

# Official Transcript of Proceedings

## NUCLEAR REGULATORY COMMISSION

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Public Meeting

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UNITED STATES NUCLEAR REGULATORY COMMISSION  
NUCLEAR MATERIALS SAFETY AND SAFEGUARDS  
NATIONAL SOURCE TRACKING PROPOSED RULE

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PUBLIC MEETING

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MONDAY, AUGUST 29, 2005

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The meeting came to order at 9:00 a.m. in  
the NRC Auditorium, 2 White Flint North, Rockville,  
Maryland, MARK DELLIGATTI presiding.

PRESENT:

MARK DELLIGATTI	SECTION CHIEF, NMSS
JACK STROSNIDER	OFFICE DIRECTOR, NMSS
MERRI HORN	SENIOR PROJECT MANAGER, NMSS

		2
1	I-N-D-E-X	
2	AGENDA ITEM	PAGE
3	Welcome and Introductions	3
4	Mark Delligatti, Section Chief, NRC	
5	Opening Remarks	5
6	Jack Strosnider, Office Director, NMSS,	
7	NRC	
8	Proposed Rule Presentation	13
9	Merri Horn, Senior Project Manager, NRC	
10	Public Comment	35
11		
12		
13		
14		
15		
16		
17		
18		
19		
20		
21		
22		
23		
24		
25		

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

(9:04 a.m.)

WELCOME AND INTRODUCTIONS

MODERATOR DELLIGATTI: Good morning again.

My name is Mark Delligatti. I am one of the section chiefs of one of the two rulemaking sections in the Office of Nuclear Material Safety and Safeguards. I am not Merri Horn in case you were wondering.

I would like to welcome you all here today. We're having this meeting in the hopes of receiving public comments on the proposed rule on the national source tracking system.

The meeting is being transcribed by a court reporter. So when you give your comments here today, you can assure that they will become part of the record for the rulemaking process.

If you would prefer not to give your comments verbally at one of the mikes here, you can present them to the court reporter. And we will have them read into the record. That is your choice. Of course, you can also always submit public comments via the mail, fax, and e-mail in our normal process during the public comment period.

We are here today until 3:00 p.m. We will be taking a lunch break at around 12:00 o'clock. And

1 just depending on how many people want to speak, we  
2 would ask you to keep in mind that we would like to  
3 give everybody a chance to speak who wants to speak.  
4 So if it looks like there is a big list, we may ask  
5 you to try to keep your comments down to a reasonable  
6 amount of time.

7 But after everyone who has signed up to  
8 speak has had the opportunity to speak, we will also  
9 take additional comments from anyone else in the  
10 audience as long as time permits.

11 Let me see what else I have to tell you  
12 here. I hope you all noticed the posters out in the  
13 lobby. We have posters on several subjects of  
14 interest. And you can check them out during the lunch  
15 break if you didn't have a chance to check them out so  
16 far.

17 One of the series of the posters is on  
18 completed source tracking transaction forms to give  
19 you an idea of what those would look like. We also  
20 have a poster out there on the import and export and  
21 also one on Web-based licensing. I believe there are  
22 actually some materials that you can pick up on each  
23 of those as well.

24 I would like to introduce to you a couple  
25 of the folks who are here today before I introduce our

1 opening speaker. Dr. Patricia Holahan is the Deputy  
2 Director of the Division of Industrial and Medical  
3 Nuclear Safety. Trish?

4 And Mr. Scott Moore is the Branch Chief of  
5 the Rulemaking and Guidance Branch, NMSS. They're my  
6 bosses. So treat them nicely. And Merri Horn, I  
7 think most of you know Merri. She will be doing the  
8 presentation on the proposed rule. She works in the  
9 Rulemaking Section.

10 And, finally and certainly most  
11 importantly, I think, for our opening remarks, I would  
12 like to introduce to you the Director of the Office of  
13 Nuclear Material Safety and Safeguards. Jack is going  
14 to come up and speak to us briefly, welcoming you all  
15 to be here today, Mr. Jack Strosnider.

16 MR. STROSNIDER: Thank you, Mark.

17 OPENING REMARKS

18 MR. STROSNIDER: Welcome, everybody. On  
19 behalf of NRC, we really appreciate your being here  
20 today. This is the first of two public meetings that  
21 we have planned with regard to the national source  
22 tracking rulemaking.

23 The second one will be on September 20th  
24 in Houston, some state offices there. And I want to  
25 acknowledge the state support for that. We appreciate

1       that very much.

2               I wanted to start off with just a few  
3       general comments on rulemaking.       Writing of  
4       regulations is one of the most important things that  
5       we do at NRC.

6               The regulations are important because they  
7       are our vehicle for implementing national and  
8       international policy and for achieving NRC's goals of  
9       maintaining safety and security. And they, of course,  
10      translate into what is actually happening out in the  
11      field. So it is an extremely important activity.

12              One of the most important parts of that  
13      activity is what is happening today. It's the  
14      opportunity for public stakeholder involvement in that  
15      process. We take that very seriously. We really want  
16      your comments.

17              I can tell you with almost 30 years now at  
18      NRC, I have reviewed a lot of final rulemaking  
19      packages. One of the first places I always go to in  
20      that package is the comments to see what the comments  
21      were and how we resolve them.

22              Invariably, I learn from other people's  
23      perspectives. We try hard. The staff makes a real  
24      hard effort to try to reflect, you know, everyone's  
25      interest and to come up with the best proposed rules

1 that we can, obviously satisfying our mission, but we  
2 always learn from what we get in the comments.

3 So from that perspective, I really  
4 appreciate your being here today. And I really  
5 encourage you to share your comments and perspectives.  
6 That will help us all get the best regulation in this  
7 and in every area that we work on.

8 Turning specifically to the actual source  
9 tracking system, this rulemaking is a critical part of  
10 NRC's and the government's overall strategy for the  
11 security of sealed sources.

12 There has been a lot of interest by both  
13 the Commission and Congress. In fact, the recently  
14 signed Energy Policy Act of 2005 had a provision  
15 regarding this rulemaking.

16 So this proposed rule and this meeting are  
17 important steps in meeting the provisions of the act,  
18 meeting commitments that we made as a nation, and in  
19 establishing the national source tracking system.

20 A little bit of background. The NRC has  
21 been working closely with other federal agencies to  
22 enhance national radiation source security. In May of  
23 2003, NRC and the Department of Energy issued a joint  
24 report on radiological dispersal devices. That report  
25 contained a recommendation to develop a national



1 source tracking system.

2 In addition, the NRC supported U.S.  
3 government efforts to establish international guidance  
4 for the safety and security of radioactive materials  
5 of concern.

6 These efforts led to a major revision to  
7 the IAEA code of conduct on safety and security of  
8 radioactive materials. The code contains a  
9 recommendation that each country develop a source  
10 registry category 1 and 2 sources. And the U.S.  
11 government has made not a legal but a politically  
12 binding commitment to meet that code.

13 NRC, Department of Energy, and the states  
14 all have major responsibilities for domestic  
15 regulation of most radioactive sources. Other  
16 agencies also have an important role in ensuring  
17 security.

18 To this end, the NRC formed an interagency  
19 coordinating committee to provide guidance on the  
20 critical issues related to the development,  
21 coordination, and implementation of the national  
22 source tracking system and to ensure that the  
23 functions required by all agencies are addressed.

24 Eleven other agencies and the agreement  
25 states have been involved in this committee. The

1 agencies represented included Homeland Security,  
2 Department of Energy, Department of State, Department  
3 of Transportation, and others.

4 Both the rulemaking and the system being  
5 developed to support that ruling are intended to  
6 reflect the needs of the NRC as well as the other  
7 agencies on the committee.

8 I just want to stop and point out that is  
9 a very key point here. We want to make sure that --  
10 and the reason we put the task force together was to  
11 try to get those perspectives and make sure that the  
12 rule and the system that we put in place will serve  
13 everyone's needs.

14 We built flexibility into the software  
15 system that will support this so that we can hopefully  
16 make adjustments and address people's needs. But we  
17 need to know what they are. We need to work with  
18 other agencies. Similarly, stakeholders need to  
19 provide input so we can understand their perspectives.  
20 So I want to take this opportunity to thank all the  
21 agencies involved for their effort in their task  
22 force: past and future.

23 The national source tracking system will  
24 be a Web-based system for recording transactions  
25 involving the higher activity sealed sources.

1 Eventually it will provide a history of each  
2 nationally tracked source.

3 The NRC has adopted the IAEA category 2  
4 values as a threshold to allow alignment between  
5 domestic and international efforts to increase the  
6 safety and security of radioactive sources. The  
7 system will contain information on sources possessed  
8 by NRC, the agreement states, as well as DOE  
9 facilities.

10 National source tracking is a part of a  
11 comprehensive radioactive source control program for  
12 radioactive materials that could be used in a  
13 radiological dispersal device.

14 When I spoke earlier about the importance  
15 of rulemaking, one of the things that maybe I didn't  
16 emphasize was the fact that it's part of an overall  
17 regulatory framework. It goes along with inspection  
18 and licensing and oversight and a lot of other  
19 activities that we undertake.

20 So although the source tracking system  
21 cannot ensure the physical protection of sources, it  
22 will provide greater accountability. A national  
23 source tracking system in conjunction with other  
24 controls, inspections, including the orders that NRC  
25 has issued, will result in improved security and

1 accountability.

2 Implementation of the national source  
3 tracking system will provide the security of sources  
4 around the world by helping cognizant agencies to keep  
5 track of the locations of the sources and to enable  
6 quick responses to losses, unauthorized transfers, or  
7 diversions.

8 Implementation of the national source  
9 tracking system will also fulfill the U.S. government  
10 commitment to implementation of the IAEA code of  
11 conduct recommendation to develop a national registry  
12 of categories 1 and 2 radioactive sources.

13 As I said earlier, I encourage you to  
14 participate in the rulemaking process by providing  
15 your comments on the proposed rule. We want your  
16 perspectives and input. And there are some specific  
17 areas that we ask your comment on in the draft  
18 rulemaking package. And so we're interested in that  
19 but also any other perspectives you have.

20 Your input in these areas will help us  
21 make the right decision for tracking these materials.  
22 Your comments will help us to enhance a national  
23 source tracking system and provide an important tool  
24 for maintaining the security of our nation.

25 So, once again, I want to welcome you

1 here. I want to emphasize the importance of this  
2 activity and how much we value your input. And I  
3 encourage you to speak candidly today and provide that  
4 input to us. We really appreciate your being here.

5 With that, I think I am turning it over to  
6 Merri.

7 MODERATOR DELLIGATTI: I just have a  
8 couple of --

9 MR. STROSNIDER: Okay. Mark?

10 MODERATOR DELLIGATTI: -- clean-up things.  
11 Thank you.

12 MR. STROSNIDER: Thank you.

13 MODERATOR DELLIGATTI: I think we forgot  
14 to mention most of you probably know there are  
15 restrooms out in the lobby if you need them. Coffee,  
16 et cetera, is available upstairs in the NRC cafeteria.

17 Merri is going to do a presentation on the  
18 proposed rule. After the conclusion of Merri's  
19 presentation, we will start the public comment  
20 process. That is the main purpose we're here today,  
21 to hear your public comments on the proposed rule.

22 If you have any other questions for Merri  
23 or for me or for Scott or for Trish, we would  
24 appreciate if you would hold them and try to ask us  
25 those during the break because, again, what we want to

1 do today primarily is to hear your public comments.

2 So, with that, I'd like to introduce you  
3 to Merri Horn. Merri, I'll go out and see what kind  
4 of list we have of commenters.

5 If you haven't signed up to speak yet and  
6 you want to, just go out in the lobby. I will check  
7 periodically and see if we get any more names out  
8 there.

9 Thank you.

10 PROPOSED RULE PRESENTATION

11 MS. HORN: Well, good morning and welcome  
12 to our first public meeting on source tracking. I  
13 want to thank everyone for taking time out of what I  
14 know are very busy schedules to attend this meeting.  
15 Your stakeholder input is very important to us.

16 There will definitely be a source tracking  
17 system. Congress has pretty much deemed that. But  
18 there is flexibility in exactly what that system is  
19 going to look like. The exact parameters have not  
20 been set. So your comments are very important to us.

21 Let me give you a little talk about the  
22 information packets that you all received when you  
23 checked in. If you will look on the right-hand side,  
24 there should have been a public feedback form. We  
25 encourage you to fill that out at the end of the

1 meeting. Your input on that is also very important to  
2 us.

3 There should be a copy of the slides with  
4 room for taking notes. There is the table. This  
5 table lists the isotopes and the threshold that the  
6 rule addresses. It's just kind of an easy, handy  
7 reference guide for you.

8 There's a one-page document that provides  
9 instructions on how to provide public comments. There  
10 are several different ways, and those are explained  
11 here. It's also in the Federal Register notice, but  
12 this gives you a quick reference that tells you how  
13 you can comment.

14 There's a copy of the Federal Register  
15 notice containing the proposed rule, very important.  
16 This is what we're asking you to comment on. And  
17 there's a copy of the regulatory analysis document.  
18 This basically provides the cost benefits of the  
19 system. And we encourage commenting on that also.

20 The other side, on the left-hand side of  
21 your packet, you should have had a copy of the agenda.  
22 There are some questions and answers related to source  
23 tracking that you might find of interest and use.  
24 There's a copy of a completed transaction form. This  
25 is basically the same thing that you're going to see

1 in part of the poster sessions, this handy take-home  
2 version.

3 There is a copy of the code of conduct.  
4 That is one of the base documents for the rulemaking.  
5 And there's a copy of the -- it's an IAEA document,  
6 categorization of the radioactive sources.

7 We also have -- and, as Mark mentioned,  
8 there are several poster sessions we have. As I  
9 mentioned, the transaction forms are out there. We  
10 also have some information on the import/export rule.  
11 That's the rule for anyone who is importing or  
12 exporting category 2 and above levels of material.

13 That rule will impact you. It takes  
14 effect at the end of the year. They have a little  
15 poster. And they also have two handouts: a copy of  
16 the rule and then a little fact sheet.

17 We also have information on our Web-based  
18 licensing system. This is a new project that the NRC  
19 is going to be implementing. I think roll-out is  
20 early next year -- is that correct? -- sometime,  
21 anyway, sometime in the spring of next year.

22 Basically a lot of it is for our internal  
23 use. Licensees will also be able to apply for new  
24 licenses online or amendments. They may be able to  
25 check status of some of those licensing actions. So



1 it's going to be useful. There's a little brochure.  
2 I encourage you to pick one up and take a look at it.  
3 The roll-out will be sometime next year.

4 Now, as Mark mentioned, there is a sign-up  
5 list outside for any of the speakers who would like to  
6 give oral comments. If you don't wish to give oral  
7 comments, there are little note cards, those note  
8 cards outside by the speaker registration. So you can  
9 write your comment on that.

10 You can give those to the ladies at the  
11 registration desk. You can give them to Mark. You  
12 can give them to me. You can give them to the court  
13 reporter. And we'll make sure that those get into the  
14 public record. And obviously you can submit the  
15 comments by any of the methods that are listed in the  
16 Federal Register notice.

17 Basically today's format, I'm going to  
18 give you a little background on the rule itself, some  
19 discussion of what the actual rule requires, some of  
20 the rule content, a little bit on schedule. And then  
21 we'll basically invite you to provide comments.

22 As Jack mentioned, this effort has not  
23 been limited to NRC. We have had involvement from  
24 agreement states and from 11 other federal agencies.

25 We did form an interagency coordinating

1 committee. We had steering committees. We had  
2 working groups. There was a lot of very intense  
3 effort getting to this point. This system and the  
4 rule reflect the needs of all of those other agencies.  
5 Among those, as Jack mentioned, are Homeland Security,  
6 DOE, EPA. Some of those agencies I believe have  
7 representatives here today.

8 Also, as was mentioned, NRC and DOE got  
9 together. And they formed a task force. That task  
10 force developed a report on RDD. That report did  
11 contain a recommendation to develop a national source  
12 tracking system.

13 In that same time frame, the NRC was  
14 supporting U.S. government efforts to establish  
15 international guidance for the safety and security of  
16 sources of concern. Those efforts led to a major  
17 revision of the IAEA code of conduct. That's one of  
18 the handouts that was in the information packet.

19 The code was approved by the IAEA board of  
20 governors in September of 2003. And that was about  
21 the time that we started looking into some of these  
22 other security aspects.

23 And, again, the code did contain a  
24 recommendation for a source registry for each country.  
25 It contained category 1 and category 2 sources.

1           We have made a non-legally binding  
2 political commitment, is how it's described, to the  
3 code of conduct. I was noticing recently the  
4 President signed the Energy Policy Act of 2005 on  
5 August 8th. So it was just earlier in this month.  
6 One of the provisions in there is that we will have a  
7 national source tracking system. It dictates that the  
8 final rule for that system will be issued by August  
9 8th, 2006.

10           So we believe that this proposed rule is  
11 consistent with the act. We have taken a look at it.  
12 There are a couple of exceptions related to some of  
13 the isotopes that will be covered. And I will talk  
14 about that a little bit later.

15           I would like to point out, source  
16 tracking, it's not isolated. It's part of an  
17 integrated and complementing efforts to enhance the  
18 security of materials.

19           There are a lot of other aspects that we  
20 had ongoing. We issued I think earlier in the year a  
21 rulemaking on security for portable gauges. We have  
22 issued in July, I believe it was July 1, a ruling for  
23 exported materials at the category 1 and category 2  
24 levels.

25           We have issued orders to irradiators and

1 manufacturers. We have issued orders related to  
2 transportation of these materials. And we are going  
3 to be issuing in the next few months additional orders  
4 to some more licensees that have category 1 and  
5 category 2 sources.

6 So all of those activities work together  
7 to form the security groups for these materials. And  
8 I will say that some of the orders that we have been  
9 issuing, we will codify those. We will be doing  
10 rulemakings on those in the next couple of years to  
11 get those in the regulations.

12 A little background on the rule. The  
13 proposed rule was published July 28th. It's out there  
14 for a 75-day public comment period. Those comments  
15 are due October 11th. As I have mentioned, we are  
16 having this public meeting and one in Houston.

17 Now, there are several methods that you  
18 can submit comments by: Mail, e-mail, hand delivery,  
19 fax. Those are outlined in the Federal Register  
20 notice and in that one-page handout in your  
21 information packet.

22 Now, obviously you can also provide  
23 comments at today's meeting. And, again, whether you  
24 want to make oral comments or you want to provide  
25 written comments, either of them we will accept. We

1 will make sure that they get into the public record.

2 The proposed rule is actually being  
3 promulgated under the provisions of common defense and  
4 security. And what this means is that the rule  
5 applies to NRC licensees as well as agreement state  
6 licensees. So it will apply to everyone at the same  
7 time.

8 The states will not have to have a delay  
9 to promulgate their own regulations. These  
10 regulations will apply to agreement state licensees.  
11 Everyone starts reporting at the same time basically.

12 Primary licensees impacted by the rule  
13 include manufacturers and distributors, irradiators,  
14 medical facilities involving radiation teletherapy,  
15 high and medium dose rate brachiotherapy,  
16 radiographers. And some of the well logging sources  
17 also are covered by this.

18 In addition, DOE plans to provide  
19 information on the sources that they have at their  
20 sites into the system. So it truly is a national  
21 system.

22 The rule requires these basic provided  
23 things. And I will be talking about them in a little  
24 more detail in a couple of slides.

25 The thresholds for reporting. Both the

1 RDD, NRC, DOE RDD reports establish isotopes and  
2 thresholds at which a source tracking system should be  
3 established. The code of conduct indicated for  
4 category 1 and category 2 sources we should do a  
5 source registry.

6 The NRC adopted the IAEA category 2 values  
7 to allow alignment between domestic and international  
8 efforts to increase the safety and security of  
9 radioactive sources.

10 And I will say that we added seven  
11 isotopes to the list that were not in the IAEA code of  
12 conduct that came from the RDD report. The code  
13 values come from IAEA tech box 1344, which is one of  
14 the handouts that was in your information packets.  
15 That provides how the numbers were determined.

16 Basically, the tech doc considered the  
17 potential use associated with non-violent use,  
18 considering normal quantity use in various  
19 applications. It included both RDDs and REDs.

20 And, again, your information packet  
21 contained a one-page table that had the isotopes and  
22 the thresholds that would be addressed by the rule.

23 I will say that the code of conduct  
24 included radium-226. Up until recently, we did not  
25 have authority for that. And so when the rule was

1 published, we did not yet have authority. So it was  
2 not included. But since the Energy Policy Act gives  
3 us authority over discrete sources of radium-226, we  
4 plan to include those in the final rule.

5 The Energy Policy Act also prohibited NRC  
6 from addressing certain materials in the source  
7 tracking system. And some of those materials were  
8 special nuclear material.

9 So there are three plutonium isotopes that  
10 were included in the rule that we will now delete.  
11 And those isotopes are plutonium-236, 239, and 240.  
12 So the only two plutonium isotopes that will be  
13 included in the final rule are plutonium-238 and  
14 plutonium-239 beryllium sources, so just the PB  
15 sources for that isotope. Because those were in the  
16 code of conduct, that's why they are still included.

17 One of the items that the rule requires is  
18 manufacturers to assign a unique serial number to each  
19 nationally tracked source. The reason for this is  
20 that the system will track sources by combination of  
21 the make, model, and serial number. That was the  
22 easiest way to do it. And while most manufacturers we  
23 do believe actually already make them this way, we  
24 want to make it a requirement so that there is just no  
25 question.

1           The licensees will be required to report  
2           their initial inventory. We have to have a starting  
3           place for the source tracking system. So we have to  
4           know what you have at day one basically.

5           The category 1 sources are intended by the  
6           end of next year and the category 2 in March of 2007.  
7           There may be some delay in that. These are our goal  
8           dates, but we can't obviously track the material and  
9           have it reported until we get the system developed.

10          And that is running a little bit behind.  
11          So we don't know quite yet when that date will be, but  
12          the final rule will reflect the actual dates of when  
13          we start tracking.

14          Now, many licensees have been involved  
15          with our database survey. We went out starting near  
16          the end of 2003. And we did a survey of licensees  
17          authorized to possess category 1 and category 2  
18          materials.

19          We had a very good response rate from  
20          that. We're continuing that. We're going out now,  
21          2005. We'll go out in 2006. And depending on when  
22          the source tracking system is up and running, we may  
23          go out in 2007.

24          To make it a little easier for licensees,  
25          the information that you reported to the database, we



1 will load that into the national source tracking  
2 system. And then we'll provide a copy to those  
3 licensees, asking them to update, verify that the  
4 information is correct. So that will make that  
5 initial inventory provision a little easier.

6 Basically, this is a transaction-based  
7 system. So we're requiring you to report  
8 transactions. And basically that is manufacturer of  
9 a new source. And that will just be a category 1 or  
10 category 2 source when you transfer those sources to  
11 another licensee, when that other licensee receives  
12 those sources, and then ultimately when you actually  
13 dispose of those sources, so very, very basic.

14 For the manufacturer, we expect you to  
15 provide company identification information. That's  
16 basically the name, your address, your license number.  
17 For NRC licensees, it would be your docket number,  
18 just that basic ID information.

19 And the same thing for the sources. We  
20 want the basic source identification information, the  
21 source strength at the time of the manufacture, who  
22 the manufacturer is, the model number, the serial  
23 number, and the manufacture date.

24 For transfers, again, the company  
25 identification information. In this case, it would be

1 for both the shipping, the company that has a source  
2 and is submitting to somebody, and the receiving  
3 company. But, again, it's the basic information: the  
4 company name, address, license number; and, again,  
5 basic source information.

6 The extra information in this case is  
7 shipping date, what date did you actually ship the  
8 material out on, and then what is the estimated  
9 arrival date.

10 That information is very important because  
11 that way the system if that material doesn't arrive on  
12 time can notify NRC or other agencies. And it gives  
13 us a head's up to the immediate problem.

14 For those transfers that involve going to  
15 a waste broker or to a disposal facility, we're asking  
16 that you provide the waste manifest number and a  
17 container identification number. There's a reason for  
18 that, which will become clear in a couple of slides.

19 Again, we seek basic information again:  
20 the company identification that's reporting, who  
21 actually sent the source to you, the source  
22 information, then the receipt date. And, again, the  
23 waste manifest number containment contained with  
24 identification.

25 Now, the proposed rule does require

1 information on the disposal of sources. Now, we're  
2 not asking the licensees at the disposal facilities,  
3 at the waste broker facilities to actually open up the  
4 drums or whatever container it is and verify that the  
5 source is in there.

6 Therefore, you only have to provide  
7 manifest number and container identification number  
8 along with your company identification number and then  
9 the date of disposal and method of disposal. The  
10 system will match up that manifest number and a  
11 container identification number. That will match it  
12 up to those sources.

13 There are several different methods, as we  
14 said, that you can submit the information. You have  
15 to provide the transaction information by the close of  
16 the next business day after the transaction. There  
17 are several methods in which you can do that: online,  
18 an electronic file, fax, mail, or you could do it by  
19 telephone with follow-up by mail or by fax.

20 We encourage licensees to set up an  
21 account with the national source tracking system so  
22 that you can do it online. This is the easiest method  
23 to do it.

24 You'll be given log-in information,  
25 password. You can go online. And once your account

1 is set up, your company identification information is  
2 already there. So you don't have to answer that  
3 again. You don't have to write it out on a form.

4 Once the source has been received at your  
5 site, if you want to transfer it to some -- the  
6 sources are already listed. All you have to do is go  
7 in and click on a source and then indicate the  
8 transaction that you would like to do. So it makes  
9 the recording a lot easier, a little more error-free.  
10 So we really are encouraging the licensees to set up  
11 an account and to do it this way.

12 Those licensees that do large numbers of  
13 transactions on a daily basis, for instance,  
14 manufacturer or distributor, they can do an electronic  
15 file, basically do a batch load. They can get all of  
16 their transactions for a given day. They can send us  
17 an electronic file and download it into the system;  
18 again, very easy way to do it.

19 It's extremely important that the  
20 information in the source tracking system be accurate  
21 and reliable because otherwise it doesn't really do us  
22 a lot of good.

23 So to accomplish this, we're doing two  
24 things. One is if you discover an error, we want you  
25 to correct it. And so the rule will require you to

1 make that correction within five days of the  
2 discovery. It may be you recorded the wrong model  
3 number or the transaction you were sending to someone  
4 and you put maybe the wrong company. We want you to  
5 fix those things.

6 Maybe it was a typo. You put in the wrong  
7 serial number. It was supposed to be a seven, and you  
8 hit two or something. We want you to fix those when  
9 you discover them.

10 The other aspect of that is we are going  
11 to require an annual verification and reconciliation  
12 of the data. This will be conducted once a year.  
13 Basically it would ask you to go in, take a look at  
14 the information in the source tracking system. You  
15 will have access to that. If you have it set up in an  
16 online account, we will mail you the information so  
17 that you can check.

18 You go through and say, "Yes, this is  
19 correct." You don't really need to do anything else.  
20 But if the information is incorrect, we're asking you  
21 to fix the problem: either file the missing reports  
22 or correct any information that had been submitted  
23 incorrectly.

24 At that first round currently -- this is  
25 scheduled for June 2007. That date, again, may change

1 depending on exactly when the source tracking system  
2 is up and operating.

3 We invite comment and encourage comment in  
4 any and every aspect of the rulemaking. But there are  
5 six areas in which we are specifically seeking your  
6 input. And your input is important in these areas  
7 because we haven't decided exactly what we're going to  
8 do here. So it's very important that you provide  
9 input.

10 The first of those areas is inclusion of  
11 category 3 level sources. A category 3 level source  
12 is one-tenth of the category 2 level. For instance,  
13 if the threshold value for category 2 is 50, the  
14 category 3 threshold would be 5, so basically  
15 one-tenth of that.

16 We're basically looking for information on  
17 the additional number of licensees impacted, the  
18 number of sources that are out there, the number of  
19 transactions that occur. We need this information to  
20 determine cost burden for whether we want to include  
21 those category 3 sources.

22 Our view right now is not to include but  
23 there has been some discussion in various areas that  
24 maybe we should go down to category 3. So we invite  
25 your comment on that.

1           The second area that we had actually  
2 sought comment was the regulations on radium-226.  
3 This is actually moot now since the Energy Policy Act  
4 gives us the authority over discrete sources of  
5 radium-226. There will be no need for the states to  
6 adopt regulations to require reporting. They won't  
7 have the authority. We will. We will include it in  
8 our final rule.

9           The third area is reporting use at  
10 temporary job sites. This impacts primarily I would  
11 say the radiographers and the well loggers that use  
12 the material at temporary sites and so that they are  
13 moving it around, point out there is no change in  
14 ownership. The company still maintains control of  
15 that material. There are still requirements, security  
16 requirements, that they have to implement.

17           But should we require that reporting? So  
18 basically how much burden would this impose on those  
19 licensees? How frequently is there a change in job  
20 location? Would the licensees even have the tools to  
21 report this type of information because they're out in  
22 the field? They may not come back to their office so  
23 that they would have the tools to actually report this  
24 information. Should we include all temporary job  
25 locations or just those that are maybe outside of the

1 state?

2 Those are the types of things. And we  
3 need your information. We need your input because we  
4 haven't decided where we are going to go on that.

5 The fourth item was indicating for waste  
6 shipments, for tamper indication. We're not requiring  
7 the waste brokers or the disposal facilities to  
8 actually verify that the source is in a container.  
9 That could mean that someone hijacked the shipment,  
10 took the source out, and then sent it on. And you  
11 would never know.

12 So we were wondering, should we require  
13 these waste brokers and disposal facilities to inspect  
14 the shipping container to see if there's any  
15 indication of tampering, which might be an indication  
16 that there is a problem? Maybe we need to do a little  
17 more investigation; so, again, encourage you to  
18 comment on that area.

19 The fifth area was inclusion of quality  
20 assurance provisions on data submission. Obviously  
21 the data quality is very important to the system for  
22 it to operate as we intend. And we do expect  
23 licensees to provide us correct information, but we're  
24 not requiring any specific QA aspects in the proposed  
25 rule other than if you find an error, correct it, and



1 then the annual verification.

2 So the question is should we require some  
3 additional QA? One possibility is a double check of  
4 the accuracy using two independent staff members,  
5 basically the one person that prepares the report. We  
6 would have a second person that would actually go in  
7 and verify that the information is correct before it  
8 was submitted.

9 So we're seeking comments. You know, what  
10 are the appropriate quality assurance aspects for this  
11 sort of submittal, what the additional burden on the  
12 licensee might be? For smaller licensees, is it even  
13 possible for you to do that? Do you have enough staff  
14 that you could do an independent check of the data?

15 Particularly if you're doing an online  
16 submittal, how could the QA work? So we're really  
17 encouraging you to provide comment on those areas.

18 And then the last issue was data  
19 protection by licensees. This information in the  
20 source tracking system, it's going to be official use  
21 only. It's not going to be safeguards, but it will be  
22 OUO.

23 For OUO information, there's no specific  
24 requirement on licensees to protect that information.  
25 It's basically the equivalent of company proprietary

1 information. And you can share it with others at your  
2 discretion so that there really are no required  
3 controls.

4 And so basically we're seeking comment on  
5 whether we should require licensees to provide some  
6 additional protections of this information, not to the  
7 level of safeguards I don't think but somewhere in  
8 between. Is that something that should be done?

9 And, as I said, your input on these areas  
10 is very important. We really do need the information  
11 from the impacted stakeholders so that we could make  
12 an informed decision and to actually weigh the extra  
13 burden to the benefit that we might receive,  
14 particularly from these aspects. But, as I said,  
15 we're looking for comment for all areas.  
16 Specifically, we really are seeking input in these.

17 The rule also invites comment on the  
18 information collection aspects. Actually, those  
19 comments are due today, the comments on the rule  
20 overall October 11th, but the information collection  
21 is today.

22 The supporting statement is on our Web  
23 site, [ruleforum.llnl.gov](http://ruleforum.llnl.gov) if you haven't seen that. We  
24 would encourage you to provide comments on that. And  
25 those comments go to OMB, not to us.

1           Finally, as far as schedule, as I said,  
2           the rule was published July 28th. This is our first  
3           public meeting on this topic. And we plan a second  
4           meeting on September 20th in Houston, Texas. That is  
5           going to be at state facilities. As Jack mentioned,  
6           we are very appreciative of them hosting us for that  
7           meeting.

8           We plan a phased implementation. Right  
9           now we're planning that to start in the fall,  
10          basically into 2006. We plan to hold stakeholder  
11          workshops. Basically this would be for the licensees  
12          who are going to have to be making the reports. And  
13          the idea is that you would actually get hands on so  
14          you could set up a phony account so that you could  
15          actually practice and do a couple of transactions.  
16          You'll be given instructions on how to set up an  
17          account, how you make the reports.

18          When we have those workshops, we will  
19          probably be having them at least one in each region.  
20          Final numbers and locations obviously have not been  
21          determined. And, again, it may slip. It may be in  
22          the spring, early Summer of 2007 before we actually  
23          have those.

24          With that, I thank you for your attention  
25          and turn back over to Mark and for comments.

1 MODERATOR DELLIGATTI: Okay. I've got an  
2 initial list of three people. And as you folks are  
3 commenting, I will go back and check again, see if  
4 anyone else has signed up officially.

5 The first person on the list is Debbie  
6 Keyes from AMEC. Debbie, you can use either of these  
7 mikes on the side or if you want to come up here and  
8 use this mike, that's fine as well.

9 PUBLIC COMMENT

10 MS. KEYES: Good morning. I would like to  
11 comment on the temporary job site part of the proposed  
12 rule on industrial radiography. Several problems  
13 occurred in my trying to anticipate reporting all of  
14 our transactions, if you will, to temporary job sites.

15 If we just have five crews down the road,  
16 they could conceivably go to 8 different jobs each  
17 during the day, which happens to be 40 transactions.  
18 Unless we get the program down to considering tiny  
19 factors, we'll report the eight transactions during  
20 one day, but you're still not going to know where that  
21 source is unless we list the times. And this is then  
22 going to become a large problem.

23 And what about the breaks for lunch or  
24 stopping to get gas? Do we need to cover the entire  
25 time period as transactions while it's out?

1           They go to a job. They have to wait for  
2           a tie-in. So they decide they go do something else  
3           while they're waiting, come back to that same job.  
4           Accuracy is going to be a very large problem if we're  
5           going to get into temporary job sites. And we are  
6           going to have to get down to the level of actually  
7           stating what time the source is at each job.

8           The other problem with that is entering  
9           the data by 5:00 p.m. the next day. It's going to  
10          take the entire day to gather the information and try  
11          and get some semblance of correctness. It's going to  
12          be a full-time job for a person who only has five rigs  
13          on the road and there are times when larger companies  
14          have a lot more.

15          Since we're going to be under an immediate  
16          detection assessment and response order anyway, we're  
17          going to have to know where those sources are every  
18          second of the day and immediately detect, assess, and  
19          respond to any problem. If the information isn't  
20          required to be entered into the database until 5:00  
21          p.m. the following day, you're going to know about it  
22          the day before anyway if, in fact, we're following the  
23          order that we're under. So there won't be any  
24          improvement in response time for something that  
25          happens to one of our sources.

1           It probably would be a better idea and we  
2 wouldn't have any problem with a shorter verification  
3 period of inventory, rather than an annual  
4 verification. Because of the rate of decay at the  
5 sources that we use, next year we're not going to have  
6 anything we had this year anyway. After six months,  
7 it's going to drop off the system.

8           So maybe for industrial radiographers, a  
9 monthly verification of inventory or even a daily  
10 verification of inventory would take us a lot less  
11 time and would be a lot easier than doing the  
12 temporary job site requirement.

13           Thank you.

14           MODERATOR DELLIGATTI: Thank you.

15           The next speaker I have on the list is  
16 John Whittenborn, MIRC. John?

17           MR. WHITTENBORN: Good morning. My name  
18 is John Whittenborn. I'm with the law firm Collier,  
19 Shannon and Scott in Washington, D.C. Our firm  
20 represents a group called the Metals Industry  
21 Recycling Coalition, MIRC.

22           MIRC is an ad hoc coalition of metal  
23 industry trade associations and a couple of companies.  
24 Members include the American Iron and Steel Institute;  
25 the Steel Manufacturers Association; Specialty Steel

1 Industry of North America; the Copper and Brass  
2 Fabricators Council; the Nickel Institute; and the  
3 International Nickel Company, INCO.

4 MIRC supports the Commission's proposed  
5 rule to implement a national source tracking system to  
6 monitor and provide increased oversight to certain  
7 sealed sources. However, my comments are addressed to  
8 issue number one that you had on the list. We believe  
9 the program should be expanded to include the category  
10 3 sources.

11 MIRC members, the metals recyclers,  
12 comprise a major sector of the nation's economy. Each  
13 member of MIRC and their companies consume scrap metal  
14 to make new metal products. In fact, our members are  
15 the largest recyclers by weight in the country.

16 Each year, still mills, for example, that  
17 operate electric arc furnaces and basic oxygen  
18 furnaces recycled more than 75 million tons of scrap  
19 into new steel products.

20 Steel products in general contain about 66  
21 percent recycled content. These products have  
22 wide-ranging applications, including many consumer  
23 products that you're all familiar with: food and  
24 beverage containers; automobiles; homes; and in the  
25 specialty steel instance, even surgical implants.

1           Copper and brass materials are also widely  
2 recycled into a variety of products that go into  
3 consumer use. In 1999, the copper industry recycled  
4 approximately 1.6 trillion tons of scrap into new  
5 products. Copper and brass products contain on  
6 average about 50 percent recycled content.

7           Nickel is also a highly valued metal that  
8 is recycled at an exceptionally high rate.  
9 Increasingly, nickel is even recovered from waste  
10 materials, such as batteries, and from the electric  
11 arc furnace dust that is produced in the steel mills.

12           Recycling of scrap metals has become a  
13 sophisticated technology-based industry involving  
14 highly controlled scrap selection and blending  
15 processes necessary to meet detailed customer  
16 specifications, including specifications and  
17 certifications concerning radioactivity.

18           Recycling generates significant  
19 environmental benefits. MIRC members recycle material  
20 that otherwise might be disposed in landfills or  
21 otherwise improperly disposed. The recycling  
22 conserves a significant amount of energy by using a  
23 feed stock of scrap, instead of virgin ores.

24           We estimate the energy savings from steel  
25 mini mill industry alone conserves enough power each



1 year to supply electricity to the City of Los Angeles  
2 for eight years. It's a lot of electricity.

3 Over the past decade or so, an  
4 industry-wide problem, though, has emerged that is  
5 rapidly growing in magnitude. This problem is the  
6 amount of scrap metal contaminated with radioactive  
7 material.

8 Some of this contamination in scrap is the  
9 result of background radiation absorbed by steel  
10 products, such as oil and gas transmission pipes. A  
11 more dangerous and potentially life-threatening form  
12 of contamination, however, is the presence of shielded  
13 radioactive sources, typically cesium-137 or  
14 cobalt-60, in the scrap supply.

15 According to the General Accounting  
16 Office, there are approximately 40,000 general  
17 licensees authorized to possess approximately 600,00  
18 shielded radioactive sources in the United States  
19 alone.

20 To date, there's been very little effort  
21 to track these devices to ensure that they are managed  
22 properly. As a result, outdated sealed sources are  
23 too often discarded and channeled into the recycling  
24 stream for recovery of their metal components.

25 Radioactive sources and scrap feed stock

1 pose a number of serious problems for the  
2 metals-recycling industries. A radioactive source  
3 that is inadvertently melted in a furnace can result  
4 in dangerous levels of radioactive exposure for mill  
5 workers and even the surrounding community.

6 When a radioactive source is melted,  
7 depending upon the isotope involved, it may  
8 contaminate the slag and slag-handling equipment, the  
9 finished metal product, the furnace itself, the bag  
10 house, the duct systems, and the surrounding facility.

11 In one instance in Florida recently, a  
12 teletherapy unit was discovered prior to melting,  
13 fortunately, that was rated at 5,000 curies of  
14 cobalt-60. Had this unit contained its rated quantity  
15 of cobalt-60 and then melted, it would have subjected  
16 the melt shop workers and the surrounding community to  
17 a potentially lethal dose of radiation.

18 Cobalt-60 was, in fact, melted at a  
19 Mexican steel facility in 1983. The workers and the  
20 community suffered serious radiation exposure.  
21 Unfortunately, that steel was imported into the United  
22 States before the incident was discovered.

23 In addition to exposure concerns, when a  
24 source is melted, each component of the system and the  
25 steel mill or the brass mill must be completely

1 cleaned out and many mill components discarded.

2 Contaminated items must be disposed of,  
3 typically at cost, at low-level radioactive waste  
4 disposal facilities. And the steel mill typically  
5 must be closed while the remediation and replacement  
6 of equipment take place. Often this can take several  
7 weeks, maybe even months.

8 The combined cost of the remediation,  
9 disposal, and closure following an inadvertent source  
10 melt at a steel mill typically requires a remediation  
11 program that can cost somewhere from 12 to 24 or more  
12 million dollars.

13 Since 1984, there have been 84 known melts  
14 of significantly radioactive sources in the  
15 metals-recycling industry internationally. In each  
16 case, workers were placed at unnecessary risk and  
17 facilities saddled with excessive remediation and  
18 disposal costs while being forced to close for  
19 extended periods of time.

20 One of these 84 incidents occurred last  
21 year in Florida. This facility melted a significant  
22 source containing cesium-137. Fortunately, no  
23 employees were subjected to dangerous exposures, but  
24 the facility was forced to close for 27 days and  
25 incurred several million dollars in remediation and

1 disposal costs. So it's a problem that still occurs.

2 The downstream customers of our MIRC  
3 member companies are also extremely concerned about  
4 radioactivity in recycled metal products. The metals  
5 industry has worked diligently for many years to build  
6 consumer confidence in the safety and the utility of  
7 products made from recycled metal.

8 However, the public, often fueled by  
9 sensationalized news reports, remains concerned about  
10 the safety of recycled metals in products that they  
11 use.

12 The mere perception that metal products  
13 are unsafe because they are made from potentially  
14 radioactive scrap metal may lead to massive customer  
15 deselection.

16 Notwithstanding government assurances that  
17 scrap is safe and that low levels of radioactivity are  
18 safe, consumers simply do not want any added radiation  
19 to their homes, automobiles, or workplaces. Rightly  
20 or wrongly, consumer confidence would be severely  
21 undermined if even small amounts of low-level  
22 radioactive sources for scrap material enter into our  
23 melting facilities.

24 To preserve this consumer confidence and  
25 the safe and continued operation of the mills, metals

1 companies have implemented use of sophisticated  
2 radiological detection devices to screen scrap  
3 shipments before they enter a facility.

4 Many facilities also screen their scrap  
5 shipments before they enter the furnace, a second  
6 level of detection. However, even the most advanced  
7 detection systems cannot be 100 percent effective in  
8 locating a single shielded source within a truckload  
9 or a rail car of scrap metal. And if the shield on  
10 the source remains fully intact through the scrapping  
11 process, the source may not be detectable at all.

12 In order to screen most effectively the  
13 incoming scrap, metals-recycling companies typically  
14 calibrate their detection equipment to be as sensitive  
15 as possible, oftentimes at or slightly above  
16 background levels for the area. Consequently,  
17 low-level sources with activity levels that may not  
18 pose exposure concerns will trip the sensors on a  
19 regular basis.

20 A conservative estimate based upon  
21 conversations with several of our MIRC member  
22 companies indicates that a typical mill may sound  
23 between 20 and 50 false alarms per month. Each of  
24 these requires a response.

25 Our concern is that mills may be forced to

1 decrease the sensitivity of their equipment so that  
2 the number of false positive alerts becomes more  
3 manageable. And fewer process interruptions occur.

4 However, turning up the dial, if you will,  
5 on the detection equipment leaves mills exposed to  
6 greater risk of exposure to an inadvertent melt of a  
7 higher-level source.

8 MIRC has worked for more than a decade,  
9 closely with NRC and DOE and EPA, to develop  
10 mechanisms to exclude radioactive materials from the  
11 scrap supply.

12 We worked with NRC to develop a  
13 registration program for certain general license  
14 sources and for the imposition of registration fees.  
15 We strongly supported NRC's efforts to increase base  
16 civil penalties for the loss, abandonment, or improper  
17 transfer or disposal of sealed sources and devices.  
18 And we have also worked closely with NRC to seek a  
19 safe and cost-effective means of disposing of waste  
20 following the inadvertent melting of a sealed source.

21 Most recently, MIRC worked with the  
22 Nuclear Regulatory Commission to prevent the release  
23 of slightly radioactive scrap metal into the recycling  
24 stream as a result of the decommissioning of NRC  
25 facilities.

1           We found initial success when NRC staff  
2           developed a proposal that we thought would have been  
3           effective in keeping potentially radioactive scrap  
4           metal out of the recycling stream.

5           The staff proposal would have established  
6           a one millirem annual dose limit for releasing solid  
7           materials that originated in radioactively restricted  
8           and/or impacted areas at NRC license facilities into  
9           a limited number of pathways.

10          Of specific importance to our metals  
11          industry, the staff proposal would not have allowed  
12          for the release of metals for recycling on a  
13          preapproved basis. Instead, scrap metal release for  
14          recycling could only have occurred on an individual  
15          basis with NRC specific approval for each authorized  
16          release. As a result, the radioactive scrap metal  
17          would only be released on this case-by-case basis and  
18          with close oversight. And materials exceeding the one  
19          millirem annual dose limit would have been entirely  
20          segregated from the recycling supply, scrap supply.

21          Unfortunately, on June 2nd of this year,  
22          NRC announced the Commission voted to disapprove  
23          publication of the staff's proposal regarding the  
24          disposition of solid materials. Consequently, the  
25          integrity of the metals industry scrap feed stock

1 remains at risk.

2 This risk is compounded by the increasing  
3 dismantling of aging Cold War era facilities  
4 containing materials and equipment with residual  
5 levels of radioactivity. Additionally, as the value  
6 now of scrap metal continues to rise, scrap metal  
7 dealers become less discriminating about the sources  
8 of scrap and, instead, place a premium on gathering as  
9 much scrap as they can. Our problem is getting worse.

10 Now, I'm sorry for all of this background,  
11 but it was necessary because it's against this  
12 background that I would like to offer our comments on  
13 the NRC proposed tracking rule.

14 NRC's currently proposed rule would make  
15 we think great strides for assisting the metals  
16 industry in eliminating radioactive sources from the  
17 scrap feed stock because it provides better oversight,  
18 management, and stewardship of certain sealed sources.

19 As a result, sealed sources subject to the  
20 proposed rule that are nationally tracked and subject  
21 to increased NRC oversight are much less likely to be  
22 managed in a way as to lead to their inadvertent or  
23 intentional disposal in the waste or the recycling  
24 streams.

25 Under this proposed rule, though, NRC is



1       only proposing to extend the tracking and management  
2       requirements to the category 1 and category 2 sources.  
3       Category 3 sources, which are the main concern to the  
4       scrap industry, would not be regulated under this  
5       proposal.

6               We understand that NRC decided to limit  
7       the proposed rule to categories 1 and 2 sources to  
8       ensure better management of the sources that had the  
9       greatest potential to be used by terrorists in an RDD  
10      or radiological exposure device. However, in failing  
11      to address category 3 sources, NRC is neglecting to  
12      provide critical oversight of a category of sealed  
13      sources, some potentially quite dangerous, we think,  
14      that are most likely to end up in the scrap supply.

15             In the preamble to the proposed rule, NRC  
16      identified category 3 sources as those that have  
17      one-tenth of the radioactivity of category 2 sources.  
18      However, the statement is somewhat misleading.  
19      Category 3 sources are sources with radioactivity  
20      levels that start at one-tenth of the category 2  
21      sources, but they also include sources that have  
22      radioactivity levels right up to the bottom threshold  
23      of the category 2 sources.

24             Accordingly, the difference between a  
25      category 2 source and a category 3 source can be

1 negligible. Under this proposed rule, category 2  
2 sources will be tracked and monitored while category  
3 3 sources, which may have radioactivity levels nearly  
4 equal to a category 2 source, will remain unchecked  
5 and unmonitored.

6 Perhaps more disconcerting is the fact  
7 that NRC is proposing to automatically delist and  
8 cease tracking category 2 sources at the point at  
9 which they decay below category 2 levels.

10 It is likely that many licensees may  
11 believe that their management responsibilities with  
12 respect to decayed sources have also ceased.  
13 Accordingly, this proposed rule may result in even  
14 more highly radioactive category 3 sources ending up  
15 in the scrap or the recycling streams.

16 In this proposed rule, NRC notes that  
17 unless accumulated in significant quantity, category  
18 3 sealed sources may not have enough radioactivity to  
19 be used in a dirty bomb.

20 However, some of the more radioactive  
21 category 3 sources may pose a threat nearly comparable  
22 to the threat posed by category 2 sources. And all  
23 category 3 sources are capable of wreaking havoc at  
24 metals-recycling facilities. The metals-recycling  
25 industry needs protection from these sources, not

1 increased vulnerability.

2 MIRC supports the premise of this  
3 important rulemaking. NRC's proposals is in many ways  
4 entirely consistent with the various steps that we  
5 have been advocating for many years. Assignment of  
6 unique serial numbers is critical to ensure that  
7 sources are properly managed throughout their use and  
8 at the end of their useful life.

9 And requiring licensees to assess their  
10 inventory on an annual basis is also necessary to  
11 ensure that proper stewardship is taking place.  
12 Requiring prompt and accurate reporting of all sealed  
13 source transactions gives NRC the necessary oversight  
14 to ensure that sources are monitored and never  
15 improperly disposed.

16 These common sense steps are equally  
17 necessary to track the category 3 sources, especially  
18 those that contain radioactivity levels comparable or  
19 nearly comparable to category 2.

20 Accordingly, as NRC's stated goal in the  
21 rulemaking is to reduce the availability of sources  
22 that could be used in a dirty bomb or other RDD,  
23 category 3 sealed sources should be tracked  
24 aggressively as well.

25 Moreover, category 3 sources currently

1 present a danger, as I mentioned, to the  
2 metals-recycling industry, its employees, and their  
3 communities.

4 While protecting against the development  
5 of a dirty bomb is an important goal, NRC must  
6 recognize that category 3 sources in the scrap stream  
7 also pose a threat to public safety. And that threat  
8 is very real.

9 Without adequate monitoring, the number  
10 and gravity of the 84 reported incidents that have  
11 occurred since 1980 will continue to occur and will  
12 likely increase.

13 When implemented, the national source  
14 tracking system will develop the infrastructure to  
15 track category 1 and category 2 sealed sources. And  
16 we believe that with modest additional investment, NRC  
17 has the ability to track category 3 sources as well.

18 If NRC declines to extend this proposed  
19 rulemaking to include the category 3 sources, they  
20 will foreclose an opportunity to advance a rule which  
21 is truly protective of public safety and the  
22 environment.

23 Thank you.

24 MODERATOR DELLIGATTI: Thank you, John.

25 I have one more speaker on the initial

1 list. Kate, I'm going to slaughter your last name if  
2 I try to say it. If you could introduce yourself when  
3 you get up there? Thank you very much.

4 MS. ROUGHAN: My name is Kate Roughan. I  
5 work for AEA Technology U.S.A. We manufacture and  
6 distribute radioisotopes for industrial, medical, and  
7 calibration uses.

8 As such, ourselves and our customers, this  
9 will have a significant impact on what we do and our  
10 customers do. Most of the isotopes on the list in the  
11 categories 1 and 2 we manufacture and distribute to  
12 hundreds of end users in the United States and in the  
13 world.

14 My first comment -- I have several  
15 comments. So you can jump in or whatever. My first  
16 comment falls on what Debbie said in terms of the  
17 temporary job sites. Most of the oil well logging and  
18 industrial radiography work takes place at remote  
19 outposts, various changes and locations on a daily  
20 basis, as Debbie said, maybe once a day, maybe twice  
21 a day, maybe a location for a week. They don't have  
22 access to computers or faxes and things like that. So  
23 it would be difficult to say that they received the  
24 source or they transferred the source to another  
25 location.

1           The other note is that as a manufacturer  
2           and distributor, we're required to notify the end user  
3           of a shipment of a category 2 source. We have to  
4           verify that they got the source. So there's already  
5           a mechanism in place that says that transition took  
6           place.

7           And under the protective measure order  
8           that's due to go out for oil well logging and  
9           industrial radiography, we'd have to have a system in  
10          place to detect and deter any loss or theft. So,  
11          again, you have kind of a close system already to  
12          monitor and protect that source.

13          Along with that, if you could reconcile  
14          the inventory, instead of a daily basis, as Debbie  
15          said, maybe a monthly or quarterly basis would make  
16          more sense for those types of licensees.

17          My next comment refers specifically to  
18          manufacturers. We receive bulk shipments of  
19          radioactive material from many different locations.  
20          That bulk shipment then gets broken down and put into  
21          different capsules, different over-encapsulations with  
22          different serial numbers. I'm not sure how the  
23          tracking system is going to capture all of that  
24          information.

25          Also, at some end users, at oil well

1 logging customers as you put that sealed source into  
2 another bolt plug, that becomes a different serial  
3 number. So if they enter that serial number into the  
4 tracking system, you'll lose the trail. So something  
5 has to be set up so that can be covered adequately or  
6 determine what specific serial number has to be  
7 tracked throughout the entire lifetime of that source.

8 As for a manufacturing perspective, we  
9 manufacture many, many sealed sources a day.  
10 Typically they ship out the same day. Sometimes they  
11 don't. So for a manufacturer to enter the  
12 manufacturing data at the day of manufacture, we ship  
13 the source out two days to reenter that data. Because  
14 we ship the source does not make a lot of sense.

15 If we could just enter the data, as we  
16 ship the source to the end user, you still have the  
17 tracking system because internally we have to have the  
18 mechanism to monitor that inventory and any sealed  
19 source that we have in our possession. We're under an  
20 order for that. So, again, we're covered by  
21 regulation already.

22 A couple of other comments just to close  
23 out. I mean, I have a lot, but I'll just do the major  
24 ones here. There are some differences between how the  
25 other countries are implementing similar regulations

1 in the code of conduct. There does not seem to be a  
2 lot of consistency.

3 The European Union has the highest  
4 directive, which has different quantities that need to  
5 be reported. It's not going to be implemented the  
6 same way the U.S. is doing it. So I think that needs  
7 to be looked at very closely.

8 A problem for us as a manufacturer, we do  
9 receive radioactive material from many different  
10 countries. If the country is not adopting the IAEA  
11 code of conduct the same way the U.S. is, there are  
12 going to be inconsistencies in the data reported.

13 Some of the countries I know that we get  
14 material from will not be giving us information on  
15 specific serial numbers and things before we receive  
16 the radioactive material itself. So it's going to be  
17 difficult to track until we get into our possession.

18 Category 3 sources, I strongly recommend  
19 that they not be covered at this point. Most of those  
20 are generally licensed sources and devices. Most of  
21 the people don't even realize they have a license. I  
22 really don't think they'll understand the whole  
23 tracking system until they get a lot more education  
24 and understand what they need to do.

25 In addition, there's hundreds, thousands



1 of those sources out there. I think it's going to be  
2 difficult to get that system in place for that number  
3 of sources and for that number of different licenses.

4 A final comment, as a licensee that's been  
5 affected by pretty much any proposed rule or that's  
6 been put out from the security perspective, there  
7 needs to be an effort to make sure that all those  
8 different things have been looked at because there is  
9 some redundancy and there are some inconsistencies.

10 As I've said, from the temporary job site  
11 perspective, there's already a mechanism to realize  
12 that the licensee has got that source and that they  
13 have their own measures in place to keep protected and  
14 detect loss or theft.

15 I think that's it.

16 MODERATOR DELLIGATTI: Okay. Thank you  
17 very much, Kate.

18 Before we go on, I wanted to let you know  
19 that two more of our managers have arrived back.  
20 Charlie Miller is the Director of the Division of  
21 Industrial and Medical Nuclear Safety. And Mr. Tom  
22 Essig is the Branch Chief for the Material Safety  
23 Inspection Branch. Welcome to both of you.

24 Has anybody else signed up in the last  
25 minute or two to provide public comments? We have

1 gone through the list. If anybody would like to make  
2 a comment who hasn't signed up, just indicate by  
3 raising your hand and come up and introduce yourself.  
4 And you can use any of the mikes.

5 MR. KILLAR: Good morning. I'm Felix  
6 Killar with the Nuclear Energy Institute. We decided  
7 not to sign up because I figured everybody was saying  
8 things and I wouldn't have to say them, but they  
9 weren't said. So I guess I have to say them anyway.

10 First off, I'd like to talk a little bit  
11 about the agreement state program. We recognize you  
12 have compatibility of programs in place, but I think  
13 part of what Kate was talking about is that there is  
14 going to be a big education program that has to be  
15 done.

16 We need to make sure that what's done with  
17 the NRC and the agreement state licensee is very  
18 compatible, the education program out there is carried  
19 out very well because I know our manufacturers are  
20 going to do a lot to educate the end users of these  
21 sources and what have you. But they still are going  
22 to have to understand how this rule works, what their  
23 requirements are going to be and what have you because  
24 there are a number of mom and pops -- I like to use  
25 the term -- that will be affected by this. And they

1 have no idea a lot of times what these regulations or  
2 rules mean.

3 So we have a big education program to  
4 implement this, and we need to work, particularly with  
5 the agreement states, to make sure the education  
6 program is consistent throughout.

7 Our next point is on the use of the  
8 information and the implementation of this program  
9 through particularly the database. I heard from this  
10 morning's presentation and what have you that you have  
11 some workshops, but I think you have to have something  
12 before the workshops. I think you need to sit down  
13 with the users and work with the users on how you  
14 implement this stuff.

15 I know I have the same issue with my IT  
16 people. I tell my IT people what I want. And then  
17 they go and develop it. And they come back. And they  
18 say, "Here it is."

19 And I look. I say, "No. That's not what  
20 I told you I wanted. You gave me what you thought I  
21 wanted." So we need to work I think with the users of  
22 the database and the implementation of this prior to  
23 the workshops, put this in a very user-friendly format  
24 so people who will be using this information are very  
25 comfortable using it and working with it. Maybe

1     you've gotten close to it, but I don't think you're  
2     there. And I'd hate to have a system saying, "Okay.  
3     This is it" and then find out you need to tweak it a  
4     little bit, maybe tweak it beforehand and stuff.

5             One of the points that Kate made I'd like  
6     to reinforce is that we have a lot of people who  
7     manufacture and ship these things on the same day or  
8     within a couple of days of each other. It doesn't  
9     make a whole lot of sense to have them sending in two  
10    different forms.

11            If we can use the same form and have  
12    manufacturer check and a transfer check on the same  
13    form, you just send one form in at the same time, that  
14    way we would get away from at least one level of  
15    getting information in and stuff.

16            The next comment is on how corrections are  
17    going to be handled. You know, on a number of forms,  
18    you have correction forms. I didn't see that in any  
19    of the transaction forms or correction forms. So how  
20    are corrections going to be handled to make sure that  
21    if a correction isn't being sent in, instead of being  
22    a correction, it ends up as a double entry? So now we  
23    have a wrong form and a right form, and we need to  
24    make sure that we are corrected.

25            Plus, for people who are submitting this

1 stuff electronically, how are they going to be able to  
2 make those electronic changes or at least I assume  
3 they can go and make those electronic changes and  
4 stuff. We need to make sure that's clear on how  
5 that's going to be handled.

6 Another point that was touched on a little  
7 earlier that needs some more clarification is on decay  
8 and decay of these sources and as they go through to  
9 actually fall off the system because they've decayed  
10 below the threshold levels are because once they're  
11 captured on the system, they stay on the system. I  
12 don't think it's real clear in the rule. We need to  
13 make sure it's clear how this is going to be handled.

14 And the last thing, it's, again, one of  
15 the things that Kate captured here a little bit.  
16 We're having a number of industries joining up. I  
17 guess you call it a remanufacturing industry. They're  
18 taking older sources and what have you, orifice  
19 sources, and they're remanufacturing. They're melting  
20 them down and creating new sources from them, or  
21 they're machining them and what have you in new forms,  
22 what have you. And in doing that, you lose your  
23 unique identification number.

24 But nowhere in your tracking system do you  
25 have any way of handling that. You talk about

1 disposal, but you don't have for remanufacture or loss  
2 of the serial number or what have you. And you lost  
3 the ability to track that unique identification  
4 number. So those are some of the things needed to  
5 take into consideration.

6 Thank you.

7 MODERATOR DELLIGATTI: Okay. Thank you.

8 Anybody else who would like to comment at  
9 this time? Yes, sir? Please come up and introduce  
10 yourself.

11 MR. CLARK: Hi. I'm Jim Clark. I've had  
12 about 40 years in the nuclear business. A few of my  
13 clients are in this business. And I want to reiterate  
14 how difficult the human side of this data collection  
15 will be.

16 It won't be like the decades of collecting  
17 information at DOE and major facilities on special  
18 nuclear material. They have experienced people who  
19 are well-versed in this activity. You're embarking on  
20 something that needs a lot of attention on the human  
21 side or there will be chaos on this data collection.

22 The second part, having run a nuclear  
23 waste disposal site, I'd say I can't imagine an  
24 efficient tracking system that didn't confirm that the  
25 sources going to the disposal were really in the

1 disposal container.

2 And I think that the problems at Humboldt  
3 Bay and other sites spent a lot of time and attention  
4 trying to go back. And records would lead you to  
5 believe that you just can't assume that the sources  
6 really are in those wasting papers.

7 Thank you.

8 MODERATOR DELLIGATTI: Thank you very much  
9 for that.

10 Is anybody else ready to comment right  
11 now? Come on up. Introduce yourself.

12 MR. DIXON: I'm Chris Dixon, U.S.  
13 Inspection Services.

14 Currently we have over 50 sealed sources.  
15 On any given day, we can have over 50 jobs. And  
16 trying to report to a temporary job site, out of those  
17 50, they could go on 2 to 3 different jobs a day.

18 So, in reality, we could have over 150  
19 transactions that need to be reported by 5:00 p.m. the  
20 next day. This would require us to add additional  
21 full-time personnel, which in some locations could be  
22 a financial burden. And that's our thoughts on it.

23 As far as the QA goes, requiring two  
24 independent outside agencies to review, I feel that,  
25 U.S. Inspection feels that, it is a financial burden

1 to some of our locations due to the size.

2 And that's all I have.

3 MODERATOR DELLIGATTI: Thank you very  
4 much.

5 Anybody else prepared to comment right  
6 now?

7 (No response.)

8 MODERATOR DELLIGATTI: Okay. As we  
9 mentioned at the outset, if you have some comments and  
10 you would prefer not to stand up and make them, we do  
11 have some cards for you. You can write the comments  
12 down. And we can read them into the record. We can  
13 even read them for you right now while we're in this  
14 forum.

15 But in case anybody wants to take a little  
16 bit of time to write some comments down, I thought  
17 this might be a good time to give our court reporter  
18 a short break and give us all a chance to stretch our  
19 legs.

20 So why don't we take 15 minutes? And you  
21 can look at the posters outside, get some coffee, use  
22 the restrooms. And then we'll start up again at  
23 10:30.

24 Thank you.

25 (Whereupon, the foregoing matter went off



1 the record at 10:17 a.m. and went back on the record  
2 at 10:33 a.m.)

3 MODERATOR DELLIGATTI: We're about ready  
4 to get started again. I don't believe that anybody  
5 else signed up outside. Is there anybody else here  
6 who is ready to give a public comment?

7 (No response.)

8 MODERATOR DELLIGATTI: If not, I do have  
9 one that was presented to us that I can read out for  
10 you all. So is there anyone who would like to come up  
11 to one of the mikes?

12 (No response.)

13 MODERATOR DELLIGATTI: Okay. I do have a  
14 statement or public comments from the U.S.  
15 Environmental Protection Agency Office of Air and  
16 Radiation. They were submitted by Bonnie Gitlin,  
17 Acting Director. And I will read those for us.

18 "To the Nuclear Regulatory Commission:  
19 Thank you for the opportunity to comment on the  
20 proposed rule to develop a national source tracking  
21 system of sealed sources. The Radiation Protection  
22 Division within the U.S. Environmental Protection  
23 Agency's Office of Radiation and Indoor Air supports  
24 this rule because it addresses a longstanding  
25 information gap and should make information collection

1 practices more consistent and efficient across the  
2 federal and state governance that had responsibility  
3 for tracking these sources.

4 "In addition, this rule enhances RPD's  
5 ongoing efforts to establish material flow accounts,  
6 MFAs, for commercial radionuclides in the United  
7 States. The long-term goal of this effort is better  
8 environmental management of commercial radionuclides.

9 "Our primary comments on the proposed rule  
10 are as follows. Through ongoing efforts, RPD is  
11 interested in the relationship of the national source  
12 tracking system to orphan sources and waste flows.

13 "We would like the NRC to clarify whether  
14 devices returned to manufacturers for long-term  
15 disposal are subject to this rule. RPD requests that  
16 NRC work jointly with us on a data-sharing format to  
17 allow RPD and other agencies to use NST data.

18 "The proposed rule essentially focuses on  
19 category 1 and 2 sources. RPD believes that  
20 accumulation of sources other than categories 1 and 2  
21 sources could possibly threaten national security.

22 "RPD proposes to work with NRC to develop  
23 estimates of the number and activity levels of these  
24 sources that flow through the U.S. economy. Please  
25 refer to the attached comments for a more in-depth

1 discussion of these points as well as a description of  
2 RPD's ongoing effort to establish MFAs and their  
3 relationship to the national source tracking system."

4 And what follows is about a three-page  
5 expansion of the highlights that we were just  
6 presented. So that again was from Bonnie Gitlin,  
7 Acting Director of the Radiation Protection Division  
8 at the United States Environmental Protection Agency.

9 Anybody else decide they had a hankering  
10 to comment while I was reading that? You are going to  
11 need to go to one of the mikes, but keep in mind that  
12 our purpose today is to collect comments and not to  
13 respond to questions. Okay.

14 MS. ROUGHAN: Just a comment, then. It  
15 would be useful to have some guidance in terms of the  
16 IT implementation of the databases and things because  
17 it is going to take some effort from particularly  
18 manufacturers to impalement that and see what is going  
19 to be useful and what is going to be pursued, have  
20 that database dump, if you will, the data.

21 MS. HORN: Let me respond to that. We  
22 haven't really started with the IT aspects yet. We're  
23 going to be going out with the procurement request  
24 here in the next few weeks. And so we will be getting  
25 the contractor on board to do these sorts of things.

1           One of the things that we're going to be  
2       asking them to do is to work with primarily  
3       manufacturers and distributors to come up with what we  
4       call an electronic batch file, the format for that, so  
5       that it is compatible to the majority of the systems  
6       that we can to make it as easy as we can. So we will  
7       be working with you to do that. But that phase isn't  
8       here yet.

9           MODERATOR DELLIGATTI: Yes? You have a  
10      comment? Okay. Please come up and introduce yourself  
11      at the microphone.

12           MR. CHARETTE: Marc Charette, MDS Nordion.

13           Just a comment on the electronic batch  
14      file. We're in Canada. And we have been sitting with  
15      the Canadian Nuclear Safety Commission, which is doing  
16      the same thing, looking at sealed source tracking  
17      system. They have approached us in the creation of an  
18      electronic batch file, the data entry.

19           And how it is going to work is I would  
20      strongly encourage the U.S. to work also with the CNSC  
21      on this electronic batch file. It would be ideal to  
22      have the same sort of information that can be  
23      transferred to the CNSC and to the U.S. NRC.

24           You know, we manufacture large sources for  
25      industrial irradiator. And one batch information

1 could be sent simultaneously to both directions.

2 So I'm not sure if there's any intent to  
3 work with the Canadians on this. They're a little bit  
4 ahead of you guys right now. But it would be ideal to  
5 be able to have a joint system or something very  
6 close.

7 MODERATOR DELLIGATTI: Thank you.

8 Any further comments?

9 (No response.)

10 MODERATOR DELLIGATTI: Okay. I know,  
11 Merri, you want to respond to that. But let me just  
12 tell you how we are going to proceed. If there are no  
13 further commenters at this time, after Merri speaks to  
14 this issue, what we will do is we will go off the  
15 record for the time being.

16 However, one of us and the court reporter  
17 will remain here for the full time of the meeting. So  
18 if you decide between now and 3:00 o'clock that you do  
19 have a comment or if people come in later, we will be  
20 here to accept the comments.

21 MS. HORN: Actually, your question as to  
22 whether we are working with the Canadians, we have had  
23 several meetings with them. And we are working with  
24 them. And we will try to make the system compatible.  
25 I don't know if that will totally be possible or not,

1 but we are making that attempt.

2 And certainly we will be working with  
3 Nordion. You are going to be one of the larger  
4 companies I suspect that will be reporting data to the  
5 system. So you will be one of the likely  
6 manufacturers that we contact when we are trying to  
7 make the system.

8 MODERATOR DELLIGATTI: Okay. One last  
9 chance. Anybody got any further comments at this  
10 time?

11 (No response.)

12 MODERATOR DELLIGATTI: Okay. I want to  
13 thank you all who came this morning. We really  
14 appreciate it. The comments were very, very useful  
15 and will be very helpful to us.

16 And, as I said, we will remain here. The  
17 court reporter will be here until the closing time of  
18 3:00 o'clock. And, you know, send your friends back.  
19 Thanks very much.

20 (Whereupon, at 10:39 a.m., the foregoing  
21 matter was adjourned.)

22

23

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25