

UNITED STATES OF AMERICA  
CENTERS FOR DISEASE CONTROL

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NATIONAL INSTITUTE FOR OCCUPATIONAL  
SAFETY AND HEALTH

+ + + + +

ADVISORY BOARD ON RADIATION AND  
WORKER HEALTH

+ + + + +

69th MEETING

+ + + + +

THURSDAY  
MAY 20, 2010

+ + + + +

The meeting convened at 8:15 a.m.,  
Eastern Daylight Savings Time, in the Crowne  
Plaza Hotel, 300 3rd Street Niagara Falls, New  
York, James M. Melius, Chairman, presiding.

PRESENT:

JAMES M. MELIUS, Chairman  
HENRY ANDERSON, Member  
JOSIE BEACH, Member  
BRADLEY P. CLAWSON, Member  
R. WILLIAM FIELD, Member  
MICHAEL H. GIBSON, Member  
MARK GRIFFON, Member  
RICHARD LEMEN, Member  
JAMES E. LOCKEY, Member  
WANDA I. MUNN, Member  
JOHN W. POSTON, SR., Member  
ROBERT W. PRESLEY, Member

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PRESENT(Cont'd):

DAVID B. RICHARDSON, Member\*  
 GENEVIEVE S. ROESSLER, Member  
 PHILLIP SCHOFIELD, Member  
 PAUL L. ZIEMER, Member\*  
 TED KATZ, Designated Federal Official

REGISTERED AND/OR PUBLIC COMMENT PARTICIPANTS:

ADAMS, NANCY, NIOSH Contractor  
 ALLEN, DAVID, DCAS  
 ARRIGO, CHARLES J.  
 BLANDINO, PAULA  
 BEITER, DOROTHY  
 BEITER, GEORGE  
 BONSIGNORE, ANTOINETTE, Linde Petitioner  
 BRADFORD, SHANNON, DCAS  
 BRANDINO, PAULA  
 BREWSTER, MARIE  
 BROCK, DENISE, DCAS\*  
 BURGOS, ZAIDA, NIOSH Contractor  
 BURNS, RICHARD  
 CAPONE, JOANNE  
 CAPONE, MAY  
 CARBONI, ROBERT  
 COOK, ROGER, Bethlehem Steel Petitioner  
 CONEY, AUDREY  
 CRUZ, RUBEN, CDC  
 CYGANIK, MARY  
 DIMITROFF, CHESTER  
 DISTEFANO, FRANK  
 DOLBOU, LOIS  
 DYSTER, PAUL, Mayor of Niagara Falls  
 EVASKOVICH, ANDREW, LANL Petitioner  
 FASCIANA, CHARLOTTE  
 FIGIEL, STANLEY  
 FISHER, HAROLD, St. Louis Airport Site  
 Petitioner\*  
 FITZGERALD, JOE, SC&A  
 FRANCO, TINO, Bethlehem Steel Petitioner  
 REGISTERED AND/OR PUBLIC COMMENT PARTICIPANTS:

FRATELLO, MELISSA, Senator Kirsten

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 HINNEFELD, STUART, DCAS  
 HOWELL, EMILY, HHS  
 HINNEFELD, STU, DCAS  
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 HUPKOWICZ, STANLEY  
 IDZIOR, MILDRED  
 JACQUEZ-ORTIZ, MICHELE, Senator Tom Udall's  
 Office  
 JAMES, ESTER L.  
 JOHNSON, KAREN, Weldon Spring Plant  
 Petitioner\*  
 KERN, CATHY  
 KERN, MARIA  
 KERRIGAN, ROBERT  
 KOCZAJA, HELEN  
 KOPACZ, MATTHEW  
 KOTSCH, JEFFREY, DOL  
 LACEY, MABLE  
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 LEWIS, MARK, ORAU Team  
 LICATA, CHARLES  
 LIN, JENNY, HHS  
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 MCARTHY, TIMOTHY  
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 ROZNIAK, MRS. LEO  
 RUIZ, HARRIET, LANL Petitioner  
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 SEALY, SANDY  
 SPONG, MARIE  
 STRESING, KEN  
 SUIDA, ANNE  
 TASSEFF, THOMAS  
 TRIPLETT, TINA, Weldon Spring Plant  
     Petitioner\*  
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 VENTURA, MARGARET  
 VENTURA, SAM  
 WADE, LEW, DCAS  
 WAGNER, DIANE  
 WALKER, JOYCE, Bethlehem Steel Petitioner  
 WARREN, KAY

REGISTERED AND/OR PUBLIC COMMENT PARTICIPANTS:

WEBBER, BEVERLY  
 WEBBER, LEWIS, Bethlehem Steel Petitioner  
 WELKA, JOHN

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WILLER, MAY  
WILSON, FANNIE  
ZABRON, RAYMOND

\*Participating via telephone

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## C-O-N-T-E-N-T-S

ITEM	PAGE
Welcome .....	7
SEC statement .....	9
Weldon Spring .....	49
Petitioner Comments .....	92
Blockson SEC Petition .....	107
Chapman Valve .....	168
Bethlehem Steel .....	208
Mound Site .....	311
Work Group reports .....	322
Site Profile Reviews .....	340
LANL Presentation .....	383
Public Comment .....	411
Adjournment .....	462

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

2 (8:30 a.m.)

3 CHAIRMAN MELIUS: We are going to  
4 get started here. Everyone needs to quickly  
5 digest here.

6 MR. KATZ: Good morning, and  
7 welcome, everybody, who is here in the room,  
8 as well as the folks on the line, the Advisory  
9 Board on Radiation Worker Health. It's our  
10 second day here in Niagara Falls, and we have  
11 a very full agenda today.

12 So, the first thing I'd like to  
13 do, on the line is -- check to see, I believe  
14 I heard Dr. Ziemer.

15 MEMBER ZIEMER: Yes, Paul Ziemer on  
16 the line.

17 MR. KATZ: Welcome, Paul, and how  
18 about Dr. Richardson, are you with us all  
19 right?

20 MEMBER RICHARDSON: Yes, I am.

21 MR. KATZ: Great, so, we have then,  
22 a full Board attendance again today, and let

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1 me just note, logistically, for people on the  
2 phone, please, mute your phones. If you don't  
3 have a mute button, \*6 will mute your phone  
4 and then \*6, hitting it again will unmute your  
5 phone, and please don't put the call on hold  
6 at any point, hang up and dial back in, if you  
7 need to leave the call for a while, and I  
8 think that's it. We're ready. Thanks.

9 CHAIRMAN MELIUS: Thank you, Ted.  
10 Good morning. We will start our first item of  
11 business this morning. It's the St. Louis  
12 Airport Storage Site, SEC, and we'll hear  
13 first from LaVon Rutherford and then, from the  
14 petitioners, I believe. So, LaVon?

15 MR. RUTHERFORD: All right, good  
16 morning, I'm LaVon Rutherford. I'm Special  
17 Exposure Cohort Health Physics team leader,  
18 and I'm going to present the St. Louis Airport  
19 Storage Site petition evaluation.

20 This petition was received on July  
21 22, 2009. The petitioner proposed a Class of  
22 all workers who worked in any area at -- and

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1 in any job capacity, from January 3, 1947  
2 through -- actually, this is incorrect, now,  
3 that I look at it. I should have noticed  
4 this, this morning.

5 Petitioner proposed Class was  
6 initially January 1946 through December 1966,  
7 which was the actual original designated  
8 facility covered period, and then the 1967  
9 through 2001 was the end of the residual  
10 period, and I'll get to that.

11 Petition qualified on September  
12 22, 2009. It qualified on the basis of a lack  
13 of monitoring.

14 Initially, as I said, the  
15 designated facility was 1946 through 1966. It  
16 was designated as Atomic Weapons Employer and  
17 had a residual period of 1967 through October  
18 2009.

19 However, during our evaluation, we  
20 uncovered information of the actual start  
21 period looked like it should have been 1947,  
22 and the end period should actually have been

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1 at a later date, closer to 1973.

2 We also uncovered information that  
3 supported that the site appeared to be owned  
4 by the AEC, which would have made that a DOE  
5 site.

6 So, in November 2009, we sent a  
7 letter to the Department of Energy and  
8 Department of Labor, with supporting  
9 information, indicating that -- questioning  
10 the facility designation.

11 In December 2009, the Department  
12 of Labor responded, in agreement with our  
13 recommendation and designated the facility as  
14 a DOE site from January 3, 1947 through 1973,  
15 and again, from 1984 through 1998. They did  
16 defer action on whether this site would be an  
17 AWE site for 1946. They deferred that to DOE,  
18 who has that responsibility.

19 In April 2009, the Department of  
20 Energy responded that there would be no AWE  
21 covered period for SLAPS.

22 So, the actual original period I

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1 had indicated -- and so, actually, I'll just  
2 go, the Class evaluated by NIOSH then is the  
3 January 3, 1947 through December 31, 1973, and  
4 again, from January 1, 1984 through December  
5 31, 1998. This is the entire covered period  
6 at SLAPS, and SLAPS is an acronym for --  
7 instead of me saying St. Louis Airport Storage  
8 Site over and over again.

9 All right, a little background.  
10 Beginning in the 1940's in the Manhattan  
11 Engineering District, acquired 21.7 acres of  
12 site north of the St. Louis Airport. They  
13 acquired this land to use it to store residues,  
14 resulting for processing of uranium ores.

15 Most of the material that was  
16 stored at this site was residues generated at  
17 work from Mallinckrodt Chemical Works, during  
18 uranium processing from 1946 through 1953.

19 The residues remained at SLAPS  
20 until Mallinckrodt ceased production and then  
21 they were sold to a private company in 1966,  
22 and from 1966 through 1969, most of the stored

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1 materials were removed from the site.

2 After removal of the site --  
3 removal of the residues, the St. Louis Airport  
4 Authority removed all above ground structures  
5 and added one to three feet of clean fill dirt  
6 over the remaining buried materials. The city  
7 took possession of the property in 1973. The  
8 DOE was then authorized to re-acquire the site  
9 in 1984, where it was turned over and managed  
10 to -- by the FUSRAP program.

11 The site was transferred once  
12 again, it was transferred to the U.S. Army  
13 Corp of Engineers in 1998, and therefore,  
14 that's why the ended covered period is 1998.

15 A little picture of the SLAPS  
16 Site. If you actually -- you can see, the  
17 different types of materials are designated  
18 AM-10, AM-7. The drum storage shed right  
19 there is actually where most of the K-65  
20 material was stored, and that was actually --  
21 it was only -- when I say a storage shed, it  
22 was actually only a covered area.

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1           You can also see, there was a  
2 legend at the top with different other types  
3 of material that are stored on the site.

4           Okay, where we look for  
5 information, again, most of these things,  
6 you've seen 100 times, are different places --  
7 but we look at Site Profiles, taken from  
8 information bulletins. We interviewed former  
9 employees. We actually interviewed seven  
10 employees that were at the site in different  
11 periods, some during the early years at  
12 Mallinckrodt -- or at SLAPS, and some during  
13 the later years, during the remediation.

14           We looked at existing claim files,  
15 documentation provided by the petitioners,  
16 Site Research Database and then we did data  
17 captures.

18           Our data capture efforts, at the  
19 existing company, Cotter Corp, we went to  
20 Missouri Department of Natural Resources, DOE  
21 Germantown, Legacy Management, OSTI, NNSA,  
22 NARA, U.S. NRC, Washington State University,

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1 Southern Illinois University, which has  
2 provided us a number of documents on sites in  
3 Missouri and the Illinois area, DOE Opennet  
4 internet search, CEDR, various DOE locations,  
5 National Academies Press and the U.S. Army  
6 Corp of Engineers.

7 As you would expect, being that  
8 this is a storage site of residue, we do not  
9 have a large number of claims. We have three  
10 claims that's been submitted to NIOSH. Of  
11 those three claims, all three are in the Class  
12 evaluated. Two of the three are in the Class  
13 we recommend.

14 Dose reconstruction, completed  
15 two. We have one claim that has internal  
16 dosimetry, which is uranium bioassay and the  
17 other as external -- two have external film  
18 badge data.

19 A little bit about the source  
20 compounds, pitchblende raffinate AM-7  
21 designated, if you look back on the map, you  
22 can see it at designated AM-7. Residues

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1 resulting from the processing of pitchblende  
2 ores at Mallinckrodt. We can see we had a  
3 maximum inventory of 74,000 tons. These  
4 materials were received from 1946 through  
5 1955, and they were removed from 1966 through  
6 1967.

7 The African metals maintain  
8 ownership of the pitchblende residues because  
9 of the marketability of the metals in there.  
10 You had the nickel, cobalt, copper and the  
11 radium, and I was going to say one more thing  
12 on this. Oh, the pitchblende raffinates were  
13 high in thorium-230 concentration.

14 Colorado raffinates, these are  
15 domestic ores. Again, they're residues  
16 resulting from the processing of domestic ores  
17 at Mallinckrodt, maximum inventory of 32,500  
18 tons and materials received were from 1946  
19 through 1955. Materials were removed in 1966  
20 and 1967, again, high thorium-230  
21 concentration.

22 K-65 material, the radium-bearing

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1 residues, these residues were resulting from  
2 the processing of Belgium Congo ores, had  
3 maximum inventory at 1,757 tons, and materials  
4 were received from 1946 through 1948, and  
5 removed in 1948 and 1949, very high radium  
6 content.

7 Other source materials, they had  
8 barium sulfate cake, which also had a high  
9 radium content, C-liner slag, interim residue  
10 plant tailings, vitro residues, captured  
11 Japanese sands and scrap metal.

12 Scrap metal was mostly empty  
13 drums. Actually, some of these drums were  
14 actually drums that were emptied -- that were  
15 -- the actual ore material brought into the  
16 site and after they dumped the ore material,  
17 they took those drums to SLAPS.

18 Potential radiation exposures  
19 during the Class period, we have internal  
20 exposures would be from airborne uranium and  
21 uranium progeny, however, the significant  
22 source of internal exposure would be from the

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1 uranium progeny, the thorium, the radium and  
2 the radon, since the uranium was processed out  
3 of most of this material.

4 External sources of exposure were  
5 photon exposure from radium-226, beta  
6 exposures from uranium and there was no  
7 significant neutron exposure.

8 I've broken up the personnel and  
9 area monitoring data into three separate  
10 periods because they're distinct periods of  
11 operation and up from 1947 up through the 1971  
12 period. No operations in 1971 to 1973 and  
13 then operations from 1984 to 1998, which were  
14 remediation.

15 You have 17 bioassay samples that  
16 were Mallinckrodt. The samples were all for  
17 uranium and over different periods. We have  
18 no bioassay samples for other isotopes.

19 Air monitoring data, we have some  
20 radon monitoring data in 1948 and 1949, as  
21 high as 515 picocuries per liter.

22 Internal monitoring data, in 1971

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1 to 1973, this was an area when -- time period  
2 when there was no building stagnant  
3 operations, clean fill, no personnel  
4 monitoring data and no air monitoring data.

5 All right, 1984 through 1998, we  
6 had -- actually, this is a remediation period.

7 There's urine samples. There's samples that  
8 were taken for the thorium-230, 232, 226 and  
9 228. Actually, the samples were analyzed for  
10 that.

11 We also have a study that actually  
12 identified the isotopic ratios during that  
13 time period.

14 Okay, external monitoring data, we  
15 have no external personal -- we have no  
16 external monitoring data that specifically  
17 identified as SLAPS. All the external  
18 monitoring data is Mallinckrodt workers that  
19 typically went back and forth. We do know  
20 that there was one, at least one worker, our  
21 petitioner, who stayed there all the time, and  
22 we have external monitoring data that

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1 indicates that there were time periods that  
2 they went to SLAPS.

3           Again, Mallinckrodt employees were  
4 monitored with film badges and we do have a  
5 reference from a 1949 reference that indicates  
6 the highest beta rating was 70 millirem per  
7 hour and the highest gamma reading was three  
8 to 10 millirem per hour.

9           The external monitoring data from  
10 November 3, 1971 through December 31, 1973,  
11 again, all buildings and source material were  
12 removed. There was some material that was  
13 left, and that material was covered with one  
14 to three feet of clean fill dirt.

15           We have no personnel external  
16 monitoring data. We do have a verification  
17 survey that was conducted, just after the fill  
18 dirt was placed on top of the site, the one to  
19 three feet, and it indicated there was no  
20 reading that exceeded one millirad per hour.

21           External monitoring data from 1984  
22 through 1998, during these years, as the

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1 remediation years, it included  
2 characterization remediation activities.  
3 Workers were issued TLDs for years 1985, 1987,  
4 1988 and 1990. We do not have all of the  
5 results. We have some of the results for that  
6 period.

7 We do have a summary report from  
8 1986 that estimates the exposure to be -- to  
9 the workers, to be less than 20 millirem per  
10 year.

11 We also have a baseline risk  
12 assessment that was conducted by Argonne  
13 National Lab, that models exposures as well.

14 So, our evaluation process, this  
15 is a two-prong test. Everyone has seen this.

16 Is it feasible to estimate the levels of  
17 radiation dose of individual members of the  
18 Class with sufficient accuracy, and then is  
19 there reasonable likelihood that such  
20 radiation doses may have endangered the health  
21 of members of the Class?

22 We found during the first period,

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1 that the period of January 3, 1947 through  
2 November 2, 1971, that the available  
3 monitoring records, process description and  
4 source term data are not adequate to calculate  
5 the internal dose. The residues, particularly  
6 -- although we have maximum inventory numbers  
7 for the AM-7, the AM-10, the AM-10 in  
8 particular, was not characterized for all  
9 long-lived isotopes, uranium -- or the  
10 thorium, the radium and such.

11 We also have no personal  
12 monitoring data and limited air sampling data.

13 The air sampling data that we have is all  
14 radon data from 1948 and 1949. We have  
15 nothing for any other radionuclides.

16 We found that the available  
17 monitoring records, process description and  
18 source term data are adequate to complete dose  
19 reconstruction, with sufficient accuracy for  
20 the other two periods, which is the November  
21 3, 1971 through December 31, 1973, and from  
22 January 1, 1984 through December 31, 1998.

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1           During this period, the 1971 to  
2 1973, period, the only potential internal  
3 exposure would have been from radon. The site  
4 was covered with one to three feet of fill  
5 dirt. Radon exposures will be based on the  
6 radon levels calculated in the baseline risk  
7 assessment, which was completed by Argonne  
8 National Lab in November 1993.

9           They are actually baseline values  
10 that were taken at .99 picocuries per liter.  
11 It was the highest reading that was found  
12 around the site.

13           The external exposures, we have a  
14 couple of different methods. The baseline  
15 risk assessment provides a bounding estimate  
16 of potential photon exposures. Since during  
17 this period, the site was covered with one to  
18 three feet of fill dirt, there would not have  
19 been any beta exposure.

20           We also know that the November 3,  
21 1971 survey, verification survey that was  
22 conducted, indicated that there was no reading

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1 greater than one millirad per hour, that could  
2 be used as a bounding dose, one millirad per  
3 hour per 2,000 hours.

4 The 1984 through 1998 period, this  
5 was, remediation activities were going on. We  
6 had bioassay data. We also have a baseline  
7 risk assessment that actually does -- that I  
8 discussed, that could be used for non-  
9 monitored employees.

10 External exposures, we have  
11 personal monitoring data, and we also have the  
12 baseline risk assessment, as well.

13 So, our feasibility summary is  
14 that from January 3, 1947 through November 2,  
15 1971, dose reconstruction is not feasible, due  
16 to internal exposures.

17 November 3, 1971 through December  
18 31, 1973, dose reconstruction is feasible, and  
19 again, the same for the 1984 through 1998  
20 period.

21 And this just is our  
22 recommendation for this period, that dose

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1 reconstruction is not feasible and health  
2 isn't endangered, for the January 3, 1947  
3 through November 2, 1971, and for this period,  
4 since dose reconstruction is feasible, we do  
5 not have to look at health endangerment for  
6 the 1971 and 1973 and the 1984 to 1998 period,  
7 and then our recommended Class, I'm not going  
8 to read all of that. I think everyone can  
9 read it, but it's basically for the period of  
10 January 3, 1947 through November 2, 1971.  
11 That's it. Questions?

12 CHAIRMAN MELIUS: Board Members  
13 with questions for LaVon? I'll start off with  
14 one. Your last slide that --

15 MR. RUTHERFORD: Class Definition.

16 CHAIRMAN MELIUS: Class Definition,  
17 issue is, you have added work that --

18 MR. RUTHERFORD: We need -- yes, we  
19 could have left off who worked in any area and  
20 in any job capacity, and did the same thing.

21 CHAIRMAN MELIUS: Okay.

22 MR. RUTHERFORD: You're absolutely

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1 correct.

2 CHAIRMAN MELIUS: I'm trying to --  
3 first time I've seen that, I think.

4 MR. RUTHERFORD: Well, you know,  
5 and I'll be honest with you, I'm missed it.

6 CHAIRMAN MELIUS: Okay.

7 MR. RUTHERFORD: I mean, it means  
8 the same thing, but we don't need it.

9 CHAIRMAN MELIUS: Okay.

10 MR. RUTHERFORD: Yes.

11 CHAIRMAN MELIUS: Okay, the only  
12 problem is, I didn't know if it was to try to  
13 capture something special or --

14 MR. RUTHERFORD: No, no, it was  
15 not.

16 CHAIRMAN MELIUS: And the group was  
17 unclear, or whatever, okay.

18 MR. RUTHERFORD: Yes.

19 CHAIRMAN MELIUS: Okay, thank you.

20 Any other Board Members with questions? Yes,  
21 Brad?

22 MEMBER CLAWSON: LaVon, how many --

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1 you were saying that you had samples. How  
2 many --

3 MR. RUTHERFORD: Radon samples?

4 MEMBER CLAWSON: Well, no, you were  
5 saying that for the employees, that you had --  
6 that they had --

7 MR. RUTHERFORD: Seventeen bioassay  
8 samples?

9 MEMBER CLAWSON: Seventeen bioassay  
10 samples.

11 MR. RUTHERFORD: Yes, the 17  
12 bioassay samples were all for uranium and you  
13 know, it's not totally clear -- remember, most  
14 of these workers worked at Mallinckrodt and  
15 they would -- the way things worked is, they  
16 would process the material, drum up the  
17 residues.

18 They drum up the residues, load  
19 them on the truck and then they would take  
20 out, you know, four to six workers out with  
21 them, to the site, and then they would take  
22 out and they would dump the residues into a

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1 pit and then, they also had another pit, they  
2 kept all the scrap metal in, from these drums  
3 or sometimes, they would actually reuse the  
4 drums and take them back.

5 The 17 bioassay samples, we can't  
6 be for sure that those bioassay samples are  
7 for activities that were conducted at SLAPS.  
8 We believe they may have been, just because of  
9 the indications in the records. Either way,  
10 they're only for uranium.

11 MEMBER CLAWSON: And those 17  
12 samples were over how many years?

13 MR. RUTHERFORD: Nineteen-forty-  
14 seven through -- let's see, it would have been  
15 1959/1960 period.

16 MEMBER CLAWSON: Well, you were  
17 talking about the drumming and so forth, like  
18 that. Did they have area monitoring and stuff  
19 like that? Did they have area TLDs, because  
20 you were saying it was like, one MR.

21 MR. RUTHERFORD: That was the later  
22 period. Again, we're recommending this Class

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1 up to 1971, during the early period, when  
2 there was actually work going on at the site,  
3 and the one MR -- less than one millirad per  
4 hour was after they had removed the materials,  
5 the bulk residues, they had removed them and  
6 they placed one to three feet of clean fill  
7 dirt over top and then they took a  
8 verification survey on contact readings of one  
9 millirad per hour, was the -- or it was a  
10 verification survey verified that there was  
11 less than one millirad per hour over there.

12 MEMBER CLAWSON: So, that's beyond  
13 when the product was there?

14 MR. RUTHERFORD: Yes.

15 MEMBER CLAWSON: Okay, I'm sorry.

16 MR. RUTHERFORD: The product was  
17 gone --

18 MEMBER CLAWSON: I misunderstood  
19 you, because I was going to say, I know that  
20 K-65 silo --

21 MR. RUTHERFORD: Exactly.

22 MEMBER CLAWSON: -- it was a lot

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1 hotter.

2 MR. RUTHERFORD: Yes, K-65 material  
3 would have been much higher than that.

4 CHAIRMAN MELIUS: Any other  
5 questions? Dr. Ziemer, Dr. Richardson?

6 MEMBER ZIEMER: This is Ziemer. I  
7 have one question. LaVon, you gave us the  
8 information on what claims have been processed  
9 so far, but can you remind us of the size of  
10 the workforce during those various periods?

11 MR. RUTHERFORD: Very small,  
12 exactly. In fact, I had indicated, we  
13 actually interviewed seven workers and four of  
14 those interviews, if I remember correctly, it  
15 was four, were for individuals that worked  
16 during the 50's period and you know, most of  
17 the workers -- most of the time, there was no  
18 one at the site.

19 There were indications, especially  
20 our petitioner, that the petitioner worked  
21 there, pretty much continuously. They were  
22 actually -- it looked like they were more of

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1 the site custodian for the site, and in fact,  
2 their verified employment with Department of  
3 Labor is only for SLAPS. They have no covered  
4 employment at Mallinckrodt.

5 MEMBER ZIEMER: Thank you. That's  
6 getting to my point, and that is the following  
7 that -- this is a storage site, that employees  
8 would have been present at, somewhat  
9 intermittently, and it wasn't clear to me, how  
10 we deal with the 250 day issue in such a case.

11 Is it employment for 250 days or  
12 is it on site presence, and how is -- if  
13 that's the case, how is that verified?

14 MR. RUTHERFORD: Well, you know,  
15 and it's a good question, but the -- if you  
16 look at the three claims we have right now,  
17 the one claim actually has verified employment  
18 that -- for a number of years, three to four  
19 years at SLAPS, during the 50's period.

20 Another claim, and this one, we'll  
21 obviously have to ask the Department of Labor,  
22 has verified employment at SLAPS and verified

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1 employment at Mallinckrodt during the same  
2 period.

3 MEMBER ZIEMER: So, they're covered  
4 by a separate --

5 MR. RUTHERFORD: Right, right.

6 MEMBER ZIEMER: -- Class, in any  
7 event, yes.

8 MR. RUTHERFORD: And early in this  
9 case, it doesn't matter because Mallinckrodt  
10 is also an SEC during that period.

11 MEMBER ZIEMER: Right, that's what  
12 I meant.

13 MR. RUTHERFORD: The other -- the  
14 third claim we have is actually verified  
15 employment in the 1971 to 1973 period, and  
16 which is --

17 MEMBER ZIEMER: Which is not part  
18 of this.

19 MR. RUTHERFORD: Which is not part  
20 of the recommended SEC, that's correct.

21 CHAIRMAN MELIUS: Dr. Richardson,  
22 do you have any questions?

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1                   MEMBER     RICHARDSON:     Yes,     my  
2     questions   are   along   the   same   lines   as   Dr.  
3     Ziemer's.

4                   I   was,   you   know,   struck   by   the  
5     description   that   the   worker   population   was  
6     "very   mobile,"   specifically   not   residing   in  
7     SLAPS   for   any   length   of   time,   but   working   on  
8     all   properties.

9                   But   it   was,   that   this   is   going   to  
10    be   a   problem   and   then   some   of   these   are  
11    Mallinckrodt   employees,   some   of   these   are  
12    people   who   are   spending   time   there.   Could   it  
13    be   employees   of   the   City   of   St.   Louis,   but  
14    presumably,   they're   not   covered   here.

15                  So,   the   expectation   is   that   either  
16    the   claimant   is   going   to   be   able   to   document  
17    that   they   had   an   extended   period   of   employment  
18    at   SLAPS   or   that   they   were   also   simultaneously  
19    Mallinckrodt   workers,   is   that   right?

20                  MR.   RUTHERFORD:   That's   correct.   I  
21    would   think   that   --   well,   the   only   workers  
22    that   --   based   on   all   indications   we   have,   the

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1 only workers that worked on the site were  
2 Mallinckrodt workers and you know, besides the  
3 petitioner, was Mallinckrodt workers and the  
4 petitioner himself.

5 The truck drivers, there is  
6 question on the truck drivers, whether they  
7 were actually contracted or not. The truck --  
8 because the Mallinckrodt workers, from the  
9 interviews that we took, the interviews, the  
10 Mallinckrodt workers indicated that they  
11 loaded the trucks up with the drum barrels,  
12 they rode with the truck, on the back of the  
13 truck.

14 In fact, one of workers said, "We  
15 road right on the drums," and rode right out  
16 to the site, and then, "We dumped the barrels  
17 and either brought the barrels back or the  
18 barrels were put in -- stored on the site.  
19 The empty barrels were stored on the site."

20 One of the questions we asked was  
21 whether the trucks were contracted or not. It  
22 really doesn't matter in that -- the truck

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1 drivers would still be covered under this  
2 program because it's a Department of Energy  
3 site. So, they would have been contracted.  
4 They would have been a contractor.

5 Now, the question though is, the  
6 250 days, how do you do a 250 days on a truck  
7 driver, going back and forth to the site? You  
8 know, I don't know.

9 CHAIRMAN MELIUS: Henry?

10 MEMBER ANDERSON: I just don't  
11 remember, what's the dates of the Mallinckrodt  
12 SEC?

13 MR. RUTHERFORD: Beginning of  
14 Mallinckrodt operations, which was July 1940 -  
15 - basically, the beginning of the MED, pretty  
16 close.

17 MEMBER ANDERSON: Yes.

18 MR. RUTHERFORD: August 1942.

19 MEMBER ANDERSON: It's more the end  
20 date that I'm --

21 MR. RUTHERFORD: And the end date  
22 is 1957, end of 1957.

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1                   MEMBER ANDERSON: So, there's a  
2 period here --

3                   MR. RUTHERFORD: Well, wait a  
4 minute, I'm trying to think because all this -  
5 - I'm trying to remember this off the --  
6 because we added a second little period onto  
7 Mallinckrodt, that took us up to 1959, I  
8 believe, or 1960?

9                   Denise is trying to --

10                  MEMBER ANDERSON: Okay.

11                  MR. RUTHERFORD: I hear Denise.

12                  MEMBER ANDERSON: But in any case,  
13 there is a period here that doesn't overlap.

14                  MR. RUTHERFORD: That's correct,  
15 that's correct.

16                  MEMBER ANDERSON: So, we'd still  
17 have the 250 day issue.

18                  MR. RUTHERFORD: But during that  
19 period, you would expect that workers during  
20 that period would have actually been on site,  
21 because that's when the material was removed  
22 from the site.

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1                   So, they would have been removing  
2                   and -- and taking the material off, that 1966  
3                   to 1969 period, I know.

4                   CHAIRMAN MELIUS: Okay, anymore  
5                   questions? Thank you, LaVon, and we'd like to  
6                   hear from the petitioners next. I don't know  
7                   if the petitioner is on the line.

8                   MR FISHER: Yes, my name is Harold  
9                   David Fisher and I'm the brother of  
10                  [identifying information redacted], who  
11                  submitted the application for the SEC for  
12                  SLAPS.

13                  CHAIRMAN MELIUS: And you wish to  
14                  make any comments now?

15                  MR. FISHER: Well, I've just got  
16                  four little points I'd like to make.  
17                  Actually, I'm going to add one.

18                  My father is one of the claimants  
19                  and he worked at the site and only at the site  
20                  for 32 months, from 1950 to 1953, and he not  
21                  only worked at the site, he lived at the site.

22                  So, he was there 24 hours a day, for the five

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1 days that he worked there.

2 But anyway, in reference to the  
3 SEC tracking number, SEC-00150, [identifying  
4 information redacted] petitioned for all SLAPS  
5 employees, and we concur with the NIOSH report  
6 dated April 12, 2010, which proposes SLAPS to  
7 be an SEC for qualifying employees.

8 This process has been daunting,  
9 starting in January 2002 -- or and still not  
10 ended, with claim establishment, followed by  
11 dose reconstruction, then final decision, and  
12 much of that, we had a difficult time  
13 understanding.

14 We do want to thank you, the  
15 Board, for this process, which has allowed for  
16 more complete evaluation of SLAPS and it's  
17 effects on the health of employees.

18 Lastly, we would like to express  
19 our gratitude and acknowledge the contribution  
20 and guidance of Ms. Denise Brock, which  
21 allowed us to take this step for all the  
22 employees of SLAPS. That's it, thank you.

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1                   CHAIRMAN MELIUS: Thank you, very  
2 much. Do Board Members have any other  
3 questions or comments? If not -- yes, Brad?

4                   MEMBER CLAWSON: What about the --  
5 now, was he a full-time guard or --

6                   MR. FISHER: No, he was a  
7 construction supervisor, was his title. He  
8 ran bulldozers and cranes, moving and placing  
9 the material, and he maintained the equipment,  
10 and worked at the site and not only worked  
11 there, but he lived there.

12                  MEMBER CLAWSON: The reason I was  
13 wondering this, we were just looking at the  
14 paperwork on this and it says, "Equipment  
15 operators, full-time guard and also located at  
16 SLAPS from the 1946 to 1951, 1959 -- "

17                  MR. FISHER: Yes, my dad was there  
18 from early 1950 through 1953, about August or  
19 September.

20                  MEMBER CLAWSON: So, they kind of  
21 had a -- they had a mobile workforce, LaVon,  
22 actually, that came out there, but we had

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1 somebody out there all the time.

2 MR. RUTHERFORD: This one person  
3 was the one person that was out there, all the  
4 time. Not all of the periods, was there  
5 someone out there all the time.

6 There was a person, during the  
7 period that he was there, that he was out  
8 there all the time. We did have interviews  
9 with workers that, during some of the periods,  
10 there was no one out there. It was just a  
11 locked fence around it. They had key -- they  
12 would have a key to enter and they would come  
13 in and dump the materials.

14 The petitioner's father actually  
15 was moving a lot of the material around, the  
16 AM-7, the AM-10, after it was placed.

17 What would happen is, if you read  
18 some of the documentation, because of the rain  
19 and so on, some of these piles, you would get  
20 run-off off these piles, and that run-off, in  
21 order to keep it contained within these areas,  
22 he would move the material back into these

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1 pitted areas.

2           So, he was an heavy equipment  
3 operator. He was a custodian. He was a one-  
4 man-show, pretty much for the site right  
5 there.

6           CHAIRMAN MELIUS: Josie?

7           MEMBER BEACH: LaVon, just quick  
8 question, the guards, were they -- who were  
9 they employed by?

10          MR. RUTHERFORD: Well, that's --  
11 you know, there was no guard -- well, you get  
12 mixed information on this, okay.

13          One individual said there was a  
14 full-time guard. Another individual that we  
15 interviewed said, "No, there were no guards.  
16 It was a locked gate. You went to the area."

17          Based on the discussion that we  
18 did have, the security guards were hired by  
19 Mallinckrodt. So, you know, if there was a  
20 security guard there, it was a Mallinckrodt  
21 worker.

22          CHAIRMAN MELIUS: Mark?

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1                   MEMBER GRIFFON: Yes, LaVon, just  
2 to follow up on the -- I was trying to look  
3 quickly at the Argonne report here.

4                   But in 1971, when they removed all  
5 this material, where did it go?

6                   MR. RUTHERFORD: It was actually --  
7 the material was bought by -- if I remember,  
8 by Latty Avenue & Company, and the material  
9 was transferred to Latty Avenue in the 1966 to  
10 1969 period.

11                  MEMBER GRIFFON: And they purchased  
12 it, based on, no nuclide information? They  
13 didn't do any kind of sampling ahead of time,  
14 at that point, to determine what they were  
15 getting?

16                  MR. RUTHERFORD: Yes, we have no  
17 indication of that, at all. I mean, I'm sure  
18 that they were probably buying it for the  
19 thorium-230 content. I mean, they knew that  
20 the residue --

21                  MEMBER GRIFFON: They knew there  
22 was a lot there --

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1 MR. RUTHERFORD: Yes, I mean --

2 MEMBER GRIFFON: -- they didn't  
3 know exactly what.

4 MR. RUTHERFORD: -- tons and tons,  
5 they were just trying to -- Mallinckrodt was -  
6 - you know, it was actually -- you know,  
7 because operations had transferred from  
8 Mallinckrodt to Weldon Spring and Weldon  
9 Spring was the ones who authorized the actual  
10 transfer by buying of the material, AEC  
11 through Weldon Spring to Latty Avenue.

12 MEMBER GRIFFON: Okay, but in that  
13 process of removing and -- there was not  
14 survey --

15 MR. RUTHERFORD: No.

16 MEMBER GRIFFON: -- no sampling,  
17 no, nothing that you could find, anyway?

18 MR. RUTHERFORD: Nothing that we  
19 could find.

20 MEMBER GRIFFON: Okay, and in the  
21 Argonne report, when you said they estimated  
22 the radon levels, was that modeled or

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1 measured? I couldn't find it.

2 MR. RUTHERFORD: Actually, the  
3 model -- or the .99 picocuries per liter was  
4 measured. It was measured on the site --

5 MEMBER GRIFFON: That's what I  
6 figured. Thank you.

7 MS. BROCK: LaVon, this is Denise.

8 I've checked and it looks like that SEC went  
9 up to 1958, not 1962. The covered time frame  
10 was 1962, but the SEC, I believe, we added  
11 1958 to the already 1942 to 1957.

12 CHAIRMAN MELIUS: Correct.

13 MR. RUTHERFORD: That's right.

14 CHAIRMAN MELIUS: Because I just  
15 looked it up on the site, the website.

16 MEMBER GRIFFON: Thanks, Denise.

17 CHAIRMAN MELIUS: Okay, any other  
18 comments or questions? Now, do I hear a  
19 motion? Excuse me, Wanda, yes?

20 MEMBER MUNN: That's quite all  
21 right. Just waiting for the questions to be  
22 done.

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1 CHAIRMAN MELIUS: Okay.

2 MEMBER MUNN: I move that we  
3 recommend -- that we accept NIOSH's  
4 recommendation for a Class of SEC, for all  
5 employees in the Department of Energy, its  
6 predecessor agencies and their contractors or  
7 subcontractors, who worked at the St. Louis  
8 Airport Storage Site in St. Louis, Missouri  
9 from January 3, 1947 through November 2, 1971,  
10 for a number of work days aggregating at least  
11 250, during either solely under this  
12 employment or in combination with work days  
13 for the parameters, established for one or  
14 more other Classes of employees in the Special  
15 Exposure Cohort.

16 CHAIRMAN MELIUS: Do I have a  
17 second for that?

18 MEMBER BEACH: I'll second it.

19 CHAIRMAN MELIUS: Wanda, I would  
20 like you to consider a friendly amendment.

21 MEMBER MUNN: Yes, sir.

22 CHAIRMAN MELIUS: But first, I will

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1 read it into the record.

2 The Advisory Board on Radiation  
3 and Worker Health, the Board has evaluated SEC  
4 Petition 00150 concerning workers at the St.  
5 Louis Airport Storage Site in St. Louis,  
6 Missouri under statutory requirements  
7 established by EEOICPA, incorporated in 42 CFR  
8 83.13.

9 Board respectfully recommends a  
10 Special Exposure Cohort be accorded to all  
11 employees of the Department of Energy, DOE,  
12 its predecessor agencies and their contractors  
13 or subcontractors who worked in any area, in  
14 any job capacity at the St. Louis Airport  
15 Storage Site in St. Louis, Missouri from  
16 January 3, 1947 through November 2, 1971, for  
17 a number of work days aggregating at least 250  
18 work days, occurring either solely under this  
19 employment or in combination with work days  
20 within the parameters established for one or  
21 more other Classes of employees in the SEC.

22 The recommendation is based on the

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1 following factors: St. Louis Airport Storage  
2 Site was used as a storage site for residues  
3 resulting from the processing of uranium ores.

4 NIOSH found that there was insufficient  
5 monitoring data or information on radiological  
6 operations at this facility, in order to be  
7 able to complete accurate individual dose  
8 reconstructions for these workers during the  
9 time period in question. The Board concurs  
10 with this conclusion.

11 The Board has reviewed information  
12 which confirms that radiation exposures at the  
13 St. Louis Airport Storage Site in St. Louis,  
14 Missouri during the time period in question  
15 could have endangered the health members of  
16 this -- the health of members of this Class.  
17 The Board concurs with this conclusion.

18 Based on these considerations,  
19 discussions held at our May 19<sup>th</sup> and 21<sup>st</sup> 2010  
20 Advisory Board meeting in Niagara Falls, New  
21 York, the Board recommends that this Special  
22 Exposure Cohort Petition be granted.

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1           Enclosed is the documentation from  
2 the Board meeting where this Special Exposure  
3 Cohort Class was discussed. The documentation  
4 includes transcripts of the deliberations,  
5 copies of the petition, the NIOSH review  
6 thereof and related materials. If any of  
7 these items are unavailable at this time, they  
8 will follow shortly. Will you accept that as  
9 a friendly amendment?

10           MEMBER MUNN: I accept that as an  
11 excellent contribution to the amendment.

12           CHAIRMAN MELIUS: Thank you, and we  
13 have a comment from the counsel.

14           MS. HOWELL: These are purely  
15 grammatical in nature.

16           CHAIRMAN MELIUS: Okay.

17           MS. HOWELL: First sentence?

18           CHAIRMAN MELIUS: Passed.

19           MS. HOWELL: And then in the Class  
20 Definition, employees of the Department of  
21 Energy, its predecessor agencies and its  
22 contractors or subcontractors, instead of

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1 "their."

2 CHAIRMAN MELIUS: Okay.

3 MS. HOWELL: Thanks.

4 CHAIRMAN MELIUS: Any other  
5 comments? If not, Ted, will you do roll call?

6 MR. KATZ: Yes, thank you. Okay,  
7 Dr. Lockey?

8 MEMBER LOCKEY: Yes.

9 MR. KATZ: Dr. Lemen?

10 MEMBER LEMEN: Yes.

11 MR. KATZ: Mr. Griffon?

12 MEMBER GRIFFON: Yes.

13 MR. KATZ: Mr. Gibson?

14 MEMBER GIBSON: Yes.

15 MR. KATZ: Dr. Field.

16 MEMBER FIELD: Yes.

17 MR. KATZ: Mr. Clawson?

18 MEMBER CLAWSON: Yes.

19 MR. KATZ: Ms. Beach?

20 MEMBER BEACH: Yes.

21 MR. KATZ: Dr. Anderson?

22 MEMBER ANDERSON: Yes.

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1 MR. KATZ: Dr. Poston?

2 MEMBER POSTON: Yes.

3 MR. KATZ: Mr. Presley?

4 MEMBER PRESLEY: Yes.

5 MR. KATZ: Dr. Richardson?

6 MEMBER RICHARDSON: Yes.

7 MR. KATZ: Dr. Roessler?

8 MEMBER ROESSLER: Yes.

9 MR. KATZ: Mr. Schofield?

10 MEMBER SCHOFIELD: Yes.

11 MR. KATZ: Dr. Ziemer?

12 MEMBER ZIEMER: Yes.

13 MR. KATZ: Dr. Melius?

14 CHAIRMAN MELIUS: Yes.

15 MR. KATZ: All in favor. No  
16 abstentions. No recusal's. The motion  
17 passes.

18 CHAIRMAN MELIUS: Okay, excellent.  
19 Thank you, everybody. Are the petitioners  
20 here for Weldon Spring, or are they on the  
21 phone? Do you know, Ted?

22 MR. KATZ: Let me check.

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1 MS. TRIPLETT: Yes, we are.

2 CHAIRMAN MELIUS: Okay, good. Now,  
3 it's just, we didn't want to start if you  
4 weren't. We had listed 9:15 a.m. We didn't  
5 want to start, unless you were here.

6 Then, we'll move onto Weldon  
7 Spring Plant, and of course, have our  
8 presentation from Mark Rolfes. Mark?

9 MR. ROLFES: Thank you, Dr. Melius.

10 Ladies and gentlemen, Members of the Board,  
11 I'm Mark Rolfes. I'm here today to present  
12 the NIOSH findings of the Weldon Spring Plant,  
13 Special Exposure Cohort Petition Evaluation  
14 Report.

15 Land owned by the Department of  
16 the Army, Weldon Spring Ordnance Works was  
17 transferred to the Atomic Energy Commission in  
18 1955. Weldon Spring Chemical Plant  
19 construction began in 1956 and was completed  
20 in February of 1957.

21 The Atomic Energy Commission  
22 contracted with Mallinckrodt Chemical Company

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1 to refine uranium at Weldon Spring Plant from  
2 June 1957 through December 1966. In 1967, the  
3 AEC returned the land to the Department of the  
4 Army.

5 The main operational activity at  
6 the Weldon Spring Plant was the conversion of  
7 natural uranium ore concentrate, yellow cake,  
8 to uranium metal. Ninety-eight percent of the  
9 nuclear material throughput at the Weldon  
10 Spring Plant was natural uranium.

11 The average annual uranium  
12 containing material process throughput at  
13 Weldon Spring was 12 million kilograms.

14 A little bit about the process of  
15 producing uranium and refining uranium.  
16 Uranium ore concentrates were sampled,  
17 digested in nitric acid and the purified  
18 uranyl nitrate hexahydrate product was  
19 extracted.

20 Uranyl nitrate solution was then  
21 thermally denitrated to uranium trioxide and  
22 heated in a furnace to form uranium dioxide.

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1 Hydrogen gas was reacted with uranium dioxide  
2 to produce uranium tetrafluoride.

3 Uranium tetrafluoride was then  
4 mixed with magnesium chips and loaded into a  
5 refractory-lined reduction vessel, or bomb,  
6 and heated to produce uranium metal. Uranium  
7 metal was then extruded into rods and machined  
8 into cores for nuclear reactors.

9 Thorium processing campaigns began  
10 in November 1963. Natural thorium was  
11 received as a nitrate or as an oxide. Thorium  
12 nitrate tetrahydrate was thermally denitrated  
13 with steam to yield a low density oxide  
14 precipitate.

15 The oxide was then scooped into a  
16 tank, water and nitric acid were added to  
17 produce a sol. The sol was subsequently dried  
18 to form a ceramic gel, which could then be  
19 fired to yield thorium oxide.

20 Approximately 310,000 kilograms of  
21 natural thorium were processed per year during  
22 the years of 1964 through 1966.

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1                   NIOSH       received       the       Special  
2       Exposure Cohort Form B and 83.13 on April 29,  
3       2009.       The       petition       was       qualified       for  
4       evaluation       on       September       11,       2009.  
5       Interrelated SEC petition was merged with the  
6       one received on April 29, 2009.

7                   A       Federal       Register       notice       was  
8       published on September 22, 2009, then NIOSH  
9       issued its Evaluation Report on April 21,  
10       2010.

11                   The       proposed       SEC       Class;       the  
12       petition was submitted to NIOSH on behalf of a  
13       Class of employees from the Weldon Spring  
14       Plant.       The       petitioners       proposed       Class  
15       Definition reads, "All employees of the  
16       Department of Energy, Department of Energy  
17       contractors or subcontractors, who worked in  
18       any area at the Weldon Spring Plant in Weldon  
19       Spring, Missouri, during the applicable  
20       covered operational period from January 1,  
21       1957 through December 31, 1966."

22                   The       Class       evaluated       by       NIOSH       was

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1 all employees of the Department of Energy,  
2 Department of Energy contractors or  
3 subcontractors who worked in any area at the  
4 Weldon Spring Plant in Weldon Spring, Missouri  
5 during the applicable covered operational  
6 period, from January 1, 1957 through December  
7 31, 1967.

8 The information available to NIOSH  
9 during the evaluation included personnel  
10 dosimetry records, urinalyses and in vivo  
11 records from the ORAU Center for Epidemiologic  
12 Research database, ORAU team Technical  
13 Information Bulletins, procedures and the  
14 Weldon Spring Plant Technical Basis Documents,  
15 Weldon Spring Plant health protection reviews,  
16 radiation safety operating procedures and  
17 airborne dust studies.

18 Furthermore, we had approximately  
19 950 documents in the NIOSH Site Research  
20 Database, which pertained to the Weldon Spring  
21 Plant.

22 NIOSH conducted interviews with

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1 former Weldon Spring Plant employees. We also  
2 have available to us, case files in the NIOSH  
3 OCAS Claims Tracking System, and also, the  
4 documentation provided to NIOSH by the  
5 petitioners.

6 As of March 12, 2010, in the NIOSH  
7 OCAS Claims Tracking System, we have received  
8 258 Weldon Spring Plant claims, which require  
9 a dose reconstruction from the Department of  
10 Labor.

11 Of those 258 claims that we have  
12 received from the Department of Labor, 244  
13 meet the Class Definition. Of those 244,  
14 NIOSH has completed 180 dose reconstructions.

15 NIOSH has internal dosimetry data  
16 for 207 of the 244 cases that meet the Class  
17 Definition, and has external dosimetry for 192  
18 of the 244.

19 The petition basis and concern  
20 submitted to NIOSH include concerns regarding  
21 radon exposures, thorium bioassay, recycled  
22 uranium, thorium disequilibrium, lost or

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1 missing records, accidents/incidents, ambient  
2 environmental exposures, contamination  
3 control, medical exposure and neutron dose.

4 The first petition concern was  
5 that there were no measured air concentrations  
6 of radon were reported in the literature.

7 NIOSH looked into the materials  
8 that were processed at the Weldon Spring Plant  
9 and found that the uranium ores did not  
10 include the -- the uranium ores processed at  
11 the Weldon Spring Plant did not include  
12 unmilled materials that contained high amounts  
13 of radium. These were pre-processed ores that  
14 came from mills in the Western United States.

15 Based on the uranium throughput  
16 information, NIOSH estimated a maximum ambient  
17 radon exposure of .06 working level months per  
18 operational year. There was a petition  
19 concern that there was no quantitative in  
20 vitro bioassay for uranium -- excuse me, for  
21 thorium.

22 NIOSH did confirm that there was

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1 no quantitative in vitro bioassay found for  
2 thorium-232 for the workers at Weldon Spring  
3 Plant. NIOSH will utilize daily weighted  
4 average thorium concentrations from air  
5 monitoring data to bound thorium exposures.

6 There was a petition concern that  
7 Weldon Spring received unknown amounts of  
8 recycled uranium after 1961. NIOSH  
9 investigated the receipts and processing of  
10 recycled uranium. To bound internal doses,  
11 NIOSH will apply the highest concentrations of  
12 transuranic contaminants for all uranium  
13 processed.

14 There was a petition concern about  
15 uncertainty in quantifying thorium-232  
16 exposures via in vivo measurements of  
17 thallium-208. NIOSH has access to 200  
18 qualitative in vivo measurements for 148  
19 Weldon Spring Plant employees, although these  
20 data have not been used to bound thorium dose  
21 for the evaluated Class.

22 There was a petition concern which

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1 recanted a concern by Mont Mason, regarding  
2 the possibility of lost medical records from  
3 the Weldon Spring Plant. NIOSH investigated  
4 the possibility of lost medical files and Mont  
5 Mason had indicated that the problem could  
6 have been a record filing error. So, he had  
7 all of the files sent to Oak Ridge, to resolve  
8 the discrepancy.

9 NIOSH also interviewed  
10 epidemiologist familiar with Mont Mason and  
11 the Weldon Spring Plant records. A letter  
12 from T.F. Mancuso to the Atomic Energy  
13 Commission specifically requested that the  
14 files referred to by Mont Mason not be  
15 destroyed. NIOSH found no actual indications  
16 that the records were lost or destroyed.

17 There was a petition concern that  
18 accidents may not have been documented  
19 sufficiently, or that the records might not be  
20 available. NIOSH thoroughly reviewed  
21 documentation and found no indication of  
22 significant accidents or incidents at the

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1 Weldon Spring Plant. While several events  
2 were identified through document reviews and  
3 interviews with workers, there were no  
4 indications of exceptionally high radiation  
5 exposures or exposures that have not already  
6 been accounted for in the data available to  
7 NIOSH.

8           There was a petition concern about  
9 the lack of any thorium data and a belief that  
10 there was no basis to estimate thorium  
11 releases prior to 1967. There was also a  
12 concern that thorium was stored and used at  
13 Weldon Spring Plant in 1958.

14           In its evaluation, NIOSH found  
15 that the earliest thorium processing began in  
16 1963 at Weldon Spring Plant. There were no  
17 indications of prior of thorium processing  
18 discovered. NIOSH has daily weighted average  
19 concentration, air monitoring data, which  
20 encompassed the thorium operations.

21           There was a petition concern about  
22 the lack of atmospheric monitoring data for

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1 Weldon Spring Plant during operations. There  
2 was also concern over the use of Fernald  
3 environmental data.

4 In its evaluation, NIOSH looked at  
5 the atmospheric monitoring data during the  
6 Weldon Spring operational period and realized  
7 it is limited, but sufficient to estimate  
8 intakes of radioactive airborne particulate  
9 and radon.

10 Employees with the highest  
11 potential for exposure at Weldon Spring Plant  
12 were monitored. The monitored workers  
13 exposures could be used to bound unmonitored  
14 workers exposures. This evaluation does not  
15 specifically rely upon Fernald data.

16 There was a petition concern about  
17 lack of routine personnel contamination  
18 monitoring, as well as a comprehensive  
19 bioassay program for all isotopes on site. It  
20 was this set of concerns that allowed NIOSH to  
21 qualify the SEC petition, and NIOSH denies  
22 this evaluation and responses to these

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1 concerns are encompassed in the Special  
2 Exposure Cohort petition Evaluation Report.

3 There was a petition concern about  
4 little information being available, regarding  
5 occupational medical x-ray procedures,  
6 equipment and examination frequency. NIOSH  
7 has not located specific policy guidance on  
8 occupational medical x-rays for the Weldon  
9 Spring Plant.

10 However, occupational medical x-  
11 ray doses can be assessed using default values  
12 of entrance kerma, available in TIB-0006 dose  
13 reconstruction from occupationally related x-  
14 ray procedures.

15 There was a petition concern about  
16 the lack of documentation and detail related  
17 to neutron dose at Weldon Spring Plant.  
18 Neutron radiation produced via the alpha-  
19 neutron reaction in uranium tetrafluoride,  
20 alpha-neutron reactions become more  
21 significant with increased uranium enrichment.

22 NIOSH found no possibility of

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1 significant neutron dose at the Weldon Spring  
2 Plant, given the level of uranium enrichment  
3 processed.

4 During the evaluation, NIOSH also  
5 looks for potential SEC issues as part of the  
6 review. NIOSH identified an issue that could  
7 be a potential SEC issue.

8 The issue was that feed material  
9 processed by Weldon Spring Plant was referred  
10 to as uranium ore by former workers and the  
11 concern is that uranium progeny in the  
12 pitchblende posed different exposure concerns  
13 than pre-processed ores.

14 NIOSH investigated the concern and  
15 found the use of the term "ore" to be  
16 inaccurate. Milling of uranium removes  
17 progeny radionuclides, such as uranium --  
18 excuse me, such as radium. Weldon Spring did  
19 not process radium-bearing ores, but rather  
20 ore concentrates, which were pre-processed at  
21 mills in the Western United States.

22 A second potential SEC issue that

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1 was identified, NIOSH identified a single  
2 reference to Building 441 as a facility which  
3 was used to store uranium hexafluoride  
4 cylinders.

5 NIOSH conducted former worker  
6 interviews to attempt to confirm the presence  
7 of uranium hexafluoride on site at Weldon  
8 Spring. Two former workers provided  
9 information that uranium hexafluoride was  
10 never processed nor stored at the Weldon  
11 Spring Plant, and it appears that the  
12 reference is erroneous.

13 Now, for a sample dose  
14 reconstruction, for a chemical operator who  
15 was employed in Building 101 and 103 at the  
16 Weldon Spring Plant from 1958 through 1966,  
17 the individual was a male born in 1929,  
18 diagnosed with cancer in 2010.

19 For skin cancer, the Probability  
20 of Causation and determination, the ethnicity  
21 of the individual was assumed to be White,  
22 Non-Hispanic.

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1           The individual was monitored for  
2 external exposures for all years and NIOSH was  
3 provided with annual exposure data for each  
4 year. The individual had a recorded photon  
5 dose of 3.737 rem, a recorded electron dose of  
6 13.655 rem.

7           NIOSH calculated a missed photon  
8 dose of 725 millirem, based upon the maximum  
9 number of possible non-positive dosimetry  
10 results. For an over-estimate, NIOSH would  
11 apply 100 percent 30 to 250 keV photon energy  
12 distribution. For uranium areas, a better  
13 estimate of the actual photon energies would  
14 be a 50/50 split between 30 to 250 keV photons  
15 in greater than 250 keV photons.

16           For a thorium work, the energy  
17 distribution would typically be about 25  
18 percent 30 to 250 keV photons and about 75  
19 percent greater than 250 keV photons. Neutron  
20 doses were not assigned in this assessment.

21           We take a look at the individuals  
22 bioassay data that we received from the

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1 Department of Energy. For this hypothetical  
2 individual, we had uranium and urine bioassay  
3 samples. He had submitted 59 total samples  
4 and 57 of those were greater than the minimum  
5 detectable amount of .008 milligrams per  
6 liter.

7 For the years prior to 1963,  
8 natural uranium was assumed and a specific  
9 activity of 683 picocuries per milligram was  
10 used in the dose reconstruction.

11 For years from 1963 forward, one  
12 percent enriched uranium was assumed and a  
13 specific activity of 973 picocuries per  
14 milligram was used.

15 Recycled uranium was assumed  
16 beginning in 1961 and intakes of plutonium,  
17 neptunium and technetium were added to the  
18 uranium intakes. The chronic uranium intake  
19 was calculated to be 4,400 picocuries per day  
20 based on the individuals bioassay data.

21 From 1958 through 1966 for work in  
22 Building 101 and 103, the individual had a

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1 potential exposure to uranium, recycled  
2 uranium contaminants, uranium concentrate  
3 trace contaminants and thorium-232 for the  
4 years 1963 through 1966.

5 This slide shows the inhalation  
6 intakes in picocuries per day, as well as the  
7 basis for assigning those intakes.

8 As you can see, the uranium intake  
9 of 4,400 picocuries per day is based upon  
10 urine data. The plutonium, neptunium-237 and  
11 technetium-99 are based upon recycled uranium  
12 fractions. We've assigned thorium-230 intakes  
13 and then, intakes about the radionuclides,  
14 including radium-226, lead-210, plutonium,  
15 radium and other isotopes of thorium from  
16 raffinate pit ratios.

17 For the years of 1963 through  
18 1966, the uranium intake was the same at 4,400  
19 picocuries per day based on the individuals  
20 urinalysis data. NIOSH also added in intakes  
21 of plutonium, neptunium and technetium from  
22 the recycled uranium fractions.

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1 Thorium-232 intakes were based  
2 upon daily weighted average concentration  
3 data. The maximum applicable daily weighted  
4 average value was selected based upon the work  
5 area and the year of employment.

6 The arithmetic average was used  
7 with an assumed GSD of five, to calculate a  
8 median value. A log-normal distribution was  
9 applied with a GSD of five. Ingestion intakes  
10 were calculated based upon information from  
11 OCAS, TIB-0009.

12 On this slide, we show the median  
13 intake value of thorium, and this is also  
14 followed by a GSD of five. The thorium  
15 intakes are assigned equally to thorium-232,  
16 228 and radium-228. You can see the intakes  
17 for 1963 and picocuries per day are  
18 approximately 36 followed by 32, 19 and 16  
19 from inhalation. The ingestion intakes are  
20 all less than one picocurie per day.

21 This summarizes the results of the  
22 sample dose reconstruction. For the left-hand

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1 column, we showed the target organs for the  
2 dose reconstruction and then, the next column  
3 is the internal dose in rem, followed by the  
4 external dose in rem, and then the Probability  
5 of Causation, which is a percentage.

6 For the first organ, the prostate  
7 an internal dose of 10.4 rem was assigned and  
8 an external dose of 5.4 rem. That created a  
9 Probability of Causation of 20.41 percent.

10 The internal dose to the skin was  
11 10 rem and the external dose to the skin was  
12 17.8, and because of difference in cancer  
13 models, the basal cell carcinoma, that level  
14 of dose created a Probability of Causation of  
15 40.02 percent, while for a squamous cell  
16 carcinoma, it generated a PoC of 8.16 percent.

17 The internal dose to the kidney  
18 was approximately 108 rem with an external  
19 dose of 4.6 rem. The Probability of Causation  
20 was 77.44 percent. The internal dose to the  
21 liver was 49 rem, with an external dose of 4.6  
22 rem and the PoC was 86.24 percent.

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1           The lung cancer, the internal dose  
2           for the lung was 2,380 millirem and the  
3           external dose was 4.4 rem, giving a  
4           Probability of Causation of 99.13 percent.

5           NIOSH evaluates the petition,  
6           using guidelines in 42 CFR 83.13 and submits a  
7           summary of findings in a petition Evaluation  
8           Report to the Board and to the petitioners.  
9           The Weldon Spring Plant SEC Evaluation Report  
10          was released to the public on May 4, 2010.

11          As part of the evaluation process,  
12          as you're all familiar with, the two-prong  
13          test established by EEOICPA, NIOSH must  
14          determine whether it is feasible to estimate  
15          the level of radiation doses of individual  
16          members of the Class with sufficient accuracy,  
17          and two, whether there is a reasonable  
18          likelihood that such radiation dose may have  
19          endanger the health of members of the Class.

20          NIOSH found that the available  
21          monitoring records, process descriptions and  
22          source term data are adequate to complete dose

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1 reconstructions with sufficient accuracy for  
2 the evaluated Class of employees.

3           Therefore, under the law, the  
4 health endangerment determination is not  
5 required, and this final slide summarizes the  
6 feasibility findings for the Weldon Spring  
7 Plant SEC-00143 for the years of January 1,  
8 1957 through December 31, 1967, showing that  
9 the reconstruction is feasible for internal  
10 and external sources of radiation exposure at  
11 the Weldon Spring Plant. Thank you.

12           CHAIRMAN MELIUS: Thank you, Mark.

13           Do Board Members have questions for Mark?

14           Yes, Wanda?

15           MEMBER MUNN: I just have a  
16 comment. I think the Agency should be  
17 applauded for such a thorough and careful  
18 review of this particular site.

19           It had -- it involved a wide range  
20 of concerns, on the part of the claimant and  
21 others, and the manner in which those were  
22 addressed with such thoroughness is very

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1 helpful for Board Members, in evaluating what  
2 actually transpired at this site. So, thank  
3 you.

4 MR. ROLFES: Thank you, Wanda.

5 CHAIRMAN MELIUS: Yes, Brad?

6 MEMBER CLAWSON: Yes, your mention  
7 that 98 percent of that was natural uranium.  
8 What was the other two percent?

9 MR. ROLFES: The other two percent  
10 would have included recycled uranium and  
11 thorium.

12 MEMBER CLAWSON: So, they were  
13 using -- it was -- part of it was the recycled  
14 part of the uranium?

15 MR. ROLFES: Also, I forgot to  
16 mention as well, the one percent enriched  
17 uranium, there was a small quantity of  
18 enriched uranium, which didn't come on site --  
19 let's see here, I believe it was in 1963. Let  
20 me find the slide, to verify that.

21 Part of my sample dose  
22 reconstruction -- yes, one percent enriched

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1 uranium was assumed from 1963 forward, and so,  
2 that would have been the exception -- that  
3 would have been part of the other two percent  
4 of the material that was processed.

5 MEMBER CLAWSON: Okay, you were  
6 mentioning about the records that they -- that  
7 you found, documentation that they weren't  
8 supposed to be destroyed or so forth. So,  
9 you've never found those records or --

10 MR. ROLFES: Most of those are  
11 medical files, which normally, we wouldn't be  
12 interested in, unless it had some sort of  
13 radiologic data, some kind of dosimetry  
14 information.

15 I haven't looked at the records  
16 myself, but from what I recall, it was related  
17 to physical exams and blood tests and things  
18 that weren't directly relevant to dose  
19 reconstruction.

20 MEMBER CLAWSON: Okay. Now, you  
21 were using Fernald for surrogate data, is that  
22 -- I don't understand.

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1                   MR. ROLFES: Previously, in the  
2 Weldon Spring TBD, I believe there is  
3 information discussing the in vivo counts that  
4 were done on the employees who were working  
5 with thorium from 1963 through 1966.

6                   They had brought, I guess, a  
7 precursor to the Y-12 mobile in vivo unit, to  
8 Weldon Spring, to have approximately 148  
9 employees counted, and we've discussed that  
10 information in our Site Profile, but we felt  
11 that the measurements that were taken wouldn't  
12 be good for building, like a coworker model.

13                   So, we had defaulted to the  
14 information in the Fernald Site Profile, to  
15 assign thorium intakes for the years of  
16 operation where -- from 1963 through 1966 at  
17 Weldon Spring.

18                   MEMBER CLAWSON: I was just  
19 wondering that because I didn't think that we  
20 had come to a conclusion yet on Fernald.  
21 That's why I was wondering what we were using  
22 Fernald's data for on that, but that's -- that

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1 will be -- thank you.

2 CHAIRMAN MELIUS: Okay, Mark, I  
3 believe.

4 MEMBER GRIFFON: Just a couple of  
5 things. One thing that was intriguing me on  
6 your page four slide, they never dealt with  
7 uranium hexafluoride, did they?

8 MR. ROLFES: No, they did not.  
9 That was one of the things that --

10 MEMBER GRIFFON: Because I think --

11 MR. ROLFES: -- that we did  
12 investigate too, to determine --

13 MEMBER GRIFFON: I think page four  
14 should say, "Your hydrofluoric acid reacted  
15 with uranium oxide to get uranium  
16 tetrafluoride," but anyway, that's just a  
17 minor thing.

18 MR. ROLFES: Where are you?

19 MEMBER GRIFFON: You'll find that,  
20 it's on page four -- is it page four on yours?  
21 Is that page four? Yes, that was it, the  
22 third bullet.

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1 MR. ROLFES: The third bullet?

2 MEMBER GRIFFON: Hydrogen gas  
3 reacted, I think --

4 MR. ROLFES: Yes, hydrogen gas and  
5 HF.

6 MEMBER GRIFFON: Yes, that should  
7 be HF, right, hydrofluoric acid. Anyway,  
8 that's a minor thing.

9 I guess, I see the overlap, the  
10 similarities with Fernald are striking here.  
11 I think it actually -- you know, several of  
12 the same issues, I think, are going to come  
13 into play and I'm not sure if we're going to  
14 be able to tease them all out here at the  
15 Board level.

16 But the recycled uranium, I think  
17 you derived that from the DOE report.

18 MR. ROLFES: Yes, recycled uranium  
19 balanced.

20 MEMBER GRIFFON: You didn't go back  
21 for the actual data itself. Did you just use  
22 the numbers provided by the DOE summary

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1 report?

2 MR. ROLFES: That's correct, and  
3 we're using the 95<sup>th</sup> percentile of the  
4 contaminant concentrate -- concentrations, and  
5 for plutonium, I believe, the value is  
6 approximately 6.3 parts per billion plutonium  
7 on uranium phases. That's the 95<sup>th</sup>  
8 percentile, and it's based on an unblended  
9 uranium trioxide PUREX source.

10 MEMBER GRIFFON: Right, right, I  
11 mean, I know that's something that has come up  
12 on the Fernald meetings, that you know, we  
13 might want to pursue further, as far as the  
14 actual data itself, rather than the summary  
15 report from DOE.

16 But the other question is, and  
17 this is similar too -- the daily weighted  
18 averaging, do you know anything about that? I  
19 mean, was it area sampling? Was it breathing  
20 zone, and then we have the age-old problem  
21 with daily weighted averaging of being able to  
22 track the worker through their course of daily

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1 work and placing them in a work -- you said,  
2 work area, combined with year.

3 That's a good model, as long as we  
4 can track the people.

5 MR. ROLFES: The daily weighted  
6 average reports do indeed contain information  
7 collected from the worker's breathing zone, as  
8 well as the general area, and furthermore,  
9 basically, these reports would track a worker  
10 at each station, during their eight hour work  
11 shift. They would follow them to do this  
12 operation, take a breathing zone sample, as  
13 well as a GA sample, and then, track the  
14 worker to the next operation or to lunch,  
15 even, and take, like, a general area air  
16 sample in the lunch room.

17 And so, they would come up with a  
18 time integrated air concentration for that  
19 employees' work day.

20 MEMBER GRIFFON: But how are you  
21 going to -- I'm assuming they didn't monitor  
22 everyone all the time. So, you're going to

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1 have to match --

2 MR. ROLFES: Correct.

3 MEMBER GRIFFON: -- a claimant with  
4 a particular --

5 MR. ROLFES: That --

6 MEMBER GRIFFON: -- job type, or  
7 I'm not sure how you're going to do it.

8 MR. ROLFES: For a best estimate,  
9 you would do that, but what we're planning on  
10 doing is using the highest daily weighted  
11 average concentration for each facility, for  
12 each year.

13 MEMBER GRIFFON: Okay, so, there's  
14 some assumptions in there too, that I think we  
15 need to explore. But leave it for now. Thank  
16 you.

17 CHAIRMAN MELIUS: Dr. Lemen?

18 MEMBER LEMEN: On one of the  
19 slides, you talked about two former workers  
20 providing information on the uranium  
21 hexafluoride, saying it was never processed.

22 Can you tell me a little bit more

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1 about the two workers that you talked to, and  
2 what they did at the facility?

3 MR. ROLFES: I'd have to get back  
4 to you on that. They were two individuals, I  
5 believe, that would have had a -- would have  
6 known the materials that we were asking of.

7 I'd have to get back to you on the  
8 details of their job titles and background, et  
9 cetera.

10 MEMBER LEMEN: I was just curious  
11 as to why you picked those two and what their  
12 jobs were. So, if you could get back to me,  
13 I'd appreciate it.

14 MR. ROLFES: Sure, I want to say  
15 that one of them might have been involved in  
16 like, process engineering, but I'll certainly  
17 get back to you on that.

18 MEMBER LEMEN: Thank you.

19 CHAIRMAN MELIUS: Phil, then Mike.

20 MEMBER SCHOFIELD: Do you know how  
21 often the workers gave urine samples and were  
22 there any fecal samples for ingestion?

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1 MR. ROLFES: To my knowledge, there  
2 were no fecal samples ever taken from Weldon  
3 Spring Plant employees, but urinalysis were  
4 taken as frequently as several times a day,  
5 through weekly samples.

6 Some employees may have only given  
7 an annual sample, for example, during the  
8 physical. It was a range of distributions of  
9 sample frequency, based upon the individual's  
10 exposure potential and job duties.

11 MEMBER GRIFFON: Several times a  
12 day?

13 MR. ROLFES: Yes, for an incident,  
14 for example, you know.

15 CHAIRMAN MELIUS: Mike?

16 MEMBER GIBSON: Mark, what -- how  
17 many worker interviews did you do, roughly?

18 MR. ROLFES: I know about 10, but  
19 I'd have to get -- let me take a look. I  
20 might have it.

21 MEMBER GIBSON: I mean, it looks  
22 like at least nine references, based on C-

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1                   MR. ROLFES: That's what I was  
2 going for. I was going to say about 10, but it  
3 was --

4                   MEMBER GIBSON: Because it was all  
5 the way up A through I, I believe.

6                   MR. ROLFES: Okay, thank you. So,  
7 then nine are documented here. There were  
8 likely earlier interviews that were conducted,  
9 as part of the Site Profile investigations,  
10 but specific to the SEC, as you said, is nine.

11                   MEMBER GIBSON: Then in ER, I just  
12 glanced through it, it looks like that --  
13 basically, only three of the workers, C, G and  
14 H, their knowledge of the site was referred to  
15 several times. Do you know what their job  
16 titles were?

17                   MR. ROLFES: I suspect that they  
18 were probably the same ones that were  
19 interviewed, regarding the uranium  
20 hexafluoride. So, I can follow up with you on  
21 that.

22                   CHAIRMAN MELIUS: Any other

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1 questions? Bill?

2 MEMBER FIELD: I had a question  
3 about the thorium bioassay.

4 MR. ROLFES: Yes.

5 MEMBER FIELD: That wasn't used for  
6 the bounding at all, is that right?

7 MR. ROLFES: No, it was not.

8 MEMBER FIELD: Okay, how does the  
9 highest bioassay compare to your bounded  
10 estimates?

11 MR. ROLFES: The way the bioassay  
12 data for the thorium-232 in vivo counts, they  
13 were using the thallium-208 peak-4 as a marker  
14 for thorium-232 exposures, and they had  
15 categorized individuals exposures as  
16 background, trace or, I think it was a lung  
17 burden, and it corresponded to bands of counts  
18 up to, I think -- don't quote me on this, but  
19 I think the lung burden number of counts was  
20 around 240.

21 The data that I recall, most of  
22 the counts were for trace or background. I

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1 don't recall any full lung burdens being  
2 measured.

3 MEMBER FIELD: Okay, yes, my  
4 question was just for the highest bioassay  
5 result you found, how -- you know, how would  
6 that compare to the bounded estimate?

7 Obviously, was it within the  
8 bounded estimate?

9 MR. ROLFES: Well, we didn't  
10 calculate that. So, since it wasn't directly  
11 a quantitative measurement, it was more of a  
12 non-quantitative measurement, there's a lot of  
13 uncertainties regarding the age of the thorium  
14 materials processed and such.

15 MEMBER GRIFFON: Yes, I mean,  
16 that's something that, on Work Group levels,  
17 we've often looked at that for sort of  
18 validating, you know, even if you're not going  
19 to use these others, are they consistent with  
20 -- you know, so, good point.

21 CHAIRMAN MELIUS: Yes, Brad?

22 MEMBER CLAWSON: I just have one

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1 more. Mark, this is kind of getting to me  
2 because we still haven't resolved Fernald's  
3 issues, and how would this affect, this one?

4 If we're using this as data to --  
5 and we haven't even settled Fernald's, as a  
6 matter of fact, that's why the action items  
7 that we've got a White Paper on right now,  
8 that we're disagreeing on, and I just -- I  
9 don't see how we can use this data to do  
10 another site, when we haven't even settled it.

11 MR. ROLFES: We are not currently  
12 using any data from Fernald under the SEC  
13 evaluation for Weldon Spring.

14 CHAIRMAN MELIUS: Okay, thank you,  
15 Mark. Now, we'll like to hear from the  
16 petitioners. I don't know if they're on the  
17 line.

18 MEMBER RICHARDSON: I had a  
19 question.

20 CHAIRMAN MELIUS: I'm sorry, David  
21 and Paul, I apologize. I know I do it, at  
22 least once. Go ahead, David.

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1                   MEMBER RICHARDSON: I had two  
2 questions. The first one was, I was intrigued  
3 by the description of using Mancuso's data and  
4 the comparison of the completion or the level  
5 of completeness of the data that were key-  
6 punched by Mancuso and the hard copy records  
7 and log books that you were able to find.

8                   So, you have a series of tables in  
9 here, 7-1 to 7-3, maybe, in your report, where  
10 you find in some cases, that you were able to  
11 validate 60 percent or 40 percent of the data  
12 that was the CER database, other years, it  
13 gets up to 100 percent.

14                   That was something new, I think  
15 for me, was previously, when I've had  
16 discussions with people involved in the  
17 compensation program, they've tended to view  
18 epidemiologic data as, not as the record of --  
19 not as the source of information of record for  
20 kind of, construction of workers doses, that  
21 you would go back to original hard copy  
22 records, because information that was

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1 collected for research purposes is not  
2 necessarily -- has a different pedigree, we're  
3 going to use their words, than maybe a dose of  
4 record that was maintained by a site. Could  
5 you talk about that?

6 MR. ROLFES: Well, this was done.  
7 We had sampled five percent of the available  
8 hard copy results and we didn't necessarily  
9 collect the data from the CER database, but we  
10 used the data that we had collected from  
11 Department of Energy to compare to the data  
12 that was collected by ORAU and their CER  
13 database.

14 We did it as a cross-comparison to  
15 basically validate, to determine whether the  
16 records may or may not have been complete.

17 MEMBER RICHARDSON: But my reading  
18 of the report, and maybe it's a  
19 misunderstanding, is that for some years, the  
20 majority of the information that you have on  
21 bioassay data for uranium is coming from the  
22 ORAU CER database, is that wrong, that there

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1 are some years where you haven't been able to  
2 locate the hard copy records?

3 MR. ROLFES: As far as gathering  
4 all of the bioassay data from one centralized  
5 source, keep in mind also, that when we  
6 receive a claim for a dose reconstruction at  
7 NIOSH, we receive a Department of Energy  
8 response, which contains bioassay data in it  
9 for the employee.

10 MEMBER RICHARDSON: Okay, so, what  
11 I -- so, this statement here, for example,  
12 that there were 2,900 urinalysis results in  
13 the CER database for 1965, NIOSH does not have  
14 hard copy records, results for 1965.

15 That's -- you're saying that none  
16 the less, a dose reconstruction for a worker  
17 is not going to be based on the CER database.

18 MR. ROLFES: Well, I guess I'll  
19 have to get back to you with additional  
20 information on that. I apologize, I don't  
21 have the answer.

22 MEMBER RICHARDSON: I mean, because

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1 kind of the -- the kind of the conclusions  
2 here are that you can do dose reconstruction  
3 for these workers because you've identified a  
4 vast repository of information that allows you  
5 to have individual bioassay data for all these  
6 workers.

7 But the documentation here is  
8 describing that vast repository of information  
9 for many years, as solely being epidemiologic  
10 data files that are maintained by the Center  
11 for Epidemiologic Research of the DOE.

12 I mean, so, is there confirmation  
13 that there exists out there, some source of  
14 bioassay hard copy results that the DOE is  
15 going to provide to you, which are not just  
16 coming from Mancuso's research files?

17 MR. ROLFES: I'll have to get back  
18 to you.

19 CHAIRMAN MELIUS: Thanks. Dr.  
20 Ziemer, do you have any questions?

21 MEMBER ZIEMER: I have no  
22 questions.

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1                   CHAIRMAN MELIUS: Okay, and David,  
2 do you have anymore questions?

3                   MEMBER RICHARDSON: Yes, I had one  
4 other question.

5                   CHAIRMAN MELIUS: Sure.

6                   MEMBER RICHARDSON: The description  
7 of the process going on involves a whole  
8 series of kind of, steps of chemical  
9 conversion, right? It's starting out with  
10 yellow cake, and the bioassay results, again,  
11 are -- you have some information on the source  
12 material and some assumptions about possible  
13 contamination or levels of enrichment.

14                   So, you've got some idea about the  
15 enrichment. You've got some idea about the  
16 bioassay, the excretion results in urine.

17                   One of the pieces of information  
18 that seems to me, maybe not here, is  
19 information on the chemical form of the  
20 uranium at -- for a given uptake -- intake.

21                   And so, I was wondering if the  
22 solubility of the different uranium compounds

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1 that are being produced through these  
2 different steps of this industrial process,  
3 they're going to -- it's going to vary across  
4 the process and whether that's going to affect  
5 the clearance from the lung, or the clearance  
6 and kind of, the retention time in the lung,  
7 and do you -- is there -- how is that  
8 information being incorporated in here, or is  
9 my assumption wrong about that?

10 MR. ROLFES: The chemical  
11 solubility's of various uranium compounds are  
12 well known and when NIOSH completes a dose  
13 reconstruction, NIOSH would use the chemical  
14 solubility Class that was the most claimant  
15 favorable for the organ, the target organ and  
16 the dose reconstruction.

17 So, if it's a lung cancer case, we  
18 would use solubility Class S, which would  
19 result in the highest lung dose because of the  
20 residence time.

21 MEMBER RICHARDSON: Yes, okay, I  
22 mean, I know that the -- the coefficients are

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1 known. What the -- so, the answer is, you're  
2 just going to -- it's the same question as the  
3 questions about dose rate.

4 You actually -- it's actually  
5 often difficult to place a worker into a  
6 specific location. So, you're going to make  
7 an assumption that all of them have the  
8 longest lung retention time, for example, and  
9 deal with the question that way, about the  
10 compound that's being -- that was taken up.

11 MR. ROLFES: I'm not sure I  
12 followed the question, but basically, when  
13 NIOSH would complete a dose reconstruction,  
14 you're using uranium urinalysis, we would look  
15 at the data and determine -- you can determine  
16 what type of uranium an individual is exposed  
17 to, by looking at the excretion rate.

18 We would use the most claimant  
19 favorable solubility Class for the type of  
20 cancer the individual had.

21 MEMBER RICHARDSON: Okay.

22 CHAIRMAN MELIUS: Okay, thanks.

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1 Let's hear from the petitioners now. I  
2 believe they're on the line.

3 MS. TRIPLETT: Hello, can you hear  
4 me?

5 CHAIRMAN MELIUS: Yes, I think we  
6 can get a little bit more volume on it. Go  
7 ahead.

8 MS. TRIPLETT: We're trying to fix  
9 the phone. Hold on one second.

10 CHAIRMAN MELIUS: Okay, yes, that's  
11 better.

12 MS. TRIPLETT: Can you hear me?

13 CHAIRMAN MELIUS: Yes, yes, we can.

14 MS. TRIPLETT: Okay.

15 CHAIRMAN MELIUS: Thanks.

16 MS. TRIPLETT: All right, good  
17 morning. My name is Tina Triplett and I'd  
18 like -- I actually prepared a statement that I  
19 would like to read into the record.

20 My father, Leroy Triplett, worked  
21 at the Mallinckrodt Chemical Works Plant in  
22 Weldon Spring from 1959 to 1966. He performed

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1 work as a rigger, electrical maintenance and a  
2 chemical operator.

3 My father was diagnosed with colon  
4 cancer in 1999. He applied for compensation  
5 under the EEOICPA in October 2003.

6 His dose reconstruction was  
7 completed by NIOSH on October 31, 2005, the  
8 day he died.

9 Watching my father deteriorate and  
10 say goodbye was the hardest thing that I and  
11 my family have ever had to do in our lives.

12 I promised my father that I would  
13 continue his fight for the sacrifice he made  
14 for the safety -- I'm also fighting for all of  
15 the Mallinckrodt workers at Weldon Spring Site  
16 who are just like him.

17 These workers were exposed to  
18 numerous and unaccountable amounts of  
19 different types of radiation. These workers  
20 were exposed without their knowledge of the  
21 hazards and without the appropriate  
22 monitoring.

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1 I've filed for a Special Exposure  
2 Cohort for the Mallinckrodt Weldon Spring  
3 Plant in late April 2009. In my petition, I  
4 addressed many important issues which promotes  
5 NIOSH's inability to accurately perform dose  
6 calculations with sufficient accuracy.

7 NIOSH makes several assumptions in  
8 their Evaluation Report, pertaining to  
9 photons, thorium and ambient exposures.  
10 Furthermore, there are numerous issues of  
11 NIOSH not considering SC&A findings.

12 Mallinckrodt employees at Weldon  
13 Spring were not monitored on a routine basis  
14 for every type of radionuclide that they were  
15 exposed to. I agree, there was some external  
16 monitoring for the Weldon Spring Site, but it  
17 was limited. Not everyone was monitored,  
18 including industrial workers who transferred  
19 from the downtown facility. Approximately 50  
20 percent of the Weldon Spring workers were not  
21 monitored.

22 In 1958, Mallinckrodt Works health

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1 physics director Mont Mason commented that  
2 Weldon Spring's increase handling and  
3 processing of thorium would lead to an  
4 increase incident of cancers.

5 If thorium was not present at  
6 Weldon Spring as early as 1958, why would Mont  
7 Mason make this reference?

8 A conference with Al Becher, a  
9 consultant for Mallinckrodt Chemical Works  
10 also indicated that exposures to thorium were  
11 more than realized at the Weldon Spring plant.

12 Another concern from the SEC  
13 petition was the lack of or the destruction of  
14 records, in particular the V-2151 shelf-list  
15 that Dr. Thomas Mancuso requested not be  
16 destroyed on September 12, 1972. Among the  
17 shelf-list were medical files for the Weldon  
18 Spring employees through 1966 and dust  
19 studies, which Mancuso could not find one  
20 complete set.

21 NIOSH just sees the letter from  
22 Mancuso means the records were safe from

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1 destruction. I lack confidence in their  
2 statements since this issue was already raised  
3 in the Mallinckrodt SEC petition.

4 These records have never been  
5 located because these documents were beyond  
6 scheduled destruction dates. If the documents  
7 had been located, I request that they be  
8 produced.

9 Furthermore, in an ERDA study by  
10 A. S. Becher, relevant data for radiation  
11 exposure and exposures and toxics, as well as  
12 identification of the exposed versus non-  
13 exposed population at Mallinckrodt Chemical  
14 Works were incomplete.

15 In addition, a previous computer  
16 employee announced in a NIOSH project meeting  
17 from February 2, 2005 that all radiation  
18 records, including over-exposures, could not  
19 be located, which brings me to this point.

20 There's a lack of Weldon Spring  
21 worker testimony in the dose reconstruction  
22 process. Many workers have provided valuable

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1 information about experiences at Weldon  
2 Spring, such as routine accidents, over-  
3 exposures and restrictions and a lack of  
4 personal and egress monitoring.

5 However, this information is not  
6 sufficiently addressed by NIOSH. It appears  
7 that NIOSH is not able to dose incidents,  
8 therefore, they neglect to use this  
9 information.

10 I included several affidavits and  
11 an SEC petition pertaining to my father's own  
12 work experience at Weldon Spring, including  
13 exposure reports and blank dust concentration  
14 readings, receiving thorium in his eye,  
15 explosion on the extrusion press and purposely  
16 dropping his badge in orange oxide to test the  
17 health and safety aspects.

18 My father had also stated that he  
19 had been blindfolded before and was taken to  
20 locations that he was never to discuss. My  
21 father confided in Denise Brock, who works for  
22 NIOSH, and she can also attest to these

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1 statements.

2 As previously noted in a prior  
3 Mallinckrodt SEC Cohort, there was severe data  
4 integrity issue. This will continue to be a  
5 massive concern for Weldon Spring, considering  
6 all operations and the company health and  
7 safety director transferred to that location.

8 Another interest is that NIOSH  
9 claims the plant was specifically designed to  
10 process uranium low concentrates produced  
11 elsewhere in the United States and Canada.  
12 NIOSH advises these materials were sent to the  
13 Weldon Spring plant for sampling.

14 However, according to the National  
15 Bureau of Standards from December 1965,  
16 sampling included concentrates from Belgium,  
17 South Africa, Australia and Portuguese  
18 producers.

19 These concentrates contain an  
20 assortment of impurities at varying amounts,  
21 including thorium. These impurities differed  
22 from mill to mill and from time to time at a

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1 given mill. Both foreign and domestic empire  
2 works continue until June 30, 1965.

3 I'm not a scientist or a health  
4 physicist. I am just one of many who have had  
5 a loved one taken too soon as a result from  
6 employment at Mallinckrodt Chemical Works, at  
7 Weldon Spring.

8 I recognize and appreciate the  
9 hard work by all parties involved in this  
10 process, but I would like to stress the  
11 importance of timeliness. This program's  
12 timeliness is so imperative for these cancer-  
13 stricken workers.

14 NIOSH has had ample time to prove  
15 their case, but the fact is, NIOSH has not  
16 been able to demonstrate dose reconstructions  
17 can be performed with sufficient accuracy and  
18 plausibility.

19 I'm respectfully requesting the  
20 Board recognize the numerous deficiencies and  
21 grant a Special Exposure Cohort for the  
22 Mallinckrodt Chemical Works Weldon Spring

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1 Plant, 1957 to 1967.

2 Thank you for your time.

3 CHAIRMAN MELIUS: Thank you.

4 MR. KATZ: Tina, thank you for  
5 soldiering through your statement. We  
6 appreciate it. I would just ask -- this is  
7 Ted Katz with the Board, if you would speak to  
8 Denise about sending in your statement, that  
9 would be appreciated.

10 MS. TRIPLETT: Okay.

11 MR. KATZ: Thank you.

12 CHAIRMAN MELIUS: Do we have  
13 another petitioner that also wants to speak?

14 MS. JOHNSON: Hi, this is Karen  
15 Johnson. Can you hear me?

16 CHAIRMAN MELIUS: Yes, we can.

17 MS. JOHNSON: Okay. I'm really  
18 probably going to keep mine pretty short,  
19 because I think Tina covered most of our  
20 concerns, and the Board as well, and I thank  
21 you for that.

22 Our biggest concerns are worker

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1 testimonies really have not seem to have been  
2 acknowledged, especially in regard to  
3 incidents that workers have attested to, the  
4 fact that these incidents went unreported.

5 Therefore, we assume -- it would  
6 be reasonable to assume that also, their  
7 monitoring was not recorded.

8 So, we would like that looked into  
9 a little further, and I apologize, we are all  
10 really -- we've both lost our fathers, you  
11 know.

12 I guess at this point, we really  
13 would like to -- because most of our petition  
14 was based on the SC&A review, we would really  
15 like to request that SC&A also review the  
16 evaluation, if that is at all possible, and I  
17 think that's pretty much all I have.

18 CHAIRMAN MELIUS: Okay, thank you.

19 Do any of the Board Members have questions  
20 for the petitioners at this point?

21 Okay, we need to then, I think,  
22 decide what to do with this -- in response to

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1 this petition. Our -- Evaluation Report. Our  
2 usual situation, where NIOSH has made a  
3 recommendation like this, is to really have  
4 further review, both by a Work Group and by  
5 SC&A.

6 So, if somebody wants to make a  
7 motion to that effect or discuss that.

8 MEMBER LEMEN: I will make that  
9 motion.

10 CHAIRMAN MELIUS: Yes, well, Josie  
11 was first.

12 MEMBER BEACH: And I realize, we  
13 have a Site Profile Review report from NIOSH,  
14 I believe March of 2009. So, that's  
15 completed.

16 I'd like to make a motion that we  
17 set up a Work Group to look at the Site  
18 Profile and the Evaluation Report.

19 CHAIRMAN MELIUS: Okay.

20 MEMBER BEACH: And have SC&A, of  
21 course, review the Evaluation Report.

22 CHAIRMAN MELIUS: Do we have a

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1 second to that?

2 MEMBER GRIFFON: Second.

3 CHAIRMAN MELIUS: Okay. Any  
4 discussion on that?

5 Okay, we will do that. We will  
6 set up a Work Group on that and I think at  
7 this point, we should also task SC&A to --

8 MEMBER GRIFFON: Do we have to vote  
9 on the motion?

10 CHAIRMAN MELIUS: Yes, we need to  
11 vote. I'm sorry, okay, jumping ahead here.  
12 We'll get the other vote too.

13 But let's go ahead. All in favor  
14 of setting up the Work Group and referring the  
15 -- having SC&A review the SEC Evaluation  
16 Report, say aye.

17 (Chorus of Ayes.)

18 CHAIRMAN MELIUS: Opposed?  
19 Abstain? Okay.

20 MEMBER BEACH: And your phone?

21 CHAIRMAN MELIUS: David and Paul?

22 MEMBER ZIEMER: Ziemer, aye.

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1 CHAIRMAN MELIUS: Yes, okay.  
2 Okay, yes, Andy?

3 MEMBER ANDERSON: Just quick, where  
4 do we stand on the Fernald conclusion issue? I  
5 mean, it's kind of cascading here.

6 CHAIRMAN MELIUS: Yes, that's a  
7 good point.

8 MEMBER GRIFFON: I guess we'll get  
9 an update tomorrow on the Work Group. We're  
10 still in the Work Group process. It's Brad's  
11 Work Group.

12 MEMBER CLAWSON: I will give a  
13 report on that. We've got some outstanding  
14 issues.

15 MEMBER GRIFFON: Yes, we have not  
16 come to completion on the Fernald SEC  
17 discussions yet, but there are a lot of  
18 similar issues.

19 CHAIRMAN MELIUS: Okay, good, and  
20 if you people can let me know, volunteers for  
21 the Work Group, Weldon Spring? Wanda? Phil?

22 Anybody else? I've got you down.

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1 Think about it, and let me know, and then  
2 Paul and David, if you could also let me know  
3 if you'd like to volunteer, I'll -- just send  
4 me an email. I think that would be fine, and  
5 then we'll make the appointment after the  
6 meeting of that, and get that out to  
7 everybody. Good.

8 MS. JOHNSON: Can I make one more  
9 comment? This is Karen Johnson, one of the  
10 petitioners.

11 It's really a question, when they  
12 go to Work Group, will petitioners be allowed  
13 to sit in on any of those teleconferences?

14 CHAIRMAN MELIUS: Yes, you will.  
15 Those meetings are by teleconference. You'll  
16 be allowed to sit in and will be notified of  
17 all the meetings and will be kept up to date  
18 on what's going on with that.

19 MS. JOHNSON: Okay, thank you.

20 CHAIRMAN MELIUS: Yes, good. Okay,  
21 we have one other item.

22 MR. KATZ: Okay, so, just to be

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1 clear, so that SC&A is tasked with reviewing  
2 that Evaluation Report as part of that motion?

3 CHAIRMAN MELIUS: Right, that was  
4 part of the motion, correct.

5 MR. KATZ: Just for my being clear.  
6 Thank you. I realize that I have -- I  
7 omitted obtaining a vote from Wanda Munn, for  
8 the St. Louis Airport facility, and her knee  
9 didn't allow her to kick me this far across  
10 the table to remind me.

11 But so, let me just solicit her  
12 vote. I had -- all others had voted in favor.

13 MEMBER MUNN: Having made the  
14 motion, I'm reluctant to withdraw it. I  
15 therefore, vote yes.

16 MR. KATZ: Thank you for that. I  
17 apologize for the oversight.

18 CHAIRMAN MELIUS: Okay, we have a  
19 break scheduled. We're a little bit early,  
20 but let's take a break until 10:30 a.m.

21 (Whereupon, the above-entitled  
22 matter went off the record at 10:05 a.m. and

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1 resumed at 10:35 a.m.)

2 CHAIRMAN MELIUS: Okay, why don't  
3 we get started. We have -- the first item on  
4 the agenda is the Blockson Chemical SEC  
5 petition, which we've been discussing for a  
6 long time here.

7 We have -- I did just have a  
8 discussion with our legal counsel, and it  
9 probably -- we've not been sort of following  
10 Robert's Rules of Order very strictly, but we  
11 do have a motion that's tabled, and since we  
12 may try to reach some decision on the Blockson  
13 SEC petition today, it probably would be most  
14 proper if we started by, you know, a motion to  
15 remove that from the table.

16 So, I would entertain that motion,  
17 before we start discussion.

18 MEMBER CLAWSON: So moved.

19 CHAIRMAN MELIUS: Second.

20 MEMBER LEMEN: I'll second.

21 CHAIRMAN MELIUS: Second, okay.

22 All in favor?

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1 (Chorus of Ayes.)

2 CHAIRMAN MELIUS: Opposed? Okay,  
3 Dr. Ziemer, Dr. Richardson?

4 MEMBER ZIEMER: Aye.

5 MEMBER RICHARDSON: Aye.

6 CHAIRMAN MELIUS: Okay. We  
7 couldn't tell if you ayed together there, from  
8 a distance here.

9 Okay, discussion? I think where  
10 we are is the main issue on Blockson was the  
11 model, the radon model, and I think there were  
12 concerns. I think we've sort of reached the  
13 point that we had decided -- at least at the  
14 present time, that there was no sort of  
15 further work to be done on the model, or that  
16 could be done.

17 There was issues, questions raised  
18 about validation, but those -- well, for  
19 whatever various reasons, those could not be  
20 pursued, and I think that's sort of where we  
21 left it.

22 I think -- again, for background

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1 for those in the audience, we've wanted our  
2 new Members to be brought up to date on the  
3 situation with Blockson and all of the work  
4 and discussions that had gone on, which was a  
5 lot and was difficult, I think, to absorb and  
6 I think at our last meeting, there were a  
7 couple of questions about it. We wanted  
8 people to have a chance to -- particularly the  
9 new Members, to ask any questions, and I think  
10 we should sort of -- run out of the questions.

11 And I guess the question is, what  
12 we do to -- in terms of moving forward on  
13 this, and I think we want to try to resolve  
14 it, if we can, today. Maybe we can't. The  
15 Board has been essentially deadlocked on this  
16 for quite some time.

17 MEMBER ZIEMER: Dr. Melius?

18 CHAIRMAN MELIUS: Yes?

19 MEMBER ZIEMER: Question, this is  
20 Ziemer.

21 CHAIRMAN MELIUS: Yes.

22 MEMBER ZIEMER: For clarity, we

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1 need to indicate whether the motion is to  
2 approve an SEC Class or a motion to agree that  
3 dose reconstruction can be done.

4 I don't recall which motion was  
5 before us.

6 CHAIRMAN MELIUS: We'll read the  
7 motion to you.

8 MEMBER ZIEMER: Okay.

9 MS. HOWELL: I don't know if I have  
10 the exact wording, but I have some notes on  
11 it.

12 The motion that had been tabled  
13 repeatedly, or not removed from the table  
14 repeatedly, was actually made in June 26, 2008  
15 in our St. Louis meeting.

16 Ms. Munn moved to accept the NIOSH  
17 position on Blockson and thus deny the SEC  
18 Class. That was seconded by Dr. Roessler and  
19 the Board then voted to table the motion on  
20 that.

21 MEMBER ZIEMER: Thank you.

22 CHAIRMAN MELIUS: I don't believe

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1 that report has been provided to us in the  
2 information we have today. It should be on  
3 the website, however.

4 MEMBER MUNN: Yes.

5 CHAIRMAN MELIUS: Yes.

6 MEMBER MUNN: I have no material at  
7 all in my Blockson file.

8 CHAIRMAN MELIUS: Right.

9 MEMBER MUNN: Is there -- am I --

10 MEMBER ROESSLER: Well, mine is  
11 empty too.

12 CHAIRMAN MELIUS: I think  
13 everybody's is, and I looked at my memory  
14 stick here and there was nothing either, and I  
15 --

16 MEMBER ROESSLER: That's on the O:  
17 drive.

18 CHAIRMAN MELIUS: Yes, but on the  
19 website, there should be something, if that's  
20 helpful, and obviously, everyone is -- by  
21 email and we've exchanged voluminous  
22 documents, or at least a lot of documentation

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1 on this.

2 MR. KATZ: Right, there was a whole  
3 document history that was sent to everybody,  
4 including the new Members, to sort of bring  
5 everybody up to speed, remind people who have  
6 been with us for a long time, as well as to  
7 educate the new Board Members.

8 But that was not redistributed  
9 recently. That was distributed last -- you  
10 know, back, before February.

11 MEMBER MUNN: Yes, it was and at  
12 that time also, the brief presentation, which  
13 was the final Working Group presentation, was  
14 also repeated, for the sake of those who were  
15 present.

16 CHAIRMAN MELIUS: Correct, just  
17 that we don't have anything in front of us  
18 today. So, a little more confusing.

19 MEMBER MUNN: Yes.

20 CHAIRMAN MELIUS: Do we have --  
21 fair enough, we have a motion that it's off  
22 the table to accept the NIOSH Evaluation

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1 Report. Is there a discussion on that? Maybe  
2 someone could sort of summarize the different  
3 viewpoints. Yes, Wanda, why don't you go  
4 first?

5 MEMBER MUNN: My apologies, for not  
6 bringing along the presentation again. I  
7 thought it would be redundant for us to go  
8 through the abbreviated comments that I made  
9 last time.

10 But as Chair of the Working Group,  
11 we worked with the Blockson material for a  
12 period of almost two years before we brought  
13 it to the Board.

14 It came to the Board because we  
15 had a split group. We had two members of the  
16 Working Group who did not wish to accept the  
17 NIOSH recommendation and two members of the  
18 Board who did.

19 We had gone item by item, through  
20 each of the questions that had been raised.  
21 There were seven question raised by the  
22 contractor during the review. We had

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1 addressed each of those satisfactorily.

2 A number of issues had arisen  
3 since, which have been under discussion and  
4 for the most part, were resolved. SC&A agreed  
5 that all of their concerns had been met.

6 The outstanding issue, as I  
7 recall, when last we left it with the Board,  
8 was some disagreement as to whether or not the  
9 radon loading that existed in that building  
10 could be adequately characterized.

11 It was the position of some of us,  
12 that in a large building with not particularly  
13 good insulation and a work crew who did not  
14 have assigned jobs, but who moved from one  
15 station to another inside that large building  
16 throughout the entire day -- throughout the  
17 entire shift, they seldom ran more than two  
18 shifts, and the work force did not consist of  
19 more than nine to 12 people at one time.

20 It was the position that some of  
21 us took, including me, that the distribution  
22 could easily be bounded and to the best of my

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1 knowledge, that's the outstanding issue at  
2 this time, whether or not it's feasible to  
3 assume that a reasonable bound could be made  
4 of the radon loading of that building.

5 CHAIRMAN MELIUS: Okay, thank you,  
6 Wanda, for that summary. Somebody else want  
7 to comment on the model, or I guess -- I'm  
8 sorry, go ahead, Gen?

9 MEMBER ROESSLER: As I recall, and  
10 I think we should remind Board Members, the  
11 radon model that's under discussion was one  
12 developed by SC&A and one that, after much  
13 discussion, NIOSH accepted and would use that  
14 model, and I just want to make sure I'm  
15 correct on that, but I think we should bring  
16 that out.

17 It was a model, in my view, a very  
18 scientific model with much room for  
19 uncertainty bounds and so on.

20 CHAIRMAN MELIUS: Yes, I just would  
21 correct that slightly, is that I think the  
22 approach was proposed by SC&A. The actual

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1 model that is under consideration and sort of  
2 the parameters of that model, actually, I'm  
3 not even sure they've been fully settled.

4 But it was a NIOSH -- we're going  
5 to turn back to NIOSH, to fill in. I think,  
6 is that a fair assessment of the way it -- it  
7 went back and forth so often --

8 MEMBER ROESSLER: What I remember,  
9 from a Work Group meeting, is that SC&A  
10 presented the model. I think the values of the  
11 parameters are the ones that we might need  
12 some clarification on.

13 CHAIRMAN MELIUS: Correct, yes, I  
14 think that was what I was trying to express  
15 under that. Other comments?

16 If not, I -- I mean, my concerns,  
17 which I've also said repeatedly here, is that  
18 we have a model that's been put in front of  
19 us, that is -- has never been validated and  
20 despite repeated, I think, requests or  
21 attempts to do the same from NIOSH, NIOSH has  
22 not been able to locate data or a situation

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1 where they could validate that specific model.

2 And so, we would be accepting a  
3 model that has not been validated and there  
4 continues to be, I think, significant  
5 uncertainties, at least in my mind, about the  
6 application of that model, if that's that type  
7 of model, without validation, is acceptable  
8 for doing dose -- individual dose  
9 reconstruction for radon at the Blockson Site.

10 I do not oppose it.

11 MEMBER ZIEMER: This is Ziemer. I  
12 have a comment.

13 CHAIRMAN MELIUS: Yes, let me -- go  
14 ahead, Paul.

15 MEMBER ZIEMER: I'm sorry, did I  
16 interrupt?

17 CHAIRMAN MELIUS: No, that's okay,  
18 I was going to ask --

19 MEMBER ZIEMER: In the process of  
20 unmuting you, I always lose a little bit.

21 CHAIRMAN MELIUS: I know, go ahead,  
22 Paul.

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1                   MEMBER ZIEMER: Well, on the issue  
2 of validation, we had questions along the line  
3 as to what it would mean to validate a model.

4           Not all of us agree on what validation even  
5 means on some of these models.

6                   But the model that was used, in  
7 terms of the approach, is not unlike the  
8 manner in which one would determine radon  
9 levels from a source term in a room or a  
10 closed sort of, big box with some amount of  
11 ventilation, which was specified.

12                   My recollection is, the main issue  
13 was the rate of mixing and the extent to which  
14 one might have extremely non-uniform  
15 concentrations or concentration gradients  
16 through the facility, but keeping in mind that  
17 the release point was way at the top, and  
18 quite a ways away from workers.

19                   It certainly, in my mind, seemed  
20 reasonable, that the assumed mixing rates for  
21 this -- or assumed concentration, not assumed,  
22 but the calculated concentration in the work

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1 areas, were quite reasonable.

2 So, I mean, there's many models of  
3 this type used where one could argue, what  
4 does it mean to validate them. It certainly  
5 is a -- the approach uses quite a normal  
6 acceptable approach, and you know, I think  
7 even SC&A has sort of defended that approach,  
8 but they would need to speak for themselves.

9 CHAIRMAN MELIUS: Yes, Brad?

10 MEMBER CLAWSON: Well, also too,  
11 remember, we have the surrogate data issue  
12 too. We're using -- it was my understanding,  
13 we were using information from a Florida  
14 phosphate plant and also an Idaho phosphate  
15 plant.

16 CHAIRMAN MELIUS: I think to be  
17 correct on that, the original proposal was to  
18 use the data from the Florida phosphate plants  
19 and that was one we rejected and NIOSH then --  
20 NIOSH/SC&A came up with this alternative  
21 proposal.

22 I don't believe that the Idaho was

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1 being used and again, that's my memory of  
2 that. I think it was considered it could -- I  
3 think we had suggested, could there be -- was  
4 there adequate data from the Idaho plants or  
5 other, you know, sort of northern latitude  
6 plants, where they would be -- you know, might  
7 be closed facilities and much more similar to  
8 the Blockson than the Florida, which were  
9 mostly open-sided facilities and so forth.

10 Just a further comment on Dr.  
11 Ziemer's comment. I keep hearing this  
12 statement that these are widely used models  
13 and if they're widely used models, it seems to  
14 me that then there should be available data to  
15 validate -- it should have been validated at  
16 some point in time, and I've actually had a  
17 fair amount of experience dealing with models  
18 attempting to estimate indoor air  
19 concentrations and materials, and they get  
20 quite complicated quite quickly and difficult  
21 -- and are difficult to validate.

22 But if this is such a simple,

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1 straightforward model, then it would seem to  
2 me that there should be data out there that  
3 would validate or help us to validate, and I  
4 agree, validation is a continuum of those  
5 different approaches. It's not a single  
6 validation.

7 But it seems to me, there should  
8 have been then, data out there that would be  
9 helpful for doing that, whether it's from  
10 other industrial sites or other situations.  
11 Wanda?

12 MEMBER MUNN: Since Jim Neton was  
13 the person at NIOSH who followed this most  
14 closely, I thought it might not be out of  
15 order for me to repeat some of the comments  
16 that Jim made at the February meeting, at the  
17 time that we were discussing this. With your  
18 permission, I'll read it. It's not a long  
19 statement. We were discussing this precise  
20 issue.

21 CHAIRMAN MELIUS: That's fine.

22 MEMBER MUNN: And he said, I might

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1 elaborate a little bit on what Wanda said,  
2 which is all correct, but the model that was  
3 developed was a probabilistic model, so we  
4 took actually SC&A, in conjunction with SC&A.

5 It's sort of a long story.

6 But we've ended up with this  
7 probabilistic model that used the  
8 distributions of the various parameters that  
9 are relevant to the contribution of the  
10 variation of the concentration in the  
11 building.

12 The key parameters, as you  
13 indicated, were the ventilation rate of the  
14 building, the volume of the building, the  
15 input term of the ore itself and the release  
16 rate into the atmosphere.

17 The model allows for those. They  
18 have set distributions, put them out there.  
19 It allows for them to vary independently and  
20 we've selected the 95<sup>th</sup> percentile of the end  
21 result of the Monte Carlo calculation.

22 So, allowing all those parameters

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1 to vary independently, you picked the highest  
2 value. I think we ended up with something on  
3 the order of 17 picocuries per liter.

4 The issue of the variation, the  
5 spacial variability within the building itself  
6 was the issue, the very issue that Mark has  
7 posed for a while now, and it's at least my  
8 opinion that the variation is in some ways  
9 handled by the allowance of those parameters  
10 in the probabilistic model to vary  
11 independently.

12 So, in other words, you would have  
13 a variation in locations, where maybe the  
14 ventilation rate would be lower than another  
15 location, that sort of thing.

16 So, in the emanation fraction as  
17 well. So, allowing those to vary  
18 independently, I think, somehow addresses  
19 that. This Polish study that we had,  
20 unfortunately, was not contemporaneous with  
21 the 50s. The issue we had is, as far as I can  
22 tell, there is virtually no radon monitoring

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1 data in phosphate plants from the 50s and even  
2 the 60s. The earliest data we have of the  
3 best data we have come from, was around the  
4 70s.

5 But the Polish study, I think, and  
6 I forget which time frame, it was fairly  
7 recent, but they did the long-term track edge  
8 cups through building, I think in the winter  
9 time, when it was fairly locked up and looked  
10 at the variability and we didn't see that huge  
11 a variation through the building itself.

12 It was kind of a similar facility,  
13 similar production rates, that sort of thing.

14 So, it ends up being a weight of the evidence  
15 argument. There is no good way that we could  
16 think of to model this sort of spacial  
17 variability in itself, and we feel picking the  
18 95<sup>th</sup> percentile helps to account for some of  
19 the uncertainty that we observed.

20 We ended up with a 95<sup>th</sup> percentile.

21 I think it's around 17 picocuries per liter  
22 for a source term, and that comes into the

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1 building at about 30 picocuries per gram  
2 radon.

3 CHAIRMAN MELIUS: Okay, thank you.  
4 Henry?

5 MEMBER ANDERSON: My history  
6 doesn't go back quite as long as the others,  
7 but I do have the last meeting, and I have a  
8 couple of issues, one being, it is a model.  
9 As I understand it, there are no measurements  
10 that were made at the facility.

11 So, we're now trying to  
12 extrapolate from the source terms and the  
13 amount of ore and emissions from that, which -  
14 - and you put a bound on that, and then you --  
15 probabilistic modeling is basically, it just  
16 creates all the possible ranges. It doesn't  
17 tell you what necessarily is more realistic  
18 than the others.

19 What I was also concerned about at  
20 the last meeting, it sounded like -- or at  
21 least I heard, that there are other sites  
22 coming up, where NIOSH would intend to use

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1 this model for radon because there are other  
2 similar or other circumstances where radon was  
3 not monitored, so, that what we're really also  
4 -- what my concern is, is if we say, well, you  
5 know, it doesn't matter much here, the  
6 exposure isn't that great from this, and so we  
7 approve it, then that basically validates  
8 without testing data, that this is a  
9 methodology that we go forward with it.

10 My understanding is, this has --  
11 modeling of radon has not been used at any of  
12 the other sites, that if sites -- that if  
13 there was a radon issue, they measured it, and  
14 therefore, we could -- you could model where  
15 in the building, based on the measurements  
16 that were made in that building, and that's  
17 quite a different modeling exercise than I see  
18 this one.

19 So, my concern is it's a bit like  
20 a surrogate data, that probabilistic model is  
21 something that, you know, in epidemiology we  
22 use now, but that's quite different than using

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1 that to say, this is our best estimate of what  
2 the exposures actually were and you can bound  
3 it, but again, what the probabilistic model  
4 does is you just change the exposure and the  
5 range parameters and it will change your  
6 output.

7           So, you know, it's just, what you  
8 put into it is what comes out of it. So,  
9 that's part of my concern here, is we -- it  
10 may not matter too much, as to whether it's 17  
11 or 25 or I think the earlier estimates, using  
12 the Florida was, you know, half that or  
13 something.

14           So, I'm not sure, kind of  
15 negotiating what the 95 percent limit would  
16 be, really helps us too much on the issue and  
17 so that -- my major concern is, if we are so  
18 confident of this model, are we also then  
19 saying that it's appropriate to use in any  
20 large box, where there might be radon and we  
21 have ore being processed through and we just  
22 put in the parameters and go from there.

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1           So, that's kind of where my  
2 concern is, is if this were a one-time unique  
3 set of circumstances, it would be quite  
4 different and now, if you do this model, than  
5 all exposures can be modeled and all you've  
6 got is a starting point from somewhere else.  
7 So, that's kind of my concern on this.

8           CHAIRMAN MELIUS: Okay, thank you,  
9 Henry. Wanda, I believe, is next.

10           MEMBER MUNN: The source terms here  
11 are well known, and we have good records, with  
12 respect to what the volume was, materials that  
13 came in, the volume of materials that went  
14 out. We know what happened to the raffinate.

15           There is no reason to assume that  
16 the known emission rate of the materials that  
17 were handled is valid material.

18           I don't know whether there is  
19 anyone here from NIOSH and our contractor, who  
20 is -- who have anything to add or any comment  
21 to make at this point. But it's -- there is  
22 no point that we have -- that I'm aware of,

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1 that we have not addressed.

2 Henry's concern that this may be  
3 used as some sort of a gold standard does not  
4 seem to fit the paradigm that we have observed  
5 in the past, where for the most part, we take  
6 great pains to look at individual cases as  
7 best we can, and this is certainly no  
8 different than that.

9 There is no question that the  
10 weight of the evidence in the Blockson case  
11 very clearly shows us that we can do quite  
12 reasonable, quite accurate dose assessments  
13 for the people who work there.

14 Is there anyone in the NIOSH group  
15 or -- Stu, do you have anything you can add at  
16 this juncture, or is John Mauro here?

17 MR. HINNEFELD: I think, I don't  
18 have anything particular to add. I mean, the  
19 discussion here is sort of summarize the  
20 discussion that's gone on, during the course.

21 You know, the radium content in  
22 the feed, in the limestone -- or the rock,

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1 phosphate rock feed, was well known. That was  
2 characterized. The volume of the building is  
3 well known. Ventilation rate was, I believe,  
4 doubled, probabilistically, and there may have  
5 been some uncertainty on those other values  
6 and models as well.

7 But I mean, the discussion here  
8 has been the discussion. We have really  
9 nothing else to add.

10 MEMBER MUNN: Thank you.

11 CHAIRMAN MELIUS: Okay, John, do  
12 you have anything to add?

13 DR. MAURO: In thinking about, if I  
14 had some data for this building, let's say, we  
15 had 10 or 20 radon measurements taken over a  
16 period of time, and I was to ask, would you  
17 take the distribution of those radon  
18 measurements? There may have been some grab  
19 samples taken, or the upper 95<sup>th</sup> percentile, I  
20 would use the model.

21 There is the belief here that  
22 measurements are always better than models.

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1 There are times when measurements are better  
2 than models. There are times when models --  
3 depending on what you're trying to achieve.

4 In this particular circumstance,  
5 and I wouldn't -- I would agree completely, I  
6 would never extend this to another site, until  
7 I was sure that the class of problem I was  
8 dealing with was very similar to the one we're  
9 dealing with.

10 There's some concern about Texas  
11 City. Certainly, that's a reasonable concern.

12 Should this model be applied to Texas City?

13 Well, for this particular  
14 facility, this particular approach, even if I  
15 had some data in that building, I would sooner  
16 trust the model as being the better way to  
17 capture the upper end of what might have  
18 occurred in this building.

19 So, and the model itself is the  
20 first principle model. The thing that has to  
21 be validated is, do we trust the distributions  
22 that were put in? Did we capture the range

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1 properly, and there has been some disagreement  
2 between SC&A and NIOSH, regarding the air  
3 turnover rate.

4           The outcome of that was, we think  
5 that the upper bound is 35 picocuries per  
6 liter and NIOSH believes it should be 17.  
7 That's the extent of it. Other than that, I  
8 think we also have some measurements that were  
9 taken in the 1980s in this building, and we  
10 have measurements taken in other buildings  
11 which really don't adequately apply.

12           But one thing they do show is that  
13 17 or 35, certainly appears to bound for the  
14 data that we do have, even in light of its  
15 limitations. This number is an upper bound  
16 value that to assign to a person, as if you  
17 were being exposed to that level, 95<sup>th</sup>  
18 percentile level all the time. I consider that  
19 to be extremely conservative and upper bound.

20           So, I mean, I am trying to step  
21 out of this, even though SC&A originally  
22 conceived of the idea. I stand before you

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1 saying that I believe that in this particular  
2 application, this is the most sensible way to  
3 approach this problem and if you're not going  
4 to use a model here, you really can't use a  
5 model anywhere.

6 MEMBER MUNN: Thank you, John.

7 CHAIRMAN MELIUS: I'll remember you  
8 said that, because I guarantee you, it will --  
9 that's not to -- you know, disparage your  
10 arguments, but never say never, right? Dr.  
11 Lemen?

12 MEMBER LEMEN: Having been one of  
13 the new members that brought this up and I  
14 guess, was a little bit responsible for  
15 tabling it last time, I think there are two  
16 issues here, and one issue is that we do have  
17 something that I haven't -- and I've looked  
18 through the data, seen any validation. I  
19 would support what Dr. Melius says about that.

20 I would secondly want to echo what  
21 Dr. Anderson says. I, again, without sounding  
22 like a broken record, do not believe that when

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1 we're dealing with a compensation program, and  
2 I'm an epidemiologist by training, so, I do  
3 believe in models. But I don't believe in  
4 them for a compensation program.

5 I have to say very strongly that  
6 we're not doing an experimental study here.  
7 We're dealing with people's lives, and we're  
8 dealing with the ability of compensating these  
9 people for exposures they've received.

10 So, I have to strongly urge, after  
11 looking at this, that we reject this and get  
12 this decided and take a vote and go forward  
13 and not come back to visit this idea of  
14 surrogate data and modeling again. I just  
15 don't think it's appropriate in this case.  
16 Thank you.

17 CHAIRMAN MELIUS: Thank you, Dr.  
18 Lemen. Dr. Lockey.

19 MEMBER LOCKEY: I think this -- we  
20 really have gone the extra steps to look at  
21 these particular exposures in a claimant-  
22 friendly manner, and in relationship to radon,

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1 the end organs we're looking at are lung and  
2 hematological system, because those are the  
3 primary ones that would be affected.

4 Originally looked at the Florida  
5 data. I think it was seven or eight was the  
6 number and that's based on pretty good hard  
7 data, and then we weren't satisfied with that.

8 We didn't think it was claimant-friendly  
9 enough, or we wanted to validate it.

10 So, we went to our consultants and  
11 asked them to look at another way, and now, we  
12 have an upper boundary of 17, which is  
13 extremely claimant-friendly.

14 So, if we're worried about, are we  
15 being claimant-friendly here, in relationship  
16 to the end organs of interest, which in this  
17 case, are hematological system and the lung  
18 cancer, I think we're being extremely  
19 claimant-friendly and I think we covered the  
20 bases in relationship to our mandate in that  
21 area.

22 We do actually cover the bases,

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1 did you have lung cancer or you have a  
2 hematological based tumor, and you have this  
3 dose reconstruction applied with these  
4 parameters, you are going to get compensation.

5 CHAIRMAN MELIUS: Dr. Ziemer or Dr.  
6 Richardson?

7 MEMBER ZIEMER: Yes, this is  
8 Ziemer. I just had one sort of comment related  
9 to Dr. Anderson's remarks and also Dr. Lemen,  
10 in terms of precedence setting.

11 I don't think the fact that we use  
12 -- if we were to use a model here or this  
13 particular model, that that automatically  
14 binds us forever for using that model or a  
15 particular model in future cases.

16 I think it's very important to  
17 recognize that each site and each situation is  
18 unique and one would have to determine that a  
19 particular model was appropriate to that site.

20 The fact that it had been used  
21 before or hadn't been used before, I don't  
22 think binds this Board to any particular

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1 future position. It's quite true that we do  
2 look at precedence and we do want to be  
3 consistent.

4 But the fact that a particular  
5 approach was used at a particular site does  
6 not bind us, in any way, in my mind, to doing  
7 that same approach at a different site, which  
8 will have its own particular parameters and  
9 own particular uniqueness.

10 Also, I should comment, and I  
11 understand Dr. Lemen's concerns about using  
12 both models and surrogate data, and I simply  
13 point out to you that, although that may be an  
14 objection, a personal objection that he has,  
15 and I respect that, none the less, this  
16 program allows for that approach and, by and  
17 large, that approach is used as Dr. Lockey has  
18 described, to provide a completely claimant-  
19 favorable decision.

20 Compensation programs, in fact, in  
21 a sense, are based on making the right  
22 decision and they are not based on determining

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1 the precise dose, but an approach which will  
2 give the claimant-favorable decision.

3 Obviously, one can argue that, for  
4 example, an SEC is the more claimant-  
5 favorable, but it is not always, for some  
6 claimants.

7 CHAIRMAN MELIUS: Okay, thank you.  
8 Dr. Richardson?

9 MEMBER RICHARDSON: I had one -- I  
10 had a question and I also had a, sort of,  
11 comment. But first, the question is sort of a  
12 point of clarification.

13 There was the issue raised of the  
14 use of surrogate data, and we've been focusing  
15 on the radon model and discussions about that.

16 My question had to do with how  
17 internal exposures from inhalation and  
18 ingestion of other radioactive dusts that  
19 might be produced during either the crushing  
20 of phosphate rock, the drying and loading of  
21 yellow cake, are those -- those aren't dealt  
22 with here in the radon model, and is there --

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1 is this where -- is there a surrogate data  
2 model that's being used that's drawing upon  
3 information from Idaho or another facility, to  
4 address those exposures?

5 CHAIRMAN MELIUS: Can someone from  
6 NIOSH answer?

7 MR. HINNEFELD: Yes, I want to make  
8 sure we're clear on this. For the part of the  
9 question that talked about loading the yellow  
10 cake, in other words, loading the uranium, and  
11 any of the other exposures that would have  
12 occurred in Building 55, which is where the  
13 uranium recovery operation occurred, the dose  
14 is reconstructed based on bioassay data that's  
15 available for some of the years that this  
16 plant operated.

17 There is the possibility that  
18 people were exposed to other, you know, more  
19 of a mixture of radioactive materials, outside  
20 of Building 55, during phosphate rock crushing  
21 and so on, and so, for that purpose, there is  
22 a surrogate model from an Idaho Falls, or

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1 Idaho plant, that describe that situation and  
2 there's data from that site to use as an  
3 option.

4 Now, as a practical matter, a  
5 particular claimant, either worked in Building  
6 55 or outside 55, and so, the dose  
7 reconstruction each time is done with both  
8 considerations, which one for this particular  
9 exposure experience and this particular  
10 cancer, which one will be more favorable to  
11 the claimant, and that one is selected for  
12 that claimant, rather than having it  
13 prescribed.

14 As of -- I don't even know when  
15 this was, six months to a year ago, the last  
16 time I was briefed on this, every dose  
17 reconstruction done so far had used the  
18 Building 55 dose.

19 So, the surrogate model is  
20 available, if someone -- if that would give  
21 them a higher dose than the Building 55 dose,  
22 but up until that time the situation hadn't

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1 arisen that that was more favorable, and so,  
2 Building 55 was used for each one.

3 CHAIRMAN MELIUS: And then you also  
4 had a comment, David, if that answers your  
5 question.

6 MEMBER RICHARDSON: I think that  
7 answers my question. You're saying that you  
8 don't have the ability to place somebody in  
9 Building 55, and so, when a claimant comes in,  
10 you run them as though they were in Building  
11 55 and as though they were not in Building 55?

12 MR. HINNEFELD: We know the names  
13 of some people in Building 55, because we have  
14 their bioassay samples. But we do not believe  
15 we have a comprehensive list of the people who  
16 were in Building 55, and the covered facility  
17 is Blockson Chemical. The covered facility is  
18 not just Building 55.

19 So, they are all eligible claims,  
20 and yes, so we treat them -- we run them both  
21 ways, you know, we don't know if they were in  
22 55 or if they were outside, and so, we do them

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1 both ways and then provide the particular dose  
2 reconstruction that's more favorable to them.

3 CHAIRMAN MELIUS: And maybe for a  
4 follow-up clarification, if this would help,  
5 John Mauro, in the review of the Blockson SEC,  
6 did you look at the surrogate data issue and  
7 what was the timing of that? It may have been  
8 well before we had surrogate data criteria for  
9 the Board. I don't --

10 DR. MAURO: In the strictest sense,  
11 the model is -- I never thought of that as a  
12 surrogate data issue. The model -- surrogate  
13 data issue has always been, we have  
14 measurements taken over here, and we want to  
15 assume that they --

16 CHAIRMAN MELIUS: Yes, no, no.

17 DR. MAURO: So, what we really  
18 have, the only aspect of this that's surrogate  
19 is the parameter values we use, for example,  
20 the air turnover rate that was used in the  
21 model is data, it comes from data from other  
22 facilities where they measured air turnover

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1 rate.

2 So, in a way, this would be a type  
3 two application of a surrogate model. So,  
4 that's the degree to which this particular  
5 approach uses surrogate data.

6 MEMBER RICHARDSON: Excuse me, I'm  
7 drawing a distinction between the model  
8 proposed for radon and the methodology used to  
9 derive doses from inhalation and ingestion of  
10 radioactive dusts during other activities,  
11 crushing or loading --

12 CHAIRMAN MELIUS: The ore crushing,  
13 so the -- so, the use of the Idaho data --

14 DR. MAURO: Oh, okay, I thought you  
15 were referring to the inhalation of the  
16 uranium from the 55 gallon drum. I have to  
17 say, I don't recall the scenario for the dust.

18 CHAIRMAN MELIUS: Okay, that was my  
19 only question, okay. David, you had an  
20 additional comment?

21 MEMBER RICHARDSON: Yes, the other  
22 comment had to do with -- in principle,

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1 deriving a model that's -- I think it's very  
2 nice what's been done in deriving kind of the  
3 model for radon exposures, and I can -- in a  
4 sense, I can -- I accept it and I believe it's  
5 claimant-friendly and I can see that we could  
6 move forward with it.

7 I have two, I guess, modest, kind  
8 of reservations about it. One is, is that  
9 it's certainly claimant-friendly on average  
10 and it's probably, in the vast preponderance  
11 of cases, it's claimant-friendly and it may be  
12 that the uncertainty bound that have been  
13 placed on these parameters, when they're  
14 convoluted over C- through this Monte Carlo  
15 process, allows there to be that the 95<sup>th</sup>  
16 percentile actually is claimant-friendly for  
17 everybody.

18 That's the sort of question  
19 though, is there somebody who is in the 97<sup>th</sup>  
20 percentile, who is -- you know, we've actually  
21 been not friendly to?

22 So, there is a possibility that

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1 although we're on average in the vast majority  
2 of cases, we're claimant-friendly, the absence  
3 of individualized information means that  
4 models are performing best in -- for  
5 characterizing exposures for most people, and  
6 yet, they're not giving us good predictions  
7 for individuals. That's one thing to keep in  
8 mind.

9           The other one is that, is there --  
10 when we end up with situations with so much  
11 uncertainty, we can still produce models and  
12 MCMC modeling is very appealing, that you can  
13 kind of start to layer in all these  
14 uncertainties, and you have a framework for  
15 dealing with them.

16           But, in that case, we can always  
17 produce models that are going to be  
18 exceptionally friendly for people, but does it  
19 meet the kind of the goal of, can we derive  
20 plausible doses for individuals, and in this  
21 case, lots of these dose estimates, I think  
22 we'd all agree, are not plausible, kind of in

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1 the sense that they're not very plausible  
2 estimates of what the exposure to radon was  
3 for most of the workers here.

4 There are probably over-estimates,  
5 is what we -- as they've been characterized.  
6 They're extremely claimant-friendly, and in  
7 that situation, are we suppose to say, well,  
8 we've settled upon a model that we believe is  
9 extremely claimant-friendly, or are we  
10 supposed to say, this is one of these  
11 situations where this is why we have an SEC,  
12 because in order to derive dose estimates for  
13 the vast majority of these people, we have to  
14 use a model which is actually giving  
15 implausibly high exposures for some of these  
16 people.

17 CHAIRMAN MELIUS: Yes, thank you.  
18 I mean, I think with this or any other -- many  
19 of our surrogate data approaches, other  
20 approaches, I mean, that is the basic sort of  
21 tension is, do you capture people that,  
22 because of their work or type of work they did

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1 or work assignments had, would be at the  
2 higher end of the distribution, are those  
3 adequately addressed and then, in assuring  
4 that they are, what's happening to everybody  
5 else?

6 Are you going -- are you  
7 implausible, in terms of your dose estimates  
8 for the average worker or other workers in the  
9 facility, and when you're doing something  
10 based on a building, where people have many  
11 different work assignments, either you have to  
12 assume, sort of, they're rotating -- I mean,  
13 it's just -- it is difficult and it's hard to  
14 reach the right parameters for doing so, and  
15 it's an issue Mark has brought up earlier  
16 also, into that.

17 Okay, I believe Bill Field would  
18 be next.

19 MEMBER FIELD: I had a -- I guess,  
20 just a clarification, that I wanted to check  
21 with, and then maybe some questions.

22 With the clarification, when we're

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1 voting whether or not to approve or not  
2 approve this, are we also voting on the  
3 distributions?

4 CHAIRMAN MELIUS: Not necessarily.

5 NIOSH has been hedging, I don't know if  
6 that's a fair statement. Stu, you may want to  
7 comment, but on the -- on what will be the  
8 parameters in the model, that would be --

9 MR. HINNEFELD: Well, I'm not here  
10 to specify what will be the parameters of the  
11 model. I mean, the -- as I understand it,  
12 now, I can be corrected, maybe by counsel or  
13 by Ted, but the motion was about the SEC,  
14 whether to add the SEC, and that has to do  
15 with the feasibility of the dose, not the  
16 quantity of the dose.

17 So, if, in fact, the question is  
18 about the parameters of the model and where is  
19 it going to come out, what's the number going  
20 to be, I don't think that's a relevant  
21 question to this vote. That would be my  
22 judgment.

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1                   CHAIRMAN MELIUS: Yes, it would be  
2 a -- commonly, we so call it a Site Profile  
3 issue.

4                   MR. HINNEFELD: That would be a  
5 Site Profile issue.

6                   CHAIRMAN MELIUS: So, it would be  
7 addressed sort of as a Site Profile and we  
8 would have a -- say, if we voted for an SEC or  
9 part of an SEC, and so forth, there are sort  
10 of left over issues that are Site Profile  
11 issues,           involved           individual           dose  
12 reconstruction and like with Portsmouth  
13 Paducah, we're now sort of going back and, you  
14 know, evaluating those Site Profile issues, to  
15 that.

16                   And it may turn out that, you know  
17 --  
18 I can't think of any examples, but there  
19 probably are, with the 8314s, where as we were  
20 going through those Site Profile issues, that  
21 we find new SECs or where we can't -- it's  
22 complicated.

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1                   MEMBER FIELD: Right, and I guess  
2 it is complicated. There's a lot of factors,  
3 input factors going into this and it's very  
4 hard to reconstruct historic exposures, as we  
5 all know.

6                   But part of, I think, the  
7 questions that have come up, regarding  
8 validation, I look at validation as something  
9 that you would like to do, if you're deriving  
10 a central estimate or what your best estimate  
11 would be.

12                   And whether or not you have the  
13 information, then to bound it, is sort of a  
14 different question to me, and the bounding,  
15 really depends in part on what the  
16 distributions are. That's why I bring that  
17 question up.

18                   CHAIRMAN MELIUS: Yes, I guess my  
19 comment is the validation, to me, also should  
20 -- for the purposes we're using these models,  
21 also needs to capture the distributions in  
22 some way.

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1           MEMBER FIELD: Well, yes, I'm not  
2           sure, and the whole question, we could talk at  
3           length, about what validation means.

4           CHAIRMAN MELIUS: Yes.

5           MEMBER FIELD: But I guess, what  
6           you -- regardless of what it's called, what  
7           you want to get is a reasonable estimate of  
8           what someone was exposed to, and because there  
9           is so much uncertainty in the input  
10          parameters, it's almost like -- I have a  
11          tendency to want to see this be as claimant-  
12          favorable as possible, even though it's not  
13          supposed to depend on quantity of exposure,  
14          but whether or not it can be bounded, that it  
15          seems like there's a gray area in there, to  
16          me, and it may not be -- it may not be obvious  
17          to other people --

18          CHAIRMAN MELIUS: Yes.

19          MEMBER FIELD:           -- like my  
20          questions are, but it would be helpful just to  
21          know that if we're missing, we're not -- by  
22          the bounds, we're not missing it by much, if

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1 at all.

2 CHAIRMAN MELIUS: Yes, that's a  
3 fair assessment. I just add one more thing,  
4 sort of, the Board procedure is that we do in  
5 evaluating an SEC one of the things we've done  
6 -- NIOSH often doesn't have everything  
7 complete at the time they're doing an SEC  
8 Evaluation Report.

9 But we've sort of said that, well,  
10 if they're going to say that they can  
11 reconstruct dose, then sort of show me,  
12 demonstrate it.

13 So, you'll see in the reports and  
14 in the presentations, on say, an 83.13, where  
15 they will say they can -- they don't -- I  
16 believe it's in this one, though it's been a  
17 while since I've looked at Blockson, the end  
18 of the report -- they will demonstrate they'll  
19 do some, you know, dose reconstructions, you  
20 know, based on, sort of the common -- they're  
21 not actual individuals, but they will go  
22 through that process.

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1                   So, at least we have some  
2 demonstration that they can do that and we at  
3 least feel generally comfortable that with  
4 what they're proposing now -- I mean, things  
5 change, as you go along. You find things  
6 later, but that's been the process.

7                   MEMBER FIELD: Can I just follow up  
8 with one question?

9                   CHAIRMAN MELIUS: Sure.

10                  MEMBER FIELD: And it's sort of a  
11 question that goes back to source term and how  
12 much we know about the source term.

13                  In one of the documents, it says,  
14 the greatest uncertainty involves the fraction  
15 of radon and involves some sulfuric acid, and  
16 I'm just wondering, how -- do we have it well  
17 documented, what the quantity of radium is  
18 that goes through the process in this  
19 facility? That's well documented?

20                  DR. MAURO: You bring up a very  
21 good point. The throughput, the mass  
22 throughput of the ore and its content is well

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1 understood.

2           The point you're making is, okay  
3 fine, you've got this bulk material moving  
4 through the system. You're hitting it with  
5 sulfuric acid. You're digesting it and the  
6 sense is that if -- that's where the radon is  
7 going to leave.

8           Okay, now, we ran some diffusion  
9 models. We said, okay, now, we've got this  
10 soup. Okay, everything is dissolved, open  
11 ended tanks on the second floor, and the  
12 question is, well, that's where the radon is  
13 going to come off.

14           What fraction of the radon in the  
15 soup is going to become airborne, and the  
16 answer is, we don't know.

17           So, we ran some diffusion  
18 calculations, straight diffusion, not vector  
19 transport, just -- and we ran it and it turns  
20 out, less than one percent would come off  
21 through diffusion.

22           So, we said, well, that would be

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1 the lower end of what would come off. What  
2 would be the upper end? The upper end would  
3 be 100 percent, and we said, but -- we said is  
4 -- and then, we got into the discussion with  
5 NIOSH, okay, is that a good upper end?

6 But that's an enormous  
7 uncertainty. We're going from zero to one.

8 MEMBER FIELD: Right, right.

9 DR. MAURO: So, where we ended up  
10 on that particular -- so, we're talking  
11 distribution now, not modeling, important.  
12 You see, in effect -- the discussion we're  
13 having right now says, look, well, we'll  
14 accept the idea you could run a box model, but  
15 you better be right about the distributions,  
16 okay.

17 Well, it turns out, we ended up  
18 with going with 70 percent of the fraction of  
19 the radon that's in the soup becomes airborne,  
20 and that came out of a very interesting place.

21 We have lots of data on when  
22 people withdraw groundwater into their shower,

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1       okay, they measure the radon in the  
2       groundwater. The water comes out, taking a  
3       shower, the water is collected, okay. It  
4       turns out that -- which is a very -- it's a  
5       way to really -- if you want to get the radon  
6       out of the water and into the air, that's a  
7       good way to do it. You know, you sort of  
8       spray it, you know, and you really --

9                So, what we found was, the highest  
10       fraction that came out was 70 percent. So, we  
11       said, even on the very turbulent conditions  
12       with a lot of vector transport in the soup, we  
13       don't think more than 70 percent of the radon  
14       would come out, and there was where we picked  
15       our upper bound.

16               So, our input to the distribution  
17       on that parameter went from zero to .7 and --  
18       to capture the full range, and we made it a  
19       uniform distribution.

20               So, that's how we dealt with that  
21       uncertainty, but that is a very important  
22       uncertainty. It's a large one, where you pick

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1 it.

2 The reality is, we don't know, it  
3 could be much lower than that, so, that's why  
4 we're feeling pretty confident that, that  
5 number of -- well, our number is 34 picocuries  
6 per liter, is very claimant-favorable and I  
7 agree with you, to the point where, is it  
8 plausible, you know, I mean, it's up there.

9 MEMBER FIELD: Right, right. Just  
10 one last question.

11 CHAIRMAN MELIUS: Sure.

12 MEMBER FIELD: I guess I have some  
13 concerns about using water and acid as equal  
14 medium for carrying radon, as far the  
15 solubility coefficients. I think they differ.

16 So, I think if you were taking a  
17 shower with acid, you may have a higher  
18 emanation than 70 percent

19 DR. MAURO: You know, you're saying  
20 then, let's go zero to one, the spread.

21 MEMBER FIELD: I am.

22 DR. MAURO: And I'm okay with -- I

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1 mean, see, it's not the model anymore, it's  
2 the parameters, and that becomes a Site  
3 Profile issue.

4 MEMBER FIELD: Okay.

5 CHAIRMAN MELIUS: Well, I disagree  
6 with that point, John. I think you actually  
7 have to show that the parameters you're using  
8 for the model have some basis in reality. I  
9 mean, you can't just --

10 DR. MAURO: I have to say, I mean,  
11 my whole world is models. As a health  
12 physicist, modeling things all the time.

13 CHAIRMAN MELIUS: Okay.

14 DR. MAURO: And I can see why it  
15 would be disturbing to try to solve lots of  
16 classes of problems, simply throwing a bigger  
17 distribution.

18 So, you know, before, maybe I got  
19 a little carried away. You know, if you can't  
20 do  
21 it here, you can't do it anywhere. I  
22 shouldn't have said that.

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1                   But nevertheless, I think that the  
2                   -- the idea of a box model as a way of coming  
3                   at this problem is not a bad idea, and the  
4                   real tough part is that have you captured the  
5                   range of parameters going to the model in a  
6                   way that seems to be appropriate, or is it  
7                   just too easy, you know, just too easy to  
8                   throw a bigger distribution at it to make sure  
9                   we're okay. I respect that problem.

10                   CHAIRMAN MELIUS: Thank you. I  
11                   also hope we don't have a bunch of SC&A people  
12                   taking showers in sulfuric acid to derive a  
13                   parameter. I think that's a little bit above  
14                   and beyond. Okay, Mike?

15                   MEMBER GIBSON: Just a comment and  
16                   a question. There's been some comment that  
17                   modeling and surrogate data is allowed in The  
18                   Act, which, you know, I guess I don't dispute,  
19                   but The Act also is based on this whole  
20                   process of being timely to the claimants, and  
21                   I think this process has been anything but  
22                   timely for the claimants of Blockson.

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1           So, my question is, if we,  
2 procedurally, if we vote on this, the motion  
3 that's on the table, and we vote it down, what  
4 are our options today?

5           CHAIRMAN MELIUS: Well, if we vote  
6 it down, then I assume, then the next step  
7 would be to develop a Class Definition and  
8 supporting information for -- to vote it up, I  
9 guess, you know, so to speak, the SEC.

10           So, we would have to craft that,  
11 whether we could do that at this meeting or at  
12 a later point, I'm not sure. Sort of one step  
13 at a time.

14           So, I think the motion on the  
15 table is to accept, and that's the first one  
16 we need to deal with. I mean, alternatively,  
17 we could re-table the motion.

18           However, given the timeliness  
19 issue, and the -- this may come out of the  
20 vote, also, I mean, we could decide that we --  
21 based on the vote, or if we can't -- if it's a  
22 tie vote, for example, we might want to have

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1 further information.

2 But I think because of the  
3 timeliness issue, it does behoove us to be  
4 specific about what further steps we expect,  
5 in follow up that would -- they need to be  
6 steps that would, I think, help us to resolve,  
7 you know, need to resolve in a timely fashion,  
8 this particular SEC petition.

9 MEMBER GIBSON: Well, would it be -  
10 - if this is voted down, would we be within  
11 our rights to make a motion that if it does  
12 indeed pass, draft a letter to the Secretary  
13 saying, we disagreed with NIOSH's assessment  
14 and we recommend a pass?

15 CHAIRMAN MELIUS: Well, I think we  
16 would make a -- turn that into a positive  
17 message, but I think we have to craft a  
18 motion, but it also has to include a Class  
19 Definition. We don't have a Class Definition.

20 I mean, we have the one from the  
21 petition and we could vote that. I think we  
22 then have to be sure that what we're proposing

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1 justifies that Class Definition. I think that  
2 would be the -- as I said, that's something we  
3 may be able to do here. I just don't want to  
4 jump ahead procedurally, and then we've had  
5 this motion in front of us.

6 And I'm hoping that we're edging  
7 towards a vote on the motion, and I --

8 MS. PINCHETTI: This is Kathy  
9 Pinchetti. I'm the petitioner for the SEC.

10 CHAIRMAN MELIUS: Okay.

11 MS. PINCHETT: I don't know if this  
12 an appropriate --

13 CHAIRMAN MELIUS: No, this a good  
14 time, because we are about to finish up our  
15 Board discussion on this, so before we take a  
16 vote -- so we would like to hear from you.

17 MS. PINCHETT: Okay.

18 CHAIRMAN MELIUS: Go ahead.

19 MS. PINCHETT: It's okay to talk  
20 now?

21 CHAIRMAN MELIUS: Right now, yes.

22 MS. PINCHETT: Okay, I just wanted

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1 to say that my dad worked at Blockson for 44  
2 years, and on behalf of all the coworkers,  
3 that's why I submitted this.

4           There have been references to the  
5 -- things like people only working single  
6 shifts and that is absolutely not true. I  
7 think the other workers and the family members  
8 can attest to that, that you had a certain  
9 job, and my dad's job was filter operator, and  
10 if your relief person that was trained to do  
11 that same job did not show up, then you worked  
12 a double, and it was more common than not, for  
13 him to be working double shifts.

14           So, he was in Building 55 and I'm  
15 kind of losing track of which building we're  
16 talking about. I don't think there's even any  
17 dimensions of Building 40.

18           So, we keep going back and forth  
19 and it seems like the discussion is very  
20 circular and it seems that the new members  
21 are, you know, able to see the forest despite  
22 the trees, and can see that there is really no

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1 information to base this on, it's all  
2 estimates and assumptions and I think the  
3 whole purpose of submitting the SEC was that  
4 anyone that worked at Blockson would be  
5 covered, and now it's kind of like we're  
6 trying to estimate how much they were exposed  
7 to.

8 It's pretty obvious that there's  
9 been a lot of dust for radiation. My dad was  
10 in the hospital for a month, with radiation  
11 poisoning, while he was working on this  
12 project, and ended up staying there and  
13 surviving and was there for 44 years and I  
14 submitted this petition four years ago and  
15 we're no closer to a decision now than we were  
16 when it was first submitted.

17 And there's no more information  
18 that's going to become available and to this  
19 estimate and plug it into a textbook model,  
20 it's -- I don't know what the purpose of all  
21 that is.

22 So, I guess in sum, I just want to

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1 ask that the Board accept the SEC petition on  
2 behalf of Blockson.

3 CHAIRMAN MELIUS: Thank you. So,  
4 we have a motion on the table to accept the  
5 NIOSH SEC Evaluation Report, which would, in  
6 essence, turn down the petition. Are you  
7 ready to vote on it? So, Dr. Ziemer, Dr.  
8 Richardson, any further -- I don't want to --

9 MEMBER ZIEMER: I have no further  
10 questions. This is Ziemer.

11 CHAIRMAN MELIUS: Okay, David?

12 MEMBER RICHARDSON: I don't have  
13 any other questions at this point, no.

14 CHAIRMAN MELIUS: Okay, thank you.  
15 Okay, Ted, yes. Don't skip --

16 MR. KATZ: I'll try to do this  
17 right this time, and get everybody in one go.

18 CHAIRMAN MELIUS: Yes, basically,  
19 the proposed Class Definition was that --  
20 actually, who had -- somebody had written it  
21 out. Emily, read that.

22 MR. KATZ: The motion.

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1 CHAIRMAN MELIUS: The motion.

2 MR. KATZ: The motion, she didn't  
3 have it verbatim, but the motion on the table  
4 --

5 CHAIRMAN MELIUS: Is basically to  
6 accept the NIOSH SEC Evaluation Report, which  
7 says that they can conduct dose  
8 reconstructions, is to turn down the petition.

9 MR. KATZ: Is everybody clear?  
10 Okay, so, let's just run this alphabetically  
11 so I don't skip anybody. Dr. Anderson?

12 MEMBER ANDERSON: No.

13 MR. KATZ: Ms. Beach?

14 MEMBER BEACH: No.

15 MR. KATZ: Mr. Clawson?

16 MEMBER CLAWSON: No.

17 MR. KATZ: Dr. Field?

18 MEMBER FIELD: Yes.

19 MR. KATZ: Mr. Gibson?

20 MEMBER GIBSON: No.

21 MR. KATZ: Mr. Griffon?

22 MEMBER GRIFFON: No.

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1 MR. KATZ: Dr. Lemen?

2 MEMBER LEMEN: No.

3 MR. KATZ: Dr. Lockey?

4 MEMBER LOCKEY: Yes.

5 MR. KATZ: Dr. Melius?

6 CHAIRMAN MELIUS: No.

7 MR. KATZ: Ms. Munn?

8 MEMBER MUNN: Yes.

9 MR. KATZ: Dr. Poston?

10 MEMBER POSTON: Yes.

11 MR. KATZ: Mr. Presley?

12 MEMBER PRESLEY: Yes.

13 MR. KATZ: Dr. Richardson?

14 MEMBER RICHARDSON: No.

15 MR. KATZ: Dr. Roessler?

16 MEMBER ROESSLER: Yes.

17 MR. KATZ: Mr. Schofield?

18 MEMBER SCHOFIELD: No.

19 MR. KATZ: Dr. Ziemer?

20 MEMBER ZIEMER: Yes.

21 MR. KATZ: Okay, so, let me just be

22 accurate on the numbers here. So, there are

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1 seven yes's, which means there are nine no's,  
2 which means the motion fails.

3 CHAIRMAN MELIUS: Okay, so, what I  
4 would propose as the next step is that we come  
5 back to this after lunch. Over lunch, I will  
6 work to develop a motion and a Class  
7 Definition. I will talk to the NIOSH counsel  
8 and see if we can come up with something that  
9 we can approve after lunch, or later in the  
10 meeting, today, or even tomorrow morning, but  
11 preferably, I think today, and we will go from  
12 there. Is that satisfactory with everybody?  
13 Okay, thank you.

14 Moving on to Chapman Valve.  
15 Again, I don't believe we have any information  
16 -- no motion, we have no motion here and  
17 again, there is -- I don't think there's any  
18 information on our drives, our O: drive or  
19 anything related to that.

20 So, I guess we start with any  
21 discussion or if anybody wants to make a  
22 motion on Chapman. Yes, Dr. Poston?

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1                   MEMBER POSTON: I think, isn't the  
2 motion on the table? The motion was to accept  
3 the recommendations of NIOSH.

4                   CHAIRMAN MELIUS: No, yes, I don't  
5 believe that's --

6                   MEMBER POSTON: And that was  
7 tabled?

8                   CHAIRMAN MELIUS: What?

9                   MEMBER POSTON: That was tabled?

10                  CHAIRMAN MELIUS: No, don't think  
11 it --

12                  MR. KATZ: No, I think the record  
13 is -- there was some discussion of a motion,  
14 but there actually never was a formal motion,  
15 or at least --

16                  MEMBER POSTON: Then can we make a  
17 motion?

18                  MR. KATZ: There is not one  
19 currently.

20                  MEMBER POSTON: You did not make a  
21 motion?

22                  MEMBER BEACH: It was so long ago,

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1 I can't remember.

2 CHAIRMAN MELIUS: Yes.

3 MS. HOWELL: Let me get to the  
4 right place. I think the most recent action  
5 regarding Chapman Valve, there had been a  
6 motion. I believe the motion was to accept  
7 the NIOSH report, and then, that motion was  
8 tabled and then the motion failed.

9 So, there is no motion on the  
10 table at this time, is what I believe had  
11 happened.

12 MEMBER GRIFFON: The motion to  
13 table failed?

14 MS. HOWELL: No, I'm sorry --

15 MEMBER POSTON: The motion was  
16 tabled and the motion to remove it was a tie  
17 vote.

18 MS. HOWELL: Right, in a tie vote,  
19 failed.

20 MEMBER POSTON: It didn't fail.

21 MS. HOWELL: Okay, Doctor --

22 MEMBER POSTON: It moved forward.

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1 It didn't fail.

2 MS. HOWELL: Dr. Poston moved to  
3 accept the NIOSH recommendation on Chapman  
4 Valve, thus denying the Class. The Board vote  
5 on the motion was a tied vote.

6 MEMBER POSTON: Yes.

7 MS. HOWELL: So it failed and there  
8 is no motion on the table. A tie vote fails,  
9 but it doesn't mean that it -- it doesn't mean  
10 that people voted against. It just means it's  
11 gone. So, a new motion would be in order,  
12 either way.

13 CHAIRMAN MELIUS: Does anybody want  
14 to make a motion, or comment, or discuss?  
15 Yes, Bill?

16 MEMBER FIELD: I had a question. I  
17 think I asked this last time we had a  
18 conference call.

19 CHAIRMAN MELIUS: Yes.

20 MEMBER FIELD: But one of the  
21 unique aspects of this site was this one  
22 finding of the one sample, is that correct?

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1 There was --

2 CHAIRMAN MELIUS: Correct.

3 MEMBER FIELD: Is there any  
4 recollection, not knowing the history of this  
5 site, that any workers reported working with  
6 enrichment materials at this site, any self-  
7 reported information?

8 CHAIRMAN MELIUS: Mark?

9 MEMBER GRIFFON: Yes, SC&A brought  
10 this up in their report. John, maybe you can  
11 speak to this, the interview with --

12 DR. MAURO: Yes they were, Arjun  
13 and myself, John, were at the worker meeting  
14 and the answer is no, the only information we  
15 have, that they recall these large manifolds  
16 came in and went out and there --

17 MEMBER GRIFFON: There was no  
18 direct information, right.

19 DR. MAURO: They seem to remember  
20 certain kinds of devices that came in and then  
21 were transported to this other facility,  
22 called Dean Street, and that was the only

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1 thing that's -- that we came away with, so,  
2 maybe that's the reason, because if a manifold  
3 that was being used for enriching uranium was  
4 being refurbished -- and this was, you know,  
5 something that we just thought about, that  
6 might be one reason why there might, during  
7 the transshipment, have some quantity of  
8 enriched uranium left behind.

9 But that would not have been  
10 related to the activity covered, for the  
11 covered period. But then again, when we went  
12 in -- we, NIOSH, went into the literature, to  
13 see if there was any evidence that such  
14 transshipments occurred, that came in from  
15 let's say Oak Ridge, and went to Dean Street,  
16 no.

17 As a matter of fact, my  
18 recollection and please, anyone who has a  
19 better recollection --

20 MEMBER POSTON: One of the women  
21 testified or told us that she remembered  
22 typing the shipping orders and so forth, for

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1 these manifolds. But as John says, we were  
2 never able to find any data that indicated, or  
3 any copies of those shipping orders at all.

4 Mr. Chairman, you mentioned  
5 Robert's Rules of Order, therefore, I'd like  
6 to make a motion, so that we can discuss this.

7 CHAIRMAN MELIUS: That's fine.  
8 That's why I left it open. So, go ahead.

9 MEMBER POSTON: I would like to  
10 move that we accept the NIOSH evaluation.

11 MEMBER PRESLEY: Second.

12 CHAIRMAN MELIUS: Yes, okay. Now,  
13 discussion, Brad?

14 MEMBER CLAWSON: NIOSH, just  
15 lately, made the comment that in researching  
16 data for one of the other sites, they came up  
17 with new information on Chapman Valve, but  
18 they -- the only thing that I've heard on it  
19 is that it has not changed their stance on it.

20 But I haven't heard what they've  
21 found, with Chapman Valve. See, this is one  
22 of the questions that I've always had on this,

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1 is that there has been a lot of information  
2 and just -- you know, we've had people tell us  
3 about this, but they haven't been able to find  
4 any of the documentation or so forth like  
5 that, and I guess I have a little bit of a  
6 problem with it, because the paper trails are  
7 never always that good.

8 CHAIRMAN MELIUS: Yes. Stu, and  
9 then I believe somebody from SC&A, I think I  
10 know what Stu is going to talk about.

11 MR. HINNEFELD: Yes, well, this  
12 visit was made last Thursday, in order to try  
13 to see these, and what we found was a finding  
14 that said -- that associated Chapman Valve  
15 with one box at a storage facility in  
16 Maryland.

17 So, we went Thursday, this was a -  
18 - it was identified as a classified  
19 collection. The things we saw turned out not  
20 to be classified, but they were inter-mixed  
21 with classified material, and they were  
22 essentially -- as I understand it, they were

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1 materials, you know, accountability numbers,  
2 you know, this is how much uranium we got,  
3 this is how much uranium we sent, pertains to  
4 that 1948 period that we know about, that is  
5 the activity that we knew -- that we have the  
6 detailed knowledge about.

7 So, that's it. Joe Fitzgerald is  
8 actually there. Mark Rolfes was actually  
9 there. They might be able to give a better  
10 characterization.

11 CHAIRMAN MELIUS: Yes, Mark or Joe,  
12 do you have anything to add? Joe?

13 MR. FITZGERALD: No, I think that  
14 covered it pretty well. Actually, it was in  
15 the context of what John was saying, John  
16 Poston was saying earlier. We wanted to focus  
17 on any possibility of those shipments and  
18 focus on the sites that might have been  
19 shipping, and the records turned out to be, as  
20 Stu was saying, administrative, you know,  
21 property management.

22 I mean, it was -- you know, it was

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1 specific to Chapman, but nothing that would  
2 probably shed light on this.

3 CHAIRMAN MELIUS: Wouldn't shed  
4 light one way or the other, I guess is --

5 MR. FITZGERALD: Right, right, I  
6 mean, there was some expectation there might  
7 be some information that would give you some  
8 hint or some clue to this, but not at this  
9 time.

10 CHAIRMAN MELIUS: Yes, okay, thank  
11 you, Joe. Okay, so, we were -- I mean, they -  
12 - as we mentioned earlier, NIOSH had expedited  
13 the visit there, to get Chapman, once these  
14 were -- became aware of this information and  
15 we were hoping it would help to resolve, but  
16 it hasn't, and I think the other information,  
17 just to refresh people's memory, and again,  
18 Stu or somebody can correct me if I'm wrong,  
19 but that the initial -- also we, at one point,  
20 thought that maybe there was Defense  
21 Department Nuclear Navy operations worked on  
22 at this facility and -- but we're unable to

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1 locate records and any sort of further --  
2 through a computerized database, and if I  
3 recall right, there may be paper records  
4 someplace, but this would be a large  
5 undertaking to do -- wasn't sure that there  
6 was access for this.

7 And so, it was decided not to move  
8 forward on that, and so, we're left with this  
9 sample that we can't explain. Yes, Brad, then  
10 Wanda.

11 MEMBER CLAWSON: This has been part  
12 of the problem, and I guess, maybe it's wrong,  
13 or whatever. I got back to what I do right  
14 now, and we had a FUSRAP report that came out  
15 of there and they said that it was not  
16 uncommon, going into these sites, to be able  
17 to find higher than expected contents because  
18 a lot of these sites interacted with one  
19 another.

20 And we basically had two samples,  
21 one enriched and one not, and we're  
22 disregarding this one sample, and this is my

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1 frustration because I personally know that in  
2 my process, the only documentation of fuel  
3 that I have from other sites is just on my  
4 criticality sheets. I have no record of it  
5 because it's not my fuel. It belongs to  
6 somebody else, and this is -- we've taken and  
7 we've cut Dean Street out, because we couldn't  
8 find the information on Dean Street, and John,  
9 isn't that right, didn't we cut Dean Street  
10 out separate from Chapman?

11 MEMBER POSTON: After the  
12 interviews that Arjun and John and I conducted  
13 on site, Dean Street was added.

14 MEMBER CLAWSON: It was added.

15 MEMBER POSTON: Because we were not  
16 aware of Dean Street at all.

17 MEMBER CLAWSON: Okay.

18 MEMBER POSTON: And then when they  
19 started looking for records, and correct me,  
20 John, if I'm -- if I understand, they found no  
21 records, and so, we couldn't proceed if the  
22 Dean Street was incorporated with the other

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1 facility, and so, we requested that that be  
2 removed.

3 So, it wasn't there initially,  
4 when we did our interviews. We found out that  
5 there was a second facility, which was added,  
6 but then when we looked for some way to  
7 understand what went on at Dean Street, we had  
8 no success at all. So, we asked that -- the  
9 Working Group asked that it be removed from  
10 our consideration and we focused on the  
11 original facility.

12 CHAIRMAN MELIUS: Can I just ask  
13 for a clarification, because -- but Dean  
14 Street is part of the facility definition?

15 MEMBER POSTON: It was not.

16 CHAIRMAN MELIUS: Not, then it was  
17 added?

18 MEMBER POSTON: Then it was added  
19 and then we requested that it be removed, so  
20 that we could focus on the initial definition.

21 CHAIRMAN MELIUS: But removed from  
22 your consideration, but it is still part of

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1 the facility definition?

2 MEMBER POSTON: I don't know the  
3 answer.

4 CHAIRMAN MELIUS: That was --

5 MEMBER RICHARDSON: Correct.

6 CHAIRMAN MELIUS: Can someone --

7 MEMBER CLAWSON: I thought that we  
8 brought it in. I didn't remember removing it,  
9 and this is --

10 CHAIRMAN MELIUS: Well, I think --

11 MEMBER POSTON: We did.

12 MR. HINNEFELD: Okay, in response  
13 to your question, Dean Street is considered  
14 part of Chapman Valve.

15 CHAIRMAN MELIUS: Okay.

16 MR. HINNEFELD: So, if someone  
17 worked at Dean Street, that's considered  
18 covered employment.

19 CHAIRMAN MELIUS: Okay, that's --

20 MEMBER CLAWSON: I just -- we've  
21 got too many unanswered questions, bottom  
22 line, is what it comes down to, and I don't

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1 think that we can really, in my personal  
2 opinion, really do justice for that.

3 CHAIRMAN MELIUS: Thank you, Brad.  
4 John, you had further?

5 MEMBER POSTON: Well, I thought it  
6 would be appropriate -- I'm sorry, Wanda.

7 MEMBER MUNN: No, go ahead.

8 MEMBER POSTON: I thought it would  
9 be appropriate to go back and recall what the  
10 Work Group did, just for -- to make everyone  
11 aware.

12 There is no question that on the -  
13 - in terms of the reconstruction of external  
14 dose, for the facility, we have the -- NIOSH  
15 has all the film badge data.

16 So, the question of external doses  
17 is moot, as far as I'm concerned. They have  
18 the information.

19 The internal dose is a horse of a  
20 different variety, as my advisor used to say,  
21 because we have a limited number of air  
22 sampling results in the facility and so, the

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1 approach that was taken by NIOSH was to take  
2 the highest concentration -- and again, John,  
3 if I'm misstating this, please, let me know,  
4 this has been a long time -- taking the  
5 highest concentration that existed in the  
6 facility and assume that it was there eight  
7 hours a day, for the entire covered period.

8 Now, the covered period is a year  
9 and a half, but the actual activity in the  
10 facility was less than that. So, we have two  
11 over-arching assumptions. One, that the  
12 maximum concentration existed in the facility  
13 over the entire covered period, which it C- we  
14 -- you know, think it does not, and the fact  
15 that the activity in the facility was much  
16 shorter than the covered period.

17 So, under those assumptions, the  
18 Work Group concluded that if NIOSH calculated  
19 a Probability of Causation and it was less  
20 than 50 percent, it would never -- there were  
21 no situations in which it could be greater  
22 than 50 percent, and that's the reason we

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1 voted to accept the NIOSH recommendation. Jim  
2 is frowning.

3 MEMBER GRIFFON: I didn't  
4 understand that last part.

5 MEMBER POSTON: Say it again?

6 CHAIRMAN MELIUS: I didn't  
7 understand the last part, how --

8 MEMBER POSTON: Well, the period in  
9 which the folks were exposed was shorter than  
10 the year and a half.

11 CHAIRMAN MELIUS: Okay.

12 MEMBER POSTON: We assumed that  
13 they were exposed for a year and a half at the  
14 maximum concentration, eight hours a day, five  
15 days a week.

16 CHAIRMAN MELIUS: Okay, I  
17 understand now.

18 MEMBER POSTON: And the logic is,  
19 if the PoC is not greater than 50 percent,  
20 under those assumptions, it would never be  
21 greater than 50 percent.

22 CHAIRMAN MELIUS: Okay, I thought

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1 you assume that up front, that's why --

2 MEMBER POSTON: No.

3 CHAIRMAN MELIUS: -- I  
4 misunderstood.

5 MEMBER POSTON: Now, we do have the  
6 problem that Brad brought up, of the two  
7 samples, one which was not enriched, the  
8 second one, which was slightly enriched,  
9 somewhere in the order, as I recall, around  
10 two percent.

11 NIOSH, Jim Neton, did get in touch  
12 with the FUSRAP people at Oak Ridge, talked to  
13 the folks that made the measurements. They  
14 were relatively certain that they -- that that  
15 was a correct value.

16 When we asked them, how did they  
17 make the measurements, what techniques, and so  
18 forth, they really didn't have a firm answer.

19 The folks -- the leader of the group was  
20 still at Oak Ridge, but some of the other  
21 folks were not there to help explain.

22 So, we do have those two samples.

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1 We thought, because there was an indication  
2 later, that some of the activities at Chapman  
3 Valve outside of the covered period, were  
4 conducted under the Department of Defense. I  
5 believe Jim Neton also -- or somebody in NIOSH  
6 requested any documents from, I believe from  
7 the Navy. There was a Navy activity.

8 We got no response from the Navy,  
9 in terms of what activities were going on at  
10 Chapman Valve and so, that -- we basically got  
11 stonewalled. We have no idea if there was  
12 slightly enriched uranium. We really don't  
13 know where that sample came from.

14 John, and Arjun and I, actually  
15 postulated that it may have come from Oak  
16 Ridge, with those manifolds, but again, we  
17 couldn't find records that the manifolds were  
18 either shipped in or shipped out.

19 So, we don't even -- except for  
20 the testimony of this woman who was very lucid  
21 and clear about it, we have no indication that  
22 the manifolds actually exist. I don't know.

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1 So, that's another one of the things. But --

2 MEMBER GRIFFON: I agree with that  
3 account pretty much fully, except for one part  
4 of it. I think, and NIOSH can correct me if  
5 I'm wrong, but I think the model is based on  
6 urinalysis, not on air sampling. But  
7 otherwise, it's all -- it was based on like  
8 the highest urinalysis valve and the intakes  
9 were calculated from that.

10 MEMBER POSTON: Okay, I --

11 MR. HINNEFELD: There was actually  
12 a fire there and there was bioassay taken  
13 after the fire, and so, the highest sample  
14 from that is taken for the acute exposure  
15 associated with the fire.

16 And then, the highest sample, not  
17 associated with the fire, is used for the  
18 chronic exposure for everybody for the whole  
19 time.

20 MEMBER POSTON: Thank you, Mark, I  
21 stand corrected.

22 CHAIRMAN MELIUS: It's been a

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1 while. Thank you for that summary.

2 MEMBER GRIFFON: The only other  
3 thing I would say is that it was my -- my  
4 memory is, from the interview, Jim Neton did  
5 interview the individuals who did the surveys  
6 and I thought he had indicated that he wasn't  
7 sure of the particular method, but at that  
8 time, they would have definitely used alpha  
9 spec or mass spec.

10 So, that was part of his reasoning  
11 on why it was a real number, it wasn't likely  
12 to have -- you know, just be attributed to  
13 error.

14 MEMBER POSTON: Yes, it was an  
15 either/or situation.

16 MEMBER GRIFFON: Yes.

17 MEMBER POSTON: He didn't remember.

18 MEMBER GRIFFON: Right, right.

19 MEMBER POSTON: So, it could have  
20 been this or it could have been that.

21 MEMBER GRIFFON: Yes.

22 CHAIRMAN MELIUS: Thank you.

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1 Wanda?

2 MEMBER MUNN: One of the most  
3 valuable summaries that we have, of what goes  
4 on with these case reviews is NIOSH  
5 presentations that are made to us, where their  
6 recommendation occurs.

7 In this plethora of electronic  
8 data that's available to us, can we not pull  
9 up, for our own review, the presentation  
10 slides that were the NIOSH presentation to the  
11 Board?

12 CHAIRMAN MELIUS: I don't believe  
13 that information is archived on the website.  
14 So --

15 MEMBER MUNN: That's really  
16 unfortunate.

17 MEMBER GRIFFON: It's on the O:  
18 drive.

19 CHAIRMAN MELIUS: It's on the O:  
20 drive?

21 MEMBER GRIFFON: Yes.

22 CHAIRMAN MELIUS: Somebody wants to

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1 --

2 MEMBER GRIFFON: I'm pretty sure.  
3 I see the Evaluation Report. I'm looking for  
4 the slide.

5 CHAIRMAN MELIUS: Yes, I did know  
6 that --

7 MEMBER MUNN: I looked for the  
8 slide and couldn't find it.

9 CHAIRMAN MELIUS: Yes. I agree  
10 with you in general, Wanda. I think that we  
11 need to make sure, next time we bring up  
12 something from our past, that we need to have  
13 some reference material readily available, and  
14 I'll work with Ted and NIOSH, to make sure  
15 that that is available to us, when we're  
16 having these type of discussions and sort of  
17 reconsidering or reviewing something that  
18 we've done in the past, where it's not on the  
19 website or not directly accessible, or easily  
20 accessible on the O: drive, we should make it  
21 more readily available.

22 MEMBER MUNN: Those visuals are

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1 sometimes much easier to get to the meat of  
2 the matter, than reading the written material  
3 that comes out in the document.

4 MEMBER ZIEMER: Dr. Melius?

5 CHAIRMAN MELIUS: Yes, go ahead. I  
6 was -- Gen had a comment, then I was going to  
7 do you and David.

8 MEMBER ZIEMER: Okay, go ahead,  
9 Gen.

10 MEMBER ROESSLER: Mine is short.  
11 Just a comment on Dr. Poston's wording. The  
12 sample that we have under discussion, he said  
13 was enriched. I don't think we have  
14 confirmation that that's true. I think the  
15 interpretation was that it was probably  
16 enriched, and that's why the questions were  
17 asked about the methodology for looking at the  
18 sample.

19 I think there are all kinds of  
20 other possibilities. So, I think maybe a  
21 change in wording would be -- I'm not quite  
22 sure what it is, but we're not certain it was

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1 enriched.

2 MEMBER GRIFFON: Likely was  
3 enriched, I guess, yes, likely was, or  
4 something.

5 MEMBER ROESSLER: One  
6 interpretation.

7 CHAIRMAN MELIUS: Paul?

8 MEMBER ZIEMER: My memory is also a  
9 little fuzzy, but -- and maybe this was asked  
10 in the past some time. But what would be the  
11 implication of the dose reconstruction if  
12 NIOSH assumed that that low enrichment uranium  
13 instead of the natural uranium?

14 MR. HINNEFELD: Well, I mean,  
15 theoretically, you could adjust the dose  
16 upward, but the problem with that though is  
17 that we -- it's pretty clear from the  
18 information we have, that they used natural  
19 uranium.

20 The work we know about at Chapman  
21 Valve used natural uranium and they made these  
22 slugs. That's the work we know about, and so,

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1 it would be a little incongruous, I think, to  
2 say because of this two percent sample, we're  
3 now going to do doses as if this were enriched  
4 uranium, based on the bioassay data we have.  
5 I think that would be a little inconsistent.

6 MEMBER ZIEMER: I suppose the only  
7 other implication is, there was something else  
8 going on that's not accounted for, and I think  
9 we also had the discussion because of the  
10 detail to which enriched uranium was tracked,  
11 not only now, but then, that the likelihood of  
12 there being any significant operation  
13 involving U-235, that -- went undiscovered in  
14 the process of record review, is very  
15 unlikely.

16 I think we all concluded that at  
17 best it was a contamination brought in,  
18 perhaps in the shipping of the manifolds or  
19 something like that, for which there might  
20 have been some small area of a loading dock  
21 contaminated. I believe the sample was on a  
22 loading dock, was it not?

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1                   CHAIRMAN MELIUS: Yes, near a  
2 loading dock.

3                   MR. HINNEFELD: Can I just offer  
4 something?

5                   CHAIRMAN MELIUS: Sure.

6                   MR. HINNEFELD: Our position on  
7 this has -- I think we've been pretty  
8 consistent in expressing this all along.

9                   The work that we know about,  
10 despite all our research it's still the only  
11 work we know about, is the manufacture of  
12 those natural uranium slugs, and we believe we  
13 have a method for reconstructing the dose for  
14 that natural uranium work.

15                   The existence of a two percent  
16 sample, if it in fact, is a two percent  
17 sample, is more -- if you're going to  
18 interpret that in any way, it would have -- I  
19 would think it would have to be, there must  
20 have been other work at that site, that we  
21 don't yet know about.

22                   And so, I don't know, you know,

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1 if, in fact, that work occurred and if, in  
2 fact, we can learn enough about that work to  
3 even make a judgment about whether doses  
4 should be reconstructed, in other words, was  
5 it AEC work, or make a judgment about, is it  
6 feasible to reconstruct those doses, if we  
7 don't learn anything more than, oh, yes, they  
8 did have two percent uranium, then maybe we  
9 don't have enough.

10 But that would all -- that's  
11 essentially a different -- it's essentially a  
12 different Class. You know, what we know about  
13 is the work, the natural uranium work, that's  
14 what we believe we can reconstruct, and if  
15 there is information that comes to bear or if  
16 there is information that says there was other  
17 activity there that involved two percent  
18 uranium, then we would have to go back and  
19 reconsider when that work occurred and what it  
20 would mean.

21 I just -- I don't see how a two  
22 percent sample ties to the abundant knowledge

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1 we have, how it refutes the abundant knowledge  
2 we have, that this work in 1948 and 1949,  
3 which is all we're talking about, was natural  
4 uranium. I'm sorry, I wanted to say it.

5 CHAIRMAN MELIUS: Well, correct me  
6 if I'm wrong on this, but I think the other  
7 information we have, which again, none of it  
8 is definitive, but from what I've heard, is  
9 one, there is -- we do have this testimony  
10 from this one person about the manifolds.  
11 Maybe a different time period, it's not clear.

12 And secondly, there is -- I  
13 believe Mark quoted at the last meeting, which  
14 was something new to me, but there was -- at  
15 least new to my recall, was about some  
16 references in some of the DOE documents to  
17 other work that might have gone on at that  
18 facility, that it wasn't -- maybe I'm off --

19 MEMBER GRIFFON: The only thing I  
20 do remember that they did do some Naval work,  
21 but as far -- what we couldn't determine was  
22 if there was any -- if they did any Naval

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1 nuclear work.

2 CHAIRMAN MELIUS: Okay.

3 MEMBER GRIFFON: I mean, it was  
4 Naval valve work.

5 MR. HINNEFELD: Yes, valve --

6 CHAIRMAN MELIUS: Unrelated to this  
7 --

8 MR. HINNEFELD: They also did valve  
9 work for AEC. If I'm not mistaken, the  
10 manifold -- the woman who testified about the  
11 manifold, testified that was during the war,  
12 isn't that true?

13 MEMBER GRIFFON: Right.

14 MR. HINNEFELD: So, that would have  
15 been different timing.

16 CHAIRMAN MELIUS: Okay, yes, that  
17 was what I recall. But I would just say in  
18 general, there are a number of these older  
19 sites that we've dealt with recently, where we  
20 just did not have adequate information on --  
21 we knew there were some operations there. We  
22 just didn't have adequate information to be

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1 able to characterize those in any way, and  
2 we've -- you know, basically made those fairly  
3 wide open SECs, based on ignorance of  
4 operations.

5 I mean, we knew there were some  
6 there, but we weren't able to characterize  
7 them in some way, and those were a continuum  
8 and it's difficult and I guess the questions  
9 are, how are we being consistent in  
10 approaching?

11 I don't think we've ever had a  
12 situation where we've had an anomalous sample  
13 that -- from a site, that has caused as much  
14 confusion, and I also -- Dr. Ziemer's  
15 question, this may be my ignorance also, but  
16 given what we've learned recently about -- or  
17 difficulties we've had with Rochester and this  
18 latest round of 50 boxes, I'm far from  
19 convinced that every time we find records --  
20 you know, look for records, that we've found  
21 them on operations, and certainly, some of  
22 these older sites are poorly documented.

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1           So, may not quite have -- quite as  
2 much faith, as you do, Dr. Ziemer, that we  
3 would have found the records on unenriched  
4 uranium at a site. But that's just my  
5 judgment.

6           So, we have a motion. David  
7 Richardson, have you -- I didn't ask you if  
8 you had questions or comments.

9           MEMBER RICHARDSON: I don't think I  
10 have questions.

11           CHAIRMAN MELIUS: Okay.

12           MEMBER RICHARDSON: No.

13           CHAIRMAN MELIUS: Any other  
14 comments from Board Members? If not, I think  
15 we need to proceed to a vote.

16           I think this is similar to the  
17 Blockson situation. We have a motion to  
18 accept the NIOSH SEC evaluation, and if we  
19 reject that, then given the time frame and so  
20 forth, I do think it behooves us that -- to  
21 make a -- you know, have a step -- a way to go  
22 forward, beyond this, and whether it be a

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1 motion the other way or whatever, I think we  
2 need to --

3 MEMBER GRIFFON: Is there anyone  
4 from the petition here?

5 CHAIRMAN MELIUS: That's what I  
6 wanted to -- I'm waiting for Ted to -- Ted was  
7 looking for Bill Field. Is there a petitioner  
8 that -- Ted, do you know, for this?

9 MR. KATZ: There are two  
10 petitioners.

11 CHAIRMAN MELIUS: Are the  
12 petitioners on the line for the Chapman?

13 MS. REALE: Yes, I am, Marianna  
14 Reale.

15 CHAIRMAN MELIUS: Okay, hi, there.  
16 Do you have anything you'd like -- any  
17 statement you'd like to make?

18 MS. REALE: I'm just saying that  
19 this thing has been dragged out for more than  
20 10 years and it seems as though everyone is so  
21 against it. It's very unfair to all these  
22 people.

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1 CHAIRMAN MELIUS: Okay, thank you.

2 Okay. Is there another petitioner, somebody  
3 else on the line, that would -- from Chapman?

4 Okay, why don't we proceed with a  
5 vote then? The vote would be to accept the  
6 NIOSH Evaluation Report and to turn down the  
7 SEC petition.

8 MEMBER ANDERSON: Go backwards.

9 MR. KATZ: Yes, I'm going to flip  
10 the direction of the roll call. Keep it  
11 simple. Dr. Ziemer?

12 MEMBER ZIEMER: Yes.

13 MR. KATZ: Mr. Schofield?

14 MEMBER SCHOFIELD: No.

15 MR. KATZ: Dr. Roessler?

16 MEMBER ROESSLER: Yes.

17 MR. KATZ: Dr. Richardson?

18 MEMBER RICHARDSON: Yes.

19 MR. KATZ: Mr. Presley?

20 MEMBER PRESLEY: Yes.

21 MR. KATZ: Dr. Poston?

22 MEMBER POSTON: Yes.

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1 MR. KATZ: Ms. Munn?  
2 MEMBER MUNN: Yes.  
3 MR. KATZ: Dr. Melius?  
4 CHAIRMAN MELIUS: No.  
5 MR. KATZ: Dr. Lockey?  
6 MEMBER LOCKEY: Yes.  
7 MR. KATZ: Dr. Lemen?  
8 MEMBER LEMEN: No.  
9 MR. KATZ: Mr. Griffon?  
10 MEMBER GRIFFON: No.  
11 MR. KATZ: Mr. Gibson?  
12 MEMBER GIBSON: No.  
13 MR. KATZ: Dr. Field?  
14 MEMBER FIELD: Yes.  
15 MR. KATZ: Mr. Clawson?  
16 MEMBER CLAWSON: No.  
17 MR. KATZ: Ms. Beach?  
18 MEMBER BEACH: No.  
19 MR. KATZ: Dr. Anderson?  
20 MEMBER ANDERSON: No.  
21 MR. KATZ: Excuse me?  
22 MEMBER ANDERSON: No.

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1                   MR. KATZ: Thank you. That's  
2 correct, it's a tie, eight. So, the motion  
3 fails.

4                   CHAIRMAN MELIUS: Given the time  
5 period and that it's close to lunch, what I  
6 think we should do is, we'll break for lunch.  
7 We'll come back at the beginning of the  
8 afternoon session. We will have a short  
9 discussion on thinking about steps forward,  
10 what we should do next, how do we resolve this  
11 issue with Chapman, and so, if you can at  
12 least think about that over lunch time.

13                   And we will break and we will --  
14 please, try to be back here by 1:30 p.m. We  
15 do have a petition. We will have petitioners  
16 and others present for the discussion of  
17 Bethlehem.

18                   (Whereupon, the above-entitled  
19 matter went off the record at 12:15 p.m. and  
20 resumed at 1:40 p.m.)

21                   MR. KATZ: Can I check on the  
22 lines? Dr. Ziemer and Dr. Richardson, are you

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1 with us?

2 MEMBER ZIEMER: Yes, Ziemer here.

3 MEMBER RICHARDSON: Hello, yes,  
4 David is here.

5 MR. KATZ: Great, thank you.

6 CHAIRMAN MELIUS: A couple of  
7 updates before we start discussion on  
8 Bethlehem.

9 One is on the Mound Site that we  
10 discussed yesterday, where we had issues with  
11 the Class Definition for that, I believe we  
12 will see a proposal later today, for a Class  
13 Definition that we hope will be more  
14 satisfactory for that site.

15 And so we should see that in  
16 writing, so, we'll discuss that during our  
17 Board working time, which should start a  
18 little after three or so this afternoon.

19 On the Chapman Site, which we  
20 discussed this morning, we were -- continue to  
21 be in deadlock. After that discussion, I did  
22 have further discussions with NIOSH and I

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1 think there are two follow up items that can  
2 be pursued on that, in terms of additional  
3 information.

4 One is, we do have the 70 boxes of  
5 materials that were found recently, or  
6 whatever the number is, I'm not sure.  
7 Although they've looked at those that were  
8 labeled Chapman, there are some other -- many  
9 other boxes they have not gone through yet,  
10 some of which are some of the related sites  
11 and so forth, that may shed some information  
12 on what went on at Chapman Valve.

13 Secondly, they will also look back  
14 into the Nuclear Navy question. Again, the  
15 clarification was that they had done sort of a  
16 computerized record search, but they will go  
17 back to the Navy and the Defense Department  
18 and see if there's information available and  
19 we'll pursue the issue of doing a manual  
20 search of those records also, so that we would  
21 have additional information to work with, one  
22 way or the other. We'll see on that.

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1           So, that will be something.  
2           Hopefully, that will be done in a timely  
3           fashion and we can pursue it.

4           On the Blockson Site, what I think  
5           would be the best path forward is that we need  
6           to -- we need to have resolution to vote on  
7           for that, presumably that would need a new  
8           Class Definition because we are -- I think at  
9           least in principle, basing our -- a finding of  
10          the SEC on the radon issue, in that one  
11          building, and so, we need to craft a Class  
12          Definition that not only encompasses where  
13          dose cannot be reconstructed, or also,  
14          encompass -- be a workable Class Definition  
15          and that's just going to take some time.

16          So, my proposal would be that we  
17          not take any further action on that, but for  
18          the agenda for our next conference call, that  
19          there be -- that we would have that site on  
20          the agenda, Blockson Site, and that there  
21          would be a proposal in writing ahead of time,  
22          to everybody, for us to be able to vote on

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1 that, and I think that would be the best way  
2 to go forward on that.

3 So, if that's agreeable with  
4 everybody, I don't think we need to take any  
5 action, but just as a point of information,  
6 going forward.

7 MEMBER ZIEMER: Dr. Melius?

8 CHAIRMAN MELIUS: Yes.

9 MEMBER ZIEMER: Paul Ziemer here.

10 I agree with that, moving forward. I did want  
11 to raise a concern or ask that NIOSH  
12 specifically address this, and that would be,  
13 because in essence, what we're seeing here is  
14 that if the vote remains the same, it would be  
15 a recommendation for an SEC, and the question  
16 is going to arise for those who don't meet the  
17 250 day issue, or who do not have one of the  
18 specified cancers.

19 In the case of the partial dose  
20 reconstruction, that we usually look at, as a  
21 -- for those who are in those categories, what  
22 NIOSH will do to assign radon exposure for

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1 those individuals, since we have in essence,  
2 taken the position that the radon model is not  
3 usable.

4 So, I would hope that what's in  
5 their definition of Class, that they at least  
6 make us aware of what will be done on the  
7 partial dose reconstruction.

8 CHAIRMAN MELIUS: I agree with  
9 Paul, and that was what I was thinking, it  
10 was, we would take our time on this and -- a  
11 little bit more time and come back, to be able  
12 to address that, as well as the specific Class  
13 Definition for Blockson.

14 MEMBER ZIEMER: Thank you.

15 CHAIRMAN MELIUS: Yes, all right.  
16 Okay, let's move on. We have the Bethlehem  
17 Steel SEC petition and we will first hear from  
18 NIOSH, from Sam Glover, who will make a  
19 presentation, then we will later hear from  
20 SC&A and we'll also hear from the petitioners.

21 So, Sam, go ahead.

22 MR. GLOVER: Thank you, Dr. Melius.

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1 Can everybody hear me okay? Okay, I'm Sam  
2 Glover. I'm here to, as was asked earlier by  
3 the Board, this is actually a re-presentation  
4 of what we discussed about two years. So,  
5 this will give you guys an opportunity to  
6 refresh what we presented and the facts around  
7 our presentation.

8 So, I came to work about six years  
9 ago at NIOSH, in January 2005, and Jim Neton  
10 says, Sam, I've got a job for you. My very  
11 first day, I started on Bethlehem Steel. So,  
12 I find myself six years later, we're still  
13 working at it. We were right in the middle of  
14 a Technical Basis Document review at the time.

15 The first one for the Board was  
16 the first place we dose reconstruction for and  
17 so, there's a lot of first's here. So, we'll  
18 begin with that.

19 The petition for Bethlehem Steel  
20 was received March 13, 2006. It qualified for  
21 evaluation on August 29, 2006.

22 A Federal Register notice was

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1 posted September 7, 2006 and the Evaluation  
2 Report was issued in February 21, 2007.

3 The ER was presented, as you can  
4 see, July 2007 at the Board meeting, and the  
5 petition was referred to the Board -- by the  
6 Board to the Surrogate Data Group -- Data Work  
7 Group.

8 So, to be specific, NIOSH  
9 evaluated the following Class of people, all  
10 Atomic Weapons Employer personnel at the  
11 Bethlehem Steel Corporation who were monitored  
12 or should have been monitored for exposure to  
13 uranium during uranium-rolling activities at  
14 the Bethlehem Steel Lackawanna, New York  
15 facility from January 1, 1949 through December  
16 31, 1952.

17 Bethlehem Steel is a large steel  
18 manufacturer -- was a large steel  
19 manufacturing facility located in Lackawanna,  
20 New York. Bethlehem Steel Corporation  
21 purchased the facility in 1922.

22 By the end of World War II, there

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1 were over 20,000 employees at Lackawanna. It  
2 was state of art, continuous rolling mill  
3 added in 1947, known as the ten-inch bar mill.

4 This is a photo of -- Mr. Ed  
5 Walker provided this to us. We have others,  
6 but this kind of gives you a feel for the size  
7 of this continuous rolling mill, that was  
8 later added -- similar facility was added in  
9 Fernald.

10 So, a bit of background. The EC  
11 contracted with Bethlehem Steel to improve  
12 rolling pass schedules on a continuous rolling  
13 mill. The goals of the Bethlehem Steel  
14 rolling program were to finish rolling up rods  
15 that were rough rolled at Simonds Saw and  
16 Steel or Aliquippa Forge, evaluate the effect  
17 of lead and salt bath heating on products and  
18 process quality, heat treating of rods and  
19 billets rolled or to be rolled at other  
20 facilities, which in some cases, also included  
21 grinding as part of this preparation.

22 For the rolling period, I want to

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1 briefly discuss, it was originally established  
2 by the Department of Labor, in 1949-1950.

3 As NIOSH began its research, we  
4 obtained documents which showed the rolling  
5 occurred in 1951 and 1952 and upon review, the  
6 Department of Labor added that, and so the  
7 covered period became 1949 through 1952.

8 Initial designation was based on a  
9 letter in the late 1970s which stated that in  
10 around 1949 through 1950, Bethlehem Steel  
11 rolled uranium. Worker interviews also stated  
12 that there were 1949-1950 rollings.

13 Numerous additional reports had  
14 been collected related to this early rolling  
15 period and a portion of these documents,  
16 approximately seven, most strongly speak to  
17 these operations, which were provided to the  
18 Department of Labor for their information.

19 The Department of Labor has chosen  
20 not to change the covered period. These  
21 documents are also available to the Board and  
22 the Director of NIOSH or the Secretary of HHS.

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1       These are available -- we have those  
2 available on a secure flash drive. These  
3 include export-controlled information, and so,  
4 they are available for your review.

5               Included in these reports is a  
6 letter to the FBI in 1952 which discusses in  
7 great detail background and operations of this  
8 experimental rolling program which, it is  
9 stated, began in 1951.

10              It also includes a detailed New  
11 York operations office report, which describes  
12 the science of Fernald and very specifically,  
13 addresses the experimental rolling program.

14              Experimental rolling number one  
15 remains the earliest documented rolling at  
16 Bethlehem Steel on April 26th and 27th of  
17 1951.

18              Letters by the previous Director,  
19 Larry Elliott, describe that while it is  
20 likely, during the 1949 and 1950 time frame,  
21 that no rolling occurred at Bethlehem Steel,  
22 NIOSH continues to use a claimant-favorable

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1 approach and include the very high exposures  
2 derived from Simonds Saw and Steel.

3 It continues to be the position of  
4 the Division of Compensation Analysis and  
5 Support that we can reconstruct dose for the  
6 entire period. So, with that, I'll continue  
7 through this.

8 You'll see, these are the  
9 documented rollings that we have at Bethlehem  
10 Steel. You see on April 26th and 27th, 1951  
11 is listed as experiment number one. Twenty-  
12 six billets were rolled on that day in a lead  
13 and salt bath.

14 You can see where we have air  
15 data. This provides our background for the  
16 facility. The last known rolling was October  
17 19, 1952, which was a production rolling, in  
18 which 60 tons was rolled in a salt bath.

19 Sources of information, the Site  
20 Profile documents, the basis of developing an  
21 exposure matrix. This was a heavily reviewed  
22 document by the Board, which was Technical

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1 Basis number three. We had initial document  
2 in this, which was the revision, which was  
3 issued July 27, 2006.

4 We also had a Technical Basis, and  
5 as I said, the previous Technical Basis number  
6 one, which was the original document.

7 We have the Site Profile for  
8 Simonds Saw and Steel, which as you guys have  
9 done a great deal of surrogate data review,  
10 associated with the early years for Bethlehem  
11 Steel, the earliest data we have is 1951, and  
12 we use Simonds Saw and Steel to do the review  
13 for 1949 and 1950.

14 We also use Technical Information  
15 Bulletins, including occupational x-rays, in  
16 estimating the maximum plausible dose to what  
17 was an Atomic Weapons Employer facility, also  
18 known as OTIB-0004.

19 We held several outreach meetings,  
20 including May 4, 2004, July 1, 2004, January  
21 12, 2005 and June 26, 2006. There were also  
22 numerous personal interviews, including those

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1 with [identifying information redacted], Ed  
2 Walker. These were telephone interviews, but  
3 obviously, Mr. Walker was heavily involved  
4 with the Board process for several years, as  
5 we reviewed the TBD.

6 Site Research Database, when I  
7 presented this in 2007, it contained 141  
8 documents. We actually have more than that  
9 now, so there are -- that could actually be  
10 updated.

11 These contain historical  
12 background process information, trip reports,  
13 air sample data, FUSRAP reports and residual  
14 contamination surveys.

15 We have documentation and  
16 affidavits submitted by petitioners, including  
17 the Wayne Range letter, which was originally  
18 used to set the 1949 and 1950 time frame.  
19 This is a 1970s -- late 1970s document,  
20 produced by the Department of Energy and 69  
21 affidavits.

22 The radiological operations,

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1 uranium billets were prepared by Mallinckrodt.

2 They were rough-rolled at Simonds Saw and  
3 Steel or Aliquippa Forge. They were shipped  
4 to Lackawanna on freight cars for finish  
5 rolling and, based on numerous documents, work  
6 involved only the ten-inch bar mill.

7 Rollings typically occurred on the  
8 weekend, as documented in many references,  
9 because of the production needs of the mill  
10 during the week. Documents and interviews  
11 report strict accountability practices  
12 regarding the collection of scale, residues,  
13 fines and cropped ends. Tonawanda sub-office  
14 reports of November 1951 detail 13 bundles of  
15 cobbled rods and four drums of scrap was  
16 transferred from Lackawanna to Lake Ontario  
17 Ordnance Works.

18 No bioassay or external dosimetry  
19 data are available for Bethlehem Steel  
20 operations. In 1951 and 1952, the Health and  
21 Safety Laboratory, known as HASL, and later  
22 National Lead, conducted air and surface

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1 radioactivity monitoring during various  
2 rolling activities.

3 Data evaluated with data collected  
4 at Simonds Saw and Steel for rollings  
5 conducted in 1949 and 1950. We used Simonds  
6 Saw and Steel as surrogate data.

7 Simonds Saw and Steel, obviously  
8 were very close to Lockport, a large supplier  
9 of rolled uranium rods for Hanford. They were  
10 the big Atomic Weapons Employer roller. They  
11 rolled well over one-million tons of uranium.

12 NIOSH used the October 1948 air  
13 sample data to supplement the Bethlehem Steel  
14 evaluation. October 27, 1948 was before any  
15 health improvements which were suggested by  
16 HASL had been implemented.

17 Uranium was not coded with lead or  
18 salt at this time frame. It was heated in an  
19 air-heated furnace, which maximized the amount  
20 of oxidation produced on the rolls.

21 So, when they began using a lead  
22 bath, it reduced that oxidation by at least a

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1 factor of two, and I have documents -- there's  
2 numerous documents that talk about that.

3 Samples collected during the  
4 periods of highest concentrations were also of  
5 extremely short duration. These weren't 10-  
6 minute samples. They were one-minute samples,  
7 collected only during the peak operation.  
8 They maximized the exposure potential that  
9 could have occurred.

10 The highest exposed worker,  
11 estimated by HASL, was exposed to 190 MAC.  
12 This is at Simonds Saw and Steel, 190 times  
13 the maximum permissible level for the maximum  
14 acceptable concentration. One MAC is equal to  
15 70 dpm, or 50 micrograms of uranium, natural  
16 uranium.

17 So, just to give you a feel, this  
18 is the distribution of air data that was  
19 observed on that day. The upper tail, at 95th  
20 percentile, which is equal to 553 times the  
21 maximum permissible level, is what was used as  
22 a surrogate for Bethlehem Steel.

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1                   This would be the highest rolling  
2 data, the guy who would have been at the  
3 rolls, the rolling operator for Simonds Saw  
4 and Steel. This is over twice what HASL  
5 estimated the highest exposed person that  
6 Simonds Saw could have received on a daily  
7 weighted average.

8                   Data was collected at Bethlehem  
9 Steel during 1951 and 1952 rollings. Data  
10 consists of 204 measurements by HASL. Salt  
11 and lead bath coatings were used at various  
12 times. As I said, the lead bath was used to  
13 help reduce oxidation. It did not cause a  
14 problem when it went to the Hanford reactors.

15                  The salt bath was being tested  
16 also to help reduce this oxidation problem. A  
17 fraction of breathing zone samples, not as  
18 large at Simonds Saw and Steel, they were  
19 looking for source term generation, and so, in  
20 our Technical Basis Document review, along  
21 with the Advisory Board, it was determined  
22 that we would supplement the general air

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1 samples by using a multiplier on the general  
2 air to make more breathing zone samples, to  
3 weight the upper distribution higher.

4 The actual air monitoring data  
5 from Bethlehem Steel consists of -- and this  
6 is broken up into two time frames. You see in  
7 the beginning, we have 225 MAC and 70 MAC of -  
8 - this is 15,000 dpm per meter cubed in the  
9 earliest time frame, and then, they began only  
10 to roll in salt baths, and when they did that,  
11 when they quit doing lead baths in -- around  
12 November of 1951, the air data dropped  
13 precipitously and the highest data point  
14 became the grinding operation.

15 It was no longer the rolling mill,  
16 but at the grinding ops, we had a measurement  
17 there, and that was the highest data point,  
18 and so, instead of using the distribution, we  
19 chose to use the very highest value that was  
20 measured during that time frame.

21 So, a summary evaluation for  
22 Bethlehem Steel, in 1949 and 1950, the

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1 building is a ten-inch bar mill. Although no  
2 documentation or records have been found to  
3 substantiate that rolling operations were  
4 actually performed, it is assumed to have been  
5 performed. We've been claimant-favorable to  
6 assume that it's contained -- that it was  
7 performed.

8 Simonds Saw and Steel was used as  
9 a surrogate with no protective coating or  
10 ventilation methods applied. This includes  
11 Simonds Saw and Steel rough rolling  
12 activities, not just finished rolling. The  
13 rough rolling activities is when the highest  
14 airborne agent -- was generated, as it knocked  
15 that oxide off the rods.

16 The plant population, all workers,  
17 were assumed to be affected. We did not try  
18 to put people in the ten-inch bar mill.  
19 Everyone was given the highest -- the 95th  
20 percentile value of the maximum dose,  
21 potential data set, with a cobble cutting dose  
22 model added for suspected cobble cutters.

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1           In January 1951 through September  
2 1951, also the ten-inch bar mill, lead and  
3 salt bath technologies were utilized. General  
4 air sample monitoring was mainly performed.  
5 We used a breathing zone general area ratio  
6 from Simonds Saw and Steel, which was applied  
7 to Bethlehem Steel to provide more high data,  
8 and we used again -- workers are assumed to be  
9 affected by the 95th percentile of the value  
10 of the maximum dose set, with also a cobble  
11 cutting dose model affected for suspected  
12 cobble cutters, as determined by the  
13 Department of Labor, who holds that under  
14 their auspices of -- that that person would be  
15 determined by them, who cobble cutters are.

16           September of 1951 through 1952 --  
17 through the end of 1952, that's December 31,  
18 1952, salt technology -- salt bath technology  
19 was fully employed, significantly reducing the  
20 airborne uranium levels. This was documented  
21 in numerous reports. Hence, grinding  
22 operations became the task with maximum dose

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1 potential. All workers assumed to be affected  
2 by grinding airborne levels with cobble  
3 cutting dose adding more for the suspected  
4 cobble cutters.

5 This became more important during  
6 this time frame, if you were expected to be a  
7 cobble cutter, because the dose -- the air  
8 concentration was down to 70, the cobble  
9 cutting is a higher level.

10 Specifically to cobble cutters,  
11 cobbled uranium are bars that bend or could  
12 not pass through the rolling operation. It  
13 was evaluated -- the frequency was evaluated  
14 of cobbling based on the written reports and  
15 documented rollings. Worker interviews  
16 assisted in determining the location and  
17 nature of the cutting operations, and also, we  
18 found in Fernald reports that they did torch-  
19 cut uranium during cobbles with the mill.

20 When Fernald operated the rolling  
21 mill, we also found supporting evidence that  
22 they did torch-cut there.

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1                   Tonawanda reports clearly show  
2 receipt of both drums of residue and bundles  
3 of cobbled rods from Bethlehem Steel as part  
4 of the scrap program.

5                   Cobble cutters, again, these  
6 cobbles, based on interviews with workers,  
7 were taken off line using crane and necessary  
8 cutting to allow the rolling to continue.  
9 Cobbles were cut up by one employee.

10                  We evaluated both the intake rate,  
11 time required and particle size during cutting  
12 operations, for the exposure analysis from  
13 1948 to 1952. We're assuming that two hours  
14 per rolling day, 600 MAC air and using .5  
15 micron particle size. Eight hours per day is  
16 70 MAC with five microns of particle size.

17                  Ingestion, employees ate and drank  
18 in the area. It was assumed that they --  
19 during rolling and in between rolling periods.

20                  Air concentration data used to determine the  
21 surface loading and a dilution model was used  
22 between the rollings.

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1           So, obviously, they were rolling a  
2 tremendous amount of steel in addition to this  
3 rolling operation conducted on the weekends.

4           So, inhalation and ingestion,  
5 during the periods of residual contamination,  
6 survey data from both Simonds Saw and Steel  
7 and Bethlehem Steel was used. Rolling data  
8 used to determine rolling day surface  
9 contamination values and general area samples  
10 were used to determine non-rolling-day data.

11           Residual period specifically  
12 designated to ensure that activities in the  
13 basement are included. Area required  
14 occasional clean-up. Worker interviews  
15 indicate intermittent occupancy. Source term  
16 data was used to bound the exposure during  
17 operations. Steel and uranium will mix to  
18 dilute the source term.

19           External sources of exposure, the  
20 uranium dose was evaluated and determined it  
21 has an extremely, extremely small component of  
22 the dose. Direct contact with uranium is the

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1 driver, shallow and deep dose. There's also  
2 residual contamination. We also included the  
3 reuse of contaminated clothing and  
4 occupational medical dose.

5 Triangular distribution was used  
6 for the evaluation of shallow dose from beta  
7 particles. The minimum worker was one meter  
8 from uranium source for one hour, versus --  
9 per 10-hour shift. That gives you 90 millirem  
10 per rolling day. The mode was determined to  
11 be a survey data from Simonds Saw and Steel.  
12 The highest value measured during those shifts  
13 was 15 millirad per hour for an entire 10-hour  
14 shift. This provides you 150 millirem per  
15 rolling day, and the maximum of this  
16 triangular distribution, six hours at one foot  
17 from an extended uranium source, and that  
18 would be 150 millirad per hour, four hours,  
19 one meter from the source, which would give  
20 you 1,260 millirem per rolling day.

21 Each of these multiplied by the  
22 number of rolling days, and the deep dose was

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1 also evaluated as a triangular distribution.

2 Residual contamination for the  
3 external dose, we used Simonds Saw and Steel,  
4 contamination as bounding. We used a 1.25  
5 times 10 to the seventh dpm per meters squared  
6 at all times on the surfaces for four years,  
7 even though they documented that they cleaned  
8 up after the rollings.

9 The annual dose from contaminated  
10 surfaces is provided here, skin at 1.7, bone  
11 .01, and all other organs .005. Obviously,  
12 skin dose, because of the shallow dose, is  
13 very high, even contaminated surfaces.

14 Contaminated clothing, we assume  
15 that it was wore for two weeks after rollings,  
16 based on worker interviews. We used dose rate  
17 data from Mallinckrodt Chemical Company as  
18 bounding, because of the type of radionuclides  
19 and the work that they did. This assigned 1.5  
20 millirem per hour to the skin, 10 hours a day,  
21 which results in 1.8 rem per year shallow  
22 dose.

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1           Occupational medical dose, we have  
2 no evidence to show that the AEC required  
3 occupational medical x-rays at Bethlehem  
4 Steel. We assume pre-employment and periodic  
5 annual x-rays in keeping with AEC practices,  
6 at larger facilities.

7           The Evaluation Report, NIOSH  
8 evaluates the petition using the guidelines of  
9 42 CFR 83.13 and submits as summary finding of  
10 petition Evaluation Report. NIOSH issued this  
11 on February 21, 2007.

12           NIOSH found that the available  
13 monitoring records, process descriptions and  
14 source term data are adequate to complete dose  
15 reconstruction with sufficient accuracy for  
16 the proposed Class of employees, health  
17 endangerment determination not required.

18           In summary, we find that dose  
19 reconstruction is feasible for internal dose  
20 of uranium, external dose and beta-gamma and  
21 occupational medical x-rays. Thank you.

22           CHAIRMAN MELIUS: Questions for

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1 Sam? Well, I'll have one, then. To start off  
2 with, the -- if my recollection is correct,  
3 and this goes back to the early days of the  
4 program, that there were, for the earlier time  
5 period, the 1949-1950 time period, there were  
6 worker interviews, where the workers had  
7 reported rollings during that time period. I  
8 believe that was the basis for the initial  
9 assumptions on that. Do you recall that?

10 MR. GLOVER: The worker interviews  
11 did suggest that there was 1949 and 1950  
12 rollings. The initial Department of Labor  
13 designation was because of the Range letter.

14 CHAIRMAN MELIUS: Right.

15 MR. GLOVER: Yes, sir.

16 CHAIRMAN MELIUS: Yes, and the  
17 facility designation was starting in 1949,  
18 correct?

19 MR. GLOVER: That's correct.

20 CHAIRMAN MELIUS: Yes, yes, just  
21 get that clear. Other questions? Can't take  
22 questions from the audience now, this is --

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1 yes, Bill?

2 MEMBER FIELD: Just had a quick  
3 question. In your records or any reports, did  
4 you see any evidence of radiographic sources,  
5 x-rays, metal at all?

6 MR. GLOVER: No, sir.

7 CHAIRMAN MELIUS: Other questions?  
8 The Board? Dr. Ziemer or Dr. Richardson?  
9 For those of you in the audience, we have two  
10 Board Members that are calling in from --  
11 because they were unable to be here today, but  
12 they are on a conference call.

13 MEMBER ZIEMER: I have no questions  
14 at this time.

15 CHAIRMAN MELIUS: Okay. Dr.  
16 Richardson?

17 DR. RICHARDSON: I don't have any  
18 questions.

19 CHAIRMAN MELIUS: Okay.

20 DR. RICHARDSON: No, I don't have  
21 any.

22 CHAIRMAN MELIUS: Thank you. Okay,

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1 go back. Next, we'll like to hear from SC&A.

2 DR. MAURO: Good afternoon. My  
3 name is John Mauro. I work for Sanford, Cohen  
4 & Associates, and like Sam, the very first  
5 project that the Board -- we work for the  
6 Board -- the Board asked us to independently  
7 evaluate the work being done by NIOSH on  
8 Bethlehem Steel and that was the first project  
9 we worked on also.

10 A great deal of work was done for  
11 quite a bit of time and in fact, the paradigm,  
12 the approach that you just heard on how to  
13 reconstruct doses reflects a very long,  
14 protracted series of discussions that took  
15 place between the Board, this contractor,  
16 SC&A, NIOSH, related to -- initially, there  
17 was some initial drafts of how they were going  
18 to approach the problem. We had certain  
19 concerns and, over the years, we got to the  
20 point where we resolved those concerns, and at  
21 the end of this long process, SC&A had -- came  
22 to its technical conclusions that the approach

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1 that you just heard is claimant-favorable and  
2 will place a plausible upper bound on both  
3 the internal and external exposures.

4 Now, by the way, that was a review  
5 of the Site Profile. SC&A has not reviewed  
6 the Evaluation Report, but we are very  
7 familiar with the Site Profile and the  
8 protocol that you just heard.

9 One of the things that SC&A was  
10 asked to do, relatively recently, was to say,  
11 okay, as we all know, embedded in this process  
12 is the use of what we call surrogate data.  
13 This means that Bethlehem Steel had data on  
14 air samples, but it wasn't a complete set of  
15 data. It was quite a bit of data, mainly air  
16 sampling data, and there were time periods  
17 when there wasn't any data.

18 And the way -- and this was not  
19 uncommon, what we do is, we -- what NIOSH does  
20 and what health physicists do is they try to  
21 find the way to come up with a way to fill in  
22 the gaps, in a way that is reasonable,

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1 claimant-favorable and in fact, the Board and  
2 its Working Group have come up with criteria.

3 They're very concerned that,  
4 listen, if you have to resort to surrogate  
5 data, namely, go get some data from another  
6 site and use it at this site. You've got to  
7 do it very carefully, because you have to make  
8 sure that there's parity and it's done fairly.

9 So, we were asked, recently, to  
10 look at that question and compare the --  
11 basically, the use of surrogate data. So, I  
12 won't go back into any of the details here.  
13 The factual information presented to you, we  
14 completely agree, that's exactly what is being  
15 done and from the point of a view of a dose  
16 reconstruction, our finding is that that  
17 certainly places an upper bound on the  
18 exposures.

19 The question then is, does it meet  
20 the acceptance criteria that the Board has  
21 developed in draft form, as being appropriate.

22 You know, because you have to be careful when

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1 you're going to use data, and as you heard,  
2 data was used from Simonds Saw, airborne  
3 sampling data, and other data, which I'll  
4 explain briefly, to apply -- to sort of fill  
5 in some of the holes at Bethlehem Steel, and  
6 the question is, was that appropriate. Does  
7 it work well?

8 The way I'm going to -- and I'll  
9 do this briefly. I don't have any slides.  
10 It's good to think about the first place where  
11 surrogate data is used. There's three places,  
12 described in three places -- is 1949 to 1950.

13 This was a time period where the  
14 evidence that there was some rolling, uranium  
15 rolling going on, basically, from interviews  
16 of workers, and as Sam has explained to you,  
17 they really can't find very much evidence that  
18 there was rolling, but based on those  
19 interviews, we're going to presume there was  
20 some rolling.

21 All right, so, now, you have the  
22 presumption of rolling and the question was,

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1       okay, let's presume there was some rolling.  
2       How much rolling?

3                 The presumption was made that I  
4       believe there were 13 rollings that took  
5       place, which in our opinion, probably not a  
6       bad presumption, because we know that the  
7       rollings that took place in let's say, 1951  
8       and 1952, there were seven to ten, to 12  
9       rollings that took place on weekends, and of  
10      course, during the weekdays, as I'm sure you  
11      all know, is when the steel was moved.

12                So, making that assumption that,  
13      okay, though we don't have any evidence that  
14      there was any rolling, we're going to assume  
15      uranium was rolled in 1949 to 1950, and so,  
16      that's the first thing. We'll assume it  
17      occurs. We'll assume there was about -- I  
18      think it was 13 rollings, and we're going to  
19      say, well, what are we going to do for the  
20      dust loading. We've got to come up with some  
21      number.

22                Well, they didn't have any numbers

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1 for Bethlehem Steel. So, they said, well,  
2 let's go to over to Simonds Saw and let's grab  
3 their data, and that big question, is using  
4 the Simonds Saw data appropriate to apply to  
5 Bethlehem Steel, if there was some rolling?

6 And the way you answer that  
7 question is, well, we have to be sure that  
8 that data is claimant-favorable, that it's  
9 sort of going to be reasonable, and is there  
10 any reason to believe -- you ask yourself the  
11 question, is that -- if you measure dust at  
12 Simonds Saw in 1949, and you have the  
13 concentrations of dust, and let's -- and  
14 you're saying, well, we'll assume that that  
15 same concentration happened in Bethlehem  
16 Steel, is that a reasonable thing to do.

17 So, the first thing we did is  
18 asked ourselves, and I think -- and NIOSH did  
19 too, they said, well, what were the  
20 differences in the operations that might be  
21 important.

22 Well, one of the big differences

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1 is, Simonds Saw was a relatively small plant,  
2 had two mills, maybe 100 feet wide, or 100  
3 feet long, but Bethlehem Steel was big. In  
4 fact, it was state of that art, maybe 100 to  
5 200 feet wide, 1,000 feet long. I think they  
6 had six or seven rolling stations. So that  
7 changes the complexion, changes the physical  
8 setting.

9 Now, and you say to yourself,  
10 well, what does that mean. Well, another  
11 thing that was important, rolling of uranium  
12 took place every day at Simonds Saw, only took  
13 place on weekends. Okay, so, there was a  
14 difference, and one would expect there might  
15 be some differences in the ventilation system,  
16 where the workers worked, how they worked.

17 Another thing that's important is,  
18 since they rolled uranium all the time at  
19 Simonds Saw, they could have -- they build up  
20 a lot of uranium on the floor and you're  
21 walking around and you're kicking up dust.

22 But at Simonds Saw -- I'm sorry,

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1 at Bethlehem Steel, they rolled on the  
2 weekends. So, what did you have on the floor?

3 Well, what you had is a combination of iron  
4 filings, or whatever that comes off, and  
5 uranium sort of mixed in there from the  
6 weekend work.

7 So, these are some of the  
8 differences, in general. Also, what -- since  
9 Simonds Saw was a smaller plant and was sort  
10 of more primitive -- didn't have the level of  
11 sophistication -- I understand that Bethlehem  
12 Steel was state of the art at the time, was as  
13 good as they come.

14 Well, what happened is, when you  
15 were using the -- at Simonds Saw, they'd roll,  
16 as I understand it -- they go through the 10-  
17 or 16-inch roll and they would somehow  
18 manually go through it again, and they would  
19 drag the rolled steel -- uranium, and it would  
20 scrape along the grating, generate sparks,  
21 generate airborne activity, while the steel --

22 Another difference was, that's

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1 important, at Bethlehem Steel, it was a  
2 continuous rolling operation, sort of like --  
3 as I understand it, it went right through the  
4 rolling. So, there was a little less of that  
5 kind of handling.

6 So, okay, now, you start to get a  
7 sense of the differences and you say -- and  
8 this is where the judgment comes in, you see.

9 Well, if I've got all of this air  
10 sampling data, and they do have a lot of good  
11 air sampling data from Simonds Saw, and I have  
12 nothing for 1949 and for Bethlehem Steel, know  
13 what we're going to do? This is what -- the  
14 decision that was made. They said, what we're  
15 going to do is, we'll take all that data from  
16 Simonds Saw and we're going to find out the  
17 highest values they got. They call it the  
18 95th percentile value. It turns out, it's 553  
19 MAC, the maximum air concentration, and they  
20 said, we're going to assume that that  
21 concentration occurred in 1949 in Bethlehem  
22 Steel.

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1                   Now, as best I can tell, and you  
2 know, you folks know this better than I do,  
3 you know, is it likely that the dust loading  
4 in a place like Simonds Saw for that year, was  
5 higher than the dust loading at Bethlehem  
6 Steel?

7                   It looks like it probably was. It  
8 was a more primitive operation, and by  
9 assigning the upper 95th percentile from  
10 Simonds Saw, you're probably placing -- you're  
11 probably certainly conservative when you apply  
12 that to Bethlehem Steel.

13                  But ah, here is the hooker. Part  
14 of the criteria of when you do that is, it's  
15 got to be plausible. So, and this is where  
16 judgment comes in and here is where the Board  
17 is probably going to have a lot of discussion.

18                  I, for one, believe by assigning  
19 553 MAC to 1949 to the breathing zone that the  
20 people in Bethlehem Steel experienced, that's  
21 claimant-favorable. It's a high number, it's  
22 a big number. It's going to give a very large

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1 dose.

2 But then again, this is one of the  
3 criteria for when you use surrogate data. You  
4 have to be plausible. It has to be realistic.

5 It can't be some crazy, off-the-charts  
6 number, and there is where the judgment comes  
7 in. It's almost like, you've got to be high  
8 enough that you're sure that every worker that  
9 worked at Bethlehem Steel in 1949 who might  
10 have been involved in a rolling, that we're  
11 going to assign a number that's going to be  
12 high for them. We're not going to  
13 underestimate his dose.

14 But you don't want to make it so  
15 high, that it's unrealistic. You've got to  
16 find that place, and there is where the  
17 judgment comes in.

18 So, that's surrogate issue number  
19 one, that in my opinion, is the judgment call  
20 that has to be made, whether that was  
21 appropriate or not, and this is something that  
22 we don't -- we did not come to a conclusion on

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1 this. We are just trying as best we can to  
2 present the facts as we understand them to all  
3 concerned, including you. You know, whether  
4 it -- does that seem to make sense?

5 Let's go to the second place,  
6 where they used surrogate data. Now, it turns  
7 out that the air sampling data that was  
8 collected at Bethlehem Steel in 1951 and 1952,  
9 they -- now, think of it like this. There's  
10 two ways you can collect air sampling data.

11 You could have a little sample,  
12 and it's right where you're breathing zone is  
13 or you could have a general air sampling  
14 that's sitting up here, pulling in air  
15 samples. Better data is over here, because  
16 it's all -- it's very well known that there  
17 could be a ten-fold difference between the  
18 concentration of the uranium in the air when  
19 you have an air sample breathing zone, and the  
20 concentration that's sitting up here, in some  
21 air sampler.

22 One of the concerns we had was

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1 that, when you look at the Bethlehem Steel  
2 data, they have an awful lot of general air  
3 samples, not that much breathing zone samples.

4 So, if you're going to use the air  
5 sampling data for Bethlehem Steel to  
6 reconstruct inhalation, you've got to take  
7 into consideration that there -- you know,  
8 maybe you don't have enough breathing zone  
9 data. In fact, that was one of our  
10 criticisms.

11 So, what was done is, it turns  
12 out, they had a lot of good breathing zone  
13 samples and they would -- stay with me on this  
14 one, I have an estimate of how much people  
15 might have breathed it, based on the breathing  
16 zone data. I could also make an estimate  
17 based on the general air sample, and we found  
18 out that there was a big difference in which  
19 one you would use.

20 It turns out that there's about an  
21 eight-fold difference, nine-fold difference,  
22 depending on what you use. So, we felt that

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1 if you're going to use the Bethlehem Steel  
2 dust loading data, based on the air sampling  
3 data they had, you had to adjust it up,  
4 because there wasn't enough breathing zone  
5 data, and the adjustment factor was based on  
6 knowledge of the relationship between the  
7 breathing zone concentrations and the general  
8 air concentrations observed at Simonds Saw.

9 So, in a way, we're using  
10 surrogate data, right? We're saying, oh,  
11 okay, we have some really good data at Simonds  
12 Saw, to understand the difference between  
13 breathing zone and general air samples. Based  
14 on our understanding, we're going to use that  
15 as an adjustment factor, so that we could sort  
16 of kick up, and they did.

17 If they used -- it turns out, for  
18 the time period in 1951, if you were to use  
19 just the Bethlehem Steel data, just the way it  
20 came off the presses, you would have went with  
21 87 MAC. But because of our concerns, that you  
22 got -- you know, you don't have enough good

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1 breathing zone sample. Let's go ahead -- they  
2 kicked it up to 225.

3 So, that was one way to adjust the  
4 breathing zone to try to be as claimant-  
5 favorable as you can or as appropriate as you  
6 can.

7 So, surrogate data, right, we use  
8 the Simonds Saw adjustment factor in that  
9 experience there. You can make a judgment for  
10 yourself, whether or not you think that's a  
11 reasonable thing.

12 Finally, the last one, and I'll be  
13 done, we heard about cobble cutting. Well, it  
14 turns out, by 1952, they got really good at  
15 rolling uranium. They used a salt bath. So,  
16 the amount of dust that was being generated  
17 really came down. In fact, it turns out, as  
18 you heard, it got all the way down to 70 MAC.

19 It's still high, by the way, but it's much  
20 better than the 553 we had, you know.

21 But then we said, well, wait a  
22 minute, there were other things going on that

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1 might have -- that now, maybe are more  
2 important, and one of them is cobble cutting.

3 Some of you may be familiar with what that  
4 means.

5 But what they did is, they take an  
6 acetylene torch and some of these rollings,  
7 they had to cut them, and it turns out, when  
8 you do that, you generate dust, and what  
9 happened is -- so, what happened was, they  
10 decided, okay, for the cobble cutters, we're  
11 going to assume that when they were cutting  
12 the cobbles, with the acetylene torch, we're  
13 going to assume, let's say, it took three or  
14 four minutes, maybe 10 times a day they had to  
15 do it. I don't know, you guys might be more  
16 familiar with it than I am about it.

17 When they did that, we're going to  
18 assume the guy that was doing that was exposed  
19 to 600 MAC for that time period, and so, but  
20 here is the third place where surrogate data  
21 is used. There's no basis for that. Your  
22 basis is, if you go into the literature on the

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1 amount of dust that people are exposed to in  
2 the worst possible environments, it really  
3 doesn't get much worse than 600 MAC.

4           So, in a way, they broke one of  
5 the rules of surrogate data. They really  
6 didn't have a good basis for it. They picked  
7 a number that was basically, an upper bound.  
8 You know, I don't think anybody would argue,  
9 you know, 600 MAC is a nasty, big number.  
10 We're going to just use that as an upper bound  
11 for the people who were doing the cobble  
12 cutting.

13           But according to the criteria, as  
14 set forth by the Board, you know, you've got  
15 to do it better than that. You know, it's got  
16 to be -- you've got to somehow -- because we  
17 don't have any data, from any facility, of  
18 what kind of dust do you generate when you cut  
19 uranium with an acetylene torch. We don't  
20 have any data.

21           So, not having that data puts you  
22 in just a situation where you don't really

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1 meet the Board's criteria, because you've got  
2 to have a basis for it.

3 But one thing to say, there's no  
4 doubt in my mind that throwing 600 MAC at it  
5 is certainly in upper bound, and there is  
6 another judgment call, is that okay. In fact,  
7 it may be unreasonably high.

8 So, those are the three places  
9 where surrogate data were used, when they do  
10 what you just heard, and a judgment has to be  
11 made by everyone concerned whether or not it's  
12 fair to the workers. Is it claimant-  
13 favorable? Is it -- you know, or is it  
14 something that just isn't right, and this is  
15 something that we leave with the Board and  
16 yourselves, to get a -- make a judgment of  
17 whether or not it's the right thing to do.  
18 That's my story.

19 CHAIRMAN MELIUS: Thank you, John.

20 Questions from the Board Members for John?  
21 Yes, Bill?

22 MEMBER FIELD: Could you just

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1 discuss the impact of particle size and all  
2 these calculations, or what's assumed?

3 DR. MAURO: I'm sorry, I didn't  
4 hear you.

5 MEMBER FIELD: The impact of  
6 particle size?

7 DR. MAURO: Yes, particle -- yes,  
8 the particle size, they generally -- what  
9 happens is, ICRP recommends, whenever you're  
10 doing inhalation studies, assume 5 micron  
11 AMAD, and that's like your default value, and  
12 it's generally accepted.

13 There's a lot of literature that  
14 that sort of plays as an upper-bound. But  
15 they didn't do that when they got to the  
16 cobbles.

17 When the got to the cobbles, they  
18 said, "But we know that when you're cutting  
19 cobbles, you're not generating particles.  
20 You're generating fumes," which is melted  
21 metal becoming vaporized, and the fumes are  
22 much smaller, they're sub-particle sized.

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1                   So, yes, NIOSH did two things.  
2                   They assumed 5 micron AMAD for the regular  
3                   dust and they assumed .5 micron AMAD for the  
4                   cobble part. So, in my mind, that isn't bad.

5                   CHAIRMAN MELIUS: Good. Other  
6                   questions? Yes, Dr. Lemen?

7                   MEMBER LEMEN: John, given your  
8                   report, what is the bottom line that you  
9                   recommend to the Board?

10                  DR. MAURO: What do I think?

11                  MEMBER LEMEN: Yes, what do you  
12                  recommend?

13                  DR. MAURO: I think that if you use  
14                  the methods described previously, you would  
15                  certainly place an upper-bound on the  
16                  exposures that any worker could have possibly  
17                  received, while they were working at Bethlehem  
18                  Steel.

19                  Whether or not that meets the  
20                  plausibility requirement, because I do believe  
21                  that some of those concentrations are at such  
22                  a high level, that maybe they're too high, and

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1 this is where -- but I do believe that these  
2 assumptions will -- see, when we first started  
3 this, and we got to the point where we agree  
4 with that size profile, because we felt  
5 strongly, "Yes, you're going to place an  
6 upper-bound with those assumptions."

7 But now, a different question was  
8 posed most recently, it is plausible, and all  
9 I can say is that, some of those numbers are  
10 pretty high. Whether or not you would  
11 consider them plausible or not, that's where I  
12 stop and I -- because that's very much a  
13 judgment call, and you've got to -- that's  
14 made by the Board.

15 MEMBER LEMEN: I guess that's where  
16 I have a problem. I heard you use the term  
17 "judgment call" several times.

18 DR. MAURO: Yes.

19 MEMBER LEMEN: I heard you use the  
20 term "ten-fold difference."

21 DR. MAURO: Yes.

22 MEMBER LEMEN: I heard you use the

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1 term "eight-fold difference." I heard you use  
2 "assume" a lot of times, and I heard you use  
3 the term "broke rules of the surrogate data."

4 It seems to me, like you're  
5 recommending to the Board, we don't accept it.

6 DR. MAURO: I didn't say that.

7 MEMBER LEMEN: Well, you said those  
8 words.

9 DR. MAURO: I did say those words,  
10 but maybe I shouldn't have said those words.

11 What I'm saying is, if you're  
12 going to compare the use of surrogate data  
13 against the criteria, and there are places  
14 where it did not meet those criteria -- now,  
15 these are draft criteria. It's not written in  
16 stone.

17 CHAIRMAN MELIUS: Well, yes, and I  
18 think they're now --

19 DR. MAURO: But they're reasonable  
20 criteria --

21 CHAIRMAN MELIUS: They're now a bit  
22 more final, and I think to be fair to John, we

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1 don't ask our contractor to recommend  
2 decisions for us. They are a technical  
3 contractor and they provide a technical  
4 review, based on the criteria, the  
5 regulations, the program, the methods and so  
6 forth.

7           There is a report here that  
8 actually discusses a lot. This is the --  
9 dated May 2010, use of surrogate data for dose  
10 reconstruction at Bethlehem Steel, revision  
11 one, that actually reviews a lot of this  
12 information in more detail and also, I would  
13 point out the part of -- one part that I found  
14 particularly useful on page 10 and 11, is sort  
15 of a good comparison between the Bethlehem  
16 mill and the Simonds Saw, in terms of the  
17 characteristics of those operations.

18           And one of our criteria are, you  
19 know, workplace plausibility, are the  
20 workplaces, from which these are derived,  
21 appropriate -- you know, are they comparable  
22 and so, that we can have -- you know, feel a

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1 level of comfort in using data from one,  
2 applying them to another site. Phil?

3 MEMBER SCHOFIELD: Yes, just one  
4 question, do you know if they -- when they're  
5 cutting the cobbles, if they had any kind of  
6 PPE available to them, at all?

7 DR. MAURO: I'm sorry, I didn't  
8 hear you.

9 CHAIRMAN MELIUS: For the cobble  
10 cutting, was there personal protective  
11 equipment used?

12 DR. MAURO: Not that I know of, and  
13 in the calculations, no credit was taken for  
14 it, and so, if there was some type of --  
15 whether, you know -- if you're doing a torch  
16 cutting, I would say though, torch cutting,  
17 you know, you have this face mask to protect  
18 you from the sparks, protect your eyes.

19 But I don't know whether or not  
20 you would consider it some type of --

21 CHAIRMAN MELIUS: Some type of  
22 shield.

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1 DR. MAURO: A shield, a shield, as  
2 opposed to like, a respiratory protection. It  
3 could come up anyway. So --

4 CHAIRMAN MELIUS: Okay.

5 DR. MAURO: My guess is, if you're  
6 dealing with -- if you're cutting, you have a  
7 shield, but the air still -- the vapor still,  
8 could find its way underneath the shield.

9 CHAIRMAN MELIUS: Dr. Ziemer or Dr.  
10 Richardson, do you have questions for Dr.  
11 Mauro?

12 MEMBER ZIEMER: My questions have  
13 all been answered previously.

14 CHAIRMAN MELIUS: Okay, thank you.  
15 David?

16 MEMBER RICHARDSON: One question  
17 about cobble cutting. In addition to the  
18 assumption, which you're pointing out about  
19 the levels of air exposure, air concentrations  
20 when they're doing cutting, there are  
21 assumptions about the amount of time per day  
22 that somebody does that and there is some

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1       uncertainty about who is actually that work,  
2       is that right?

3                   I mean, there is -- it's kind of  
4       been punted back to the Department of Labor,  
5       to say that somebody is a cobble cutter and  
6       not that there maybe --

7                   PARTICIPANT:     Yes,     I     had     a  
8       question.     Are   you   assuming   that   you're  
9       comfortable?

10                  MEMBER RICHARDSON:   Excuse me, is  
11       someone else on the phone?

12                  CHAIRMAN MELIUS:    I   think   we're  
13       having a different conversation there.   So, go  
14       on, David.

15                  MEMBER RICHARDSON:   But   just   to  
16       help   me   clarify,   because   some   of   the  
17       information going into the -- what we've been  
18       focusing on, on the air concentration  
19       information, right now is surrogate data, but  
20       layered on top of this, there is information  
21       about the amount of time that somebody  
22       performs the task and who is actually doing

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1 that task, is that right? All of those things  
2 are unknown.

3 DR. MAURO: Yes, certainly, the  
4 amount of time -- and I recall, when I was  
5 reviewing that work, certain information was  
6 gathered by NIOSH, to try to get a reasonable  
7 estimate of how many cobbles had to be cut,  
8 for each time you went through a rolling  
9 operation, and they came up with some  
10 estimate.

11 I have to say right now, I can't  
12 really say whether or not that was -- you  
13 know, as claimant favorable as it could be.  
14 So, but certainly, that's part of the question  
15 and also, who -- you know, who are you going  
16 to give this to, is certainly -- and how are  
17 you going to determine that, is certainly a  
18 question that has to be answered, when you're  
19 doing dose reconstructions.

20 MEMBER ZIEMER: Dr. Melius?

21 CHAIRMAN MELIUS: Yes, Paul.

22 MEMBER ZIEMER: At our Surrogate

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1 Data Work Group meeting, I asked Dr. Neton  
2 about the cobble cutters and he indicated to  
3 me that they had identified cobble cutters and  
4 they actually assign a different dose to them.

5 Perhaps, one of the NIOSH people  
6 could confirm this, but I had forgotten that,  
7 because I had assumed that everyone at  
8 Bethlehem was being assigned the same dose.

9 CHAIRMAN MELIUS: Yes, I actually  
10 have that mistake and assumption. That's what  
11 I think, Jim was responding to, and I think  
12 Sam Glover actually, also mentioned it during  
13 his presentation.

14 I think -- I don't think we really  
15 know how well Department of Labor is able to  
16 do that, since -- but -- since these people  
17 would, right now, be referred to the program  
18 for dose reconstruction, to the NIOSH program,  
19 then I assume NIOSH would be doing it as part  
20 of their review and in gathering information.

21 I don't know, Sam, if you have  
22 anything to add on that.

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1                   MEMBER ZIEMER: Okay, all right,  
2 then.

3                   CHAIRMAN MELIUS: Sam?

4                   MR. GLOVER: We use that when a  
5 person is identified. I would repeat the  
6 worker testimony, that the guy who cut up  
7 cobbles, it was pulled off to the side and  
8 there was a guy that he identified himself as  
9 the guy who cut up cobbles for Bethlehem  
10 Steel. He would have been the guy who would  
11 have taken care of that.

12                  CHAIRMAN MELIUS: Okay.

13                  MR. GLOVER: So, it's fairly  
14 limited.

15                  CHAIRMAN MELIUS: Yes, okay,  
16 thanks. Anymore -- any further questions for  
17 John? If not, we would like to hear from the  
18 petitioners. You'll have a chance to speak.

19                  Ms. Walker, it's the petitioners  
20 that need to speak. So, we need to start with  
21 the petitioners and --

22                  I'll just point out, people in the

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1 audience, it's not a full public comment  
2 period. There will be a full public comment  
3 period later this afternoon, starting around  
4 six, is it? Six o'clock.

5 But we do allow the petitioners to  
6 speak during this time period, and they're  
7 designating people.

8 MS. WALKER: First of all, I'd like  
9 to thank the Advisory Board and NIOSH for  
10 having the meeting here in Niagara Falls.  
11 Thank you very much.

12 Over the last 10 years, I've seen  
13 and heard the frustrations of the claimants.  
14 These claimants, I feel, have endured their  
15 share of heartache, losing their husbands,  
16 fathers, brothers and sons. For what? To  
17 help their Government, unbeknownst to them,  
18 working with uranium that was kept secret for  
19 over 50 years.

20 When the government finally  
21 announced they were going to compensate the  
22 workers who worked during the years 1949

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1 through 1952, they all had to do was proved  
2 they worked at Bethlehem Steel for at least  
3 250 days, and contracted cancer, and they  
4 would receive their reward in three months.  
5 That's when the nightmare began.

6 Many of the facilities have little  
7 information or lost records, or no information  
8 at all. Bethlehem Steel was one such  
9 facility. It was a state of the art facility  
10 and the only one at that time.

11 It also employed between 22,000 to  
12 26,000 workers. Minimum, if any, monitoring  
13 was done. They didn't know the Ed Walker that  
14 I knew. He was just an ordinary guy from a  
15 small town.

16 Ed had graduated from high school  
17 in 1951 and went to work at Bethlehem from  
18 1951 to 1954, as an apprentice brick layer.

19 I didn't know Ed at the time, but  
20 through the years, he would talk about how  
21 dirty the place was. They had to blow the  
22 reddish-orange dust off their sandwiches.

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1 There was dust particles in their coffee and  
2 dust all over the water coolers.

3 Ed started researching, after he  
4 was denied, and found extensive laws and  
5 discrepancies in the program. Ed and I  
6 started attending their meetings. We also  
7 engaged the help of all of our Senators,  
8 Congressmen, Congresswomen, the news and TV  
9 media's, for their help, and we were very well  
10 accepted.

11 I would like to quote from Ed's  
12 Special Exposure Cohort petition in 206. I  
13 think it summarizes much of the work that he  
14 has done.

15 His quote was, "During the entire  
16 continuous rolling period, the workers were  
17 unaware that material being processed was  
18 uranium. The Federal Government kept all work  
19 secret for 50 years. Government records,  
20 documented, show that the Government had  
21 removed or destroyed all of the records for  
22 the period 1949 through 1952."

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1           "During this period, none of the  
2 workers were never monitored. No dosimetry  
3 badges were worn. No protective gear, gloves,  
4 boots, coats, masks or glove boxes were ever  
5 used."

6           Based on total lack of information  
7 in exposures at Bethlehem Steel, I would  
8 respectfully ask this Board committee to right  
9 the wrong that was done to my husband and all  
10 the workers who were exposed to the deadly  
11 radiation at Bethlehem Steel.

12           For the seven years that Ed  
13 survived doing research, there wasn't a day  
14 gone by that he didn't put his heart and soul  
15 into this program. Thank you.

16           (Applause.)

17           CHAIRMAN MELIUS: Thank you, and we  
18 have somebody else from the petitioners that  
19 wanted to --

20           MR. FRANCO: Yes, I'm Tino Franco.  
21 I'm also from the Bethlehem Steel Action Group  
22 and representing also, fellow family members

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1 that were a part of working there at Bethlehem  
2 Steel.

3 Basically, I'm going to be a  
4 little bit repetitive, but this is a sentiment  
5 that we have been experiencing and this has  
6 been, as Joyce just declared, so, I won't be  
7 too repetitive.

8 But I want to go back to what  
9 Senator Clinton, then Senator Clinton shared,  
10 with you all, on June 15, 2006, and I'm then  
11 I'm going to intersperse on a personal note.

12 Senator Clinton testified before  
13 the Advisory Board to recommend approval of a  
14 Special Cohort petition and received  
15 compensation under the EEOICP, without going  
16 through the case-by-case radiation dose  
17 estimates.

18 Senator Clinton stated, "Bethlehem  
19 Steel nuclear workers and their families have  
20 not received the compensation they deserve. I  
21 urge the Advisory Board to act swiftly, to  
22 bring justice and closure to these Cold War

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1 heroes."

2 "The dose reconstruction process  
3 has been time consuming, controversial,  
4 particularly at facilities like Bethlehem  
5 Steel, where workers did not wear individual  
6 radiation monitors, there was minimal  
7 monitoring of surrounding atmosphere for  
8 radiation."

9 She also added that she would like  
10 for us to be added, at that point, to the  
11 Special Cohort which means, employees do not  
12 have to go through a dose reconstruction  
13 process.

14 Instead, if an employee has an  
15 eligible cancer and worked at the facility  
16 when weapons work was performed, their cancer  
17 was presumed to have been caused by workplace  
18 exposure and the employees' claim was paid, as  
19 Joyce just noted.

20 Senator Clinton then also stated,  
21 "These workers were essential to our Cold War  
22 effort. These workers literally built our

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1 nuclear arsenal in the decades after World War  
2 II and helped us eventually to win the Cold  
3 War in the late 40's and early 50's. The  
4 government contracted with Bethlehem Steel,  
5 which is in Buffalo, to roll uranium at their  
6 plant.

7 But the workers were never told  
8 what they were working with. They were not  
9 provided with safety equipment to shield them  
10 from radiation. They were not monitored to  
11 determine how much radiation they were being  
12 exposed to. Uranium dust was thick in the  
13 air. They breathed it. They coated their  
14 hands with it. They would sit in areas on the  
15 plant to eat lunch and put their lunch down,  
16 and uranium dust would be on their sandwiches.  
17 They ingested it. It covered them  
18 completely.

19 As you are all aware, the original  
20 Site Profile was developed without even a  
21 visit, to the Bethlehem Steel plant, and so,  
22 she states, "I became even more convinced that

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1 reconstructing doses for Bethlehem Steel  
2 workers is an impossible task."

3           It shouldn't be surprising, after  
4 all, we're talking about work that occurred in  
5 secret over 50 years ago and before modern  
6 radiation monitoring and safety practices had  
7 been developed, and as a result, the inability  
8 to estimate a Bethlehem Steel worker dose is  
9 not a failure. It simply can't be done.

10           The real failure would be if we  
11 don't recognize a Special Cohort that will  
12 give them the recognition and the justice they  
13 deserve.

14           When Congress passed a law in  
15 2000, it recognized that reconstructing doses  
16 would be impossible in many cases, and that's  
17 why the Special Cohort process was included in  
18 the law. The statute is very clear, though.

19           It says that if the government  
20 doesn't have the information to reconstruct  
21 doses, then workers should be given the  
22 benefit of the doubt and their claims should

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1 be paid, even more precisely, it provides for  
2 Classes of workers to be added to a Special  
3 Cohort if it's not feasible to estimate the  
4 radiation doses with sufficient accuracy, and  
5 that is where the reasonable doubt --  
6 likelihood that the radiation dose clearly  
7 could have endangered their health.

8 Now, I don't think we could have a  
9 clearer case in the Bethlehem Steel, where not  
10 a single worker wore a radiation badge, where  
11 the workers rolled uranium, where many of them  
12 contracted related cancers.

13 You, the Board, have received  
14 numerous letters from others, Senator Schumer,  
15 Gillibrand, Representatives Higgins, Slaughter  
16 and Chris Lee, appealing on our behalf.

17 So, today, we are appealing to  
18 you, to help us bring this process to a  
19 conclusion. It has been now 10 years since  
20 Congress passed the law. There are not many  
21 workers left from that era. Many now have  
22 died from this exposure related -- from these

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1 exposure related cancers, in many cases,  
2 tragically, with extreme suffering.

3           They and their families have had  
4 to endure. Many of these workers were World  
5 War II Veterans, yes, even heroes there too.  
6 Just in my family alone, my dad a Marine, my  
7 father-in-law in the Navy, three uncles in the  
8 Army, all made it through the War, thank you,  
9 Lord, safely, then they came home to be  
10 reunited with their families and all they  
11 wanted to do was to provide to their families.

12           So, innocently and unexpectedly,  
13 but faithfully, they went to work every day,  
14 only to be deliberately exposed to radiation  
15 and not warned or protected and certainly, not  
16 told.

17           Ladies and gentlemen, that is  
18 unconscionable. Innocent victims, and still,  
19 the tragedy continues, as the shameful debate  
20 and huge disrespect for them continues, what  
21 they and we, their family members, from  
22 Bethlehem Steel Action Group has phased is

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1 this, delay, deny and hope they die, responds  
2 for 10 years.

3 Today, we say, acknowledge the  
4 wrong's to these workers. Amend your past  
5 practices. Bring closure for them and for us,  
6 their families. That is what these pioneer  
7 workers deserve, dignity and justice and  
8 honor, and then the only decision that really  
9 can be made, okay, is the admission to place  
10 them all into the Special Cohort group. In  
11 fact, we, the family, members of the Bethlehem  
12 Steel Action Group, trust that this Board will  
13 finally resolve this shameful blot of  
14 embarrassment on the workers and their  
15 families, and on behalf of them all, we thank  
16 you ahead of time, for your favorable  
17 decision. Thank you.

18 (Applause.)

19 CHAIRMAN MELIUS: Someone else  
20 speaking on behalf of the petitioners?

21 MR. COOK: Hi, I'm Roger Cook, the  
22 Director of the Western New York Council and

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1 Occupational Safety and Health, and Joyce  
2 asked that I speak in support of the SEC  
3 cohort petition that was submitted by Ed  
4 Walker, on behalf of the Bethlehem Steel  
5 Action Group, and I guess it's appropriate I  
6 should do that, because I was with Ed while we  
7 were preparing that petition.

8 Much of what I have to say repeats  
9 what was said, so, I'll be quick. I think  
10 within two minutes, I can do this.

11 I first became involved with Ed  
12 Walker and the Bethlehem Steel Action Group in  
13 2004. Ed explained to me that the Energy  
14 Employees Occupational Illness Compensation  
15 Program of 2000 was suppose to compensate  
16 workers who had been exposed to radiation  
17 during the Cold War, during the periods 1948  
18 through 1952.

19 He noted, he put his claim in in  
20 2001 and then 10 months later, he got a  
21 letter, indicating that there would be a Site  
22 Profile conducted at the Bethlehem Steel Site,

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1 which would be the basis for dose  
2 reconstruction for the claimants.

3 He then noted that in 2003,  
4 claimants were being denied compensation and  
5 he did not understand the basis for their  
6 denials, and this was what concerned him. He  
7 said, "None of the workers who were exposed to  
8 radiation while the uranium was being cut and  
9 rolled had been contacted for information, for  
10 the Site Profile," and he suspected that NIOSH  
11 and DOL were using partial or faulty  
12 information, and I have to say that my  
13 organization, the Council of Occupational  
14 Safety and Health, takes very seriously,  
15 information that we get from workers, because  
16 usually, when we find industrial diseases and  
17 so forth, it's been after the fact.

18 It's not because of the scientists  
19 or the reconstructionist who put together the  
20 very formal protocols, actually of discovery.

21 It's usually because we discover the diseases  
22 in the workers. That's basically the way that

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1 we do a lot of industrial medicine in this  
2 country.

3 Ed and I contacted Richard Miller  
4 at the Government Accountability Project and  
5 he agreed that the workers should have been  
6 contacted and interviewed, and agreed to come  
7 to Buffalo for a meeting.

8 Subsequently, Richard, Dr. Melius  
9 and others, I believe from NIOSH and SC&A,  
10 attended a public meeting and met with former  
11 workers, most of whom gave detailed accounts  
12 of working conditions at the facility, that  
13 NIOSH apparently had no knowledge of.

14 They really scoffed at the --  
15 something that was in the report that said  
16 that the operations were cleaned up relatively  
17 quickly after they were conducted.

18 They spoke of the dust that was in  
19 the rafters, the dust that was on the floors,  
20 the dust that was all over the workplace.

21 The key question that Ed and  
22 others raised was, how can you evaluate claims

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1 with having knowledge of what the operations  
2 and conditions at the plant were?

3 Further, the workers noted that  
4 none of them had been informed that they were  
5 rolling or handling radioactive material  
6 during the 1949 to 1952 period, that the  
7 material could have deleterious health  
8 effects, that they should be wearing  
9 protective equipment, that they should be  
10 wearing dosimeters, that they should have  
11 regular health evaluations.

12 Finally, as of June 7th -- as the  
13 June 7, 1976 letter from Wayne Range to David  
14 Anderson makes clear, after interviewing  
15 workers, "I do not understand why Mr. Glover  
16 omitted to say that that was -- those were the  
17 guys who said the operations were really going  
18 on in 1949 through 1951, that these operations  
19 at the Blooming Mill and the continuous mill,  
20 there were virtually no records of operations  
21 or exposures during that period."

22 Following those meetings, Ed

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1 continued to uncover information that NIOSH  
2 had failed to emphasize or apparently, was not  
3 aware of, conditions of the salt bath, the  
4 Blooming Mill operations, the cutting of  
5 cobbles, the cutting of billets, the dust that  
6 was generated by that, the cutting of uranium  
7 scrap and the dust, the tons of uranium that  
8 Ed believes, was unaccounted for, the  
9 conditions in the long sub-basement underneath  
10 the rolling bed, where workers repaired  
11 motors, cleaned up waste and were exposed to  
12 dust and to fumes from burning grease on the  
13 motors.

14 The proximity of other workers to  
15 the grinding operations, the fact that  
16 according to one of the claimants,  
17 [identifying information redacted] --  
18 [identifying information redacted],  
19 [identifying information redacted] -- you  
20 couldn't, down in that sub-basement, see  
21 further than 15 feet in front of you because  
22 of the dust.

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1           As we know, the absence of  
2 operations and exposure data at Bethlehem led  
3 NIOSH to use surrogate data from Simonds Saw  
4 and Steel, a method which Richard Miller  
5 stated, is not permitted under the law, a  
6 position which was affirmed by former Senator  
7 Clinton, Senator Schumer, Congressional Rep  
8 Slaughter, Higgins and Lee, and former  
9 Representative Reynolds.

10           Again, during this time, Ed Walker  
11 continued to devote much of his time to  
12 uncovering information that demonstrated  
13 significant differences in the two facilities,  
14 differences whose significance were  
15 consistently dismissed by the Director of OCAS  
16 at NIOSH, as were the observations of Marvin  
17 Resnikoff, PhD, who found serious flaws in  
18 NIOSH's methodology.

19           So, that was then. Sadly, Ed  
20 passed away, without hearing the words of our  
21 current President Obama, who stated that, "I  
22 will assure that the benefits under the

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1 Energy Employee Occupational Illness  
2 Compensation Act of 2000 will be provided in a  
3 timely and equitable manner. The delays and  
4 foot-dragging over the past several years is  
5 simply inexcusable."

6 While the President says he will  
7 support ongoing -- will support going the  
8 legislative route, if necessary, I believe  
9 that all members of the Bethlehem Steel Act --  
10 Bethlehem Steel Action Group have hung in  
11 there, and would agree that if this Board --  
12 if the Board would act now and address the  
13 inexcusable foot-dragging by agreeing, one,  
14 that the surrogate data from other -- another  
15 facility is inappropriate and dose  
16 reconstruction should not be based on this  
17 methodology.

18 Two, the Bethlehem Steel workers  
19 should be placed in Special Exposure Cohort,  
20 as the law provides, in the absence of any or  
21 insufficient data. Three, something like the  
22 criteria stated in the Ed Walker Memorial Act

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1 should be applied to all former workers who  
2 exposure records may be incomplete or where  
3 lack -- of lacking proper documentation, and  
4 they should be compensated if, one, they  
5 worked at the facility for an aggregate of at  
6 least 250 years during the 1949 through 1952  
7 period, I'm not personally --

8 CHAIRMAN MELIUS: Two-hundred-fifty  
9 days.

10 MR. COOK: I'm sorry, days. What  
11 did I say, years?

12 CHAIRMAN MELIUS: Years.

13 MR. COOK: Days, it seems like  
14 years, it does seem like years. Two, that  
15 fewer than 50 percent of the total number of  
16 workers were individually monitored on a  
17 regular basis for exposure to  
18 internal/external ionizing radiation. Three,  
19 the individual internal exposure records for  
20 radiation are non-existent or are not  
21 available, or to the extent that a portion of  
22 individual internal or external records are

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1 available for that period, from such facility,  
2 the exposure to radiation at such facility  
3 could not be reliably determined for greater  
4 than two-thirds of the workers.

5 Finally, I would ask this Board to  
6 move with dispatch -- with the dispatch the  
7 President's words imply. The former workers  
8 and their families have been extremely  
9 patient. Hopes have been raised and dashed.  
10 The time is now to do the right thing, to  
11 compensate these Cold War heroes and their  
12 families. Thank you.

13 (Applause.)

14 CHAIRMAN MELIUS: Thank you, Roger.  
15 Anyone else to speak on behalf of the  
16 petitioners?

17 MS. MACRI: Yes, hi, I'm Suzanne  
18 Macri. I'm a staffer for Congresswomen Louise  
19 Slaughter.

20 CHAIRMAN MELIUS: Okay.

21 MS. MACRI: I want to thank all of  
22 you. The reason the Congresswoman sent me, I

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1 was here yesterday too, I'm her case worker.  
2 I work strictly with the atomic workers. I've  
3 done it for six years.

4 This morning, there was an  
5 obituary in the paper. One of the people I've  
6 worked with for six years passed away. He was  
7 refused four times. He passed away from  
8 cancer the other night. Like I said, I worked  
9 closely with him.

10 I can stand here and tell you  
11 about numerous cases that I've handled over  
12 the years. I'll only go over three that I've  
13 covered, the last two weeks.

14 One woman, her father was  
15 diagnosed at 49 percent. He was refused.  
16 Another woman, her husband had bladder cancer  
17 and lung cancer, and she happened to state in  
18 her letter to the Department of Labor and  
19 NIOSH, that his skin was falling off his  
20 bones.

21 They sent a letter back from her -  
22 - to her, that I have, saying, it was eczema.

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1                   Another gentleman, just another  
2 one, worked at Hooker. He wrote and said that  
3 he had left to go to Niagara Falls Fire  
4 Department and shortly after that he was  
5 diagnosed with two cancers.

6                   They wrote back and said they had  
7 no record of the Niagara Falls Fire Department  
8 working out of Hooker. Again, he tried to  
9 explain, no, they never worked out of Hooker.

10                  I left to go work for the Niagara Falls Fire  
11 Department. Again, they wrote back, no record  
12 of Niagara Falls Fire Department working out  
13 of Hooker.

14                  We had to write a letter. I had to  
15 call. Finally, they understood. That's just  
16 many mistakes. I have over 400 cases, and out  
17 of 400 cases that I've personally handled,  
18 trying to get compensation, only five in the  
19 last six years, have been compensated.

20                  I just really, really want to  
21 thank you and find it in your heart -- I don't  
22 know who or what we have to do to convince the

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1 Department of Labor and NIOSH that these  
2 people need to be compensated.

3 I've already lost seven of the  
4 constituents that work with our office and  
5 their widows, and I don't know what else to  
6 say. But thank you and please, listen from  
7 your heart. Some of this data that you read  
8 for dose reconstruction, I don't even  
9 understand it and what one worker may be able  
10 to tolerate and not develop cancer, that might  
11 not be true for someone else. But I want to  
12 thank you.

13 CHAIRMAN MELIUS: Thank you.  
14 Anyone else on behalf of the petitioners?  
15 Yes, sir?

16 MR. WEBBER: My name is Lew Webber.  
17 I'm the President of Shore Chapter 46.  
18 That's the Bethlehem Steel Chapter. I'm  
19 representing the people of our Chapter, which  
20 is over 1,000 people that work at the plant.

21 Now, there is not that many  
22 members that are affected by this disease, but

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1 we have a large amount. I am not one of the  
2 affected members. I'd like [identifying  
3 information redacted] to stand up.

4 [identifying information redacted]  
5 was a crane operator from the time he was  
6 [identifying information redacted] years old,  
7 worked for 40 -- he's number five on this list  
8 that I passed out. He worked from 1948 --  
9 let's see, 1942 until 1983.

10 He has [identifying information  
11 redacted], both the [identifying information  
12 redacted] and [identifying information  
13 redacted] have been removed completely. He  
14 has less than four inches of [identifying  
15 information redacted]. He has partial  
16 [identifying information redacted].  
17 [identifying information redacted] has been  
18 removed, due to [identifying information  
19 redacted]. [identifying information redacted]  
20 hasn't eaten yet today, because if he did, he  
21 couldn't come here.

22 He has to be home when he eats,

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1 because he has to take care of it. He has a  
2 [identifying information redacted], but it  
3 won't hold, due to the fact he doesn't have no  
4 room for expansion. Most people that have a  
5 [identifying information redacted] have a  
6 [identifying information redacted] that is  
7 large enough that they could eat a small meal.  
8 But unfortunately, he cannot.

9 Now, he has endured this for 23  
10 years. His bills per week, the portion he  
11 pays, is over \$30. They're actually \$90, but  
12 the insurance covers part of it. But \$30 a  
13 week comes out of his pocket. For the last 23  
14 years, he had paid all these expenses, and I  
15 really -- we have probably, some other people  
16 involved.

17 I did this little survey, just to  
18 show that we had seven people with colon  
19 cancer, two people with skin cancer, three  
20 with lung cancer, three with stomach cancer,  
21 two with esophagus cancer, three with pancreas  
22 and liver. Between the years of 1984 and 1990,

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1 ten of these were diagnosed, which kind of  
2 shows that the people got sick about the same  
3 time.

4 Also, what might be interesting  
5 is, [identifying information redacted] was a  
6 crane operator in the bar mill. We had 16  
7 crane operators work during the time frame --  
8 during that time of these projects. Not all  
9 of them handled uranium, probably, but  
10 [identifying information redacted] is the last  
11 one alive. The rest have all passed on.

12 So, I just appeal to you, this has  
13 to do mostly with common sense, that these  
14 people are sick, need help and I'd like to see  
15 that done, if this Board can see fit, to help  
16 us with this exposure cohort, and thank you  
17 very much for all the Politicians. Senator  
18 Kirsten Gillibrand has written letters,  
19 Senator Schumer's office and Assemblyman Brian  
20 Higgins, and also, we appealed to President  
21 Obama to meet with him last week. We were  
22 turned down. He was too busy. He has had

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1 letters from us and answered them.

2 So, thank you very much for all  
3 your concerns. We really appreciate it, and  
4 thank you for coming here.

5 CHAIRMAN MELIUS: Thank you. Yes,  
6 sir?

7 PARTICIPANT: I am going to be very  
8 brief, to address the greatest sin of mankind  
9 is injustice. I'm suffering from Parkinson's  
10 disease. I have friends who are suffering  
11 from other diseases. I have no control over  
12 this.

13 There are people, and I recommend  
14 to the future our country, to have an autopsy,  
15 so that you can establish some kind of a track  
16 record, on behalf of the medical profession.  
17 Thank you.

18 CHAIRMAN MELIUS: Thank you. Okay,  
19 I think we as a Board need to now consider  
20 this, and so, if you can be patient with us  
21 for a little bit and let us do that.

22 Unless there are other people on

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1       behalf of the petitioners, but -- okay, be  
2       brief, because we need to be able to -- yes,  
3       thank you.

4                   PARTICIPANT:     I don't represent  
5       anybody other than my father who deceased in  
6       1988 due to kidney cancer. He worked in the  
7       ten-inch bar mill. His dose reconstruction  
8       came back at 49.87 and I've been denied four  
9       times.

10                   Every time I go, we go to a  
11       meeting, we have a denial. I get the  
12       transcript back, I think somebody else was at  
13       this meeting. I've had transcripts where  
14       they've given us wrong data on what my  
15       father's disease was.

16                   The Department of Labor tells me  
17       they don't know, they've lost our birth  
18       certificates. This is -- it's horrendous,  
19       what you're putting the families through and  
20       then this gentleman here sits here with an air  
21       concentration, do they really have air  
22       concentration samples at Bethlehem Steel? Do

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1 they know who the cobblers were, because when  
2 I asked, when we first opened this and said,  
3 do you know what my father did, they had no  
4 idea.

5 We, then found out he worked in  
6 the ten-inch bar mill. That still wasn't good  
7 enough. I don't know what to say. I've been  
8 fighting this. We have four hearings. They  
9 won't budge from 49.87. He died in 1988, of  
10 what they told me was a superficial cancer.

11 Well, I don't know, but kidney  
12 cancer does not seem superficial. Thank you.

13 CHAIRMAN MELIUS: Thank you. We'll  
14 let two more people speak, this gentleman with  
15 the green shirt, and then, you've been patient  
16 over there. You'll be next, if you want to  
17 get up by the mic, so, we'll --

18 PARTICIPANT: Mr. Chairman and  
19 Honorable Board, I had a speech here prepared,  
20 but I'm not going to even go through it,  
21 because after hearing all of this, I just want  
22 to quick, briefly let you know.

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1           My father worked in the plant from  
2 1937 and through these years we're talking  
3 about. In all those years, he was a sander  
4 there and when these billets, or whatever they  
5 were, rods, came off, he used to sand these  
6 things and he used to tell me about it.

7           I just wanted to let you know  
8 that, you know, he had a high case that -- of  
9 a bunch of rems that the NIOSH had discovered,  
10 but it didn't go anywhere.

11           But my problem with this is, with  
12 -- now, the Nuclear Regulatory Board won't let  
13 you have any more than .5 percent through --  
14 you know, dosage at one time. How much is  
15 left in the steel plant now? It's been there  
16 forever.

17           I mean, does it just evaporate?  
18 Did the radiation that these guys went through  
19 quit? This has all got to be building up  
20 somewhere, that all these people that are  
21 dying through thing, and my dad died from a  
22 very rare case of cancer. How can it be? It

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1 just doesn't go that way.

2 But I'm just trying to say that  
3 this place was never cleaned up. It was dirty  
4 and filthy and these guys had to pay the  
5 price. Thank you very much for your time.

6 CHAIRMAN MELIUS: Thank you, and  
7 sir, you -- I'm sorry, I don't have a name.

8 PARTICIPANT: Can I just ask a  
9 question?

10 CHAIRMAN MELIUS: Sure.

11 PARTICIPANT: Does this just  
12 pertain to the people that worked for  
13 Bethlehem, because I worked on construction,  
14 and I was there for over 25 years, in and out  
15 of buildings, and I was subjected to a lot of  
16 silica dust. That's the question.

17 CHAIRMAN MELIUS: Yes, the -- and  
18 the answer to that is, for this site, the way  
19 the law is written, it's an AWE site and only  
20 people working for Bethlehem Steel, the main  
21 contractor, are included.

22 So, for this particular type of

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1 site, contract workers, other sub-contract  
2 workers, the construction workers and so  
3 forth, are usually are not included. That's  
4 the way the law is written.

5 PARTICIPANT: Yes, but nobody told  
6 us that you were subjected to silica dust.

7 CHAIRMAN MELIUS: I understand.

8 PARTICIPANT: And that turns into  
9 cancer.

10 CHAIRMAN MELIUS: Yes, I  
11 understand, but I'm just telling what's in the  
12 law. I can't -- you know --

13 PARTICIPANT: All right, thank you  
14 very much.

15 CHAIRMAN MELIUS: That's the way it  
16 is. Okay, okay, for the Board Members, do we  
17 have any further questions or comments? If  
18 not, I'll -- why don't I move forward?

19 When the Work Group met, we did --  
20 we discussed the report from SC&A, the one on  
21 the application of surrogate data.

22 Just, for those of you that are

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1 newer Board Members, to remind you, at the  
2 time that we had considered -- first dealt  
3 with the site and made recommendations and did  
4 our review, was before there were SEC  
5 regulations.

6 So, the times I was up here and  
7 others, talking to people from Bethlehem and  
8 the original evaluation, there were no SEC  
9 regulations or any possibility for people to  
10 apply for that.

11 So, at a subsequent point in time  
12 is when they -- people from the Bethlehem  
13 Action Group applied for the SEC.

14 So, that's some of the reason for  
15 the delay. It's also why we have to  
16 reconsider, because the time we were first  
17 reviewing this issue, John Mauro referred to  
18 it, we were reviewing it as a Site Profile,  
19 without the possibility of considering an SEC.

20 When we discussed in the Work  
21 Group, we -- last week, we discussed mainly  
22 about the surrogate data issue and I thought

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1 that the report from SC&A was very useful and  
2 I think John has characterized it correctly,  
3 while many of the assumptions were claimant-  
4 favorable, I personally really question the  
5 plausibility of applying data from the Simonds  
6 Saw Site to the Bethlehem site, and going back  
7 in time, particularly the early years, where  
8 there's almost nothing, you know -- we know  
9 the -- we have information that there were  
10 rollings, but from the worker interviews, but  
11 we have very little information to sort of  
12 anchor any sort of estimate from and even in  
13 the later years, there's very little data.

14 So, I'm going to propose as a  
15 motion, that we approve a work Class, in  
16 addition to the SEC, that would be all Atomic  
17 Employers -- Weapons Employer personnel at the  
18 Bethlehem Steel Corporation who were monitored  
19 -- who worked at the Bethlehem Steel  
20 Corporation from January 1, 1949 through  
21 December 31, 1952.

22 MEMBER LEMEN: I will second that.

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1                   CHAIRMAN MELIUS: Okay, we have a  
2 second from -- we'll get it open for  
3 discussion. Other people? Comments or --  
4 yes?

5                   MEMBER GRIFFON: I'll speak in  
6 support of the motion. I think a nice summary  
7 that all of the members on the Board might  
8 reflect on is -- was made by John Mauro's  
9 presentation, that the three, sort of,  
10 surrogate factors that were involved in this,  
11 and I think one part of the presentation that  
12 John made that was very important, in my  
13 consideration of this anyway, is the cobble  
14 cutters.

15                   I mean, you know, and I agree with  
16 John's recollection of this, is that you know,  
17 there wasn't any data and basically, they  
18 pulled a high number, and you know, it begs  
19 the question of, do you really know what was  
20 going on at Bethlehem Steel or are we just  
21 increasing the number, to sort of say, you  
22 know, look, we're assigning a very high dose.

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1 I think there is -- that's a very different  
2 question.

3 So, on -- from the sufficient-  
4 accuracy standpoint, I have a lot of trouble  
5 with the proposed methods for dose  
6 reconstruction.

7 Another -- and I mean, just the  
8 differences in the facilities, I think, you  
9 know, one factor -- I'm not sure on this, but  
10 the sub-floor, and I do remember Ed Walker  
11 making the -- very strong arguments on the  
12 sub-basement work that was done and the  
13 conditions in the sub-basement, and I'm not  
14 sure that translates to Simonds Saw. I don't  
15 know if there was a similar situation.

16 The final point that I have been  
17 thinking about is the -- this correction  
18 factor for breathing zone versus general area  
19 air sampling, and again, we use Simonds Saw.  
20 I'm not sure if we cross-walked or if we are  
21 able to cross-walk, you know, the relevance of  
22 using that correction factor in Bethlehem

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1 Steel.

2 In other words, were the general  
3 area air samplers at a similar distance in  
4 Simonds Saw from the operation as they were,  
5 you know, general area air samplers to  
6 breathing zone versus the Bethlehem Steel  
7 facility.

8 I'm not sure that you can  
9 translate those directly and to just apply a  
10 correction factor, again, just to get a higher  
11 number and maybe convince us that, look, this  
12 is a very high dose, I'm not sure that meets  
13 the threshold of sufficient accuracy that  
14 we're required to look at.

15 So, those are my points for  
16 supporting the motion.

17 CHAIRMAN MELIUS: Thank you, Mark.

18 Other comments? No, this is really for Board  
19 discussion right now, thank you. Yes, Phil  
20 and then --

21 MEMBER FIELD: I was just  
22 wondering, did the Work Group have a

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1 recommendation?

2 CHAIRMAN MELIUS: No, we did not  
3 make a recommendation. We didn't, sort of,  
4 get the point. We had literally just received  
5 the report from the SC&A the day before the  
6 meeting, and I don't believe people have had a  
7 chance.

8 We got a presentation on and we  
9 had discussion, but we did not make the  
10 specific recommendation yet.

11 Bethlehem Steel. The surrogate  
12 data -- to refresh your memory, procedurally,  
13 the -- Bethlehem Steel SEC evaluation had been  
14 referred to the surrogate data Work Group.

15 When we originally had that, we  
16 had deadlocked on the -- as I recall, we had  
17 deadlocked on the evaluation recommendation  
18 and we at that point, referred it to the  
19 surrogate data Work Group for review. That  
20 was one of the two sites that were referred to  
21 the surrogate data Work Group, that and the  
22 Texas City Site.

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1                   MEMBER LOCKEY: The question is, is  
2 the Work Group going to meet again to review  
3 SC&A's report.

4                   CHAIRMAN MELIUS: Not if we take  
5 action here today. Dr. Lemen?

6                   MEMBER LEMEN: I would just like to  
7 speak in support again and reiterate what I  
8 said the last -- yesterday and today, that I  
9 think this is a really good example of how  
10 surrogate data should not be used and we need  
11 to really concentrate.

12                   If we don't have the data, let's  
13 not try and invent it, and I would recommend,  
14 the Board --

15                   (Applause.)

16                   MEMBER LEMEN: And I'd like to  
17 support your motion, just on the record.  
18 That's all.

19                   (Applause.)

20                   MEMBER SCHOFIELD: First, I'd like  
21 to fully support your motion but there is some  
22 -- one area of a health concern here, which I

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1 know is not actually the Board's area, but the  
2 workers and the potential for the lead  
3 poisoning they had, after they were in the raw  
4 mill after the lead baths, I think maybe  
5 that's an area that CDC could possibly look  
6 into or maybe the State.

7 CHAIRMAN MELIUS: Yes, I don't know  
8 if it were -- I guess, to some extent, it  
9 relates to Part E, but it's also a bigger -- I  
10 mean, there's other -- we heard discussions  
11 last night, which are known to cause cancer  
12 among steel workers.

13 So, there's a number of hazards at  
14 these sites. Another gentleman pointed out,  
15 the silica exposure, which is also -- you  
16 know, more than just related to these  
17 particular rollings there.

18 Wanda, then I want -- go ahead,  
19 Wanda.

20 MEMBER MUNN: I am hesitant to even  
21 say anything, because I know this is an  
22 unpopular position, and I have such strong

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1 feelings of empathy for the workers and their  
2 families.

3 Cancer is a dreadful disease and  
4 it's horrible for all of us. It's -- however,  
5 from a factual point of view, it's very  
6 difficult to see that a fairness issue exists  
7 when a blanket granting is made to such a  
8 large group of people, knowing that there is  
9 no real supporting evidence of excess cancers  
10 in the population.

11 The working situations are very  
12 difficult, I know, and the issue of the amount  
13 of exposure is one which we've discussed  
14 endlessly, and as Mark and others have pointed  
15 out, is truly problematical, with respect to  
16 getting to real accuracy.

17 But to lead people to believe that  
18 they have all been harmed by work that they  
19 have done, when only some of them have been  
20 harmed is a difficult thing to accept as a  
21 fairness issue.

22 I will probably abstain from this

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1 vote, because it cannot in my mind be truly  
2 substantiated on the facts.

3 I understand Dr. Lemen's position  
4 and I have nothing but sympathy for the people  
5 who are here and who have spoken already on  
6 behalf, but I think it does need to be said,  
7 that SECs in many ways are not fair. They are  
8 unfair because many people who are being  
9 compensated are receiving the same kind of  
10 largesse from their fellow tax payers, as  
11 their fellows -- as their fellows --

12 CHAIRMAN MELIUS: Please, let this  
13 --

14 MEMBER MUNN: -- as their fellows  
15 -- as --

16 CHAIRMAN MELIUS: No, it's not  
17 public comment period. It's time for the  
18 Board. People can express their opinions.

19 MEMBER MUNN: As their fellows  
20 were, who actually were harmed, and it's --  
21 this is a precedent which has, I know, been  
22 looming for a quite long time and probably

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1 will occur again.

2 But it's in many ways, good to at  
3 least have it over and thanks for the  
4 opportunity for expressing one opinion that's  
5 slightly different.

6 CHAIRMAN MELIUS: Thank you. Dr.  
7 Ziemer, Dr. Richardson, do you have comments?  
8 If not, I will -- if there are no further  
9 questions or -- Paul, David, I -- okay.

10 MEMBER RICHARDSON: Dr. Ziemer was  
11 speaking.

12 CHAIRMAN MELIUS: Well, we couldn't  
13 hear him then.

14 MEMBER RICHARDSON: Dr. Ziemer,  
15 could you take your mute off?

16 MEMBER ZIEMER: This is Ziemer. Am  
17 I off?

18 CHAIRMAN MELIUS: You're on now,  
19 Paul. Thanks.

20 MEMBER ZIEMER: Okay, I had a  
21 couple of comments, if I might.

22 CHAIRMAN MELIUS: Yes, you

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1 certainly may.

2 MEMBER ZIEMER: One is, I did want  
3 to point out that the Work Group, although we  
4 heard the SC&A evaluation, we did not adopt it  
5 or approve it nor did NIOSH have an  
6 opportunity to respond to it.

7 I do understand the comments John  
8 Mauro made and I personally agree with the  
9 points that he made.

10 The net effect, though, is to say  
11 that the doses assigned at Bethlehem Steel are  
12 implausibly high, as I understood the  
13 implausibility part.

14 Now, one reason why that is  
15 interesting is because if they are implausibly  
16 high and we look at the dose reconstruction  
17 that were done there, and I think most of the  
18 cases were reconstructed, I don't have the  
19 exact figures before me, but I believe that  
20 virtually every lung cancer has been  
21 compensated. I say virtually, there may have  
22 been a couple of exceptions to that and most

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1 of the denials were other types of cancers.

2 Now, I personally believe that  
3 there are a lot of health effects at Bethlehem  
4 Steel that are due to things like chemicals  
5 and other dusts. There's a whole mix of  
6 things, some of which can be associated with  
7 uranium exposure, some of which are probably  
8 associated with a lot of other things.

9 There's no denial, the health  
10 effects are there. In my mind, the Special  
11 Exposure Cohort approach puts the, I'll call  
12 it blame, for the effects all on the uranium  
13 exposures and ignores everything else.  
14 Unfortunately, our laws don't provide too well  
15 for compensation through other routes.

16 But the other part of it is, is  
17 simply to point out, and I've worked all my  
18 career with all kinds of radionuclides, and of  
19 those, natural uranium would be considered  
20 about the lowest in radiotoxicity of all the  
21 nuclides that we work with. In fact, its  
22 chemical effects are worse than its

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1 radiological effect, and even in the uranium  
2 miners, we see essentially lung cancers.  
3 Other cancers due to uranium exposures are  
4 extremely, extremely rare.

5           So, in my mind, in a certain  
6 sense, the NIOSH approach, although  
7 implausibly high, has a certain fairness built  
8 into it, in terms of the compensation of the  
9 workers there at Bethlehem Steel, and in fact,  
10 I believe, if you look at the record, the  
11 compensation rates have been, I would guess,  
12 more generous than virtually any other site in  
13 this country.

14           Now, that in itself does not say  
15 that makes it correct. But I think we should  
16 recognize that the NIOSH approach has, in a  
17 sense, tried to be ultra extremely fair, to  
18 the point of being implausibly fair.

19           So, that's my point, and it's one  
20 reason why I believe that the bounding  
21 approach that NIOSH has done, does provide a  
22 fair compensation decision. I say a fair

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1 compensation decision, because in my mind,  
2 from the radiological point of view, it is  
3 probably implausibly high.

4 CHAIRMAN MELIUS: Thank you, Paul.

5 I would point out, just my interpretation on  
6 the SC&A report is, I mean, the basis for  
7 looking at this is -- with the surrogate data  
8 criteria, is we really can't tell if it's  
9 implausibly high or low.

10 The basic -- it's the question of  
11 the comparison between the --

12 MEMBER ZIEMER: Well, I believe  
13 John --

14 CHAIRMAN MELIUS: No, no, and if  
15 you let me finish, I was saying, in this case,  
16 it certainly pointed out, at least in some of  
17 the instances, it may be interpreted as  
18 implausibly high.

19 But the real basis for our  
20 decision on surrogate data is, you cannot make  
21 -- is the implausibility of the comparison --  
22 in the basis of the comparison.

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1 David Richardson, do you have  
2 comments?

3 MEMBER RICHARDSON: No, I think I'm  
4 going to hold my comments.

5 CHAIRMAN MELIUS: Okay.

6 MEMBER RICHARDSON: Thank you.

7 CHAIRMAN MELIUS: Thank you, David.

8 Okay, if -- no further questions or comments,  
9 then I think we will have a vote, or have a  
10 motion. I made a motion. Do we have a  
11 second? Yes?

12 The motion is to grant the SEC for  
13 all Atomic Weapons Employer personnel at  
14 Bethlehem Steel Corporation working there --  
15 who worked in uranium rolling activities at  
16 Bethlehem Steel, Lackawanna, New York  
17 facility, from January 1, 1949 through  
18 December 31, 1952.

19 MR. KATZ: Okay, and I am going to  
20 try to mix this up a little bit, so that we're  
21 not stuck in a rut.

22 CHAIRMAN MELIUS: Okay.

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1 MR. KATZ: I'm going to go ahead  
2 this way, but I'll get everybody. Dr.  
3 Roessler?

4 MEMBER ROESSLER: No.

5 MR. KATZ: Mr. Presley?

6 MR. PRESLEY: I'm going to vote  
7 yes, with a whole lot of reservation. Sam,  
8 you've done a lot of good and I've got  
9 somebody working in this area. I've got some  
10 reservations.

11 MR. KATZ: Ms. Munn?

12 MEMBER MUNN: Abstain.

13 MR. KATZ: Dr. Lockey?

14 MEMBER LOCKEY: No.

15 MR. KATZ: Mr. Griffon?

16 ACTING CHAIR: Yes.

17 MR. KATZ: Mr. Gibson?

18 MEMBER GIBSON: Strongly support  
19 the motion, yes.

20 MR. KATZ: Ms. Beach?

21 MEMBER BEACH: Yes.

22 MR. KATZ: Dr. Anderson?

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1 MEMBER ANDERSON: Yes.

2 MR. KATZ: Mr. Clawson?

3 MEMBER CLAWSON: Yes.

4 MR. KATZ: Mr. Gibson? Wait, I'm  
5 repeating. Dr. Field, I'm sorry.

6 MEMBER FIELD: The process seems  
7 kind of expedited, and I can understand why  
8 you want to expedite it, with everyone here.  
9 But as a new member, I don't feel able to make  
10 a vote, so I'm going to abstain.

11 MR. KATZ: Okay, Dr. Lemen?

12 MEMBER LEMEN: Strongly support the  
13 motion.

14 MR. KATZ: Dr. Melius?

15 CHAIRMAN MELIUS: Yes.

16 MR. KATZ: Dr. Poston?

17 MEMBER POSTON: No.

18 MR. KATZ: Dr. Richardson?

19 MEMBER RICHARDSON: Yes.

20 MR. KATZ: Mr. Schofield?

21 MEMBER SCHOFIELD: Yes.

22 MR. KATZ: Dr. Ziemer?

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1 MEMBER ZIEMER: No.

2 MR. KATZ: Okay, thank you. I  
3 thought I should mix this up. So, let me just  
4 -- okay, so, we have one, two, three -- we  
5 have four nays. We have two abstentions, that  
6 makes six, that means we have 10 yeses, let me  
7 make sure, and we have 10 yays, so, the motion  
8 passes.

9 CHAIRMAN MELIUS: Yes, the motion  
10 carries, 10 to four.

11 (Applause.)

12 CHAIRMAN MELIUS: And we'd like to  
13 thank you for coming today, for your patience  
14 with this process. Certainly, our sympathy to  
15 your families. I know, Ms. Walker, and others  
16 that have been -- many others have lost family  
17 members and we're glad we're able to get this  
18 accomplished today. Thank you.

19 We'll take a break for 20 minutes  
20 and then reconvene.

21 (Whereupon, the above-entitled  
22 matter went off the record at 3:29 p.m. and

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1 resumed at 3:58 p.m.)

2 CHAIRMAN MELIUS: Okay, why don't  
3 we get started again and there are a few  
4 people missing, but they are -- one of them is  
5 -- two of them are conflicted on the first  
6 issue.

7 The first issue I'd like to deal  
8 with is the Mound, and I think Mike, if you'd  
9 step in the audience for a second.

10 MR. KATZ: And do we have -- Dr.  
11 Ziemer and Richardson, are you back with us?

12 CHAIRMAN MELIUS: We have a Class  
13 Definition issue.

14 MEMBER RICHARDSON: Yes, I'm here.

15 CHAIRMAN MELIUS: Okay.

16 MR. KATZ: Great. Dr. Ziemer, you  
17 too? Dr. Ziemer, did you just unmute to say  
18 you're with us?

19 (No response.)

20 CHAIRMAN MELIUS: Dr. Ziemer?

21 MR. KATZ: Dr. Ziemer, are you with  
22 us now?

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1                   CHAIRMAN MELIUS: Let's just go  
2 ahead.

3                   MR. KATZ: Okay.

4                   CHAIRMAN MELIUS: And we can  
5 collect that. The issue came up yesterday,  
6 with Mound, about Class Definition issue and  
7 we had -- I think we all have some concerns  
8 about it, and we have a proposal that the --  
9 worked on with counsel, and then we have a  
10 suggested change to that.

11                   So, I will read the -- the one  
12 that's proposed, which is, all employees of  
13 the Department of Energy, its predecessor  
14 agencies and their contractors and  
15 subcontractors who one -- who had -- who were  
16 -- number one, who were monitored for tritium  
17 exposure and worked at the Mound Plant in  
18 Miamisburg, Ohio from March 1, 1959 through  
19 March 5, 1980, for a number of work days  
20 aggregating at least 250 work days occurring  
21 either solely under this employment or in  
22 combination with work days within the

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1 parameters established for one or more other  
2 Classes of employees in the Special Exposure  
3 Cohort, or two, worked in the R and/or SW  
4 buildings, of the Mound Plant in Miamisburg,  
5 Ohio from March 1, 1959 through March 5, 1980,  
6 for a number of work days aggregating at least  
7 250 work days occurring either solely under  
8 this employment or in combination with work  
9 days within the parameters established for one  
10 or more other Classes of employees in the  
11 Special Exposure Cohort.

12 So, that's the proposed. We  
13 figured that -- the second part, worked in the  
14 R and/or SW building, helps to sort of capture  
15 the people that --

16 MEMBER ANDERSON: That weren't  
17 monitored.

18 CHAIRMAN MELIUS: Monitored,  
19 correct. So, the one change, which people  
20 from the Work Group, Josie, had -- others had  
21 suggested, were concerned about, were  
22 monitored for tritium exposure, how that would

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1 be interpreted and are proposing that we  
2 change that from, you know, who were monitored  
3 for tritium exposure, to who had at least one  
4 tritium bioassay sample, and worked at the  
5 Mound Plant in Miamisburg, Ohio from that time  
6 period.

7 So, is that -- the counsel is just  
8 hearing that, I think, for the first time.  
9 So, and you're sitting way in the back there.

10 MEMBER BEACH: She asked for a  
11 repeat.

12 CHAIRMAN MELIUS: Yes, it's --  
13 okay, one had -- who -- number one, had at  
14 least one tritium bioassay sample, and worked  
15 at the Mound. I think the issue is, sort of  
16 this interpretation of monitored. You know,  
17 it's like the same issue we've got with  
18 monitored or should have been monitored.

19 This makes it more explicit, so,  
20 at least there is -- sort of a working  
21 definition for that, that's explicit by what  
22 we meant.

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1                   Okay, thanks for that.     So, I  
2 think we've --

3                   MEMBER ANDERSON: So moved.

4                   CHAIRMAN MELIUS: So moved, thank  
5 you, took the words out of my mouth.   Do I  
6 have a second to the so-moved?

7                   (A chorus of seconds.)

8                   CHAIRMAN MELIUS: Okay, Brad, give  
9 Brad credit and all in favor? Do I need to do  
10 that?

11                  MEMBER ZIEMER: Question, sorry.

12                  CHAIRMAN MELIUS:     Sorry,     Dr.  
13 Ziemer.

14                  MEMBER ZIEMER: Yes, I didn't get  
15 the full wording there.   What was the second  
16 point: had at least one tritium bioassay and?

17                  CHAIRMAN MELIUS: And worked --

18                  MEMBER ZIEMER: And worked?

19                  CHAIRMAN MELIUS:   At   the   Mound  
20 Plant from March 1959 --

21                  MEMBER ZIEMER: Yes, I got that  
22 part, but what -- the building part?

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1 CHAIRMAN MELIUS: And the number  
2 two, worked in the R and/or SW buildings at  
3 the Mound Plant from, blah, blah, blah.

4 MEMBER ZIEMER: Was it one tritium  
5 bioassay and worked, or worked?

6 CHAIRMAN MELIUS: And worked.

7 MEMBER ZIEMER: And worked?

8 CHAIRMAN MELIUS: You had to work  
9 at the Mound Plant from that time period --

10 MEMBER ZIEMER: Right.

11 CHAIRMAN MELIUS: -- and you had  
12 to have at least one tritium bioassay sample.

13 MEMBER ZIEMER: And then having --

14 CHAIRMAN MELIUS: And then, number  
15 -- or, number two, you worked --

16 MEMBER ZIEMER: That's what I was  
17 asking on the or part, is that or worked?

18 CHAIRMAN MELIUS: Or worked. Now,  
19 you could have done both, but --

20 MEMBER ZIEMER: Oh, that's where  
21 the and/or comes from?

22 CHAIRMAN MELIUS: Yes, to qualify,

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1 it's really one or the other. So, this is an  
2 or.

3 MEMBER ZIEMER: Does that require  
4 then for -- the -- the Department of Labor to  
5 first establish the bioassay and then confirm  
6 the working in the building or the --

7 CHAIRMAN MELIUS: No, no --

8 MEMBER ZIEMER: If they have the  
9 bioassay sample, they don't have to take  
10 another step, right?

11 CHAIRMAN MELIUS: No, the  
12 qualification is either of those criteria.  
13 The first criteria is had --

14 MEMBER ZIEMER: Got you.

15 CHAIRMAN MELIUS: -- at least one  
16 tritium bioassay sample and worked at the  
17 Mound Plant in Miamisburg from March 1, 1959  
18 through 1980, then for a number of -- blah,  
19 blah, blah, and then the second way that they  
20 can qualify, or worked in the R and/or SW  
21 buildings at the Mound Plant from, blah, blah,  
22 blah, for a number of work days, 250, et

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1 cetera.

2 MEMBER ZIEMER: Okay, thank you.

3 CHAIRMAN MELIUS: Yes, it is a  
4 little -- it's different, put it that way.

5 MEMBER ZIEMER: Well, my question  
6 on the and part, if it's a double requirement,  
7 what was mentioned yesterday, that -- by Stu,  
8 I think, was that it does pick up some people  
9 in a different building, the tritium assay --  
10 bioassay picks up a few people who had no  
11 connection with that building.

12 I wondered if the and part, if  
13 this a double requirement, does that eliminate  
14 them --

15 CHAIRMAN MELIUS: No.

16 MEMBER ZIEMER: -- or the or part  
17 leaves them in, I guess.

18 CHAIRMAN MELIUS: No.

19 MEMBER ZIEMER: I think there's  
20 still some ambiguity there.

21 CHAIRMAN MELIUS: There definitely  
22 is, and I think that, if we'd been able to

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1 have -- work -- count on or rely on just the  
2 criteria of working in the building or  
3 something, it would be better. But we don't  
4 believe there are records for everyone who  
5 worked in the building.

6 But there may be some people that  
7 can show that they worked in the building and  
8 may not --

9 MEMBER ZIEMER: May not have the  
10 tritium --

11 CHAIRMAN MELIUS: -- may not have  
12 the tritium bioassay, tritium monitoring.

13 MEMBER ZIEMER: Right.

14 CHAIRMAN MELIUS: And so forth, so,  
15 but you know, we are -- I hate to use the word  
16 surrogate -- sort of a surrogate, definitely.

17 We're trying to capture the group, the  
18 individuals who were exposed as best we can  
19 do, we believe, based on the information.  
20 Okay, Wanda?

21 MEMBER MUNN: Would it be  
22 clarifying to use the word either?

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1 CHAIRMAN MELIUS: So, who either  
2 one, yes, that's fine. So, we'll modify that  
3 either, either, colon, the punctuation mark,  
4 not the word. Okay, so, Ted?

5 MR. KATZ: Thank you, okay.

6 CHAIRMAN MELIUS: With those  
7 friendly amendments.

8 MR. KATZ: With those friendly  
9 amendments. Dr. Anderson?

10 MEMBER ANDERSON: Yes.

11 MR. KATZ: Ms. Beach?

12 MEMBER BEACH: Yes.

13 MR. KATZ: Mr. Clawson?

14 MEMBER CLAWSON: Yes.

15 MR. KATZ: Dr. Field?

16 MEMBER FIELD: Yes.

17 MR. KATZ: Dr. Lemen?

18 MEMBER LEMEN: Yes.

19 MR. KATZ: Dr. Melius?

20 CHAIRMAN MELIUS: Yes.

21 MR. KATZ: Ms. Munn?

22 MEMBER MUNN: Yes.

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1 MR. KATZ: Dr. Poston?

2 MEMBER POSTON: Yes.

3 MR. KATZ: Mr. Presley?

4 MEMBER PRESLEY: Yes.

5 MR. KATZ: Dr. Richardson?

6 MEMBER RICHARDSON: Yes.

7 MR. KATZ: Dr. Roessler?

8 MEMBER ROESSLER: Yes.

9 MR. KATZ: Mr. Schofield?

10 MEMBER SCHOFIELD: Yes.

11 MR. KATZ: Dr. Ziemer? You might  
12 be muted, Dr. Ziemer.

13 CHAIRMAN MELIUS: Paul?

14 MEMBER ZIEMER: I vote yes.

15 CHAIRMAN MELIUS: Thank you.

16 MR. KATZ: Yes, okay, so, all  
17 voting voted in favor. That's 13 in favor.  
18 Three individuals, Mr. Gibson, Dr. --

19 CHAIRMAN MELIUS: Mr. Griffon.

20 MR. KATZ: -- Mr. Griffon --

21 CHAIRMAN MELIUS: Dr. Lockey.

22 MR. KATZ: -- and Dr. Lockey are

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1       recused.

2                   CHAIRMAN MELIUS: Okay, thank you.

3       So, the recused can rejoin us at the table.

4                   The next order of business, we  
5 will start some of the Work Group reports and  
6 this is to -- we're going to start with ones  
7 that will assist us in terms of SC&A casting  
8 issues.

9                   I will point out that I need to  
10 leave at 4:30. I have a graduation to attend  
11 on the West Coast and I need to catch an  
12 airplane and so it's not because of anything  
13 Ted said to me or anybody else's action on the  
14 Board. Previous engagement.

15                   So, I will be sort of sneaking  
16 out. I am going to turn the Chairmanship over  
17 to Mark Griffon for the remainder of this  
18 afternoon and tomorrow morning.

19                   So, the first -- I understand --  
20 if I understand correctly, the Work Group that  
21 is -- report that is critical to our tasking  
22 of SC&A is the Procedures Work Group, and so,

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1 Wanda.

2 MEMBER MUNN: I hope all of you  
3 recall the fairly lengthy report I gave on our  
4 telephone conference during our last meeting,  
5 when I tried to bring you up to date with  
6 respect to what the Subcommittee had been  
7 doing.

8 We are continuing to deal with the  
9 standard workload that we have but the most  
10 pressing items that we've had facing us in  
11 recent months has been the issue of the PERs,  
12 how we will address them and how we will move  
13 forward on them.

14 We've been trying to work very  
15 closely with SC&A to get the information that  
16 we need assimilated and to get the process  
17 established so that we can move forward in a  
18 timely manner with these things.

19 I'm going to work on the  
20 assumption that all of you have -- you should  
21 have, somewhere in your files, the protocol to  
22 review NIOSH's Program Evaluation Reports that

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1 was prepared by SC&A in December 2009. It was  
2 sent to all of you and it was their  
3 presentation to us with respect to their view  
4 of how we should proceed in this manner.

5 The Subcommittee finds this to be  
6 an acceptable document. There is -- are a  
7 number of attachments. The attachments might  
8 change from time to time.

9 You should have also received from  
10 John Mauro or Kathy Behling, a most -- the  
11 most recent update of the PERs that are  
12 available for us to choose to deal with.

13 As I hope you recall, we had  
14 indicated earlier that we would attempt to  
15 select some of these PERs and -- so that SC&A  
16 could get started on them. We have been --  
17 some of us have been working on a document,  
18 which is integral to this proposal, namely a  
19 two-page wrap-up description of what happens  
20 at the end of the PER review process. That  
21 will become an archival document so that, in  
22 perpetuity, whoever wants to identify what any

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1 PER was about and what was done with it, can  
2 pull up this quick two-pager and take a look  
3 at it.

4 Several of us on the Subcommittee  
5 have had numerous exchanges. Originally, it  
6 had been my plan to attempt to have a  
7 teleconference meeting about this. But it  
8 seems to be more efficient at this juncture  
9 for the three of us who are involved,  
10 primarily Dr. Lemen, Dr. Ziemer and myself, in  
11 word-smithing this document.

12 I'm very concerned about it  
13 because I want to make sure -- I understand  
14 that it's going to be used primarily as a  
15 template. It's a straw man that John and  
16 company put together for us and we've changed  
17 it significantly from its original format and  
18 its original content. We want to try to get  
19 it right.

20 So, we're not going to present  
21 that to you today. We're still playing with  
22 that. We -- with any luck at all, we'll have

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1 that very nicely put together and as polished  
2 as we can get it, when the Subcommittee meets  
3 next on June 8<sup>th</sup>.

4 It appears to me that what we need  
5 to do today, if at all possible, if there's  
6 concern about SC&A being held off any longer  
7 with respect to the choice of PERs to be  
8 reviewing next, we have the list that they've  
9 put before us of the PERs that are available  
10 that they have assessed from a number of  
11 criteria with, in their view, the most  
12 important at the top and the least important,  
13 depending upon how you weigh the assessment  
14 values, at the bottom.

15 So, if there is -- I'd like to  
16 make sure that no one on the Subcommittee has  
17 any additional comment to make before I  
18 suggest that we take a look at the list of  
19 PERs and see if it is the desire of the Board  
20 to make a selection, so SC&A can move forward  
21 with their preferred task of getting on with  
22 this.

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1                   MR. KATZ: So, let address a  
2 procedural matter, then, related to this,  
3 because like Site Profiles, tasking these  
4 conflict of interest matters, and some of  
5 these are site-specific, and for the site-  
6 specific ones, those who have a conflict, just  
7 let me remind you, and I can do that as we go  
8 through these, too, but if you have a conflict  
9 for that site, you shouldn't be speaking. You  
10 can stay at the table, but shouldn't be  
11 speaking to the issue, and of course, you  
12 wouldn't vote on that one either.

13                   MEMBER LOCKEY: You may have to  
14 remind us.

15                   MR. KATZ: And I'm happy to remind  
16 you. That's easy to do. I have it all  
17 organized here by PER.

18                   The other thing I would just note  
19 is, in discussing this with John Mauro  
20 yesterday, he thought that a ballpark of  
21 around five would probably be at a limit of  
22 how many PERs to deal with at a time.

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1 CHAIRMAN MELIUS: Okay.

2 MEMBER MUNN: That sounds  
3 reasonable. I was thinking in terms of three,  
4 but if five is possible on their schedule,  
5 then I see no reason why not.

6 I believe everyone should have  
7 that on their email.

8 CHAIRMAN MELIUS: Do you want to --  
9 why don't we start with the three, so, to  
10 talk, discuss, then we can add through the  
11 next two.

12 MEMBER MUNN: That's fine. Let me  
13 make very sure that there is no one on the  
14 Subcommittee who wants to speak to any of this  
15 before we start moving through the PERs.

16 CHAIRMAN MELIUS: Yes, well, I  
17 guess, first, are there any questions for  
18 Wanda about the Subcommittee and what she's  
19 reported on?

20 Okay, Dr. Ziemer or Dr.  
21 Richardson?

22 MEMBER ZIEMER: I have no comment.

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1 CHAIRMAN MELIUS: Okay, thank you.

2 MEMBER RICHARDSON: No.

3 CHAIRMAN MELIUS: Thanks, David.  
4 Okay.

5 MR. KATZ: Let me just remind then,  
6 Members, for these -- just for the top what?  
7 For the top four or five, where the recusals  
8 are -- so, for Hanford, we have recusals of  
9 Ms. Beach and Ms. Munn.

10 The next one that we would have  
11 recusals is for the INL and that would be Mr.  
12 Clawson, and then for PER 18, that's the  
13 fourth of these listed in priority order, we  
14 would have Dr. Poston and Mr. Schofield, just  
15 --

16 MEMBER MUNN: Wait, that's not the  
17 same order I had. The order I have,  
18 attachment one, updated May 17<sup>th</sup>, has the  
19 construction trades prior to INL.

20 MR. KATZ: There are no conflicts.  
21 That's why I didn't mention any conflicts,  
22 because there's no one conflicted for that.

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1                   MEMBER MUNN: Well, that makes it  
2 easier then. I thought you said that was  
3 number four, all right.

4                   MR. KATZ: No, the fourth is LANL,  
5 L-A-N-L.

6                   MEMBER MUNN: Appreciate it.

7                   CHAIRMAN MELIUS: So, the first is  
8 INL, Construction.

9                   MEMBER MUNN: No, the first is --

10                  MR. KATZ: The first is Hanford.

11                  CHAIRMAN MELIUS: Hanford?

12                  MR. KATZ: That's the highest  
13 priority one.

14                  CHAIRMAN MELIUS: Okay.

15                  MEMBER MUNN: And I can't speak to  
16 that, but I could --

17                  MR. KATZ: So, do we want to just  
18 go down the list and --

19                  CHAIRMAN MELIUS: I guess that's --

20                  MR. KATZ: -- just begin the  
21 discussion?

22                  CHAIRMAN MELIUS: Yes.

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1 MR. KATZ: So, why don't we just --  
2 for Hanford, is there any discussion before we  
3 take a vote?

4 CHAIRMAN MELIUS: Well, actually, I  
5 don't think we need to go through that, as  
6 long the -- that's -- unless there is  
7 disagreement.

8 So, all in favor of Hanford, say  
9 aye.

10 (A chorus of ayes.)

11 CHAIRMAN MELIUS: Opposed?

12 (No response.)

13 CHAIRMAN MELIUS: Okay, and Dr.  
14 Richardson, Dr. Ziemer, do you --

15 MEMBER ZIEMER: Yes.

16 CHAIRMAN MELIUS: Okay.

17 MR. KATZ: I think we need to do  
18 this by voice vote.

19 MS. HOWELL: I'm sorry, because of  
20 the conflict of interest --

21 MR. KATZ: Because of recusals --

22 MS. HOWELL: -- recusals, we need

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1 to go voice votes.

2 CHAIRMAN MELIUS: Okay.

3 MR. KATZ: Okay. So, I'll just do  
4 this very quickly. Dr. -- we're talking about  
5 PER-29, Hanford. Dr. Anderson?

6 MEMBER ANDERSON: Yes.

7 MR. KATZ: Mr. Clawson?

8 MEMBER CLAWSON: Yes.

9 MR. KATZ: Dr. Field?

10 MEMBER FIELD: Yes.

11 MR. KATZ: Mr. Gibson?

12 MEMBER GIBSON: Yes.

13 MR. KATZ: Mr. Griffon?

14 MEMBER GRIFFON: Yes.

15 MR. KATZ: Dr. Lemen?

16 MEMBER LEMEN: Yes.

17 MR. KATZ: Dr. Lockey?

18 MEMBER LOCKEY: Yes.

19 MR. KATZ: Dr. Melius?

20 CHAIRMAN MELIUS: Yes.

21 MR. KATZ: Dr. Poston?

22 MEMBER POSTON: Yes.

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1 MR. KATZ: Mr. Presley?

2 MEMBER PRESLEY: Yes.

3 MR. KATZ: Dr. Richardson?

4 MEMBER RICHARDSON: Yes.

5 MR. KATZ: Dr. Roessler?

6 MEMBER ROESSLER: Yes.

7 MR. KATZ: Mr. Schofield?

8 MEMBER SCHOFIELD: Yes.

9 MR. KATZ: Dr. Ziemer?

10 MEMBER ZIEMER: Yes.

11 MR. KATZ: Great, the next -- we  
12 don't -- we can do by voice vote, because  
13 there is no recusals. That's the construction  
14 trades.

15 CHAIRMAN MELIUS: Okay, proceed.

16 MR. KATZ: So, all in favor, say  
17 aye.

18 (A chorus of ayes.)

19 MR. KATZ: Any opposed?

20 (No response.)

21 MR. KATZ: Okay, the next one is  
22 PER-17 INL, and for that, we have Mr. Clawson

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1 recused. So, I'll run down the vote. Dr.  
2 Anderson?

3 MEMBER ANDERSON: Yes.

4 MR. KATZ: Ms. Beach?

5 MEMBER BEACH: Yes.

6 MR. KATZ: Dr. Field?

7 MEMBER FIELD: Yes.

8 MR. KATZ: Mr. Gibson?

9 MEMBER GIBSON: Yes.

10 MR. KATZ: Mr. Griffon?

11 MEMBER GRIFFON: Yes.

12 MR. KATZ: Dr. Lemen?

13 MEMBER LEMEN: Yes.

14 MR. KATZ: Dr. Lockey?

15 MEMBER LOCKEY: Yes.

16 MR. KATZ: Dr. Melius?

17 CHAIRMAN MELIUS: Yes.

18 MR. KATZ: Ms. Munn?

19 MEMBER MUNN: Yes.

20 MR. KATZ: Dr. Poston?

21 MEMBER POSTON: Yes.

22 MR. KATZ: Mr. Presley?

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1 MEMBER PRESLEY: Yes.

2 MR. KATZ: Dr. Richardson? Dr.

3 Richardson?

4 MEMBER RICHARDSON: Yes.

5 MR. KATZ: Thanks. Dr. Roessler?

6 MEMBER ROESSLER: Yes.

7 MR. KATZ: Mr. Schofield?

8 MEMBER SCHOFIELD: Yes.

9 MR. KATZ: Dr. Ziemer?

10 MEMBER ZIEMER: Yes.

11 MR. KATZ: That's three. Do you --  
12 do we want to go to five?

13 CHAIRMAN MELIUS: Do we want to go  
14 to five?

15 MR. KATZ: Yes, okay. So, the next  
16 --

17 MEMBER MUNN: What's the difference  
18 if you do four?

19 MR. KATZ: The next is PER-18.  
20 That's LANL.

21 MEMBER MUNN: May I ask John, if he  
22 really feels five is --

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1 MR. KATZ: John, would you like to  
2 confirm, is five a manageable number or are  
3 you concerned?

4 DR. MAURO: No, five is -- three,  
5 five, we can handle five.

6 MR. KATZ: Okay.

7 MEMBER MUNN: Okay.

8 DR. MAURO: Yes, we can do it.

9 MEMBER MUNN: Fine with me.

10 DR. MAURO: Well, I'm here, there's  
11 something I'd like to remind everyone of and I  
12 think it might have slipped through the  
13 cracks.

14 When we do a PER, you know, we've  
15 already done three of them, the last thing in  
16 the PER is doing some real cases to see if, in  
17 fact, it implemented the change and those  
18 cases and the way in which it was suppose to  
19 work is that I believe, Wanda and Mark, you  
20 were going to sort of collaborate and say  
21 which cases you'd like to review.

22 So, right now, we're sort of not

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1 finished with the one on lymphatic tissue, the  
2 one on high-fired plutonium and Blockson.  
3 Those are three PERs that we completed,  
4 delivered, but the last chapter isn't there,  
5 which is three, four, five, six cases, to see  
6 if, in fact, they did it the way they were  
7 supposed to do it.

8 So, that's something that has to  
9 be worked into the process, and so, maybe you  
10 want to just bear that in mind, that somewhere  
11 along the line, we're going to have to pick  
12 cases to do, so, we could do this -- finish  
13 this job.

14 We can start it, but we can't  
15 finish it without your help.

16 MR. KATZ: Thank you, John.

17 MEMBER MUNN: That's correct, and I  
18 didn't mention that because that was a part of  
19 the protocol that I had assumed everyone had  
20 read.

21 MR. KATZ: So, for LANL, we have  
22 two recusals, Dr. Poston and Mr. Schofield.

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1 Dr. Anderson?

2 MEMBER ANDERSON: Yes.

3 MR. KATZ: Ms. Beach?

4 MEMBER BEACH: Yes.

5 MR. KATZ: Mr. Clawson?

6 MEMBER CLAWSON: Yes.

7 MR. KATZ: Dr. Field?

8 MEMBER FIELD: Yes.

9 MR. KATZ: Mr. Gibson?

10 MEMBER GIBSON: Yes.

11 MR. KATZ: Mr. Griffon?

12 MEMBER GRIFFON: Yes.

13 MR. KATZ: Dr. Lemen?

14 MEMBER LEMEN: Yes.

15 MR. KATZ: Dr. Lockey?

16 MEMBER LOCKEY: Yes.

17 MR. KATZ: Dr. Melius?

18 CHAIRMAN MELIUS: Yes.

19 MR. KATZ: Ms. Munn?

20 MEMBER MUNN: Yes.

21 MR. KATZ: Mr. Presley?

22 MEMBER PRESLEY: Yes.

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1 MR. KATZ: Dr. Richardson?

2 MEMBER RICHARDSON: Yes.

3 MR. KATZ: Dr. Roessler?

4 MEMBER ROESSLER: Yes.

5 MR. KATZ: Dr. Ziemer?

6 MEMBER ZIEMER: Yes.

7 MR. KATZ: And finally, the fifth,  
8 PER-8, that's lung model. There are no  
9 recusals, so, we could do a voice vote. All  
10 in favor, say aye.

11 (A chorus of ayes.)

12 MR. KATZ: Any opposed, say nay.

13 (No response.)

14 MR. KATZ: It passes, all in favor.

15 CHAIRMAN MELIUS: And, Mark, I'm  
16 going to now turn the meeting over to you.

17 Just so you know that I'm a nice  
18 person, I left Mark with letters written for  
19 LANL and the other two sites for tomorrow.

20 ACTING CHAIR GRIFFON: Okay, now  
21 that Jim is gone.

22 MR. KATZ: So, Mark, we have

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1 additional SC&A tasking to do, which is Site  
2 Profile reviews.

3 There are a number of Site  
4 Profiles that haven't been reviewed yet and I  
5 have a list of the names of those.

6 ACTING CHAIR GRIFFON: Do we have a  
7 sense from -- how many are we going for? Do  
8 we have a sense from SC&A on how many Site  
9 Profiles?

10 MR. KATZ: And John can speak to  
11 these. The Site Profiles that are possible  
12 for review are Simonds Saw, Stanford Linear  
13 Accelerator --

14 MEMBER MUNN: Ted?

15 MR. KATZ: Yes.

16 MEMBER MUNN: Do we also have a  
17 list of them or should we be writing these  
18 down?

19 MR. KATZ: I would write them down.  
20 I don't know whether you have a list off the  
21 top of my head or not.

22 MEMBER MUNN: Simonds Saw?

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1                   MR. KATZ: Simonds Saw, Stanford  
2 Linear Accelerator, Pacific Proving Grounds,  
3 Superior Steel, TVA and Allied Chemical  
4 Corporation and just to note, Dr. Melius and I  
5 had some interactions with John previously on  
6 Site Profiles that hadn't been reviewed and  
7 there was only one other Site Profile that --  
8 but that Site Profile is currently under for  
9 renovation by DCAS. So, it didn't make sense  
10 to even consider that one, since we don't have  
11 a current version ready for review.

12                   But so, John, do you want to speak  
13 to these Site Profiles?

14                   DR. MAURO: Yes, I would -- the  
15 first three and -- but I have to also mention  
16 that during the discussion of TBD-6001 the  
17 other day, and that there will be a meeting of  
18 that Work Group.

19                   There are four or five Site  
20 Profiles that are under those. So, what I'm  
21 getting at is, they're small. They're all  
22 relatively easy to do. So, we probably want

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1 to limit these to three, so that we could do  
2 these three and we could also take care of the  
3 small group that goes with TBD-6001, and now,  
4 I'm operating on the premise that the group  
5 that falls under TBD-6001, that's going to be  
6 handled under the 6001 Work Group, along with  
7 -- you know, that's all part and parcel of an  
8 integrated process.

9           These others, though, I'm  
10 presuming will be under a separate Work Group,  
11 the ones we're about to identify now.

12           ACTING CHAIR GRIFFON: I would  
13 think that would be the case, yes.

14           DR. MAURO: Yes, okay, so, I would  
15 say three would be plenty.

16           ACTING CHAIR GRIFFON: Okay,  
17 anybody out of that list, does anybody have  
18 any -- I mean, I look at it and I see, Simonds  
19 Saw seems to be one that stands out for me as  
20 needing something.

21           MEMBER MUNN: Why?

22           ACTING CHAIR GRIFFON: What? Why?

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1 MEMBER MUNN: Isn't that done now?

2 ACTING CHAIR GRIFFON: I don't  
3 think Simon Saw is done, no.

4 MEMBER ANDERSON: The data was  
5 used, but not --

6 ACTING CHAIR GRIFFON: Yes, the  
7 data was used, right, right.

8 MEMBER MUNN: I guess my question  
9 is, what's the point?

10 ACTING CHAIR GRIFFON: Well --

11 MEMBER BEACH: It's current in the  
12 evaluation process.

13 ACTING CHAIR GRIFFON: Is it in the  
14 evaluation process also?

15 MEMBER BEACH: Right.

16 ACTING CHAIR GRIFFON: Yes. So, if  
17 it's in -- it's in the ER review, is that  
18 correct?

19 MEMBER BEACH: I'm just looking  
20 ahead at the SEC petitions for tomorrow's --

21 ACTING CHAIR GRIFFON: Yes.

22 DR. MAURO: To help out a little

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1 bit, it's been our experience, when there is  
2 an SEC that's undergoing, in the process,  
3 where Simonds Saw is, it's been approved --

4 ACTING CHAIR GRIFFON: Right.

5 DR. MAURO: -- and it's in the  
6 process. What we found has been beneficial is  
7 if we can get our Site Profile review out  
8 quickly, into the hands of NIOSH as quickly as  
9 we possibly can, it might help and they'll  
10 have at least some perspective, as we see --

11 ACTING CHAIR GRIFFON: Your  
12 concerns earlier on --

13 DR. MAURO: Yes, earlier, right,  
14 because we did that on Brookhaven. Now, I  
15 don't -- I know that that seemed to go very  
16 well. I don't know the degree to which our  
17 work -- but we did get it -- our Site Profile  
18 review on Brookhaven into the hands of NIOSH  
19 before the Brookhaven ER came out, and that  
20 seems to be a way of doing things which makes  
21 it -- things go a little more smoothly.

22 So, that's why I think C- that's

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1 why I felt Simonds Saw was important, because  
2 it's in the queue. So, yes.

3 Now, the other two are not. The  
4 other two would just be Site Profile Reviews,  
5 and then I do not believe are in the queue for  
6 Site Profile -- for SECs.

7 ACTING CHAIR GRIFFON: I mean, my  
8 sense is, you have to look at it either way.  
9 If you're doing the evaluation review for the  
10 SEC, you're going to ultimately look at the  
11 model used in the Site Profile, so why not  
12 start it now, is sort of what I would justify  
13 looking at that one. John agrees. I don't  
14 know if anyone else agrees.

15 MEMBER BEACH: Well, and to  
16 clarify, that's due in July.

17 ACTING CHAIR GRIFFON: Yes, right,  
18 right. But you know, we can look at any  
19 others that stand out to Members.

20 MEMBER MUNN: Stanford Accelerator  
21 would be interesting just from a technical  
22 standpoint, but whether or not it has --

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1                   ACTING CHAIR GRIFFON: Justifies a  
2 full review, yes.

3                   MEMBER MUNN: Yes, I don't know.

4                   ACTING CHAIR GRIFFON: Do we have  
5 any sense of a number of -- this is a question  
6 for Stu or support group, the numbers of  
7 claims for each of these sites? I expect not  
8 by Stu's reaction.

9                   MR. HINNEFELD: No, I'm sorry, I  
10 don't. I don't have that with me. I might be  
11 able to find out relatively soon. But I don't  
12 have it, if you want to know on this.

13                   I don't think we have very many  
14 from Stanford, but I'll check.

15                   ACTING CHAIR GRIFFON: And yes,  
16 because my sense is that Pacific Proving  
17 Ground and the Stanford Linear Accelerator are  
18 kind of different, you know, things that we  
19 haven't looked at before, certainly. But are  
20 -- is it -- does it justify a full SC&A  
21 review? I'm not sure.

22                   MEMBER ZIEMER: Mark?

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1                   ACTING CHAIR GRIFFON: Yes, Paul.

2                   MEMBER ZIEMER: Paul Ziemer here.

3                   I just wanted to remind the Board that before  
4                   each Board meeting, Nancy Adams sends out a  
5                   document which summarizes the Board tracking  
6                   on all of the sites and the one that she sent  
7                   out this past week, you should have gotten in  
8                   your email, that lists all the Site Profiles  
9                   and those that are under review or when  
10                  they've been reviewed, the dates. That may be  
11                  also helpful to you.

12                  I note, for example, I see that  
13                  Pacific Northwest Labs, which I believe is  
14                  Battelle --

15                  MEMBER MUNN: That's correct.

16                  MEMBER ZIEMER: -- shows up as not  
17                  having a Site Profile Review. Is that  
18                  correct, John Mauro?

19                  DR. MAURO: No, we were recently  
20                  authorized to do Pacific --

21                  MEMBER ZIEMER: Okay, that's been  
22                  authorized?

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1 DR. MAURO: Yes.

2 ACTING CHAIR GRIFFON: That's been  
3 authorized, okay.

4 DR. MAURO: Yes, so, we have that  
5 in the -- we're working on it.

6 MEMBER ZIEMER: It doesn't show up  
7 on the current list as having been authorized.  
8 What about West Valley?

9 DR. MAURO: West -- yes, West  
10 Valley has been authorized. PNL has been  
11 authorized, yes.

12 MEMBER ZIEMER: Okay. So, I guess  
13 those dates are -- those dates don't show up  
14 on the current chart that went through me  
15 here.

16 DR. MAURO: Joe just reminded me,  
17 though we have PNL, it's going to be a very  
18 easy one because it's basically part and  
19 parcel to Hanford.

20 MEMBER ZIEMER: Understood.

21 DR. MAURO: They're connected very  
22 closely.

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1 MEMBER ZIEMER: Right.

2 DR. MAURO: So, our plan was to  
3 deliver something, but we don't see that as  
4 being, you know -- it's really a sub-set of  
5 Hanford.

6 ACTING CHAIR GRIFFON: And can  
7 someone just describe -- Superior Steel, I  
8 know we've had a couple cases come before the  
9 Dose Reconstruction Subcommittee, but can you  
10 quickly -- someone just quickly go over what  
11 they did at Superior Steel, so we have a sense  
12 of -- I can't remember if they did rolling  
13 operations or if they did -- okay, or Allied  
14 Chemical. It might be good just to know a  
15 little bit of background on these, that --

16 MR. HINNEFELD: Allied Chemical, I  
17 think, I know that's the one in Metropolis.

18 MEMBER ZIEMER: How about Kansas  
19 City Plant?

20 MEMBER GLOVER: Allied Chemical --  
21 this is Stu.

22 ACTING CHAIR GRIFFON: Hold on,

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1 Paul, one second.

2 MEMBER ZIEMER: Okay.

3 MR. HINNEFELD: Allied Chemical,  
4 I'm pretty sure is the conversion plant in  
5 Metropolis, Illinois that it -- it's a fairly  
6 large scale uranium chemical conversion --  
7 conversion plant.

8 ACTING CHAIR GRIFFON: Right,  
9 right, okay. So, that may be interesting. I  
10 mean, I'm almost thinking, does it make sense  
11 to -- well, I don't know. We haven't really  
12 done this before, but if Simonds Saw and  
13 Superior Steel -- you know, if they're similar  
14 operations, we might want to have one Work  
15 Group look at both, although Simonds Saw is an  
16 SEC. So, I'm not sure that makes sense. But  
17 --

18 MEMBER BEACH: What about TVA, any  
19 information on that?

20 ACTING CHAIR GRIFFON: Yes, TVA,  
21 any -- we might have to -- you know, we have  
22 more working time tomorrow. I guess, what I'm

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1 proposing is, we got this list from Ted.  
2 Maybe we should take tonight to think about  
3 it, on our own, and if NIOSH can come back and  
4 maybe give us some numbers on -- the number of  
5 claimants and a little description of what  
6 went on at each one of these sites, so, we can  
7 have a sense of what we're looking at  
8 assigning, because I agree with Wanda. I  
9 imagine there's a fair number of claimants at  
10 most of these sites, but it would be good to  
11 see some data before we just start assigning  
12 SC&A to do these.

13 MR. KATZ: Yes, and you could look  
14 on the website, at the TBDs for these.

15 ACTING CHAIR GRIFFON: Right, we  
16 could all do a little more --

17 MR. KATZ: To familiarize  
18 yourselves with them.

19 ACTING CHAIR GRIFFON: We can all  
20 do a little of our own homework, but also --  
21 you know, I'm sure everyone is pretty tired  
22 from a long day of meetings, but I propose, if

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1 it's okay, maybe we can just put this off for  
2 our working time tomorrow. Is that okay with  
3 everybody?

4 MR. KATZ: Yes.

5 ACTING CHAIR GRIFFON: All right.  
6 So, we have the -- the ideas are out there.  
7 Are there any others that we haven't -- I  
8 heard Paul say Kansas City.

9 DR. MAURO: We have Kansas City.  
10 We're working on it now.

11 ACTING CHAIR GRIFFON: John, did --  
12 Paul, did you hear that?

13 MEMBER ZIEMER: Yes.

14 ACTING CHAIR GRIFFON: Yes, okay.

15 MEMBER MUNN: TVA is another  
16 phosphate.

17 ACTING CHAIR GRIFFON: Hold on, Stu  
18 has another comment.

19 MR. HINNEFELD: Yes, Stu, again.  
20 Superior Steel manufactured uranium strip and  
21 rolled uranium slabs for Savannah River. The  
22 period was like, 1952 to 1957.

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1                   ACTING CHAIR GRIFFON: Okay.

2                   MR. HINNEFELD: So, that's Superior  
3 Steel. I'm working on getting the number of  
4 claims for these five sites.

5                   ACTING CHAIR GRIFFON: All right,  
6 well, we can --

7                   MR. HINNEFELD: I'll have it --

8                   ACTING CHAIR GRIFFON: We'll take  
9 it up tomorrow, so, you got a little -- yes,  
10 all right. Okay, what's next?

11                  MR. KATZ: I think I have an item  
12 here, that, really, Jim wanted to discuss, so,  
13 we can't do that.

14                  ACTING CHAIR GRIFFON: Okay.

15                  MR. KATZ: So, then the next is  
16 really to begin the Subcommittee and Work  
17 Group reports.

18                  ACTING CHAIR GRIFFON: All right,  
19 and I can say, we'll do the -- start the Work  
20 Group updates and if we don't finish all of  
21 them, we have time tomorrow.

22                  I can say for the Dose

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1 Reconstruction Subcommittee, which often  
2 starts this process off, I didn't get the  
3 report out yet. I was trying to email it  
4 before Jim left, but I'm going to -- right  
5 after this meeting ends, I'm going to send  
6 everyone an email with this follow-up on the  
7 first 100 cases report, from the Dose  
8 Reconstruction Subcommittee.

9 I apologize for not getting it out  
10 sooner, but at least, you know, we can -- I  
11 can describe it tomorrow and at least, go  
12 through it and then you'll have it. I don't  
13 expect any action on it. But, you know, I'll  
14 give a better update on that tomorrow.

15 But then maybe we can start with  
16 the Dose Reconstruction -- or the Procedures  
17 Subcommittee, sorry.

18 MR. KATZ: Wanda, do you want to  
19 report on Procedures today?

20 MEMBER MUNN: Didn't I just do  
21 that?

22 ACTING CHAIR GRIFFON: Is there any

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1 more --

2 MR. KATZ: Well, you did the PER.

3 Do you have other items --

4 MEMBER MUNN: No, I don't.

5 MR. KATZ: -- with respect to the  
6 Procedures Subcommittee report.

7 MEMBER MUNN: I did the whole  
8 thing.

9 MR. KATZ: Okay, very good.

10 ACTING CHAIR GRIFFON: Okay, you  
11 gave your regular --

12 MEMBER MUNN: Yes, I just did.

13 ACTING CHAIR GRIFFON: Okay, that  
14 was a quick one.

15 MEMBER MUNN: Well, there was  
16 nothing to add over what I reported at our  
17 last meeting.

18 MR. KATZ: That's fine.

19 MEMBER MUNN: At the  
20 teleconference.

21 ACTING CHAIR GRIFFON: That's  
22 great.

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1                   MR. KATZ: Okay, and then let me go  
2 to the next one. Obviously, I'm going to skip  
3 the Work Groups for which we've already  
4 addressed them today.

5                   So, the first --

6                   ACTING CHAIR GRIFFON: Hold on one  
7 second. John?

8                   DR. MAURO: I'm sorry to interrupt,  
9 but I just wanted to check. Wanda, I know one  
10 of the challenges we've had with the  
11 procedures was the software that we'd been  
12 using. I'm not -- I saw some email  
13 correspondence. I've been out of the office.

14                   Has that been fixed because, you know, when  
15 we move through the process, we -- it really  
16 expedites the process if we -- if it's -- if  
17 we could -- I don't know where it is now.

18                   MEMBER MUNN: We have to have the  
19 process. The last information that I saw was  
20 from Steve Marschke and he -- what the message  
21 said was, I've checked it out and it works for  
22 me today. Stu?

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1                   MR. HINNEFELD: Yes, the -- as far  
2 as I know, that data -- well, that data has  
3 all been added to the application that we  
4 wrote, that's actually available -- it's now -  
5 - it's made for all the Work Groups now.

6                   I mean, this is made to hold  
7 findings for all the work of all the Work  
8 Groups, and there are ways to pull it up, so  
9 that it looks very much like the product we  
10 had before, though we're -- I think we're  
11 going to go through that at the next  
12 Subcommittee meeting.

13                  MEMBER MUNN: I had hoped that you  
14 would do that at the --

15                  MR. HINNEFELD: Yes, we're planning  
16 to have our IT folks there and go through a  
17 tutorial on the next Subcommittee meeting, so,  
18 people can understand. It's -- I think it's  
19 available there by now. It's called the  
20 document control tracking application, DCTA,  
21 on our staff tools page.

22                  So, you go to our staff tools

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1 page, you can open it up, but it's not very  
2 intuitive on how to get to these particular  
3 Procedures findings.

4 MEMBER MUNN: I had assumed that  
5 we'd all need training, but since Steve was  
6 comfortable with it, I figured if Steve could  
7 get on, we'd find out our --

8 ACTING CHAIR GRIFFON: And I think  
9 some people will need training on how to get  
10 to staff tools, but that's really --

11 MEMBER MUNN: Yes, that's true.

12 ACTING CHAIR GRIFFON: But we'll  
13 have to go through that, yes.

14 DR. MAURO: One last dimension to  
15 that, why it's important is the two-pagers.

16 MEMBER MUNN: Yes.

17 DR. MAURO: You see, basically,  
18 there are 103 procedures that we've reviewed  
19 over the last five years. Out of those, we  
20 have determined that about 55, we've finished,  
21 we're done, and we want two-pagers on all of  
22 them, but the only way to write those two

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1 pages, is to be able to go into the database  
2 and retrieve the history of how we got there,  
3 how did we --

4 In other words, whatever the  
5 procedure was, there was a series of meetings  
6 and how we closed out every issue, it's all in  
7 that database and it's going to be very  
8 difficult to write those two-pagers and --  
9 unless that's working.

10 MR. KATZ: Thanks, John.

11 ACTING CHAIR GRIFFON: Yes, that  
12 will be --

13 MR. KATZ: I think, actually, the  
14 DCAS folks are planning to do a little bit of  
15 training of the front end of the Subcommittee  
16 meeting in a week and a half, so, that  
17 everybody is abreast of how to work that new  
18 data system.

19 ACTING CHAIR GRIFFON: And I should  
20 say, it comes just in time, because I was  
21 ready to make a motion to go back to the old  
22 matrix system, but anyway. So, I actually

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1 prefer that.

2 MR. KATZ: So, let's see the --

3 ACTING CHAIR GRIFFON: But that's  
4 another story. So, let's go through the Work  
5 Groups, yes.

6 MR. KATZ: Let's proceed with  
7 Fernald, Mr. Clawson.

8 MEMBER CLAWSON: Yes, we just had a  
9 Fernald Work Group here just last month.  
10 We've got several issues that are starting to  
11 come in. They're starting to flow back.

12 I just noticed that I got from  
13 SC&A an issue on the thorium and so forth.  
14 We're proceeding on -- we haven't got a work -  
15 - another Work Group meeting at this time.

16 As soon as I get more of the data  
17 or a date of when we can expect it, we'll set  
18 up another Work Group.

19 ACTING CHAIR GRIFFON: Do you know  
20 if you have any outstanding action items? Is  
21 that -- did you say there were outstanding --

22 MEMBER CLAWSON: Yes, we've still

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1 got some outstanding.

2 ACTING CHAIR GRIFFON: Some  
3 outstanding, for NIOSH? For SC&A? For both?

4 MEMBER CLAWSON: For NIOSH and kind  
5 of a little bit of both. I think John's about  
6 got all of his, that we're going to sit down  
7 with.

8 ACTING CHAIR GRIFFON: Okay, all  
9 right, that's good.

10 MR. KATZ: Any questions? Okay,  
11 thank you. Hanford is Dr. Melius, who is, of  
12 course, gone, but does Dr. Poston or Mr.  
13 Schofield, Dr. Ziemer, someone want to report  
14 for the Hanford?

15 ACTING CHAIR GRIFFON: I don't  
16 think there's been any report to give, right.

17 MR. KATZ: Okay, I don't -- yes,  
18 right.

19 ACTING CHAIR GRIFFON: Okay.

20 MR. KATZ: INL is next. That's Mr.  
21 Schofield.

22 MEMBER SCHOFIELD: We're going to

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1 have scheduled Work Group meetings in June or  
2 July.

3 MR. KATZ: Lawrence Berkeley is Dr.  
4 Ziemer.

5 MEMBER ZIEMER: Lawrence Berkeley  
6 Work Group has just been formed this past  
7 week. We've not yet met.

8 MR. KATZ: Right, thank you, and  
9 Linde reported yesterday morning, and then we  
10 have LANL, Mr. Griffon.

11 ACTING CHAIR GRIFFON: Yes, Los  
12 Alamos, we did have a Work Group meeting just  
13 a little while ago in Cincinnati, a couple of  
14 weeks ago, I think. It kind of runs together.

15 And we made some -- it was our  
16 initial meeting on the latest -- the later  
17 years' SEC petition and so, we made some  
18 initial headway, but we have quite a bit of  
19 work to do on that and we'll -- we have some  
20 LANL folks here today, so we're going to get  
21 some comments on the change in the old SEC  
22 petition language, and also, I assume on the

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1 new petition.

2 So, we're moving on on that, but  
3 we haven't scheduled another meeting yet, but  
4 we did start the Work Group working on that.

5 MR. KATZ: Thank you. Any  
6 questions? Then we have Mound, Ms. Beach.

7 MEMBER BEACH: Mound does have a  
8 list of action items out. At this time, I  
9 don't have them right in front of me, but we  
10 are going to be scheduling a meeting at the  
11 end of June, first of July time frame, to  
12 address the final issues for Mound.

13 MR. KATZ: Thank you, Josie.  
14 Pantex, Mr. Clawson.

15 MEMBER CLAWSON: Yes, we finally  
16 had our first Work Group meeting. We've got  
17 several outstanding issues. We were able to  
18 take the matrix and combine several of the  
19 issues into one.

20 At this time, SC&A is at Pantex.  
21 We did get our documentation, our interviews,  
22 and they're wrapping those things up.

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1           We've also got a tour coming up.  
2           It's probably going to be the later time frame  
3           of July. We're still trying to hammer out the  
4           exact buildings and so forth like that. But  
5           we are finally making headway there.

6           MR. KATZ: Any questions? Thank  
7           you, Brad. Pinellas, Mr. Schofield.

8           MEMBER SCHOFIELD: Nothing yet.  
9           They don't expect anything until at least  
10          August.

11          MR. KATZ: Thank you, and Piqua,  
12          Dr. Poston.

13          MEMBER POSTON: We're scheduling a  
14          meeting, sending out an email to try to get  
15          that scheduled in June or early July.

16          MR. KATZ: Thank you, John. Rocky  
17          Flats, Mr. Griffon.

18          ACTING CHAIR GRIFFON: Rocky Flats  
19          has no update at this point, except to -- you  
20          know, my comment to the Department of Labor on  
21          clarifying on the implementation of the Class,  
22          but no update from the Work Group.

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1 MR. KATZ: Thank you. Santa  
2 Susana, Mr. Gibson.

3 MEMBER GIBSON: Yes, we had a --  
4 were finally able to have a Work Group meeting  
5 April 20<sup>th</sup> in Cincinnati. We went back  
6 through the matrix and some of the open  
7 issues.

8 There were some that were  
9 resolved. There are some that were identified  
10 that's going to take some additional time for  
11 DCAS to respond to, and so we look forward to  
12 that.

13 We'll hopefully have another  
14 meeting in a couple of months.

15 MR. KATZ: Thank you, Mike. SRS,  
16 Savannah River Site, Mr. Griffon.

17 ACTING CHAIR GRIFFON: We also had  
18 a Work Group meeting a couple of weeks ago on  
19 Savannah River. I believe this was the first  
20 meeting of the Work Group to address the SEC.

21 We had had a Work Group a while  
22 back on the Site Profile issues, but now it is

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1 looking at the SEC issues.

2 Again, several actions were  
3 identified for NIOSH and SC&A, I believe, and  
4 we weren't ready to schedule another meeting  
5 yet, but we will, hopefully in probably two to  
6 three month time frame.

7 MR. KATZ: Any questions? Thank  
8 you, Mark. Then we have the -- there's the  
9 SEC Work Group and Dr. Melius gave an update,  
10 really yesterday for that. I think that  
11 covers that, unless any Members have anything  
12 more to add to what Jim discussed yesterday.

13 Very good. Then we have TBD-6000,  
14 Dr. Ziemer.

15 MEMBER ZIEMER: Our Work Group met  
16 on May 12<sup>th</sup>. Our main focus -- well, we're  
17 still working on closing out the TBD-6000  
18 itself, but our main focus is on Appendix BB,  
19 which is the General Steel Industries Site  
20 Profile and the General Steel Industries SEC  
21 petition, and in that connection, the  
22 petitioner, [identifying information

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1 redacted], had been able, through the FOIA  
2 process, to identify a large number of  
3 documents that were held by the Nuclear  
4 Regulatory Commission.

5 Those documents have been made  
6 available, actually, on a website by the NRC,  
7 so they're available to the Work Group. NIOSH  
8 also had those documents available and in the  
9 meantime, had done their review of those  
10 documents to determine the impact of those on  
11 their dose reconstruction process, source term  
12 information and related matters.

13 And at our meeting, NIOSH  
14 presented their sort of critique of those  
15 documents. Well, I shouldn't call it a  
16 critique, but their evaluation of those  
17 documents, in terms of how that would impact,  
18 how they would do dose reconstruction for the  
19 General Steel Industry Site.

20 Also, at that time, since we had  
21 just received that information from NIOSH, our  
22 contractor, SC&A, had not had an opportunity

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1 to official review that, and they also  
2 received a pretty detailed critique from the  
3 petition on the NIOSH review, which we are --  
4 ourselves and the Board had an opportunity to  
5 critique in any detail.

6 But we did also receive from the  
7 petitioner a request that we task SC&A to  
8 review all of those NRC provided documents,  
9 and so, in connection with the tasking issue,  
10 I want to present my view of what should be  
11 tasked, and I say it's my view because at the  
12 time of our Work Group meeting, we had not had  
13 a chance to go through [identifying  
14 information redacted]'s comments in full  
15 detail, that is, his critique of the NIOSH  
16 comments.

17 And I wanted the Work Group  
18 members to have a chance to do that, before we  
19 did any tasking and we agreed to postpone the  
20 tasking until the full Board meeting, in any  
21 event.

22 What the request from the

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1 petitioner was, was that we task our  
2 contractor to evaluate the documents from the  
3 NRC. I'm not sure I'm using the correct word,  
4 when I say evaluate. But we need to review  
5 those and my personal point of view is, that's  
6 the agency's job, NIOSH, and they have  
7 reviewed those.

8 I believe that our contractors  
9 job, if we wish to task them, is to critique  
10 what NIOSH has done, and so, I'm proposing  
11 that our -- that we task SC&A to critique the  
12 NIOSH White Paper, which is basically what was  
13 presented, a White Paper that relates to that  
14 set of documents, which covered -- includes  
15 NRC licenses, NRC inspections, states --  
16 material from the state agencies, a wealth of  
17 material about the sources used, the  
18 inspection reports from the NRC and so on.  
19 So, a vast amount of material.

20 My suggestion is that we task SC&A  
21 to critique how NIOSH says it will use those  
22 documents, recognizing that by doing so, it

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1 probably will be necessary for SC&A to review  
2 the documents themselves.

3 But I think our task is to ask  
4 SC&A whether their view is that NIOSH is  
5 correctly making use of those documents for  
6 dose reconstruction, particularly vis-a-vis  
7 the petition itself, as well as it may pertain  
8 to the Site Profile, which also includes  
9 source term information.

10 But that is a recommendation from  
11 me, not from the full Work Group, but to task  
12 SC&A to critique the White Paper, which I  
13 believe in doing so, will cause them to, by  
14 necessity, to have to review those documents.

15 But the focus should be how NIOSH  
16 is proposing to use those documents. Perhaps,  
17 other Members of the Work Group can comment or  
18 agree or disagree with that.

19 ACTING CHAIR GRIFFON: Yes, Paul,  
20 Mark Griffon, and as a member of the Work  
21 Group, I agree with that, that NIOSH should  
22 really -- and they did, you know, do the first

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1 review of the actual data, but really, SC&A is  
2 probably going to get out the -- you know, the  
3 end result anyway, by reviewing NIOSH's  
4 position. They'll probably have to look back  
5 at the data to --

6 MEMBER ZIEMER: Well, they clearly  
7 will have to.

8 ACTING CHAIR GRIFFON: Yes, yes.

9 MEMBER ZIEMER: I'm just saying, in  
10 principle, we've tasked SC&A to critique the  
11 technical work done by NIOSH.

12 ACTING CHAIR GRIFFON: Right, I'm  
13 agreeing with you.

14 MEMBER ZIEMER: Yes.

15 ACTING CHAIR GRIFFON: So, yes,  
16 yes.

17 MEMBER ZIEMER: So, that's what I  
18 would propose, if the other members of the  
19 Work Group agree, we can -- let me make that  
20 as a motion then and we can act on.

21 I move that we task SC&A to do  
22 what I've just described.

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1                   ACTING CHAIR GRIFFON: Is there a  
2 second?

3                   MEMBER BEACH: I'll second it.

4                   ACTING CHAIR GRIFFON: Second from  
5 Josie. Is there any --

6                   MEMBER ZIEMER: And Josie is a  
7 member of that group, as well.

8                   ACTING CHAIR GRIFFON: Is there any  
9 discussion on that? All in favor of that  
10 motion, aye?

11                   ALL: Aye.

12                   MR. KATZ: It's just the Work  
13 Group, really, that --

14                   ACTING CHAIR GRIFFON: Well, I  
15 thought it was --

16                   MEMBER ZIEMER: No, no, I'm asking  
17 -- this is a motion for the Board.

18                   ACTING CHAIR GRIFFON: That's what  
19 I was asking you, if it will -- if the Board  
20 had the task or if the Work Group had the  
21 task.

22                   MR. KATZ: The Work Group.

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1           ACTING CHAIR GRIFFON: Okay, all  
2 right. Okay, well, that passes on the Board  
3 and the Work Group. So, it's fully tasked to  
4 SC&A, to do that. Paul, was there another  
5 item that you had?

6           MEMBER ZIEMER: No, I simply point  
7 out to the Board, or to the full Board, I  
8 believe that within the last day, perhaps,  
9 early this week, [identifying information  
10 redacted] did provide to all the Board  
11 Members, some information relating to this  
12 site, which he wished to share with all the  
13 Board Members.

14           It may be that he will comment on  
15 that and there's a public comment period, but  
16 I did want to make you aware of that document.

17           ACTING CHAIR GRIFFON: Okay, thank  
18 you.

19           MR. KATZ: Paul, I would just add  
20 one other thing to this discussion, is, I  
21 received, and I believe I distributed it, but  
22 I'm somewhat uncertain, the Bliss -- the TBD-

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1 6000 Work Group also briefly discussed Bliss &  
2 Laughlin, which is --

3 MEMBER ZIEMER: Oh, yes, let me  
4 mention that.

5 MR. KATZ: Thank you.

6 MEMBER ZIEMER: The Bliss &  
7 Laughlin that was done by SC&A was still at  
8 the DOE. So, we don't have that matrix yet,  
9 to review. So, we were not able to do  
10 anything specifically on Bliss & Laughlin at  
11 the meeting.

12 Perhaps John Mauro can update us  
13 on that, but I believe that was still at the  
14 DOE, at the time that we met.

15 DR. MAURO: I believe so.

16 MEMBER ZIEMER: We did not have the  
17 matrix from SC&A.

18 MR. KATZ: Thank you, Paul. I just  
19 -- the petitioner is anxious to see that work  
20 go forward on that petition as well. So, I  
21 just thought I'd give that credit, because  
22 we've heard from the petitioner after the Work

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1 Group meeting.

2 MEMBER ZIEMER: Yes, thank you.

3 MR. KATZ: All right, thanks. TBD-  
4 6000, one Work Group has just been  
5 established, as well. Dr. Anderson is the  
6 Chair.

7 MEMBER ANDERSON: And I now know  
8 where the documents are, if I can find the  
9 documents on the O: drive.

10 But yes, I think we're basically  
11 waiting for NIOSH to organize our first -- or  
12 put the material together, and I think, aren't  
13 you also reviewing 6001?

14 MEMBER ZIEMER: They're already is  
15 a 6001 matrix.

16 MEMBER ANDERSON: Yes, okay.

17 MEMBER ZIEMER: Dr. Anderson.

18 MEMBER ANDERSON: Okay, so, there  
19 is.

20 DR. MAURO: There is a TBD-6001  
21 matrix with the issues laid out. I don't know  
22 if NIOSH has yet responded -- commented on any

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1 of those. I don't recall.

2 MEMBER ANDERSON: Yes, I think  
3 that's what I was told we're waiting for.

4 DR. MAURO: And the other important  
5 aspect is -- in fact, this was a new concept.

6 There are four or five exposure matrices  
7 dealing with specific sites that are  
8 appendices to TBD-6000.

9 Now, as I understand it, we will  
10 review those. We have already reviewed one of  
11 them, the metallurgical lab. We're going to  
12 review Hooker and then, there's a couple of  
13 others.

14 These are not big deals. These  
15 are relatively modest documents. So, the idea  
16 being, and we haven't done this before, is  
17 that when we engage TBD-6000, we will  
18 simultaneously engage the other four and in  
19 one fell-swoop, knock off a lot of exposure  
20 matrix's, the sites. We should create some  
21 efficiencies, I think, and I think it's a good  
22 idea.

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1 MR. KATZ: That's TBD-6001,  
2 actually --

3 ACTING CHAIR GRIFFON: So, you're  
4 waiting on progress, before you schedule a  
5 meeting, right?

6 DR. MAURO: Yes.

7 ACTING CHAIR GRIFFON: Okay.

8 MR. KATZ: But also, there are  
9 three SEC petitions assigned to that --

10 ACTING CHAIR GRIFFON: Right.

11 MR. KATZ: -- Work Group. All  
12 right, good. So, next is surrogate data,  
13 which --

14 ACTING CHAIR GRIFFON: I'm sorry,  
15 maybe I should clarify. John, you're  
16 reviewing the SEC petitions are part of your  
17 review, and that will roll all into the  
18 committee together, right? Not just the  
19 matrix?

20 DR. MAURO: No, I have to say, the  
21 only one that I'm aware of that's an SEC in  
22 that group is Hooker.

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1 ACTING CHAIR GRIFFON: Hooker?

2 DR. MAURO: And the others, I don't  
3 -- I'm not sure.

4 MR. KATZ: I can't recount them  
5 right now, but there are three.

6 DR. MAURO: Yes, yes.

7 MR. KATZ: I think, I believe there  
8 are three, yes. Electro Met is one. That's  
9 one, and there's a third --

10 DR. MAURO: Well, we've already  
11 completed our review of Electro Met. You have  
12 that report.

13 ACTING CHAIR GRIFFON: But not the  
14 Evaluation Report, or is there a NIOSH  
15 Evaluation Report for Electro Met, for the  
16 SEC? MR. KATZ: Yes.

17 DR. MAURO: I think we --

18 ACTING CHAIR GRIFFON: So, have you  
19 completed your review of that?

20 DR. MAURO: I think it's done. I  
21 think the Evaluation Reports, profile review--

22 ACTING CHAIR GRIFFON: Okay.

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1 DR. MAURO: -- petition review,  
2 the whole nine yards has been delivered. So,  
3 that's sitting there, waiting to be engaged by  
4 the TBD-6001 Work Group.

5 ACTING CHAIR GRIFFON: Okay.

6 MR. KATZ: Thank you, John. Then  
7 we have surrogate data reported already, and  
8 then we have last, but not least, worker  
9 outreach, Mr. Gibson.

10 MEMBER GIBSON: We had a meeting  
11 March 19<sup>th</sup> in Cincinnati and I believe the  
12 Board Members should have, some time last  
13 week, received a spreadsheet sent out by Ted,  
14 that shows worker comments and how they're  
15 being tracked.

16 The Work Group wanted to send it  
17 out to the Board and give you a few days to  
18 look at it. That's all we'd like to  
19 recommend, is a tool to track worker comments  
20 and get your feelings on that, number one.

21 And then, also, during the  
22 meeting, we tasked SC&A to look at how we

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1       could -- how they thought we could best  
2       implement objective number three. They did  
3       respond, with a short two-page of their  
4       recommendations. Unfortunately, I have some  
5       email problems, so, I wasn't able to talk to  
6       some of the Work Group members, to see if they  
7       agree with it, before we bring that to the  
8       Board, but maybe we can do that tomorrow.

9               MR. KATZ: Well, that actually -- I  
10       mean, the Work Group can work through those,  
11       because the Work Group can task --

12              MEMBER GIBSON: Okay.

13              MR. KATZ: It's really, for just  
14       the Work Group to consider -- consider the  
15       proposal and make recommendations to SC&A, as  
16       to the scope.

17              MEMBER GIBSON: Okay, so, I guess  
18       the only issue then is, did everyone get the  
19       spreadsheet and is there any thoughts on that?

20              ACTING CHAIR GRIFFON: I have to  
21       say, I didn't have a chance to review it yet.

22       So, I don't know if others have.

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1 MEMBER MUNN: I just saw it.

2 ACTING CHAIR GRIFFON: You saw it.

3 We may be able to take this up tomorrow, if  
4 people have time to look at it tonight, adding  
5 onto our homework, but you know. All right,  
6 we have --

7 MR. KATZ: Do you want to discuss  
8 that tomorrow?

9 ACTING CHAIR GRIFFON: Yes, yes.

10 MR. KATZ: Very good.

11 ACTING CHAIR GRIFFON: Let's try to  
12 do that.

13 MR. KATZ: Well, that gets us  
14 through our Work Groups, unless -- oh, Josie?

15 MEMBER BEACH: I don't know if you  
16 mentioned Brookhaven. Brookhaven is one of my  
17 --

18 MR. KATZ: I'm sorry.

19 MEMBER BEACH: Did you skip it?

20 MR. KATZ: I did skip Brookhaven,  
21 because --

22 MEMBER BEACH: This will be very

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1 brief, because I don't have too much to  
2 report.

3 We do have the Site Profile and we  
4 have been -- the Evaluation Report from SC&A  
5 has been delivered. So, I will be setting up  
6 a Work Group meeting in the next month,  
7 probably to coincide with my Mound Work Group  
8 meeting.

9 MR. KATZ: Thank you, Josie. I  
10 knew we discussed the SEC, and so, I was  
11 thinking, is this still active, but yes, thank  
12 you. That concludes the Work Group.

13 So, now, we have, actually, some  
14 time. LANL begins at 5:15 p.m. So, we  
15 actually have time for a short break, before  
16 LANL.

17 ACTING CHAIR GRIFFON: Yes, why  
18 don't we take a short break, but this is time  
19 sensitive, since we have this published at  
20 5:15 p.m. We'll stick to that time.

21 MR. KATZ: So, 10 minutes.

22 ACTING CHAIR GRIFFON: Ten minute

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1 break, yes.

2 (Whereupon, the above-entitled  
3 matter went off the record at 5:00 p.m. and  
4 resumed at 5:15 p.m.)

5 ACTING CHAIR GRIFFON: Okay, let's  
6 start up. We have really one more agenda item  
7 and then we're going to have public comment,  
8 and we may be able to do a few public comments  
9 before the 6:00 p.m. time frame, but we'll  
10 certainly stay on until after six, to cover if  
11 people are still here or on the phone, that  
12 want to make public comment.

13 We do have to be here at six at  
14 least for a little while, because it's  
15 published that way.

16 The next item on the agenda is the  
17 LANL. It's 83.14 amendment to a petition, I  
18 believe, and Stu Hinnefeld is going to give us  
19 an update on that, and then we have time for  
20 the petitioners to weigh in on that, as well.

21 Stu, are you ready to -- Stu is  
22 getting ready to do this presentation. Just

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1 bear with us for one minute. We're setting up  
2 the computer here.

3 Okay, Stu is ready to present.  
4 Stu, I'll turn it over to you.

5 MR. HINNEFELD: Now, I am ready. I  
6 think the agenda actually has Greg Macievic  
7 giving this presentation and I decided, you  
8 know, it's not terribly cost effective to  
9 travel Greg up here for a half-hour agenda  
10 item, and I was confident in that decision,  
11 knowing that Dr. Neton was going to make the  
12 presentation.

13 So now Dr. Neton couldn't make the  
14 trip, and so, here I am.

15 ACTING CHAIR GRIFFON: Third  
16 string.

17 MR. HINNEFELD: Yes, no good deed  
18 goes unpunished. Third string and no good  
19 deed goes unpunished.

20 Okay, I'm here to present the  
21 Evaluation Report for SEC-170. This is a  
22 petition that was submitted by a claimant

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1 whose dose reconstruction we could not  
2 complete, due to insufficient information.  
3 So, it's an 83.14 petition.

4 The claimant was employed in Los  
5 Alamos National Laboratory and our  
6 determination is that we're unable to complete  
7 a dose reconstruction for the claimant and  
8 that's the qualified basis for the petition.

9 So, they submitted the petition  
10 relatively short time ago. We qualified it on  
11 April 23<sup>rd</sup>, and since the petition process in  
12 these instances, follows -- you know, comes  
13 after our decision that it's not feasible to  
14 do dose reconstruction, the evaluation process  
15 is essentially done before the petition comes  
16 in. So, we're able to provide it today.

17 Just a little short recap of the  
18 work that was done at Los Alamos. We all know  
19 it's one of the large weapons labs and they've  
20 done a variety of work over the course of the  
21 years. There is a list of some of them from -  
22 - that we've talked about before, at other

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1 presentations.

2                   And the full description of that -  
3 - of the Los Alamos radiological history is  
4 found in the -- our Evaluation Report SEC-  
5 00051.

6                   I think I should probably say at  
7 this point that the Evaluation Report we're  
8 presenting today is essentially a  
9 modification, or a slight modification to the  
10 Evaluation Report we presented earlier on  
11 these years, from 1943 up through 1975, and in  
12 that Evaluation Report, we started with the  
13 criteria on the people who were monitored, or  
14 should have been monitored.

15                   We then, after some discussions,  
16 decided to throw in -- to list specific  
17 technical areas, because this is about the  
18 time when the issues with that phrase  
19 monitored or should have been monitored and  
20 the administration of Classes, about the time  
21 that came up, and so, I can remember at one of  
22 our meetings, I don't even remember where or

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1 when, but I think I was peripherally involved  
2 in the discussions, of trying to derived at --  
3 a complete listing of technical areas, that we  
4 should be in there to cover people who were  
5 monitored, or should have been monitored.

6 And so, there were some technical  
7 areas listed, associated with that Evaluation  
8 Report, and it turns out, now, we want to make  
9 a slight amendment to that Evaluation Report  
10 from 1943 through 1975.

11 So, the previous Class was -- is  
12 listed here. It's employees, contractors and  
13 subcontractors who were monitored or should  
14 have been monitored, while working in  
15 operational technical areas with a history of  
16 radioactive material used at the Los Alamos  
17 National Laboratory for 250 days, and there is  
18 a period of March 1943 through December 1945.

19 The dose reconstructions that  
20 we're doing for -- or the information  
21 available for those reconstructions at Los  
22 Alamos include external radiation, based on

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1 the routine monitoring.

2 We can't necessarily identify  
3 source terms in detail for all the  
4 radionuclides that were used because Los  
5 Alamos used so many radionuclides and in so  
6 many different applications.

7 The environmental monitoring  
8 information is not particularly good at Los  
9 Alamos before 1970, or for one instance, in  
10 1965 for external environmental, and we've  
11 actually -- we've received some claims for  
12 dose reconstruction, you know, since the  
13 enactment of the Class associated with SEC  
14 Petition 00051.

15 We've received some claims for  
16 dose reconstruction that we looked at and  
17 said, well, gee, we can't do the dose  
18 reconstruction for this claim, and therefore,  
19 our conclusion was, it should have been  
20 included in the Class.

21 The issue we have here is that  
22 work assignment location at Los Alamos is not

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1 a definitive indicator of a person's various  
2 work locations. I mean, they could be  
3 assigned to a specific technical area and work  
4 in others, and we don't really have a record  
5 system that shows movement among technical  
6 areas. So, you can't really exclude people  
7 from certain technical areas or place them in  
8 certain technical areas at particular times,  
9 based on the record we have.

10 So, we concluded then that, you  
11 know, this technical area designation that we  
12 tried last time isn't a good descriptor of the  
13 people who could have been exposed or might  
14 have been exposed, and so, our -- so, we felt  
15 like the previous Class Definition and  
16 therefore, the previous SEC Class was not  
17 entirely complete.

18 So, here is -- we're saying here  
19 that, you know, based on the information  
20 available, we can't really eliminate workers  
21 from -- specific workers from the potential  
22 exposure scenario.

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1           In terms of health endangerment,  
2 when we determine that we cannot provide a  
3 sufficiently accurate dose reconstruction for  
4 a Class, we always conclude that there is some  
5 evidence of worker -- of health endangerment.

6           We found -- we did not find  
7 evidence that workers were involved in a  
8 sudden discrete event that was not reported  
9 and investigated. We know that there were  
10 criticality event accidents at Los Alamos, but  
11 we don't know that that would have -- those  
12 criticality accidents affected the members of  
13 those Classes, and so, we are going with the  
14 chronic exposure criteria, essentially a two-  
15 prong -- or you have essentially two options  
16 in the findings, and so, we're going with the  
17 chronic exposure 250 day criteria.

18           Our finding, our recommendation,  
19 feasibility recommendation, is that's it not  
20 feasible to do dose reconstruction at times we  
21 break this into the various categories of  
22 dose. The key infeasibility here is in --

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1 reconstruct all the internal doses.

2           We're not -- you know, we don't  
3 feel we have a way to reconstruct convincing  
4 internal doses for this period, and our  
5 proposed Class Definition that we're  
6 presenting today is, all employees of the  
7 Department of Energy, its predecessor agencies  
8 and their contractors and subcontractors, who  
9 worked at Los Alamos from March 15, 1943  
10 through December 31, 1975, which is the same  
11 period.

12           So, we've just gone from monitored  
13 or should have been monitored and who worked  
14 in designated technical areas, et cetera, to  
15 just all employees, and that again, is to  
16 remedy the situation where we received claims  
17 for dose reconstruction, that we still don't  
18 feel we can reconstruct.

19           And we have a very brief one, it's  
20 strictly that modification, and that's the end  
21 of my presentation.

22           ACTING CHAIR GRIFFON: Thanks, Stu.

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1 Any questions from the Board for Stu?

2 MR. KATZ: Before we go to  
3 questions, just let me note for the record  
4 that two members, Dr. Poston and Mr. Schofield  
5 have recused themselves from this session.

6 ACTING CHAIR GRIFFON: Any  
7 questions from the Board, for Stu? I have  
8 one, I can start it off, or you can start it  
9 off.

10 I noted -- I think what I heard  
11 you say was that you identified a claim, in  
12 which you couldn't place the worker in some of  
13 these buildings and therefore -- and I just  
14 wonder if you -- I think this gets back to  
15 what -- something Jim was asking about  
16 yesterday, the process of sort of going from  
17 the building, specific to the all workers, and  
18 if it was -- if this claim was an anomaly or  
19 if you kind of looked and saw a pattern here  
20 that was going to be a problem going forward.

21 In other words, this was happening  
22 in quite a few claims and --

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1 MR. HINNEFELD: It has not happened  
2 a lot. I want to say, we have a handful of  
3 claims that people --

4 ACTING CHAIR GRIFFON: Oh, you do  
5 have a handful of claims?

6 MR. HINNEFELD: It's not one.

7 ACTING CHAIR GRIFFON: Right.

8 MR. HINNEFELD: No.

9 ACTING CHAIR GRIFFON: Okay, go  
10 ahead, Wanda.

11 MEMBER MUNN: Stu, I just,  
12 truthfully, haven't read through the SEC and  
13 probably should, to answer my own question.  
14 But this is such an enormous time period, and  
15 when I saw that you had essentially limited or  
16 certainly, inadequate monitoring data, prior  
17 to 1970, you said?

18 MR. HINNEFELD: Environmental data  
19 is not particularly good. I mean, there's not  
20 particularly a very large amount of  
21 environmental monitoring data, between --  
22 before 1970 for -- I think it's 1970 for the

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1 internal, you know, for airborne radionuclides  
2 and 1965 for external exposure. I think they  
3 put out some environmental dosimeters around  
4 1965.

5 And so, one aspect of the dose for  
6 someone who would not be monitored would be,  
7 what would be the way they've been exposed to,  
8 from being on the property, which depends  
9 upon, essentially, environmental -- so, that's  
10 environmental.

11 That's not the key element for the  
12 dose reconstruction -- or for the  
13 infeasibility. The infeasibility is the  
14 inability to tell for a specific individual  
15 that this person was not exposed in one of the  
16 technical areas where radioactive materials  
17 were used. That's the basis for the  
18 Evaluation Report.

19 MEMBER MUNN: All right, there was  
20 real concern in my mind about that much of a  
21 lack of monitoring data for such a long period  
22 of time. But that's all right. Thank you.

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1                   ACTING CHAIR GRIFFON: I mean, if -  
2                   - to summarize, the only change, right, was  
3                   the Class Definition, really?

4                   MR. HINNEFELD: All we changed was  
5                   the Class Definition from --

6                   ACTING CHAIR GRIFFON: Nothing else  
7                   changed from the review --

8                   MR. HINNEFELD: -- you know,  
9                   monitored or should be monitored to all  
10                  employees, that's the only change.

11                  ACTING CHAIR GRIFFON: Right, so,  
12                  we approve the full period -- you know, 1943  
13                  to 1975 for those technical areas.

14                  MR. HINNEFELD: Yes.

15                  ACTING CHAIR GRIFFON: It was just  
16                  NIOSH determining that there were --

17                  MEMBER GLOVER: Yes.

18                  ACTING CHAIR GRIFFON: -- problems  
19                  with that Class Definition.

20                  MR. HINNEFELD: Right, this -- like  
21                  I said, this definition was written as  
22                  monitored or should have been monitored, about

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1 the time that issue surfaced with the  
2 difficulty of administering those Classes, and  
3 how that can sometimes put a burden on the  
4 claimant, and you know, place Labor in the  
5 position of having to look for some sort of  
6 evidence along those lines, and so, that's why  
7 we try to get away from that now.

8 ACTING CHAIR GRIFFON: And go  
9 ahead.

10 MEMBER ANDERSON: Any idea of how  
11 many additional workers are now -- would now  
12 be eligible, not cases, but I mean, how many  
13 unmonitored people were there employed, during  
14 those years?

15 MR. HINNEFELD: We wouldn't really  
16 know that. We wouldn't really know how many  
17 people potentially would fall into this.

18 You know, we'd have to know quite  
19 a lot about each one, you know, each  
20 individual who was going to claim, to kind of  
21 make a judgment about whether they'd fall into  
22 this or not.

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1           So, but right now, we have -- I  
2 think it's just a handful. We have eight.  
3 Right now, we have eight claims that would be  
4 affected, but no, we don't have any way to  
5 know how many people could ultimately fall  
6 into this.

7           MEMBER ANDERSON: How many people  
8 were employed there, during that period of  
9 time, I mean, because it's basically anybody  
10 who worked there a year.

11           MR. HINNEFELD: I bet our friends  
12 from Los Alamos could tell better than me, of  
13 how many people might have been employed  
14 there.

15           MEMBER ZIEMER: Mark?

16           ACTING CHAIR GRIFFON: Yes, go  
17 ahead, Paul.

18           MEMBER ZIEMER: This is Ziemer. I  
19 am trying to understand. This is a fairly big  
20 campus, I'll call it a campus, a lot of  
21 facilities there, some of which, indeed, are  
22 not technical.

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1 I don't know what it was -- you  
2 know, the full layout in 1975, but maybe you  
3 can expand on that, but they certainly had  
4 areas like -- at least at the present time,  
5 they have buildings that are sort of set aside  
6 for offices and dining halls and so on, that  
7 have nothing to do with any work, and does  
8 this mean that we're including anyone that --  
9 anywhere on that site, because we can't  
10 exclude them from having gone to technical  
11 areas? Is that what we're saying?

12 ACTING CHAIR GRIFFON: Let Stu  
13 speak to that, but I guess that's the essence  
14 of it, yes.

15 MR. HINNEFELD: Yes, that's what  
16 we're saying.

17 ACTING CHAIR GRIFFON: And I think  
18 that's why we're asking questions here, is to  
19 better justify that -- opening up that far,  
20 you know, so -- I think Bomber had a response  
21 to that.

22 MR. RUTHERFORD: Yes, I do have one

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1 thing -- a couple of things to say.

2 If you actually look at it, there  
3 were very -- I mean, the site is broken up  
4 into technical areas completely and there were  
5 very few technical areas that were left out of  
6 our original definition.

7 So, it's not as broad a change as  
8 you would expect, okay. It's really -- I  
9 mean, we had one technical area that was  
10 smack-dab in the middle of about -- you know,  
11 smack-dab in the middle of a bunch of other  
12 technical areas, so, we excluded this  
13 technical area, because it was actually, if I  
14 remember correctly, a place where it was  
15 security guards or someone would -- that was  
16 their starting point, basically. It's where  
17 they came in, there was no radioactive  
18 material there. But they -- then they moved  
19 throughout the site.

20 Well, we excluded that building  
21 because there was no radioactive material  
22 there, all right, but it also sat right smack-

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1 dab in the middle of the other technical areas  
2 that were included, and so, even though -- I  
3 mean, the workers traversed through technical  
4 areas. They dispersed out to other technical  
5 areas, and this was one of the issues we came  
6 up with.

7 ACTING CHAIR GRIFFON: Were there  
8 other particular types of workers, where you -  
9 - I mean, security guard seems like one of the  
10 troubling ones. Was it maintenance? Was it -  
11 - yes, so, we've heard these kinds of  
12 situations before.

13 MEMBER ZIEMER: Was there anything  
14 that wasn't called a technical area, like  
15 loader fleet, that's off in the different --

16 MR. HINNEFELD: No, I don't believe  
17 so, Paul.

18 MEMBER ZIEMER: Okay, everything is  
19 in a technical area anyway.

20 MR. HINNEFELD: Everything is in  
21 something that -- something called a technical  
22 area.

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1 MEMBER ZIEMER: Yes.

2 MEMBER PRESLEY: Everything out  
3 there starts with TA, technical area.

4 ACTING CHAIR GRIFFON: Right,  
5 right. So, and based on the fact that you've  
6 only identified eight that fall into this  
7 category, out of how many claims are you  
8 dealing with right now?

9 MR. RUTHERFORD: Originally, I  
10 think there were 1,153 claims, is that  
11 correct, Leroy, 1,153 claims, and we had  
12 roughly 400-something that were active, and  
13 those include the post-1975 time period, and  
14 we've only come up with eight right now, out  
15 of that.

16 ACTING CHAIR GRIFFON: And how many  
17 currently qualified for the SEC definition?

18 MR. RUTHERFORD: I'd have to -- I'm  
19 not sure.

20 ACTING CHAIR GRIFFON: It's in the  
21 -- I mean --

22 MR. RUTHERFORD: Hundreds,

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1 hundreds.

2 ACTING CHAIR GRIFFON: Hundreds?

3 MR. RUTHERFORD: Oh, yes.

4 ACTING CHAIR GRIFFON: So, we're  
5 talking eight out of hundreds?

6 MR. RUTHERFORD: Yes.

7 ACTING CHAIR GRIFFON: Eight  
8 additional ones, so, I guess you can make an  
9 argument that it's not likely to -- like you  
10 said, it's not expanding the Class as much as  
11 we might think.

12 MR. RUTHERFORD: Right.

13 ACTING CHAIR GRIFFON: Yes, okay.  
14 Any other questions from the Board, or on the  
15 phone? Paul or David?

16 MEMBER ZIEMER: No further  
17 questions from me.

18 ACTING CHAIR GRIFFON: I mean, I  
19 think we might be ready to make a motion on  
20 this.

21 MR. HINNEFELD: There might be --  
22 is the petitioner for this participating? The

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1 petitioner would be on the phone, if she's  
2 participating.

3 ACTING CHAIR GRIFFON: Oh, yes, I'm  
4 sorry, yes. Is the petitioner for this 83.14  
5 for LANL on the phone?

6 (No response.)

7 ACTING CHAIR GRIFFON: No? But I  
8 know there are a couple of people here in the  
9 audience that would like to speak to the  
10 petition, so, I'll let -- I'm sorry about  
11 that, I almost forgot. Didn't see you over  
12 there.

13 MS. RUIZ: Thank you, Mr. Chair and  
14 Members of the Committee. My name is Harriet  
15 Ruiz and that's spelled R-U-I-Z, and I'm the  
16 original petitioner for the SEC-00051. It  
17 became law in 2007.

18 I would like to thank NIOSH for  
19 bringing this to our attention. My original  
20 intent was to cover all employees that worked  
21 in Los Alamos, simply because even some in the  
22 administration buildings, were contaminated

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1 because of what was done up there and what  
2 they were exposed to.

3 So, that's all I have to say,  
4 except to welcome all the new members on the  
5 Advisory Committee. I haven't spoken to you  
6 guys since Denver, I believe. So, welcome and  
7 thank you very much.

8 ACTING CHAIR GRIFFON: Well, thank  
9 you.

10 MS. RUIZ: And thank you, NIOSH, I  
11 appreciate all your concern for the claimants.  
12 That's really important to me. Thanks.

13 ACTING CHAIR GRIFFON: Thank you,  
14 Harriet, and thank you for making the long  
15 trip to come see us again. Is there someone  
16 else going to -- yes?

17 MS. VALERIO: Good afternoon. My  
18 name is Loretta Valerio and I'm the Director  
19 of the Office of Nuclear Workers Advocacy in  
20 New Mexico.

21 As an advocate, I've been involved  
22 with LANL claims where employment records were

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1 specified group designations rather than  
2 technical areas where the employee actually  
3 performed his or her work.

4 While researching some of these  
5 records, for many of these records, I found  
6 that both the employment and the monitoring  
7 records were either inconsistent or were just  
8 totally absent, and I'd like to take just a  
9 second to thank the Board and NIOSH, for  
10 considering expanding the SEC to include all  
11 LANL workers between the years of 1943 and  
12 1975. Thank you.

13 ACTING CHAIR GRIFFON: Thank you.  
14 Okay, and is the petitioner on the phone?  
15 I'll ask again.

16 (No response.)

17 ACTING CHAIR GRIFFON: Is there any  
18 further Board discussion or -- we're ready to  
19 take a motion, I believe. Anybody want to  
20 make a motion on this, Bob?

21 MEMBER PRESLEY: I'll make a motion  
22 that we accept this change.

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1 MEMBER CLAWSON: I'll second it.

2 ACTING CHAIR GRIFFON: Second by  
3 Brad, okay, any discussion -- so, the motion  
4 is to accept NIOSH's modified language, Class  
5 Definition, to be all workers for LANL, period  
6 1943 through 1975, and is there any discussion  
7 on the --

8 MEMBER ZIEMER: Procedural  
9 question.

10 ACTING CHAIR GRIFFON: Sure, Paul.

11 MEMBER ZIEMER: Does this require  
12 an actual sort of new SEC Class or is it  
13 simply a modification? In other words, does  
14 this go to the Secretary and the --

15 ACTING CHAIR GRIFFON: It is a  
16 separate -- yes, it was brought forward as a  
17 separate 83.14. So, I believe it does require  
18 --

19 MEMBER ZIEMER: Okay, thank you.

20 ACTING CHAIR GRIFFON: -- a  
21 letter, yes, yes. Thank you for -- I defer to  
22 you on the procedural questions.

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1                   MEMBER ZIEMER: Well, I believe  
2 then it would go to the Secretary as a  
3 recommendation --

4                   ACTING CHAIR GRIFFON: Yes.

5                   MEMBER ZIEMER: -- for -- although  
6 it's not a new Class, it's an expansion. But  
7 thank you. In essence, it would replace the  
8 previous one.

9                   ACTING CHAIR GRIFFON: That's  
10 correct.

11                  MR. KATZ: That's correct.

12                  ACTING CHAIR GRIFFON: Yes. Okay,  
13 is there any discussion on the Board or Paul  
14 or David, any comments on the motion?

15                  MEMBER ZIEMER: No comment.

16                  ACTING CHAIR GRIFFON: If there's  
17 no comments, I --

18                  MEMBER RICHARDSON: I don't think  
19 from me, no.

20                  ACTING CHAIR GRIFFON: If there's  
21 no comments, I guess we're ready for a vote.  
22 We'll do a roll call vote, Ted.

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1 MR. KATZ: Thank you. Dr.

2 Anderson?

3 MEMBER ANDERSON: Yes.

4 MR. KATZ: Ms. Beach?

5 MEMBER BEACH: Yes.

6 MR. KATZ: Mr. Clawson?

7 MEMBER CLAWSON: Yes.

8 MR. KATZ: Dr. Field?

9 MEMBER FIELD: Yes.

10 MR. KATZ: Mr. Gibson?

11 MEMBER GIBSON: Yes.

12 MR. KATZ: Mr. Griffon?

13 ACTING CHAIR GRIFFON: Yes.

14 MR. KATZ: Dr. Lemen?

15 MEMBER LEMEN: Yes.

16 MR. KATZ: Dr. Lockey?

17 MEMBER LOCKEY: Yes.

18 MR. KATZ: Ms. Munn?

19 MEMBER MUNN: Yes.

20 MR. KATZ: Mr. Presley?

21 MEMBER PRESLEY: Yes.

22 MR. KATZ: Dr. Richardson?

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1 MEMBER RICHARDSON: Yes.

2 MR. KATZ: Dr. Roessler?

3 MEMBER ROESSLER: Yes.

4 MR. KATZ: And Dr. Ziemer?

5 MEMBER ZIEMER: Yes.

6 MR. KATZ: So, all in favor, one  
7 member, Dr. Melius, is absent, so, I'll have  
8 to collect his vote, subsequently, and there  
9 are two members who have recused, and that  
10 would be Dr. Poston and Mr. Schofield. So,  
11 the motion passes.

12 ACTING CHAIR GRIFFON: Okay, thank  
13 you, and we'll have to draft up a letter, and  
14 I'm not sure who is going to do that because  
15 Melius isn't here. But we -- I think he left  
16 -- yes, we're not sure what he left, but we'll  
17 find it, yes.

18 Okay, anyway, that ends our agenda  
19 for today. We have a couple items for our  
20 working session tomorrow morning, but what I  
21 was going to do is, if it's okay with Members,  
22 we just had a break and there are a few people

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1 here that have been waiting, actually very  
2 patiently, the last couple of days, and since  
3 we just did LANL, I thought it might be okay  
4 to start our public comment session.

5 We certainly have to stay after  
6 6:00 p.m. because we advertised it that way.  
7 But I guess I would ask the LANL folks, maybe  
8 to start us off, because we were just talking  
9 about that site, and I think that makes a lot  
10 of sense, if they -- so, this is our public  
11 comment session, starting a little early, and  
12 we'll also check the sign-in sheet, and maybe  
13 I can ask Ted to just give the rules on public  
14 comments.

15 MR. KATZ: Yes, I'll do that,  
16 before you start.

17 ACTING CHAIR GRIFFON: And  
18 redaction for the --

19 MR. KATZ: Which is, thank you,  
20 Mark. As most of you are aware, there is a  
21 transcript, a verbatim transcript for the full  
22 Board meeting, including the public comment

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1 sessions.

2 So, for members of the public,  
3 what you say during the public comment session  
4 will be transcribed fully, will end up in the  
5 transcript for this Board meeting on the  
6 website, the NIOSH website. If you provide  
7 your name, that will be included, any personal  
8 information you provide about yourself, that  
9 will be included in the transcript.

10 But if you discuss third parties,  
11 other persons in your comments, their names  
12 and other identifying information about those  
13 third parties will be redacted and if you'd  
14 like to see the full policy on redaction on  
15 comments for transcripts, it should be out  
16 there on the table and it's also available  
17 online, on the NIOSH website with the agenda  
18 for this meeting. Thank you.

19 ACTING CHAIR GRIFFON: Okay, yes, I  
20 think we're ready to start. Andrew has some  
21 slides, I think, that he's going to start  
22 with, right?

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1 MS. JACQUEZ-ORTIZ: Well, I'd like  
2 to thank Chairman Griffon and Members of the  
3 Board for allowing me to speak today on behalf  
4 of Senator Udall. This is Tom Udall out of  
5 New Mexico, as opposed to Mark Udall.

6 My name is Michele Jacquez-Ortiz  
7 and I have worked for Senator Udall since he  
8 was elected to Congress nearly 12 years ago,  
9 and for those of you on the Board who have  
10 joined more recently, Senator Udall's  
11 constituency contains many DOE contractor  
12 facilities, the largest of which is LANL.

13 Senator Udall, along with his New  
14 Mexico colleague, Senator Jeff Bingaman,  
15 hosted the first public hearings in New Mexico  
16 on this issue and worked to ensure that our  
17 constituents would be covered as part of the  
18 compensation program.

19 When the Senator's Office was  
20 notified of NIOSH's decision to propose an  
21 83.14 petition to broaden the LANL SEC Class,  
22 so it covers all claimants through 1975, he

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1 was delighted.

2 As some of you might recall, those  
3 of you who were present for the May 2007  
4 meeting in Denver, in which Harriet Ruiz's SEC  
5 was considered, the claimants put forth a  
6 strong effort to pass an SEC that was not tied  
7 to specific technical areas. They knew that  
8 this detailed information was not available.

9 Still, the fact that NIOSH  
10 approved this decision is very significant and  
11 something that deserves a big thank you from  
12 Senator Udall on behalf of his constituents  
13 that will benefit.

14 The Senator's office had a couple  
15 of questions for the record, that we'd like to  
16 pose, related to the 83.14. The first of  
17 which is, of those eight claimants, is it just  
18 eight claimants that will be affected by this  
19 changed in the expanded SEC Class? So, that's  
20 actually a question for NIOSH and --

21 MR. KATZ: Do you want -- I mean, I  
22 think I can respond for the program, in this

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1 respect.

2 I mean, I believe I'm correct to  
3 say, I mean, it's eight claimants that have  
4 been identified at this point, but that's not  
5 to say that there wouldn't be other claimants  
6 in the future who would also be affected.

7 So, that's not the -- the total  
8 number, it's just the number that are in the  
9 system currently.

10 MS. JACQUEZ-ORTIZ: Okay, that's  
11 helpful. Thank you. Will the cases be  
12 reopened, is the second question, and this is  
13 -- it's just procedural, but will the cases be  
14 reopened? Will all of their previous  
15 information remain intact or will they need to  
16 reapply, of those that are affected?

17 ACTING CHAIR GRIFFON: You can go  
18 ahead, Stu. Go ahead.

19 MR. HINNEFELD: There will be no  
20 need to reapply. The process goes  
21 automatically. The claimant doesn't have to  
22 do anything.

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1 MS. JACQUEZ-ORTIZ: Okay, perfect,  
2 thank you, and then on a separate note, the  
3 Senator's office is monitoring issues  
4 surrounding the bioassay database recently  
5 developed for post-1975 LANL claimants, as  
6 well as the use of surrogate data.

7 We've listened closely to  
8 questions and concerns about these issues  
9 posed by the Board and share some of those  
10 concerns. We applaud the Advisory Board's  
11 decision yesterday to adopt criteria where  
12 surrogate data is concerned.

13 I think it's important to say  
14 thank you and to give kudos to those involved  
15 with the program when good decisions are made.

16 Moreover, it's important to say thank you to  
17 each of you on the Advisory Board for the  
18 hundreds of hours that you spend on these  
19 petitions, often invisibly. Thank you for  
20 allowing me to speak today on behalf of  
21 Senator Udall and for your work to ensure  
22 fairness and compassion in your decisions that

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1 affect so many of these courageous Cold War  
2 veterans.

3 ACTING CHAIR GRIFFON: Thank you,  
4 Michele, and I think Andrew has some comments.

5 MR. EVASKOVICH: Good afternoon,  
6 ladies and gentlemen. My name is Andrew  
7 Evaskovich. I'm the petitioner for SEC-00109  
8 for Los Alamos National Laboratories Support  
9 Service Workers.

10 What I'm going to be discussing  
11 today is the pre-assessment screening for Los  
12 Alamos National Laboratory. This report was a  
13 joint study prepared by Department of Energy,  
14 the New Mexico Environment Department, the  
15 Department of the Interior, and the U.S.  
16 Forest Service, I believe, and several pueblos  
17 that surround Los Alamos National Laboratory,  
18 and it addresses environmental pollution, or  
19 the -- and the possibility of injury to the  
20 environment.

21 It's a pre-assessment in order to  
22 determine whether or not there should be

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1 reparations for those -- for any damages to  
2 the environment.

3 If you'll recall the last time I  
4 spoke to you, I talked to you, part of the  
5 presentation included opera and explosions,  
6 so, we're going to do something a little  
7 different today.

8 We're going to discuss  
9 prospecting. The reason why I mentioned  
10 prospecting is because people have inquired to  
11 me about my research efforts, and basically I  
12 felt like it was panning for gold. That's why  
13 this screen is titled this because I sifted  
14 through a large amount of reports and I  
15 usually ended up with small, little nuggets.  
16 Either sometimes I would find a really big fat  
17 one, concerning, say, neptunium and TA-55 that  
18 wasn't monitored, or smaller nuggets, you  
19 know, and basically, I gathered a bunch of  
20 nuggets together to prepare my SEC petition,  
21 and I did pull some nuggets out of this  
22 report, which I have provided to the Board as

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1 well, and NIOSH.

2 This is an overview of the Los  
3 Alamos National Laboratory. This will give  
4 you a review of the laboratory since we  
5 haven't discussed this in a year, and I notice  
6 there was some -- a lack of clarity -- or a  
7 lack of understanding about this new petition  
8 that was approved.

9 As you can see here, we have  
10 canyons. The Valles Caldera here, which is a  
11 large volcano that exploded and created the  
12 mesa, and you have the large canyons that run  
13 down and you can see the work areas here,  
14 particularly here is LANSCE, with the lagoons  
15 at LANSCE.

16 These are the surrounding areas of  
17 the laboratory, which is part of the concern  
18 of the report, Bandelier National Monument,  
19 Santa Fe National Forest, you have some BLM  
20 land for Department of Interior, San Ildefonso  
21 Pueblo, Santa Clara Pueblo.

22 The pre-assessment screen is a

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1 document that represents only a preliminary  
2 step in natural resource damage assessment  
3 process, and this is just to determine whether  
4 they should go forward to find out exactly  
5 what the extent of the damage was.

6 A lot of the data was developed  
7 from the RACER database, which is funded by  
8 the Department of Energy. It was -- and it's  
9 a very large collection of data. That's the  
10 location of the data. I'm sure a lot of it  
11 has been used in order to develop the Site  
12 Profile information. It's publically  
13 accessible and it's also -- New Mexico  
14 Environment Department data as well.

15 The RACER database currently  
16 contains nearly six million data records, most  
17 of which have been validated as confirming to  
18 accepted standards of scientific data  
19 collection and analysis, but not all of them  
20 have, which is an important point.

21 The PAS represents the first phase  
22 of a natural resource damages assessment for

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1 LANL Site and all other areas, within which  
2 natural resources may have been injured by the  
3 storage of oil or release of hazardous  
4 substances, including radionuclides.

5 The radionuclides, metals, and HE  
6 may have been released into the environment  
7 during the various steps of the design,  
8 experimentation, manufacture, or detonation of  
9 experimental weapons, and each of these  
10 operations was dispersed geographically  
11 throughout LANL, in which this refers to the  
12 83.14 because it was spread out all over the  
13 laboratory.

14 Non-key facilities have been  
15 responsible for generating hazardous and  
16 radiological waste. So it wasn't just  
17 concentrated into certain key areas, and there  
18 is some data here that references that. The  
19 15 key facilities represent 90 percent of the  
20 data or radioactive liquid waste and solid  
21 waste, but this was according to the 1999  
22 site-wide environmental impact statement.

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1                   But in 2004, non-key facilities  
2 were responsible for 87 percent of low level  
3 radioactive waste, 30 percent of mixed level  
4 radioactive waste, 54 percent of transuranic  
5 waste volumes generated by all LANL  
6 facilities, and this is quoted from the 2008  
7 site-wide environmental impact statement.

8                   The major contributors to  
9 environmental impact of operating LANL waste  
10 water discharges and radioactive emissions are  
11 -- the historic discharges in the Mortandad  
12 Canyon have resulted in above background  
13 residual radionuclide concentrations,  
14 americium, plutonium, strontium-90, and  
15 cesium-137.

16                   Plutonium deposits have been  
17 detected along Rio Grande between Otowi and  
18 Cochiti Lake, and the principle contributors  
19 to air emissions have been and continue to be  
20 the Los Alamos Neutron Science Center and high  
21 explosives testing activities, and LANSCE and  
22 the high explosive testing activities, I

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1 think, are key to what I've talked about in my  
2 petition, and it's interesting to talk about  
3 the canyons because this also references the  
4 addition of opening all technical areas  
5 because I have addressed this concern before  
6 before the Board in 2008, when the Board met  
7 in Tampa.

8 That was one of the concerns that  
9 I addressed, was contamination into the buffer  
10 areas and the potential for exposure to those  
11 -- to the radionuclides in those areas.

12 The effluent discharges to canyons  
13 of LANL resulted in contamination of surface  
14 water and sediment in canyons. Some  
15 contaminants tend to absorb to the sediment  
16 particles, which either remain in the canyons  
17 or are transported downstream to the Rio  
18 Grande.

19 Jemez Mountains have experienced a  
20 series of wild land fires. I've made these an  
21 issue in my petition as well. They've had the  
22 water fire in 1954, La Mesa fire in 1977, that

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1 burned onto LANL land. I didn't address that  
2 one because I didn't have a lot of information  
3 on it, but I think it needs to be looked at  
4 because it did burn into TA-16, TA-49, and TA-  
5 37, which did have radioactive materials.

6 The Dome fire, the Oso fire, and  
7 the Cerro Grande fire, which was a very large  
8 fire also, and it affected the environment.  
9 This is a photograph of the Cerro Grande fire.

10 You can see the extent of the burning that's  
11 happening there. You can actually see that it  
12 is burning on LANL property, and, again, this  
13 is a satellite view that I presented before of  
14 the extent of the fire at Los Alamos.

15 This is important because the loss  
16 of ground cover and vegetation resulting from  
17 the fire combined with below average  
18 precipitation over several years may have  
19 increased the resuspension of contaminants in  
20 the air. So I think this report reflects on  
21 issues that I have addressed concerning  
22 contamination or exposure pathways.

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1           To discuss the air contamination,  
2 discharges of hazardous and radiological  
3 contaminants that have occurred as part of  
4 operations at LANL, releases that include  
5 stack emissions, point -- which are point  
6 source, fugitive emissions, which are non-  
7 point sources, and from detonation and burning  
8 of explosives, and the firing sites where the  
9 explosives are detonated, I feel, are a key  
10 issue because they did test with radionuclides  
11 at those areas.

12           Approximately 1,000 curies of  
13 radioactive air emissions occur annually from  
14 off gassing at inactive facilities. Soil  
15 contamination, spills, releases, deposits of  
16 contaminants released into the air,  
17 radionuclides, metals such as lead and  
18 beryllium, improper disposal of hazardous  
19 materials have resulted in widespread onsite  
20 contamination of soils. So I think this  
21 supports the 83.14 because it discusses the  
22 whole site, and basically, the disposition or

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1 the -- when they -- in the early years, they  
2 had what they called the kick-and-roll program  
3 to get rid of radionuclides. They backed up  
4 in the truck, kicked the barrels out, and then  
5 they left, and that occurred on the site  
6 before they actually established material  
7 disposal areas.

8 Surface water and sediment  
9 contamination, radionuclide metals,  
10 contaminants and fluids were historically  
11 discharged directly or indirectly into the  
12 environment, and in addition, historical  
13 spills and leaks have led and continue to lead  
14 to contamination of sediment and surface  
15 water, and this plays into the widespread  
16 problems and the issue of the sediments in the  
17 canyons.

18 This leads to groundwater  
19 contamination, and this occurs through the  
20 infiltration of hazardous substance from  
21 surface water and soils, and they are  
22 currently trying -- evaluating their program

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1 to see if it is effective in determining what  
2 types of materials are actually getting into  
3 the groundwater, which is a big issue in New  
4 Mexico, especially, because of the limited  
5 water resource. We don't have anything near  
6 as large as Niagara in New Mexico. Some  
7 examples of the contamination are tritium,  
8 plutonium-239 and 240, americium-241, and  
9 strontium-90.

10 Potential release sites are a very  
11 big issue. The MDAs, which are material  
12 disposal areas where radioactive or hazardous  
13 constituents have been disposed of, generally  
14 by burial within soil or underlying tuff.  
15 There are two MDAs, U and V, which they do not  
16 even know what is in them. They have not even  
17 classified the materials that went into those  
18 areas. So before they can even begin clean  
19 up, they're going to have to try to figure out  
20 what's in those, in order to safely do it.

21 Firing sites where radioactive or  
22 hazardous constituents have been explosively

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1 disperse, outfalls, where soils, sediments and  
2 water bodies or aquifers have been  
3 contaminated with radioactive or hazardous  
4 constituents contained or discharged  
5 effluents, and other areas of possible  
6 surface, sub-surface, or groundwater  
7 contamination. These are what are considered  
8 potential release sites, and there are a very  
9 large number of them on Los Alamos, and I  
10 discuss these as well in my petition.

11           What does this lead to?  
12 Contamination of birds and mammals. Birds and  
13 mammals are exposed to contaminants of concern  
14 through consumption of contaminated prey,  
15 incidental ingestion of contaminated soils,  
16 sediment, and/or water, and via contact with  
17 radioactive material.

18           Some further examples, gophers at  
19 LANL-G had tritium concentrations of 9.1 rad  
20 per day. Rock squirrels near radioactive  
21 waste lagoon at TA-53, which is the LANSCE  
22 facility, had a significantly higher tritium

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1 concentration, and mean concentrations of  
2 radionuclides in small mammal carcasses were  
3 found to be significantly higher at a site in  
4 Mortandad Canyon, relative to background  
5 concentration.

6 This leads us to the canary in the  
7 coal mine. Canaries are especially sensitive  
8 to methane and carbon monoxide, which made  
9 them ideal for detecting any dangerous gas  
10 build-ups. As long as the canary in the coal  
11 mine was kept singing, the miners knew the air  
12 supply was safe. A dead canary in a coal mine  
13 signaled an immediate evacuation, and this  
14 refers, or leads to this, basically, my  
15 opinion.

16 Injuries to wildlife at LANL, so  
17 the potential for harm to humans, in these  
18 source terms and exposure pathways need a  
19 better evaluation, which I believe the LANL  
20 Working Group and NIOSH and SC&A are doing at  
21 this point.

22 I had to add this information

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1 because of discussions that have occurred here  
2 at the Board concerning surrogate data, and  
3 this petition or my petition has resulted in  
4 something new, which is substitute data.

5 As you know, surrogate data is the  
6 use of exposure data from one site for  
7 individual dose reconstruction for workers at  
8 another site. Substitute data is use of  
9 exposure data for one material at a site for  
10 another material at the same site, and so far,  
11 I believe only LANL has this issue, but I do  
12 believe that there do need to be some  
13 guidelines, and I'm going to request today  
14 that the Board develop some type of criteria  
15 for this.

16 As they had was surrogate data  
17 because this is something new. I'm not sure  
18 if it's going to apply to other sites or just  
19 LANL, but I think it is a big issue that needs  
20 to be addressed, and I think that has been  
21 demonstrated today -- yesterday, with the  
22 issues that have been presented to the Board

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1 and dealt with by the Board.

2           So I guess the question is have  
3 the nuggets that I've gathered, do they weigh  
4 enough to support adding a Class to this  
5 Special Exposure Cohort, and I'm hoping that  
6 as you do your work, you do as I did, and when  
7 you find these nuggets, you do find some  
8 enjoyment in the fact that you did find them,  
9 and I thank you for your service and thanks  
10 for listening to me today.

11           ACTING CHAIR GRIFFON: Thank you,  
12 Andrew, and thanks to all the folks from New  
13 Mexico. We appreciate you coming out and  
14 giving us comments on LANL.

15           I will say one thing on the  
16 substitute data. I think this did come up in  
17 the Work Group meeting on LANL, and  
18 specifically, the use was sort of using  
19 cesium-137, which was measured to -- as a  
20 substitute for other either fission product  
21 exposures or actinide exposures, and also, I  
22 believe it was plutonium as a substitute for

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1 other transuranic exposures.

2 So -- and Jim Neton was careful to  
3 pose this as sort of a substitute model, not  
4 surrogate model, and so I think it -- I think  
5 we do need to maybe think of this as an entire  
6 Board and maybe consider if this is happening  
7 at other sites and if we need to sort of  
8 understand it better from a policy standpoint,  
9 as the entire Board.

10 MR. KATZ: Andrew, just let me ask,  
11 if you would save your presentation either to  
12 the NIOSH computer or email it to us, either  
13 way.

14 MR. EVASKOVICH: Yes, it's saved on  
15 the laptop there.

16 MR. KATZ: Okay, thank you.

17 ACTING CHAIR GRIFFON: Okay, I'm  
18 going to continue with public comments. It's  
19 just about -- it is after six now, so,  
20 continue on the public comments.

21 I have a listing here, but I  
22 believe some folks may have left. They signed

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1 up earlier and may have left. But I'll go  
2 through the listing. If you didn't sign the  
3 list, I'll certainly open it up to anyone that  
4 has joined us in the last few minutes, will be  
5 welcome to speak.

6 So just to go down the list, I  
7 have Joyce Walker on here, but I believe -- I  
8 don't believe she came back.

9 Okay, next I have Tino Franco, and  
10 I apologize if I'm mispronouncing names. Tino  
11 Franco?

12 How about [identifying information  
13 redacted]? And then let's see, Paul Dyster,  
14 Paul? You can use either microphone, wherever  
15 you're comfortable.

16 MR. DYSTER: My name is Paul  
17 Dyster. I'm Mayor of the City of Niagara  
18 Falls. I'd like to welcome you here and, you  
19 know, hope that you enjoy your stay and those  
20 that have traveled to this hearing from far  
21 away places, I hope you enjoy your stay here  
22 in Niagara Falls.

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1           It's a wonderful place to come for  
2 a visit at this time of year. It's also,  
3 unfortunately, a place that has a history that  
4 makes it very germane to the issue that is  
5 being addressed in this hearing, and I tried  
6 to stick around for the public comment period  
7 yesterday when my remarks might have been  
8 somewhat more germane to the cases that were  
9 being discussed, but I had another engagement.

10       But I thought it was important to come back  
11 this evening.

12           The City of Niagara Falls has been  
13 on record regarding the issue of atomic worker  
14 compensation since the year 2001, and in 2001,  
15 the City Council, of which I was then a  
16 member, unanimously passed a resolution  
17 relative to the Energy Employees Occupational  
18 Illness Compensation Program Act that was  
19 followed by another unanimous Council  
20 resolution in 2002.

21           The interest, of course, that we  
22 have in this issue is that a variety of

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1 facilities, including Electro Metallurgical  
2 Company, Hooker Electrochemical, and Titanium  
3 Alloys Manufacturing are facilities that were  
4 actually located in Niagara Falls, but city  
5 residents also worked at the Lake Ontario  
6 Ordnance Works, Simonds Saw and Steel, Ashland  
7 Oil, Linde Ceramics and other facilities in  
8 nearby communities, and as you've, no doubt,  
9 heard, many of these workers, hundreds of  
10 workers, at these facilities handled high  
11 levels of radioactive materials with little or  
12 no protective gear or other precautions,  
13 sometimes with little knowledge, at the time,  
14 of what it was that they were doing. All they  
15 knew was that -- you know, they were going to  
16 work in the morning, and they felt as though  
17 they were doing something that was  
18 contributing to the national security, and  
19 they thought that that was important.

20 The reason that we were passing  
21 resolutions back in 2001 and 2002 was that, of  
22 course, you know, during that time period,

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1 efforts were taken to try to provide some  
2 compensation to workers in similar  
3 circumstances. In October of 2000, the Energy  
4 Employees Occupational Illness Compensation  
5 Program Act was passed, and there was a very  
6 high level of expectation in the community at  
7 that time that finally justice was going to be  
8 done in the cases of these workers.

9 But what we found subsequently was  
10 that in order to qualify for compensation,  
11 employees or their survivors had to provide  
12 such a detailed employment history that -- and  
13 various other evidence of their past  
14 employment and trying to document their  
15 exposure, that it became very, very difficult  
16 for many of those involved to do so, and in  
17 local government, we began receiving numerous  
18 complaints about the difficulty of simply  
19 going through the process. This was even  
20 before the initial round of results, which in  
21 far more cases than the public expected,  
22 resulted in the denial of claims. Why did

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1 this happen?

2 Well, I think it happened in part,  
3 from no fault of the workers that were  
4 employed at these industries, as a result of  
5 the record keeping or lack of it, that was  
6 being done at facilities that participated in  
7 the activities in question, many of which, of  
8 course, were privately owned and where records  
9 might not have been kept with the same  
10 diligence as at government facilities, and as  
11 a result of the loss of industry in subsequent  
12 years, many of those facilities either moved  
13 overseas or were shut down, again, at no fault  
14 of the workers, but complicating their task,  
15 when they tried to reconstruct records.

16 So you had a situation where in  
17 many cases, even the best case of due  
18 diligence on the part of the worker, may have  
19 turned up very scanty records. There was even  
20 one -- a worse situation that occurred here,  
21 and I say this not because I think we're  
22 likely to be able to hold criminally culpable

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1 any of the individuals that were involved,  
2 but, you know, we had other environmental  
3 tragedies in this community, for example, the  
4 Love Canal situation.

5 In the immediate aftermath of Love  
6 Canal, there were widespread reports within  
7 the community of shredding of documents at  
8 local chemical companies, any non-essential  
9 files were essentially being destroyed because  
10 they were concerned to avoid future  
11 liabilities.

12 So besides simply records that may  
13 never have been kept, records that may have  
14 been lost through the closing of facilities or  
15 otherwise through the passage of time, I think  
16 there's a lot of evidence to suggest that in  
17 this region, at least, there was willful  
18 destruction of records that might have  
19 documented later claims.

20 To try to ask the individual who,  
21 without fault, you know, worked in an industry  
22 and then sought compensation for damage to

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1 their health and well being that they suffered  
2 as a result, to try to ask them to overcome  
3 this mountain of difficulties, in order to  
4 access compensation, you know, we didn't feel  
5 in 2001 and 2002, we don't feel today, was  
6 fair.

7           It's probably something that  
8 you've heard numerous times, with result to  
9 the claims of atomic workers. It's been  
10 attributed variously to the Magna Carta,  
11 William Penn, Gladstone, but I think it's very  
12 applicable, you know, that justice delayed is  
13 justice denied.

14           And I wanted to conclude, when  
15 these difficulties arose back some years ago,  
16 we sought assistance from our federal  
17 representatives, and two of them that were at  
18 that time and remain to this day very active  
19 in assisting the victims in attempting to  
20 achieve compensation, Senator Charles Schumer  
21 and Congresswoman Louise Slaughter, and back  
22 in December of 2002, Senator Schumer held a

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1 rally of sorts out in front of an industry on  
2 Buffalo Avenue. One of the individuals who  
3 spoke was a fellow by the name of Ernest  
4 Frank, who was then 80 years of age. He was a  
5 former iron worker who was seeking a  
6 settlement. He had worked at various  
7 industries that were involved in the nuclear  
8 weapons program back during the 1940s and  
9 1950s, and at that time he said, "Trying to  
10 get the money has been a long drawn out  
11 process. Most of the people I worked with are  
12 gone. Will I live long enough to see it? I  
13 don't know."

14 Standing at his side was Senator  
15 Schumer. Senator Schumer said, "We're going  
16 to fight for you and for the others that are  
17 in a similar position," and Senator Schumer,  
18 to his credit, did help to lead that fight at  
19 that time.

20 The next time that we held a press  
21 conference, it was with Congresswoman  
22 Slaughter. That was in March 2003, and I

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1 attended that press conference as well. I was  
2 coming from the wake of Ernest Frank. He had  
3 died that day, as it turns out, ironically.

4 His son, Chip, has been active in  
5 this fight for many, many years. He kept  
6 alive his father's memory through the  
7 subsequent years. He now himself has passed  
8 away, and I felt that it was a burden upon me,  
9 as Mayor of the City of Niagara Falls, to  
10 attach a human face to the issue that you're  
11 facing.

12 I believe that Senator Schumer is  
13 still on the case. I think that the proposals  
14 he has made for trying to overcome this  
15 impasse represent a way forward. I think the  
16 opportunity to pursue an administrative  
17 solution to this question is the most positive  
18 avenue currently available, and I would like  
19 to say that Senator Schumer, now Senator  
20 Gillibrand, who has joined the fight, and  
21 Congresswoman Slaughter, have the full support  
22 of the City of Niagara Falls and its residents

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1 in their efforts to achieve just compensation  
2 for atomic workers who have been victimized,  
3 through no fault of their own, by a very  
4 difficult set of circumstances.

5 I thank you for the opportunity to  
6 speak.

7 ACTING CHAIR GRIFFON: Thank you  
8 for the comments, and we are happy to be here  
9 to hear from you and directly from so many  
10 that worked at these facilities.

11 The next person I have is Lewis  
12 Webber. Again, some folks may have left from  
13 being here earlier. [identifying information  
14 redacted]? No? [identifying information  
15 redacted]? [identifying information  
16 redacted]? I believe that was earlier.  
17 [identifying information redacted]? Cathy  
18 Kern? Most of those ones I've read off were  
19 Bethlehem Steel, and we did have a vote on  
20 Bethlehem Steel earlier, and I think they left  
21 after that vote.

22 MS. KERN: Good evening, ladies and

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1 gentlemen, and thank you for giving me this  
2 opportunity to speak. My name is Cathy Kern,  
3 and I worked at Praxair, formerly known as  
4 Linde, for 31 years, from March 26, 1968 to  
5 June 30, 1999, when I accepted a buy-out to  
6 leave. I also worked in Building 14, which  
7 you heard about yesterday, from 1970 to 1974,  
8 which today, no longer exists due to  
9 contamination.

10 As far as the slides yesterday, it  
11 said Linde was in Tonawanda. The name is  
12 different today, since Linde decided to spin  
13 off from Union Carbide and became known as  
14 Praxair, but the site is still there.

15 I was here yesterday, and I heard  
16 the most gut-wrenching accounts of claims  
17 being denied. I gave this much thought last  
18 night. I felt I needed to come back today and  
19 provide not only support but additional  
20 information that you may or may not know. I  
21 have not filed a claim, as I am not ill yet,  
22 and I hope to not be.

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1           As an employee, for the first 25  
2 years, it was required that you got a yearly  
3 physical by the company, at the company's  
4 location. All employees, whether they were  
5 salaried or hourly, were given the same  
6 physical, which included chest X-rays, EKG,  
7 blood work, and urinalysis.

8           At the age of 47, I went to a  
9 cardiologist who informed me I had a heart  
10 murmur. When I told him I had an EKG every  
11 year and was never told this, he shrugged his  
12 shoulders and said, "Not everyone that  
13 performs and EKG can read them."

14           I often wondered what results, if  
15 anything out of the ordinary, was told to  
16 employees. We had two full-time nurses and a  
17 medical doctor on staff that was there every  
18 day. Employees were medically monitored, as  
19 well as treated for on the job injuries.

20           Once the factory closed, however,  
21 all salaried employees' physicals stopped. I  
22 often wondered, where are all these medical

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1 records that were supposedly kept on file?

2 Also, when you are an employee,  
3 your employee records do not say what building  
4 you worked in, just your title and length of  
5 time in a particular department. The Linde  
6 property, I believe, is 111 acres, and I don't  
7 even know how many buildings. They were all  
8 numbered. Could have been 40, 50.

9 We moved departments on a regular  
10 basis from buildings to buildings due to the  
11 many reorganizations that took place. We went  
12 from buildings to buildings for meetings. I  
13 moved 12 times to 14 different buildings.

14 There was a constant movement of  
15 people and a constant renovation of these  
16 buildings, and you often wonder, with all this  
17 renovation, what was disturbed? What was  
18 brought to the surface?

19 When I was in Building 14 from  
20 1970 to 1974, I was told to get a security  
21 clearance. Why? We didn't have any  
22 government contracts. That was a research

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1 building with offices, labs, and high bay.

2           However, I went and got my  
3 security clearance because that's what I was  
4 told to do. However, years later, in another  
5 engineering department, we were doing work  
6 with Oak Ridge, yet no one was told to get a  
7 security clearance. This is -- that just is  
8 something that's a big question mark with me.

9           In the late 1970s, the Linde  
10 Tonawanda Site underwent a massive expansion  
11 which included two wings in the front with the  
12 center area being the main entrance that was  
13 open three stories that included library,  
14 cafeteria, conference rooms.

15           The first floor was half in the  
16 ground. Some people called those garden  
17 apartments. So when you sat at your desk, eye  
18 level was the grass.

19           Within the first five years of  
20 occupancy, eight people on the first floor of  
21 Building 100 North, where I was, developed  
22 cancer and died. The youngest, 39, the

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1 oldest, mid-50s.

2 This concerned me, so I went over  
3 to the dispensary and asked the nurse about  
4 it. You know, her response was, "Oh, Cathy,  
5 you're getting at that age when you're  
6 noticing people are dying." I hardly thought  
7 so.

8 She then made a statement that  
9 sounded like a tape recording. She said, "The  
10 number of cancer cases here is no greater than  
11 any other company in Western New York." This  
12 made me sound like -- that's what she was told  
13 to say.

14 At the same time, I decided to put  
15 a radon detector in my office since I worked  
16 half in the ground. It was not conspicuous,  
17 but it was there. Well, somebody saw it,  
18 blabbed all over that I had one.

19 One day, a person came into my  
20 office and said to get rid of it and to  
21 remember that Karen Silkwood was murdered.  
22 Though they laughed walking out of my office,

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1 I didn't. I took it as a threat, and I got rid  
2 of the radon detector.

3 Now, also, as an employee, I was  
4 required to be inoculated with both tetanus  
5 and typhoid shots. I did not travel. When I  
6 asked why typhoid, I was told because I work  
7 in close proximity to employees that are  
8 working on various projects with nasty stuff,  
9 and I'm also handling papers that had been  
10 brought back from foreign countries. I could  
11 also be exposed to foreign nasty stuff.

12 This is just like our skilled  
13 craftsmen in the factory, who go home with  
14 their work clothes that have to be cleaned.  
15 Their families could also be exposed to  
16 contaminants. Yes, a lot of the workers took  
17 showers, changed their clothes before going  
18 home, but these same work clothes had to be  
19 cleaned, yet these families weren't inoculated  
20 against nasty stuff and contaminants.

21 I was also told, "Do not discuss  
22 or ask questions about the low level radiation

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1 issues." Everyone knew how I felt, and I just  
2 wanted answers, but I was told, there are no  
3 problems at the site. It is safe.

4 Yet on a regular basis, I watched  
5 men in what I used to call the white zoot  
6 suits, head to toe, going down into wells all  
7 over the property that are being monitored,  
8 and there was one right at the main entrance,  
9 where you walked in.

10 If it is safe, why are they there?

11 If Building 14 was so safe, why was it torn  
12 down? It is my understanding that today, one-  
13 third of the buildings on the Linde Site have  
14 been dismantled and hauled away.

15 In early 2000, I attended a public  
16 meeting regarding remediation of the Linde  
17 Site. I wrote a letter to the Army Corp of  
18 Engineers, basically to prove I worked there  
19 and the dates, since I had been -- it has been  
20 known that employee records do disappear.

21 I then gave my thoughts about the  
22 property, especially Buildings 14, which I

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1 worked in, and the tunnels that ran from  
2 Building 14 to Building 27. The letter was  
3 not threatening. It was just facts. It was  
4 questions. I even did a correlation with  
5 Agent Orange and Love Canal.

6 Five months after I sent this  
7 letter, I was at a social function sponsored  
8 by Linde retirees, and the then site manager,  
9 ripped up one side of me and down the other,  
10 demanding to know why I wrote a letter to the  
11 Army Corp of Engineers. When he started  
12 reciting phrases I used, I knew he got a copy.

13 All I said to him was, "Freedom of  
14 speech." Unbeknownst to me, some people said  
15 my letter created problems, and I have no  
16 evidence of that. Building 14 was  
17 subsequently torn down and, I believe, shipped  
18 out west for burial, and the tunnels closed  
19 and new ones installed.

20 What people do not know, and for  
21 those of you that may be saying, "How do we  
22 get records," there was a policy for all

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1 divisions of Union Carbide, which Linde was  
2 one, Mining and Metals, the others, and I  
3 forget the names of the others, all records  
4 and closed project files were to be sent to a  
5 large warehouse in Vermont.

6 We were able to retrieve these  
7 documents, as needed, on a quick turnaround  
8 time. I don't know who the person is at  
9 Praxair Tonawanda, but there has to be a  
10 person that can help get records from Vermont,  
11 maybe the safety department. I knew who used  
12 to do it, but I don't know if that person is  
13 here today. I also don't know what the  
14 medical department did with the records.

15 I am here today, not for me, but  
16 to provide information for all the workers  
17 from the companies that are trying to get  
18 their claims satisfied. I am here to support  
19 all workers I know and all workers I do not  
20 know.

21 Why does the government spend  
22 trillions of dollars on an unpopular war, but

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1 turn their backs on workers? They're doing  
2 the same thing to our returning veterans. All  
3 these workers have paid into government  
4 agencies, whether it be workmen's comp,  
5 disability, Social Security, but yet, when it  
6 comes time to collect what is due, they are  
7 denied.

8           These workers and their families  
9 should not have spent years filing claims.  
10 This ordeal faced by the families, I feel, is  
11 cruel and inhumane. It's a travesty. They  
12 have been victims twice, and three times, and  
13 four times during denial process. If you were  
14 to put a dollar value on the man hours  
15 expended in denying these claims, it would far  
16 exceed, probably by a factor of two, the  
17 amount of money these families are due.

18           Let's get that word, that awful  
19 word, cover-up, removed from the dialogs of  
20 the past many years and please, pay these  
21 people now. Thank you.

22           ACTING CHAIR GRIFFON: Thank you,

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1 Cathy, for your comments. I have Joseph Page  
2 is next on my list. Joseph?

3 MR. PAGE: Thank you. I want to  
4 thank you for allowing me to speak at this  
5 open forum, and I'm actually here for two  
6 reasons.

7 One is my father worked at Hooker  
8 Chemical from 1941 until 1968 and his untimely  
9 death at 43 years old. He died of cancer,  
10 multiple myeloma, which is one of the  
11 compensation cancers.

12 He left a family of eight and a  
13 young bride. I filed a claim on my mother's  
14 behalf and was denied. I was able to get all  
15 his medical records and his work history  
16 records but, again, no proof of radiation, but  
17 he was there from 1941 to 1968. His claim  
18 denied.

19 Well, unfortunately, I also work  
20 at -- not unfortunately that I work, but I'm  
21 also at Occidental Chemical, formerly Hooker  
22 Chemical, and I just passed my 39<sup>th</sup> year

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1       there.

2                   In the year 2007, I was diagnosed  
3 with thyroid cancer, which is rare in men, and  
4 the type of cancer I had, number one cause,  
5 radiation. I was asked by both my doctor and  
6 the surgeon if I was ever exposed to  
7 radiation, and at the time, I said, no, until  
8 later, I was to find out that residual  
9 radiation was on site at Hooker Chemical into  
10 the year 1977.

11                   My claim also denied, and all I'm  
12 asking now is to re-evaluate both my father  
13 and my compensation claims and give fair  
14 evaluation to them.

15                   ACTING CHAIR GRIFFON: Thank you,  
16 and we have an SEC review under way for  
17 Hooker, but also, if you have specific  
18 questions on your claim or your father's,  
19 there are NIOSH staff in the back of the room  
20 that might be -- right over to the side, that  
21 you might be able to follow up with after the  
22 meeting.

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1 MR. PAGE: Thank you.

2 ACTING CHAIR GRIFFON: Sure. The  
3 next person is Harry Millard.

4 MR. MILLARD: Thank you. I started  
5 working at Simonds Saw and Steel in 1959,  
6 February, and I had 25 years over there, until  
7 it closed.

8 About two years ago, they wrapped  
9 the plant up and in certain areas over there,  
10 that are still, you know, showing radioactive  
11 waste and stuff, but -- and of those four  
12 buildings, I've worked in all of them, for  
13 five years, and I've got prostate cancer.

14 My question is, and I don't like  
15 it, is why is not prostate cancer on that  
16 list? There are 22 other cancers, and  
17 prostate cancer is not there, and I'm still  
18 having trouble with bladder, bowel infections,  
19 that stuff, and I -- you can't tell me that  
20 unless somebody can definitely prove that it  
21 wasn't caused by that, over there, for --  
22 because I worked the swing grinders over there

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1 for almost three years and ground steel that,  
2 they never told us what it was, and I never --  
3 you know, you just went in, you did your day's  
4 work, you got out.

5 The 16 inch, there's four areas,  
6 10 inch, 16 swing grinders and the old mill  
7 shop, and I used to pull a lot of doubles on  
8 the 16 inch because that's where the money  
9 was, if you wanted to, you know, get a good  
10 paycheck.

11 And I've worked almost three years  
12 on the swing grinders, and I also worked in  
13 the old mill shop, where the old hammer was,  
14 and they built right over that thing, they put  
15 a pickle house over there. If they would dig  
16 that floor up, I hate to tell you the amount  
17 of readings they'd get.

18 Okay, I'd like to thank you people  
19 for hearing me out, but it's a shame that the  
20 prostate cancer is not on there, and I just  
21 want to -- and I hope somebody can do  
22 something about it. Thank you.

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1           ACTING CHAIR GRIFFON: Thank you,  
2           yes, and the actual list, you're right, it  
3           isn't on the list of cancers, and it's sort  
4           out of the Board's purview to weigh in on  
5           that, but you are eligible to file a claim and  
6           --

7           MR. MILLARD: I've been denied  
8           twice.

9           ACTING CHAIR GRIFFON: Okay.

10          MR. MILLARD: And I -- you know, I  
11          got seven guys that worked on the swing  
12          grinders and if it is a coincidence, it might  
13          get done -- all of us got prostate cancer.

14          ACTING CHAIR GRIFFON: Yes.

15          MR. KATZ: Just to be clear, that  
16          list is established by Congress and is in  
17          statute. So it's not something the Board  
18          could affect.

19          MR. MILLARD: Well, thanks for  
20          hearing me out.

21          ACTING CHAIR GRIFFON: Appreciate  
22          your comments, yes, and that's all I have on

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1 the list, but I've seen some other people come  
2 in, so I'm going to ask in the room, if anyone  
3 that wants an opportunity to make some public  
4 comments, please, step forward and identify  
5 yourself at the microphone. Anyone want to  
6 make public comments?

7 MR. KATZ: I also --

8 ACTING CHAIR GRIFFON: I was going  
9 to ask on the phone, if there is anyone on the  
10 phone line that wants to make public comments  
11 at this time, we could have those heard.  
12 Anyone on the phone line?

13 Last chance for the room, anyone  
14 want to make a public comment or statement?  
15 If there's no more, Ted might have something  
16 else to close.

17 MR. KATZ: Mark, I have actually a  
18 couple of comments.

19 ACTING CHAIR GRIFFON: Okay, yes.

20 MR. KATZ: People gave me notes  
21 that they asked that I read into the record,  
22 for -- who couldn't be here this evening.

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1                   So I'm not going to give the name  
2                   in these cases because neither of these people  
3                   authorized me to give their name, but here is  
4                   the first statement, from up here in Angola,  
5                   New York.

6                   "NIOSH is asking claimants for  
7                   medical information that is impossible to  
8                   obtain if your family member died in 1963.  
9                   This is considered age discrimination. The  
10                  employee job location automatically put them  
11                  in direct contact with cancer causing agents.  
12                  This is truly difficult to resurrect. This  
13                  is truly difficult to resurrect all the health  
14                  records. The claimants should be given  
15                  consideration for direct exposure."

16                  The second statement I have, it  
17                  says, "My husband, Edward M." and I can't make  
18                  out the last name, "worked in several  
19                  departments of the Bethlehem Steel and passed  
20                  away from cancer of the lung. I was wondering  
21                  why he is not entitled to receive any benefits  
22                  from Bethlehem Steel. He worked for South

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1 Buffalo Railway, which was a subsidiary of the  
2 steel plant, during the years of 1947 to  
3 1953."

4 Thank you, that's it.

5 ACTING CHAIR GRIFFON: Okay, and if  
6 there is anyone -- one more time, anyone else  
7 in the room, public comments? Like to make a  
8 statement?

9 MR. OWENS: Sure.

10 ACTING CHAIR GRIFFON: If you could  
11 just give us your name, for the court  
12 recorder.

13 MR. OWENS: My name is Carey  
14 Owens, Jr. I worked at Bethlehem Steel  
15 starting in -- I started in '46, but I had to  
16 go back in the Service because I was already  
17 in the Reserves, and I came back in '53, and I  
18 worked in the lab carrying samples from  
19 different various parts of the plant, and one  
20 thing I remember, in the lab, they had some  
21 kind of pipes or something like that, that  
22 they used.

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1                   ACTING CHAIR GRIFFON: I'm sorry,  
2                   in the back of the room, if you could -- we're  
3                   picking you up up here pretty loud. Sorry, go  
4                   ahead.

5                   MR. OWENS: They had some kind of  
6                   pipes, they called them rods, that they'd use  
7                   to some kind of atomic construction or what-  
8                   not, and in and out of this lab I would pass  
9                   these particular items, and it was very  
10                  curious to me, but no one ever explained what  
11                  they were about.

12                  But I worked there for 29 years  
13                  and I took my pension and went on the TRW  
14                  training period, and from that, I went into  
15                  the locksmith business, where I wound up at  
16                  the atomic plant in West Valley, and during  
17                  this particular time, replacing locks and  
18                  making locks, what-not.

19                  Some of my equipment that I used,  
20                  they wouldn't allow me to take it out of the  
21                  plant because it -- these little Geiger kind  
22                  of things would pick up whatever it was

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1 picking up.

2 So I did that for two and a half  
3 years. But I had been following this  
4 Bethlehem Steel thing, and I've taken tests  
5 here and there, and they seem to always come  
6 up negative. So I was wondering if there is  
7 any change in the implements of -- that we may  
8 be able to get some benefits.

9 ACTING CHAIR GRIFFON: Yes, thank  
10 you for your comments and we -- yes, we  
11 actually had a vote earlier today on Bethlehem  
12 Steel, and the Board is recommending adding a  
13 Class, a Special Exposure Cohort Class for `47  
14 to `52, is that right?

15 MR. KATZ: Forty-nine.

16 ACTING CHAIR GRIFFON: Forty-nine  
17 to `52, I'm sorry, 1949 to `52. But anyway,  
18 are there any further comments in the room?

19 Okay, if there's no more public  
20 comments, I think we're adjourned for tonight.  
21 We start at 8:30 tomorrow?

22 MR. KATZ: Yes, we do.

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1                   ACTING CHAIR GRIFFON: Eight-thirty  
2 tomorrow, bright and early, guys, 8:15 a.m.,  
3 oh, yes, I've got to welcome people.

4                   MR. KATZ: Thank you everybody,  
5 very much and thank you, Paul and David, for  
6 sticking this out.

7                   (Whereupon, the above-entitled  
8 matter went off the record at 6:35 p.m.)  
9  
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