundwater rewrite in the context of  
19 performance-based then there has to be something more  
20 general -- general in the -- in the regulation so our  
21 agreement state regulators can understand what  
22 performance-based licensing is. And at this point I  
23 think that they may not.

24 So, if -- if we're doing a subset of  
25 regulations as performance-based then there has to be

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1 something more general in the regulations that just  
2 defines -- it gives the terms of what performance-  
3 based is.

4 The second comment I have which is a  
5 little bit more of a stretch, is the criterion 2  
6 provision that we all have to live with right now.  
7 And I'll just, and I'll admit it right up front, it's  
8 a stretch. But it's -- it's an old policy. We in  
9 Texas do not have site to go with our 11(e)2 byproduct  
10 material. Right now we have to haul it halfway across  
11 the country and that just isn't -- and on -- it's --  
12 it's a policy that if, I guess the best you can say is  
13 N/A, it's not applicable anymore because the sites  
14 don't exist and it has to be dealt with whether it be  
15 in this rule making forum or something else. And with  
16 that, those are my two comments.

17 MR. JACOBI: My name is Rick Jacobi, I'm  
18 also from Texas. I'm a member of the Texas Mining and  
19 Reclamation Association Uranium Committee, known as  
20 TMRA. I was appointed about two seconds ago by the  
21 chairman of the committee who's sitting to the left of  
22 me to add that committee's endorsement to the  
23 seemingly overwhelming endorsement for performance  
24 based and risk informed licensing in this rule. And  
25 I guess second of all, TMRA would adopt the comments

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1 made by Paul Goranson earlier in this meeting.

2 MR. VON TILL: Other comments, questions.

3 MS. HOY: Roberta Hoy with the Wyoming  
4 Department of Environmental Quality. And I was  
5 reminded of something in the discussion about Texas  
6 and I am going to switch gears, I will not be talking  
7 about performance based licensing.

8 There was earlier discussion about aquifer  
9 exemption boundaries and this ties in with the second  
10 point that I was making.

11 When we were doing the rule making in --  
12 within Wyoming, we realized there was considerable  
13 difference between the way in which aquifer exemption  
14 boundaries were selected in different regions. As  
15 best we can tell, there is a technical basis for that  
16 and that is the water quality at these sites. There's  
17 considerable variation. And then Wyoming, who  
18 generally had very good water quality, in part, that's  
19 we had the classification system rather than the  
20 exemption system and when you have all parameters  
21 within drinking -- within water quality divisions  
22 drinking water -- except for possibly one parameter,  
23 it really makes the restoration and protection of  
24 resources -- other than that one parameter may be --  
25 very critical --

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1 MR. VON TILL: One -- one note here. On  
2 the aquifer exemptions, NRC's never been in the  
3 business of exempting aquifers. That's never been a  
4 dual regulated situation, that is EPA. And I know  
5 there is some variability, I'm sorry to say -- but I  
6 just want to make that point.

7 MR. VELASQUEZ: My name is Juan Velasquez,  
8 I'm with -- Mills Corporation and I'll say something  
9 a little bit different than what you've heard -- the  
10 rest of the uranium miners because I'm talking today  
11 with the perspective of a -- of new mining operation.  
12 And that is that on the one hand, I kind of look at  
13 these -- these kinds of gatherings, as when you ask  
14 yourself a question, you know, be careful what you ask  
15 for because you might get it, kind of scenario. I  
16 have a lot of experience and a lot of time in grade  
17 along with many of the others in this room with the  
18 regulatory reporting process. So, these things always  
19 tend to leave me a little bit, a little bit worried  
20 about what will ultimately precipitate.

21 But I would say that from the perspective  
22 of the new kid on the block, as it were with Stratton  
23 Ore, anything that can be done to make the process  
24 clearer. To make it less cumbersome for the uranium  
25 industry to be a viable industry in the future, we

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1       applaud and we support. So, being a member of the  
2       National Mining Association and being a member of the  
3       various state organizations, we support what's been  
4       said here today and we appreciate the opportunity.  
5       Thank you.

6               MR. VON TILL: Thank you, Mr. Velasquez.  
7       There's another comment in the back of the room. And  
8       I guess I -- we'd also be open to comments either to  
9       specific areas we should not go into in the rule.

10              MS. STOFFEL: I'm Dorothy Stoffell, I'm  
11       with the State of Washington and our geology is such  
12       I don't anticipate we'll ever have any in situ leach  
13       facilities.

14              I have a couple questions. One was, did  
15       I understand correctly that there are just two states  
16       to be represented on the rule making committee and if  
17       that is the case, has consideration been given to  
18       include a few more additional states that are likely  
19       to have new in situ leach facilities developed?

20              MR. MOORE: That has not been decided for  
21       sure yet. What -- what came up is, right now on the  
22       rule making working group, there's -- what's state's  
23       represented?

24              MR. VON TILL: The state's represented are  
25       Texas and we're trying to get --

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1 MR. MOORE: So, Texas is represented right  
2 now and during the NMA meeting there was an expression  
3 of interest by some none agreement states to be  
4 represented on the working group. And so, we need to  
5 look into that -- there are some -- some legal issues  
6 under the -- I think it's the Federal Advisory  
7 Committee Act on that issue. But I think those are  
8 surmountable. And so we need to look into that when  
9 we get back with our office of general counsel. And  
10 we'll be getting in touch, through our office of state  
11 programs. Usually we do that through the Conference  
12 of Radiation Control Program Directors. And we ask  
13 CRCPD for some representatives.

14 The -- we can't have the working group  
15 comprised, you know, entirely of states. So, we ask  
16 for representatives through CRCPD and then CRCPD goes  
17 out and proposes representatives. So, that's usually  
18 how we do it. Does that answer your question?

19 MS. STOFFEL: It does.

20 MR. MOORE: Okay.

21 MR. VON TILL: More questions, comments?  
22 Okay, Dave over here and then we'll go over here.

23 MR. FRIEDMAN: I'm Dave Friedman, Vice  
24 President and General Counsel with the International  
25 Uranium Corporation. We operate a (indiscernible) in

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1 (indiscernible) Utah. We support NMA's comments on  
2 this rule making, we endorse the rule making and we  
3 agree it should be kept narrow, with the addition of  
4 NMA's suggestions.

5 As an operator of a conventional mill, we  
6 just urge NRC -- any -- any provisions -- for ISL  
7 facilities that should equally apply to conventional  
8 mills -- that addressed in the rule making. So you  
9 don't have a situation where something that's codified  
10 for ISLs -- conventional mills when the rules when the  
11 rule should apply to both. Thanks.

12 MR. VON TILL: Thanks Dave.

13 MR. CLARK: Thank you. My name is Jim  
14 Clark. I'm with (Indiscernible), from Texas. As a --  
15 as a mining entity that's been in standby we're -- for  
16 a long period of time, we're very excited with the  
17 opportunities that are in front of us now to  
18 reactivate our Hobson facility in a venture with  
19 Energy Metals. And bring on new production sites in  
20 Texas.

21 One of the things that we see is -- and  
22 I'm going to refer to some of the -- Mark's comments,  
23 Pelizza's comments that as an agreement state, we --  
24 we're immune for the time being but it's just a matter  
25 of time before these have a direct impact on us.

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1           The -- I guess the equally important  
2 feature the performance-based licensing. We're seeing  
3 -- we're seeing in our state regulate -- regulators  
4 are saying that there's a -- there's a waves of  
5 applications and permits and what have you coming  
6 their direction. So, anything that we can do to  
7 streamline that process and streamline it in terms of  
8 timing and the process, I think would be -- would be  
9 a good thing for all parties. Not only the regulated  
10 community but by the regulators themselves. It's a  
11 new concept for some, but I think one that certainly  
12 needs to be explored and embraced. So, that's it.  
13 Thank you.

14           MR. BOBERG: I'm Bill Boberg, with  
15 (Indiscernible) Energy. We primarily have a couple  
16 projects in Wyoming, we're in the process of trying to  
17 take to production.

18           Can I just reiterate what the other  
19 operators and potential operators, future operators,  
20 that are saying that we endorse what the -- is going  
21 on with the rule making change and what the National  
22 Mining Association has proposed on -- forward with  
23 this, and I'd also reiterate what Jim has said with  
24 the idea that, you know, we look at the idea, we've  
25 got projects that we can move forward to production

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1 fairly quickly and the one area that is our longest  
2 timeline we've got to deal with is the -- process to  
3 move them forward. And anything that can increase  
4 efficiency along that line would be most appreciated.

5 MR. VON TILL: Thanks Bill.

6 MS. REDMAN: I'm Michele Redman with  
7 (Indiscernible) Tech, and having been at some of the  
8 additional meetings, discussion of the white paper  
9 when this concept was first broached, I'm very happy  
10 to see the -- the progress being made. We support  
11 growth of the uranium industry and support of nuclear  
12 power that it represents. And we're excited to see  
13 this moving forward so that uranium production can  
14 increase rapidly.

15 In Mr. Von Till's presentation he opened  
16 with the intent that the rule promote a performance  
17 based, risk informed approach and I see as unique in  
18 their ability to really use this approach and I  
19 well -- I think that we'll see ISLs coming more  
20 rapidly with the use of performance-based license  
21 conditions and it will also streamline the regulatory  
22 and compliance efforts once the licensees are in  
23 place. And also encourage what's been said earlier  
24 and that is to ensure that the license conditions for  
25 ISLs include performance-based conditions for sureties

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1 and that those be -- that the regulations be codified  
2 to recognize the use of performance based licenses --  
3 particularly important with the changes that go on in  
4 well fields at ISLs and they should be, at least, be  
5 similar to, or equal to those types of conditions that  
6 are available for performance based changes to  
7 sureties of conventional milling operations.

8 MR. VON TILL: Thanks Michelle. More  
9 comments, questions.

10 MR. COMFORT: As -- rule making, this is  
11 Gary Comfort, from NRC. One of the considerations  
12 though, as part of the rule making, while we're  
13 looking at making it very narrow is the more that you  
14 expand it, the more makes it open for other  
15 consideration by individuals that make it go to areas  
16 that you didn't want it to go originally, and it  
17 delays it potentially. And that's one of the things  
18 that you have to consider, is should, you know, some  
19 of the -- some of the things you've stated are very  
20 reasonable requests and suggestions, but should the be  
21 done as a separate action, you know, and you have one  
22 action going through, that's just something that  
23 should be considered. So, that you have the dual  
24 regulation aspect and control taken care of and  
25 perhaps the more specific questions on performance-

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1 based, including surety, as a separate action. And  
2 that should be suggested to the, you know --  
3 commission. That, you know, we'll look at your  
4 comments certainly. Can we include it as part of this  
5 rule making effort and how big of an impact it is? Is  
6 it important to be part of it? Is it more a side  
7 issue that we -- if we are going -- but we'll take  
8 those all and certainly into consideration.

9 MR. MOORE: But I did hear some comments,  
10 this is Scott Moore. I did hear some comments that  
11 were made that were interesting. To the effect that  
12 you can tie your comments, especially regarding the  
13 surety issues to the elimination of dual regulation on  
14 groundwater issues. That is within the purview of  
15 what the Commission tasked us to do. So, the  
16 Commission tasked us to focus on elimination of dual  
17 regulation with the EPA on the groundwater issues.  
18 They specifically said that in the SRM, to focus on  
19 that.

20 So, to the extent that you can demonstrate  
21 in your comments how these other areas go to that  
22 issue, then that would be within the domain of what we  
23 were tasked to do. And I have heard some of that  
24 today.

25 MS. SWEENEY: Just to -- Katie Sweeney,

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1 National Mining. Just to respond to what Gary had to  
2 say. You know, that was an analysis that we've  
3 already done. You know, that we want this rule making  
4 to go ahead in a quick timeframe just as much as the  
5 Commission does. And we are concerned about weighing  
6 it down with other issues, but we think that these are  
7 issues that can be reasonably and appropriately  
8 addressed in this rule making.

9 So, I think we've already done that  
10 analysis. We've certainly eliminated many, many,  
11 many, many, many other ideas that we had on improving  
12 NRC regulations for uranium recovery.

13 MR. VON TILL: More questions, comments.

14 MR. MOORE: While we're here, are there  
15 any questions anybody has for us about the process,  
16 about the current regulations, anything you want to  
17 know about -- about rule making?

18 MR. THOMPSON: This is Tony Thompson. I  
19 wanted to address something, a concern that Donna  
20 raised when she said that NRC isn't going along with  
21 phasing surety adjustments and I'm -- I'm -- I think  
22 that must be a policy, because clearly the NRC  
23 regulations as we've seen them interpreted in  
24 criterion 9, you know, provide for annual adjustments,  
25 either up or down and in the conventional milling

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1 context when, for example, let's say the first thing  
2 you do is you dismantle the mill and your surety can  
3 then come down for that part of the cost that you've  
4 achieved and then if you go to your -- your -- you  
5 clean up your -- tailings and that was part of your  
6 surety, you complete that to NRC satisfaction, you can  
7 reduce your surety on that basis. So, it would seem  
8 to me that it's only logical that if -- if there are  
9 phases in -- in decommissioning of a ISL projection  
10 with respect to restoration of groundwater, as long as  
11 it's understood, and particularly if you're going to  
12 eliminate dual regulation, it is going to have to  
13 recognize that surety can be adjusted, either up or  
14 down. For example, with the Heritage -- situation,  
15 there is at the present time, a certain standard that  
16 is assumed, a certain number of -- but before they can  
17 go to another area, or another set of well fields in  
18 another section, they're going to have to do a  
19 demonstration and it could result in less system --  
20 and therefore less surety, or perhaps more. And that  
21 would seem to me to be very consistent with the way  
22 the NRC's done it with conventional mills.

23 MR. VON TILL: Just a couple comments. A  
24 lot -- outside the scope of this particular workshop,  
25 but let me just address a couple of those. First of

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1 all, once we reach our -- our goal that we're trying  
2 to reach, we want to have this happen in the states.  
3 The states would be the only people who would be  
4 approving a restoration. And the surety issues, we'll  
5 have to look at that. Currently, our policy is, for  
6 example, (indiscernible) restores mine unit 1. As  
7 soon as the NRC approves that that has been restored,  
8 we take that off of surety. (Indiscernible) islands,  
9 well field A. As soon as that's restored we take that  
10 off the surety. That's our -- our current process.  
11 But we just emphasis, we want to reach a point in time  
12 where the state's doing this stuff. That's the whole  
13 -- whole game. As far as the particular situation  
14 you're talking about, I would just say, let's talk  
15 about that offline with the project manager. But I'm  
16 not sure of all the specifics but that's our  
17 particular situation right now.

18 We -- we want to move to a situation where  
19 we're not hold you up and, you know -- after the rule  
20 making is complete and defer active regulation to the  
21 states. When the states approve the restoration,  
22 that's the approval.

23 Now, how it's going to work with the  
24 surety arrangements, I'm not sure at this point  
25 exactly but we've heard the comments and we want to

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1 try to incorporate that so that we're eliminating  
2 (indiscernible) of the restoration, period.

3 MR. THOMPSON: I just want -- I was just  
4 following up on the point that Scott made, which is  
5 that when something comes up like surety, this  
6 particular issue is tied to dual regulation and it is  
7 something that seems to me, worthy of comment in terms  
8 of -- of eliminating dual regulation and it's clear  
9 that surety, being the largest -- the largest cost  
10 associated with terminating ISL operations, that it's  
11 very important. So, I would encourage people to  
12 comment.

13 MR. MOORE: We're encouraging comments on  
14 any aspect of the rule and, you know, I encourage  
15 everybody and I have several times, to write in to  
16 Gary -- and I've heard some good arguments on why we  
17 should take up aspects with regard to the surety  
18 related to groundwater in the room today.

19 MS. WICHERS: We always want the last  
20 word. Donna Wichers, Cogina Mining. I guess my  
21 question is, did NRC consider eliminating the  
22 requirement for groundwater surety in this dual  
23 jurisdiction -- eliminating the dual jurisdiction.  
24 So, therefore, you would only hold or look at the  
25 surety portion for the processing plant

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1 decommissioning. I -- just --

2 MR. MOORE: Let me ask a clarifying --  
3 what do you mean, did we consider? I mean we're just  
4 beginning on the rule making now.

5 MR. WICHERS: Are you going to consider,  
6 I'm sorry.

7 MR MOORE: We'll consider any comments  
8 that anybody has written in and the -- the task before  
9 the Commission is, as I laid it out. You know, to  
10 eliminate dual regulation with respect to groundwater  
11 with EPA.

12 MR. VON TILL: That's the whole point of  
13 this workshop, so we can get those kinds of comments  
14 early in the process so we can address the comments.

15 MR. ANTHONY: My name is Harry Anthony, I  
16 represent Uranium Energy. We'll have projects both in  
17 Wyoming eventually, and also in Texas. And I'd like  
18 to just kind of say I ditto the performance-based  
19 licensing and the surety based discussions here this  
20 morning. Thank you.

21 MR. MOORE: Thank you.

22 MR. VON TILL: Any more comments,  
23 questions?

24 MR. MOORE: Before we end for the day, I  
25 just want to make sure we get everybody's questions

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1 answered. We've hit on several things over and over.  
2 We want to make sure we get everybody's opportunity to  
3 comment. And we want to make sure everybody knows how  
4 to comment and when to comment.

5 Are there any questions that anybody has  
6 or does anybody want to provide any further comments.  
7 Or does anybody want to submit anything in writing?  
8 Are there any blank cards that anybody has filled out  
9 you'd like to answer anonymously? You can pass it  
10 down to the end and people at the end of the table can  
11 just hand it up.

12 UNKNOWN SPEAKER: This is not a shy group.

13 MR. MOORE: Okay. Okay. If I could just  
14 add some final comments then.

15 The address for comments is at the front  
16 of the room. It's Gary Comfort, mail stop T8F3 Rule  
17 Making Guidance, MSS, USNRC, Washington, D.C. 20555.

18 We will have a summary of the meeting  
19 including slides up on NRC's website at the rule forum  
20 portion of the website and you can find that by going  
21 to [www.NRC.gov](http://www.NRC.gov) and then under that going to rule  
22 forum, within the next ten days.

23 We appreciate everybody for coming. We  
24 hope we've answered comments. Yes, Mr. Velasquez?

25 MR. VELASQUEZ: Could you -- could you

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1 please read the email address. It's unreadable from  
2 here and I want to --

3 MR. MOORE: I'm sorry. Gary's email  
4 address is GCC1, again GCC1@NRC.gov. And Gary's phone  
5 number is 301-415-8106. Don't call Gary next week  
6 because he's going to Florida.

7 Okay. Again, Gary's email is  
8 GCC1@NRC.gov.

9 We appreciate everybody's input at this  
10 public meeting. This will probably be the only public  
11 meeting we have before the rule itself goes out for  
12 public comment. We will have however, be putting  
13 proposed rule text up on the web and we will make  
14 everybody that signed up on the signup sheets  
15 knowledgeable about that through your email addresses  
16 that are on the signup sheets.

17 We will also be making at least one address  
18 that we're aware of, I think, at the -- we may or may  
19 not be making presentations on the ISL between now and  
20 January. The rule goes to the Commission in January.  
21 We'll let you know if you gave us your email address  
22 if we have the rule available and out. But we do --  
23 we do envision it going up and maybe iterative  
24 versions of it or successive parts of it up on the  
25 website at different times.

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We appreciate everybody's input and we hope it's been helpful to everybody. There are evaluation forms over to the right for this. We encourage everybody to fill them out and give us input on how we can run the meetings better. Thank you very much.

(Off the Record)

CERTIFICATE

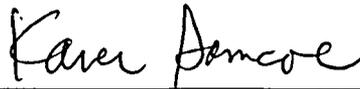
This is to certify that the attached proceedings before the United States Nuclear Regulatory Commission in the matter of:

Name of Proceeding: Workshop for Rulemaking for  
Groundwater Protection  
Requirements at *In Situ*  
Leach Uranium Recovery  
Facilities

Docket Number: not provided

Location: Denver, CO

were held as herein appears, and that this is the original transcript thereof for the file of the United States Nuclear Regulatory Commission taken by me and, thereafter reduced to typewriting by me or under the direction of the court reporting company, and that the transcript is a true and accurate record of the foregoing proceedings.



\_\_\_\_\_  
Karen Samcoe

Official Reporter  
Neal R. Gross & Co., Inc.

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