

THE U.S. DEPARTMENT OF HEALTH AND HUMAN SERVICES  
PUBLIC HEALTH SERVICE  
CENTERS FOR DISEASE CONTROL AND PREVENTION  
NATIONAL INSTITUTE FOR OCCUPATIONAL SAFETY AND HEALTH

convenes

MEETING 44

ADVISORY BOARD ON  
RADIATION AND WORKER HEALTH

VOL. II  
DAY TWO

The verbatim transcript of the 44th  
Meeting of the Advisory Board on Radiation and  
Worker Health held at the Cincinnati Marriott  
Northeast, Mason, Ohio, on Feb. 8, 2007.

C O N T E N T S

Feb. 8, 2007

WELCOME AND OPENING COMMENTS DR. PAUL ZIEMER, CHAIR DR. LEWIS WADE, DESIGNATED FEDERAL OFFICIAL	8
FERNALD SEC PETITION MR. MARK ROLFES, NIOSH/OCAS PETITIONERS	10
ROCKY FLATS SEC UPDATE MR. MARK GRIFFON, ABRWH PETITIONERS	106
DOW CHEMICAL SEC PETITION UPDATE MR. LAVON RUTHERFORD, NIOSH/OCAS PETITIONERS	130
WORKING GROUP REPORTS WORKING GROUP CHAIRS	221
PUBLIC COMMENT DR. PAUL ZIEMER, CHAIR	270
COURT REPORTER'S CERTIFICATE	367

**TRANSCRIPT LEGEND**

The following transcript contains quoted material. Such material is reproduced as read or spoken.

In the following transcript: a dash (--) indicates an unintentional or purposeful interruption of a sentence. An ellipsis (. . .) indicates halting speech or an unfinished sentence in dialogue or omission(s) of word(s) when reading written material.

-- (sic) denotes an incorrect usage or pronunciation of a word which is transcribed in its original form as reported.

-- (phonetically) indicates a phonetic spelling of the word if no confirmation of the correct spelling is available.

-- "uh-huh" represents an affirmative response, and "uh-uh" represents a negative response.

-- "\*" denotes a spelling based on phonetics, without reference available.

-- (inaudible)/ (unintelligible) signifies speaker failure, usually failure to use a microphone.

**P A R T I C I P A N T S**

(By Group, in Alphabetical Order)

BOARD MEMBERSCHAIR

ZIEMER, Paul L., Ph.D.  
Professor Emeritus  
School of Health Sciences  
Purdue University  
Lafayette, Indiana

EXECUTIVE SECRETARY

WADE, Lewis, Ph.D.  
Senior Science Advisor  
National Institute for Occupational Safety and Health  
Centers for Disease Control and Prevention  
Washington, DC

MEMBERSHIP

BEACH, Josie  
Nuclear Chemical Operator  
Hanford Reservation  
Richland, Washington

1 CLAWSON, Bradley  
2 Senior Operator, Nuclear Fuel Handling  
3 Idaho National Engineering & Environmental Laboratory

GIBSON, Michael H.  
President  
Paper, Allied-Industrial, Chemical, and Energy Union  
Local 5-4200  
Miamisburg, Ohio

GRIFFON, Mark A.  
President  
Creative Pollution Solutions, Inc.  
Salem, New Hampshire

1           LOCKEY, James, M.D.  
2           Professor, Department of Environmental Health  
3           College of Medicine, University of Cincinnati

4           MELIUS, James Malcom, M.D., Ph.D.  
5           Director  
6           New York State Laborers' Health and Safety Trust Fund  
7           Albany, New York

          MUNN, Wanda I.  
          Senior Nuclear Engineer (Retired)  
          Richland, Washington

          POSTON, John W., Sr., B.S., M.S., Ph.D.  
          Professor, Texas A&M University  
          College Station, Texas

          PRESLEY, Robert W.  
          Special Projects Engineer  
          BWXT Y12 National Security Complex  
          Clinton, Tennessee

          ROESSLER, Genevieve S., Ph.D.  
          Professor Emeritus  
          University of Florida  
          Elysian, Minnesota

          SCHOFIELD, Phillip  
          Los Alamos Project on Worker Safety  
          Los Alamos, New Mexico

SIGNED-IN AUDIENCE PARTICIPANTS

ADAMS, NANCY, NIOSH  
BALDRIDGE, SANDRA, PETITIONER  
BEATTY, SR., EVERETT RAY, FERNALD MEDICAL SCREEN  
BEHLING, HANS, SC&A  
BEHLING, KATHY, SC&A  
BREYER, LAURIE, NIOSH  
BROCK, DENISE, NIOSH  
BROEHM, JASON, CDC WASHINGTON OFFICE  
BURGAN, LARRY, DOW/SCI  
BURNS, JOHN  
CALLAWAY, ALLEN, FERNALD MEDICAL SCREENING  
CALVERT, CHARLES, MOUND  
CAMPBELL, EMMA E.  
CANTWELL, MIKE, CONG. STEVE CHABOT  
CHANG, C, NIOSH  
CORWEN, CHRISTINE, CONSTELLA  
CRAWFORD, LISA, TRESH  
CRAWFORD, PATSY  
CRAWFORD, RUDY  
D'ANGELO, JAY, ATTORNEY  
DICKEY, JOSEPH, CONSTELLA  
DONG, MAXIA, NIOSH/OCAS  
ELLIOTT, LARRY, NIOSH  
ELLIOTT, MARY, ORAUT  
ELLISON, CHRIS, NIOSH  
EVASKOVICH, ANDREW K., LOCAL #69  
FITZGERALD, JOSEPH, SC&A  
GAFFY, VICKI  
GRANT, ROGER, ORAU  
HOPPE, BILL  
HILL, STEPHEN S., CONG. STEVE CHABOT  
HINNEFELD, STUART, NIOSH  
HOMOKI-TITUS, LIZ, HHS  
HOWELL, EMILY, HHS  
HUGHES, LAURA, CONSTELLA  
JERISON, DEB  
JOHNSON, KAREN  
JOHNSON, MARY  
KOTSCH, JEFF, U.S. DOL  
LATTIMORE, SUSIE L., FERNALD  
LEAVY, GLENDA, NIOSH

LEWIS, MARK, ATL  
MAHER, ED, DMA/ORAUT  
MAKHIJANI, ARJUN, SC&A  
MAURO, JOHN, SC&A  
MCFEE, MATTHEW, ORAUT  
MCKEEL, DAN, SINEW  
MILLER, RELADA, NIOSH/OCAS  
NESSELHAUF, NELLIE  
PALLER, RICHARD, NUMEC  
PATTERSON, AGATHA  
PETERS, DEB  
PRESLEY, LOUISE S., WIFE OF ROBERT PRESLEY  
PUFF, TIM, CONSTELLA  
RAMSPOTT, JOHN, SINEW  
ROLFES, MARK, NIOSH  
RUTHERFORD, LAVON, NIOSH  
SALEYRETTE, RUTH  
SCHAEFFER, D. MICHAEL, SAIC  
SCHNORR, TERRI, NIOSH  
SENTKER, TED, G.E.  
SHEEHAN, WARREN, MOUND  
SIEBERT, SCOTT R., ORAUT  
SIMMONS, HOMER  
SKINTIK, ED, DOE  
SOUTHERLAND, G.H.  
TABOR, ROBERT G., FERNALD  
TIDWELL, CATHERINE  
ULSH, BRANT, NIOSH  
WHITE, LIBBY, DOE  
WILLIAMS, RICHARD D., NIOSH  
ZACCHERS, MARY JO, ORAU  
ZIEMER, MARILYN

P R O C E E D I N G S

(8:45 a.m.)

WELCOME AND OPENING COMMENTS

DR. PAUL ZIEMER, CHAIR

DR. LEWIS WADE, DFO

1 DR. ZIEMER: I'm going to call the meeting to order.

2 This is the second day of our Cincinnati  
3 meeting of the Advisory Board on Radiation and  
4 Worker Health.

5 Before we begin our session this morning I'd  
6 like to remind everyone -- Board members,  
7 federal staff people, members of the public --  
8 please register your attendance if you have not  
9 already done so. There's a registration book  
10 in the corridor just outside the room.

11 Also on the table in the back there are copies  
12 of today's agenda, as well as a number of other  
13 documents that are available for your use  
14 relating to items on the agenda this week.

15 (Pause)

16 I was just checking to make sure that there are  
17 also some NIOSH staff people available for  
18 assisting individual claimants. If you are  
19 here today and have a particular question  
20 regarding a claim that you need help on, there  
21 are NIOSH staff people and you can find out who

1 and where they are by checking with LaShawn at  
2 the back table, also.

3 Now I'm going to call on Lew Wade, our  
4 Designated Federal Official, to make a couple  
5 of opening remarks before we get into the  
6 agenda.

7 **DR. WADE:** Well, first just welcome and thank  
8 you for coming. I know it's cold out there and  
9 we appreciate your coming. This Board does  
10 important things -- at least we think so -- but  
11 we can do them better when you're here to  
12 observe us and to input to our deliberations,  
13 so thank you very much for being here.  
14 I would like to -- to see if we have folks on  
15 the line. Particularly is Mike Gibson with us  
16 on the line?

17 **MR. GIBSON:** Yes, I'm here.

18 **DR. WADE:** Welcome, Mike. The other issue that  
19 I'd address briefly is that we're going to  
20 start this morning taking up the Fernald SEC  
21 petition. In order to have a Board of  
22 qualified individuals, individuals who bring  
23 knowledge and substance to the deliberation,  
24 many of the Board members have experiences at  
25 different sites. And the Board operates with

1           its own series of rules, that if a Board member  
2           has a conflict at a certain site, then that  
3           Board member won't participate, for example, in  
4           a review of an individual dose reconstruction  
5           audit that focuses on that particular site. If  
6           the Board member is conflicted, then they won't  
7           make motions or vote on site profile  
8           activities. But in the nature of SEC  
9           petitions, if a Board member has a conflict,  
10          then they won't participate in the discussion  
11          of that SEC petition. They obviously won't  
12          vote or make motion. We have one Board member  
13          conflicted at Fernald, that's Dr. Lockey, and  
14          therefore Dr. Lockey is not at the table. He  
15          is with us in the audience and could  
16          participate as a member of the public, but not  
17          as a member of the Board.

18          Thank you.

19          **DR. ZIEMER:** Thank you very much, Lew.

**FERNALD SEC PETITION**

**MR. MARK ROLFES, NIOSH/OCAS**  
**PETITIONERS**

20          We will then proceed with consideration of the  
21          Fernald SEC petition. We're going to hear from  
22          NIOSH first. NIOSH will present their petition  
23          evaluation report. Then we will hear from the  
24          petitioners. Sandra Baldrige is here

1           representing the petitioners and she, and  
2           perhaps some of her colleagues, will address us  
3           at that time.

4           So first Mark Rolf (sic) from NIOSH will  
5           present the NIOSH petition evaluation report.  
6           Mark, welcome.

7           **MR. ROLFES:** Thank you, Dr. Wade, and thank  
8           you, Dr. Ziemer, ladies and gentlemen. My name  
9           is Mark Rolfes. I'm a health physicist from  
10          the National Institute for Occupational Safety  
11          and Health, Office of Compensation Analysis and  
12          Support. I've been working on the dose  
13          reconstruction project at NIOSH for about four  
14          and a half years as a health physicist. I  
15          complete dose reconstructions. I review  
16          technical documents and I have been involved in  
17          the Special Exposure Cohort evaluations.  
18          Today I am here to present to you information  
19          on the Special Exposure Cohort petition  
20          evaluation report for the Feed Materials  
21          Production Center, or Fernald.

22          Before I begin I would like to acknowledge the  
23          petitioner and thank Ms. Sandra Baldrige for  
24          her excellent petition that she put together,  
25          as well as all the Fernald workers that we were

1           able to go out and speak with.  
2           Feed Materials Production Center, better known  
3           as Fernald, the construction began in May of  
4           1951 and all plants became operational by 1954.  
5           Production continued until July of 1989.  
6           Fernald's purpose was to supply high purity  
7           uranium metal fuel cores to plutonium  
8           production reactors at Savannah River and  
9           Hanford. Fernald also produced thorium for the  
10          Aircraft Nuclear Propulsion Program and for  
11          light water breeder reactors. In 1972 Fernald  
12          became designated as the DOE repositior for  
13          thorium. Fernald was also a storage site for  
14          the K-65 raffinates, the waste materials that  
15          were left behind after uranium was extracted  
16          from the ore.  
17          NIOSH received an SEC submission, which we  
18          qualified -- I'm sorry. NIOSH received an SEC  
19          submission on December 12, 2005. We received  
20          an addendum to the SEC submission on January  
21          24th, 2006. We qualified the evaluation on  
22          April 6th, 2006, and we received another  
23          addendum to the SEC submission on September  
24          25th, 2006. NIOSH has issued its evaluation  
25          report on November 3rd, 2006.

1           The petition submission had a proposed class  
2           definition of "All employees of DOE, DOE  
3           contractors or subcontractors who worked at all  
4           locations at Feed Materials Production Center  
5           in Fernald, Ohio, also known as the Fernald  
6           Environmental Management Project, from January  
7           1st, 1951 through December 31st, 1989." The  
8           petition was submitted to NIOSH on behalf of a  
9           class of employees at Fernald.

10          In the evaluation of the Special Exposure  
11          Cohort for Fernald we have various technical  
12          documents prepared by our contractor, Oak Ridge  
13          Associated Universities, and Technical Basis  
14          Documents which comprise our site profile for  
15          Fernald which we use in dose reconstructions.  
16          We also went out and spoke with former Fernald  
17          employees. I went out to a Fernald retirees  
18          group meeting on May 2nd of 2006. We have  
19          information available to us in our case files,  
20          which we have in our claims tracking database.  
21          We have an additional repository of documents  
22          which includes air monitoring data and other  
23          miscellaneous records.

24          **UNIDENTIFIED:** (Off microphone)  
25          (Unintelligible)

1           **MR. ROLFES:** I'm sorry? I apologize. We have  
2           documentation that was provided to us by the  
3           petitioner, as well as affidavits from the  
4           petitioner. We also have available to us  
5           information from the Fernald Historical Records  
6           database, information from the Health  
7           Information System. We have information from  
8           the CEDR database, which is the Comprehensive  
9           Epidemiologic Data Resource. We have Mobile In  
10          Vivo Radiation Monitoring Lab chest counts from  
11          1965 through 1989. And we also have a study  
12          that was conducted by Dr. Susan Pinney from  
13          U.C. which is titled "Radon and Cigarette  
14          Smoking Exposure Assessment of Fernald  
15          Workers."  
16          The information that we have within our claims  
17          tracking system, the NIOSH/OCAS Claims Tracking  
18          System, indicates that we have 690 claims that  
19          have -- excuse me -- 690 claims that meet the  
20          class definition. Of those 690 claims, we have  
21          completed 619 dose reconstructions, which is a  
22          little over 90 percent of the claims that fall  
23          into this category. Of those 690 claims that  
24          we have, we had records of internal dosimetry  
25          for 631 of those claims, and external dosimetry

1 records for 641 of those claims.  
2 Now the SEC submission that we received for  
3 Fernald had several bases and concerns in the  
4 petition, and I will go through these briefly  
5 here and then go and discuss those in a little  
6 bit more detail. There was a concern about the  
7 lack of monitoring for recycled uranium  
8 contaminants. There was a concern about the  
9 lack of monitoring for thorium; a concern  
10 regarding the lack of monitoring for radium and  
11 its daughters, such as radon. There was a  
12 concern that there was no personnel or area  
13 monitoring for neutron exposures. There was a  
14 concern about the use of respiratory protection  
15 at the K-65 processes -- at the K-65 silos.  
16 There was a concern that internal dose was not  
17 assigned from bioassay or from air monitoring  
18 data. And there was a concern about the  
19 falsification of data.  
20 The petition concern regarding the lack of  
21 monitoring for internal exposures from recycled  
22 uranium contaminants was presented to us. When  
23 NIOSH completes a dose reconstruction, however,  
24 we use uranium bioassay to determine uranium  
25 intake. From that uranium intake, based on

1           documented information and ratios of these  
2           other radionuclides, we're able to estimate  
3           intakes of those recycled uranium contaminants.  
4           There was a concern that there was no in vitro  
5           monitoring for thorium, and there was a concern  
6           that there were no intakes assigned for Plant 6  
7           thorium work between 1960 and 1963. However,  
8           NIOSH has assigned intakes based on a  
9           distribution of breathing zone air sampling  
10          data and the in vivo measurements that were  
11          conducted on the site. NIOSH has acquired and  
12          evaluated in excess of 6,000 in vivo results,  
13          and between 2,000 and 4,000 thorium air  
14          sampling results. These are actively being  
15          evaluated and put into a coworker model that  
16          will be used to update the site profile.  
17          There was a concern about the lack of bioassay  
18          for radium or its progeny. However, NIOSH has  
19          located more than 600 radon breath samples  
20          which we can use to estimate radium intakes.  
21          There was a concern that there was no neutron  
22          dosimetry. However, if you take a look at the  
23          operations and the materials on site, there  
24          really wasn't a significant potential for  
25          neutron exposures at Fernald. However, when we

1 do a dose reconstruction for certain areas, for  
2 certain workers, we do assign neutron dose in a  
3 dose reconstruction based on the 95th  
4 percentile neutron-to-photon ratios from  
5 information documented in our Technical  
6 Information Bulletins.

7 There was a petition concern that doses were  
8 calculated on the basis that all workers wore  
9 respirators at the K-65 silos. However, we  
10 have bioassay data available to us, and the  
11 bounding exposure scenario and dose  
12 reconstructions are developed under the  
13 assumption that no respiratory protection was  
14 used.

15 There was a petition concern that uranium  
16 urinalyses were conducted for chemical toxicity  
17 purposes rather than radiation dosimetry.  
18 However, this does not prevent us from doing  
19 dose reconstructions. We receive uranium  
20 urinalysis results in units of mass which we  
21 can convert to an activity excretion result.  
22 We are able to estimate an intake based on the  
23 urinalysis results and calculate an internal  
24 dose from -- from that. We have in excess of  
25 180,000 urinalysis results from Fernald

1 workers.

2 There was a concern about the falsification of  
3 data, the concern that the air monitoring data  
4 were manipulated to give the appearance that  
5 air dust levels were lower. What NIOSH does  
6 when we complete a dose reconstruction, we rely  
7 primarily on an individuals bioassay data for  
8 estimating an intake, and then calculating the  
9 internal dose. However, if bioassay data are  
10 not available for that individual, for example,  
11 if that individual didn't provide a urine  
12 sample or didn't have a chest count -- we would  
13 estimate that person's radiation exposure based  
14 on coworker information. Only then if we don't  
15 have coworker information would we rely on air  
16 sampling data, and we would use a distribution  
17 of air sampling data to estimate that worker's  
18 intake, and we would not assume -- we would  
19 assume that the worker was not using a  
20 respirator, and this results in claimant-  
21 favorable intakes, which result in a higher  
22 internal dose.

23 Now I wanted to take you through a couple of  
24 sample dose reconstructions to show -- to  
25 demonstrate how we would reconstruct someone's

1           dose, and I tried to address some of the  
2           specific concerns of the petition, so -- this  
3           first sample is a dose maximizing scenario for  
4           an individual that worked in Plant 9 as a  
5           chemical operator. This individual does not  
6           represent anyone that we have as a claimant.  
7           It's a -- it's a hypothetical scenario, so --  
8           this individual was a male. He was born in  
9           1932 and diagnosed with cancer in the year  
10          2000. For the purposes of lung cancer, we have  
11          information on his smoking history. We've  
12          documented that he was a former smoker, so this  
13          individual worked in Plant 9 during 1954 and  
14          1955. It was during this time period that  
15          Fernald produced in excess of 450 metric tons  
16          of thorium, and it was during this time period  
17          that we have a very robust set of thorium air  
18          monitoring data.

19          What NIOSH has done in this sample is to assign  
20          the highest recorded air dust results to  
21          estimate the worker's maximum intake for SEC  
22          purposes. We have not applied any respiratory  
23          protection factors, and we have assumed that  
24          the thorium was in 100 percent equilibrium with  
25          its progeny.

1           The maximum intakes that we have assigned for  
2           1954 are 7,150 picocuries per day via  
3           inhalation, and 148 picocuries per day via  
4           ingestion. For 1955 we have assigned 10,500  
5           picocuries per day via inhalation and 217  
6           picocuries per day via ingestion.

7           We have calculated the internal doses for three  
8           target organs just to demonstrate the -- the  
9           dose and the probability of causation. We have  
10          calculated the internal doses between 1954, the  
11          year of the first intake, through the year of  
12          cancer diagnosis in 2000.

13          As you can see, the dose to the rectum for a  
14          rectal cancer would have been about 48 and a  
15          half rem and results in a probability of  
16          causation of 28 percent. The kidney's dose was  
17          approximately 229 rem and resulted in a  
18          probability of causation of 85 percent. The  
19          target organ, lung, for a lung cancer, the lung  
20          would have received approximately 2,486 rem and  
21          would cause a probability of causation of 98  
22          percent.

23          We have put together a second sample dose  
24          reconstruction for this presentation for a  
25          worker that dumped raffinates into the K-65

1 silos for six weeks during 1952. Once again,  
2 we assume that no respiratory protection  
3 factors were applied, and this is very claimant  
4 favorable and results in a maximizing dose  
5 estimate.

6 Following this individual's work at the K-65  
7 silos he provided a radon breath analysis, and  
8 this is a form of bioassay, as well. This  
9 bioassay result indicated that the employee was  
10 exhaling .6 picocuries of radon-222 per liter  
11 of air. From that bioassay result NIOSH is  
12 able to estimate the radium body burden, and we  
13 estimated that the radium body burden was .15  
14 microcuries. We did this using a dose  
15 conversion factor from one of our Technical  
16 Basis Documents, a dose conversion factor of  
17 2.5 times ten to the 5th picocuries of radium-  
18 226 per picocurie per liter of exhaled radon-  
19 222. The radium body burden was converted to a  
20 chronic intake rate of 42,000 picocuries per  
21 day.

22 As you can see on this slide, we have estimated  
23 the radium-226 intake rate -- and that's  
24 documented in this slide in column three.  
25 Because we know the radium-226 intake, we were

1           able to assign intakes of other associated  
2           radionuclides, based on measured information  
3           from Silo 2. Column one up there shows the  
4           various isotopes that were in Silo 2. Column  
5           two shows the activity relative to the radium-  
6           226 activity. And finally column four shows  
7           the intake rates in picocuries per day of all  
8           associated radionuclides.

9           So based on six weeks of chronic intake of K-65  
10          raffinates for a male who was born in 1932 and  
11          was diagnosed with cancer in 1990, and for lung  
12          cancer purposes he was also a former smoker, we  
13          have calculated internal doses from 1952  
14          through 1990 for the colon, for the lung and  
15          for a bone cancer.

16          The colon received approximately three rem and  
17          resulted in a probability of causation of 24  
18          percent. The lung cancer -- the lung received  
19          368 rem and resulted in a probability of  
20          causation of 96 percent. For the bone cancer,  
21          the bone dose was approximately 6,000 rem and  
22          resulted in a probability of causation of 99  
23          percent.

24          NIOSH has evaluated the petition using  
25          guidelines in 42 CFR 83.13 and has submitted a

1 summary of its findings in our Petition  
2 Evaluation Report to the Board and to the  
3 petitioners. This evaluation report was  
4 submitted on November 3rd, 2006.

5 As part of the evaluation process there is a  
6 two-pronged test that was established by  
7 EEOICPA and incorporated into 42 CFR 83.13.  
8 First, NIOSH must determine whether it is  
9 feasible to estimate the level of radiation  
10 doses of individual members of the class with  
11 sufficient accuracy. Second, NIOSH must  
12 determine if there is a reasonable likelihood  
13 that such exposures could have endangered the  
14 health of members of the class.  
15 NIOSH has found that the available monitoring  
16 records, process descriptions and source term  
17 data are adequate to complete dose  
18 reconstructions with sufficient accuracy for  
19 the proposed class of employees. And  
20 therefore, purely speaking under the law, NIOSH  
21 is not required to make a health endangerment  
22 determination.

23 This summarizes the feasibility findings for  
24 the Fernald SEC petition, indicating that dose  
25 reconstructions are feasible from various

1 sources of exposure -- internal exposures from  
2 uranium, thorium, as well as other  
3 radionuclides; and external exposures from  
4 beta-gamma exposures, neutron exposures and  
5 medical X-ray exposures that were required as a  
6 condition of employment.

7 Additional documentation and additional sample  
8 dose reconstructions are available for the  
9 Advisory Board's review under the NIOSH share  
10 drive folder, "Document Review\AB Document  
11 Review\Fernald".

12 And finally, and most importantly, I would like  
13 to thank all Fernald workers for their  
14 contribution to the defense and the security of  
15 the United States of America. Thank you.

16 Are there any questions?

17 **DR. ZIEMER:** Thank you, Mark. Let's move right  
18 directly to the petitioners then, and then  
19 we'll open the floor for additional discussion  
20 and questions.

21 So Sandra Baldrige is here to represent the --

22 **UNIDENTIFIED:** (Off microphone)

23 (Unintelligible)

24 **MS. BALDRIDGE:** I appreciate having this  
25 opportunity to present this petition in behalf

1 of the workers at the Feed Materials Production  
2 Center. I'm assuming that you've received a  
3 copy of the presentation.

4 My name is Sandra Baldrige. My father, Julius  
5 Wolff\*, worked in Plant 6 from January 1952  
6 until November 1963. I was privileged to gain  
7 access to several of the 1994 trial documents  
8 while I was preparing a request for  
9 reconsideration of my father's claim. It was  
10 then that I discovered sufficient deficiencies  
11 in the Fernald site profile.

12 I've reviewed countless documents while  
13 preparing the petition, and since. We're here  
14 today because of the contents of those  
15 documents. I believe the filing of this  
16 petition will re-- will result in a greater  
17 truth being realized about Fernald.

18 The documents presented demonstrate the actions  
19 of a company working for the government for 35  
20 years, but not with the government. National  
21 Lead of Ohio rejected suggestions that would  
22 have improved the quality of their records.  
23 They ignored DOE policy made in 1960, to  
24 operate in a safe and responsible manner, by  
25 failing to implement the as -- the "as low as

1 reasonably achievable" approach to radiation  
2 control. It took them 22 years, until 1984, to  
3 recognize the important of -- the importance of  
4 the concept. Unfortunately, their attitudes  
5 and actions resulted in the injury of many  
6 people.

7 I believe the exposure levels demonstrated in  
8 the documents, in conjunction with the  
9 indifference of some in management, made it  
10 possible -- made it impossible to accurately  
11 assess the exposure incurred by the workers.  
12 Scientists are frequently expected to make  
13 decisions in the absence of complete  
14 information. The magnitude of the variables  
15 involved, however, can make it difficult to  
16 provide answers with absolute certainty.  
17 The National Research Council addressed the  
18 issue of data quality in its 1989 review of  
19 worker's health and safety in the weapons  
20 complex. The Council stated that the data  
21 collected at DOE sites during ongoing  
22 monitoring and surveillance programs are useful  
23 in addressing risks to workers' health only to  
24 the extent that the data are accurate,  
25 comprehensible -- comprehensive, accessible and

1           comparable. The data collected in the past,  
2           the Council concluded, are inadequate, both  
3           because of the kinds of data collected and the  
4           means in which they were stored.

5           I don't believe NIOSH has the information  
6           necessary to do dose reconstruction with  
7           sufficient accuracy for the workers at Fernald.  
8           There are differences of opinion concerning the  
9           quality of that data. I have included notes  
10          from some of the documents I've received.  
11          The first is a Government Accounting Office  
12          report that was prepared at the request of  
13          Senator John Glenn, and it was requested after  
14          there was an incident involving a release of  
15          radiation of uranium dust into the atmosphere.  
16          It -- the report was broken into two documents.  
17          The first sheet is a facts -- the fact sheet.  
18          It says the DOE's Oak Ridge Operation Office  
19          oversaw the contractors operating at Fernald.  
20          In its 1984 report the task force noted that  
21          Fernald overemphasized production, making  
22          environmental and health safety a secondary  
23          concern.  
24          The 1980 to 1984 annual environmental reports  
25          prepared by Fernald showed its radioactive air

1 emissions were below DOE's exposure standards.  
2 Oak Ridge, the United States Environmental  
3 Protection Agency, and the State of Ohio have  
4 questioned the accuracy of that data.

5 The DO (sic) report showed that between 1980  
6 and 1983 the plant had the second or third  
7 highest dose of any DOE plant, and in 1984 it  
8 had the highest dose, even though it processed,  
9 according to the DOE officials, some of the  
10 least radioactive material of any DOE facility.  
11 Oak Ridge, the U.S. EPA and Ohio state  
12 officials have questioned the reliability of  
13 Fernald's air monitoring system and reported  
14 release data.

15 In June 1984 an Oak Ridge appraisal noted that  
16 Fernald's sampling equipment and data analysis  
17 were questionable. ORAU conducted an  
18 independent assessment. The ORAU report  
19 pointed out that Fernald's source sampling  
20 equipment did not provide accurate emissions  
21 data and the on-site monitoring were poorly --  
22 monitors were poorly located.

23 From 1952 through 1984 Fernald reported that it  
24 had never exceeded the DOE air standards.

25 Their 1956 release level would have exceeded

1           today's standard by 125 times.

2           In 1980 Fernald received material containing  
3           plutonium in significantly higher than normal 3  
4           to 36 parts per billion. Concentrations were  
5           up to 7,757 parts per billion. In 1985 DOE  
6           defense program officials found that Fernald  
7           did not have documents showing the  
8           concentration of materials moving through its  
9           production process, and as a result the DOE  
10          could not determine the level of radiation to  
11          which Fernald employees had been exposed.  
12          The GAO noted that the DOE had not taken  
13          advantage of available independent information,  
14          either state or local, to test the accuracy of  
15          the contractor data. They stated that no  
16          federal, state or local agency had ever  
17          monitored radionucleide (sic) emissions from  
18          Fernald or verified the data. No coordinated  
19          DOE, State or contractor system existed to  
20          independently evaluate contractor-reported data  
21          on a test basis.

22          The second report, "The Need for Better  
23          Environment and Worker Protection." Between  
24          September and December 1984, Fernald released  
25          unusually large quantities of radioactive

1 uranium dust into the environment as a result  
2 of malfunctions in the plant's air filtration  
3 system. Fernald was a chemical processing and  
4 foundry-type operation. They did not use a  
5 closed system to process radioactive material.  
6 Consequently, its operations were very dirty  
7 and dusty. The release amounted to 300 pounds  
8 of enriched uranium being released into the air  
9 over a three-month period in the fall of 1984.  
10 Knowledge of this release prompted the request  
11 for the investigation.

12 Some additional findings in the investigation  
13 included.

14 The report stated while the DOE checked the  
15 contractor's ability to accurately analyze  
16 samples, it does not provide the assurance that  
17 the release data gathered in the reports were  
18 accurate.

19 Oak Ridge concluded that Fernald could reduce  
20 its air emissions by 90 percent of its 1981-  
21 1984 reported release by merely applying better  
22 operating practices, with little cost for new  
23 equipment.

24 The April 1984 task force of Oak Ridge report  
25 noted Fernald's management and staff did not

1           perceive that the facility had a problem. Even  
2           non-compliance was not viewed as a problem.  
3           In February 1985 the Oak Ridge board that  
4           investigated Fernald's 1984 releases expressed  
5           concern about the accuracy and effectiveness of  
6           Oak Ridge's ES&H appraisal program, and  
7           identified major weaknesses in both Oak Ridge's  
8           appraisal and Fernald's self-audits. Oak  
9           Ridge's appraisal program did not identify the  
10          problems that subsequently resulted in the  
11          excessive air releases at Fernald in 1984.  
12          The DOE requires contractors to measure the  
13          plant's stack releases for each radioactive  
14          substance emitted.  
15          Fernald was a self-regulated operation.  
16          And Fernald had a cost-plus-award fee contract  
17          with the DOE and could financially be penalized  
18          by reporting radioactive releases. Oak Ridge  
19          did not use the award fee to encourage improved  
20          improvement (sic) at Fernald until 1985.  
21          Next I would like to address NIOSH's claim that  
22          they can do re-- dose reconstructions, and that  
23          data was shown in the NIOSH presentation. I  
24          would like to explain how I believe many of  
25          these dose reconstructions may have been

1           accomplished. Since my father's claim is the  
2           only one I have access to, I will use it as an  
3           example.

4           His internal dose monitoring records were  
5           reviewed. Because the dose was determined to  
6           be below -- to be low and to allow for  
7           undocumented dose, his internal dose was  
8           assigned a hypothetical intake value. The  
9           internal dose assigned was based on the  
10          information provided in the document I'll refer  
11          to as OTIB-2.

12          I examined the document and made some  
13          interesting discoveries. One, it is used for  
14          claimants who have a positive activity in their  
15          samples to ensure that the result will have the  
16          highest POC possible. Second, it is a method  
17          to facilitate timely processing of claims under  
18          the EEOICPA. Third, it is a substitute for  
19          further research and analysis when the POC is  
20          assumed to be below 50 percent, or the worst  
21          case assumption. Fourth, it can be applied to  
22          facilities where uranium was the primary  
23          radionuclide (sic). Fifth, it is a generic  
24          document that was developed with Hanford data  
25          as its basis. Sixth, it has application

1           restrictions based on the years in which the  
2           employee worked. For Hanford workers the start  
3           date is prior to 1953. For workers from other  
4           facilities the hire date must be after 1969,  
5           with a start date prior to 1970.

6           I believe the use of OTIB-2 represents a  
7           misapplication of data in my father's claim  
8           since he started work at Fernald in 1952.

9           Therefore, based on the application restriction  
10          noted in six, the OTIB-2 cannot be used in his  
11          dose reconstruction.

12          As of February 1, 2007 575 dose reconstructions  
13          have been completed for employees at Fernald  
14          who were working there in 1969.

15          I am reasonably certain that the OTIB-2 was  
16          applied to many of those claims as well. If it  
17          was, NIOSH may have completed hundreds of  
18          invalid dose reconstructions over the years for  
19          Fernald workers. This misapplication of data  
20          may have occurred in dose reconstructions for  
21          workers at other sites, as well, especially  
22          since OTIB-2 was considered a generic document  
23          and could be used as a substitution for  
24          research and analysis under certain conditions.  
25          NIOSH claims to have sufficient information

1           about the radiation exposure levels and doses  
2           that occurred at FMPC.  If that's the case, why  
3           didn't they use it?  Timeliness is not the  
4           issue here.  Years have been wasted because  
5           they chose to take a shortcut.

6           Next I would like to address Section 7 in the  
7           SEC evaluation.  The feasibility determination  
8           for the proposed class of employees covered in  
9           this evaluation report is governed both by the  
10          EEOICPA and 42 CFR 83.13(c)(1).  I would like  
11          to look at both of these documents.

12          The EEOICPA, Energy Employees Occupational  
13          Illness Compensation Program Act of 2000, as  
14          amended, 42 USC 7384, Findings, Sense of  
15          Congress, Item six.  Furthermore, studies  
16          indicate that 98 percent of the radiation-  
17          induced cancer within the weapons complex have  
18          occurred at dose levels below existing maximum  
19          safe thresholds.  It should be noted that the  
20          thresholds were exceeded at FMPC regularly, and  
21          sometimes by thousands of times the exposure  
22          limit.

23          7394(n), Exposures in the Performance of Duty,  
24          Item (c), Guidelines, Number (3), such  
25          guidelines shall (a) be based on the radiation

1 dose received by the employee or a group of  
2 employees performing similar work at such  
3 facility.

4 At such facility. Now we just saw that OTIB-2  
5 was based on Hanford.

6 Now 42 CFR 83, Special Exposure Cohort, 83.13,  
7 How NIOSH evaluates petitions, (c)(1) item (i),  
8 and this is just a portion of it, NIOSH must  
9 also determine that it has information  
10 regarding monitoring, source, source term, or  
11 process from the site where the employees have  
12 worked to serve as the basis for dose  
13 reconstruction. This basis does not limit  
14 NIOSH to using only or primarily information  
15 from the site where the employee worked, but a  
16 dose reconstruction must, as a starting point,  
17 be based on some information from the site  
18 where the employee worked.

19 Now the EEOICPA is pretty clear when it set --  
20 states that exposure in the performance of duty  
21 shall be based on the radiation dose received  
22 by workers at such site. That sets a  
23 restriction.

24 So what gives HHS the right to change the  
25 parameters of the EEOICPA? Through the rules

1 and regulations governing dose reconstruction,  
2 HHS gave NIOSH the right to substitute data  
3 from one site to another. This matter has  
4 already been brought up to Dr. Howard of HHS,  
5 and it could be a considerable problem.  
6 This is apparent because NIOSH dose  
7 reconstructed Fernald workers using Hanford  
8 data based on OTIB-2 in lieu of doing the  
9 research necessary to actually determine  
10 whether data -- whether Fernald data was  
11 sufficient to dose reconstruct. This was to  
12 facilitate timeliness.  
13 It seems that with this type of provision in  
14 place, NIOSH will always have the data they  
15 need to do dose reconstruction. They'll just  
16 take it from another site. NIOSH feels they  
17 are only required to include some data from the  
18 employee's actual work site to determine POC.  
19 It's imperative that the EEOICPA has precedence  
20 over the rules and regulations, otherwise the  
21 process becomes a mockery of the law.  
22 Coworker data is a permissible substitution.  
23 NIOSH claims to have enough data for each  
24 worker to make substitution unnecessary for  
25 FMPC dose reconstructions.

1           Could somebody get me some water? I'm getting  
2           really dry.

3           I would like to point out, it was a common  
4           practice at Fernald -- excuse me.

5                                 (Pause)

6           I would like to point out that it was a common  
7           practice at Fernald to sample dose workers.  
8           This practice enabled FNPC to estimate exposure  
9           without incurring the expense of processing  
10          results for all the workers involved. An air  
11          dust survey from a lengthy fire in Plant 6  
12          illustrated this practice. Twenty-six machine  
13          operators were involved in the fire, but only  
14          five were monitored. Therefore, the exposures  
15          received by 21 workers were not attributed to  
16          them in dose records.

17          The value of uranium urinalysis data. NIOSH  
18          claims to have large amounts of monitoring data  
19          from uranium urinalysis, and they feel it has  
20          significant value in dose reconstruction. I  
21          would like it -- to look at this matter from  
22          the NLO's perspective through the historic  
23          documents included in this position (sic).  
24          National Lead of Ohio's records are very clear  
25          on the benefits of uranium urinalys (sic)

1 monitoring and how they used the data. I will  
2 only refer to the documents by their dates.  
3 August 1972, the data have been used primarily  
4 as an indicator of operating conditions.  
5 August 1979, urinalysis results are only used  
6 as an indication of the adequacy of basis  
7 exposure control measures. September 1981,  
8 uranium in urine was used to monitor employees  
9 for exposure to airborne uranium.  
10 Workers were, in a sense, human monitoring  
11 instruments. They helped management keep track  
12 of their product to minimize losses. When  
13 uranium urine levels were elevated, management  
14 knew to look for excess product release,  
15 generally caused by equipment failure. We know  
16 this type of monitoring was done at various  
17 time intervals based on management's predicted  
18 exposure rates. This was to ensure uranium  
19 levels stayed below the toxic levels in  
20 workers.  
21 Occasionally management was asked to respond to  
22 questions about the uranium urinalysis data,  
23 and here are some of their responses.  
24 November 1963, we do not consider the urinary  
25 uranium excretion measurement as an accurate

1 method of estimating either body burden or  
2 exposure. We have assumed that the  
3 determination of internal exposure by any  
4 method, or combination of methods, is less  
5 precise than are estimations of exposure to  
6 external radiation.

7 July 1966, the state of the art for accurate  
8 estimates of radiation from internal emitters  
9 is not sufficiently advanced to make good  
10 estimates.

11 August 1979, uranium urinalysis are not used to  
12 evaluate internal radiation exposures at FMPC.  
13 September 1981, we have not used these results  
14 to make estimates of internal exposure.

15 June 1984, all employees are not monitored by  
16 in vivo counting for internal exposure, and  
17 doses cannot be computed from urinalysis data.  
18 In vivo count data is not available for all  
19 employees and doses cannot be computed from  
20 urinalysis data.

21 Then there was a question asked: Do you  
22 calculate a dose equivalent to the critical  
23 organ from internally-deposited radionucleides  
24 (sic)? The response was no, the amount of  
25 deposited radionucleide determined from lung

1 counts is recorded, but this cannot be used --  
2 let's see, the amount of deposited  
3 radionuclide determined from lung counts is  
4 recorded, which can be used to calculate lung  
5 burden. Excretion urinalysis data is recorded,  
6 but this cannot be used to calculate internal  
7 doses.

8 And these come from a questionnaire on  
9 radiation record keeping, and the response was  
10 by their record keeper.

11 In the SEC evaluation NIOSH claims workers in  
12 uranium production areas were also included in  
13 the urinalysis program to estimate internal  
14 dose. Not according to the historical FMPC  
15 documents.

16 National Lead of Ohio had a reason for stating  
17 excretion or urinalysis data recorded, but this  
18 cannot be used for calculating internal doses.  
19 The person making this statement knew something  
20 about the data that NIOSH doesn't. For NIOSH  
21 to disregard the FMPC's document or comments  
22 about the quality of their own data shows how  
23 desperate they are to use it, whether it's  
24 credible or not.

25 In June 1984 questionnaire contains some

1 additional noteworthy responses:  
2 Air monitoring results were never used to  
3 estimate internal deposition.  
4 Second, the only method used to estimate  
5 internal deposition was whole body counting.  
6 Third, Y-2 (sic) equipment was operated by  
7 National Lead of Ohio. Since 1970 they  
8 operated the counters themselves.  
9 Fourth, if artifacts are discovered, a notation  
10 that the count results are unreliable is made  
11 in the worker's record. The reason is also  
12 included.  
13 Along the same line, other forms of monitoring  
14 are discussed briefly in the above-mentioned  
15 document.  
16 In vivo lung counting was the primary means of  
17 assessing internal dose. That's based on a  
18 1972 document. The whole body counting  
19 evaluations were done in-house. National Lead  
20 of Ohio performed all dosimetry evaluations in-  
21 house after the first year. Therefore none of  
22 this data was verified by anyone outside the  
23 National Lead of Ohio operation for accuracy.  
24 I discovered additional information about  
25 uranium that could impact the usefulness of

1 FMPC's urinary analysis data. It claims the  
2 basis of the maximum allowable concentration  
3 for uranium dust is based on the chemical  
4 toxicity of uranium rather than the  
5 radiological toxicity. The reference notation  
6 was for the soluble form of uranium. The  
7 article further stated that the recommended  
8 allowable concentration of insoluble uranium  
9 compounds was five times higher than the figure  
10 used by Fernald. And for some reason, this  
11 page was excluded from the petition on the in-  
12 line -- on-line copy.

13 Data falsification. NIOSH acknowledged the  
14 possibility that air monitoring could have been  
15 manipulated, but dismissed the reality that it  
16 could have become a common practice. An  
17 admission on their part would compromise the  
18 credibility of data used for dose  
19 reconstruction.

20 An affidavit that's included in the petition is  
21 the personal account of events participated in  
22 by an industrial hygienist employed in the  
23 position from September 1953 through March  
24 1971. He did air sampling for dust and toxins,  
25 measured exhaust and ventilation systems,

1 prepared reports for management, investigated  
2 releases and performed other types of  
3 environmental monitoring. He described the  
4 factors that could affect the accuracy of  
5 monitoring results.

6 First, he used a homemade sampler consisting of  
7 a vacuum and a filter. He noted that the dust  
8 was often lost from the filter.

9 Readings for dust -- air dust levels were  
10 dependent on the direction or angle from which  
11 the measurement was taken.

12 Third, delays after an occurrence allowed  
13 conditions to clear before monitoring was  
14 performed.

15 Fourth, resampling -- he was required to often  
16 resample because the results were too high for  
17 the management.

18 Other factors that affected the results were  
19 open windows and drafts, resuspended dust, fork  
20 truck traffic, blocked ventilation ducts,  
21 production rates, and whether or not the  
22 procedures were followed.

23 Another area of data falsification involved the  
24 calculation of effluents released from stack  
25 emissions. The specific details of those can

1           be reviewed in the petition documents.  
2           Radionucleide (sic) exposure is an area of  
3           concern -- a major area of concern at FMPC.  
4           NIOSH claims radionucleides other than uranium  
5           were analyzed on occasion throughout the years,  
6           and data for specific non-uranium  
7           radionucleides is not readily available. The  
8           remainder of the information they provided  
9           involved assumptions, ratios and calculations.  
10          I believe the issues of radionucleides  
11          presented a serious exposure problem at -- to  
12          FMPC workers. There is too little information  
13          available to make determinations about all the  
14          possible isotopes to which workers were  
15          exposed. The levels to which they were exp--  
16          to which they were exposed, and whether or not  
17          they were in equilibrium, and how old the  
18          product was and whether it had crossed over,  
19          and what it -- might have happened. If this  
20          occurred, how much product was involved, and  
21          did it involve any other products? Was it in  
22          the soluble form or the insoluble form, and was  
23          it -- and what was its retention rate? There  
24          are too many questions and too little data to  
25          cover all the possibilities.

1 Recycled uranium processing introduced isotopes  
2 from other DOE sites, the contents of which can  
3 only be speculated on in some instances. The  
4 transuranics present in ash were not  
5 identified, and there was apparently no attempt  
6 to detect them using the Mobile In Vivo  
7 Radiation Monitoring Laboratory. Furthermore,  
8 FMPC could not identify plutonium-238 and  
9 plutonium-239 because they needed to upgrade  
10 their equipment.

11 Enriched uranium processing also introduced  
12 questionable levels of exposure. Uranium  
13 hexafluoride reduction product could contain  
14 neptunium, plutonium, americum (sic), technium  
15 (sic), whatever. Special order products were  
16 produced up to 37 percent enrichment on  
17 occasion. The physical inventory of products  
18 often didn't agree with the book inventory.  
19 NIOSH stated that neutron monitoring was not  
20 required at FMPC, yet chlorine is a neutron  
21 poison which was released by the cooling agent  
22 perchlorethylene, which was used in the casting  
23 and other processes as a cooling agent.

24 The radiation exposure environment determined  
25 the dose received by workers. The task being

1 performed was the primary determiner of  
2 exposure apart from individual work habits.  
3 Other factors such as location of the worker on  
4 site, the process taking place, the types and  
5 quantities of material present, and the time  
6 spent in each location were significantly  
7 important. The importance of these principles  
8 is expressed in an FMPC document. Exposure  
9 from various jobs will fluctuate considerably  
10 over a period of time. A serious problem in  
11 determining internal exposure is in the  
12 difficulty in obtaining good work records,  
13 which show how long an individual has worked in  
14 various jobs. We have records which tell us to  
15 which plant a person is assigned and which job  
16 classification he worked; however, these  
17 records do not tell us the specific job  
18 operation he performed.  
19 Sufficient information. The availability of  
20 sufficient information cannot be based on  
21 numbers alone. Information can only be deemed  
22 sufficient if it is enough to reach a  
23 reasonably accurate determination of the dose  
24 incurred. I believe it is impossible for NIOSH  
25 to establish upper bounding limits for doses

1 received based on the information available.  
2 One, the DOE lacked confidence in the  
3 credibility of FMPC practices and data.  
4 Second, the accuracy of the monitoring data is  
5 suspect because it was only evaluated in-house.  
6 Third, FMPC records are incomplete, both in  
7 quantity and type of material that would have  
8 attributed to radiation dose to the workers.  
9 Fourth, FMPC kept records in such a way that  
10 would impair their comparability to other DOE  
11 facilities to allow them to be evaluated in a  
12 similar manner.  
13 FMPC wasn't always able to accurately predict  
14 the exposure potential for specific worker  
15 groups and women. There's a document that  
16 talks about four unexplained exposures. These  
17 people were not monitored; three of them were  
18 women. I'm assuming that the one gentleman  
19 that was monitored is what led into the  
20 investigation, but they still haven't deter--  
21 been able to determine what they were exposed  
22 to or where.  
23 Six, FMPC monitoring equipment lacked the  
24 capability of detecting and identifying  
25 radionucleides (sic) present in the workplace.

1 Seventh, there are large gaps in air monitoring  
2 data. The extreme fluctuations and exposure  
3 levels prevent the establishment of reasonable  
4 assumptions.

5 Eighth, FMPC wasn't able to identify  
6 crossovers, residues and misidentified  
7 materials in a timely manner.

8 Speculation is not a substitute for  
9 information. There just isn't enough accurate  
10 information to address all the possible  
11 exposures that could have occurred. I have not  
12 attempted to evaluate the exposure, but just  
13 present the obstacles to dose reconstruction as  
14 I see it.

15 Thank you.

16 **DR. ZIEMER:** Thank you, Sandra. Do you have  
17 additional members --

18 **MS. BALDRIDGE:** I would like --

19 **DR. ZIEMER:** -- of the petitioning group that  
20 would like --

21 **MS. BALDRIDGE:** I would like --

22 **DR. ZIEMER:** -- to address us?

23 **MS. BALDRIDGE:** -- to give the floor to Ray  
24 Beatty.

25 **DR. ZIEMER:** Sure.

1           **UNIDENTIFIED:** Hello?

2           **MR. BEATTY:** Thank you, Dr. Ziemer and the  
3 Board members and Sandra for the fine job that  
4 you've done on constructing the SEC petition.  
5 You're a hard act to follow, so I won't try to  
6 reiterate a lot of the technical information  
7 that she shared with you, but I will try to  
8 attest to the extreme accuracy and validity of  
9 her information.

10           I do want to kind of rebuttal (sic) a couple of  
11 things from the NIOSH report. I will have a  
12 couple of questions, either for Mr. Elliott or  
13 Mark Rolfes personally.

14           As to the addendums that were submitted on this  
15 SEC petition, I'm familiar with number two, but  
16 number one, maybe we could discuss this a  
17 little later. I'd like to know a little bit  
18 more about number one.

19           In the sources of available information, it was  
20 slide number three in your presentation, the --  
21 something that's been brought up at other Board  
22 member meetings throughout the nation, when --  
23 particularly talking about the Fernald site, is  
24 HIS-20. I want to touch on HIS-20 a little  
25 bit. The HIS acronym stands for the Health

1 Infor-- Health Physics Information System. Now  
2 if NIOSH is throwing a great deal of  
3 credibility on that particular program, we need  
4 to talk. I personally worked at the site from  
5 January 20th, 1992 till closure October '06.  
6 HIS-20 was introduced at our site. Our  
7 training records, medical records, entry and  
8 exits to buildings was done through a  
9 monitoring scanning process with our badges.  
10 Now again, if NIOSH is using this information  
11 to do dose reconstruction as to people entering  
12 X buildings, we need to talk because the system  
13 was down more than it was up. And we know that  
14 for a fact from -- well, from records where  
15 people had to manually sign in to enter  
16 specific buildings to do certain work tasks.  
17 As far as the dose, what we did in bioassay, in  
18 vivo and other forms of medical monitoring and  
19 radiation exposure monitoring, our TLD badges -  
20 - I -- I can't dispute a lot of that  
21 information. I do not have the technical  
22 background and expertise to do that sort of  
23 thing. However, when the programs, though,  
24 shifted from say like time frames -- I just  
25 learned this morning from a fellow union

1           brother that some sites only do an annual  
2           bioassay, a urinalysis once a year, but yet  
3           they're going into high contamination areas.  
4           There's something wrong at that site really  
5           needs to be looked at. And when I started in  
6           '92, bioassay was done on a 30-day time  
7           interval, and it was changed over to 60 days,  
8           for obvious reasons. I guess the constituents  
9           or the -- the concerns from radiation, the  
10          product maybe had -- lot of it had been shipped  
11          off-site, but our concern was residual  
12          contamination and the -- the ugliness of some  
13          of the areas in which we had to perform work,  
14          and especially in safe shut-down doing hands-on  
15          cleaning, scrubbing of machinery, beam  
16          structures during the lockdowns and the gross -  
17          - gross contamination cleanup.  
18          Some of my comments also will not reflect  
19          directly on the class of the petition, but I  
20          think it -- my comments will be relevant to the  
21          reliability of the data. I want to emphasize  
22          that once more, the reliability of the data.  
23          NIOSH, I plead with you, if you plug garbage  
24          into an equation, your answer's going to be  
25          garbage, and that's what you've gotten from

1           some of the documents. Mrs. Baldrige attested  
2           to that, to the Technical Base (sic) Documents.  
3           They speak for themselves.

4           Okay, that's -- that's my comments on the NIOSH  
5           report, and again I would like to talk about  
6           that addendum number one in the next few  
7           minutes with someone.

8           The SEC petition evaluation report that I read  
9           touched a great deal on the site profile -- at  
10          least the people that developed our site  
11          profile, the six documents that were developed  
12          to make our site profile, I can't name all the  
13          persons but I do remember one specifically that  
14          came to our site, came to our union office -- I  
15          believe it's Dr. Mel Chew. Ironically, his  
16          name is on the SEC petition evaluation report.  
17          I have a concern that the person that wrote the  
18          site profile now evaluating the SEC petition,  
19          and it's kind of like the fox guarding the  
20          henhouse again, or you asking someone to  
21          dispute what they developed in a site profile  
22          when they do this SEC petition. No, I'm not  
23          going to hammer my own product. I'm going to  
24          say it's the greatest thing come along since  
25          sliced bread. So got a little problem with

1           that. Not necessarily conflict of interest,  
2           but I think some subject matter experts may  
3           have been -- well, kind of overstepped or used  
4           exclusively maybe in too many cases here.  
5           The final thing that I'd like to comment on,  
6           and I think it's worth mentioning -- and again,  
7           it's going to be a reflection of the later  
8           years. I cannot stand here and testify to the  
9           fac-- what the former cold war veterans were  
10          subjected to. I wasn't there. I didn't start  
11          until '92. But up until '89 I -- I got the  
12          pleasure of working with a lot of former  
13          workers, the cold war veterans, and they shared  
14          some stories with me about the peaks and  
15          valleys in health and safety, I'll call it.  
16          There were spike periods.  
17          Initially I think in the early days production  
18          was number one, and then in the late '80s I  
19          think with -- especially with the incidents  
20          that Mrs. Baldrige alluded to and the DOD --  
21          DOE finally stepped in. A law was developed, I  
22          think called the Price Anderson Act, and it  
23          kind of made people take notice of what was  
24          going on on these sites, and health and safety  
25          improved. And now I'm here to tell you in

1           these later years that -- and I made a couple  
2           notes here -- that there were peaks and valleys  
3           in health and safety, and I think the  
4           overriding issue was cost and schedule overrode  
5           health and safety because of closure. Getting  
6           this early closure, getting this place closed  
7           down, getting the other -- not necessarily  
8           stakeholders, but the -- the other government  
9           agencies that were -- well, hot on the heels of  
10          DOE and the contractors to get this cleaned up,  
11          like EPA. They -- they allowed some  
12          permissible limits to be changed. In other  
13          words, water being sent back into the -- the  
14          river, back to the aquifer where it was pumped  
15          out from under our sites it was so highly  
16          contaminated, went from 20 parts per billion of  
17          -- of uranium to 30 parts per billion. That  
18          just happened a few years ago.  
19          They're -- they're -- tried -- there was --  
20          there was attempts made to allow something  
21          called the WAC, or Waste Acceptance Criteria,  
22          on the on-site disposal facility, the dump that  
23          they built -- built there on the site.  
24          Initially all the contamination was supposed to  
25          be hauled off. There was a compromise made

1           there. I'm not sure if it was for the better;  
2           time will tell. But there is currently a -- an  
3           OSDF there on our site, and that Waste  
4           Acceptance Criteria -- you had to be below a  
5           certain level for the contaminated materials to  
6           go into that cell. If it was higher, you ship  
7           it off-site, either Nevada Test Site or other  
8           dumping grounds, Envirocare, what have you.  
9           The point there is, there was compromises made  
10          in the numbers, and this affects health and  
11          safety. Those kind of things were done  
12          historically, compromises. Numbers -- not  
13          necessarily manipulated, I can't attest to  
14          that. I've only heard it. But when -- when  
15          things are missing and then a federal lawsuit  
16          was filed on behalf of the community, called  
17          Fernald Settlement One. There was a lawsuit  
18          filed on behalf of the workforce, Fernald  
19          Settlement Two. This was won in federal court  
20          in Cincinnati, Ohio. It stands today. The  
21          former workers that from there -- from 1985  
22          back to 1951, they allowed -- they are allowed  
23          lifetime medical monitoring. Now that ought to  
24          say something. The fact that the -- the data  
25          that was used in -- in developing the lawsuit

1           proved that there was some shortcomings in what  
2           the DOE and the contractor had provided, or at  
3           least what these workers were told they were  
4           subjected to and various things.

5           Finally that brings me up for a final comment  
6           on a report that I hold here in my hand by  
7           NIOSH. I have shared this a couple of other  
8           times in the past. This is my actual report,  
9           and I apologize to the Board for not having you  
10          a copy of this but I will certainly see that  
11          you get it, especially Ray, for the -- for the  
12          record.

13          This report was written December of 2000.  
14          Okay? Again, I'm talking about a time frame  
15          past the SEC petition class of people, but I  
16          think it's relevant and it'll show a  
17          correlation of how information has not been  
18          maybe properly exchanged or things are missing.  
19          There's voids -- incompleteness and just flat-  
20          out reliability of data.

21          But in December of 2000 the division of NIOSH -  
22          - I assume this -- Larry, please correct me if  
23          I make a -- an inaccurate statement here, but  
24          within NIOSH I believe there's an investigative  
25          branch, Health-related Energy Research Branch,

1           Division of Surveillance and Hazard  
2           Evaluations. I've had it explained to me that  
3           if -- while I was working at the site, if I had  
4           a concern, I could contact NIOSH and ask them  
5           to come to my site and actually investigate my  
6           concern. This committee, it was established,  
7           was assigned this assessment to gather  
8           information as was needed for health effects  
9           due to occupational exposures for DOE site  
10          remediation workers. Okay? Not production,  
11          remediation, for these cleanup crews. Again,  
12          this was in 2000. This report come out January  
13          of '01.

14          The purpose of this project or this assessment  
15          was just to evaluate whether or not DOE, the  
16          contractors and any other people involved that  
17          were monitoring the cleanups of these sites, if  
18          they were given the proper information they  
19          needed to do proper monitoring and evaluations  
20          and ultimately dose reconstruction for these  
21          workers.

22          Well, there were four findings. The question  
23          was: Can remediation workers be identified?  
24          Are adequate worker, work history and medical  
25          data available for remediation workers? Can

1 individual workers be linked to their exposure  
2 and medical data? With current knowledge and  
3 understanding as described in this report, can  
4 epidemiologic expert -- exposure assessment or  
5 hazard surveillance studies of remediation  
6 workers and the technologies they employed be  
7 conducted now or in the foreseeable future?

8 Answer to number one: Some remediation workers  
9 who worked at DOE sites cannot be identified.  
10 Accurate, complete exposure, work history and  
11 medical record data are not available for this  
12 population. Individual workers cannot  
13 consistently be linked to their exposure and  
14 medical data.

15 Number four, at the present time the necessary  
16 information to conduct epidemiologic exposure  
17 assessment or hazard surveillance studies of  
18 remediation workers is not available.

19 NIOSH report. Now, they're doing dose  
20 reconstructions based on data supplied to them  
21 by the contractor and DOE, and this happened  
22 2000 to the present time, folks. What do you  
23 think it was like from the 1950s to 1989?

24 It's -- I rest my case. Thank you very much.

25 **DR. ZIEMER:** Thank you very much. Sandra, do

1           you have any additional individuals that you  
2           wish to address us at this time? Okay, thank  
3           you.

4           Now I'll open the floor, Board members, for  
5           either questions or comments on any of the  
6           three presentations.

7           Let me ask one to start with. Sandra, I wonder  
8           if you could clarify for me -- I -- are -- is --  
9           -- are the petitioners asserting that there  
10          actually were neutron exposures? I was trying  
11          to understand your statement about the chlorine  
12          and I was having a little difficulty with that.

13          **MS. BALDRIDGE:** It had been mentioned that  
14          there was no neutron monitoring and that  
15          basically there was no monitoring and there was  
16          no problem that was significant. And as I was  
17          reviewing the documents, I noticed that they  
18          mentioned the release of chlorine, that was a  
19          neutron poison. And people who were in  
20          constant contact with perchlorethylene as a  
21          cooling agent in various processes -- there  
22          would be a release from the perchlorethylene  
23          that res-- that possibly could have resulted in  
24          a neutron exposure.

25          **DR. ZIEMER:** Okay, that's -- that's what you

1           were pointing out here. Okay, I -- I -- as I -  
2           - as I would understand it, a neutron poison --  
3           such as boron is also a neutron poison, but it  
4           does not emit neutrons. I was -- I was trying  
5           to clarify whether you were asserting that  
6           neutrons are being emitted there, I --

7           **MS. BALDRIDGE:** I was just referencing  
8           statements --

9           **DR. ZIEMER:** Okay.

10          **MS. BALDRIDGE:** -- (unintelligible)  
11          information.

12          **DR. ZIEMER:** Okay, gotcha. Thank you. I'd  
13          like to also ask Ray -- Ray, do you know if --  
14          you mentioned the TLD readings and so on. Did  
15          -- did Fernald use a -- a commercial TLD vendor  
16          or did they do their own TLD work?

17          **MR. BEATTY:** Up until about a year and a half  
18          or two years prior to closure they used their  
19          own, and then they went to a -- like a vendor  
20          per se. I believe they went to Savannah River,  
21          actually, and it come back a different type of  
22          film badge. And I believe someone -- Stu or  
23          someone maybe knows more about that than me.

24          **DR. ZIEMER:** Okay, so when you said -- when you  
25          talked about in-house, they actually were

1 reading their own dosimeters --

2 **MR. BEATTY:** Yes, they actually their --

3 **DR. ZIEMER:** Was this also true of their film  
4 badges prior to the TLD days?

5 **MR. BEATTY:** I believe so, yes. They had their  
6 actual own reading lab there.

7 **DR. ZIEMER:** Thank you. Jim Melius. Jim.

8 **DR. MELIUS:** I'd like to first of all thank the  
9 petitioners for their very helpful  
10 presentations. I do have a few questions for -  
11 - for Mark. I haven't forgotten you, Mark.

12 **MR. ROLFES:** Thank you, Dr. Melius.

13 **DR. MELIUS:** Number one is in terms of -- in  
14 terms of developing the evaluation report, you  
15 men-- mention -- I'm a little confused from  
16 your slides and -- and what you presented. You  
17 mention one outreach meeting or -- and then  
18 were there additional attempts to talk to some  
19 of the petitioners as well as some of the other  
20 workers and worker representatives up at  
21 Fernald?

22 **MR. ROLFES:** I actually attended a couple of  
23 meetings with the Fernald union. I was at the  
24 meeting with Ray Beatty and Mel Chew, and I  
25 believe we had a couple of other NIOSH staff.

1           That was probably a couple of years back, I  
2           don't remember the exact date of it. But after  
3           we received the SEC submission in April, I  
4           attended a former workers' retiree meeting in  
5           May of 2006. And then we had followed up with  
6           those individuals. I had asked some of the  
7           retirees if they had any information to share  
8           with us, and if they had any concerns about the  
9           technical information or how we were doing dose  
10          reconstructions, and I passed around a sheet of  
11          paper and we got about ten people that signed  
12          up. And I know that we contacted some of those  
13          people.

14          **DR. MELIUS:** Ok-- okay, that -- just helpful --  
15          know. Secondly, the -- SC&A has done a review  
16          of the site profile, which I think actually  
17          raises a number of significant issues about  
18          your evaluation report, and I'm just trying to  
19          understand the timing a little bit in -- in  
20          terms of this. Was -- was that report or the  
21          information in that report available at the  
22          time the evaluation -- your evaluation report  
23          was done, or are these sort of like parallel  
24          processes? I -- I'm not...

25          **MR. ROLFES:** I don't recall whether we received

1 SC&A's comments before the SEC submission. I  
2 believe we had some early on discussions with  
3 SC&A concerning their comments. I know we have  
4 received a final report, though, from SC&A now  
5 at this time.

6 **DR. ZIEMER:** Let -- let me speak to that also,  
7 Jim. You -- you may recall we did appoint a  
8 workgroup for Fernald. Brad Clawson is  
9 chairing that workgroup. The members of that  
10 are Presley and Ziemer, and Mark is the -- the  
11 contact person. We -- we do have in fact --  
12 and I -- I don't think that NIOSH had this when  
13 they were preparing the evaluation report, if  
14 I'm not mistaken. I don't believe they had it  
15 then. This is very recent. There is a --  
16 Brad, let me ask you to report for the  
17 workgroup and it'll speak to this point.

18 **MR. CLAWSON:** Yeah, as you -- as you remember,  
19 the Advisory Board, we asked SC&A -- I believe  
20 it was last meeting -- if they could take and  
21 make a matrix for us of potential issues with -  
22 - for Fernald. And I just received that just  
23 before I came out here and it -- it's right now  
24 in the process of going through the -- the  
25 legal department for privacy information and so

1           forth. I have given it out to each member of  
2           the workgroup, but NIOSH has not received it  
3           officially. SC&A'd still like to have time to  
4           be able to clean it up a little bit before it  
5           gets to them.

6           **DR. ZIEMER:** So the answer is that NIOSH hasn't  
7           really officially seen the SC&A comments yet  
8           'cause they're --

9           **MR. GRIFFON:** Maybe I'm wrong, but I think the  
10          site profile review was done a while back, so  
11          they would have had the overall site profile  
12          comments well before the evaluation report.  
13          The -- the -- the matrix, Brad, you're talking  
14          about is we've asked SC&A to cull down the  
15          overall matrix to ones that may impact an SEC  
16          in preparation for this -- the SEC  
17          deliberations. But I think you've had the site  
18          profile comments for a while, if I'm not  
19          mistaken.

20          **DR. ZIEMER:** The site -- the site profile  
21          comments were issued in November by SC&A --  
22          November 10th, to be exact. I'm looking at my  
23          chart. And so that was the -- that was  
24          specifically on the site profile, not on the  
25          SEC. We now have SEC-related comments --

1           **MR. CLAWSON:** That is correct.

2           **DR. ZIEMER:** -- which have not been released  
3 yet, to either the Board or to NIOSH, but the  
4 workgroup chair does have an early copy of  
5 those.

6           **MR. GRIFFON:** But I think the SEC comments --  
7 my point was that the SEC comments are derived  
8 from the --

9           **DR. ZIEMER:** That's correct.

10          **MR. GRIFFON:** -- the original review, I  
11 believe.

12          **DR. ZIEMER:** That's correct.

13          **DR. MELIUS:** I actually have --

14          **DR. ZIEMER:** Go ahead, Jim. Does that -- that  
15 answered --

16          **DR. MELIUS:** (Unintelligible) --

17          **DR. ZIEMER:** -- your question on that issue?  
18 Yeah.

19          **DR. MELIUS:** -- just trying to get a overall  
20 understanding of what's going on.

21 Both in the SC&A report and I believe in your  
22 evaluation report you -- you're referring to a  
23 number of -- actually in your presentation,  
24 also -- a num-- number of procedures that we  
25 use in individual dose reconstruction that are

1           currently being developed. I believe the  
2           coworker model was referred to as, you know,  
3           being -- would be used. I can't tell if  
4           they're fully developed or -- or where they --  
5           where they stand. I -- I believe in the SC&A  
6           report they refer to a number of, you know,  
7           changes in the site profile that are underway  
8           that would be used in the future, and I'm just  
9           trying to get an idea of what the time frame  
10          for those are. We get into problems in SEC  
11          evaluations when we're trying to understand  
12          something that's currently not fully developed  
13          and whether it'll be feasible or not and I'm  
14          just --

15         **MR. ROLFES:** We're doing our best --

16         **DR. MELIUS:** -- (unintelligible) yeah, yeah.

17         **MR. ROLFES:** We're doing our best to get the  
18          document completed as fast as we can, and we're  
19          trying to do our best to ensure that it's  
20          technically accurate in incorporating the  
21          workers' comments that we have received, so...

22         **DR. MELIUS:** But -- but in terms of like the  
23          coworker model, I believe there's some issues  
24          with the evaluation of thorium and radon  
25          exposures that -- that are not -- you would not

1           be able to use those now for dose  
2           reconstruction -- individual dose  
3           reconstruction for -- at least for some of the  
4           workers and -- 'cause they're still being, you  
5           know, developed, and I'm trying to get a sense  
6           of well, you know, is that five years away or  
7           ten years away, is it a month away? I mean --

8           **MR. ROLFES:** The -- it's ongoing right now.  
9           The information that I discussed, I actually  
10          did sample dose reconstructions for and have  
11          places on the X drive for the Advisory Board to  
12          review. And what I've provided speaks to these  
13          issues, reconstruction of radon exposures,  
14          reconstruction of radium exposures, as well as  
15          other radionuclides from the silos. Some of  
16          these issues that were identified in the  
17          petition, I did my best to ensure that we had  
18          spoken directly to those issues, and I feel  
19          that we have done a good job demonstrating that  
20          we can reconstruct the maximum feasible  
21          radiation doses for the class.

22          **DR. MELIUS:** Yeah, but -- Larry, I asked a  
23          slightly different question --

24          **MR. ELLIOTT:** Let me see if I can help here. I  
25          think what you're asking is how soon are -- are

1           you going to see a coworker data distribution.

2           **DR. MELIUS:** Yeah, yeah.

3           **MR. ELLIOTT:** And it's going to be weeks. It's  
4           not, I don't believe, months. We're talking  
5           weeks away.

6           **DR. MELIUS:** Oh, okay, okay, that's --

7           **MR. ELLIOTT:** This is -- they're being worked  
8           on, and I think that, you know, we need to  
9           understand the premise of the need for that.  
10          We worked through a number of dose  
11          reconstructions for Fernald, and we've used the  
12          data at hand. We've held back perhaps on some  
13          individual claims where there's gaps that we  
14          need to -- this developed for, this coworker  
15          distribution for.

16          **DR. ZIEMER:** Go ahead, Jim.

17          **DR. MELIUS:** That's -- well, I guess if there  
18          are -- let others do questions. I have some  
19          sort of procedural issues, but let's come back  
20          to them after we've talked about questions --  
21          other questions.

22          **DR. ZIEMER:** Okay. Mark.

23          **MR. GRIFFON:** Just a -- a little follow-up on,  
24          little follow-up on the model stuff. You  
25          mentioned that you had radon breath samples,

1           600 radon breath samples. Is -- is it over a  
2           certain time period, is -- is there -- do you  
3           have any sense of -- does it cover the entire  
4           time period of the site or -- or the petition  
5           or...

6           **MR. ROLFES:** The radon breath samples were for  
7           the workers that were filling the K-65 silos,  
8           and the time period was between '52 -- it was  
9           '52, '53 and '54 that I can remember off the  
10          top of my head that we have data for, so I  
11          believe there were about 200 samples per year  
12          from '52, '53 and '54.

13          **MR. GRIFFON:** Okay. And the other -- the other  
14          question I thought that -- I think you said in  
15          the -- the petitioners raised a concern over  
16          falsification of --

17          **MR. ROLFES:** Uh-huh.

18          **MR. GRIFFON:** -- of air sampling records -- I  
19          think it was air sampling in particular, and I  
20          was listening to your response to that. I'm  
21          not sure that you met it head-on. I think you  
22          -- you indicated different ways you will do the  
23          dose reconstruction, but I think the question  
24          hangs out there. Was --

25          **MR. ROLFES:** Okay.

1           **MR. GRIFFON:** -- did you, in your review of the  
2 data, of the records, have you found any  
3 indication of falsification of these records?

4           **MR. ROLFES:** The petitioner provided an  
5 affidavit from a former industrial hygienist,  
6 which I did take a look at, and what -- what it  
7 described was the industrial hygienist going  
8 out and monitoring in Plant 5 for an  
9 individual's uranium exposures. And what we  
10 found is that the individual would take a  
11 sample, get the results, and his supervisor  
12 would ask him to go back because he didn't  
13 believe that the air sample was that high. So  
14 this occurred about five additional times  
15 because the individual continued to get a high  
16 air sample result. And it was not until the  
17 seventh try that the individual got a lower air  
18 sample result that was acceptable to the  
19 supervisor.

20           However, we have no indication that the  
21 previous measurements would have been  
22 destroyed, so we have all of those air samples,  
23 we believe. And when we assign intakes, if we  
24 have to rely on air monitoring data we would  
25 use a distribution of those results rather than

1 a single air sample. But -- however, because  
2 this is a uranium facility and we have uranium  
3 bioassay data, that would be the most important  
4 piece of information to assign intakes and  
5 estimate the radiation dose, so...

6 **MR. GRIFFON:** Okay, so -- so you're -- but --  
7 but there are circumstances where you're going  
8 to rely on air sampling data for some -- for  
9 some of the thorium work I think you mentioned  
10 you're going to use air sampling data for some  
11 --

12 **MR. ROLFES:** We are going to have to rely on  
13 air sampling data because -- we did have  
14 bioassay data for thorium during the early time  
15 periods. There were some gross beta urinalysis  
16 results from the early time period, from '54  
17 and '55. However, they weren't routine, so  
18 we're going to develop a coworker model from  
19 the air sampling data that we have. During  
20 those two years I believe, from the most recent  
21 record review that I have done, I was able to  
22 count about 12,000 air samples from those two  
23 years. However, we also have Mobile In Vivo  
24 Radiation Monitoring Lab results, and we have  
25 those results from 1965 through 1989, so we're

1 going to use those results in conjunction with  
2 our air sampling data to develop a coworker  
3 model, so...

4 **MR. GRIFFON:** Okay. And -- and the coworker --  
5 all these coworker models -- I think Jim was  
6 exploring this, but all these -- I might have  
7 missed this during your presentation, I  
8 apologize -- but all of them are in draft form  
9 or are there certain ones that are completed?

10 **MR. ROLFES:** We have developed several White  
11 Papers. The official product isn't --

12 **MR. GRIFFON:** Okay.

13 **MR. ROLFES:** -- isn't finalized, but we have  
14 used the White Papers to do the same dose  
15 reconstructions to -- to show that we have been  
16 able to do that. But we are actively working  
17 on finalizing the product and incorporating  
18 people's comments into it, so...

19 **MR. GRIFFON:** I guess I would ask -- more of a  
20 general comment, but it might be helpful to  
21 expedite matters with the workgroup as we move  
22 forward in deliberations if you get some of  
23 these products which you think are going to be  
24 helpful --

25 **MR. ROLFES:** Uh-huh.

1           **MR. GRIFFON:** -- in our deliberations --

2           **MR. ROLFES:** Yes.

3           **MR. GRIFFON:** -- maybe they can be posted on  
4 that --

5           **MR. ROLFES:** Definitely.

6           **MR. GRIFFON:** -- that drive --

7           **MR. ROLFES:** I definitely will.

8           **MR. GRIFFON:** -- as -- as they're available or  
9 whatever --

10          **MR. ROLFES:** Yes.

11          **MR. GRIFFON:** -- yeah.

12          **MR. ROLFES:** I definitely will.

13          **DR. WADE:** Sandra, do you have --

14          **DR. ZIEMER:** Sandra, do you have a comment?

15          **MS. BALDRIDGE:** I would like to address three  
16 items that were brought up. They're talking  
17 about developing documents, reviewing  
18 documents, yet they're still in process. My  
19 question is, how can they presume to know the  
20 value of documents that haven't been reviewed?  
21 The second point is that I believe it's stated  
22 in the site profile that they had thorium data,  
23 but they didn't know how to analyze it. So you  
24 know, they can state that they have so many  
25 pieces of data, but until it's assessable, it

1            basically has no value.

2            And thirdly, the gentleman that -- the  
3            affidavit about the monitoring procedures, I  
4            believe the time frame that he was referencing  
5            was not limited to one or more -- limited  
6            monitoring experiences, that he was relaying a  
7            process and a policy that was in place for in  
8            the neighborhood of 20 years. And you know, so  
9            to try to define it by one or two incidents I  
10           don't think is fair to the monitoring process  
11           that was in place. Thank you.

12           **DR. ZIEMER:** Phillip.

13           **MR. SCHOFIELD:** Yes, I -- I've got a question  
14           for you.

15           **DR. ZIEMER:** You can use the mike, Phillip.

16           **MR. SCHOFIELD:** You were saying that you're  
17           using the air sampling data when there was a  
18           localized -- might have been a localized  
19           excursion or something, and so you're using the  
20           surrounding air sampling data?

21           **MR. ROLFES:** No, what we would do when we  
22           complete a dose reconstruction, the most  
23           important piece of information that we have for  
24           a given claim is the bioassay data that we have  
25           for that person. What we would do is evaluate

1           that bioassay data to assign intakes. And if  
2           we didn't have bioassay data for that person,  
3           we would use coworker intakes to evaluate an  
4           intake. Now types of bioassay that we do have  
5           for Fernald include the radon breath samples,  
6           the Mobile In Vivo Radiation Monitoring Lab  
7           results, and the urine samples. And with that  
8           information, we feel we can do a very good job  
9           in reconstructing a maximizing intake.

10          There are time periods where there were not  
11          detailed records of bioassay, especially during  
12          the 1954/1955 time period. And it's during  
13          that time period that we're going to use more  
14          of the air monitoring data, but we're  
15          developing a coworker model because we have air  
16          sampling data and Mobile In Vivo Radiation  
17          Monitoring Lab results from '65 through '89.  
18          We're going to compare the production rates  
19          from the two time periods and basically  
20          construct a coworker model with the information  
21          that we have, so... Does that answer --

22          **MR. SCHOFIELD:** How often was the in vivo  
23          measurement actually done?

24          **MR. ROLFES:** I believe they had brought the  
25          counter up from Y-12 every six months, and they

1 would prioritize people based on their job and  
2 potential exposures. Or if there was an  
3 incident involved, they would put those people  
4 at the top of the list for the count.

5 There were some occasions when the mobile in  
6 vivo counter was not at Fernald, but there was  
7 an incident that occurred, and so sometimes  
8 they would send those individuals that were  
9 involved in that incident to the location where  
10 the in vivo counter was. For example, they  
11 might have had it at Portsmouth Gaseous  
12 Diffusion Plant at the time, or they may have  
13 had it down at Oak Ridge, so they would send  
14 the employees down there occasionally.

15 **MR. SCHOFIELD:** So when a person was maybe  
16 exposed to a localized incident and the air  
17 monitoring samples around there may not have  
18 picked up that localized thing, you're going to  
19 count on this in vivo, which could occur five,  
20 six, nine months later, to reconstruct this  
21 person's possible intake?

22 **MR. ROLFES:** Once again, the most important  
23 piece of information when I complete a dose  
24 reconstruction for Fernald would be to evaluate  
25 the person's bioassay data for -- to assess his

1 internal exposures. What we would do, we would  
2 take a look at all the bioassay data that we  
3 have for that individual, take a look to see  
4 how many results he has, take a look to see if  
5 any of his results are above the detection  
6 limit, see how many are below the detection  
7 limit, and what we'll actually do is assign a  
8 claimant-favorable missed intake based on those  
9 bioassay results. And we use information in  
10 our Technical Basis Documents to describe  
11 information about the limits of detection, the  
12 sensitivities of the bioassay, and it is that  
13 information that is most important to us. It's  
14 the bioassay data that we would rely on  
15 primarily.

16 **MR. SCHOFIELD:** So you're relying on data that  
17 in some possibilities there are cases where,  
18 because the supervisor determined the health  
19 physics people are detecting a higher count,  
20 possible (unintelligible) excursion than what  
21 they wanted to see, so you're using this data,  
22 which is obviously flawed if there's -- was a  
23 common practice.

24 **MR. ROLFES:** I -- I heard nothing to indicate  
25 that the bioassay data was flawed, but what we

1           would do for -- for a person that was involved  
2           in an incident, I've frequently seen for  
3           individual claims where a person would give an  
4           incident sample, a urinalysis sample, because  
5           of an incident. And what we can do with that  
6           bioassay data is reconstruct very claimant-  
7           favorable intakes based on that information,  
8           and that is the most important piece of  
9           information that we have in a dose  
10          reconstruction for internal dose  
11          reconstruction.

12         **MR. SCHOFIELD:** So you're comfortable these in  
13         vivo measurements, even though they may have  
14         been many year-- months down the road from a  
15         possible intake that was not necessarily  
16         measured or actually caught at that time?

17         **MR. ROLFES:** The -- the in vivo measurements  
18         that we have, in combination with the  
19         urinalysis results that we have, I believe we  
20         can be -- we're very comfortable with it --  
21         with that information, yes, I believe so.

22         **MR. SCHOFIELD:** How often was the urinalysis  
23         done?

24         **MR. SCHOFIELD:** Some people that didn't work in  
25         the -- in the radiation areas or in the

1 production areas only gave urinalyses on an  
2 annual basis. People in the production area  
3 sometimes gave multiple samples per day, so...

4 **MR. SCHOFIELD:** Okay, thank you.

5 **MS. BALDRIDGE:** I believe in the documents --  
6 in the petition it revealed that the in vivo  
7 monitoring, because it cost like \$36 every time  
8 they performed the analysis, that it was only  
9 provided in 1972 to chemical work-- to chemical  
10 operators, and they were only monitored once a  
11 year.

12 **DR. ZIEMER:** I might insert at this point,  
13 Phil, I think that -- and Larry can speak to  
14 this -- if there'd been a gap or a period of  
15 time since the last bioassay and then something  
16 shows up, NIOSH makes an assumption, based on  
17 what the level is here, that it occurred, for  
18 example, the day after the previous bioassay.  
19 So the -- the claimant-favorable assumption is  
20 that it occurred way back and has been excreted  
21 during that period and that puts the -- the  
22 maximum. Isn't that -- Mark, is that not --

23 **MR. GRIFFON:** I -- I -- I -- I don't think they  
24 generally use that -- that approach. I know  
25 what you're saying, but --

1           **DR. ZIEMER:** Well --

2           **MR. GRIFFON:** -- I think it's a case by case  
3 thing, really, yeah.

4           **DR. ZIEMER:** Well --

5           **MR. GRIFFON:** But they could use that -- yeah.

6           **DR. ZIEMER:** Well, unless -- unless you have a  
7 -- a sort of a regular intake, if you have a  
8 spike here and don't know what happened, worst  
9 case assumption is that you'd go back --

10          **MR. GRIFFON:** That's the worst case assumption,  
11 but that's not always --

12          **DR. ZIEMER:** Okay.

13          **MR. GRIFFON:** -- always the one applied.

14          **MR. ELLIOTT:** I think that's what you're  
15 saying, it's ca-- it is case by case.

16          **MR. GRIFFON:** Yeah.

17          **DR. ZIEMER:** But it's that type of thing, you  
18 don't assume that it was what it is that --

19          **MR. ELLIOTT:** There's models that -- that we  
20 use to show how the dose is integrated over  
21 time, and when those spikes occur, as -- as Dr.  
22 Ziemer indicated, it would be back-estimated to  
23 when it first was taken into the body that  
24 would show this kind of result.

25          **MR. GRIFFON:** I think the important part to

1 follow up on that is -- you know, the -- the  
2 hierarchy -- I don't think we disagree with the  
3 hierarchy presented by Mark that they're using  
4 urinalysis over in vivo counting as a primary  
5 or -- or first tier approach. If they have  
6 that data, that's better 'cause it's  
7 individual-specific and they won't -- you know,  
8 relying on air sampling data has more flaws,  
9 probably. And also with this particular  
10 radionuclide of interest, it's going to -- it's  
11 going to be there for a while, so depending on  
12 the analytical technique, they can certainly  
13 estimate what was there -- you know, from  
14 previous time periods, so I think that -- that  
15 was sort of where you were going is if it  
16 occurred a while after the incident -- that may  
17 not be an issue, but -- you know, 'cause  
18 there's still going to be some material in the  
19 person's body, so -- but it depends on  
20 detection limits and all -- all sorts of  
21 things, as well.

22 **DR. ZIEMER:** Brad, did you have a comment?

23 **MR. CLAWSON:** Yeah, I -- I had some questions  
24 for Mark on the -- the TDB (sic). I  
25 understand, you know, as all of us do on the

1 Board, that -- that this is kind of a living  
2 document and a -- but -- but I've got questions  
3 on -- on the thorium because in a lot of the  
4 places, when we look at the site profile it  
5 says thorium was here, here and here. But  
6 there's gaps in this, and what are we doing to  
7 be able to fill in these -- these gaps, because  
8 at many of these sites I know that it says it  
9 was here and here, but it was a lot of other  
10 places, and there's some large gaps.

11 **MR. ROLFES:** Okay. Some of the information --  
12 the petitioner did a very good job at  
13 identifying a couple of gaps that we had, and  
14 she actually had pointed out in Plant 6 there  
15 was a thorium furnace. She provided some air  
16 monitoring results to us from that. That's --  
17 that's one of the things when we receive the  
18 SEC petition, it -- it involves a much more  
19 detailed look into the records. And so I went  
20 out to -- to the DOE repository for the Fernald  
21 records out on Springdale, and went through  
22 quite a bit of Fernald records from the Fernald  
23 Historical Database. We went through and  
24 copied Mobile In Vivo Radiation Monitoring Lab  
25 results. We -- we went back and looked at a

1 lot more records. We have received an  
2 additional about 1,600 to 1,700 additional  
3 records for Fernald since the time the site  
4 profile had been written in 2003. We have a  
5 much more detailed amount of information --

6 **MR. CLAWSON:** What --

7 **MR. ROLFES:** -- to go in (unintelligible) --

8 **MR. CLAWSON:** I -- even with myself, as lame as  
9 I am on some things, I've seen quite a bit of  
10 data that you guys are calling out production,  
11 and I've seen a lot of variances on the actual  
12 production records of how much was actually  
13 done.

14 **MR. ROLFES:** Uh-huh.

15 **MR. CLAWSON:** How are we going to come -- how  
16 are we going to get this kind of brought in --  
17 be-- because I see a lot of different  
18 information and we're talking hundreds,  
19 thousands.

20 **MR. ROLFES:** When -- for -- for dose  
21 reconstruction purposes, we would rely  
22 primarily on bioassay data. That -- that is  
23 the most important piece of information to us  
24 to reconstruct an individual's internal  
25 exposure. And the film badge is the most

1           important indicator of external exposure.  
2           Those are the two -- the top pieces of  
3           information that we would have a claim for  
4           within our health physics hierarchy of data.  
5           For instance -- does -- does that answer your  
6           question, or --

7           **MR. CLAWSON:** Well, yeah, it does, but --

8           **MR. ROLFES:** Okay.

9           **MR. CLAWSON:** -- maybe as we get into the  
10          working group I --

11          **MR. ROLFES:** Sure.

12          **MR. CLAWSON:** -- because reading into the TDB  
13          (sic), one of my things that -- that came out  
14          in this was the thorium fire that they had, and  
15          they only had so much monitoring data for that.  
16          And we've -- I heard again today that we -- we  
17          had a lot more people that were involved in  
18          that than actually what was monitored. And in  
19          the TDB (sic) it doesn't readdress that.

20          **MR. ROLFES:** Okay.

21          **MR. CLAWSON:** Are we readdressing this and are  
22          we -- because the petitioners, to me, are a --  
23          a great resource of knowledge for this and are  
24          we correcting this shortfall, I guess I could  
25          say, in the TBD?

1           **MR. ROLFES:** As you said, the TBDs are living  
2 documents and NIOSH incorporates the  
3 information that is provided to us. We  
4 evaluate information that's provided by  
5 claimants, by petitioners and by the public. I  
6 just spoke with this gentleman behind me, Rudy,  
7 and he said that he and Mr. Bassett -- who  
8 couldn't be here today, unfortunately -- had  
9 some comments. And when I attended the Fernald  
10 worker outreach meeting, I received  
11 approximately 40 comments from Mr. -- from Mr.  
12 Bassett that I'm working on incorporating at  
13 this time into the TBD, so...

14           **MR. CLAWSON:** Okay, that -- thank you.

15           **DR. WADE:** Sandra has...

16           **DR. ZIEMER:** Sandra?

17           **MS. BALDRIDGE:** Since the external monitoring  
18 based on the badges came up, as I was reviewing  
19 documents, particularly as they relate to my  
20 father's claim and working on the re-evaluation  
21 process, I discovered that there were certain  
22 operators that performed his job task -- he was  
23 involved in gauge setup -- who actually worked  
24 with their heads inside the equipment so that  
25 they could make the instrument settings or

1           whatever was necessary. And I had reviewed  
2           another document where he had recommended  
3           cleaning the lights, getting the smoke off of  
4           the lights so that they could see. So I'm sure  
5           with his head inside that equipment, his badge  
6           wasn't on his nose. You know, his badge was  
7           somewhere down on his chest, so the readings  
8           for some workers couldn't possibly have picked  
9           up what they were actually inhaling in the  
10          course of performing their jobs.

11         **DR. ZIEMER:** Wanda Munn.

12         **MS. MUNN:** Compliments to Mrs. Baldrige. This  
13         is an impressive body of work. Anyone who's  
14         ever done any research knows what's gone into  
15         this, and it's impressive. Thank you for it.

16         **MS. BALDRIDGE:** (Off microphone)

17         (Unintelligible)

18         **MS. MUNN:** It's very impressive indeed. Have  
19         two comments with respect to some of the  
20         content. One, couldn't help but notice the  
21         quote from the original sense of Congress.  
22         Those of you who were at our first meeting of  
23         this Board will recall that I took issue with  
24         that statement, and at the time felt that it  
25         was -- should be the responsibility of an

1           advisory board like this one to point out the  
2           probable error in that, but the general sense  
3           of the Board was that the sense of Congress is  
4           the sense of Congress, erroneously or not, and  
5           we said nothing about it. It still concerns me  
6           that that particular item arises again when, if  
7           this statement that is made is a correct one,  
8           it has never been brought to my attention and  
9           I've not seen it in the body of data that we've  
10          worked with here.

11          The other puzzling thing to me is what appears  
12          to be a contradiction in the approach that  
13          we're taking now to the information that was  
14          recorded from the National Lab of Ohio's  
15          information from 20 and 40 years ago. If  
16          someone could clarify for me the difference in  
17          our approach now as opposed to what the  
18          Laboratory at that time apparently took as  
19          their position with respect to ability to  
20          establish dose, it would be helpful.

21          **DR. ZIEMER:** Sandra, can you speak to that?

22          **MS. BALDRIDGE:** NLO was National Lead of Ohio.

23          **MS. MUNN:** Yes.

24          **MS. BALDRIDGE:** They were the contractor that  
25          operated the FMPC. It was not a reference to a

1 laboratory, for clarification.

2 **MS. MUNN:** No, but since it's a portion of the  
3 data that you have uncovered, their statements  
4 -- some of their statements seem to be at odds  
5 with the approach that's currently being taken  
6 by NIOSH in how we are assessing the individual  
7 dose to the claimants, so --

8 **MS. BALDRIDGE:** That -- that was one of my  
9 concerns.

10 **MS. MUNN:** And -- and I was asking for a  
11 clarification from NIOSH for that.

12 **MR. ROLFES:** I -- I believe there may have been  
13 some concern about some of the records -- could  
14 -- could you repeat what your question was  
15 directly, Wanda?

16 **MS. MUNN:** You heard the -- and I'm sure you've  
17 seen the statements that were used in the  
18 petition --

19 **MR. ROLFES:** Uh-huh.

20 **MS. MUNN:** -- from NLO --

21 **MR. ROLFES:** Uh-huh.

22 **MS. MUNN:** -- with respect to monitoring --  
23 what can and cannot be determined from  
24 urinalysis data, primarily, and --

25 **MR. ROLFES:** Okay.

1           **MS. MUNN:** -- clarification would be helpful.

2           **MR. ROLFES:** For -- for example, the -- the  
3           urine samples that were taken in the earlier  
4           time periods, the -- the routine monitoring of  
5           employees -- the urine samples were reported in  
6           mass units, meaning in micrograms -- or  
7           milligrams, even -- per liter of urine. What  
8           NIOSH does with that information is  
9           reconstructs a person's radiation intake. For  
10          an individual, based on their bioassay data, we  
11          take those mass results and multiply them by a  
12          specific activity of various types of uranium,  
13          either natural uranium for the earlier time  
14          periods or I believe after 1964 our default I  
15          believe is two percent enriched uranium. It is  
16          that information that we use to complete a -- a  
17          dose assessment.  
18          And I believe in the earlier time periods, as  
19          NLO indicated, they -- they didn't estimate the  
20          people's radiation dose from their urinalysis.  
21          They were monitoring for chemical toxicity.  
22          However, we have those urine sample results and  
23          we can convert those to -- to intakes based on  
24          known and documented activities -- specific  
25          activities of the materials that were

1 processed.

2 **MS. MUNN:** So let me try to be doubly clear  
3 here. The methods that were -- the same sample  
4 --

5 **MR. ROLFES:** Uh-huh.

6 **MS. MUNN:** -- the sample results from that time  
7 were used for a different purpose than than  
8 they are used now, and the methods that were  
9 being employed in that analysis have improved  
10 and are more expanded today than they were at  
11 the time that these statements were made. Is  
12 that an accurate --

13 **MR. ROLFES:** I believe the early urine  
14 monitoring that was done was -- they were more  
15 concerned about nephrotoxicity because of the  
16 soluble forms of uranium can cause kidney  
17 damage --

18 **MS. MUNN:** Uh-huh.

19 **MR. ROLFES:** -- and they wanted to prevent  
20 workers from receiving any direct chemical  
21 effects from -- from the exposures, so...

22 **MS. MUNN:** Hence the statements that they did  
23 not make evaluations based on --

24 **MR. ROLFES:** Correct.

25 **MS. MUNN:** -- urinalysis. But the type of

1 analysis you are making now is different than  
2 from the type of analysis they were making  
3 then.

4 **MR. ROLFES:** Okay. We receive those uranium  
5 urinalysis results in units of mass, and what  
6 we do at NIOSH with those, we would take a look  
7 -- for example, say an individual had a -- a  
8 urinalysis result of 20 micrograms per liter.  
9 We would look at that -- say the -- say the  
10 sample came from someone in 1956. We would  
11 take that 20 micrograms per liter and we would  
12 multiply it by a specific activity of 683  
13 picocuries -- 683 picocuries per milligram, and  
14 then we would multiply that by a daily  
15 excretion from standard man of 1.4 liters per  
16 day. We would the use that urinalysis result -  
17 - it's now an activity excretion per 24 hours.  
18 We would use that urinalysis result to estimate  
19 the worker's intake, so...

20 **MS. MUNN:** Thank you, Mark.

21 **MR. ROLFES:** You're welcome.

22 **MR. ELLIOTT:** Let me -- let me add to that. I  
23 -- I think your question also goes to the  
24 purpose of the data that was collected, why was  
25 that information collected. And I think -- I

1 think the petitioners have made a very clear  
2 case that in -- in the quotes that she's  
3 extracted from those reports, what the purpose  
4 was, as Mark's describing it, was -- it was not  
5 for calculating a body burden. It was for --  
6 attempting to understand whether or not there  
7 was enough chemical metal exposure in the  
8 system that would cause, you know, failure in  
9 the -- in an organ.

10 We -- we use data in this dose reconstruction  
11 program that were collected for purposes other  
12 than compensation. That's recognized in -- in  
13 our rule. You all commented and heard about  
14 that. The bulk of the data that we use when we  
15 talk about external dose or TLD badge, film  
16 badge data, is -- is compliance-driven data.  
17 And it's not research data and it's not  
18 compensation-related data. However, we're  
19 allowed to use that for those various purposes  
20 that the data was collected. I think your  
21 point's well raised. I think the petitioner's  
22 point is also well made. We understand the  
23 purpose of the -- of the data as it's  
24 collected, and we should do perhaps a better  
25 job of explaining how that purpose is

1 established in our understanding and how we're  
2 applying it in our dose reconstruction.

3 **MS. MUNN:** It would be helpful.

4 **DR. ZIEMER:** Thank you. Okay, John Poston and  
5 then Jim Melius.

6 **DR. POSTON:** Well, this may be beating a dead  
7 horse, Wanda, but in the early regulations and  
8 recommendations on internal dose, most of these  
9 -- all of these were based on what's called a  
10 maximum permissible concentration. And for all  
11 of the radionuclides that are listed, they're  
12 based on a radiation dose to what was called a  
13 critical organ, with the exception of uranium.  
14 The values that are listed as maximum  
15 permissible body burdens and so forth in the  
16 regulations are not based on dose. There was  
17 no dose calculation made. It was simply based  
18 on industrial hygiene considerations, as has  
19 been pointed out. That is, the nephrotoxicity.  
20 Had the concentration been based on dose, it  
21 would have been a factor of ten approximately  
22 higher than the value that was listed, and  
23 that's why instead of listing them in  
24 microcuries or millicuries per ML or cubic  
25 centimeter or whatever, the values were listed

1 as -- as mass.

2 **DR. ZIEMER:** Jim Melius.

3 **DR. MELIUS:** Yeah, two points. One is this  
4 issue keeps coming up about sort of the  
5 legality of -- I should say the contradiction  
6 between what's written in the Act and -- and  
7 what's been the NIOSH approach of using data  
8 from other sites to reconstruct doses. And I  
9 think we'd asked at the last meeting for that  
10 to be put on the agenda to be discussed, and  
11 apparently it's not this time. I would hope  
12 that we could put it on the agenda for the next  
13 meeting. It's -- repeatedly keeps coming up,  
14 and I -- and I think we need to have some  
15 specific discussion of -- of that particular  
16 issue.

17 Re-- regarding this particular site profile --  
18 or excuse me, SEC evaluation, I think --  
19 question -- terms of how -- how do we go  
20 forward now. I believe we've got the workgroup  
21 established already on the site profile. We  
22 have -- they're working with the -- resolving  
23 the SC&A comments on that site profile. I  
24 think given now that we have an SEC evaluation  
25 report, we need to get that brought into the

1 process and I -- I guess I would be curious to  
2 know how we get SC&A involved on issues related  
3 to the -- specifically to the SEC because I  
4 think we need to try to resolve that, you know,  
5 relatively more quickly than all of --  
6 necessarily all the issues that are in the site  
7 profile review.

8 **DR. ZIEMER:** That's an excellent point and I  
9 think I might call on Brad -- Brad, you -- as  
10 chairman -- or chairman for the workgroup for  
11 this particular case, can you recommend a path  
12 forward here?

13 **MR. CLAWSON:** First of all, we just -- as you  
14 know, we did something a little bit different  
15 this time and we got SC&A to get involved with  
16 any potential SEC petition problems. They have  
17 given me a preliminary matrix, but it's not out  
18 for the public at this time because they still  
19 need to clean it up. So first of all, what I'd  
20 like to do is be able to get SC&A to be able to  
21 give us the final version of this, plus give it  
22 to NIOSH for them to be able to review. And  
23 then as soon as possible I'd like to be able to  
24 sit down as a working group and discuss these  
25 issues that we have got.

1           **DR. ZIEMER:** So the -- the suggested path  
2 forward would be to have SC&A complete the site  
3 profile review, which we have already tasked  
4 them to do --

5           **MR. CLAWSON:** Right.

6           **DR. ZIEMER:** -- for NIOSH to then respond to  
7 the findings of that, in conjunction with  
8 working with the workgroup.

9           **MR. CLAWSON:** Correct.

10          **DR. ZIEMER:** And then at some point to be able  
11 to come back to the Board with a recommendation  
12 from the workgroup on this SEC petition.

13          **MR. CLAWSON:** Yes.

14          **DR. ZIEMER:** Mark.

15          **MR. GRIFFON:** I -- I just -- I'm not clear --  
16 I'm not clear whether we've assigned SC&A to  
17 review the petition or the evaluation report.  
18 It -- I know at this point we're just working  
19 from the site profile, which was -- which was  
20 to kind of hit the ground running, that was the  
21 idea, and --

22          **DR. ZIEMER:** Lew can help --

23          **MR. GRIFFON:** -- I think we have to --

24          **DR. ZIEMER:** Lew can help us on this --

25          **MR. GRIFFON:** -- do that, yeah.

1           **DR. ZIEMER:** -- with the work assignment. What  
2 was the assignment?

3           **DR. WADE:** We believe we asked SC&A to prepare  
4 a matrix of -- from their evaluation of the  
5 site profile, to prepare a matrix of issues  
6 that they felt were related to the SEC  
7 petition. And I think we're primed to have  
8 them go further as the workgroup and as the  
9 Board decides.

10          **DR. ZIEMER:** So it would be the completion of  
11 the matrix and development of -- of those  
12 issues that they have identified, I think as I  
13 -- I've seen a copy of the matrix -- or the  
14 preliminary, and a number of the issues that  
15 you identify need to be fleshed out yet I think  
16 by SC&A. They've been identified as possible  
17 issues, but perhaps need fleshing out, so...

18          **MR. GRIFFON:** Do -- do they -- have we assigned  
19 SC&A officially under -- is it Task V, the SEC  
20 review, have we officially brought them on to  
21 review the petition and the evaluation report?

22          **DR. WADE:** I think we've asked them to do a  
23 specialized review, which was --

24          **MR. GRIFFON:** Okay.

25          **DR. WADE:** -- the matrix. I think we can at

1           this point, or as quickly as you -- as is your  
2           pleasure, ask them to undertake the full --

3           **MR. GRIFFON:** 'Cause I -- I think they might  
4           want to expand the matrix to include things  
5           that were raised in the petition or -- or the  
6           evaluation report that they didn't consider.

7           **DR. WADE:** And that's fine.

8           **DR. ZIEMER:** Before we ask for a formal motion,  
9           let me see -- Dr. Roessler has a comment.

10          **DR. ROESSLER:** Question. It seems like the  
11          timing on this would be that the Board would  
12          address it after the workgroup report, either  
13          at our next conference call, or would that -- I  
14          think that for the petitioners' information, we  
15          have to give them some idea as to when this  
16          would come up, conference call or the next  
17          face-to-face meeting.

18          **DR. ZIEMER:** When is the conference call?

19          **DR. WADE:** I believe it's -- let me get --

20          **DR. ZIEMER:** Go ahead, Ray.

21          **MR. BEATTY:** Along that line, Dr. Ziemer, thank  
22          you, Gen, for that -- including the petitioners  
23          as the working group does get together --

24          **DR. ZIEMER:** Oh, yes.

25          **MR. BEATTY:** -- please, yes. I know you've

1 done that before --

2 **DR. ZIEMER:** Right.

3 **MR. BEATTY:** -- with Bethlehem Steel and --

4 **DR. ZIEMER:** Yes, the prac-- the practice will  
5 be that any -- any meetings on this will  
6 include the petitioners, yes.

7 **MR. BEATTY:** Thank you.

8 **DR. WADE:** It's April 5th.

9 **DR. ZIEMER:** The conference call is scheduled  
10 for April 5th, and John Mauro, can you speak  
11 for SC&A? Where -- what do we need, time-wise?

12 **DR. MAURO:** Yeah, let me -- let me help a  
13 little. Yes, Dr. Wade, our mandate initially  
14 was I guess well-focused, mainly we have our  
15 site profile and to go through it, prepare a  
16 matrix of what we believe to be potential SEC  
17 issues, which in a very preliminary way we have  
18 delivered. It is certainly not final, but one  
19 of the -- and I think that the plan as -- as  
20 laid out, in terms of what's -- finalization of  
21 that matrix and getting it into the working  
22 group hands, and then the next step of course  
23 to begin to work those issues at -- at a  
24 working group. But there is one aspect to it  
25 that we really haven't discussed, and it sounds

1           like there's quite a bit of additional work  
2           that -- regarding thorium, coworker models,  
3           various work products that are going to  
4           supplement the evaluation report and the site  
5           profile that are going to be very fundamental  
6           to some of the issues that we have before us.  
7           The question becomes are -- using the current  
8           plan, we may very well put together our matrix,  
9           meet what we still perhaps may not have had an  
10          opportunity to see the form of the coworker  
11          model, the new datasets. Thorium, as you know,  
12          was one of our major concerns, and it sounds as  
13          if there's a lot of new or now-available  
14          thorium data. That's going to be fundamental  
15          to our ability to engage this -- issues  
16          productively. So in terms of timing, we are  
17          prepared to engage this immediately, but the --  
18          the -- when it's best to have let's say the  
19          face-to-face is a judgment call. Should we  
20          wait until NIOSH has an opportunity to put this  
21          material up on the O drive and make it  
22          available to us, perhaps it's available now,  
23          largely -- maybe not in a formal, final sense,  
24          but in a preliminary sense, as in many cases  
25          we've done in the past -- and that's fine.

1           Although I do think it's important that we are  
2           able to see and have some time to look at some  
3           of this new material.

4           **DR. ZIEMER:** And Dr. Roessler, I think, as in  
5           many other cases, we -- we want to move forward  
6           as rapidly as we can, but still take the time  
7           to do justice to the issues that have been  
8           raised by the petitioners, as well as by the  
9           Board's own contractor. So I -- I think we all  
10          recognize both the urgency and the need to do a  
11          -- a good job on the review, so -- what I'm  
12          going to suggest is that we take a comfort  
13          break, and during the break I'll ask Brad and -  
14          - and Mark if you would develop some wording  
15          for a formal motion that will propel us forward  
16          action-wise.

17          Now let's take a 15-minute break at this point.  
18          (Whereupon, a recess was taken from 10:55 a.m.  
19          to 11:30 a.m.)

20          **DR. ZIEMER:** Okay, we'll call the meeting back  
21          -- call the meeting back to order. The Chair  
22          recognizes Brad Clawson for purposes of making  
23          a motion.

24          **MR. CLAWSON:** Thank you, Dr. Ziemer. I'd like  
25          to make a motion that we task SC&A with a full

1 review of the Fernald SEC petition.

2 **DR. ZIEMER:** Okay. The motion is that we task  
3 SC&A to do a full review of the Fernald SEC  
4 petition. Is there a second?

5 **MR. PRESLEY:** I'll second.

6 **DR. ZIEMER:** Okay, seconded by Presley, and by  
7 Griffon, a double second.

8 Now before we have discussion, as the Chair  
9 interprets this motion, the effect of the  
10 motion would be two-fold or multi-fold. Number  
11 one, it would defer action today on the  
12 recommendation from NIOSH to basically disprove  
13 the -- disapprove the petition at this time.  
14 That is, it would defer the action.

15 Number two, it would set in motion our -- our  
16 normal process, which is -- after an SC&A  
17 review -- a issue resolution process involving  
18 the Board, SC&A and NIOSH, and -- or the  
19 workgroup, representing the Board, and SC&A and  
20 NIOSH. And then ultimately, hopefully would  
21 lead to a recommendation from the workgroup to  
22 the Board as to the SEC petition on Fernald.

23 **MR. CLAWSON:** That is correct.

24 **DR. ZIEMER:** Any discussion on the motion?

25 (No responses)



1 Mike. Brad Clawson made a motion, seconded by  
2 Mark Griffon and Bob Presley, to task SC&A to  
3 do a full review of the Fernald SEC petition.  
4 And I -- I pointed out that the effect of that  
5 would be to defer action by the Board at this  
6 time on the main petition, and that is defer  
7 action on sending a recommendation to the  
8 Secretary until we had a chance to complete the  
9 work that would be outlined in this motion, and  
10 that would be the normal process of developing  
11 findings by our contractor, resolving those  
12 with our workgroup, the contractor and NIOSH,  
13 and ultimately to have our workgroup bring to  
14 the Board a full recommendation on this  
15 petition.

16 **MR. GIBSON:** I -- I'd vote yes on that.

17 **DR. ZIEMER:** Okay. So is there anyone  
18 abstaining from the motion and --

19 **MS. MUNN:** No --

20 **DR. ZIEMER:** Wan--

21 **MS. MUNN:** -- I couldn't remember about Mike's  
22 conflicts. I couldn't remember whether he was  
23 conflicted.

24 **DR. ZIEMER:** No, Mike was apparently not --

25 **MS. MUNN:** Only on Mound, okay.

1           **DR. ZIEMER:** -- conflicted on this, no.

2           **MR. GIBSON:** No, the Fernald conflict has been  
3 removed.

4           **DR. ZIEMER:** Yeah. So -- and there are no no's  
5 and no abstentions, the motion carries and we  
6 will proceed on that basis.

7           It's understood we will keep the petitioners  
8 involved of any documents developed. We will  
9 provide those. We will keep the petitioners  
10 involved -- or apprised of any meetings, either  
11 phone or face-to-face, and they will be welcome  
12 to either attend or participate by phone in any  
13 such meetings.

14          **DR. WADE:** Dr. Ziemer, before we leave the  
15 discussion of Fernald, Ms. Baldrige gave out a  
16 -- a copy of her comments, and I know Board  
17 members have them. I'm not sure everybody else  
18 has them, but I would be so bold as to read  
19 into the record the last comment on the page  
20 that Ms. Baldrige gave us. It says (reading)  
21 This has been a dauntless task, one that I  
22 would not have chosen for myself. But by the  
23 grace of God I have done this thing.  
24 I think it's important that be on the record.  
25 Thank you.

1           **DR. ZIEMER:** Thank you very much, Lew.

**ROCKY FLATS SEC UPDATE**  
**MR. MARK GRIFFON, ABRWH**  
**PETITIONERS**

2           Now our next item of business is just an update  
3           on the Rocky Flats SEC --

4           **DR. WADE:** Our first item of business is to  
5           recover Dr. Lockey, who --

6           **DR. ZIEMER:** Oh, Dr. Lockey, I --

7           **DR. WADE:** -- who threatened to stay in the  
8           audience, but no --

9           **DR. ZIEMER:** Yeah, Dr. Lockey told me he really  
10          enjoyed --

11          **DR. WADE:** -- Dr. Lockey has to come to the  
12          table.

13          **DR. ZIEMER:** -- being out there, rather than up  
14          here. But the time is up, Dr. Lockey, and --

15          **DR. LOCKEY:** (Off microphone) (Unintelligible)

16          **DR. WADE:** And as Dr. Lockey returns to the  
17          table, relative to conflict of interest, we're  
18          now going to hear an update on the Rocky Flats  
19          SEC petition. There are two Board members who,  
20          in their current documentation, show as  
21          conflicted on Rocky Flats SEC, Ms. Beach and  
22          Brad Clawson. Both of those are under  
23          discussion and, again, it might change when  
24          next we meet. Because of the nature of this

1 next item, which is simply an update by the  
2 workgroup chair, we see no reason to -- for  
3 those two fine people to leave the table. But  
4 for the record to be clear, I point out that  
5 those are conflicts on the record now that are  
6 under discussion and deliberation. Thank you.

7 **DR. ZIEMER:** So that although they are still at  
8 the table, they still are not able to discuss  
9 or make motions --

10 **DR. WADE:** That's right.

11 **DR. ZIEMER:** -- and we don't anticipate any  
12 motion or --

13 **DR. WADE:** That's correct.

14 **DR. ZIEMER:** -- discussion. There may be some  
15 questions for the workgroup. Mark.

16 **MR. GRIFFON:** Okay, I'm -- I'm going to attempt  
17 to do a fairly brief overview of the workgroup  
18 status --

19 **DR. ZIEMER:** Be-- before -- before you do,  
20 also, Mark, I want to --

21 **MR. GRIFFON:** That was brief.

22 **DR. ZIEMER:** -- double-check and make sure that  
23 we have some Rocky folks -- Rocky -- Rocky --

24 **DR. WADE:** Flats.

25 **DR. ZIEMER:** -- Rocky Flats -- I have to be

1           careful. My wife and I vacation on Rocky Fork  
2           Lake, and I keep wanting to say Rocky Fork.  
3           Rocky Flats petitioners, I'm wondering if  
4           Terrie Barrie's on the line?

5           **MS. BARRIE:** Yes, Dr. Ziemer, I am.

6           **DR. ZIEMER:** Good, Terrie, and you'll have an  
7           opportunity to comment also if you wish to.  
8           And I believe perhaps there was one other Rocky  
9           Flats person -- is there another Rocky Flats  
10          person on the line?

11          **DR. WADE:** Kay Barker.

12          **MS. MINKS:** This is Erin Minks from --

13          **DR. ZIEMER:** Is Kay on the line? Kay Barker?

14          **MS. BARRIE:** Dr. Ziemer, this is Terrie again.  
15          Kay Barker can't participate.

16          **DR. ZIEMER:** Oh, okay. Thank you. Very good.

17          **MS. MINKS:** Dr. Ziem-- Dr. Ziemer, this is Erin  
18          Minks from Senator Ken Salazar's office --

19          **DR. ZIEMER:** Oh, very good.

20          **MS. MINKS:** -- also on the line.

21          **DR. ZIEMER:** Welcome, and if you have comments  
22          after Mark's report, we'd be pleased to hear  
23          those, as well.

24          **MS. MINKS:** Wonderful. Thank you.

25          **MR. GRIFFON:** Okay. We -- I can't even count

1           the number of workgroup meetings we've had on  
2 Rocky Flats. We're -- we're moving along on a  
3 number of complex issues. You -- you've heard  
4 reports before. We did delay a meeting in  
5 Denver until the May meetings, so that's part  
6 of the reason we're in Cincinnati this time.  
7 And -- and we also -- we had a workgroup  
8 meeting on January 26th, I believe, a fairly  
9 recent workgroup meeting in Cincinnati and we --  
10 -- at that meeting we also made plans to have a  
11 -- a meeting probably in early March, with the  
12 idea that we're going to get final reports --  
13 SC&A's going to give a final evaluation report  
14 of NIOSH's evaluation report and -- and be  
15 prepared. We're shooting for this May meeting  
16 to have all the pieces in place and -- and to  
17 give us enough lead time, we thought probably  
18 early March is going to be when the workgroup  
19 meeting's going to take place 'cause we do have  
20 to go through Privacy Act reviews before  
21 releasing this report to the public.  
22 So we're probably shooting for early March to  
23 have another meeting, and I'll give you an  
24 update on -- on some of the items. The -- for  
25 those of you who've been following these

1 issues, the -- the issues pretty much have not  
2 changed, the categories. I'll go through these  
3 categories again and try to give a fairly brief  
4 update.

5 There's some -- a small actio-- you know, not  
6 small, but there's action items that I won't go  
7 through the entire list, but I want to give you  
8 a sense of where we're at on -- on these major  
9 items.

10 The first and probably one of the largest  
11 pieces left for us to complete is the question  
12 of data completeness. And SC&A -- I think  
13 since the la-- since the last we met as a full  
14 Board, SC&A reviewed 52 -- I think it's 52 --  
15 individual cases, individual radiation files  
16 where they went back to the hard copy records,  
17 the entire radiation file for each individual,  
18 with the intent of looking at this question of  
19 do they have a -- are the records complete for  
20 -- for these individuals. And we looked at  
21 productio-- you know, sort of what we would  
22 consider high exposure potential workers, but  
23 also a random selection across the -- the group  
24 of claimants that we were sampling from -- SC&A  
25 did -- and -- and they -- they issued a report

1 back to the workgroup. They -- they did  
2 outline some gaps in external and, to a lesser  
3 extent, in some of the internal dose data, but  
4 we're -- at the point we're at right now, we're  
5 waiting for a NIOSH response to that report.  
6 In part what NIOSH is going to look at, and  
7 we've had some general discussions on this,  
8 there could be good explanations for some of  
9 these gaps. They -- monitoring practices  
10 changed over time, so depending on job title  
11 and where these people worked, they may or may  
12 not have been required to be on a monitoring  
13 program so therefore the gap may be very well  
14 explained. So that -- that part of the  
15 analysis is not complete and NIOSH is working  
16 hard on that and -- you know, 52 individual,  
17 when you have to look at all their work  
18 histories as well -- as well as the monitoring  
19 practices over time, it takes a fair amount of  
20 time. So -- but we expect their report soon on  
21 that, and that -- that's sort of where we're at  
22 with the data completeness review.  
23 Part of that is this question -- this  
24 particular issue that came up before we -- we  
25 embarked on the full data completeness review,

1 we had a question of a 1969 data gap, as -- as  
2 has been defined. And this -- this -- SC&A  
3 issued a separate report for that one time  
4 period and they -- they -- in this report they  
5 did note gaps that were involved for employees,  
6 including non-plutonium workers, sort of these  
7 uranium workers, as well as individuals  
8 involved in this 1969 fire.

9 And third, and maybe one of the most important  
10 findings, was there -- there were instances of  
11 zeroes in the electronic database when the hard  
12 copy records had blank fields. So this -- this  
13 was particularly important to us due to the  
14 earlier-raised concerns about the database, the  
15 electronic data, so this question of -- again,  
16 there were blanks in the individual's hard copy  
17 records, indicating that they were not  
18 measured. And there were actually zeroes put  
19 in the -- in the electronic database. So that  
20 -- that -- again, I don't think we have a  
21 response from NIOSH on this report, so that's  
22 sort of in NIOSH's hands to review and get back  
23 to us on that, but that's a brief summary of  
24 what SC&A found.

25 The third issue is an ongoing question on the

1           coworker models. They have coworker models for  
2           both internal and external exposures, and the -  
3           - based on a recent review of the cases at  
4           Rocky, it -- it looks as though the use of  
5           these models, especially the external dose  
6           model, may be a little more extensive than  
7           originally anticipated by NIOSH. I think it --  
8           it's not a few cases, but it's probably in the  
9           order of dozens or maybe up to 100 cases, I'm  
10          trying to remember the numbers. So the -- the  
11          only reason this -- this continues -- or is on  
12          our radar more now I think is because the --  
13          the issue was sort of dropped as a main  
14          priority of the workgroup because it was -- it  
15          was our understanding that the -- there was  
16          going to be very little reliance on coworker  
17          models. And now it seems like there might be a  
18          little more reliance, not -- you know, maybe  
19          not like some other sites, but a little more  
20          reliance on coworker models, and this rolls  
21          back into that -- this ongoing question of the  
22          -- of these databases and -- I know this is  
23          difficult if people haven't followed our -- our  
24          workgroup discussions, but there -- there are a  
25          few databases -- electronic databases that are

1 out there that are being used, and we have --  
2 SC&A, along with the workgroup, have found some  
3 discrepancies between these databases --  
4 databases, and we're trying to understand  
5 these.

6 We have also some analysis by NIOSH that, you  
7 know, concedes that there's discrepancies, but  
8 indicates that it will not affect the coworker  
9 -- the projected doses or -- or intakes by the  
10 -- by the coworker model. So we have to -- in  
11 the last meeting we asked SC&A to look back at  
12 these in light of the fact that these coworker  
13 models may be used a little more -- for -- for  
14 more cases, and let's make sure that we're --  
15 we're comfortable that -- that these -- so it's  
16 not so much -- I think we have -- SC&A is  
17 pretty comfortable with the models, the way the  
18 models were done. The question is the data in  
19 the models, so it's -- it goes back to the data  
20 again. The way it's modeled is not -- is less  
21 of a question, and I think we've also concluded  
22 that if there's any question of the way it was  
23 modeled, it's probably something that will  
24 continue in our site profile review -- in other  
25 words, it wouldn't impact the SEC decision. It

1           wouldn't -- it wouldn't affect the decision  
2           whether NIOSH could -- could calculate a  
3           plausible upper bound for -- for the -- for the  
4           population or -- of interest in the SEC cohort.  
5           So that -- so this down ba-- again, back to the  
6           data that was used in these models and whether  
7           it -- whether it (unintelligible) -- sufficient  
8           to be a problem.

9           The fourth item was this category of other  
10          radionuclides, and again, the primary --  
11          primary concerns at Rocky were plutonium, to  
12          some extent uranium. There were other  
13          radionuclides used over time. I think through  
14          the workgroup process we -- we've gotten  
15          agreement between SC&A and NIOSH on -- on  
16          everything except we're down to thorium, and  
17          there -- here I think we're -- we're -- since  
18          the last workgroup meeting, we -- we have sort  
19          of two questions we're dealing with on thorium.  
20          There -- there's not really a lot of monitoring  
21          data -- there might be some air sampling data  
22          for one particular operation, but overall  
23          there's not a lot of monitoring data, so -- so  
24          for some of the different thorium uses, they're  
25          relying on sort of a source term model where

1           they -- they're identifying how much thorium  
2           was present and from that estimating the like--  
3           the potential intakes. And I think where we  
4           stand with that is that we're pretty close to  
5           agreement on the source terms, and we're  
6           waiting for NIOSH's response on -- on the -- on  
7           the approach for bounding for a couple of those  
8           instances. I won't get into all -- there's  
9           several different uses of thorium at the site  
10          over time.

11          And -- and I think it's probably also fair to  
12          say that -- that -- just to go back, that the -  
13          - you know, data completeness seems like our  
14          biggest ob-- objective in front of us, the most  
15          work left for the workgroup is probably on this  
16          data completeness question.

17          Anyway, moving on -- so thorium, then we have a  
18          -- another issue which I've rolled into one.

19          There's three issues here, safety concern-- we  
20          -- we've defined these issues sort of as safety  
21          concerns, data integrity issue and logbook  
22          analysis. And I think they all fall under this  
23          question of -- which was raised by petitioners  
24          and other people that -- that spoke before the  
25          Board or -- or to NIOSH or SC&A, the question

1 of the records -- they've indicated that their  
2 records don't seem to match their -- their  
3 experience, their -- for -- for a particular  
4 job, they felt they were in a high rad area and  
5 for that time period they had, you know, close  
6 to zeroes on their radi-- in their individual  
7 radiation record. For example, that's one --  
8 one sort of example. There were a number of  
9 these that we've gone through in this workgroup  
10 process. Some of these led -- led into looking  
11 into these different pieces, such as these  
12 safety concern reports and back to some of the  
13 original logbooks. And the purposes for that  
14 was to sort of look at the logbook values, to  
15 the extent we could find actual quantitative  
16 information in the logbooks, and compare them  
17 to the radiation records of individuals to sort  
18 of get a sense of -- and our -- our goal here -  
19 - I think it's important to -- to -- to clarify  
20 that. Our goal as a workgroup was to look at  
21 the question of was there any indication of a  
22 systemic problem, so thi-- this is a -- a bit  
23 subjective how we -- how we defined that, but  
24 that -- that's what -- what we really want to  
25 nail down is -- and -- and in these three --

1 SC&A has issued three reports on each of those  
2 topics I mentioned, and their basic conclusion  
3 in all three I think was that they -- they had  
4 -- they had no indication of systemic  
5 discrepancies in -- in those three prongs of --  
6 of sort of what we're looking at. You know,  
7 however, they -- they do note that they did  
8 find specific discrepancies, and -- you know,  
9 but -- but our goal was not to necessarily  
10 chase down each particular case, but rather to  
11 address the entire class. So I think that's --  
12 that's where we've -- where they're coming down  
13 on that is there's no systemic discrepancies.  
14 I do want to indicate the -- the logbook  
15 analysis is one of the last pieces we received,  
16 and the only -- there is another sort of  
17 qualifier that we -- that was raised in the  
18 last workgroup meeting on -- on this  
19 conclusion. We -- we initially asked for  
20 logbooks to sort of encompass the entire time  
21 period in question, from the '50s through about  
22 1993, which is when the -- when the D&D period  
23 would have started. And we also asked for --  
24 you know, represent the -- the producti-- you  
25 know, have a good representation of the highest

1 areas of concern with regard to exposure, so --  
2 so that's how we wanted the sampling of these  
3 logbooks to occur. The report back from NIOSH  
4 -- and I may be slightly off on those years,  
5 but I think it covered from the beginning of  
6 the site up through about 1971. I think that's  
7 approximately -- 1971. Beyond -- so -- so  
8 there was a concern from SC&A expressed in  
9 their report that from '70 to '90 really wasn't  
10 sampled. We don't have any indication -- so  
11 there was no comparison of logbooks, again,  
12 against these individual radiation records for  
13 that time period. And NIOSH said that although  
14 it wasn't in their report, they did find some  
15 logbooks from that time period. There's a --  
16 we had a discussion about -- approximately 450  
17 boxes of records were retrieved at the Records  
18 Center and some of these boxes or -- or within  
19 some of these boxes there were logbooks that  
20 certainly did cover that time period or part of  
21 that time period. I'm hedging a little 'cause  
22 I'm not exactly sure what -- what was found in  
23 these boxes. And NIOSH did sample -- go  
24 through some of these logbooks and the  
25 impression -- or the conclusion they came to

1 was that there wa-- they were different than  
2 the logbooks that we looked at in the '50s and  
3 '60s in that there was not much quantitative  
4 informa-- or any quantitative information that  
5 they could use to cross-walk. So in the early  
6 periods we found -- very often, actually --  
7 fairly specific -- you know, there was an  
8 incident involving five employees. They'd  
9 actually give the employees' names and they'd  
10 say they were sent to medical for urinalysis  
11 samples, and three days later in the log you'd  
12 see, you know, urine samples for said  
13 individuals came out this way, and they'd have  
14 values. So you had a date, you had a value,  
15 you had a name. We could cross-walk and --  
16 and it sort of answered that question of, you  
17 know, were these records in the individual  
18 radiation records.

19 For the '70s through 9-- for '92 or whatever,  
20 NIOSH concluded that these logs just didn't  
21 have that kind of information, so they -- you  
22 know, obviously it wasn't in their report  
23 because there was just nothing there to do a  
24 comparison with. I did -- the -- the -- the  
25 only question here is that these logs that they

1 reviewed were not scanned, so they're not  
2 really available to the Board or SC&A, so we  
3 were kind of -- we haven't seen that  
4 information. We did ask NIOSH to give us a  
5 report on sort of the -- a -- a box -- if they  
6 have these 450 sort of a index of the boxes,  
7 which ones they sampled from and generally what  
8 logs they looked in and what they found. And  
9 at the last workgroup meeting they agreed to --  
10 to give us a description of -- of this  
11 activity, and that's as far as we've taken that  
12 at this point. We haven't asked SC&A to follow  
13 up on -- on these particular boxes or -- or  
14 logbooks within them. So that's a little bit  
15 of a -- we were hoping for logbooks in that  
16 time period to compare against them and our --  
17 our conclusion from NIOSH is that they just --  
18 the logbooks are there, but -- but they're --  
19 they're not the same as what we had for earlier  
20 time periods. They're not useful.

21 All right. The sixth item is this question of  
22 sup-- super S plutonium, which is a very un--  
23 insoluble form of plutonium and we've -- we've  
24 -- NIOSH came up with a TIB, TIB-49 -- excuse  
25 me, TIB-49, method to reconstruct doses for

1           this particular issue of super S exposures.  
2           And SC&A's reviewed the model. I think we're  
3           at -- at like the final steps of -- in -- in  
4           this review they've -- the model was based on  
5           six or eight cases, I think -- six -- I can't  
6           remember the exact number, but -- of  
7           individuals that were clearly defined -- or --  
8           or clearly exposed to this super S material and  
9           -- and also I think they tried to find cases  
10          that didn't have a previous exposure that would  
11          interfere with the interpretation of the data.  
12          So we have these six or eight cases that are  
13          referenced in TIB-49.  
14          We -- we noticed that there were 25 individuals  
15          involved in -- in one of the-- 25 other  
16          individuals that were involved in -- in this  
17          fire and -- and we asked if -- if this TIB-49  
18          approach would bound those cases as well, and  
19          all those case files have now been provided to  
20          SC&A. They're completing the review to assure  
21          basically that the six cases that were picked  
22          for this TIB were in fact appropriate and  
23          bounding and -- and would -- would yield the  
24          highest -- highest ult-- highest doses, or  
25          highest intakes. So that's our final step I

1 think on the analysis of the super S model.  
2 Seventh item is a question on neut-- neutron  
3 dosimetry. We have a -- several small  
4 technical follow-up issues on the neutron  
5 dosimetry, as well as the neutron coworker  
6 model. And basically I -- I think an important  
7 conclusion I -- I think we're here -- is that  
8 it doesn't appear that any of these are going  
9 to be SEC-type issues. It seems like -- you  
10 know, there's still some questions, but they  
11 don't appear to reach the level of an -- an SEC  
12 -- they -- they may be -- it -- so they  
13 wouldn't affect NIOSH's ability to sort of  
14 bound the doses. At least that's our un-- my  
15 understanding of SCA's interpretation at this  
16 point.  
17 And finally the D&D worker discussion. I think  
18 where we're at with this is NIOSH extended  
19 their coworker model and might e-- they -- they  
20 -- I guess there's another TIB, TIB-14 --  
21 right? -- that extends the internal coworker  
22 model out beyond the D&D period. And we've had  
23 SC&A review that and look at it to make sure  
24 that approach is sound, and thus far I think  
25 we're -- we're in agreement that that looks

1           like it's going to be a useful ap-- approach.  
2           Of course this is notwithstanding that -- that  
3           whole question of the two databases and -- and  
4           the problems with the data. But the -- the  
5           model seems -- seems adequate, I think, is --  
6           is the response from SC&A at this point.  
7           And I -- I guess the last thing that -- that we  
8           may need to go back to on our workgroup before  
9           we get to our May meeting certainly, and this  
10          was -- was me sort of reflecting on our SEC  
11          procedures, our -- our Board procedures, was  
12          that this question of proof of principle. I  
13          think -- I think early on we had some example  
14          DRs posted on -- on the -- posted for the  
15          workgroup, but I think we might want to look  
16          back, all of us -- NIOSH, SC&A -- and make sure  
17          those sample DRs ask and answer the right  
18          questions in terms of -- of this sort of idea  
19          of proof of principle. We -- we know you have  
20          these models; how are they going to be applied  
21          and used for certain circumstances. That's --  
22          that's what I'm seeing as proof of principle,  
23          and I think that's -- that's a -- one final and  
24          important task. And part of the reason it --  
25          it -- it may have shifted a little bit is

1           because we've -- some things in the models have  
2           changed as we've gone through this process or -  
3           - the coworker models, when we first started,  
4           were not even finalized so they were finalized  
5           maybe three or four months into the -- into the  
6           workgroup process, so I think that's the final  
7           task and I'll -- guess I'll close there.

8           **DR. ZIEMER:** Okay. Thank you, Mark. This has  
9           been a very hardworking workgroup. The other  
10          members of that workgroup are Mike Gibson, Bob  
11          Presley and Wanda Munn. Brant Ulsh from NIOSH  
12          is their NIOSH contact, and Joe Fitzgerald from  
13          SC&A is the contractor contact, so this has  
14          been a very hardworking group.

15          I wonder if any of the other workgroup members  
16          have comments to add -- Mike, Wanda, Bob?

17          **MR. GIBSON:** Yeah, Paul --

18          **DR. ZIEMER:** Mike, go ahead.

19          **MR. GIBSON:** Paul, if I could just add, the  
20          Fernald -- one of the Fernald petitioners, I  
21          believe Ray was mentioning a NIOSH study that  
22          came out in 2000.

23          **DR. ZIEMER:** Yes?

24          **MR. GIBSON:** It was from the HERB branch of  
25          NIOSH, which I know is a different arm of the

1 same organization, the Health-related Energy  
2 and Research Branch, but they did put out a 47-  
3 page doc-- well, 47-page PDF document, NIOSH  
4 Assessment of Information Needed for the  
5 Evaluation of the Health Effects Due to  
6 Occupational Exposures for DOE Site Remediation  
7 Workers. And this is the -- was the Fernald  
8 edition, but it does include Fernald, Mound,  
9 Rocky Flats, Savannah River, Hanford, Oak Ridge  
10 and Idaho National Engineering Environmental  
11 Lab. And it does have some very interesting  
12 findings, and I just -- I can send it to -- I  
13 will send it to each of the Advisory Board  
14 members and to Lew and, you know, he can get it  
15 out to the public -- public document. It's on  
16 the NIOSH web site. But it really discusses a  
17 lot of problems and how they're going to  
18 monitor remediation-type workers due to -- when  
19 you get into the remediation phase, a lot of  
20 job titles change and it's hard to track  
21 workers and, you know, a lot of things  
22 associated with that. The -- a very  
23 interesting report, and so I will -- I'll e-  
24 mail that to each of the Advisory Board members  
25 and to Lew, but you know, I think it really

1 needs to be looked at pretty seriously  
2 considering looking -- you know, NIOSH has  
3 different divisions, but when HERB comes out  
4 with one assessment in January of 2001 and then  
5 we have all these other things from OCAS that  
6 seem to be at odds with each other and I think  
7 they need to be discussed and -- and looked at.

8 **DR. ZIEMER:** Okay. Thank you, Mike. And --  
9 and of course in turn your -- your workgroup  
10 can take a look at that and see how that  
11 factors into the picture.

12 Other comments? Wanda.

13 **MS. MUNN:** Thank you for that, Mike. We'll  
14 look forward to seeing that document. It  
15 should be of interest to us with our Rocky  
16 Flats deliberation.

17 Our chair is to be congratulated for his work  
18 in this very extensive review that we've given  
19 to Rocky Flats. There is a remarkable amount  
20 of information available and the review that's  
21 been made of it, both by NIOSH and SC&A, as  
22 well as the members of this group, has -- has  
23 been exhausting, at best. So -- and I might  
24 even say exhaustive, so we're looking forward  
25 to the fact that we've gotten down to the

1 relatively small number of major issues that  
2 Mark pointed out.

3 **DR. ZIEMER:** Okay. Thank you. Other workgroup  
4 --

5 **MR. GIBSON:** Dr. Ziemer?

6 **DR. ZIEMER:** Yeah, Mike.

7 **MR. GIBSON:** Just one more issue. My contact  
8 list of the Advisory Board members doesn't  
9 include Josie or -- is it -- I forget the --

10 **DR. ZIEMER:** Phil.

11 **MR. GIBSON:** -- gentleman's name.

12 (Unintelligible), do you remember?

13 **DR. ZIEMER:** I'm sorry, what were you asking?

14 **MR. GIBSON:** My Advisory Board contact list  
15 does not include --

16 **DR. ZIEMER:** Oh --

17 **MR. GIBSON:** -- the new members.

18 **DR. ZIEMER:** -- they now are on the web site --

19 **MR. GIBSON:** Okay.

20 **DR. ZIEMER:** -- Mike, so I think it probably  
21 includes their e-mail addresses as well, but  
22 they're both now listed on the web site, so --

23 **MR. GIBSON:** Okay, I'll get that --

24 **DR. ZIEMER:** -- you can get the details there.

25 **MR. GIBSON:** All right. Thank you.

1           **DR. ZIEMER:** Let's see, Terrie Barrie, are you  
2 still on the line --

3           **MS. BARRIE:** Yes, Doctor, I am.

4           **DR. ZIEMER:** -- if you wish to make some  
5 comments?

6           **MS. BARRIE:** Well, actually I was prepared to  
7 present my comments tonight.

8           **DR. ZIEMER:** Oh, that -- if you prefer to do it  
9 tonight, that's fine.

10          **MS. BARRIE:** I think -- I think that would be  
11 better for me, if that's okay with you.

12          **DR. ZIEMER:** And what about the representative  
13 from the Senator's office?

14          **MS. MINKS:** Yes, I -- this is Erin Minks again.  
15 Thank you so much for the opportunity to -- to  
16 speak with the Board today. We once again  
17 appreciate the opportunity of being a part of  
18 this process and we continue to monitor it very  
19 closely, as well as Congressman Udall's office,  
20 Congressman Perlmutter and Senator Allard. The  
21 only comment I would offer today is with regard  
22 to item number four or number five that Mark  
23 Griffon raised about the logbooks from the  
24 1970s to 1990s. We would like to encourage  
25 NIOSH and I guess it would be the Board to --

1 to work with SC&A to make that available to  
2 SC&A to -- to fully review what is -- what are  
3 on -- in those logbooks with respect to primary  
4 resources, if that's still an opportunity  
5 there. We'd like that to be fully developed  
6 and explored before SC&A makes a  
7 recommendation, so that's probably the -- the  
8 most of our comments today.

9 **DR. ZIEMER:** Okay, thank you. So noted. Board  
10 -- Board members, any questions for Mark or for  
11 the workgroup?

12 (No responses)

13 If not, that will complete our activities for  
14 this morning. We have a lunch break from 12:15  
15 to 1:30. Do -- any housekeeping items, Lew,  
16 before --

17 **DR. WADE:** No, none at all.

18 **DR. ZIEMER:** Okay. We'll recess until 1:30  
19 then. Thank you.

20 (Whereupon, a recess was taken from 12:08 p.m.  
21 to 1:35 p.m.)

22 **DR. ZIEMER:** I'll call the meeting back to  
23 order.

**DOW CHEMICAL SEC PETITION UPDATE**  
**MR. LAVON RUTHERFORD, NIOSH/OCAS**  
**PETITIONERS**

1 I call the meeting back to order. We're --  
2 we're going to review the status of the Dow  
3 Chemical SEC petition. We'll have an update on  
4 that. Before we do, I just want to indicate  
5 that I -- I want to check and see if Robert  
6 Stephan, who's on Senator Obama's staff, is --  
7 Robert, are you on the line?

8 **MR. STEPHAN:** I am.

9 **DR. ZIEMER:** Very good. Also I -- hopefully  
10 here in the room, Deb --

11 **DR. WADE:** (Unintelligible)

12 **DR. ZIEMER:** Yeah, I'm looking at your last  
13 name, Deb. Deb is on the staff of  
14 Representative John Shimkus and she's here and  
15 welcome.

16 And then also perhaps on the line is Arthur  
17 Weider\*, who's one of the Dow petitioners.  
18 Arthur, are you on the line?

19 (No responses)

20 Okay, we had an indication, and we'll check  
21 again later, but he is one of the Dow  
22 petitioners. He was planning on calling in, at  
23 least listening to the discussion.

24 We're going to begin -- LaVon Rutherford from  
25 NIOSH will give us an update on the Dow SEC

1 petition. Then we'll have an opportunity to  
2 hear -- I think Dan is -- Dr. Dan McKeel is  
3 planning to speak and we'll have an  
4 opportunity, Deb, if you have additional  
5 comments as well -- and Robert. Okay?

6 **MR. RUTHERFORD:** Is this on?

7 **DR. ZIEMER:** Yes. Go ahead, LaVon.

8 **MR. RUTHERFORD:** I see somebody left some  
9 Snickers up here. Is this for doing a good  
10 job?

11 **UNIDENTIFIED:** Yes, it is.

12 **MR. RUTHERFORD:** Okay. I'm LaVon Rutherford.  
13 I'm the Special Exposure Cohort health physics  
14 team leader. I wanted to give you an update on  
15 the Dow Chemical SEC petition evaluation.  
16 We had initially planned to present the  
17 evaluation at the December Board meeting in  
18 Naperville. We worked -- we were working qui--  
19 on a -- on a expedited -- to try to get the  
20 evaluation complete to try to get that done in  
21 Naperville or -- because being an Illinois  
22 site, it made sense. As we approached the  
23 deadline of completing that evaluation, we  
24 recognized there were a number of issues that  
25 still needed to be resolved, and a couple of

1           those issues were -- specifically, we needed to  
2           address the feasibility determination for the  
3           residual radioactivity period.  Another issue  
4           that came up was -- we received the petition  
5           evaluation -- or the petition form A on  
6           November 28th.  With that petition form A was  
7           37 affidavits, and -- and those affidavits  
8           needed to be read, they needed to be looked  
9           through and we needed to ensure that all the  
10          issues associated with those affidavits were  
11          addressed in the evaluation.  
12          Based on this, we determined that we were going  
13          to be unable to get the evaluation report  
14          complete in December.  We sent a letter to the  
15          petitioner and we sent a letter to Dr. McKeel,  
16          who's the assoc-- or the petitioner  
17          representative, and we also contacted Dr.  
18          McKeel and the petitioner that we were going to  
19          delay the -- the actual evaluation report  
20          presentation.  
21          Then we intended to complete the evaluation at  
22          the February Board meeting, and we actually  
23          worked through the evaluation.  We were working  
24          through the issues of the evaluation, and in  
25          the middle of January four documents became

1           available to us. Those four documents were  
2           documents that were -- were Dow Chemical-  
3           specific documents associated with thorium  
4           exposures in some compliance inspection reports  
5           that were done by the Atomic Energy Commission  
6           during the covered period. Again, we received  
7           those roughly, you know, the middle of January.  
8           Getting those documents, we immediately  
9           transferred the copies of those documents to  
10          Dr. McKeel, indicated that we needed to look at  
11          those documents 'cause they dir-- you know, the  
12          documents directly affected, you know,  
13          feasibility determinations that needed to be  
14          made. We also recognized in those documents  
15          that -- that one of the documents, a document  
16          that was addressing the evaluation of thorium  
17          exposures in preparation of the production work  
18          that would be done for the magnesium alloy,  
19          indicated that -- that records, radiation  
20          surveys and records would be sent to the home  
21          office in Midland, Michigan. So we needed to  
22          go back and ensure that we had pulled the  
23          strings properly, based on one of our lessons  
24          learned at the December Board meeting.  
25          You know, the December Board meeting came up --

1           one of the issues was have we pulled the  
2           strings, have we checked all the proper  
3           resources for information. So we recognized we  
4           had not requested information from the home  
5           office in Midland, Michigan, so we -- we  
6           actually drafted a letter and sent a letter to  
7           the -- the home office in Midland, Michigan  
8           requesting if they had information, data,  
9           monitoring data, process information, any  
10          shipping records and so on that could be used  
11          in support of our evaluation. We have not  
12          heard back from them yet. That -- that letter  
13          was just recently sent.

14          But because of the four documents that -- that,  
15          you know, came up -- and again, those documents  
16          were documents that were actually identified in  
17          a NRC search of data in November. Obvious  
18          question is is why did they surface in January.  
19          We -- we haven't found that out yet, but for  
20          some reason when we did our initial NRC search,  
21          there was an indication that we had no data.  
22          We actually indicated to Dr. McKeel that -- in  
23          I believe November -- that we found no data  
24          with that NRC search, and we were -- there was  
25          an error somewhere in the process. Somewhere

1 in the process, the data that was found did not  
2 get to us until the middle of January.

3 So based on this data, some additional lessons  
4 learned that we want to verify that -- that the  
5 -- all the strings have been pulled properly,  
6 we determined that we would not present the  
7 evaluation at this Board meeting and that we  
8 would hold that off until the May Board  
9 meeting, and that we also will ensure that we  
10 address the feasibility during the residual  
11 radioactivity period, which is a issue that has  
12 been brought up by Dr. McKeel as well.

13 That's it for the update. Questions?

14 **DR. ZIEMER:** Okay. Board members, do you have  
15 any questions at this point?

16 **MR. GRIFFON:** Just a --

17 **DR. ZIEMER:** Mark.

18 **MR. GRIFFON:** Just -- just mainly a process  
19 question, LaVon. Is there anything now -- are  
20 those materials on the O drive? I might have  
21 missed you saying that.

22 **MR. RUTHERFORD:** Thanks for reminding -- yes,  
23 they are on the O -- on the drive, the shared  
24 drive. We actually have a Dow folder that  
25 we've actually -- we've put all the reference

1 documents that we've had so far in the site  
2 research database, and we also included the  
3 four documents that -- that came up in the  
4 middle of January.

5 **MR. GRIFFON:** And that's within that AB  
6 document review --

7 **MR. RUTHERFORD:** Yes.

8 **MR. GRIFFON:** -- the Advisory Board folder?

9 **MR. RUTHERFORD:** Yes.

10 **MR. GRIFFON:** Good, thank you.

11 **DR. ZIEMER:** Okay.

12 **DR. WADE:** Wanda.

13 **DR. ZIEMER:** Oh, Wanda, yes.

14 **MS. MUNN:** LaVon, what is this doing to our  
15 schedule now? What are you perceiving as being  
16 next steps and when are you going to get where  
17 you need to be with Dow?

18 **MR. RUTHERFORD:** Yes. Right now the plan is we  
19 -- like I said, we sent a letter to the Dow  
20 home office. If the Dow home office indicates  
21 that they do have records from the '50s -- from  
22 the covered period from Dow Madison, we will go  
23 to retrieve those records. And our plan is  
24 still to retrieve those records, evaluate that  
25 information and still complete our evaluation

1 by the May re--

2 **MS. MUNN:** By May.

3 **MR. RUTHERFORD:** -- by the May Board meeting.

4 **DR. ZIEMER:** Thank you.

5 **MR. RUTHERFORD:** Now --

6 **DR. ZIEMER:** Okay, Larry.

7 **MR. ELLIOTT:** Let me add a little more to that,  
8 if I might.

9 I think there's several possible scenarios here  
10 to play out. If -- if Dow or the Olin Company  
11 now, I think is who bought out Dow -- but  
12 anyway, if -- if our letter is not responded to  
13 before the -- next week, we'll be making a  
14 phone call to the recipient of that letter and  
15 encouraging them to follow the -- and respond  
16 to the request that is in that letter. We hope  
17 in that phone conversation -- if we don't -- if  
18 we have to go to that length, we hope in that  
19 phone conversation to get a better  
20 understanding and assessment of Dow's reaction  
21 to this request.

22 If their reaction is one of we don't have any  
23 information, we have discarded that information  
24 under our record schedules, our lawyers say we  
25 can do that, then we're going to ask for them

1 to provide us a letter to that effect.  
2 If the scenario plays out that they say hey, we  
3 think we've still got some of that data and we  
4 need to go search for it, then we're going to  
5 ask them -- we're going to press them on how  
6 much time do you need to do that. We're going  
7 to impart to them the -- the urgency here.  
8 We're going to explain to them the -- the broad  
9 interest in this data, if it exists, and why we  
10 need it and what it'll be used for, hoping that  
11 -- that will compel them to provide it.  
12 If the scenario plays out that they don't want  
13 to play ball with us, they seem to be obstinate  
14 or they seem to be recalcitrant or are not  
15 cooperative in their -- in their responses to  
16 us, then we will approach the Department of  
17 Labor and ask the Department of Labor to use  
18 their subpoena authority -- which we've already  
19 exercised in one other similar situation.  
20 Our intent, however, is as LaVon has indicated,  
21 to get all this wrapped up so that we can  
22 finally present this -- this 83.14 situation as  
23 we see it to -- to the Advisory Board and to  
24 the petitioners at your May meeting. That's  
25 our hope, that's our goal, that's what we're

1 working toward.

2 **DR. ZIEMER:** Thank you. Then let me ask -- I  
3 don't know what order we need to go in, but  
4 Deb, do you wish to comment at this time or do  
5 you want to wait till Dan -- let's have Dan  
6 then, Dan McKeel.

7 **DR. MCKEEL:** Okay, thanks. Chris -- Chris  
8 Ellison has kindly offered to change my slides  
9 because I just want you to know that CDC's  
10 PowerPoint is a little bit older than the one  
11 on my Macintosh -- have you seen those ads  
12 (unintelligible) PC?

13 **DR. ZIEMER:** Yeah.

14 **DR. MCKEEL:** Well, anyway -- so it won't  
15 actually run my PowerPoint, so we've provided a  
16 PDF file which she has to click through -- same  
17 slides.

18 Anyway, thank you very much, to the Board, to  
19 NIOSH, to allow an update from the petitioner's  
20 side on this -- on this Dow issue.

21 I would like to comment on what LaVon just  
22 mentioned, which is -- we recognized from the  
23 beginning of this that getting relevant records  
24 from Dow Chemical was going to be a very  
25 important part of proving our case about the

1 amount of thorium that was used at that site,  
2 and in particular to support our belief that  
3 there is a very intimate connection between Dow  
4 Madison and the home company and the Rocky  
5 Flats DOE site, and that the specific  
6 connection was that large amounts, truckload  
7 amounts of magnesium/thorium alloy were sent  
8 from Dow and were received to Rocky Flats and  
9 then in ret-- and then sometimes Rocky Flats  
10 would send thorium back to the -- back to Dow.  
11 So several months ago -- four or five months  
12 ago we initiated a series of conversations with  
13 the Dow Midland and the local Dow site, which  
14 is now Spectrulite. CEO is a fella named Chris  
15 Barnes, so we contacted both Chris Barnes and  
16 we contacted the Dow Midland lawyers and had  
17 extensive communications with them on the  
18 telephone and in writing. And we did in fact  
19 get back a letter from them, which we certainly  
20 could provide to Larry Elliott and LaVon, which  
21 basically said we have no responsive records.  
22 You're asking for very old records and we don't  
23 have any.  
24 And I will just tell you that I don't accept  
25 what they said, and the reason is, as -- as you

1 all probably know, that Dow Chemical was the  
2 prime contractor at Rocky Flats from 1951 to  
3 1975. And there was initiated 15 years ago a  
4 class action lawsuit by landowners against the  
5 prime contractors, which included Dow and --  
6 and Rockwell International. Now that lawsuit  
7 was just adjudicated this year, early this  
8 year, for \$155 million and is now under appeal.  
9 So it's inconceivable to me that Dow Midland  
10 wouldn't have those records that relate to the  
11 -- to at least the Dow contract effort.  
12 So I -- one of the things that I'm going to ask  
13 from LaVon is we -- we would love to see a copy  
14 of the letter that you wrote to Dow Midland,  
15 and we can certainly also send you our  
16 correspondence related to that and we -- we  
17 would like to join that effort to try to get  
18 those records released.  
19 So Chris, if we could have the first slide now.  
20 I hope my pointer works here. I'm sorry you  
21 all have to turn around, but I did have some  
22 things that I thought would be interesting for  
23 you to see. This is an aerial view of the  
24 general area where the Dow Chemical Madison,  
25 Illinois plant is, and you can see that -- it's

1 right here, and then right next to it is the  
2 General Steel Industries plant that John  
3 Ramspott has been talking about, and myself, so  
4 they're -- they're really back-to-back. There  
5 was an early issue that's been resolved through  
6 Peter Turcic's efforts at DOL where this --  
7 this General Steel site was called Granite City  
8 Steel. That's a plant that's right next to it,  
9 but it's a different plant. And then there was  
10 spillover work from General Steel at American  
11 Steel, so this is a highly concentrated  
12 industrial area.

13 And you can see in this little vie-- this  
14 little view here of Dow -- I -- I draw your  
15 attention to this -- to this larger blowup of  
16 that same area, so this is the Dow plant here.  
17 I'm sorry the audience can't see that, but I'm  
18 really pointing to this little Dow map up  
19 there, and I wanted to draw your attention to -  
20 - here are the buildings which we will show  
21 you, and right next to the castings building,  
22 Building 7 over here, there's a plot of land  
23 that you can see. It's 40 acres. And the  
24 thing that's interesting about this plot is  
25 that was where the magnesium/thorium sludge was

1 buried. And one of the issues that's come up  
2 with the Rocky Flats SEC is what sort of  
3 amounts of thorium were we talking about that  
4 were going from Dow Madison to Rocky Flats.  
5 The testimony that we've provided as affidavits  
6 is that there were many, many truckloads, so  
7 there are probably tons of magnesium/thorium  
8 alloy that went out to Rocky Flats. The  
9 sludge, the magnesium/aluminum -- the  
10 magnesium/thorium sludge was dumped in this  
11 plot, and in 1993 a company called ERG from  
12 Albuquerque, New Mexico came in and cleaned up  
13 some of this material and carted away -- to  
14 Utah, I think -- 850-plus railroad cars full of  
15 that sludge. So they processed a huge amount  
16 of magnesium/thorium sludge at Dow Chemical.  
17 In this view you can see this property  
18 adjoining right here is GSI and -- and John's  
19 favorite topic, the old Betatron building, is -  
20 - is really right at the edge of this picture,  
21 so that's a general view of the location.  
22 Chris, if we could have the... This is a view  
23 of the floor plan of -- of Dow Chemical. It's  
24 a little hard to see, but the buil-- main  
25 buildings were arrayed like this and there are

1 really three of them and housed the castings,  
2 extrusions and the rolling mills. Now I'll  
3 show you the next map and I think you can see  
4 that I'm a little bit better, so Building 5 was  
5 the rolling mill, Building 6 was the extr--  
6 where the extrusion presses were, Building 7  
7 was the casting and the pot room where the  
8 molten magnesium and thorium were allied  
9 together. I've mentioned the 40-acre plot, and  
10 on the map up ne-- on the next slide you'll see  
11 the rad areas in their radioactively  
12 contaminated map. These areas in the plant are  
13 areas that Bill Hoppe, who's here with us today  
14 and may choose to say a few words, and the  
15 workers have identified as places where they  
16 think there was contaminated thorium metal. So  
17 -- and -- and all I want you to take away from  
18 this is it was scattered throughout the main  
19 areas of the plant, all of these rad areas.  
20 Over here in this map here is that 40-acre plot  
21 that we were talking about.  
22 Next. So in the official SEC class definition  
23 that's covered in the *Federal Register* at the  
24 present moment, that covers the uranium work  
25 that was done with Mallinckrodt under an AEC

1 contract to do research and development work,  
2 extrusion, and bar straightening over at Dow  
3 Madison. And Dow Madison was -- that was their  
4 area of expertise and I'm sure that's why  
5 Mallinckrodt used them. And that -- that work  
6 was done in 1957 and '60, according to the  
7 contract. We have a little bit of testimony  
8 from a few men that perhaps the uranium work  
9 actually extended a year or so beyond that, but  
10 that -- that's -- that's where we stand on  
11 that.

12 We also know that at the -- at that same time  
13 and extending from 1957 all the way up till  
14 today there were a series of thorium licenses  
15 granted to the set of owners for that property.  
16 And we also know from the workers that there  
17 were large amounts of beryllium that were used  
18 at that site up till the present time. And  
19 this was really not included in any of the  
20 remediation reports, for instance, done under  
21 FUSRAP in the year 2000 by the Army Corps of  
22 Engineers, but there -- there is large amounts  
23 of beryllium used at that site.

24 Next, please. As far as personal monitoring  
25 data from this site, we have very good evidence

1           that a few workers up until 1986 were given  
2           film badges. Larry Elliott has confirmed  
3           several times that NIOSH has no monitoring data  
4           for them of any kind. We've contacted  
5           Landauer; they have no data for them. And  
6           through contacts who have the HASL datasets  
7           we've found out that there was no HASL New York  
8           Operations Office monitoring data for the Dow  
9           workers. The workers, numerous ones, expressed  
10          extreme doubt that their badges were ever read,  
11          and none so far has ever reported seeing a  
12          report of their film badge readings. And  
13          obviously they got no feedback from the  
14          factory.

15          They asked. They said where are our badges,  
16          but they were either told that they were okay -  
17          - but they never actually got any of their  
18          individual reports. And there is further -- in  
19          the affidavits there's worker testimony that  
20          the film badges were simply put into buckets  
21          that were discarded and eyewitness accounts of  
22          that.

23          Next, please. We know that Dow -- that Dow had  
24          numerous Department of Defense contracts. Most  
25          of their work was with the military. And then

1 we believe also that there was this Rocky Flats  
2 contract that must have existed for the thorium  
3 work. The plant we know in 1951 to 1959, when  
4 it was -- in '51 it was given basically to Dow  
5 by the General Services Administration under a  
6 quit claim deed, and we know that it was  
7 included in -- in the national industrial  
8 reserve of plants that could be called upon by  
9 the government to manufacture specific defense-  
10 related product, which I assume was thorium,  
11 and -- and that relationship lasted and was  
12 under what's called a national security clause  
13 that I haven't found a lot of -- about. But  
14 there was some special relationship with the  
15 government in the -- in the -- in that time  
16 period.

17 I just mention here that there was a contract  
18 with Lockheed to produce an alloy that they  
19 made called Lockalloy, which was a  
20 beryllium/aluminum alloy, and that was used for  
21 other purposes but particularly in the SR-71  
22 Gary Powers-type spy plane in 1962. They had  
23 many contracts at Dow with NASA, the Air Force  
24 -- the Air Force owned a lot of the equipment  
25 at the plant in the 1970s. I've talked about

1 the Rocky Flats connection. We know that  
2 Martin Marietta on several occasions sent in  
3 special metals which the men have identified as  
4 thorium-containing metal, or thorium itself,  
5 and those runs continued -- production runs up  
6 through the 1990s.

7 We also know that McDonald Douglas, who was one  
8 of the customers of Dow, stored thorium plates  
9 at the place where I taught pathology for 31  
10 years at Washington University. And when the  
11 AEC was reviewing their old licenses, they  
12 found that the only Wash. U. license that was  
13 out of compliance was one that related to  
14 thorium being stored out at their World War II  
15 bunkers in Tyson\* Valley. They notified  
16 McDonald Douglas and Wash. U. of this.

17 McDonald took them out of those bunkers and  
18 sent them over to Spectrulite in 1993, and I  
19 only relay this story and the relevance to this  
20 SEC because if, as the official documents read,  
21 production for thorium stopped at Dow  
22 Spectrulite in 1982, why would somebody ac--  
23 why would they accept this material? Now it  
24 could be that that thorium/magnesium plates  
25 originally came from Dow and they were just

1 sending them back home, so I don't know about  
2 that.

3 Next. But we do have that documentation. We  
4 also have a complete -- pretty complete history  
5 I think of the thorium licenses that were  
6 available at the site. All of this information  
7 has been given to NIOSH a long time ago. So  
8 starting in -- in the first license, 1952, was  
9 by the AEC. There was a second AEC license  
10 given to Dow Chemical in 1962. NRC licensed  
11 thorium to ConAlCo\*, the successor,  
12 Consolidated Aluminum. And then Spectrulite,  
13 the current owners, have had two licenses, one  
14 in 1986 and then when -- I think in -- around  
15 1985 or so, Illinois became an agreement state  
16 with the NRC, and then the latest license was  
17 from the Illinois Emergency Management Agency,  
18 the nuclear safety division, and that -- that's  
19 the current license that is presently being  
20 decommissioned and is -- and there's a cleanup  
21 actually going on to finally close down that  
22 thorium license, but that's that history.  
23 We also know that in the whole history of this  
24 site there've been numerous -- both company-  
25 sponsored and one major federal cleanup period.

1 I mentioned the ERG carting away material from  
2 the 40-acre site. Actually, interestingly,  
3 this contract was with both ConAlCo and Dow,  
4 even though Dow sold the main part of the plant  
5 in 1973. So as I understand the story, Dow  
6 acknowledged that there was thorium stored  
7 there and that they had some financial  
8 responsibility for that and they stepped up and  
9 they paid for this cleanup, along with ConAlCo.  
10 We also know that Spectrulite Corporation  
11 itself has conducted numerous cleanups of  
12 various kinds, including carting away the  
13 sludge that had accumulated and -- and cleanup  
14 work in the pot rooms in particular, over this  
15 past decade.

16 The major cleanup done at the site that was  
17 federal was by the Army Corps of Engineers in  
18 2000, and they cleaned up uranium dust in --  
19 only in Building 6 where the extrusion presses  
20 were located, and did a very limited cleanup of  
21 that. They recognized that there was thorium  
22 co-located with the uranium, but they -- in  
23 their documents they say that all of this  
24 thorium was related to activities other than  
25 AEC activities. Now of course we -- we do not

1 believe that and we've kind of mentioned why,  
2 but that's -- that's the official story.  
3 We've tried to contact the current owners to  
4 get records and to talk about what's at the  
5 plant right now, without success. So we've  
6 contacted Dow at both the headquarters and at  
7 the Madison site.  
8 Next. We can bring us up at least to saying  
9 that there was a lot of thorium metal still on  
10 site at Dow Madison as late as June of 2005,  
11 but by reports from the Pangea Group, which is  
12 an environmental remediation group located in  
13 St. Louis, and they've done a series of studies  
14 there. There was an early 2003 scoping report  
15 which found lots of residual thorium. Then  
16 there were two reports in 2005 and I believe  
17 that the OCAS office has all of these reports.  
18 The -- there was a sur-- a radiologic survey  
19 that was very extensive and very nice and --  
20 and apparently this is all in con-- conjunction  
21 with decommissioning the thorium license. And  
22 anyway, the -- those -- those surveys in 2005  
23 found elevated thorium-230, thorium-232  
24 activity above background, above Illinois state  
25 guidelines for decommissioning, and it was

1 throughout the plant buildings. And this study  
2 really amply confirms testimony which you'll  
3 see in the affidavits, which now number 66. I  
4 hate to tell Larry that, but we have 29 new  
5 ones. But it -- it confirms that the plant was  
6 heavily contaminated with thorium.

7 Interestingly, Pangea's reports mention not a  
8 word about beryllium 'cause I guess that wasn't  
9 their task.

10 Next, please. Here is a -- just a -- what  
11 follows. This is to document that Pangea Group  
12 did the cleanup. This is one of their most  
13 extensive reports, and in the next two slides  
14 you'll see -- yeah. This is just an inventory  
15 of where Pangea found thorium throughout the  
16 plant buildings, and all I want you to focus on  
17 -- there were lots of different types of bars  
18 and plates and et cetera, but they were in  
19 Buildings 1, 4, 5, 6, the machine shop in 6,  
20 and on the next slide in Building 7, 8, again  
21 Building 9 in the machine shop, and in Building  
22 10. So they were widespread throughout the  
23 plant in all the major divisions.

24 Next, please. We believe there was ample  
25 evidence that these workers were seriously

1           harmed. There was basically no formal  
2           radiation safety program. We do know there  
3           were a few Geiger counters that were  
4           interestingly used primarily when they had to  
5           separate radioactive from non-radioactive  
6           sludge. Some of their customers wanted to take  
7           the scraps and -- and -- sludge is probably the  
8           wrong word to use, but the scraps that were  
9           leftover after an extrusion run, some of the  
10          customers wanted to take those home with them  
11          and the only way the men had to identify which  
12          was which was to make piles and try to, with a  
13          Geiger counter, identify the hot stuff and put  
14          it in one pile and then leave the other stuff  
15          in another pile.

16          The workers uniformly say that not only were  
17          they not told about the risk of uranium or the  
18          thorium, but the substances were not really  
19          identified for them. And if they asked,  
20          thinking that they may be exposed to  
21          radioactivity, they were -- their concerns were  
22          minimized. The beryllium risks were -- were  
23          never talked about at all, and as far as we're  
24          aware, there's never been any remediation of  
25          the beryllium at all at that site.

1           So as far as badges, they were rare until 1986.  
2           The men feel they were purely cosmetic, that  
3           they were put on a few days before an  
4           inspection of state agency, for example, and  
5           taken off soon after and not worn. There were  
6           more badges worn in -- after 1986, but again,  
7           none of that dosimetry data has apparently  
8           survived. We don't know whether that means it  
9           was lost, it was never submitted. We just  
10          don't know.

11          There a -- a rich history of accidents,  
12          injuries, deaths due to machinery, impromptu  
13          operations on the special thorium, explosions  
14          in the -- in the pot room were frequent.  
15          Magnesium is a -- very prone, especially if  
16          water hits it, to explode. So those explosions  
17          often involved magnesium and thorium alloys,  
18          and lots of smoke and fumes. And we have  
19          fairly extensive evidence that at least some  
20          records were shredded by workers who observed  
21          that, and I guess missing is a pretty inclusive  
22          term because as far as we're concerned, all the  
23          records from Dow and Dow Madison are missing  
24          un-- unless and until we can turn them up. We  
25          suspect that there are more records that are

1           classified. Libby White recently, for example,  
2           turned up four inches worth of classified  
3           documents that relate to the main Dow contract  
4           with Rocky Flats, but -- and I've underlined  
5           withheld because we believe there are many more  
6           records that need to be uncovered that exist  
7           but are just not being turned over.  
8           Next, please. So LaVon mentioned one of what I  
9           think is our major things we're trying to  
10          accomplish. We certainly appreciate the  
11          recognition that this site deserves an 83.14  
12          SEC. I think that's -- that's certainly  
13          merited. But we are quite concerned about the  
14          very limited extent of the class definition  
15          which runs from 1957 to '60. And in those  
16          first 37 affidavits and in talking to the men,  
17          we've now had five big meetings with them to  
18          collect data, it's -- it's obvious that they  
19          can document that thorium was run continuously  
20          during the '60s, the '70s, the '80s, the '90s,  
21          even up into this century. And this was  
22          production runs, and also, as I've just shown  
23          you, there was residual thorium all over the  
24          place. But if we can't prove that any of that  
25          thorium was related to AEC contract work, then

1 we're probably dead in the waters on getting  
2 the -- the class definition extended.  
3 So we set out recently to get some more  
4 evidence that -- of the Rocky Flats connection.  
5 And also we think it's important just to set  
6 the record straight that this is a major  
7 beryllium site and we hope one day to get these  
8 workers covered for medical surveillance for  
9 their beryllium exposure. Lar Fuortes called  
10 into the outreach meeting. He's been studying  
11 a group of ten of these patients and workers  
12 from that site and so he's been helping us sort  
13 of ad hoc, but really that entire population  
14 should be screened for beryllium sensitivity  
15 and chronic beryllium disease.  
16 Next, please. So I just wanted to give you a  
17 feeling for the type of data we've got. These  
18 are very rich affidavits. This is from the  
19 latest set, just two excerpts. I blanked out  
20 the names. I was employed at Dow Chemical from  
21 1955 to '95, worked as a mag melter in the  
22 casting department. Thorium metal was being  
23 cast at the plant periodically the entire time  
24 I was employed, personally handled the thorium  
25 metal that was added to the pots, generated a

1 lot of fumes. Thorium metal was stored in the  
2 warehouse during -- was stored in the -- it  
3 says as stored in the warehouse during this  
4 period. I did not work in shipping but I hear  
5 rumors that the metal was being shipped to  
6 Rocky Flats, Colorado.

7 Second excerpt says I was employed at Dow  
8 Chemical from '53 to 1995. I worked in the  
9 rolling mill as an inspector. Thorium ran  
10 periodically through the rolling mill at the  
11 Madison plant during this entire period. I was  
12 all over the department from shipping to number  
13 one mill. Now this is very important. He says  
14 I saw sales orders showing that the metal was  
15 being shipped to Rocky Flats. Well, obviously  
16 we'd like to get copies of that sales orders  
17 from either the Madison plant or from Dow  
18 Midland, and we really need to move heaven and  
19 earth to get those records. I would sand the  
20 thorium sheets by hand. None of the men in the  
21 rolling mill wore respirators.

22 Next, please. Some more excerpts. I was told  
23 that the harmless radioactive chips would be  
24 melted. There are numerous testimonies of  
25 minimization of the danger of the thorium

1 metals. Another pot room. Because of the  
2 smoke and the fumes and the ashes from the  
3 melting of the chips would bellow out and go  
4 anywhere. In the pot room I was in -- I was in  
5 three explosions and burned all three times.  
6 And most of those exposures -- explosions, as I  
7 say, involved magnesium/thorium alloys. The  
8 first time I was in the hospital for a week.  
9 And these were workers that were exposed -- now  
10 we're not talking about the old days, 1988 to  
11 '93, '94 to '95 for the first excerpt on this  
12 page, 1989 to 2002 for the second one. Another  
13 worker worked about that same period, 1988 to  
14 2002 said did extrusion for a week, ran  
15 complete work cycle of thorium billets from  
16 Martin Marietta. And I think that affidavit  
17 goes on to place that in the 1990s.  
18 Okay. And the last two excerpts, I'd just  
19 summarize for you that of these 29 new  
20 affidavits, 11 different people mention thorium  
21 shipments to Rocky Flats, Colorado, and some --  
22 a few of them return shipments back from Rocky  
23 Flats; 25 mention thorium and six mention  
24 beryllium. So these last two, I was employed  
25 at the Dow Chemical Plant 1959 to 2002, worked

1 in shipping and extrusion as a packer. As a  
2 packer I packed everything off of the presses  
3 for shipment to customers. Now here's a  
4 specific date. In 1957 I was working on the  
5 billet press and saw two skids of metal with  
6 rad tags set next to the number nine press. We  
7 were told not to come within five feet of this  
8 metal. Thorium was being extruded from at  
9 least 1975 through the late 1980s. I was told  
10 that the metal was being shipped to Rocky  
11 Flats.

12 So you know, this is the kind of information  
13 we're hearing. HK and HM were names for metal  
14 alloys that contained thorium. They were  
15 rolled in the seven and four mills, metal in  
16 the ovens to be flattened. It was then  
17 stenciled in oil, shipped to Rocky Flats,  
18 Colorado. Scrap metal was shipped back to our  
19 company to be melted down. Okay?

20 Next, please. So all of this information  
21 brings us to make three respectful requests for  
22 the Board to consider. The first is, at the  
23 appropriate time we strongly urge that the  
24 class definition be expanded from what's in the  
25 *Federal Register*, which is from 1/1/57 to

1           12/21/60, that it should be expanded to cover  
2           the entire period after 12/21/60 up until the  
3           present time.

4           Also at an appropriate time when the NIOSH SEC  
5           evaluation emerges we ask that the Board task  
6           SC&A to perform a targeted review of both the  
7           thorium and the uranium work at Dow and Rocky  
8           Flats SO-- at -- the Rocky Flats DOE site, that  
9           -- that common work that they carried on  
10          together is what I'm talking about -- so we can  
11          ascertain the scope of the AEC-related  
12          activities at the Dow Madison plant.

13          And we would also like to ask that SC&A examine  
14          those four NRC documents at OCAS that delayed  
15          release of the Dow SEC evaluation report beyond  
16          January the 24th, 2007. We also have looked at  
17          those documents and I think LaVon accurately  
18          reported what they show, but we really think  
19          that an independent review of those documents  
20          would be merited.

21          Next. The third request we have of the Board  
22          is that they should facilitate and encourage  
23          NIOSH to do exactly what Larry Elliott just  
24          mentioned they were planning to do, and that is  
25          to use the subpoena power of Section 73.48(w)

1 of the Act to obtain from Dow Chemical all the  
2 SEC related documents pertinent to both Dow  
3 Midland operations and Dow Madison interactions  
4 with Rocky Flats. And those should include any  
5 possible AEC-related work done for them under  
6 contract. I'm not talking about AEC licenses  
7 for commercial thorium. I'm talking about AEC  
8 contract work. This would include all such  
9 records existing at either Midland, Michigan  
10 headquarters or at Spectrulite in Madison. And  
11 I think this step should be undertaken  
12 immediately and, as Larry said, it is being  
13 done at the present time.

14 Four -- next, please. I just wanted to show  
15 you that this is Section 73.48 -- 73.84(w) of  
16 the law mentions subpoenas, oaths, examination  
17 of witnesses and that that power resides with  
18 the Secretary of Labor and so forth. It can  
19 also issue subpoenas and compel the attendance  
20 of witnesses. I thought that was interesting.  
21 I don't know that that's ever been used.

22 Next, please. Our fourth request is that NIOSH  
23 should be encouraged by the Board to set a  
24 definite delivery date for the Dow SEC  
25 evaluation report. You know, we need this some

1           time ahead to react to whatever they say about  
2           the class definition and the residual period.  
3           And so what we know is that it's going to be  
4           presented at the May 2007 meeting, but we only  
5           know that a rough target date is an April  
6           delivery, and we're hoping that it's earlier in  
7           April rather than later. And I will just  
8           mention that if we do have this evaluation  
9           report ready to present to the Board in May,  
10          that will be approximately eight months after  
11          we were first notified that we would be  
12          recommended for a Dow -- you know, an 83.14  
13          SEC.  
14          Next, please. We're almost at the end. We ask  
15          that NIOSH forthwith publish our unredacted Dow  
16          affidavits -- the SEC application itself. Now  
17          the redacted versions were just posted  
18          yesterday. That's good. And -- but we also  
19          want the verbatim transcripts of all those  
20          meetings we've had with the workers up on the  
21          web site. And as I mentioned last night, we  
22          want them unredacted because we want the jobs  
23          listed there and we want the years that the  
24          people worked at the plant, the full set of  
25          years, to be on there. And I mentioned last

1           night that we've taken care, we think, of the  
2           Privacy Act concerns by having everybody of --  
3           of those 37 who submitted affidavits has -- we  
4           have in our hands releases for them for both  
5           Privacy Act and medical releases.  
6           Six, regardless of what happens with the SEC,  
7           this site is -- is one of those that hardly  
8           anything has been done to date for dose  
9           reconstructions. There have been 94 cases that  
10          have been sent to NIOSH. Only two dose  
11          reconstructions have been done. And just for  
12          the record, we asked and Laurie Breyer supplied  
13          us with this information, that under the  
14          present class definition, 70 of those 94 people  
15          would be covered; 41 have SEC compensable  
16          cancers. So -- you know, so that's 41 out of  
17          94 would be covered by the present class  
18          definition. If we could expand that, we would  
19          certainly sweep in more of those cases.  
20          And the final request is that the Board should  
21          encourage expeditious completment (sic) of  
22          Section 7.2 on thorium, now marked as reserved  
23          and left blank, and the site-specific  
24          appendices for Battelle TBD 6000. The latter  
25          are not in the currently-posted TBDs. So

1           although TBD 6000 is on the web site, I can't  
2           see that it would help anybody. Tho-- those  
3           site-specific appendices are absolutely vital  
4           to make this a working helpful document to the  
5           dose reconstructors, and that needs to happen  
6           just as fast as possible, we believe. We would  
7           certainly be able to use the thorium section in  
8           this SEC, and perhaps in others, and that --  
9           that's completely blank right now, so we ask  
10          that. And we simply mention, for the record,  
11          that both Dow Madison and General Steel  
12          Industries will be covered in that TBD 6000 as  
13          the main document to aid dose reconstructors.  
14          And finally, you know, I included our -- my  
15          contact information. Chris Ellison is going to  
16          give this PDF file to the Board and to NIOSH,  
17          and after the meeting we'll be sure we send  
18          hard copies to everybody and get that  
19          distributed. So thank you again very much. I  
20          think Robert Stephan may have some comments to  
21          make. Debbie Detmers does, and there's one  
22          worker, Dr. Ziemer, Bill Hoppe, who's here and  
23          may just want to say a few words about the  
24          thorium operations.

25          **DR. ZIEMER:** Very good. Thank you very much.

1 Deb, if you want to proceed.

2 **MS. DETMERS:** Thank you for letting me talk  
3 today. I am Deb Detmers. I'm the district  
4 director for Congressman John Shimkus. This  
5 plant is actually not in our district, it's in  
6 Congressman Costello's district, but we have  
7 been working with Congressman Costello, Senator  
8 Obama and Senator Durbin on this for some time  
9 -- for a very long time, to be honest with you.  
10 I just want to make a couple of really quick  
11 points.

12 First of all, our offices are here to assist.  
13 If there's anything we can do to be of  
14 assistance or answer questions, please let us  
15 know because we're here to -- to try to help  
16 get this resolved. Two of the workers came  
17 with me today, Bill Hoppe and Homer Simmons.  
18 These are both constituents of ours that I've  
19 been working with four years at least on --  
20 six? Okay, good times -- six years on these --  
21 the situation. It's been a very long, arduous  
22 process.

23 A couple things that we really want to talk  
24 about. One is the class definition needs to be  
25 expanded. That limited amount of time -- with

1 the records that we've been able to gather,  
2 which has been extremely difficult given Dow's  
3 unwillingness to share information or the  
4 plant's willingness to share information, what  
5 we have gathered from these workers and when I  
6 have talked to a lot of workers, at least  
7 (unintelligible) of those and -- and more, that  
8 tell you the same story over and over again,  
9 and they're not telling you because somebody  
10 has told them to tell you this. They told you  
11 -- they're telling you this because this is  
12 what happened. And they're telling you the  
13 thorium and they're telling you about the  
14 beryllium, and they are sick and things are  
15 happening to them and they've been trying for  
16 six years to try to get this resolved and --  
17 and they can't. So we urge you at the -- in  
18 every possible -- to -- to take a look at that  
19 and expand that time frame for the SEC.  
20 Second, I want to emphasize also if -- if  
21 that's not going to happen, or even if it is  
22 going to happen, the dose reconstruction  
23 process is -- is getting to be arduously long.  
24 Mr. Simmons's direct case I've been working on,  
25 it's been on and it's been off and it's been on

1           and it's -- I mean it -- it's gone on now --  
2           since he started he -- it was his first dose  
3           reconstruction, supposed to start six years ago  
4           and we're still sitting here and he's not  
5           gotten any better. So I would just urge you to  
6           look at that as well.

7           I can't talk about the science 'cause I'm not a  
8           scientist, but I do want to tell you if there's  
9           anything we can do to be of assistance with any  
10          agencies, if there's -- you want to talk to our  
11          bosses, I'm sure Robert agrees with us that  
12          we're quite happy to have that happen. So  
13          Robert, if you want to say something -- you  
14          still there?

15         **DR. ZIEMER:** Robert, are you still on the  
16          phone?

17         **MR. STEPHAN:** Yeah, can you hear me okay?

18         **DR. ZIEMER:** Yeah, go ahead.

19         **MR. STEPHAN:** Okay, am I -- am I too loud or  
20          too soft?

21         **DR. ZIEMER:** You're -- you're just right.

22         **MR. STEPHAN:** Okay. Just bear with me a  
23          second. I'm driving and I'm -- I'm trying to  
24          basically --

25         **DR. ZIEMER:** Why don't you -- why don't you

1 pull over, Robert?

2 **DR. WADE:** Yeah, we would feel --

3 **MR. STEPHAN:** Get my head together here.

4 **DR. ZIEMER:** I can see the headlines now.

5 **MR. STEPHAN:** Yeah, it wouldn't be good. Okay.  
6 Well, certainly we want to concur with what Deb  
7 just said. We've been working very closely  
8 with Deb and Congressman Shimkus and they've  
9 actually been working on this for -- for much  
10 longer than we have, and they've been working  
11 it on it in a very in-depth way trying to help  
12 people like Mr. Hoppe and Mr. Simmons. And so  
13 everything that she just said, we certainly  
14 would concur with.

15 First, I would like to just very quickly thank  
16 the Board. The Senator wanted me to thank you  
17 for letting him speak in -- in November. Also  
18 wanted to, you know, thank the Board and NIOSH  
19 for honoring his request to do the outreach  
20 meeting at Blockson Chemical, which I -- I was  
21 able to attend one night of we thought was  
22 helpful. I think the NIOSH staff -- Stu and  
23 Laurie were there and several others. I think  
24 they thought it was helpful, and more  
25 importantly, the workers thought that it was

1 helpful. Matter of fact, several of them  
2 thanked NIOSH for -- for doing it. They  
3 thought it was the best meeting that they had  
4 had. And so I do want to -- I do want to  
5 acknowledge that.

6 I also want to acknowledge and thank Wanda  
7 Munn, who was at the Board -- who was at the --  
8 the outreach meeting for Blockson both nights  
9 and sat through the -- the entire meeting, so  
10 we -- we certainly appreciate her efforts.  
11 With respect to Dow, the -- the conversation  
12 earlier you had about potential subpoena of  
13 records from Dow, all we would add to that is  
14 just that, you know, Dr. Ziemer, what you laid  
15 out -- the process you laid out that, you know,  
16 you guys are going to go down with trying to  
17 obtain these documents sounds good, and we just  
18 would say that, you know, let's -- let's try to  
19 follow that as closely as we can. If -- if Dow  
20 is not responsive by the end of next week,  
21 certainly we think the phone call is  
22 appropriate, but -- but you know, we -- we just  
23 don't think that 60 or 90 days is a -- is a  
24 normal -- or is a reasonable time frame for  
25 them to come up with these documents, so as --

1 as Dr. McKeel elaborated, we think that they --  
2 that they have them. They went through a long  
3 lawsuit not very long ago and we -- we hope  
4 that you get a different response than we have  
5 gotten previously. We hope they're not  
6 obstinate, but if -- if they are, we -- we just  
7 would urge that, you know, normal business  
8 courtesies of 30 days, 60 days and that kind of  
9 thing really -- really not be used, that if  
10 they're not cooperative -- at the first hint  
11 that they're not cooperative, that the  
12 Department of Labor use their subpoena power to  
13 the fullest extent that they can. So just one  
14 note we want to make about -- about those Dow  
15 records.

16 The second note on -- on the NRC documents that  
17 were discovered not very long ago, I -- I don't  
18 know if anyone from the NRC is there, but --  
19 but if you are, you know, we certainly would  
20 like to talk to you because the NRC needs to,  
21 quite frankly, get with the program a little  
22 bit. We -- we told the NRC a long, long time  
23 ago that the documents that they -- that --  
24 that were just found by NIOSH in the reading  
25 room, that they existed. And the NRC obviously

1           doesn't even know what's in their own reading  
2           room, so had they been more helpful months ago,  
3           we would have been a lot farther along in this  
4           process and we wouldn't be having to explain to  
5           Mr. Hoppe and Mr. Simmons why there -- there is  
6           a delay now to review these documents that we  
7           knew were available a long time ago. So -- and  
8           certainly that's not a reflection on NIOSH.  
9           You know, they -- they got them when they got  
10          them. But (unintelligible) the NRC will --  
11          will play ball a little bit better here in the  
12          future.

13          The -- the point about residual contamination,  
14          Larry Elliott and several folks at NIOSH  
15          walked me through -- in a conference call a  
16          couple of weeks ago -- you know, their side of  
17          this issue and I appreciate the time that they  
18          took to do that. One of the questions I have  
19          is in Dr. McKeel's slide he references thorium  
20          licensing in 1955. And Larry, if you're there,  
21          I'm just wondering, can you guys essentially  
22          prove that that thorium in 1955 was for  
23          commercial purposes?

24          **DR. ZIEMER:** Okay. Larry is approaching the  
25          mike here, Bob, hang on.

1           **MR. STEPHAN:** Okay.

2           **DR. ZIEMER:** Here you go.

3           **MR. ELLIOTT:** Robert, this is Larry Elliott.

4           **MR. STEPHAN:** Hey.

5           **MR. ELLIOTT:** I'm glad you raised that question  
6           and -- and no, I don't have proof today that  
7           the NRC licensure that has been listed by Dr.  
8           McKeel in all cases goes to commercial versus  
9           AEC-related work. I don't have that in front  
10          of me. This is an important issue, though, and  
11          -- and it goes I think really to the -- it's  
12          not the class definition. There is no class  
13          definition at this point in time.

14          **MR. STEPHAN:** Uh-huh.

15          **MR. ELLIOTT:** Let's -- let's be clear about  
16          that. This goes to the covered facility  
17          description, which NIOSH does not set in place.  
18          The *Federal Register* notice that I think Dr.  
19          McKeel is talking about about a class  
20          description is the covered facility description  
21          that is DOE and DOL's responsibility to set in  
22          place.

23          It is our understanding at NIOSH that the  
24          documentation that has been provided by the  
25          Department of Energy, reviewed by the

1 Department of Labor and also reviewed by our  
2 folks, both in our general counsel's office and  
3 in our technical staff, do not find any linkage  
4 of AEC work after the covered period of 1957 to  
5 1960. We have to go by that unless there's  
6 another document produced that indicates  
7 otherwise, and to date we have not seen such.

8 **MR. STEPHAN:** Okay.

9 **MR. ELLIOTT:** This is -- this is very important  
10 because people who only worked during the  
11 residual contamination period are going to  
12 receive a different type of exposure  
13 reconstruction -- dose reconstruction. That  
14 reconstruction will only -- we're re-- we're  
15 bound by the law and the regulations to only  
16 reconstruct the AEC portion of that dose. In  
17 this case it would be uranium.

18 **MR. STEPHAN:** Okay.

19 **MR. ELLIOTT:** We acknowledge, we respect and  
20 understand that this particular site did a  
21 variety of thorium alloy-related work for the  
22 Department of Defense. We do not argue that.  
23 We do not quibble about that. We -- we do not  
24 question the veracity or the validity of the  
25 affidavit comments that have been provided to

1 us. We accept the fact that thorium alloys  
2 were produced by Dow in their commercial  
3 operations in support of Department of Defense  
4 and other contractual agreements that they had  
5 outside of DOE or AEC.

6 We have looked at the documentation of Dow  
7 operating the Rocky Flats site for the  
8 Department of Energy or AEC -- this is the four  
9 inches of documentation that Libby White  
10 provided us a couple of weeks ago that we  
11 shared with everybody. This contract language  
12 that we see there doesn't indicate any  
13 relationship to us between Dow Madison and  
14 Rocky Flats and thorium shipments.

15 **MR. STEPHAN:** Okay.

16 **MR. ELLIOTT:** Again, we do not question the  
17 veracity of the affidavit testimonies about  
18 working on thorium. We understand they worked  
19 on thorium. This was a dirty place. It was a  
20 dirty operation. We don't question, we don't  
21 quibble about the fact that these folks --  
22 these fine folks were put in harm's way without  
23 being told specifically by the management of  
24 this facility what they were going to  
25 encounter, what types of radioactive material

1           they were going to encounter, both in a  
2           commercial operation processing of thorium-  
3           based alloys and in the uranium extrusion  
4           process that they did for the Atomic Energy  
5           Commission.

6           **MR. STEPHAN:** Uh-huh.

7           **MR. ELLIOTT:** So if -- if -- if we're going to  
8           take up a discussion about the covered facility  
9           description, I think you need to employ in that  
10          discussion Department of Energy and Department  
11          of Labor. NIOSH has no responsibility or  
12          authority in that regard. Our class  
13          definition, once it comes forward, will be  
14          established around what we can or we cannot do  
15          in dose --

16          **MR. STEPHAN:** Right.

17          **MR. ELLIOTT:** -- reconstruction. That's the  
18          regulation that we have to follow here.

19          **MR. STEPHAN:** Right. Larry, I appreciate your  
20          going through that, and if -- if I could, you  
21          know, implore the -- the -- the Board or the  
22          Department of Labor, Department of Energy --  
23          I'm not exactly sure what the process is, but  
24          as -- as Larry indicated just now and as he  
25          indicated to me two weeks ago, to have this

1 type designation reviewed. And -- and the  
2 question we have is someone at the Department  
3 of Labor or the Department of Energy to come  
4 forward and show the documentation as to how it  
5 is they arrived that only AEC, you know,  
6 government work was done during those years and  
7 that all the other years it was commercial.  
8 And the point that I'm trying to make is is how  
9 much weight do we give to worker testimony.  
10 You know, it's interesting when you go to these  
11 worker outreach meetings because if a worker  
12 ever says something that all the other workers  
13 dispute, they speak up and they correct him.  
14 And in this case you have 11 -- at least 11  
15 workers who give -- gave very detailed  
16 information about the Rocky Flats and Dow  
17 Madison relationship. And it just is not good  
18 enough for us to tell the workers well, that's  
19 the way that it is because that's what the  
20 Department of Energy says goes, and your  
21 testimony and what you saw and what you're  
22 telling us essentially we don't believe. That  
23 -- that's what it really comes down to.  
24 So I'm hoping we can take up a discussion and  
25 the Board will encourage a discussion among DOE

1 or DOL, whoever it is, to show us how it is  
2 with documentation that they arrived at the  
3 site designation, you know, being an AEC site  
4 for only those years, 'cause that's very  
5 important. And I hope we're not going down the  
6 path that -- that worker testimony is  
7 essentially disregarded. If it is because  
8 there are documents which prove that it is not  
9 correct, then fine. But you know, we should  
10 have access to that information to show us  
11 because I personally believe the workers and,  
12 you know, they -- they need something  
13 themselves to say, you know, this is why we  
14 can't give credence to what you're telling us.  
15 Here -- here it is on paper.

16 **DR. MCKEEL:** Robert, I --

17 **MR. STEPHAN:** It's not a -- go ahead.

18 **DR. MCKEEL:** Robert, I have --

19 **DR. ZIEMER:** Yeah, here's Dr. McKeel --

20 **DR. MCKEEL:** -- I have a --

21 **DR. ZIEMER:** -- again, Robert.

22 **DR. MCKEEL:** -- footnote to add to that. I  
23 don't think we've really missed any of these  
24 issues. In June of last year the -- the actual  
25 statement that has been played back to us that

1 documents that none of the activities at Dow  
2 were related to AEC activities was actually  
3 contained in one of the FUSRAP reports  
4 generated by the Army Corps of Engineers in the  
5 St. Louis district. So we went down in June,  
6 Deb Detmers went; Robert, you went --

7 **MR. STEPHAN:** Uh-huh.

8 **DR. MCKEEL:** -- or I think you actually -- you  
9 were going, you didn't come; John Ramspott  
10 went, I went. And we talked to the Deputy  
11 Director of the St. Louis Army Corps of  
12 Engineers, and in particular we talked to one  
13 of their assistant counsels, a fella named Mark  
14 Wunch, W-u-n-c-h. And one of the questions  
15 that I asked Mark directly that day was that we  
16 wanted them to clarify their authority by which  
17 they could make such a statement that none of  
18 the thorium work was related to AEC activities.  
19 And we knew from testimony from the workers  
20 that that cleanup actually occupied one week,  
21 and people were there -- they didn't interview  
22 any of the workers. They -- they came in, they  
23 -- they did their business. They had to work  
24 hard to finish in that period of time. So we  
25 asked Mark to provide that documentation.

1 We followed up with him after that meeting by  
2 e-mail and he replied back, and the answer was  
3 that their documentation was their own  
4 document. They did not have, they have not  
5 produced, they cannot produce a primary source  
6 document that proves their statement. They  
7 simply made the statement and then cited their  
8 own document as proof.

9 And so with all due respect, when Larry gets up  
10 and says that his legal people, that the  
11 Department of Labor leg-- pe-- people have  
12 reviewed all those documents and they can find  
13 no linkage to Dow Madison, then I think we're  
14 going to have to get to the point where they  
15 tell us what they did to arrive at that  
16 decision specifically and provide the details.

17 **MR. STEPHAN:** Right.

18 **DR. MCKEEL:** I don't think any such  
19 documentation has been produced so far. So  
20 what you have is the sworn testimony now on the  
21 record, names can be used, of numerous workers  
22 at the Dow Madison plant versus a statement,  
23 one line, in a FUSRAP report by people who know  
24 far less about that site than we do and cannot  
25 produce any more documentation. I can supply

1 Mark Wunch's reply to me. So we need to re-  
2 examine that. That's not a fact that's been  
3 established either way. And in fact, I would  
4 say that the preponderance of evidence, if you  
5 like that sort of reasoning, is that there was  
6 a connection with Dow and our job --  
7 collectively, all of us, if we're really  
8 interested in doing the best thing for the  
9 workers -- is to find those documents. And I  
10 think that it's really impossible to imagine  
11 that a DOE major site would accept shipments,  
12 truckloads of -- of thorium/magnesium alloy and  
13 send material back to Dow Madison to be  
14 processed without having a contract, so our job  
15 is to find that contract. Thank you.

16 **DR. ZIEMER:** Thank you. John -- Robert, did  
17 you have additional comments?

18 **MR. STEPHAN:** Yeah, I'll try to finish up here,  
19 guys. I know we're going long --

20 **DR. ZIEMER:** No, that's fine.

21 **MR. STEPHAN:** -- and I want to thank you for  
22 allowing this discussion about Dow because I  
23 know it was not -- you know, one time it was on  
24 the agenda, then it was off, and I appreciate  
25 you putting it back on.

1           Would it be appropriate to -- because I -- you  
2           know, I -- I understand that this is not a --  
3           not a NIOSH issue, that NIOSH has their hands  
4           tied to many degrees on this issue. Would it  
5           be appropriate to enlist the help of SC&A to  
6           work through this residual contamination issue  
7           and the site designation -- and the reason I  
8           think it's important is because, you know,  
9           we're talking about potentially, you know, at  
10          least a few dozen, maybe several dozen -- Dr.  
11          McKeel can correct me on the exact number --  
12          workers who may be included in this class  
13          designation. Is that -- is that a -- a  
14          realistic thing that you -- you would ask SC&A  
15          to do?

16          **DR. ZIEMER:** SC&A does what the Board asks it  
17          to do within our purview. I -- I guess I would  
18          have to ask for legal advice myself on that.  
19          One -- one thing that should be noted, I guess  
20          -- I think from what Larry said that what it  
21          appears so far is, although the work may have  
22          been concurrent, there's no -- that NIOSH has  
23          not seen evidence that the thorium part was  
24          connected to the DOE or AEC part of Dow's work.  
25          Was that correct -- is that what Larry was

1 saying?

2 **DR. WADE:** Larry left.

3 **DR. ZIEMER:** No one was questioning that the  
4 work -- the work did go on concurrently, at  
5 least --

6 **MR. STEPHAN:** Right.

7 **DR. ZIEMER:** -- as a minimum.

8 **MR. STEPHAN:** Right. What -- what I -- Larry,  
9 if I could -- go ahead, Larry, if you want to,  
10 if I -- if I could jump in.

11 **DR. ZIEMER:** Larry's conversing also with a  
12 Department of Labor person. We're just trying  
13 to get a feel for -- Larry, as I understood  
14 what you said, we know the work went on  
15 concurrently.

16 **MR. ELLIOTT:** Yes.

17 **DR. ZIEMER:** The question then is that the  
18 thorium work -- you were looking for evidence  
19 that the thorium work was somehow connected  
20 with the DOE/AEC contracts. So far --

21 **MR. ELLIOTT:** Well --

22 **DR. ZIEMER:** -- there's no such evidence.

23 **MR. ELLIOTT:** Well --

24 **DR. ZIEMER:** Is that...

25 **MR. ELLIOTT:** -- during the covered period --

1           **DR. ZIEMER:** Right.

2           **MR. ELLIOTT:** -- of -- I think it's '5-- I  
3 don't have it in my -- I've got my book, but I  
4 don't --

5           **DR. ZIEMER:** (Unintelligible)

6           **MR. ELLIOTT:** -- it was '57 to '60, is that  
7 right?

8           **DR. ZIEMER:** Right.

9           **DR. WADE:** '57 to '60.

10          **MR. ELLIOTT:** '57 to '60, that is the covered  
11 period for the AEC work.

12          **DR. ZIEMER:** Right.

13          **MR. ELLIOTT:** We have the contract that talks  
14 about that work. It's -- it's extruding  
15 uranium. Okay?

16          **DR. MCKEEL:** (Off microphone) (Unintelligible)  
17 Mallinckrodt. That contract was  
18 (unintelligible).

19          **MR. ELLIOTT:** Yes, yes, and that's what is the  
20 basis of this being an AWE.

21          **DR. ZIEMER:** Right.

22          **MR. ELLIOTT:** Right? Okay. We would have to  
23 reconstruct all radiation dose for that covered  
24 period, so that's going to include not only the  
25 uranium that AEC contracted -- or Mallinckrodt,

1 through a -- through this -- contracted with  
2 Dow. We'll do that. We'll also have to  
3 reconstruct the thorium dose for that time  
4 period.

5 **DR. ZIEMER:** Right.

6 **MR. ELLIOTT:** Now the way the law has been  
7 amended and reads, for the residual period --

8 **DR. ZIEMER:** Outside that.

9 **MR. ELLIOTT:** -- we only reconstruct -- outside  
10 that covered period, the residual period from  
11 1957 on to present, I think, would -- or till  
12 they fully removed the site, we are only going  
13 to reconstruct uranium. Okay? And this is why  
14 Dr. McKeel feels this is so important, you  
15 know, to try to get established, because if  
16 we're only allowed to reconstruct uranium, we'd  
17 lose all of that thorium dose.

18 We're not saying those folks weren't exposed to  
19 thorium. We believe they were exposed to  
20 thorium. But we're not allowed, we're not  
21 required, we're not enabled to reconstruct the  
22 -- the commercial-based dose in the -- in the  
23 residual period. Okay?

24 **DR. ZIEMER:** On the other hand --

25 **MR. ELLIOTT:** I was try-- I -- I hope that -- I

1           asked Libby if she wouldn't come forward and  
2           explain where D-- what DOE can bring to the  
3           table in this, and I was about to ask Jeff --

4           **DR. ZIEMER:** Right.

5           **MR. ELLIOTT:** -- Kotsch from DOL if he wouldn't  
6           also come to the mike and get on the record and  
7           explain where DOL's at on this because I  
8           believe that DOL has -- has answered Dr. McKeel  
9           in this -- in this particular instance to a  
10          certain degree. I'm not sure exactly what that  
11          communication has been and how it's been  
12          formatted, but you know, I -- I think they need  
13          to come to the mike, get on the record and  
14          explain what those two other Departments are  
15          doing in this regard.

16          **DR. MCKEEL:** Actually Department of Labor --  
17          neither Department of Labor nor Department of  
18          Energy have really seen the -- all of this  
19          evidence. They've not seen the affidavits from  
20          the workers. So we -- we certainly could bring  
21          this case before them and of course would be  
22          happy to do -- I mean if there's any way we  
23          could work to resolve this quickly, that would  
24          be great. And you know, Mr. Podosky could  
25          perhaps facilitate that.

1  
2  
3  
4  
5  
6  
7  
8  
9  
10  
11  
12  
13  
14  
15  
16  
17  
18  
19  
20  
21  
22  
23  
24  
25

**DR. ZIEMER:** Sure. Dan, remind me now, on the affidavits that you showed us, did the workers indicate in the case -- let's see, in the case of thorium, that they -- that thorium was being shipped to Rocky? Is that what --

**DR. MCKEEL:** That's right, we have 29 new affidavits and 11 of them testified to that.

**DR. ZIEMER:** And I think what we're hearing on the contract, the contract doesn't show anything about the thorium, so -- and -- but the workers --

**DR. MCKEEL:** But -- but let me also say that contract that we got also doesn't say anything about any of the radioactive nuclides used at Rocky Flats by the tons. It doesn't mention about plutonium. It doesn't mention anything. So my feeling is that we have gotten six inches of unclassified and -- and four inches of declassified, formerly classified, records from the Department of Energy, thanks to Libby White, that certainly pertain to that contract. But that cannot be the total car-- file on the work done under contract by Rocky Flats for the --

1           **MR. STEPHAN:** Dr. McKeel, could I --

2           **DR. MCKEEL:** -- Atomic Energy Commission.

3           **MR. STEPHAN:** -- interject --

4           **DR. MCKEEL:** It -- it can't be, because they  
5 worked with plutonium. Somewhere somebody's  
6 got to write that down in a document. So I'm  
7 saying we don't have the complete record --

8           **DR. ZIEMER:** Okay.

9           **DR. MCKEEL:** -- and we need to get it.

10          **DR. ZIEMER:** Okay. Well, I think we understand  
11 the issue and --

12          **DR. MCKEEL:** Okay.

13          **DR. ZIEMER:** -- Libby is here and Jeff is here,  
14 and it may be that, as a first step, you could  
15 provide them with your affidavits and --

16          **DR. MCKEEL:** Sure.

17          **DR. ZIEMER:** -- maybe they can -- Libby's  
18 shaking her head that perhaps there's some  
19 follow-up that can be done. Of course the oth-  
20 - and we've got some legal counsel here. Go  
21 ahead, Liz.

22          **MS. HOMOKI-TITUS:** (Off microphone) I think Lew  
23 wants to address Robert first, or do you want  
24 me to (unintelligible).

25          **DR. WADE:** I can.

1           **MS. HOMOKI-TITUS:** Okay.

2           **DR. WADE:** To the question of SC&A's  
3 involvement, SC&A has a contract that has a  
4 number of tasks to it. One of those tasks is  
5 to look at technical issues surrounding SEC  
6 petitions. I think if the Board wished to,  
7 they could task SEC (sic) with certain work  
8 related to an SEC petition that's in the  
9 offering, frame it within the contract of  
10 technical issues and move forward, if the Board  
11 wished. So I think there's a mechanism there.  
12 What the Board chooses to do remains to be  
13 seen.

14           **DR. ZIEMER:** But -- but --

15           **MS. HOMOKI-TITUS:** I'd like to --

16           **DR. ZIEMER:** -- they wouldn't -- S-- SC&A  
17 wouldn't be in a position to -- unless they had  
18 -- came up with some documents, to -- to chan--  
19 recommend changing this unless they came up  
20 with some documents that were --

21           **DR. WADE:** No --

22           **DR. ZIEMER:** -- clear cut one way or the other.

23           **DR. WADE:** Right. SC&A looks at technical  
24 issues. And if you ask them to review certain  
25 technical documents, they'll bring -- they'll

1 bring their reports back to you, and then the  
2 Board could do what it wished with them. Now  
3 the SC&A contract could be modified, but the  
4 contract that's in place has a task that deals  
5 with SEC-related issues and it deals with the  
6 review of technical materials.

7 **DR. ZIEMER:** But we already know that the  
8 affidavits, at least at first look, appear to  
9 be somewhat in contrast with what we've seen so  
10 far in the actual contracts. That is, the con-  
11 -

12 **DR. MCKEEL:** That's true.

13 **DR. ZIEMER:** That's I think --

14 **DR. MCKEEL:** But I --

15 **DR. ZIEMER:** -- what you've told us, and so  
16 that's --

17 **DR. MCKEEL:** Yes, sir, that's true.

18 **DR. ZIEMER:** SC&A could only acknowledge that  
19 at this point. What seems to be lacking is the  
20 contractual documents --

21 **DR. MCKEEL:** Oh, I -- I'm the first to admit  
22 that. But -- but I must say this. So right  
23 now what we have on the table --

24 **DR. ZIEMER:** Yeah.

25 **DR. MCKEEL:** -- is I would say 11 documents

1           that meet the -- all -- all the requirements  
2           for a -- a valid affidavit. That's what's on  
3           the table.

4           **DR. ZIEMER:** Yeah.

5           **DR. MCKEEL:** What's lacking is the contract.  
6           But it -- it really is a fundamental issue of  
7           how much -- I -- I think Terrie Barrie is going  
8           to raise this about the Rocky Flats SEC perhaps  
9           later on today, but it -- it's an issue that  
10          cuts across centers.

11          **DR. WADE:** Liz, we need to hear first.

12          **MS. HOMOKI-TITUS:** I just wanted to clarify for  
13          Robert that SC&A's contracts can't be modified  
14          for putting SC&A on a task that belongs to the  
15          Department of Labor or Department of Energy.  
16          They would have to get their own contractor for  
17          that.

18          **MR. STEPHAN:** Okay. Could -- could I make a  
19          comment, Dr. Ziemer?

20          **DR. ZIEMER:** Sure.

21          **MR. STEPHAN:** I want to focus specifically on  
22          the contract, the four inches of classified  
23          material which has been declassified that Libby  
24          White provided us. And you know, Larry had  
25          made the comment that that contract very

1 clearly does not establish any sort of  
2 relationship between Rocky Flats and Dow  
3 Madison. And so all I -- all I want to make  
4 sure that we keep in mind is that that  
5 contract, if you read it, is a fairly standard  
6 boilerplate contract about, you know, how much  
7 people are paid per hour and how much benefits  
8 -- how many benefits they get and what days off  
9 they get. And so it's certainly reasonable to  
10 me that a relationship could have existed  
11 regarding thorium between Rocky Flats and Dow  
12 Madison and it not be in that contract. So I  
13 would encourage folks to read that. That  
14 contract in no way should be viewed as some  
15 sort of a smoking gun which disproves the  
16 theory that there was a relationship between  
17 thorium -- between Rocky Flats and Madison.

18 **DR. MCKEEL:** Absolutely not. They could have  
19 written a letter. They could have had a  
20 memorandum of understanding. It could be a  
21 completely separate document, and in fact that  
22 would be perfectly reasonable. So we just  
23 haven't gotten the documentation.

24 **DR. ZIEMER:** Might have even been a handshake  
25 under the secrecy of the period, who knows?

1           **DR. MCKEEL:** Oh, I'd never suggest such a  
2           thing, but it --

3           **DR. ZIEMER:** No, I didn't suggest it.

4           **DR. MCKEEL:** -- but it's possible. Yeah, it's  
5           well (unintelligible).

6           **MR. STEPHAN:** Dr. Ziemer, I have -- I have one  
7           last --

8           **DR. MCKEEL:** Of course.

9           **MR. STEPHAN:** -- comment and I have to go, if  
10          you don't mind.

11          **DR. ZIEMER:** Yeah, go ahead, Robert.

12          **MR. STEPHAN:** Okay. Which is just that I think  
13          what I'm asking -- and maybe this is not  
14          allowable, I'm not sure, based upon the  
15          discussion you just had about SC&A -- but what  
16          I'm asking is, we -- we believe that there is a  
17          relationship between Rocky Flats and Dow  
18          Madison, regardless of what that contract says.  
19          We believe it because -- for a variety of  
20          reasons Dr. McKeel laid out, and particularly  
21          because of the worker testimony. And so what I  
22          would be asking is can SC&A essentially go and  
23          establish what is the documentation which  
24          establishes the site designation. Is that --  
25          is that something that they could establish,

1           because I'm not aware of the document that  
2           proves why the site designation is the way that  
3           it is.

4           **DR. ZIEMER:** Yeah, let -- let me ask Lew to  
5           answer that, and perhaps --

6           **MR. STEPHAN:** Okay.

7           **DR. ZIEMER:** -- counsel can add to it.

8           **DR. WADE:** Well, to the issue of site  
9           designation, Robert, this is Lew Wade, that's a  
10          judgment that's made by the Department of  
11          Energy, the Department of Labor, not by HHS and  
12          not under review of this Board.

13          **MR. STEPHAN:** Okay.

14          **DR. WADE:** So the current contract with HHS  
15          wouldn't serve for that purpose.

16          **MR. STEPHAN:** Okay. Okay. Thank you. Well, I  
17          -- I just hope -- you know, keep in mind that  
18          right now we're going with a site designation  
19          that really is in question and -- and should be  
20          invalid unless proved otherwise.

21          And the last thing I would add is I certainly  
22          appreciate, Larry, your -- your comments that  
23          you're going to do your best to -- to get the  
24          site profiles done in time for the May meeting.  
25          And I just hope that what we're doing is we're

1           -- we're maybe dragging this out a little bit  
2 longer for the purpose of potentially including  
3 more people. But if -- if we are dragging it  
4 out longer for the purpose of potentially  
5 excluding people, I think -- I think we've had  
6 long enough to do that. And so, you know, at  
7 some point there has to be an end to this  
8 process, and it's just going to be very  
9 difficult for us to face Mr. Hoppe and Mr.  
10 Simmons in May if this is put off again and the  
11 reason it's put off is not because we're trying  
12 to include more people. You know, so if we're  
13 trying to be inclusive, I could understand, you  
14 know, trying to -- to look under every rock,  
15 but if we're trying to be exclusive -- which I  
16 don't think that you are, but I'm just trying  
17 to make the point. If we're trying to be  
18 exclusive to the point of making sure we have  
19 the -- the science exactly right, I think -- I  
20 think we've had long enough to do that and we  
21 just need to move forward come May. So I  
22 certainly appreciate your guys's time in  
23 allowing me to, you know, express some  
24 comments.

25       **MR. ELLIOTT:** Thank you, Robert. This is Larry

1 Elliott again, and I share your concern. I --  
2 I believe that -- and accept, acknowledge and  
3 recognize that the Dow claimants have -- have  
4 been -- it's been long overdue in responding to  
5 their needs and -- and addressing their  
6 concerns. We want to be thorough as we do  
7 that, and so we -- we -- when we learn of  
8 something like these NRC reports, we want to  
9 make sure that we pursue those to the best  
10 advantage of the claimants. It's not that  
11 we're trying to use this information to their  
12 disadvantage, but to their advantage, whether  
13 we end up doing dose reconstruction -- we want  
14 to be able to use all the available data that  
15 exists, that we know of. If we add a class  
16 here, we want to be able to thoroughly and  
17 carefully attend to those non-presumptive  
18 claims where we end up doing a partial dose  
19 reconstruction, and we want to make sure we're  
20 thorough in that effort as well. So thank you  
21 --

22 **MR. STEPHAN:** Right.

23 **MR. ELLIOTT:** -- for your comments.

24 **MR. STEPHAN:** Okay, thank you. Thank you,  
25 guys.

1           **DR. ZIEMER:** Thank you. Board members, do you  
2           have any comments or questions -- okay, Dr.  
3           Melius.

4           **DR. MELIUS:** I have a -- one -- one question  
5           for Larry. This -- I think this is the first  
6           it's come up, the residual contamination dose  
7           reconstruction issue. If -- you unable to  
8           reconstruct the residual contamination with  
9           sufficient accuracy, you know, et cetera, and  
10          there's health endangerment, they do qualify --  
11          could qualify potentially for a Special  
12          Exposure Cohort?

13          **MR. ELLIOTT:** That is correct, yes.

14          **DR. MELIUS:** Okay, that's -- yeah, just --  
15          okay.

16          **MR. ELLIOTT:** But -- but we'd end up -- in that  
17          scenario, we'd end up with two classes. And  
18          the reason why --

19          **DR. MELIUS:** Yeah.

20          **MR. ELLIOTT:** -- is because we would include  
21          the thorium work done during the covered period  
22          but not during the residual period.

23          **DR. MELIUS:** Uh-huh, and -- and I would just  
24          also add -- this probably is a comment, then I  
25          have a recommendation to make. One is that we

1           -- we could move -- you know, again,  
2           hypothetically, if an evaluation report is  
3           ready for -- by the May meeting, maybe not all  
4           these issues that Dan and others have -- have  
5           raised are resolved, there's no reason that we  
6           couldn't approve at least part -- so to speak,  
7           deal with part -- part of the SEC re-- request  
8           that -- come in and mo-- move forward on that  
9           and reserve the right and be able to pursue --  
10          continue to pursue some of these other issues.  
11          For example, if we don't have all the, you  
12          know, contractual documents and so forth, the  
13          documentation, we don't need to necessarily put  
14          off, you know, dealing with -- with at least  
15          part of the SEC and getting some compensation  
16          out to some of these people. It's maybe not an  
17          ideal solution, but it at least would provide  
18          partial compensation for that group -- again,  
19          hypothetically, if that was the recommendation.

20          **DR. ZIEMER:** Well, in fact we have done that in  
21          some other cases.

22          **DR. MELIUS:** Right, yeah, (unintelligible) --

23          **DR. ZIEMER:** In Iowa we did something similar  
24          and --

25          **DR. MELIUS:** Yeah.

1           **DR. ZIEMER:** -- and in Mallinckrodt. Larry.

2           **MR. ELLIOTT:** That's been the premise of our  
3           83.14, as I indicated yesterday. When we  
4           identify a component of dose, we move forward  
5           with that and present it to you. This is --  
6           this particular example of Dow has been  
7           slightly different in that regard because the -  
8           - the concern about the residual period is so -  
9           - so huge here --

10          **DR. MELIUS:** Yeah.

11          **MR. ELLIOTT:** -- and we wanted to see what we  
12          could do about addressing that. We didn't want  
13          to come forward without something to say about  
14          that.

15          **DR. ZIEMER:** But it doesn't exclude doing  
16          something later, if needed.

17          **MR. ELLIOTT:** That's -- that's true. We could  
18          come forward with a -- an evaluation report on  
19          the covered period alone, which is -- the  
20          report I reviewed back in -- in November and  
21          decided that there were too many technical  
22          issues that -- and -- and Jim Neton and I had a  
23          long conversation about this, and Dr. Neton was  
24          not comfortable with the technical aspects that  
25          were unaddressed in that for the covered period

1 alone. And then we both had -- had concerns  
2 about how -- what we were saying and what we  
3 were not saying about the residual period in  
4 that particular report.

5 **DR. WADE:** Larry, could I ask you a question  
6 about the residual period? Let's assume that -  
7 - that we were to pursue the residual period as  
8 you defined, uranium only, and moved forward  
9 with an SEC class for that. Then who would be  
10 compensated?

11 **MR. ELLIOTT:** The presumptive cancers in that  
12 class.

13 **DR. WADE:** That had worked...

14 **MR. ELLIOTT:** That had worked in that period.

15 **DR. WADE:** 250 whatever it was.

16 **MR. ELLIOTT:** Yeah.

17 **DR. WADE:** So all of a sudden, the thorium  
18 issue really becomes moot.

19 **DR. ZIEMER:** Only -- only for those that don't  
20 have presumptive cancers. Then it's an issue.

21 **DR. WADE:** Right, but we would capture the  
22 people who did have the presumptive cancers  
23 through that petition.

24 **DR. MCKEEL:** But not all of them.

25 **DR. WADE:** Not all of them, but some of --

1           **DR. MCKEEL:** There are 94 people who have  
2           claims at NIOSH and it would capture 70 of  
3           those in that '57 to '60 group --

4           **DR. WADE:** And --

5           **DR. MCKEEL:** -- and of those, 41 have a  
6           presumptive cancer.

7           **DR. WADE:** Well, I'm not sure of the numbers,  
8           so let's just walk through it a little bit. Go  
9           ahead.

10          **MR. ELLIOTT:** No, I think -- I think Dan's  
11          right --

12          **DR. MCKEEL:** I think there are numbers from  
13          Laurie (unintelligible).

14          **MR. ELLIOTT:** -- that -- yeah, these are the  
15          numbers that we've given --

16          **DR. MCKEEL:** I checked them last night, right.

17          **MR. ELLIOTT:** These are the numbers that we  
18          have given them, and I don't have them right  
19          here in front of me, but --

20          **DR. MCKEEL:** (Unintelligible)

21          **MR. ELLIOTT:** -- essentially there's a --  
22          there's a subset of these claims that only have  
23          time in the residual period. And if in your  
24          scenario, Dr. Wade, we come forward with an  
25          evaluation report that establishes a class for

1           which dose -- uranium dose cannot be  
2           reconstructed for the residual period, that  
3           would be the class and those people who had  
4           presumptive cancer, one of the 22, would --  
5           would find themselves compensated. The  
6           remainder -- this is another reason why this is  
7           so critical that we be -- be very thorough in  
8           our efforts. The remainder of that group, that  
9           subset, who had non-- a non-presumptive cancer  
10          would essentially have the -- the only remedy  
11          that we can apply in a partial dose  
12          reconstruction would possibly be the  
13          occupational medicine dose, which is the X-ray  
14          -- annual X-ray, and that's not going to get a  
15          lot of people compensated.

16         **DR. WADE:** Right.

17         **MR. ELLIOTT:** We cou-- we would not pick up  
18          thorium.

19         **DR. WADE:** But following forward on Dr.  
20          Melius's suggestion of taking action that would  
21          deal positively with certain situations, the  
22          residual contamination step would deal  
23          positively with certain situations and wouldn't  
24          close the door on coming back and dealing with  
25          people if we could resolve this issue of the

1 thorium.

2 **MR. ELLIOTT:** If that -- if that scenario was  
3 that the thorium issue became part of the  
4 coverage, we would have to look at can we  
5 reconstruct that.

6 **DR. WADE:** Yeah, I just wanted to get it on the  
7 record, that's all.

8 **MR. ELLIOTT:** And that's where a lot of -- I  
9 mean I applaud Dr. McKeel and John Ramspott and  
10 all the work that SINEW is doing. They -- they  
11 have -- well, essentially they've been a  
12 research arm of NIOSH in all of their efforts  
13 and all the information that they've brought  
14 forward has certainly been beneficial and we've  
15 added it. It's -- in many cases I know they've  
16 brought it forward knowing this kind of goes  
17 against our argument in a way because some of  
18 this is technically, you know, well-developed  
19 enough that it can enable them to do some kind  
20 of dose reconstruction, perhaps. But you know,  
21 they brought up other good points about the  
22 limitations of that, so I applaud you. Thank  
23 you.

24 **DR. ZIEMER:** I wanted to --

25 **DR. MCKEEL:** Thank you.



1           **DR. MCKEEL:** What do you think? Do you think  
2 you can -- can y'all do three minutes?

3           **DR. ZIEMER:** Well, go ahead. Go ahead.

4           **DR. WADE:** You don't need to be brief. Go on.

5           **DR. ZIEMER:** No, I'm --

6           **DR. WADE:** No need to be brief.

7           **DR. ZIEMER:** I was just going to -- you know,  
8 we can take a break first if necessary, but...

9           **MR. HOPPE:** Hi, I'm Bill Hoppe. I worked at  
10 Dow from 1961 to 2002. I got 18 years in the  
11 rolling mill and I've got 22 years in  
12 maintenance. And in the rolling mill we did  
13 almost everything, but my main job I guess  
14 you'd say would be in shipping. I was a crate  
15 builder down there. The duty was block trucks,  
16 make sure, you know, everything was secured on  
17 the trucks when they shipped it.  
18 We usually ship out about four trucks a month  
19 to Rocky Flats. It was thorium and it would go  
20 from -- the gauge would be anywhere from 016 up  
21 to about eight inches thick metal, and each  
22 truck probably held anywhere from 36,000 pounds  
23 to 40,000 pounds, all depends how heavy the  
24 metal was in that.

25           And then in the rolling mill everyone did

1 almost every job, and when they ran the thorium  
2 thin sheets they'd make two or three passes,  
3 then they had to sand everything off, get all  
4 the dirt off of it. Any gouges in it they had  
5 to get that off. It'd go through a picker  
6 line, then it would go back through the mills  
7 again, and they did that maybe 20, 30 times  
8 like that. It'd be dust all over the place.  
9 And then when I got into maintenance, I got  
10 into the instrument shop in the maintenance  
11 part and my job there was to check on the  
12 instrumentation and that, and I worked a lot in  
13 the pot room checking the instruments for the  
14 temperature. Whenever they ran thorium it was  
15 real critical to keep the temperature with four  
16 degrees. And I ran up to about -- thorium up  
17 there till about 1996 or so.  
18 And the only time I ever had a badge on -- the  
19 government came in in 1995 or '96, I'm not  
20 positive there, but we had to wear a badge  
21 while we were in the pot room, and then when we  
22 got done we just threw them in a bucket and  
23 about two months later they just threw them  
24 away. I've got a statement on that.  
25 And go back to when I was in the rolling mill -

1           - I'm jumping all over the place, but -- sorry  
2           about that, but -- when we shipped out to Rocky  
3           Flats, we used to have to put stickers all the  
4           way around the metal, don't put film within 20  
5           foot of this package. And then when they got  
6           metal back from Rocky Flats, if it was thin  
7           sheets and that, sometimes we'd unload it and  
8           set it over there by where the track well was.  
9           It might sit there for two -- one, two, three  
10          weeks before they'd take it over to casting.  
11          But whenever they brought in the heavier plate,  
12          they had a guy by the name of Jay Burns, he was  
13          the head of metals for Dow, and Bill Barnes,  
14          Sr., he was a top salesman for Dow at that  
15          time, and they -- they'd be sitting there  
16          waiting for this metal to come in. They'd  
17          weigh it, put it right on the wagon and haul it  
18          right straight over to casting, and I don't  
19          know why -- you know, why that was so  
20          important, the heavier stuff, but that's what  
21          we had down there.

22          And I don't know about the dose reconstruction.  
23          I've got a list of job classes met and we only  
24          know of three guys that was on the same job the  
25          whole time they were down there, and all the

1 rest of them was all over the place. I did  
2 everything in the mill except for three jobs,  
3 so if you'd like to have it, I've got it here  
4 for you. That's about all I can -- I know  
5 right now.

6 **DR. ZIEMER:** Good. Thank you very much. Thank  
7 you very much, and the other gentleman, we'd be  
8 pleased to hear from you.

9 **DR. MCKEEL:** Homer Simmons I think was the  
10 ninth person to file a claim at Dow, and that  
11 was in August of 2001. He's been denied for a  
12 Title -- for Part E and -- just remind  
13 everybody that there's something like 20 Part E  
14 claims from Dow, which is an AWE only site.  
15 And his Tit-- his Part B claim is still open  
16 today.

17 **MR. SIMMONS:** I worked in there for 45 years.  
18 My brother worked in casting. He died of  
19 cancer at 46 and I -- we been working at it  
20 pretty hard since then. And we had the head of  
21 all the casting departments for Dow Chemical,  
22 Julius Smith, offered his 'vice to take and  
23 help any way he could and nobody accepted it  
24 and he died since then. And there's an awful  
25 lot of widows out there that's been waiting for

1           this money to come in that's never got it,  
2           either. And they call you up wondering what  
3           are -- what are you doing there, I -- so what  
4           do you tell them, you're not doing nothing?  
5           And most of them are all at the age where  
6           they're about ready to -- they need everything  
7           they can get, too. And -- and this book  
8           specifies that all the metal cast uses -- it  
9           uses a belinium (sic) in it, so that -- almost  
10          every metal in there that's been cast, it has  
11          belinium (sic) used in it, so it's really not a  
12          question 'cause it's published in a book where  
13          anybody can read it. You don't have to have  
14          paperwork to read it. They put out a thing for  
15          my foreman, he -- or my brother when he was  
16          foreman that shows that the used uranium and  
17          they had Geiger counters and they looked  
18          through a box and they found the ones that had  
19          the best beats and that's the ones they casted.  
20          And everybody worked all over the plant. They  
21          worked from -- not one job, but every place and  
22          so everybody's almost versatile and they all  
23          worked around seven and there was caustic pipes  
24          and stuff where they cleaned it up the cramen  
25          (sic) breathed it and the people on the floor

1 all -- almost all of them handled it and every  
2 time they cleaned it up it failed to pass  
3 anyway so they never really cleaned the plant  
4 up since they started. And basically I can't  
5 see how they can even let the plant stay in the  
6 condition it is with -- with not taking the  
7 people in there and making them aware that they  
8 should be claimed for right now. But other  
9 than that, I ain't got much else to say.

10 **DR. MCKEEL:** There's one point I wanted Homer  
11 to clarify for y'all and that is that in many  
12 of the documents about Dow you will see  
13 references to, quote, mag, quote. And I wanted  
14 him to let -- just let you all know that most  
15 of the ti-- they did a tremendous amount of  
16 work with magnesium, and the book he's talking  
17 about has to do with magnesium. It's by W. H.  
18 Gross\* from the American Society for Metals,  
19 and it does talk about the use of beryllium in  
20 some of the magnesium alloys.

21 **UNIDENTIFIED:** (Off microphone)  
22 (Unintelligible) history of the whole plant  
23 (unintelligible).

24 **DR. MCKEEL:** Right, it's a general book about  
25 metal fabrication at -- at all of Dow, but I

1           want Homer to just confirm for you all that in  
2           many of the documents that refer to mag,  
3           they're really not talking about 100 percent  
4           pure magnesium metal. They're really talking  
5           about magnesium and thorium, and the same when  
6           they talk about sludge. A lot of the sludge  
7           that they're talking about, some of it was pure  
8           magnesium, but a lot of it was  
9           magnesium/thorium. I just want him to tell you  
10          about (unintelligible) --

11         **MR. SIMMONS:** And -- and each one of the dies  
12         they run are all different there, like they run  
13         metal for magnesium for Samsonite Luggage.  
14         They ran all that, that was mag. And they run  
15         like shell castings, they run them  
16         continuously, and that's got -- all -- that --  
17         all of them got different stuff there and they  
18         run that for the government. That was one of  
19         their biggest orders for years. And the heavy  
20         press belonged to the government, and when  
21         business was poor they -- they might let them  
22         run something else, but most of the time they  
23         run the stuff for the government all the time,  
24         and if they had any government orders, they  
25         didn't run nothing for the civilian. And we

1 had one guy that come down and testified there.  
2 He come out of the hospital and come over here  
3 -- he forgot his teeth and he signed a  
4 deposition for him, and he died about a week  
5 later, but you can see he was thinking about  
6 his family. He wasn't thinking of himself.  
7 But there's a lot of people's in bad shape  
8 there. And like the way you's -- take and keep  
9 hauling it around for long and long, these  
10 widows ain't going to need it if you wait long  
11 enough for them. They won't need no money  
12 where they're going, but that's all I got to  
13 say.

14 **DR. ZIEMER:** Thank you -- thank you very much.  
15 I think we should take a break at this point.  
16 When we come back we'll talk briefly about the  
17 road ahead on this, and then some other issues.

18 **DR. MELIUS:** I have a rec-- okay.

19 (Whereupon, a recess was taken from 3:13 p.m.  
20 to 3:42 p.m.)

21 **DR. ZIEMER:** We're ready now to resume our  
22 deliberations, and the Chair recognizes Dr.  
23 Melius for purposes of making a motion relating  
24 to the Dow Chemical SEC.

25 **DR. MELIUS:** I would move that we engage our

1 contractor, SCA, to start a limited SEC  
2 evaluation review related to Dow. This would  
3 involve -- right now, since there is no  
4 evaluation report, this would mainly involve  
5 having them become familiar with the available  
6 documentation -- there's actually a separate  
7 section on the O drive that contains some of  
8 the information we've talked about today, as  
9 well as other documentation that NIOSH has  
10 gathered. I think this would sort of  
11 facilitate us getting ready for the review that  
12 -- of the evaluation report as it comes to us -  
13 - you know, hopefully it -- in -- in May and  
14 would help us get things started.

15 **DR. ZIEMER:** Okay. That was a motion plus  
16 maybe a statement of support for the motion.  
17 Is there a second to the motion part of that?  
18 Okay, Phillip Schofield has seconded it. The  
19 motion is to engage -- ask our contractor -- or  
20 task our contractor, SC&A, to begin a -- I  
21 think you described it as a limited SEC review.  
22 It's limited in fact by the fact that there is  
23 currently no evaluation report. We do however  
24 have the petition. We have some related  
25 documents --

1           **DR. WADE:** Posted on the web site.

2           **DR. ZIEMER:** -- those are available. And let  
3 me ask the mover and seconder, do you wish to -  
4 - to expand the motion to include a -- any sort  
5 of a full scale SEC petition review when the  
6 documents become available, or do you wish to -  
7 - does the Board and the petitioners -- or the  
8 motioners -- movers wish to, in a sense, wait,  
9 perhaps for another meeting, till we see how  
10 things develop? I'm going to assume it's the  
11 latter unless you say well, let's expand the  
12 motion and cover it fully.

13           **DR. MELIUS:** No, I -- I would suggest that we  
14 wait on that. We -- we have a workgroup that  
15 is actually tasked with dealing with some of  
16 the 83.14 issues, so that's the SEC workgroup  
17 that I chair and -- and sort of have them --

18           **DR. ZIEMER:** That workgroup --

19           **DR. MELIUS:** -- sort of monitor what's going on  
20 for the time being. We also have a conference  
21 call I believe in April, early April, at which  
22 time we'll I think be in a better position to  
23 sort of understand schedules and so forth for  
24 what will be going on, so I would just -- just  
25 --

1           **DR. ZIEMER:** So -- so the petition (sic), as --  
2           as you've stated it. Ms. Munn, wish to  
3           comment?

4           **MS. MUNN:** No, it's more of a query than a  
5           comment. I'm not clear on what we're asking  
6           SEC -- what we're asking SC&A to do with this  
7           SEC petition. Are we asking them to verify  
8           that the documentation that has been presented  
9           is all that's available? Are we asking them to  
10          try to find additional documentation? What  
11          exactly are we asking, Jim?

12          **DR. ZIEMER:** Jim.

13          **DR. MELIUS:** The -- the answer to both of those  
14          -- your questions -- would be no. What we're  
15          asking them to do, and I believe this is how we  
16          set up the task order for a limited review, is  
17          really simply become familiar with what  
18          documentation is already available in  
19          preparation potentially for reviewing the full  
20          evaluation report when it comes out. So we're  
21          not asking them to seek out new information.  
22          We're simply asking them to become familiar  
23          with and review what is currently available.  
24          Again, in the context that in the future we  
25          will be asking them to look at -- may-- maybe

1 asking them to look at the evaluation report.

2 **DR. ZIEMER:** Basically, as I understand the  
3 motion, this would include all of the materials  
4 that NIOSH has developed. It would include the  
5 materials developed by the petitioners and by  
6 their representatives. So basically it's a --  
7 sort of a preparatory action to get them  
8 underway.

9 **MR. ELLIOTT:** Just to clarify that, we have on  
10 the open drive a folder set aside for Dow  
11 Madison. The petition is there. This is an  
12 83.14 situation so the -- we told a claimant  
13 that we can't reconstruct their dose. That  
14 letter exists there, then the -- the form that  
15 we asked the petitioner to sign, the form A is  
16 there. Our letter establishes why we can't --  
17 what we can't reconstruct. All of the  
18 material, the information that has been so  
19 kindly provided by Dr. McKeel and his  
20 colleagues are contained there, as well as  
21 anything else that we have brought to bear. We  
22 will notify not only the -- the Board, but also  
23 SC&A, when we add anything to that folder from  
24 this point on. So I don't believe we've  
25 touched SC&A on anything that's gone into that

1 folder up to this point, but if you take action  
2 on this motion, that tells me that anything we  
3 add to that folder we'll not only notify you  
4 but we'll notify SC&A.

5 **DR. ZIEMER:** Further comments or questions?  
6 Yes, Libby.

7 **MS. WHITE:** Hi, yeah, I just wanted to mention  
8 on behalf of DOE that we will once again take a  
9 look at all the files that we provided and do a  
10 thorough search, both of our own records in our  
11 office, the Office of Health, Safety and  
12 Security, but work with our Office of Legacy  
13 Management and also with the History Division,  
14 which was the group that provided the  
15 classified information, the four-inch-thick  
16 unclassified information, as well, just to  
17 search and see if we can find anything else.  
18 We'd be happy then to provide a summary of  
19 everything we have provided to date and where  
20 we have searched and get that to NIOSH and also  
21 the Advisory Board.

22 **DR. ZIEMER:** Well, thank you very much, Libby,  
23 and we appreciate the -- those extra efforts to  
24 -- to help identify such documents. Jim.

25 **DR. MELIUS:** Well, actually let's -- I think we



1 we have an electronic version?

2 **DR. MCKEEL:** Yeah, the PDF document, Chris said  
3 that she'd make sure that that -- that final,  
4 final version -- there are a couple of slides  
5 that I presented that are not in that. Most of  
6 them are, but we will get you -- she will get  
7 that to you and hopefully can make copies --

8 **DR. ZIEMER:** So you'll all get --

9 **DR. MCKEEL:** -- for everybody.

10 **DR. ZIEMER:** -- an electronic version of this,  
11 which you probably prefer --

12 **DR. MCKEEL:** Right, and there is a little  
13 handout that expands on a few more things. I  
14 sent you a nicer copy of the map, the  
15 contamination map like that. And so --

16 **DR. ZIEMER:** Is that -- is that on the  
17 electronic --

18 **DR. MCKEEL:** It is on the electronic, but it's  
19 lower resolution. That -- so if you wanted to  
20 scan that one, for example, that's a better  
21 copy of that.

22 **DR. ZIEMER:** Better copy, so maybe I should  
23 give that to Chris.

24 **DR. MCKEEL:** I think that would be a good idea.

25 **DR. ZIEMER:** Where'd she go? She -- well, I'll

1 catch -- I'll catch --

2 **DR. MCKEEL:** Yeah, the electronic file is right  
3 there on the laptop and it's yours, so --

4 **DR. ZIEMER:** Okay. Thank you very much.

5 **DR. MCKEEL:** And I do appreciate the motion and  
6 the extra effort and --

7 **DR. ZIEMER:** Thank you.

8 **DR. MCKEEL:** -- the Board's efforts, NIOSH's  
9 efforts, DOE's efforts and everybody. Thank  
10 you.

11 **DR. ZIEMER:** Well, we thank you again, Dr.  
12 McKeel, for your efforts in this particular  
13 case.

14 **DR. WADE:** Just very briefly for the record,  
15 I'll meet with the contracting office and then  
16 we will talk to SC&A and what we will instruct  
17 them to do is to undertake a limited focused  
18 review of the materials posted on the -- the  
19 shared drive related to Dow Chemical and that --  
20 -- they'll review those materials from a  
21 technical point of view and that will be the  
22 nature of the instruction.

23 **DR. ZIEMER:** Let's see, was there -- Jim, did  
24 you have an additional comment or was --

25 **DR. MELIUS:** No, I was --

1           **DR. ZIEMER:** -- that was it?

2           **DR. MELIUS:** -- just getting --

3           (unintelligible) was what I wanted.

**WORKING GROUP REPORTS**

**WORKING GROUP CHAIRS**

4           **DR. ZIEMER:** Now we are going to have an  
5           opportunity to get updated on the activities of  
6           our various workgroups. And I think what we'll  
7           do is we'll just go right down the list. Was  
8           this distributed?

9           **DR. WADE:** Yes, everybody should have a copy.

10          **DR. ZIEMER:** There's a -- there's a copy of the  
11          current workgroups and subcommittee that has  
12          been distributed to you. This is a -- a  
13          version of Larry's e-mail that was distributed  
14          --

15          **DR. WADE:** My e-mail.

16          **DR. ZIEMER:** Larry -- not Larry's, Lew Wade's  
17          e-mail that was distributed to you earlier, and  
18          what I did is I took Lew's e-mail and I simply  
19          reconfigured it and indented some things so it  
20          was easier for me to read and -- and in the  
21          process of that, my computer decided to delete  
22          Robert Presley from one of the workgroups. All  
23          I was doing was indenting, but I learned now  
24          that in the process Mr. Presley went off into

1 cyberspace. He actually is a member of the  
2 Fernald site profile group, and he wondered why  
3 we had removed him. I wasn't able to convince  
4 him that it was by order of the President of  
5 the United States, so he's going to remain on  
6 that group. So if you would correct your copy,  
7 the workgroup on the Fernald site should  
8 include Mr. Presley.

9 Now let's go back through the list. We've  
10 already heard from the Subcommittee on Dose  
11 Reconstruction.

12 Workgroup on the Nevada Test Site site profile,  
13 Mr. Presley is the chair of that.

14 **MR. PRESLEY:** We met last time right before the  
15 Naperville meeting. We have not met since. We  
16 just got a matrix on comments that SC&A had  
17 made on the -- their latest set of comments. I  
18 believe Mark sent that what, Thursday or Friday  
19 of last week. SC&A has that back. We're  
20 currently commenting on that as a group and  
21 that's where we stand.

22 **DR. ZIEMER:** Okay. Thank you. Board members,  
23 any questions for that workgroup at this point?

24 **DR. WADE:** I would have one general question --  
25 and in fact, for all the presenters. When do

1           you contemplate getting the workgroup together  
2           again, Robert?

3           **MR. PRESLEY:** Lew, that's something we've got  
4           to decide and talk about, our -- all of our  
5           schedules. What we'd like to do -- I think  
6           everybody'd like to do this, is since a lot of  
7           us are on the -- you know, different workgroups  
8           is if we can get together and have our meetings  
9           back to back so that all of us can -- that are  
10          -- that are on more than one workgroup can go  
11          to wherever we go one time and -- and meet, you  
12          know, for a day or two, maybe three, whatever  
13          it takes. That's what we need to sit down as a  
14          -- as a committee and talk about, when we need  
15          to do this. But I -- right now, I don't have  
16          any dates.

17          **DR. WADE:** All right. So maybe either today or  
18          later tomorrow, after all of these discussions,  
19          we can start to pick a target week, maybe  
20          sometime middle to the end of March, and start  
21          to focus.

22          **DR. ZIEMER:** Okay, let's plan to do that.  
23          We'll proceed here. The next workgroup is the  
24          Savannah River Site, and Mike, you're chairing  
25          that. Give us an update on where you are?

1           **MR. GIBSON:** Okay. This again is another  
2           workgroup that we had some difficulty of  
3           getting DOE to I guess provide us the records  
4           we needed. I think that's been worked out now  
5           with Sam Glover from NIOSH. There are a --  
6           there is a date scheduled from February 28th  
7           through March 1st for the Q-cleared members of  
8           the working group to -- to go to Savannah  
9           River, along with NIOSH and Kathy DeMer (sic)  
10          from SC&A to go through the classified data  
11          that we need to look at. And I hope to have a  
12          conference call that has not yet been scheduled  
13          prior to that meeting, just to reaffirm with  
14          the working group and NIOSH and SC&A, you know,  
15          just what our goals are and then try to tighten  
16          things up. So after that -- after that review  
17          of the records, we could have another meeting  
18          or phone call and discuss what we can discuss  
19          and try to have something for the Board,  
20          hopefully in the May meeting.

21          **DR. ZIEMER:** Very good. So the February 28th  
22          to March 1st time frame you'll -- your group  
23          will -- or part of your group will be on site  
24          in Savannah River, so that's outside of our  
25          window anyway then where we'll need to have the

1 workgroups meet, wherever it is. We want to  
2 keep that block of time open for that visit.  
3 Thank you, Mike.

4 Then the Rocky Flats, we've already had the  
5 report on Rocky from Mark so we can go on. The  
6 next one is Chapman Valve, and bef-- the  
7 chairman is Dr. Poston. Before Dr. Poston  
8 makes his comments, I want to check and see if  
9 Portia Wu, who's from Senator Kennedy's staff  
10 and who's -- Chapman Valve is amongst their  
11 constituency. Portia, are you on the line?

12 **MS. WU:** Yes, I am. Can you hear me?

13 **DR. ZIEMER:** Yes, very well. So we'll have --

14 **MS. WU:** And Stephanie Bass --

15 **MS. BASS:** Yes, I'm on the line as well. I'm  
16 from Senator Kennedy's Boston office.

17 **DR. ZIEMER:** Okay, very good, and what we'll do  
18 is have Dr. Poston make the workgroup report  
19 and then if either of you wish to add comments,  
20 that will be fine.

21 Okay, Dr. Poston.

22 **DR. POSTON:** Okay, thank you, Mr. Chairman.  
23 This is sort of a pro-- a historical progress  
24 report since I'm a rookie.

25

1           Just to remind you, the SEC petition was  
2           qualified on November the 9th of 2005, and then  
3           the NIOSH SEC petition evaluation report was  
4           submitted to the Board on August the 8th, 2006.  
5           And in the Las Vegas meeting in September we  
6           asked SC&A to perform a review of the petition.  
7           Almost immediately, less than a month after  
8           that, there was a total rewrite of the petition  
9           evaluation report, and so that caused a little  
10          delay in the SC&A evaluation.  
11          During that period I participated in a -- in a  
12          meeting in Springfield, Massachusetts with John  
13          and Arjun, and we interviewed former workers  
14          and survivors and so forth. That was a  
15          interesting situation.  
16          And then December the 6th SC&A did release  
17          their document. I've read that document in  
18          great detail, talked with John about it. It  
19          does include both the original -- consideration  
20          of the original petition evaluation report, as  
21          well as the total rewrite.  
22          Basically I don't think there are any major  
23          issues. There's probably two things that we  
24          need to be concerned about. There is a concern  
25          about the fire that occurred in June. There

1           were only five folks involved in that. Some of  
2           the assumptions about the internal exposure, if  
3           you change the -- the date of intake only a few  
4           days, it changes the doses significantly, so we  
5           need to iron that out a little bit.

6           The other major issue involves the -- what some  
7           people call the chip furnace, other people call  
8           it an incinerator, and trying to evaluate the  
9           exposures associated with -- with those kinds  
10          of things. You may know that when they machine  
11          these materials they often put the turnings  
12          into a furnace to reduce them to -- to an oxide  
13          form so they don't spontaneously ignite. In  
14          the early days there were some shipments that  
15          ignited, and so it was common practice in these  
16          facilities to burn or incinerate the materials.  
17          We're very unsure about potential airborne  
18          exposures for the workers who had to -- the  
19          chips had to be turned to continue to expose  
20          surfaces so they would oxidize, and also  
21          putting materials in the furnaces and taking  
22          them out.

23          Those are the two major issues that we feel  
24          like we need to address.

25

1           So the next thing to do is schedule a -- a  
2           working group meeting, and I would like to do  
3           it as soon as possible. I don't want to be a -  
4           - a renegade, however -- if March makes sense  
5           for everybody else, then I would cooperate --  
6           but I'd like to see if we could get this thing  
7           going 'cause I don't think there's a -- I think  
8           there's only a couple of issues that need to be  
9           addressed. I do think we're going to have to  
10          do it face-to-face, but I'd like to get it  
11          done, so I -- if -- unless there's someone  
12          wants to assassinate me, I'm going to move  
13          forward and try to have a meeting --

14         **DR. WADE:** No need to wait till March.

15         **DR. POSTON:** -- as soon as possible.

16         **DR. WADE:** I think that the sooner the better,  
17          if --

18         **DR. POSTON:** That's all I have on it.

19         **DR. WADE:** If you want to poll your members and  
20          -- at this meeting and get a sense of date, we  
21          can schedule the meeting while we're here.

22         **DR. POSTON:** All right.

23         **MS. WU:** This is Portia Wu from Senator  
24          Kennedy's office. Have there been any meetings  
25          of the working group? 'Cause I'm -- I remember

1 I was on the call when it was set --

2 **MS. BASS:** Right.

3 **MS. WU:** -- and just to clarify, have there  
4 been any meetings of the working group thus  
5 far?

6 **DR. POSTON:** No. I -- I don't remember the  
7 date I was asked to take on this position as  
8 working group chair, but I missed -- for  
9 personal problems, I missed the December --  
10 December meeting and I've just been out of  
11 pocket because of some family matters and I  
12 haven't been able to convene the working group.

13 **DR. ZIEMER:** But we want to make sure to keep  
14 the -- the staffers there informed of any  
15 activities of the workgroup, so -- and -- and  
16 we will certainly do that. Make sure that Dr.  
17 Poston has either your e-mail numbers or -- and  
18 I think Jason will be able to provide those for  
19 us if needed -- yeah.

20 Did you have any other comments, Portia, or...

21 **MS. WU:** No, it's just -- and I know Mary Anne  
22 Reale\*, who's one of our petitioners, is also  
23 on the line. You know, Senator Kennedy's very  
24 concerned that this petition gets as -- as much  
25 attention as it deserves and -- and we are

1           concerned about how long it's taken. I realize  
2           there are a lot of reasons for that, but we  
3           just want to be sure it moves along.

4           **DR. ZIEMER:** Yeah. Based on what the chair of  
5           the workgroup has told us, it sounds like they  
6           may be able to come to closure fairly rapidly  
7           here and -- and be able to bring a  
8           recommendation back to the Board, perhaps even  
9           by our April telephone meeting, so that's  
10          certainly what we'll shoot for, at least.  
11          Okay, thank you very much. Let's proceed to  
12          the next one then and this'll be Dr. Melius's  
13          SEC issues workgroup.

14          **DR. MELIUS:** Okay. Our workgroup met in  
15          Cincinnati on I believe it was January 17th,  
16          that all members of the workgroup were present.  
17          I think Mark was there by phone. Larry and Jim  
18          Neton and I think LaVon -- I can't remember who  
19          else -- from NIOSH was present, as well as  
20          Arjun and I think some other people from SC&A  
21          on the phone. We had -- we had a good meeting.  
22          We covered two separate issues there. One is  
23          the -- the high exposure shorter term expo--  
24          time period issue regarding Special Exposure  
25          Cohorts. We had a short report from that that

1 was prepared -- Arjun's not here. I believe we  
2 distributed it after. There was -- it was  
3 prepared for the workgroup but I believe we got  
4 it cleared and -- regarding some privacy  
5 concerns and then distributed out to the rest -  
6 - rest of the Board. If not, I'll make sure  
7 that -- that takes place. You don't...

8 **DR. ZIEMER:** I think the Rocky Flats workgroup  
9 wanted a copy of that particularly, but I don't  
10 know that it has been distributed yet. Nevada,  
11 I mean --

12 **DR. MELIUS:** Nevada --

13 **DR. ZIEMER:** -- Nevada Test Site.

14 **MR. PRESLEY:** Haven't seen that.

15 **DR. MELIUS:** Okay, I'll follow up and make sure  
16 -- that was my --

17 **DR. ZIEMER:** There were some -- some issues on  
18 privacy things that they were to look at, so we  
19 need to find out where that is.

20 **DR. MELIUS:** Yeah.

21 **MS. HOMOKI-TITUS:** Can I just clarify something  
22 for you all?

23 **DR. ZIEMER:** Yeah.

24 **MS. HOMOKI-TITUS:** There should be no privacy  
25 issues that constrict Board members exchanging

1 any information, and there should be no  
2 constriction from SC&A giving the Board Privacy  
3 Act information. It's only if it's going to be  
4 made public that there's a restriction. So  
5 there --

6 **DR. ZIEMER:** Yeah, well, let me ask --

7 **MS. HOMOKI-TITUS:** -- shouldn't be any  
8 limitation on --

9 **DR. ZIEMER:** -- you this because our -- our  
10 workgroup meetings were open. Right?

11 **MS. HOMOKI-TITUS:** Right, so anything that  
12 would be made public from one of those  
13 workgroup meetings would have to be cleared.  
14 But there's no reason that Dr. Melius can't  
15 give Mr. Presley --

16 **DR. ZIEMER:** Oh, yeah, I got --

17 **MS. HOMOKI-TITUS:** -- a document.

18 **DR. ZIEMER:** Yeah, yeah.

19 **DR. WADE:** It's also if there's to be a  
20 workgroup meeting, workgroup mem-- workgroup  
21 members, SC&A could have materials in their  
22 hand, but they shouldn't be publicly discussed  
23 and they shouldn't be made publicly available.  
24 Now obviously we like to have everything that  
25 we discuss in our hands in front of the public,

1 but if it becomes a matter of efficiency of our  
2 operation, then you can have meetings but just  
3 not discuss the materials publicly.

4 **MR. BROEHM:** And I would just say, from the  
5 Congressional angle, that on a number of your  
6 meetings Congressional staff are listening in  
7 by phone. I've had a number of instances now  
8 where they're hearing documents discussed in  
9 the course of discussions and then come back to  
10 me and ask for a copy of that. As much as  
11 possible, when these are Privacy Act reviewed  
12 in advance of the meeting or subsequent to a  
13 meeting, it would be very helpful to get those  
14 as soon as they're available so I can share  
15 those with the staff and they can have those  
16 before them. Particular-- particularly I think  
17 the matrix -- matrices that are used to sort of  
18 guide discussions, those are often helpful. I  
19 know Mark has been great about providing these.  
20 That helps them sort of follow the discussion.  
21 It gets very technical, and especially being on  
22 the phone, I think it's even harder to follow,  
23 so...

24 **DR. ZIEMER:** Let me ask, Jason, do you  
25 typically know in advance what Congressional

1 people are likely to be on the line in one --  
2 each of the workgroups? Do we let you know  
3 when the workgroups are meeting, or does Lew --

4 **MR. BROEHM:** I get that through Dr. Wade --

5 **DR. ZIEMER:** Because --

6 **MR. BROEHM:** -- and I send out messages to let  
7 them know that one's coming up.

8 **DR. ZIEMER:** -- the easy way to do this would  
9 be for us to -- to copy Jason on our documents,  
10 and then have him distribute them to the  
11 appropriate people 'cause we don't always know,  
12 you know, which staffer's going to be on the  
13 line.

14 **MR. BROEHM:** No, I would appreciate that coming  
15 through me just so that I can be the -- the  
16 (unintelligible) --

17 **DR. ZIEMER:** Is that --

18 **MR. BROEHM:** -- link.

19 **DR. ZIEMER:** Would that work well? So the --  
20 the chairs, as you make your distributions,  
21 make sure Jason is copied. Is that a good way  
22 to do it or should we have Lew -- copy it to  
23 Lew?

24 **MS. HOMOKI-TITUS:** No, I was just going to say  
25 if you're going to add him would you mind just

1 going ahead and adding us 'cause --

2 **DR. ZIEMER:** Well, I don't know; now you're  
3 pushing us.

4 **MS. HOMOKI-TITUS:** Okay.

5 **DR. ZIEMER:** No, we -- we can certainly do  
6 that.

7 **MS. HOMOKI-TITUS:** Okay.

8 **DR. MELIUS:** Can I just clarify the procedural  
9 thing 'cause this issue becomes most  
10 problematic when there's a -- the work-- SC&A  
11 is rushing to get a report done in time for a  
12 workgroup meeting, and they have limited time  
13 and I don't think the problem's necessarily at  
14 their end, in most instances, and then we're  
15 trying to have the workgroup meeting, get  
16 report to us. Meanwhile give counsel's office  
17 adequate time to review -- review the report  
18 and I think it would be helpful if we had some  
19 sort of set procedures for that 'cause ideally  
20 counsel's office would get it ahead of time,  
21 and then by the time anybody on the Board or  
22 anybody else should see it, it should be --  
23 have, you know, privacy clearan-- Privacy Act  
24 clearance and -- and so forth. That way we  
25 don't have two different versions of something

1           circulating around and -- and, you know, the  
2           potential for something getting mistakenly  
3           distributed -- you know, the wrong type of  
4           copy, but --

5           **DR. ZIEMER:** Yeah.

6           **DR. MELIUS:** -- in the instance -- the  
7           problem's in the instances when it's not, and  
8           for example, I never got any -- recall any  
9           notification afterwards from the counsel's  
10          office about something being cleared 'cause  
11          that would go -- go through Lew or go directly  
12          to SC&A and I think we just need to sort of  
13          reach understanding so we don't avoid -- you  
14          know, make proper distribution at the same time  
15          we avoid making mistakes.

16          **DR. ZIEMER:** Well, and for a practical matter,  
17          for example, and take your last meeting, I  
18          think we got the SC&A report from Arjun the  
19          night before, or maybe it was that morning. So  
20          there would have been not enou-- in -- you  
21          know, sometimes that's just a matter -- the  
22          contractor has got a lot of irons in the fire  
23          and -- and they're pushing pretty hard against  
24          deadlines and it's time for the meeting and  
25          they've got to get something to us and that's

1           just the -- sort of the nature of the game, so  
2           it's -- it's a difficult thing.  If you can  
3           help us --

4           **DR. WADE:**  Well, it -- it's something I'd like  
5           to talk about --

6           **DR. ZIEMER:**  -- procedurally --

7           **DR. WADE:**  -- there's several issues and we do  
8           need to review procedures and understand  
9           procedures.  But in SC&A's case, it begins when  
10          SC&A has a report in their hands that they're  
11          prepared to turn over to the Board, to NIOSH.  
12          What SC&A does is send that report to David  
13          Staudt, the contracting officer, and say we  
14          want to go public with this report; would you  
15          please see that it is okay from the Privacy Act  
16          point of view, so step one.

17          Step two is David will take that report and  
18          then forward it on to Liz and her team to look  
19          at.  Liz and her team will look at it in an ex-  
20          - as expeditious a way as possible, and they've  
21          done that very well, and then they'll return  
22          that report to David, who then returns it to  
23          SC&A and says okay.

24          Now -- so that's what happens.  If we need  
25          more than that to happen, we need to talk about

1           that.

2           Now remember, if the -- the report is in the  
3           hands of the Board and SC&A and NIOSH and it  
4           hasn't yet cleared Privacy Act review, there  
5           can still be a meeting. The report can be in  
6           front of people. But the report should not be  
7           given to the public and should not be -- and  
8           there -- and the Privacy Act aspects of it  
9           should not be discussed during that meeting,  
10          and we're all schooled as to what they are. So  
11          that's what happens now. We can talk about  
12          that. We can talk about expanding that as you  
13          would like.

14          **DR. MELIUS:** But I think it's the situation  
15          where there hasn't been time for a prior  
16          Privacy Act review that -- that is a little bit  
17          more problematic in -- 'cause that review is  
18          still going on and we just need to make sure  
19          whoever -- whatever then gets distributed, you  
20          know, is the cleared document and -- and also  
21          to know, you know, how problematic it is and,  
22          you know, how --

23          **DR. WADE:** So the --

24          **DR. MELIUS:** -- how do we make sure, you know,  
25          it gets up to Congress, gets to whoever 'cause

1 I'm sure even the people in Congress don't want  
2 to have to have, you know, reports that sort  
3 of, you know, have Privacy Act information and  
4 have to be restricted in some way. I mean just  
5 hard -- that much harder to keep track of.

6 **DR. WADE:** Okay, so let's deal with that in two  
7 steps. The first step is that the Designated  
8 Federal Official, who should be at every  
9 workgroup meeting, should make clear to those  
10 present the issue. If there's going to be  
11 reports in front of Board members discussed  
12 that are not cleared, that should be made clear  
13 on the record, so we should be okay on that.  
14 The -- the most vexing issue you raise is in  
15 now what happens once the document is cleared  
16 in getting it distributed to people. And there  
17 it -- it re-- it involves really getting it to  
18 Jason and then getting it up on the NIOSH web  
19 site. Now we have to make sure that those two  
20 steps happen, and I think there's a little bit  
21 of open air in those two steps. So we can talk  
22 about that.

23 **MS. HOMOKI-TITUS:** We're working on that.  
24 Jason and I talk so that -- where we have a  
25 channel now for providing him the Privacy Act

1           cleared documents and we usually send the  
2           Privacy Act cleared documents back to David  
3           Staudt, with a copy to you. Would you like us  
4           to start providing them to OCAS as well?

5           **DR. WADE:** I would.

6           **MS. HOMOKI-TITUS:** Okay.

7           **DR. WADE:** I think the two things that have to  
8           happen is that -- really three things. Jason  
9           needs to get them to give them to the  
10          Congressional people. Larry needs to get them  
11          to post them. And then Board members need to  
12          get them with the understanding that it is now  
13          okay to give these things out, so all of those  
14          loops need to be closed.

15          **DR. ZIEMER:** Larry.

16          **MR. ELLIOTT:** There's one other important  
17          distribution point here. Not only the web  
18          site, but I have to take care of, through  
19          Laurie Ishak, getting -- if it's an SEC  
20          petition-related document, I need to get that  
21          into the petitioners' hands. I receive  
22          numerous requests for these, but I can't  
23          release them to the petitioner until I hear  
24          from counsel's office that they're cleared for  
25          distribution, so we don't want to forget the

1 petitioners as well.

2 **DR. ZIEMER:** Right.

3 **DR. WADE:** Now could -- could we impose upon  
4 you or someone at that point to also send the  
5 report to all the Board members?

6 **MR. ELLIOTT:** We do that when we post it on the  
7 web site. There's a -- there's a distribution  
8 list that you're included on notifying you that  
9 the document has been put on the public web  
10 site.

11 **DR. WADE:** Okay.

12 **MR. ELLIOTT:** We also do that, for your  
13 information, when it goes into the open drive,  
14 the shared drive, as a non-redacted piece of --  
15 if we get it for that.

16 **DR. WADE:** So then the question to the Board  
17 is, is it enough to get Larry's e-mail?

18 **DR. MELIUS:** I may be wrong, but like in this  
19 case, I'm not sure where this document would go  
20 -- would have gone.

21 **MR. ELLIOTT:** I'm sorry, I was not --

22 **DR. MELIUS:** It's -- it's not a -- not a site-  
23 specific document necessarily. It's the 250-  
24 day issue and -- I mean I could have missed it  
25 and you -- you may have put it up there and I

1           may have missed it, but it's -- you know, it's  
2           still a little different than a site --

3           **MR. ELLIOTT:** You're absolutely right, and I  
4           think that's another situation that we need to  
5           attend to here. We need to -- my suggestion  
6           would be we create a folder for your working  
7           group --

8           **DR. MELIUS:** Yeah.

9           **MR. ELLIOTT:** -- and notify you when something  
10          goes into that folder.

11          **DR. MELIUS:** Yeah.

12          **MR. ELLIOTT:** And if you want us then to post  
13          it on the web site, we'll need to hear from  
14          general counsel that it's okay to do so.

15          **DR. MELIUS:** Uh-huh.

16          **MR. ELLIOTT:** Okay? Does that sound  
17          reasonable?

18          **DR. ZIEMER:** That sounds like (unintelligible)  
19          --

20          **DR. MELIUS:** Yeah, yeah, that -- that would be  
21          fine, yeah.

22          **DR. WADE:** I would think the default is we want  
23          to post everything on the web site once it's  
24          cleared.

25          **DR. MELIUS:** Yeah.

1           **DR. WADE:** I think that's our default.

2           **MS. HOMOKI-TITUS:** I also just want to clarify  
3           for you all, when we send documents back that  
4           have been Privacy Act reviewed, we're sending  
5           them back to David Staudt --

6           **DR. MELIUS:** Yeah.

7           **MS. HOMOKI-TITUS:** -- notes to SC&A, but you're  
8           sending them in a Word version so that they can  
9           see where we have indicated Privacy Act review  
10          has to be done, so those need to be converted  
11          if you get them from SC&A before they're made  
12          public 'cause otherwise they still have the  
13          information.

14          **DR. WADE:** Well, let's hear from SC&A then.  
15          When you get that Word version then, John, do  
16          you then make the changes and make a document  
17          available?

18          **DR. MAURO:** At this point we have been in a  
19          mode where the product that we put out,  
20          especially when they're short-term products  
21          such as the ones Dr. Melius is referring to and  
22          the one that we sent to Brad Clawson recently,  
23          we -- and we have these one-day turnaround,  
24          those have been the problematic ones whereby --  
25          and the only solution that we've had and what

1 we're dealing with is make sure -- and this is  
2 something that we did not always do but now we  
3 do do, is put in this statement on the bottom  
4 that this may contain Privacy Act material and  
5 should be treated as such until legal counsel  
6 at NIOSH clears it. Once they get back to us  
7 and clear it, then we're -- we know we're free  
8 to -- to distribute it, but we don't do that  
9 distribution. We're -- what I'm getting at is  
10 all we -- all we are now is informed that yes,  
11 this piece is now clean and can be -- has been  
12 cleared as a Privacy Act document, but we don't  
13 take any action from there. I think that at  
14 that point, whether it goes up on a web -- the  
15 -- the NIOSH web site, whether it's distributed  
16 to the various representatives -- Congressional  
17 representatives, we don't take that action.

18 **DR. WADE:** Well, let's assume, John, that you  
19 get it back from David and it says remove this  
20 line.

21 **DR. MAURO:** Yes.

22 **DR. WADE:** So then you do --

23 **DR. MAURO:** And then we do that.

24 **DR. WADE:** -- that and make a clean document.

25 **DR. MAURO:** And then -- yes, and then we do

1           that, but I -- so that we do clean our -- our  
2           material.

3           **DR. WADE:** Then what do you do with it once you  
4           clean it?

5           **DR. MAURO:** I don't know.

6           **DR. ZIEMER:** Well, John, you are making Board  
7           distribution of all of your reports.

8           **DR. MAURO:** We always are making Board  
9           distributions --

10          **DR. WADE:** So once you've cleared it, then you  
11          make a Board distribution?

12          **DR. MAURO:** Yeah. For example, the last -- and  
13          I'm going to have to defer -- the most recent  
14          time where that happened where we went through  
15          this iterative process where the loop was  
16          closed was on material related to Rocky, the  
17          separate pieces, and I know Joe's sitting right  
18          behind me and I know he received back material  
19          that has been so-called cleansed of any mater--  
20          now what action Joe has done with that material  
21          --

22          **DR. WADE:** Okay, so it's Joe's fault. We've  
23          established that.

24          **DR. MAURO:** Let's get Joe up --

25          **DR. WADE:** Let's get Joe up here.

1           **MR. FITZGERALD:** (Off microphone)

2           (Unintelligible)

3           (On microphone) Yeah, consistent with where  
4           you're driving, what we have done is when we've  
5           gotten the changes -- recommended changes,  
6           we've made the changes and then we have sent  
7           the changed document back to NIOSH, back to  
8           counsel, and basically say here it is. But you  
9           know, we would not do any public distribution  
10          or anything. But what -- what I was looking  
11          for was a confirmation did we change it  
12          satisfactorily, did we meet all those changes  
13          before we go anywhere else. So any -- any  
14          outside distribution would have to take place  
15          at that point. Again, we would not do anything  
16          other than send it back to NIOSH and I think in  
17          the case of Rocky Flats we made it available  
18          just to the workgroup and that was it. That  
19          was the entire distribution.

20          **DR. WADE:** Okay. Now it would serve everyone  
21          better I think if you distributed it to the  
22          Board. I -- I see no downside to distributing  
23          it to the Board. But what about closing the  
24          loop, counsel, in terms of -- you -- you  
25          suggest changes to SC&A. Do we assume that

1           they've made them and distribute it? Do you  
2           want to see it again before it's released?

3           **MS. HOMOKI-TITUS:** Our preference would be to  
4           see it again. If it's a timeliness issue, then  
5           I think they're capable of following our  
6           direction. There are a number of times,  
7           though, that we send them a question that needs  
8           to be addressed before we can make a decision.

9           **DR. WADE:** I would like to suggest that if the  
10          instructions back to SC&A are simple, then we  
11          should assume that they followed those  
12          instructions and can release the report. If we  
13          find evidence to the contrary, we should deal  
14          with it. I -- I wouldn't make it overly  
15          complex at this point, so I -- if SC&A gets  
16          instructions back that are easy to follow and  
17          clear, you should follow them and then release  
18          it. If there's any question, then you need to  
19          follow up.

20          **DR. MAURO:** So what I'm hearing is we do have a  
21          certain degree of discretion here, and that is  
22          when we do get instructions back and if we feel  
23          that yes, it's clear and unambiguous, we make  
24          those changes and we are -- at that point the  
25          document is cleansed. If there's any ambiguity

1 on our part regarding whether or not we got it  
2 right, then we get back to you.

3 **DR. WADE:** I think that's reasonable.

4 **DR. MELIUS:** Then -- then SC&A would be -- then  
5 do a distribution to the Board, as well as to  
6 NIOSH -- to Larry and then to Jason to get --

7 **DR. ZIEMER:** No, no, Jason would catch it  
8 through Lew, I think. Right? I don't think  
9 SC-- or through -- through counsel, but --

10 **DR. MELIUS:** Okay.

11 **DR. ZIEMER:** -- I don't think our contractor  
12 has to -- has to get it to Jason. And Jason  
13 will take care of the people on the Hill, as  
14 appropriate.

15 **MS. HOMOKI-TITUS:** Jason and Larry will get it  
16 directly from counsel.

17 **DR. ZIEMER:** Okay --

18 **MS. HOMOKI-TITUS:** You guys.

19 **DR. ZIEMER:** -- that's good.

20 **MR. FITZGERALD:** Yeah, for Rock-- Rocky Flats,  
21 I think the only thing this would have changed  
22 is the distribution would have been to the  
23 entire Board from us, rather than just the  
24 workgroup. But we still have the expectation  
25 that the -- that counsel would handle further

1 distribution. We wouldn't do anything with  
2 that.

3 **DR. ZIEMER:** Thank you. I think that's  
4 helpful.

5 **DR. MELIUS:** Can I give my report now?

6 **DR. ZIEMER:** I -- I think --

7 **DR. WADE:** Go ahead, we're done.

8 **MR. PRESLEY:** Question --

9 **DR. ZIEMER:** Go ahead.

10 **MR. PRESLEY:** Question, Wanda's got one and  
11 I've got one on this.

12 **DR. ZIEMER:** Yeah, go ahead, Robert and then  
13 Wanda.

14 **MR. PRESLEY:** This is clear as mud. Golly bum.  
15 Jason just mentioned something about these  
16 matrix, to get them out to -- to the people  
17 before the -- that we have the meetings. Now I  
18 don't think that you all want us to, when I  
19 fire my comments or the working group's  
20 comments back to -- to SC&A or back to Mark, I  
21 don't think Larry wants a copy of all these  
22 things flying back and forth. I think what you  
23 really want is the document that we're going to  
24 use at our next working group meeting. Is that  
25 correct?

1           **DR. WADE:** Yes.

2           **MR. ELLIOTT:** I'm going to speak for Jason  
3 here, as well. I hope he finds what I have to  
4 say amenable to his needs. Our interest is to  
5 -- if the working group is going to take up a  
6 document from SC&A for its discussion, we would  
7 like to be able to not only have that document  
8 shareable with the rest of the Board, but also  
9 publicly shareable on our web site and  
10 shareable with the Congressional delegation  
11 that is interested in that document. Then  
12 whatever you -- whatever comes out of your  
13 deliberation -- you know, your comments on it  
14 and that -- I don't need to see those until the  
15 document is changed to reflect and address  
16 those comments. And then I think it then again  
17 has to go through the same process.

18           **DR. WADE:** Yes --

19           **MR. ELLIOTT:** Does that help clear up the mud?

20           **MR. PRESLEY:** Yes, some, but now do you want --  
21 do you want me to send you the copy or -- most  
22 of the time when I get a new matrix, it would  
23 come from Mark. So do you want your people to  
24 send it to you or do you want me to make sure  
25 you get it? We'll -- we'll -- we'll comment

1 things --

2 **MR. ELLIOTT:** Well, each of the --

3 **MR. PRESLEY:** -- and then we get a new matrix  
4 and Mark is the one that we're getting our  
5 matrix from and adding comments to it --

6 **MR. ELLIOTT:** Well --

7 **MR. PRESLEY:** -- then we're going back to the  
8 meeting.

9 **MR. ELLIOTT:** Here we're talking a different  
10 source of information.

11 **MR. PRESLEY:** Right.

12 **MR. ELLIOTT:** The source of information that  
13 was being discussed just a moment ago, as I  
14 understood the conversation, was about an SC&A-  
15 generated document. And I'll tell you that any  
16 document that NIOSH prepares also has to go  
17 through the same rigorous review for Privacy  
18 Act concerns before we distribute it publicly.  
19 Okay?

20 **MR. PRESLEY:** (Off microphone) This was  
21 (unintelligible).

22 **MR. ELLIOTT:** Pardon me?

23 **MR. PRESLEY:** (Unintelligible) comment  
24 document.

25 **MR. ELLIOTT:** Okay. So even though it -- you

1 know, it may come to you from Mark, it has to  
2 go still through general counsel, Privacy Act  
3 review, et cetera.

4 **MR. PRESLEY:** I want to make sure. Okay.

5 **MR. BROEHM:** I just wanted to confirm that  
6 Larry speaking for me was -- was fine. The  
7 needs that we have are that, you know, in  
8 advance of a meeting I think it's helpful for  
9 Congressional staff to have that in front of  
10 them in advance of the meeting to help guide  
11 them through the discussion.

12 **MR. PRESLEY:** I just want to make sure you get  
13 it to the right people and I don't get in  
14 trouble for sending you something --

15 **MR. BROEHM:** Right.

16 **MR. PRESLEY:** -- that you're not supposed to  
17 have.

18 **DR. ZIEMER:** Wanda? Okay, John, go ahead, do  
19 you --

20 **DR. MAURO:** Just to close the loop, when we get  
21 a document back that has been cleansed and we  
22 have changed it in accordance -- and redacted  
23 and removed the material that needs to be  
24 redacted in accordance with the instructions we  
25 receive, I think one of the things we will do

1           when we send this document out again, there  
2           will be a statement on the bottom that confirms  
3           that yes, it's clean. So in other words, any  
4           document that comes out of SC&A will have one  
5           of two things on it. Either it will say this  
6           is -- contains potentially PA material, please  
7           do not distribute; or it will contain the  
8           statement that said this has been checked and  
9           cleansed of and can be distributed, so there's  
10          never any ambiguity.

11         **DR. ZIEMER:** Good, thank you. Wanda.

12         **MS. MUNN:** My concern is not so much with  
13         documents that are eventually going to end up  
14         on the web site or will be open information,  
15         but if our past experience is any basis for  
16         evaluation, most of the Privacy Act information  
17         that we see occurs in face-to-face working  
18         group meetings. And as -- as long as we're  
19         working in face-to-face groups with pieces of  
20         paper that -- or -- or any other form of  
21         information that has names and identifiers on  
22         it, one can have some control of it. But as an  
23         example, because the NTS working group is very  
24         interested in the results of the SEC's 250-day  
25         issues which may still contain some privacy

1 information, there are real reservations in my  
2 mind about sending this information  
3 electronically.

4 From my perspective, any time I send anything  
5 on e-mail, it's an open document. And so I  
6 would be very hesitant to put any -- or receive  
7 anything that contained names and identifiers  
8 by e-mail. I know we all have firewalls of one  
9 sort or another, but it's a major concern, it  
10 would seem to me, when we're talking about we'd  
11 like to have the information that the other  
12 working group has developed before it's  
13 cleared. I would really hesitate to see that  
14 come on e-mail.

15 **DR. ZIEMER:** Actually the information I was  
16 referring to was actually an SC&A report -- I  
17 think it was Arjun's report -- and it became an  
18 official sort of document in itself, so it  
19 would have been cleared. But anyway, go ahead,  
20 Liz.

21 **DR. MELIUS:** I would just say -- and as I  
22 recall this particular document -- first of  
23 all, I believe that SC&A does a privacy review  
24 themselves before anything gets distributed, so  
25 it's not like they're sending everything to

1           counsel's office saying well, what needs to be  
2           taken out. There's already been I think  
3           appropriate care. There's Privacy Act training  
4           and -- and so forth involved. I think in this  
5           particular instance the -- the question that  
6           came up was -- it was some information from a -  
7           - that was publicly available as a thesis at  
8           University of Iowa, I believe, that actually  
9           had some names and -- historical names in it.  
10          It wasn't about people's illness or anything  
11          that -- that, and I think there was a question  
12          of -- so -- so if it's publicly available at a  
13          library, anybody can go and get it, then how do  
14          we apply the -- you know, the Privacy Act to it  
15          when it gets distributed in the context of a  
16          federal -- as a federal document or somehow,  
17          you know, connected to the -- to the federal  
18          government, but -- but I think everyone's -- I  
19          don't think there's -- we have information  
20          circulating that's sort of, you know,  
21          blatantly, you know, breaks or, you know,  
22          violates the Privacy Act. I think there's just  
23          questions where -- where there's a question  
24          about something and -- and making sure that --  
25          especially when you have so -- you know, how do

1           you de-identify something and make sure you've  
2           done it appropriately so it's still  
3           understandable and useful as a document.

4           **MS. MUNN:** Well, you understand my concern,  
5           though, with respect to exchanging e-mail  
6           information that we may need and may want, but  
7           which may not have been actually cleared.

8           **DR. ZIEMER:** Liz.

9           **DR. WADE:** It's not a trivial question.

10          **MS. HOMOKI-TITUS:** I just wanted to address  
11          what Ms. Munn brought up. That is a concern  
12          for the federal government and each agency is  
13          now working on a new policy regarding e-mail  
14          and the sending of e-mail over non-secured  
15          networks, et cetera. So I would assume that  
16          when the CDC finishes establishing their policy  
17          -- and they're putting their employees through  
18          the change right now -- that the change will  
19          also come to the Board, as well as SC&A and all  
20          the other contractors. ORAU, NIOSH, all of us  
21          are going to have to start following that  
22          regarding the use of laptops and wireless  
23          internets and using unsecured networks to send  
24          Privacy Act information. So it -- they are  
25          aware of it and there is -- policy is

1           forthcoming. It just is not ready yet.  
2           They're going off OMB circulars on it right  
3           now.

4           **DR. WADE:** And absent that policy, each person  
5           has to use their own common sense as to how  
6           they will approach it.

7           **MS. MUNN:** And FedEx, hopefully.

8           **DR. WADE:** And FedEx, if that's their choice.

9           **DR. MELIUS:** Well, there's also encryption, and  
10          for most -- many medical documents now, Privacy  
11          Act kinds of information's handled through  
12          encryption and there's some pretty  
13          straightforward ways of doing that that are  
14          considered to be secure and actually are  
15          approved by the federal government, I believe,  
16          also, as part of the --

17          **MS. MUNN:** (Off microphone) (Unintelligible)  
18          that sort of thing.

19          **DR. MELIUS:** Yeah, yeah.

20          **DR. ZIEMER:** Jim, I think we should hear your  
21          report.

22          **DR. MELIUS:** Oh, okay. Where was I? Okay.  
23          Whatever report we got from Arjun, we -- we had  
24          -- had discussion and then there -- two issues  
25          that we -- we were looking at -- or the

1 context, and this one was from the Ames  
2 Laboratory, which we've discussed as a past SEC  
3 (unintelligible) there, and the second was with  
4 the Nevada Test Site. After fairly lengthy  
5 discussions we decide the best way to move  
6 forward was -- one on the Ames was that SC&A  
7 was going to clarify some of the issues  
8 regarding potential exposures at that facility  
9 from -- from fires and explosions. And that  
10 for the Nevada Test Site we would identify a  
11 number of exposure in-- incidents there  
12 regarding above-ground testing and then  
13 evaluate those in the context of their  
14 potential -- sort of SEC evaluation and the  
15 potential exposures that people have received  
16 in less than a 250-day period, and then come  
17 ba-- and that -- that was -- would help to form  
18 the basis for a report from -- from our working  
19 group.

20 The next step in that -- both of those  
21 processes, both for Ames and NTS, was to get  
22 the people from SC&A together with some NIOSH  
23 and possibly ORAU staff, I'm not sure, to work  
24 out some of the -- the technical details about  
25 how those examples would be developed. And

1           then I expect we'll have those done and we'll  
2           be having a discussion of that at another  
3           workgroup meeting, most likely prior to our  
4           April -- April meeting -- that. So it -- the -  
5           - we were making progress. I think we have a  
6           path forward that everyone agrees on that will  
7           be helpful for everybody involved and should  
8           work out.

9           Now I don't know if Paul or Gen or Mark have  
10          anything to add to that part of our report, but  
11          --

12         **DR. ZIEMER:** No.

13         **DR. MELIUS:** Okay. The second part of our  
14         report concerns the 83.14 issue. We were  
15         charged with sort of working with NIOSH and  
16         trying to evalu-- what would be better ways of  
17         presenting and the ty-- types of information  
18         that would be useful to have, either in the  
19         evaluation report for the 83.14s or for --  
20         available to the Board prior to our evaluation  
21         of -- of the NIOSH re-- NIOSH reports. We did--  
22         - didn't have any new 83.14s to discuss, non--  
23         none had come up, so we sort of worked off of  
24         our experience with -- one's an 83.14 and the  
25         other was an 83.13, but they were sort of

1 similar in that we didn't have site profiles  
2 prior to the review of them. One was the  
3 Monsanto, the other was General Atomics, I  
4 believe and -- do that.

5 And we worked with NI-- I think there's sort of  
6 an agreement that there were certain areas,  
7 particularly regarding description of work  
8 areas and the basis for how NIOSH went about  
9 defining the class that could be better  
10 explained in the reports, and so we had some  
11 di-- dialogue on that.

12 And secondly, we also agreed that it would be  
13 very helpful to have some of the backup  
14 information for those reports available to the  
15 Board on the O drive so that we'd be able to  
16 look at that information, review that  
17 information prior to the -- our -- any rev--  
18 our review of -- of that report. Particularly  
19 we're interested in sort of summary or  
20 decision-making documents that would be -- not  
21 -- not just all access to particularly raw  
22 data, but also to some of the background  
23 evaluation that NIOSH or their contractors have  
24 done in the development of the SEC evaluation  
25 report. And NIOSH I think's actually already

1 going ahead and implementing that -- that  
2 program and I think it's useful and it will  
3 help us in the evaluation of future 83.14  
4 reports.

5 Again, I don't know if Gen, Paul or Mark have  
6 anything to add to that.

7 **DR. ZIEMER:** You've covered it well. Thank you  
8 very much.

9 Then we have the workgroup to review SEC  
10 petitions that did not qualify. I think Jim  
11 Lockey -- you gave us kind of a summary of that  
12 last time, but there was a follow-up action  
13 that you were going to do so tell us where you  
14 --

15 **DR. LOCKEY:** We were waiting for the -- there  
16 were -- if a petition doesn't qualify, the  
17 petitioner has the right to appeal it to the  
18 Director of NIOSH. I think there were four  
19 petitions under review by the Director of  
20 NIOSH. There's a committee that does that for  
21 the Director and LaVon Rutherford spoke to me  
22 this morning and said that that review process  
23 has been done and the summary reports are going  
24 to be made available to this working group  
25 within the next week, and hopefully we can fin-

1           - finalize this during the meeting during the  
2           last two weeks in March.

3           **DR. ZIEMER:** Okay. Thank you. I don't think  
4           we have any -- well, let's see, Hanford site,  
5           yes. Jim, just give us a quick update on  
6           Hanford.

7           **DR. MELIUS:** Hanford, we tried to schedule a  
8           meeting of -- of the workgroup. We -- if you  
9           recall, at the last meeting I reported that  
10          we'd had a conference call, the workgroup, with  
11          NIOSH and SC&A to try to sort of prioritize how  
12          we would approach the site profile review for -  
13          - for Hanford. We had actually made --  
14          narrowed down some of the issues. The main --  
15          main issue that really was ready for discussion  
16          had to do with the neutron doses at that  
17          facility and we were -- I was trying to  
18          schedule a workgroup report and were -- we were  
19          not -- unable to come up with a date that would  
20          be workable for that before this meeting. So  
21          we will have to schedule that meeting now.  
22          I would add, and I think we'll discuss -- 'cuss  
23          this tomorrow, the particular problem -- issue  
24          was the availability of one person from ORAU,  
25          Jack Fix, to be available for a meeting. I

1 believe he was out of the country till sometime  
2 into February or March, but I -- it points out  
3 to this -- this problem of, you know, document  
4 ownership. Jack has -- is conflicted on the --  
5 on the Hanford site. I think he would be a  
6 resource for us, but he -- he is conflicted and  
7 -- and here we're in a situation we have a  
8 conflicted person, a site expert, but who --  
9 but we're holding up, you know, moving along in  
10 a process because that person's not available  
11 because apparently nobody else has sort of  
12 taken over document ownership yet and is ready  
13 to meet and capable of fully discussing the --  
14 the technical issues involved. And I would  
15 hope we'd be able to get beyond that with this  
16 because to me it's -- it's a problematic  
17 situation, much as we've had with Rocky Flats  
18 where so much is -- of the discussion relies on  
19 -- on one person who has a -- an admitted, you  
20 know, potential conflict of interest on that  
21 site. Again, not to take away from their  
22 capability or -- or knowledge, but it just I  
23 think is a somewhat awkward situation given our  
24 concerns about conflict of interest and I think  
25 we're going to hear more about that tomorrow.

1 I think Larry and Kate are supposed to give us  
2 an update on the implementation of the policy.

3 **DR. ZIEMER:** Okay, thank you. Speaking of  
4 conflict of interest, we do have a workgroup on  
5 that but I don't think we have any actions --  
6 or do we?

7 **DR. LOCKEY:** Well, there's one -- do you want  
8 to --

9 **DR. ZIEMER:** Okay.

10 **DR. LOCKEY:** This brings up the --

11 **DR. ZIEMER:** Do you have a -- okay. Emily.

12 **MS. HOWELL:** Our office has been working to  
13 provide Dr. Lockey, who's the chair of this  
14 working group, with materials so that the  
15 working group has something to look over, and  
16 we should be getting those to him next week and  
17 hopefully the working group will, you know, be  
18 able to meet.

19 **DR. ZIEMER:** Okay.

20 **DR. LOCKEY:** Our plan, again, is probably to  
21 try to have our first meeting -- last two weeks  
22 in March.

23 **DR. ZIEMER:** Okay. Very good, thank you. We  
24 already heard from the procedures review  
25 workgroup yesterday so that one is done.

1           **MS. MUNN:** Are we going to vote on that today?

2           **DR. ZIEMER:** Huh?

3           **DR. WADE:** Tomorrow.

4           **DR. ZIEMER:** We'll actually have the vote on  
5 that tomorrow.

6           **MS. MUNN:** Tomorrow? All right.

7           **DR. ZIEMER:** Yeah. Okay. Workgroup on  
8 Blockson, Wanda Munn chaired that one and  
9 Wanda, why don't you tell us about those  
10 activities.

11          **MS. MUNN:** The Blockson group has not yet met  
12 because, as I think all of the Board is aware,  
13 the original site profile and SEC petition were  
14 pulled back for additional rework and that is  
15 underway as we speak. There is no real reason  
16 for the group to meet until those documents are  
17 available to us.

18 We did have the workers outreach meeting that  
19 was put together by the Department of Labor and  
20 was -- I think I sent you all a report  
21 indicating it was well-attended. I was very  
22 pleased to be there myself. The workers were  
23 quite forthcoming in their information. I  
24 believe several key issues that were of concern  
25 to us at the time we went in were illuminated

1           considerably by the comments of the workers and  
2           gave Tom something to work with as he went back  
3           to address those documents.

4           We're hoping that we will have the  
5           documentation from NIOSH in our hands -- what,  
6           within the next few weeks? -- so that we'll  
7           have something to start to go with. It's our  
8           anticipation at this time that the working  
9           group probably will meet for the first time  
10          sometime in late March if the documents are  
11          then available.

12          **DR. ZIEMER:** Thank you very much. I believe  
13          that -- well, Fernald work--

14          **DR. WADE:** (Off microphone) Dr. Melius has  
15          (unintelligible).

16          **DR. ZIEMER:** Okay, go ahead, Jim.

17          **DR. MELIUS:** Make just one quick observation.  
18          In reading actually Wanda's rep-- e-mail to the  
19          Board about the Blockson site visit and  
20          actually talked to somebody else about it and  
21          do that, I certainly was impressed about the  
22          type of information that was obtained from that  
23          and -- and as I think Wanda said and said in  
24          her e-mail how worthwhile that -- that -- and  
25          helpful that -- that visit was, and I would

1           certainly encourage NIOSH in its sort of future  
2           dealings with I think all sites but  
3           particularly some of these sites that have not  
4           had as much attention and -- and invol--  
5           involvement in that -- that -- you know, prior  
6           to evaluation reports -- you know certainly  
7           prior to the Board being -- being put in place  
8           to take action on these, that -- that we have  
9           had significant and outreach efforts and the  
10          kind of public meetings and so forth that --  
11          that were -- appeared to be handled well and  
12          well-attended in -- in the Blockson situation  
13          and hope we could continue those. I -- I just  
14          think they're very critical to having sort of a  
15          credible program, as well as doing technically  
16          a good job with these reports. The Blockson --  
17          or at least appeared to identify some other  
18          group of workers that hadn't been considered in  
19          the original report and I thought it was very  
20          helpful.

21          **DR. ZIEMER:** Good comment, and I -- I think  
22          it's also excellent if we can have at least a  
23          Board member present -- Wanda in the case of  
24          Blockson. John was able to attend the Chapman  
25          Valve meeting. We had some earlier meetings

1           that some of us attended at Bethlehem. And  
2           whenever -- particularly those of you chairing  
3           working groups, if you or one of your members  
4           can participate whenever those activities --  
5           that would be excellent. I think a Board  
6           presence at these also is useful, not only for  
7           the Board, but for the participants as well.  
8           Our final workgroup is the Fernald, and we --  
9           we heard from -- on that earlier, so that  
10          completes our roster of current workgroups. We  
11          will have an opportunity tomorrow to talk about  
12          adding some additional workgroups, but that  
13          gets us up to date on the activities of the  
14          present workgroups.

15          I do want to point out tomorrow when -- we're  
16          going to adjourn here shortly and -- and we'll  
17          reconvene for public comment period later  
18          today, but Board members, looking ahead to  
19          tomorrow, since we have no formal  
20          recommendations to send to the Secretary this  
21          time on SEC petitions, we don't have to work on  
22          the wording. So the --

23          **DR. WADE:** Brilliant.

24          **DR. ZIEMER:** Huh?

25          **DR. WADE:** Brilliant.

1           **DR. ZIEMER:** The section in the afternoon  
2           called Review of SEC Petition Recommendation  
3           Wording -- we can delete that. That knocks  
4           roughly an hour off your afternoon schedule,  
5           and you can look at the rest of the things  
6           there, but if -- if we're very efficient on  
7           what's there for the rest of the afternoon, it  
8           appears to the chair that it might be possible  
9           to finish before the next snowstorm hits,  
10          whenever that may be. But I'm -- I'm hopeful  
11          that we will be able to com-- complete our  
12          business early afternoon, so that's just a --  
13          sort of an incentive for those of you who want  
14          to try to get to the airport in a timely  
15          fashion and still allow enough time. I don't  
16          know that the roads are completely clear yet,  
17          but we'll try to be efficient as we proceed  
18          tomorrow.

19          **DR. WADE:** We can certainly work through lunch  
20          and then adjourn. I think that --

21          **DR. ZIEMER:** Yeah.

22          **DR. WADE:** -- will save another hour.

23          **DR. ZIEMER:** If we -- if we do that, we could  
24          adjourn by 1:00, perhaps even.

25          **DR. WADE:** Perhaps.

1           **DR. ZIEMER:** Now this evening we have a public  
2 comment period beginning at 7:00 p.m., so we'll  
3 look forward to having you all back at that  
4 time. Let me ask if there's any other  
5 housekeeping items that we need to take care of  
6 before we recess.

7           If not, thank you very much. Those of you who  
8 -- members of the public, particularly -- if  
9 you do wish to address the Board and the  
10 participants this evening, please remember to  
11 sign up on the registration sheet out in the  
12 foyer.

13           We are recessed till 7:00 p.m.

14           (Whereupon, a recess was taken from 4:46 p.m.  
15 to 7:00 p.m.)

**PUBLIC COMMENT**

**DR. PAUL ZIEMER, CHAIR**

16           **DR. ZIEMER:** I'm going to call the meeting to  
17 order for the public comment session. This is  
18 the Advisory Board on Radiation and Worker  
19 Health -- make sure you're all in -- you know,  
20 if you thought you were coming to the hotel for  
21 the big party, this is just one of them, but  
22 welcome.

23           This is our second public comment session. We  
24 had one yesterday afternoon. I know a number

1 of the local folks came at that time, perhaps  
2 concerned about weather, but we're glad that  
3 those of you who are brave enough to come out  
4 this evening were able to do so.

5 For those of you who aren't well-acquainted  
6 with the work of the Advisory Board, this Board  
7 is, as its name indicates, advisory. We advise  
8 the Secretary of Health and Human Services. We  
9 are independent of the government agencies. We  
10 don't work for the agencies.

11 We are a group of independent people from  
12 various parts of the country with various  
13 backgrounds. We do not do the dose  
14 reconstructions. We do not adjudicate cases or  
15 handle individual problems. That doesn't mean  
16 we don't want to hear about problems or issues.  
17 We are providing a kind of oversight for the  
18 many facets of the dose reconstruction program,  
19 so we do want to hear your concerns and your  
20 stories insofar as they will help us understand  
21 issues that are facing the federal agencies  
22 that are administering this program.

23 In this case, our -- the main agency that we're  
24 working with is NIOSH, which is part of Health  
25 and Human Services, but also relates to work of

1 the Department of Labor and the Department of  
2 Energy as well.

3 I'm Paul Ziemer, Chairman of the committee.

4 The committee members are all here. You may  
5 see their name tags, but if you're like me, you  
6 may have trouble reading them.

7 This is Dr. Gen Roessler, who retired from the  
8 University of Florida who now lives in  
9 Minnesota -- somewhat close to Lake Wobegon, I  
10 understand.

11 Wanda Munn is a retired engineer from the  
12 Hanford area -- Richland, Washington.

13 The fella called "court reporter", Ray Green is  
14 our -- is our court reporter. Some people have  
15 been concerned that he has a breathing problem,  
16 but that's part of his -- his apparatus.

17 Dr. Jim Melius is from the New York area. He  
18 is a -- both a medical doctor and a Ph.D. by  
19 training.

20 Dr. Lewis Wade is the Designated Federal  
21 Official. That means he's not an official  
22 voting member of this Board, but under the  
23 Federal Advisory Committee Act he is the  
24 designee of the Secretary of Health and Human  
25 Services who helps coordinate the activities of

1           this particular board.

2           I will be sitting there in a moment. I'm a  
3           retired professor of radiation safety and  
4           health physics from Purdue University.  
5           Mark Griffon is a health physicist who  
6           basically is a private consultant.

7           Jim Lockey is not here this evening. He's  
8           local, University of Cincinnati, an M.D. And  
9           the main reason he's not here is he is  
10          officially conflicted on the Fernald site, and  
11          since we're expecting most of the folks here to  
12          be providing information about or concerns  
13          about Fernald, Jim would not be allowed to be  
14          seated at the table, as it were, for Fernald  
15          issues so he is not with us tonight.

16          Bob Presley is from the Oak Ridge area,  
17          formerly worked at Y-12 for many years and is  
18          still working in another capacity there in Oak  
19          Ridge.

20          Another seat is -- that normally is here and  
21          not here today is Mike -- I blanked out.

22          **DR. WADE:** Gibson.

23          **UNIDENTIFIED:** Mike Gibson.

24          **DR. ZIEMER:** -- Mike Gibson. Mike, I hope you  
25          didn't hear that on the phone. Mike has been

1 calling in all day. Mike, are you still on the  
2 phone this evening?

3 **MR. GIBSON:** Yes, Dr. Ziemer, I'm here.

4 **DR. ZIEMER:** Okay. I'm -- I'm claiming old  
5 age, that's my story and I'm sticking to it. I  
6 -- I wouldn't ordinarily forget the last name,  
7 but anyway, welcome, Mike Gibson.

8 Mike has worked around the Mound site. He's  
9 from Ohio. He's not too far away, but by phone  
10 this evening.

11 John Poston, professor of radiation safety and  
12 health physics, Texas A&M.

13 Brad Clawson, who is -- what was that name  
14 again? Brad Clawson works in the Idaho Falls  
15 area, Idaho National Laboratory.

16 Josie Beach is at the -- in the Hanford site  
17 area where she originally worked for the main  
18 contractor and now is with C2H --

19 **DR. WADE:** CH.

20 **DR. ZIEMER:** -- CH2 --

21 **UNIDENTIFIED:** CH2M-Hill.

22 **DR. ZIEMER:** -- Hill.

23 **UNIDENTIFIED:** CH2M-Hill.

24 **DR. ZIEMER:** Again, you know, it's the old age  
25 thing and that again is my story, Josie, I'm

1 sticking to it. A -- a new -- new member of  
2 the Board, this is Josie's first meeting with  
3 us.

4 And then Phil Schofield, also his first  
5 meeting. Phil is -- comes to us from the Los  
6 Alamos area, so we welcome two -- two new Board  
7 members with us this evening.

8 So now with that, I'm going to begin with two  
9 individuals who have requested public comment  
10 from sort of long distance. The first of these  
11 is Terrie Barrie, and Terrie, are you on the  
12 line?

13 **MS. BARRIE:** Yes, Doctor, I am.

14 **DR. ZIEMER:** Yes, and Terrie Barrie is with the  
15 Rocky Flats petitioners. And then I think  
16 after Terrie, we will hear also from Kay if  
17 she's on the line.

18 **DR. WADE:** Kay Barker.

19 **MS. BARRIE:** Dr. Ziemer, can Kay go first?  
20 She's (unintelligible) --

21 **DR. ZIEMER:** Kay can go first.

22 **MS. BARRIE:** Yes.

23 **MS. BARKER:** Thank you, Dr. --

24 **DR. ZIEMER:** Both -- both from Rocky Flats.

25 **MS. BARKER:** Thank you, Dr. Ziemer. Good

1 evening, Dr. Ziemer and members of the Board.  
2 My name is Kay Barker and I want to thank you  
3 for allowing me to phone in my public comments  
4 tonight on the Rocky Flats petition. One of  
5 the topics I want to talk about tonight is  
6 conflict of interest.

7 I recently heard Ms. Karin Jensen (sic) say  
8 that she has no personal conflicts with Rocky  
9 Flats. I don't understand what that means. On  
10 her ORAU disclosure statement she lists Rocky  
11 Flats as an employer. Board member Mike Gibson  
12 asked for an explanation, too, but I did not  
13 understand Dr. Wade's explanation. Wouldn't  
14 anyone who worked for or was assigned to Rocky  
15 Flats have a personal conflict?

16 I checked the *Webster's New World Dictionary*  
17 for the correct meaning of conflict of  
18 interest, and this is what it states: A  
19 conflict between one's obligation for the  
20 public good and one's self-interest. In the  
21 case of Karin Jensen (sic) and Roger Falk,  
22 being ex-employees of Rocky Flats but also the  
23 authors of the neutron dose reconstruction and  
24 the SEC evaluation report, both Karin and Roger  
25 now work for NIOSH giving professional

1 testimony against the very people they once  
2 worked with at Rocky Flats. Now that's a  
3 conflict of interest.  
4 How can the NDRP be used against the Rocky  
5 Flats employees, as you can't just white out  
6 Roger Falk's name and write in somebody else's  
7 when Roger is listed as the author of the NDRP.  
8 No matter how you look at it, the NDRP is a  
9 conflict of interest and can't be used. The  
10 same goes for the SEC evaluation report that  
11 Karin wrote. It seems like conflict of  
12 interest means nothing to NIOSH/ORAU as it was  
13 just reported that NIOSH revised the  
14 occupational internal dose for Rocky Flats on  
15 February 1st of this year. The author of this  
16 TBD is Roger Falk as site expert, with  
17 NIOSH/ORAU team approving it. Not only is  
18 Roger Falk a major conflict of interest, but so  
19 is Nancy Daugherty\* as Roger used her research.  
20 Conflict of interest abounds in the Rocky Flats  
21 petition just with all the people who work for  
22 NIOSH/ORAU. Not only do you have Karin Jensen  
23 (sic) and Roger Falk, you also have Joe  
24 Aldrich\* and Nancy Daugherty, who I personally  
25 knew when she worked at Rocky Flats. Conflict

1 of interest do abound in the Rocky Flats  
2 petition, and nothing seems to be done about  
3 it. It amazes me that the NDRP and the SEC  
4 evaluation report are considered valid, along  
5 with the occupational internal dose. If SC&A  
6 submitted documents with similar conflicts,  
7 would they be accepted? For some reason I  
8 think not.

9 How many more conflict of interest do the Rocky  
10 Flats claimants have to accept? Conflict of  
11 interest, whether person or otherwise, is still  
12 conflict of interest and can't be used. This  
13 alone should guarantee the Rocky Flats  
14 petition.

15 I'm also very concerned about what Mr. Falk --  
16 excuse me, Mr. Funk said last night, that Dr.  
17 Poston's family members are or were part of the  
18 ORAU team doing dose reconstructions. I'm not  
19 sure if that is illegal, but it definitely  
20 raises concerns in my mind about the ethics and  
21 why he's even on the Advisory Board with his  
22 family's conflict of interest that affects him.  
23 Secondly I'd like to talk about the NDRP and  
24 what I found in the NDRP report. The NDRP is  
25 not only a conflict of interest, it is not

1 accurate for 1970. Though some of these  
2 records are not complete or not present for  
3 1970, now isn't that the definition of the SEC  
4 petition? Under 2.0, Obligation and  
5 Limitations, it states: Except for the  
6 application of the NDRP ratios as described in  
7 Section 4.1.6, the methods described in this  
8 (unintelligible) -- in this TIB apply only to  
9 workers at Rocky Flats -- Flats plutonium  
10 facility during the period from 1952 to 1970.  
11 There are three important caveats (sic) on  
12 limitation. The first one: The final NDRP  
13 neutron dose for 1970 may not be accurate.  
14 Recorded dosimeter status was not always  
15 complete.  
16 Second item: The gamma dose information for  
17 1970 may not be present.  
18 Third item: The information on gamma dose was  
19 collected only when applicable to the NDRP  
20 effort.  
21 If the original NDRP lists these caveats (sic),  
22 how can NIOSH assume they can use this for dose  
23 reconstruction?  
24 I must remind you again that in my late  
25 husband's case I have, in the NDRP, values for

1 neutron dose a full two years before he ever  
2 started working at Rocky Flats. How can this  
3 be data reliability and an accurate NDRP. That  
4 doesn't include the fact that the NDRP's a  
5 major conflict of interest.

6 The third item I'd like to briefly discuss is  
7 the site profile. Frequently I hear in the  
8 discussions that this is a -- not a site  
9 profile issue and not an SEC issue, as well. I  
10 disagree that these should be separated. Dose  
11 reconstruction is based upon the site profile.  
12 If the site profile has errors, and it does,  
13 then any dose cannot be reconstructed with any  
14 sense of accuracy. NIOSH has already claimed  
15 that the site profiles need to be updated every  
16 two years. If that is the case, then every  
17 dose reconstruction they do would be incorrect,  
18 and so on and so on, for every update they do.  
19 For an example, just look at all the claims  
20 that have been processed on the Rocky Flats  
21 site profile before the site profile was even  
22 audited and the necessary changes made. Will  
23 all of these claims be reopened and corrected  
24 to reflect the corrections made to the site  
25 profile? This will be -- need to be done at

1 all plants and not just Rocky Flats.  
2 The last item I'd like to discuss is something  
3 that came up at the January 26th working group  
4 meeting. There was a discussion during this  
5 meeting about Plants A, B and C. I think  
6 everyone agrees that Plant A, or Building 444,  
7 was the uranium foundry and that Plant C was  
8 plutonium production. I didn't hear any  
9 reference to the small foundry in Plant B,  
10 Building 881. A quick call was made to a site  
11 expert and he said there was a foundry in  
12 Building 881. That data was decommissioned  
13 prior to 1964. I did a quick Google search and  
14 found on a DOE web site the historical American  
15 engineering record which mentions that a  
16 foundry was in Building 881 from 1953 to  
17 approximately 1964. How is it possible that  
18 NIOSH is not aware of this? I got the  
19 impression that NIOSH is only considering  
20 Building 444 as the foundry. Here lies another  
21 site profile error and also a dose  
22 reconstruction error as well.  
23 Dr. Ziemer, I urge you and the other Board  
24 members to seriously consider all these issues  
25 I have raised this evening before deciding on

1 the Rocky Flats petition. Conflicts of  
2 interest alone are serious enough to show  
3 NIOSH's inability to reconstruct dose on the  
4 Rocky Flats claims.

5 Thank you for allowing me this time.

6 **DR. ZIEMER:** Thank you very much, Kay. I do  
7 want to assure you that these issues will be  
8 looked at. Mark Griffon is here making some  
9 notes next to me. As you know, Mark is our  
10 Board person that's heading up that site  
11 profile -- or that working group.

12 Also I did want to mention that in cases where  
13 the site profiles are revised and amended, any  
14 such amendments that do affect how dose  
15 reconstructions are done, it is in fact NIOSH's  
16 policy to go back and review any previously-  
17 denied claims to determine whether or not the  
18 updates or changes would affect or change the  
19 compensation decision. So that in fact is done  
20 across the board when such changes are made.

21 I'm looking to Larry Elliott to make sure I've  
22 stated that correctly and he is nodding his  
23 head that that is the case, that they do in  
24 fact review any cases that had been denied  
25 under a previous version of a site profile.

1 With respect to conflict of interest issues,  
2 I'll simply suggest that NIOSH again examine  
3 the issue of those names that have been  
4 mentioned, recognizing that there is an  
5 allowance in the process that allows  
6 individuals who have worked on a site to be  
7 called on as site experts, just as we call on  
8 workers who have been on the site to provide  
9 input. But there are some specific  
10 requirements as to what they can and can't do,  
11 so we'll simply ask that NIOSH and our working  
12 group again look at those individuals you have  
13 named to make sure that they meet those  
14 requirements.

15 And the other comments, I think Mark has made  
16 some notes here and will make sure that we  
17 follow up on that. Thank you very much.  
18 Terrie -- Terrie Barrie?

19 **MS. BARRIE:** Yes.

20 **MR. GIBSON:** Dr. Ziemer?

21 **DR. ZIEMER:** Yes, Mike, you have a follow-up  
22 comment?

23 **MR. GIBSON:** Yes, if I could, please.

24 **DR. ZIEMER:** Sure.

25 **MR. GIBSON:** I have raised these questions in

1 the past several times, and I've still not got  
2 an answer. The people who put together the  
3 site profile as site experts, so-called, I've  
4 asked repeatedly how many working people, not  
5 necessarily union, just working people who did  
6 not have management authority, were used as  
7 site profile experts. And I would like to know  
8 the answer to that question.

9 **DR. ZIEMER:** Okay, I don't know the answer to  
10 that, Mike, specifically on Rocky, and maybe we  
11 can get that information, but --

12 **MR. GIBSON:** But --

13 **DR. ZIEMER:** -- certainly --

14 **MR. GIBSON:** And for -- for all sites.

15 **DR. ZIEMER:** For all sites.

16 **MR. FUNK:** Dr. Zimmer (sic)?

17 **DR. ZIEMER:** Yes.

18 **MR. FUNK:** This is John Funk from Nevada Test  
19 Site. I'd like to pass this on to Mike. In  
20 our case, Mike, the whole site profile was  
21 taken from a single individual, Mr. Ray Brady,  
22 who was a health physicist, and a couple of  
23 other people and it passed through three or  
24 four hands. By the time it got highly  
25 editorialized and in fact it's -- it's so

1 distorted and so misinformed, I don't even know  
2 how we've even went as far as we've went. So  
3 if the rest of the sites are like ours, they're  
4 not -- in fact they came to building trades in  
5 Las Vegas and they interviewed them and none of  
6 the people in building trades got any  
7 experienced personnel from the site. They went  
8 to two carpenters, which one was the southwest  
9 regional manager and the other one was his  
10 assistant, and the regional manager had never  
11 been on the test site and his assistant had  
12 been an apprentice under me, and he volunteered  
13 that he didn't feel that he was qualified  
14 enough and he might have been 'cause he was  
15 just a welder. But they made no attempt to  
16 contact me and they no -- made no attempt and -  
17 - although I have managed to put to-- a dozen  
18 people together right now. I'm putting my own  
19 site profile together. I'm going to submit one  
20 with an SEC application with one of my own  
21 experts, and people from the site who hold very  
22 high positions. But that -- this is what  
23 happened to you, it's happened to all of us and  
24 it's just one person where they got all the  
25 information from and NIOSH editorialized

1 anything we had completely out of existence.

2 Thank you.

3 **MR. GIBSON:** I'm sorry --

4 **DR. ZIEMER:** Thank you, John.

5 **MR. GIBSON:** -- who was that -- was that Phil?

6 **DR. ZIEMER:** I think that was John Funk. Was  
7 it John Funk?

8 **MR. FUNK:** Yes, it was.

9 **DR. ZIEMER:** Yeah, John Funk, Mike.

10 **MR. GIBSON:** Okay. Thank you.

11 **DR. ZIEMER:** Thank you. Okay, let's hear from  
12 Terrie Barrie now.

13 **MS. BARRIE:** Okay, Doctor.

14 Good evening, Dr. Ziemer and members of the  
15 Board. This is Terrie Barrie, the Alliance of  
16 Nuclear Worker Advocacy Group, and again I  
17 thank you for the opportunity to speak tonight.  
18 First I would like to publicly thank Richard  
19 Miller for his years of dedication and  
20 involvement with the sick nuclear workers.  
21 Many of us will miss his insight and efforts to  
22 correct the problems with the implementation of  
23 EEOICPA. I wish him well in his new position.  
24 I would also like to state my displeasure with  
25 NIOSH for ignoring Mark Griffon's direction to

1           send the draft SC&A reports I requested on  
2           January 9th. Mark Griffon and Dr. Wade assured  
3           me that as soon as they were reviewed for  
4           Privacy Act issues they would be forwarded to  
5           me. The data completeness report was posted to  
6           NIOSH's web site on February 6th and -- but I  
7           had yet to receive the safety concerns draft  
8           report. Both of these reports I believe were  
9           submitted to NIOSH in December and I would  
10          think that there has been ample time to remove  
11          any personal information by now. And I also  
12          sincerely hope that all the Board members take  
13          time to read these draft reports.  
14          Now I would like to offer some observations  
15          that I have from listening to the Board working  
16          group meetings. NIOSH stated that they  
17          interviewed the Rocky Flats site experts on  
18          badge destruction. NIOSH's Rocky Flats site  
19          experts asserted that investigations into badge  
20          destructions were in fact done. SC&A requested  
21          proof. NIOSH did not offer proof, only the  
22          word of the experts. SC&A could only find one  
23          instance of badge destruction investigation in  
24          their review of the logbooks that would  
25          corroborate (sic) the -- NIOSH's assertion.

1           And I must remind you, as Kay has already, that  
2           there is a major conflict with Roger Falk as a  
3           site expert. Not only was he responsible for  
4           the health physics department at Rocky Flats,  
5           but he testified against my husband in his  
6           workers compensation claim. If the Board  
7           accepts NIOSH's site expert testimony as being  
8           the truth, then the Board must accept the  
9           petitioners' site experts' affidavits, or  
10          SC&A's site experts' testimony, as the truth.  
11          Conversely, the Board must ignore NIOSH's site  
12          expert's testimony if there is no documentation  
13          to back it up, just as the Board demands  
14          documentation to prove the petitioners'  
15          assertions.

16          NIOSH revealed that they are using the coworker  
17          model more frequently because it is easier.  
18          Easier does not mean it's accurate. Using  
19          coworker model because of its ease here is a  
20          gross injustice to the claimants. The Board  
21          has not signed off on the coworker model as  
22          being scientifically valid, as required by law.  
23          By using coworker models NIOSH is ignoring the  
24          information supplied by the claimants in the  
25          initial interview.

1           In Mr. Jack Wedding's\* dose reconstruction, and  
2           I do have his permission to use his name, NIOSH  
3           ignored his oral history. Mr. Wedding was  
4           scrubbed down four times after the '69 fire  
5           before he was decontaminated enough to be  
6           placed in an ambulance to be taken to the  
7           hospital -- to the hospital to be further  
8           decontaminated. Mr. We-- (broken transmission)  
9           of his Rocky Flats medical records in his file,  
10          and that should have included this incident.  
11          SC&A stated they could not find conclusive  
12          evidence that there is a systemic problem with  
13          raw records versus the HIS-20 database, but  
14          they did find circumstantial evidence. The law  
15          nor the final rule require that a preponderance  
16          of evidence standard needs to be met. There is  
17          ample documentation showing that there are gaps  
18          in records. In SC&A's review they chose to  
19          examine only files that had a full year of  
20          missing data. I am sure that the percentages  
21          of files with gaps would go up if the report  
22          included workers' files that were missing any  
23          dosimetry. My husband's file, for example, is  
24          missing some dosimetry information -- not a  
25          full year, mind you, but a quarter for this

1 year or six months for that year.

2 It was widely reported that records from the  
3 Fernald plant was -- were buried as toxic  
4 waste. It happened at the Rocky Flats plant,  
5 too. A report prepared by History Associates,  
6 Incorporated for DOE dated August of 1995 shows  
7 a list of documents they requested but were  
8 reported missing or permanently withdrawn. The  
9 Rocky Flats newspaper titled *Envision* dated  
10 February 19th of 2004 reports on page seven  
11 that, and I quote, More than 466 boxes of  
12 unneeded documents were destroyed, end quote.  
13 Considering that DOE kept records from 1967  
14 that addressed vacation leave for certain  
15 employees, I wonder if these documents were  
16 really unneeded.

17 A working draft report titled "Managing Data  
18 for Long-term Stewards -- Stewardship" was  
19 prepared by ICF Kaiser Consulting Group in  
20 March of 1998 for DOE. They used Rocky Flats  
21 as a focus site. It states in Chapter 4 that,  
22 and I quote, Paper records may be fragile.  
23 Many old records are preserved with carbon  
24 copies. These have proven difficult or  
25 impossible to scan electronically. Also paper

1 records decay over time, particularly records  
2 preserved on acid-based paper. Production  
3 records have been lost. Production records for  
4 (unintelligible) were identified by records  
5 management personnel for long-term retention.  
6 Initially these records could not be archived  
7 immediately because they were con-- they were  
8 (unintelligible) contaminated. Before they  
9 could be arc-- (broken transmission) -- were  
10 inadvertently boxed up in crates and disposed  
11 of as low-level waste, end quote. Here is  
12 proof that records were destroyed at Rocky  
13 Flats. Is there conclusive evidence that these  
14 records were workers' files? No, and I'm sure  
15 NIOSH team will argue just that. But coupled  
16 with the many gaps in records and the testimony  
17 of workers, a reasonable person can infer that  
18 the missing dosimetry records were indeed  
19 destroyed.

20 It matters not if these records were destroyed  
21 by malicious intent or just merely the result  
22 of sloppy record-keeping, the result is the  
23 same. The data missing from workers' files may  
24 hold the very key to the actual exposures the  
25 workers received at Rocky Flats. The Board

1 cannot and should not ignore this. NIOSH may  
2 be very capable with developing a scientific  
3 calculation. But if they do not possess all  
4 the data, those calculations could be so very  
5 wrong.

6 I also disagree with the assessment that the  
7 environmental dose the workers receive is  
8 inconsequential. I remind you that the -- that  
9 there was a grand jury investigation into the  
10 environmental crimes committed at Rocky Flats.  
11 The workers were there and -- and -- and were  
12 contaminated by this. Last Thursday it was  
13 also reported in the *Denver Post* that the judge  
14 matched -- plans to release some of the grand  
15 jury testimony. There is also a lawsuit filed  
16 by landowners surrounding the Rocky Flats  
17 plant. I have the contact information of the  
18 law firm who represented the landowners. I  
19 would suggest that the Board investigate if any  
20 testimony or evidence is available that would  
21 further support the SEC petition.

22 I would also like to be assured, also, that any  
23 personnel from the NIOSH/ORAU team has  
24 disclosed any involvement with these two cases  
25 on their disclosure statements.

1 Thank you again, Dr. Ziemer, for giving me the  
2 -- this time to address the Board, and I will  
3 be happy to FAX you the documents I cited in my  
4 comments.

5 **DR. ZIEMER:** Okay, thank you, Terrie. So the -  
6 - the documents you referred to, have you --  
7 you've not received any of them as yet?

8 **MS. BARRIE:** No, Doctor.

9 **DR. ZIEMER:** Okay. Is --

10 **MS. BARRIE:** The SC&A reports?

11 **DR. ZIEMER:** Are these -- I think Mark has a --  
12 Mark has handed me a list which he thinks --  
13 it's one document called "Other Radionuclides,  
14 Including Thorium," one called "Data  
15 Completeness Evaluation" -- are these the --  
16 does this match up with what --

17 **MS. BARRIE:** Okay, the di-- okay, I do not have  
18 the "Other Radionuclides," I do not have the  
19 safety concerns.

20 **DR. ZIEMER:** "Completeness of Records for '69  
21 and '70" is another one.

22 **MS. BARRIE:** Yes, that has been posted to the  
23 NIOSH web site and I have reviewed that.

24 **DR. ZIEMER:** That you have. "Data Reliability  
25 Safety Concerns"?

1           **MS. BARRIE:** I do not have that.

2           **DR. ZIEMER:** "Data Reliability, Data Integrity  
3 Examples"?

4           **MS. BARRIE:** I do not have that.

5           **DR. ZIEMER:** "Data Reliability Logbook Review".

6           **MS. BARRIE:** I do not have that.

7           **DR. ZIEMER:** Okay. I think those are the ones  
8 that have been cleared so far. Looks like you  
9 only have one of -- of six. So I -- I'm  
10 wondering if so-- I need help from somebody  
11 here. What -- what -- anybody -- maybe Larry,  
12 do you -- can you tell us the status of -- are  
13 these on the -- one of the drives or --

14           **MR. ELLIOTT:** These are the documents that you  
15 were speaking about earlier today, I believe,  
16 in this exchange about how SC&A products get  
17 through the Privacy Act review process.

18           **DR. ZIEMER:** Right.

19           **MR. ELLIOTT:** I have not been given those  
20 documents until perhaps today, I was looking at  
21 my e-mail --

22           **DR. ZIEMER:** So NIOSH didn't get them either.

23           **MR. ELLIOTT:** No, we don't have -- I don't have  
24 them to post. I don't have them to distribute.

25           **DR. ZIEMER:** John Mauro, do you know the status

1 of these? These are SC&A documents -- or Joe  
2 Fitzgerald, Joe can help us out here.

3 **MR. FITZGERALD:** Yeah, we had submitted all  
4 these sections in the -- the first week of  
5 January to -- to legal counsel --

6 **DR. ZIEMER:** To legal counsel for --

7 **MR. FITZGERALD:** -- for Price Anders--

8 **DR. ZIEMER:** -- review.

9 **MR. FITZGERALD:** -- for -- for the Privacy Act  
10 review.

11 **DR. ZIEMER:** Right.

12 **MR. FITZGERALD:** We made those changes and then  
13 sent them back to NIOSH about the third week of  
14 January or fourth week --

15 **DR. ZIEMER:** By NIOSH, he's talking about the  
16 legal office, not --

17 **MR. FITZGERALD:** Legal office, with --

18 **DR. ZIEMER:** -- not Larry's --

19 **MR. FITZGERALD:** -- the understanding that  
20 NIOSH would then make distribution to the  
21 petitioners as well as to the Congressional  
22 staff.

23 **DR. ZIEMER:** Once they cleared there.

24 **MR. FITZGERALD:** But it -- they've all been  
25 reviewed and cleared, yeah.

1           **MR. GRIFFON:** I -- I guess just to -- to  
2           clarify, on the 26th in the workgroup we -- we  
3           realized that these things, although we thought  
4           they were Privacy Act cleared at that point, a  
5           few of -- some -- a few of them, not all of  
6           them, we -- we understood that -- you know, we  
7           made a commitment to those on the phone that we  
8           would -- as soon as they were cleared, to make  
9           sure they got them. So I think there's a  
10          little delay here, but we'll -- you know, I  
11          think we got the -- you know, NIOSH has the  
12          message and we're continuing to get these out,  
13          so -- as soon as we can. Right, Larry?

14          **DR. ZIEMER:** Okay. Okay. Well, Mark and Joe,  
15          if you'll follow up on that. Terrie, we'll  
16          make sure that -- that those get to you here  
17          shortly.

18          **MS. BARRIE:** Okay, I appreciate it, Doctor.

19          **DR. ZIEMER:** And -- and we have -- we have the  
20          notes on your other issues there. Thank you  
21          very much.

22          Now we have -- we have a letter from -- a  
23          Congressional letter from Senator Cantwell's  
24          office that needs to be read into the record,  
25          and I'm going to call on Chia-Chia Chang to

1           come read that into the record.

2           **MS. CHANG:** (Reading) I want to thank Chairman  
3           Ziemer and members of the Advisory Board on  
4           Radiation and Worker Health for the opportunity  
5           to submit testimony about issues relating to  
6           the review of the Hanford site profile and the  
7           Hanford Special Exposure Cohort petition that  
8           was recently qualified. In addition, I want to  
9           thank Dr. Melius and the Hanford working group  
10          for their support to organize issue-specific  
11          discussions between NIOSH and SC&A and keeping  
12          the process moving toward a resolution. Too  
13          many workers at Hanford have waited years for  
14          help, and they deserve a comprehensive review  
15          without further delays.

16          One of the Hanford working group's primary  
17          goals is to provide clarity on some of the  
18          difficult issues in question between the NIOSH  
19          Hanford site profile and findings from the SC&A  
20          review of the Hanford site profile, both of  
21          which entail a great deal of complexity and a  
22          considerable amount of technical information.  
23          For example, the issue of neutron-to-photon  
24          ratio methodology for dose reconstruction is a  
25          concern that needs careful examination by the

1           working group. The potential that reactor  
2           workers at Hanford were exposed to chronic  
3           levels of unmonitored neutrons is an issue that  
4           NIOSH should explore further and not dismiss.  
5           I also want to take a brief moment to comment  
6           on the Hanford Special Exposure Cohort petition  
7           that NIOSH recently qualified, which would  
8           cover all employees at Hanford from January 1,  
9           1942 through December 31st, 1990. This  
10          petition is a resource providing critical  
11          information so that we may better understand  
12          the full extent of workers' exposure to toxins.  
13          I am concerned that without carefully examining  
14          this petition we might wrongly deny worker's  
15          compensation to thousands of deserving Hanford  
16          employees who have already waited too long. I  
17          have full confidence that NIOSH will give the  
18          petition a fair and thorough review.

19          I have enjoyed working with the Board to move  
20          the Hanford review process forward. It is my  
21          hope that the Board ultimately resolves some of  
22          the worker compensation issues that have long  
23          plagued many workers and their families for  
24          years at Hanford. In particular, workers at  
25          Hanford deserve a Special Exposure Cohort

1 designation.

2 America's nuclear workforce has a rich  
3 tradition of hard work and tremendous sacrifice  
4 that has kept our country secure. There is no  
5 room for compromise when it comes to workers'  
6 safety or health. Time is of the essence, and  
7 those workers who have become significantly  
8 exposed to unmeasured neutrons deserve quick  
9 action, and we have a responsibility to step up  
10 and deliver it.

11 Thank you again for allowing me to submit  
12 testimony, and I look forward to working with  
13 the Advisory Board on worker compensation  
14 issues at Hanford.

15 **DR. ZIEMER:** Okay. Thank you very much. Next  
16 we'll hear from John Ramsport (sic) and he  
17 represents the Illinois nuclear workers.

18 **MR. RAMSPOTT:** Again would like to thank the  
19 Board and other authorities are here at the  
20 meeting tonight. My name is John Ramspott and  
21 I do represent workers at General Steel  
22 Industries in Granite City, Illinois.

23 Appreciate -- and also wanted to thank you for  
24 the courtesy shown us last night during public  
25 comment section where myself, Dr. McKeel and

1 Vincent Kutemperer had an opportunity to try to  
2 share some information on activation with a  
3 Betatron device.

4 And tonight I'd like to share a little  
5 information, if I may. So far at General Steel  
6 Industries there have been four dose  
7 reconstructions and absolutely -- 'cause we do  
8 have copies of them, they've been redacted or  
9 the individuals are dead -- there is no  
10 Betatron mentioned. It definitely was not  
11 taken into consideration and it should have  
12 been. And the reason for that is -- it's real  
13 simple -- the uranium that went there was to  
14 clearly be inspected with a Betatron. That's  
15 why the uranium went over there. I don't know  
16 how it was missed the first time. Chest X-rays  
17 seem to be pretty common. They're X-ray  
18 devices. This is an accelerator. I think  
19 someone just missed the boat.

20 I think it needs to be considered now. I also  
21 believe these four individual cases, which have  
22 all -- actually one said it was paid, but then  
23 we found out later it was paid because they  
24 were at another site, but the other ones  
25 definitely should be reopened, and we are going

1 to ask that that happen. And maybe a little  
2 direction on the proper authorities to send  
3 that request to would really be appreciated.  
4 And again, the operation period was 1953  
5 through 1966, and then after that period --  
6 that is the recognized contract period for the  
7 AEC uranium for Mallinckrodt -- we know the  
8 device was used all the way through and until  
9 the plant was closed in 1973. And again I  
10 repeat, they really should have factored that  
11 from day one.

12 Now to our knowledge -- and again, with  
13 extensive research -- we really aren't sure if  
14 they've ever used the Betatron device and it's  
15 been factored in to any dose reconstructions at  
16 any of the sites that are included in this  
17 program. TIB-6000, which covers our site,  
18 clearly states that all radiation should be  
19 considered for dose reconstruction during the  
20 contract period. All radiation it says. We  
21 clarified that and everybody was pretty clear  
22 on it.

23 Now we have looked for information to find a  
24 Betatron or any other sites, and we did that  
25 'cause that's a good way to start if we can

1 find their records and see how they're looked  
2 at, it gave us an i-- it would give us an idea  
3 of what to look for for our site. Well, there  
4 was one site that had a Betatron. Actually  
5 they had two sites, or two Betatrons equal to  
6 the type, or very much like -- same brand as  
7 the one General Steel had, and we think they're  
8 really important and Mr. Elliott said we try to  
9 help quite a bit and we do and in good  
10 conscience I got to mention these tonight.  
11 There were two of them at Los Alamos. They are  
12 referenced in some documents. Actually the TBD  
13 document actually mentions a 20-million-volt  
14 Betatron and a 24-million-volt Betatron. But  
15 sad to say, that seems to be where it stops.  
16 And since that particular site is now being  
17 considered I believe for an SEC, I don't think  
18 it'd be fair if those people don't get their  
19 opportunity to see if what we heard last night  
20 about activation -- there's no reason it  
21 wouldn't apply to them as well. So I'm going  
22 to ask that we look at that if we could 'cause  
23 the Betatrons are not quite as exotic or -- as  
24 a lot of people think with our research, and I  
25 do have the documents. We're going to provide

1 a complete package of everything I'm going to  
2 discuss tonight to Larry Elliott, the Board --  
3 just like we have done in the past. Everybody  
4 should be able to use this information.  
5 On a recent exploration we also find out the  
6 information in this TBD -- we don't believe  
7 it's correct. We believe it's really way off.  
8 The TBD cited says that a Betatron puts out 25  
9 R at three feet or one meter. I have a  
10 published Allis Chalmers -- out of a service  
11 bulletin document dated 1951, these are the  
12 people that made the machine, and the specs are  
13 for 22 million, that seems to be the standard  
14 at that time, and I'll read exactly what it  
15 says in the service manual at 22 million volts  
16 the uncompensated X-ray output will be at least  
17 100 Roentgen per minute at three feet from the  
18 target at the center of the X-ray beam cone.  
19 The published report says 25, so it's off  
20 considerably. So if what we heard last night  
21 about activation takes place, this machine  
22 clearly should be considered and they have two  
23 of these at Los Alamos -- or did have. They're  
24 probably gone now. And the reason we know they  
25 were at Los Alamos, we've now found the serial

1 numbers. And the serial numbers for these  
2 particular machines -- 'cause this is to let  
3 somebody else verify what I'm saying --  
4 Betatron number one, the serial number is 1-  
5 01005 -- I'm sorry, let me repeat this again  
6 and get it straight -- 1-0100-15987, and Los  
7 Alamos Betatron number two is 1-012020278.  
8 Well, fortunately in the same service manual-  
9 type bulletins, this -- I'd have bet a lot of  
10 money we'd never find, or it would never have  
11 found -- we now have the serial numbers for the  
12 two that were General Steel. And the first one  
13 at Eddystone, Pennsylvania, which in turn came  
14 to Granite City Steel in 1963, was 1-0120-  
15 22900. And the second one, which came to  
16 Granite City originally, 1-0120-22685. And  
17 having been in the office equipment business a  
18 long time and know a little bit about military  
19 equipment from some friends that I've consulted  
20 with, you don't want to lose anything that has  
21 a serial number on it. So now we think these  
22 should be able to be found, verified, and if  
23 they do exactly what the General Steel Betatron  
24 apparently does and all Betatrons of that size,  
25 it's going to be important.

1 Well, this time went a little further and kind  
2 of hit the gold mine. This is a list of 40  
3 more. There are Betatrons all over the place.  
4 I'm going to read some and they're going to  
5 sound pretty familiar 'cause some of them are  
6 actually being considered for SECs right now.  
7 I'm going to start the way they have them  
8 listed, Allis Chalmers Company -- and all these  
9 companies, matter of fact, the ones I've  
10 checked off here, they're all existing  
11 radiation program sites that are on a published  
12 list from the Department of Labor, but what I'd  
13 like to do is get the latest list double-  
14 checked 'cause I bet out of these 40 machines,  
15 there may be some other sites 'cause there's a  
16 ton of arsenals. Allis Chalmers, Pokitney  
17 (sic) Arsenal; Birdsboro Corporation, which is  
18 listed as Birdsboro Foundry; Armco Steel  
19 Corporation; and of course General Steel  
20 Castings Company; Los Alamos, referred on this  
21 list and then clarified as University of  
22 California; and the Naval Research Laboratory.  
23 They all had Betatrons and it's including some  
24 AWE sites and DOE sites with SECs in motion, so  
25 I feel that we really need to have someone look

1 at this thoroughly. If these are SECs in  
2 motion and we're missing these machines, we're  
3 missing another radiation source that should  
4 have been reviewed for these sites. And the  
5 sad part is a lot of these people at these  
6 sites have already had dose reconstructions  
7 done. If they missed it by a percent and they  
8 happened to be in this area where this machine  
9 is, I know we're going to ask the ones at  
10 General Steel be looked at again and reviewed.  
11 I would think that might apply to all those  
12 people, too, and that's why we decided to kind  
13 of go public on this. It's -- took a little  
14 thought, but it's the fair right thing to do.  
15 And like Larry said earlier today, we really  
16 tried to help a lot of people, not just  
17 ourselves or our sites.  
18 And kind of in closing, one thing happened  
19 today -- this might really be the mother lode  
20 'cause gentleman walked up to me and he says  
21 oh, yeah, by the way, we had one of those, too.  
22 Now this one I haven't verified, but he says is  
23 that one of those big things with a magnet on  
24 it; is that one of those things? What'd you do  
25 with yours over there? I said well, they

1            looked at, you know, metal castings or tank  
2            turrets; said what did you do with yours? He  
3            said we looked at uranium ingots. One of the  
4            people from Fernald, Ray Beatty, who did a  
5            fabulous presentation along with Sandra, who I  
6            consider very credible and I have to do a  
7            little more homework with him, I have his card,  
8            he said he had a Betatron at his site, too.  
9            And I know that's a fresh SEC site, so now we  
10           got two DOE sites. I think there are three  
11           SECs in motion maybe for the Naval Lab -- Naval  
12           Research Lab, I saw that on Larry's list, and  
13           of course Los Alamos and now Fernald.  
14           Fernald's the only one I personally can't swear  
15           to 'cause I have to do a little homework. The  
16           guy described it to a T, said he looked at --  
17           or they used it to inspect for flaws in uranium  
18           ingots, and they're not on the list but I  
19           understand why. We were told that some sites  
20           were so secure that their own personnel were  
21           actually trained to service them so they  
22           wouldn't be on a list of normally serviced like  
23           a General Steel, and the same thing happens  
24           and, like I say, there are a ton of locations  
25           here. Like Rock Island Arsenal, there's a lot

1 of places that we'll need to check out a little  
2 further, but it seems to me like maybe the  
3 Betatron ought to really, really be taken  
4 seriously and looked at now 'cause it affects a  
5 whole lot of other sites, and I think the way  
6 the law's written, they really do have the  
7 opportunity or should have the opportunity of  
8 having these factored into their dose  
9 reconstructions.

10 So I'm open for any questions or -- I certainly  
11 appreciate your time, and again, the courtesy  
12 we had last night and -- matter of fact, Larry  
13 and I just chatted very briefly at the break.  
14 I told him I had some new information coming  
15 and we're definitely going to provide him with  
16 it, give it to anybody that can use it 'cause I  
17 think this is really important. So thank you  
18 very much for your time. Any questions?

19 **DR. ZIEMER:** Thank you, John. We appreciate  
20 your input on this issue and continued  
21 sleuthing on everybody's behalf. Thanks. Any  
22 questions, Board members?

23 Okay, let's hear then from Dr. McKee -- McKeel,  
24 Dan McKeel.

25 **DR. MCKEEL:** Well, I'm not going to talk about

1 GSI and I'm not going to talk about Dow. I'm  
2 going to talk about philosophical big issues,  
3 just things that sort of occurred to me as we  
4 were all deliberating the past two days.  
5 I guess the first issue that I want to follow  
6 up on is what Terrie Barrie and Kay Barker just  
7 mentioned about conflicts of interest, and I  
8 know the Board and ORAU and NIOSH have been  
9 dealing with this very actively so I -- I  
10 really don't have any big major insights to  
11 provide.  
12 However, I would like to point out that  
13 conflict of interest -- you know, there are  
14 social aspects, there are ethical aspects, but  
15 in a sense when you're dealing with this kind  
16 of a federal Act, it really becomes a legal  
17 issue. And I want to couple that thought with  
18 the idea that it -- it seems to me, I'm -- I'm  
19 not aware of all the background that's behind  
20 this, but it certainly seems to me recently  
21 that Privacy Act concerns have loomed large in  
22 the deliberations of this body, and I sense  
23 that there is a -- something's happened down at  
24 CDC and in that arena that has -- has led to  
25 this. It may be government-wide, I'm not sure.

1 But it occurs to me -- a couple of things. One  
2 is, Privacy Act concerns are not new. The law  
3 was formulated in 1974. There are several  
4 physicians on this Board and certainly in my 31  
5 years as a professor at Washington U. medical  
6 school, medical concerns were a big -- a big  
7 issue for us in protecting private medical  
8 information of people and I -- I know the  
9 upheaval that was caused when the provisions of  
10 the HIPAA law started being applied in -- in  
11 the medical arena. So this -- this is a timely  
12 issue and I -- I know there are a lot of  
13 concerns.

14 I mentioned to y'all yesterday that -- that I  
15 have a specific concern about Privacy Act  
16 issues, and that goes to the fact that I  
17 believe that redacting in our affidavits for  
18 the Dow site has actually led to -- I'm -- I'm  
19 pleased that they're now posted on the web  
20 site, but I think it leads to a serious  
21 diminution (sic) of the information we wanted  
22 to convey and that you all need to know when  
23 you read those documents and consider them.  
24 And I just want to mention this, that -- you  
25 know, I tried and our group has tried to

1           initiate a dialogue to the people that we think  
2           are the people who we really should dialogue  
3           about this with, and that's the legal officers  
4           at OCAS and NIOSH and CDC, and I -- I name all  
5           those because e-- even the machinations of that  
6           big agency and sub-agencies within a big agency  
7           are rather difficult to define, and I am dimly  
8           aware of at least three different legal offices  
9           and several FOIA offices within OCAS, NIOSH and  
10          CDC. And I guess what I want to speak to y'all  
11          as a petitioner, an SEC petitioner, is that it  
12          certainly would be useful if somebody would get  
13          together within those agencies and publish  
14          maybe a little white paper or some guidance to  
15          the rest of us who need access to those people.  
16          I mentioned last night that we've really been  
17          blocked from direct access from talking to the  
18          -- the legal affairs officers. And I think  
19          this is -- you know, you apply the Privacy Act  
20          essentially is a legal issue. And we have  
21          expert people in the legal profession with  
22          tremendous expertise in that area, and they  
23          want to talk to somebody that we can talk on  
24          the same level and get this straightened out  
25          because we have a goal, you all have

1 constraints, and we need to get it straightened  
2 out. And I -- I -- we need some facilitation  
3 to find a path forward.

4 That brings me to a not exactly connected idea,  
5 but it is somewhat connected, and that is --  
6 we're talking about affidavits. The issue was  
7 raised earlier today how much weight does the  
8 Board, NIOSH, the agencies, how much weight is  
9 paid to testimony from workers. And the issue  
10 is, who are the real site experts? Are they  
11 the people who are -- own TBDs and site  
12 profiles? Maybe. But if you think about it --  
13 for instance, in the Dow situation, we have  
14 affidavits now -- 66 affidavits which  
15 encompasses, as I tried to show you today, you  
16 know, hundreds of man-years of expertise that  
17 can't be gained any other way than actually  
18 working at the department. And I'm aware of  
19 some, not all, of the early debates that went  
20 on in this program about -- particularly at the  
21 level of NIOSH -- of when would it be desirable  
22 -- most desirable to get worker input into the  
23 process. And as I understand the -- the  
24 reasoning, there was a debate. One side said  
25 well, it would be much better to get worker

1           input early in the process of creating a site  
2           profile so that the site profile could be truly  
3           informed by people who actually worked there,  
4           who -- who really didn't have a conflict of  
5           interest with anybody. Now when you get up to  
6           the management levels, people who made policy  
7           decisions, people who could say were the film  
8           badge data -- should they be conveyed to the  
9           workers, yes or no, that's a whole different  
10          story. But I'm talking about the people who  
11          actually ran the presses and rolled the mills  
12          and did the extrusions. It seems to me that  
13          they're not conflicted. But as I understand  
14          it, the decision was made by NIOSH to -- and --  
15          and Department of Labor, who shares that task -  
16          - that it would be better to wait until after  
17          the site profiles are created and then solicit  
18          worker input. And it seems to me, with all due  
19          respect -- I know there are two sides to every  
20          issue -- but that was a very bad decision  
21          because we have heard time and time and time  
22          again that there has been extra work created  
23          for the workgroups and for everybody to  
24          basically fix flawed documents where a -- a  
25          session probably lasting -- or several sessions

1           lasting four to eight hours with the workers,  
2           as we've done, would have clarified many of  
3           those issues and really resulted in far, far  
4           better, more accurate, more believable, more  
5           credible, better accepted site profiles. So  
6           you know, it's never too late to change and I  
7           would strongly urge there be a debate about  
8           this.

9           And along with that debate, I'd just like to  
10          say that I -- I was privileged, I think, to be  
11          able to participate a little bit in the  
12          Blockson outreach meeting we just had in  
13          Joliet. And you know, we had a dialogue about  
14          the best way to go about that. What was very  
15          successful at Dow and GSI was to select topics  
16          and let the workers comment on those topics  
17          rather than just have a freeform presentation  
18          by the workers of what was at the top of their  
19          minds right at that moment.

20          So I'm -- I'm not -- I'm not saying there's a  
21          right way or a wrong way, but this is something  
22          -- I think how you actually conduct a worker  
23          outreach, how you solicit site expert testimony  
24          from workers who are trying to remember things  
25          that happened ten to 50 years ago, that's a --

1           that's an area that needs a little more  
2           attention.  And you know, I think we ought to  
3           initiate such a -- such a -- a process.  And  
4           then along with that would be where is it most  
5           desirable to have that worker -- at what time,  
6           what is the timing that we ought to get that  
7           worker input into the process.

8           And then finally, I think everybody needs to  
9           look inside themselves and come up with a -- a  
10          -- a really clear idea of how much weight  
11          you're going to attach to various site experts.  
12          And I don't know, as a professor at a -- at a  
13          medical school, I -- I guess -- one side of me  
14          says well, you know, kind of the benign  
15          dictatorship idea of things, that the professor  
16          knows everything; the students don't know  
17          anything.  But having done that for 30 years, I  
18          have really a different perspective on that and  
19          that is we definitely all learn from each  
20          other.  And I really feel that I learn far more  
21          from my students that I -- than I ever taught  
22          any individual.  And collectively, you know, I  
23          was the benefactor of the educational process,  
24          not them.

25          I'm sure I imparted a few things that a few

1 people remember, but collectively, they made me  
2 a much wiser person. So I've gone through that  
3 same experience in this program, which is a  
4 little bit new to me, but I've read documents  
5 by people who were chosen because they had had  
6 no previous experience at the site, and then  
7 they read existing documents, basically, and  
8 wrote a site profile. So I've seen how that  
9 worked out at, you know, Mallinckrodt downtown  
10 and Weldon Spring, which I knew really quite a  
11 lot about, and -- and -- and so forth at  
12 various places. And it's really my considered  
13 opinion that -- that the worker input is at the  
14 wrong end of the process and that we -- we  
15 should revisit that. So that -- that's enough  
16 of that little sermonette. That's just sharing  
17 the way I feel as a former professor and so  
18 forth.

19 The second thing and the last thing I want to  
20 talk to you all about, I -- I guess I would put  
21 is the general idea of data capture and data  
22 management. And it seems to me the more I'm  
23 hearing of these processes that that af-- that  
24 -- those two processes could use a lot more  
25 focused attention. They seem sort of mundane,

1 but I certainly ran into this in the medical  
2 school doing large-scale longitudinal studies  
3 of Alzheimer patients that actually that sort  
4 of methodology, data management I would call  
5 it, and collecting data are absolutely  
6 essential. And I -- my considered judgment  
7 after all this time of being involved with this  
8 program is that too little attention was paid  
9 to data capture efforts at the front end and --  
10 and actually they're just done in a very  
11 inefficient, very kind of dis-coordinated way.  
12 And that even now, you know, when I read about  
13 these regular data capture efforts and that for  
14 particular sites, you know, 44 boxes this time  
15 and 16 more this time and 12 this time, if you  
16 really think about it, you know, you've got 316  
17 sites and it's very clear from the research  
18 John and I have done that basically he and I  
19 have done all the research for our two sites,  
20 except during the periods of the cleanup.  
21 Now the Department of Energy came in and looked  
22 at General Steel for a week, and the Army Corps  
23 of Engineer (sic) came in, Oak Ridge National  
24 Laboratory made some measurements, but  
25 collectively the federal agencies looked at Dow

1           for probably three weeks. That's all. At  
2           neither -- during neither of those experiences  
3           was there any interaction with the workers, so  
4           tho-- those documents are -- are basically  
5           uninformed about what actually went on in those  
6           buildings, in -- in my opinion.  
7           So I have a couple of recommendations just for  
8           your consideration. One is, I think everybody  
9           ought to get together and say look, rather than  
10          collecting this data so sporadically, maybe a  
11          lot of effort and -- and actually some more  
12          money should be channeled into a major data  
13          capture effort for all of the sites and that,  
14          you know, there ought to be benchmarks for  
15          that. I mean somebody could define -- we have  
16          100 percent of the documents to collect, and so  
17          the first benchmark would -- at this point, six  
18          years into the program, have we got ten percent  
19          of that data collected and captured and scanned  
20          and on the shareable O drive, or have we got 50  
21          percent or have we got 90 percent. And if you  
22          did that sort of analysis and you came up with  
23          a conclusion that maybe you had 20 percent,  
24          then I would say, you know, you'd be -- time  
25          would be well spent to divert attention from

1           some of the other things to getting data  
2           captured. And -- and you know, I -- I ran into  
3           this at -- in the Mallinckrodt SEC and now I'm  
4           running again into it in the Dow SEC where  
5           documents suddenly appear. And I think part of  
6           the reason is because they weren't looked for  
7           systematically, so somewhere in this big  
8           universe are all the documents we need for Dow.  
9           And -- and, you know, it should be thought of  
10          in that way, by site. Let's get all the  
11          information about these -- this site. I  
12          understand it's a major effort.

13          So -- and then just the final thing is, Mark  
14          Griffon's group with Rocky Flats I know have  
15          been dealing with major issues which really  
16          come down to data management issues. How do  
17          you cross-walk between two databases,  
18          relational databases, some are I'm sure old  
19          legacy flat file databases, but there is a  
20          wealth of information technology expertise out  
21          there that could actually help with that. I'm  
22          sure there is within the agencies. But it  
23          seems to me that that would be the sort of  
24          thing, as well. For example, as a practical,  
25          real world thing, we wanted to get people to

1           the Blockson worker outreach meeting, not just  
2           as a general meeting but because we needed  
3           specifically -- you all needed -- more data  
4           about what happened in Building 55 and Building  
5           40 and the work flow from the phosphate rock to  
6           the extracted uranium. Well, it turned out  
7           that NIOSH had the names of 21 people that they  
8           (unintelligible) invited. And then we asked  
9           the question well, is that all the workers who  
10          are living that we could invite to this  
11          meeting? Well, it turned out -- and so we  
12          initiated a process of asking DOL how many  
13          could they come up with. Well, interestingly,  
14          they turned up with 39 more names. And then we  
15          said okay, that's great, so now we have 70  
16          people that we could invite. So could NIOSH  
17          send their 21 names to Department of Labor and  
18          so the Department of Labor would know who they  
19          were and they could send out -- DOL could send  
20          out invitations to the other 39. Well,  
21          apparently there's a big problem with that  
22          happening. Either it's a problem between  
23          sharing the names -- we also said the other  
24          way; can NIOSH look at the DOL database and  
25          pick out those -- you know, mark or flag those

1           21 names and then just send out invitations to  
2           the other 39. I was told that that -- that  
3           wasn't possible.

4           And I guess I'm going to end on saying that  
5           that reminds me of exactly what we've heard on  
6           the national level with two big events. The  
7           9/11 disaster taught us that in the same little  
8           city, the same little municipality, that the  
9           fire department and the police department  
10          cannot talk to each other. They can't listen  
11          to each other on the radio because their  
12          systems are not compatible. And there was a  
13          lot of talk about getting that all straightened  
14          out, and I gather there's been some movement on  
15          that, but perhaps not enough.

16          The other time when we heard this is when we've  
17          had these massive reorganizations of the  
18          intelligence community and we learn that, you  
19          know, the FBI and the CIA may have a problem  
20          communicating person-to-person, but their  
21          databases also have a problem. So it's just a  
22          -- a way of saying that I think these are two  
23          sort of fundamental infrastructure issues, data  
24          capture and data management, that it would  
25          really be -- behoove everybody to put some more



1 She's here yet, okay.

2 **MS. JERISON:** Thank you for letting me speak.  
3 This is not something I normally do, so just  
4 bear with me a little bit.

5 I've run across several questions that NIOSH  
6 hasn't been able to answer and would like to  
7 bring them to the attention of the Board. I'll  
8 address them using my father's claim, since  
9 that's what I'm best acquainted with, but I  
10 think they have implications for other  
11 claimants as well. I know that NIOSH is  
12 probably tired of hearing from me and I  
13 apologize, but I really feel like some of these  
14 things need to be addressed.

15 My father, James Good, worked at Mound  
16 Laboratory from 1949 to 1957. He died in 1960  
17 when I was ten, the eldest of four children.  
18 His death certificate says he died of Hodgkin's  
19 Disease. For many id-- year-- years I didn't  
20 even have any idea what he did at work. I just  
21 knew he was a physicist.

22 In 2002 my mother applied for EEOICPA and I  
23 started helping her with the claim in 2005.  
24 We're currently on our third draft dose  
25 reconstruction. All three have been

1           overestimates. The first one gave my father 44  
2           rem, and when I ran the IREP the probability of  
3           causation came out to be about 18 percent. I  
4           submitted some additional information and NIOSH  
5           also revised the way they were dosing the  
6           lymphatic system, so the second dose  
7           reconstruction came out to 126 rem with a  
8           probability of causation of 44.7 percent. I  
9           submitted additional information and dose  
10          reconstruction number three came out to 159 rem  
11          with a probability of causation of 38 percent.  
12          So all three of these were overestimates and I  
13          still -- well, I still don't think that all the  
14          radioactive exposure's been considered, but I  
15          don't have a scientific background so I can't  
16          follow all the ins and outs of how dose  
17          reconstruction is calculated. But I can think  
18          logically, and it makes no sense to me that as  
19          the rem goes up, the probability of causation  
20          goes down, and this is something NIOSH hasn't  
21          really been able to explain to me.  
22          My mother and I also know that there are  
23          monitoring records that are missing from my  
24          father. NIOSH disagrees with this and feels  
25          that the records are complete. There's a

1 period of several years that he had a few --  
2 the he had few bioassay or dosimeter readings.  
3 NIOSH says this is because he was no longer  
4 working with radioactive materials. But that  
5 makes no sense as he was a research physicist.  
6 He had five -- or he had six months worth of  
7 dosimeter readings in 1954, six months in 1955  
8 and none at all in 1956, which results in him  
9 getting no missed dose for that year in the  
10 dose reconstruction. Except for polonium, his  
11 bioassay records are sketchy. He had seven  
12 thorium results in 1956, although the papers he  
13 wrote on thorium were mainly written in 1955,  
14 so these records are either missing or he  
15 wasn't monitored. He had one result for  
16 protoactinium (sic) within the time frame of  
17 the dose reconstruction.

18 So what was -- what was he working on? I found  
19 papers that he'd written that document some of  
20 the -- what he was doing, and I'm also waiting  
21 for a couple Freedom of Information requests.  
22 Research papers show that he was working on  
23 bismuth, uranium, bazillion monozite (sic),  
24 cobalt-60, rare earth elements, polonium and  
25 polonium metal compounds, lanthanum -- which

1           was used as a preliminary for actinium work,  
2           and a literature search for the preparation and  
3           usage of zirconium/tritium targets. I found no  
4           papers he wrote yet that show he worked on --  
5           with actinium or tritium, but Mound worked on a  
6           need-to-know basis. And although people often  
7           worked in teams, they didn't seem to look at --  
8           look things up for other researchers, so it  
9           seems likely that the work he did was in  
10          preparation for later work with actinium and  
11          tritium, but no documentation survived.  
12          NIOSH has told me a number of times it really  
13          doesn't matter if he worked with other  
14          radionuclides that aren't in his dose  
15          reconstruction because their overestimate of  
16          polonium exposure would cover these. This may  
17          or may not be true. I -- I can't tell, but it  
18          doesn't seem like good science to approach it  
19          that way.

20          My mother clearly remembers an incident in 1950  
21          when my father was sent home from work and  
22          remained off for several days. His dosimeter  
23          records indicate that he did -- didn't work in  
24          his lab for 11 days following the incident.  
25          His supervisor, George Pish\*, called my mother

1 to warn her he was coming home early because of  
2 an exposure and he might be upset. When he was  
3 home -- while he was home he drove urine and  
4 fecal samples to Mound every day and was sent  
5 home, presumably because the samples were too  
6 hot to allow his return. Interestingly enough,  
7 I found a document, MLM-177, that outlines  
8 Mound's policy on exposure for this time  
9 period. It states that a worker who has a  
10 count higher than 12 C. per minute per 50  
11 milliliters is removed from his job or put to  
12 work in an area where the possibility of  
13 exposure is more remote, or he's barred from  
14 the operating area altogether. It says nothing  
15 of what would cause a person to be removed from  
16 the site for several days.

17 There's no record of these samples. His  
18 polonium bioassay results for the day of the  
19 incident was zero. There was no surviving  
20 radium results. We don't even know at this  
21 point what they were testing for. The incident  
22 report discusses how a fire started in the  
23 glovebox he was working in as he was heating a  
24 vial containing polonium with a torch. An  
25 explosion caused the gauntlets and rings to be

1           blown off and caught a piece of paper on fire.  
2           My father smothered the fire with a smock. The  
3           incident report says his next move was to  
4           replace the gauntlets, thereby preventing  
5           conta-- further contamination of the lab. Then  
6           he checked and found his hands and pants were  
7           hot. During the rest of the cleanup, a vial of  
8           radium was spilled in another hood and he was  
9           exposed to this as well.

10          NIOSH has given him credit for the radium  
11          exposure, but not for the polonium exposure  
12          because they say the polonium didn't spill.  
13          There was an explosion in the glovebox. His  
14          hands and pants tested hot. He prevented  
15          further contamination. NIOSH says the incident  
16          report is incorrect and should have said to  
17          prevent further potential contamination. I  
18          don't see how they can determine this so long  
19          after the fact.

20          In the first dose reconstruction he was given  
21          no credit for this incident. The second dose  
22          reconstruction gave him a little over one rem,  
23          and the third one gave him 20 rem exposure for  
24          the radium but none for the polonium.

25          One of the big issues that's being raised at

1 the site -- in the site profile review is  
2 radon. When I looked at my dad's dose  
3 reconstruction there was no mention of radon.  
4 When I asked about this I was told that it  
5 wouldn't be applicable because it would not add  
6 dose to the cancer site. This seems odd  
7 because the organ they used as a dose  
8 equivalent -- for external radiation, at least  
9 -- was the lungs.

10 And at Mound there were handwritten logbooks  
11 for the different buildings that discuss  
12 everyday occurrences, such as problems with the  
13 ventilation system. I've found copies of  
14 logbook excerpts from several buildings,  
15 including the R building where my father  
16 worked. I sent these to NIOSH to document  
17 building-wide incidents that my father was  
18 exposed to, and also to ask -- and also asked  
19 that they be used for all applicable claimants  
20 since they reference people by name. NIOSH  
21 said that they couldn't use them for other  
22 claimants because of a privacy issue, and they  
23 added no dose to my father's claim as there  
24 were no accidents mentioning him by name.  
25 The Mound building site profile review

1 discusses how negative pressure would suck  
2 radon into R and SW buildings, and this is  
3 borne out by the logbooks. I don't know where  
4 the originals of these are, but it would be  
5 really good if we could find them.

6 We found Mound medical records where my father  
7 had gone to the on-site doctor's office for  
8 treatments of cuts and burns. One of these  
9 reports that my father -- getting a piece of  
10 hot steel in his eye. The first time I asked  
11 NIOSH about this I was told that hot meant  
12 temperature rather than radioactive, but the  
13 word -- because the word hot was not in  
14 quotation marks. I asked how they determined  
15 this. NIOSH referred me to OTIB-0022, Guidance  
16 on Wound Modeling for Internal Dose  
17 Reconstruction. It's not specific enough to  
18 answer my question. I asked NIOSH for the  
19 written documentation or the basis that they  
20 were making this determination on and they  
21 declined to answer.

22 Next they told me that if it was radioactive it  
23 wouldn't have added to the -- any dose to the  
24 cancer site. This seems hard to believe as the  
25 cancer site was the lymph nodes on the neck

1 below his eye.

2 When my mother has asked about overtime or how  
3 the radiation from machines my father worked  
4 with was accounted for, she was told that the  
5 dosimeter bioassay testing would have picked up  
6 all the radiation he was exposed to, no matter  
7 how many hours a week he worked or what  
8 machines he used. I know that not all the  
9 materials were bioassayed for, especially in a  
10 research lab, and I don't think all types of  
11 radiation was monitored by dosimeters -- could  
12 be monitored by the dosimeters, so I don't feel  
13 comfortable with this explanation.

14 I also think there's a possibility that NIOSH  
15 may be underestimating the neutron dose from  
16 the early years at Mound. For about half a  
17 year in 1950 my father's neutron dose was  
18 reported in reps rather than rems. NIOSH  
19 states that reps and rems are roughly  
20 equivalent. The 1950 AEC publication, Control  
21 of Radiation Hazards in the Atomic Energy  
22 Program, states that neutrons and protons --  
23 that for neutrons and protons one rep is  
24 equivalent to ten rem. Maybe a ten-to-one  
25 discrepancy isn't enough to be significant, but

1 I'd feel more comfortable if this were  
2 examined.

3 NIOSH also states that there's no indication  
4 that Mound subtracted any background radiation  
5 from dosimeter readings from 1949 to 1957.

6 Well, equally, there's no indication that they  
7 didn't. I would feel much more comfortable if  
8 this was based on actual information rather  
9 than guessing.

10 Thank you very much.

11 **DR. ZIEMER:** Thank you. Thank you, Deb, for  
12 sharing that with us.

13 I inadvertently skipped over Sandra Baldrige.  
14 Sandra's with us again this evening, and I  
15 think we now have some material that -- is this  
16 Sandra's material that was distributed? Yes.  
17 Board members, you should have a packet.

18 **MS. BALDRIDGE:** That's actually a summary of  
19 the documents in the petition, and I -- it's  
20 helped me because if I've got an idea in my  
21 head and I'm not sure where I read it, I can  
22 reference my summary sheets. I thought it  
23 would be beneficial for all of you.

24 But I would like to thank you for this  
25 opportunity to speak again this evening -- I'll

1           adjust since I'm a little taller -- I will try  
2           to make it brief.

3           I do really appreciate the patience that I have  
4           seen not only with the Board members but also  
5           the participants. I haven't seen any unusual  
6           facial expressions or rolling of the eyes or  
7           whatever -- impatience with presentations in  
8           the past.

9           I do want to refer just to a couple items that  
10          I think are kind of interesting. I have a lot  
11          more highlighted but I've chosen to cut it  
12          down. The summary primarily outlines  
13          incidences or high exposures and a few other  
14          interesting items. The reference letters and  
15          numbers to the side were my originals. I  
16          didn't have the time to do the comparison for  
17          you. The first statement -- you can just  
18          listen and you'll be able to find them later.  
19          This is from a letter, 1951, it says: Cancer  
20          is a specific industrial hazard of the atomic  
21          energy business. This significant fact  
22          justifies, in the opinion of the committee, the  
23          continued exploitation of the commission's  
24          special facilities for radiation and cancer  
25          research, diagnosis and therapy. The committee

1 recommends the cancer program be vigorously  
2 pursued as a humanitarian duty to the nation.  
3 I have trouble with that.

4 **DR. ZIEMER:** Sandra, what -- what agency was  
5 that from?

6 **MS. BALDRIDGE:** That's a letter --

7 **DR. ZIEMER:** I'm wondering if -- that -- that  
8 sounds like a cancer research --

9 **MS. BALDRIDGE:** Advisory Committee for Biology  
10 and Medicine. That was in a -- a  
11 correspondence. It's listed as PE-560, a  
12 letter to Dean from Goodpasture.

13 **DR. ZIEMER:** PE-560?

14 **MS. BALDRIDGE:** Yes.

15 **DR. ZIEMER:** Thank you.

16 **MS. BALDRIDGE:** Then identified under index  
17 section six of PE-544a, talk-- talking about  
18 the sludge furnace alterations for oxidation of  
19 thorium residues in Plant 6. It says: There  
20 have been 30 known fires in the past four years  
21 of pyrophoric thorium residues. In one case  
22 the fire burned through a concrete storage pad.  
23 Some drums had been stored on soil. In  
24 addition to known residues, there are 1,300  
25 drums of unknown pyrophoric residues in

1 storage. The operator will manually place a  
2 packed thorium charge of approximately 30  
3 pounds in the cradle of a hoist.

4 And my question was, not knowing the process, I  
5 don't know how he would lift -- pack and lift  
6 unless he brought that into some kind of  
7 proximity with his body.

8 Thorium residues will be dumped and mixed on a  
9 four by eight-foot steel table. Suitable  
10 shovels and hoes and rakes will be provided for  
11 mixing. The storage area will be temporarily  
12 enclosed by a six-foot cyclone fence to prevent  
13 cross-contamination of thorium and uranium  
14 materials.

15 And my comment is, what stops the wind? The  
16 MAC which we have been using for thorium is  
17 approximately 20 times that presently  
18 recommended by the National Committee on  
19 Radiation Protection.

20 PE-178g, talking about cleaning out the burnout  
21 oxide conveyors in Plant 5. Up to a year ago  
22 the operator had to position himself under the  
23 inspection plate to remove it for access under  
24 the oxide conveyor. This caused much of the  
25 oxide to come down upon him. Breathing zone

1 samples results of this operation were found to  
2 be 97,000 times MAC.  
3 PE-371c, MACs of 608, with nothing in process  
4 to improve the condition. MAC of 465, with  
5 nothing in process to improve the conditions.  
6 Then in section four, it's probably under the  
7 addendum, in PE-397e, which was a health  
8 protection review from 1964, it talks about  
9 recycled materials from GE-HAPO -- HAPO -- are  
10 being processed in several plant areas. They  
11 contain impurities. They increase in alpha-  
12 beta and/or gamma emitters.  
13 Then it also -- under that, it says: Consider  
14 neutron film. Detailed study of the neutron  
15 generator is needed. Potential air  
16 contamination from tritium.  
17 My question is, since all these documents are  
18 in NIOSH's possession, I was wondering if they  
19 had checked workers' records for any of these  
20 locations and dates to see if these exposures  
21 have been confirmed in the records of dose.  
22 And I thank you.  
23 **DR. ZIEMER:** Thank you very much. That last  
24 one on the neutron film sounds to me like it  
25 could be a deuteron tritium accelerator. I'll

1           just throw that out, may be something we can  
2           follow up on.  If they're talking about -- or  
3           that would be a tritium target, a deuteron  
4           accelerated to a tritium target to give a  
5           neutron -- I think, help me out, John Poston,  
6           maybe a 14 MeV neutron.

7           He's shaking his head.  Is that -- two of us  
8           agree on something here, so it must be right,  
9           but I hadn't we -- we had asked before about  
10          the neutron issue and this may be partially an  
11          answer to that.

12          Now does this come -- this comes out of that  
13          site information --

14          **MS. BALDRIDGE:**  Right.

15          **DR. ZIEMER:**  Right.  So I'm wondering if they  
16          might have had a DT accelerator.  Those are  
17          often used as moisture gauges, actually.  So --  
18          okay, thank you very much, Sandra.

19          Now Andrew Evaskovich -- may not get your last  
20          name quite right, Andrew, but it's close --  
21          close enough for government work, right?

22          **MR. EVASKOVICH:**  Well, as I've said before, you  
23          can call me Evak, that's what everybody else  
24          does.

25          **DR. ZIEMER:**  Right.

1           **MR. EVASKOVICH:** My name is Andrew Evaskovich.  
2           I'm with the --

3           **DR. ZIEMER:** Evaskovich.

4           **MR. EVASKOVICH:** -- from Los Alamos. I'm with  
5           the Air National Guards Union of America, Local  
6           Number 69 there. I just basically wanted to  
7           touch on some issues concerning like data  
8           capture. During the worker outreach meetings  
9           we had a person from NNSA who -- I guess the  
10          best word would be -- would be crashed our  
11          meeting. This was arranged with NIOSH to come  
12          talk with us and for us to present information  
13          in order to improve the site profile, and she  
14          showed up. I didn't know who she was. Other  
15          members knew her because they knew her dad, so  
16          they allowed her to attend. However, I think  
17          once people found out she was with the NNSA it  
18          cast a pall upon the meeting and therefore not  
19          all the information was captured, and her name  
20          was Philippa Greigo\*, and I spoke to Libby  
21          Hunt\* about this earlier, but I wanted it to be  
22          on the record.

23          And being that Mr. Podonsky (sic) was here  
24          yesterday talking about records and the fact  
25          that there are records in a warehouse that need

1           to be retrieved, I think there are some issues  
2           concerning that. I've spoken with Congressman  
3           Udall's office about this. Actually they  
4           brought it to my attention, but my  
5           understanding is, as far as those records go,  
6           the hospital is still in control of getting  
7           access to them and individuals have to request  
8           that their records be looked for and saved. So  
9           -- because there's a -- the vast mixture of  
10          records. They're not only former AEC  
11          employees, because the AEC controlled the  
12          hospital and the records up to the mid-- early  
13          to mid-'60s, and it was turned over to the  
14          county. And sometime -- the records were moved  
15          into this warehouse and basically discarded.  
16          And like Mr. Podonsky (sic) mentioned, there's  
17          an issue with the Hantavirus because rodents  
18          were moving in and living among the records and  
19          condition of the records is poor.

20          What I would like to request among the Board  
21          and Mr. Elliott of NIOSH, and other persons  
22          involved, is just to ensure that the records  
23          are preserved for the purposes of using them  
24          for reconstruction because if individuals do  
25          not know or become ill later down the -- you

1 know, down the road or after time, and they're  
2 not aware of this and they haven't requested to  
3 have those records preserved, they may be lost.  
4 So I think we need to preserve all the records  
5 until we can determine whose records are there  
6 and whether or not they need to be saved.  
7 My final issue would be the LANL RaLa SEC  
8 because that was approved in September in Las  
9 Vegas, and upon further research, in my opinion  
10 the -- the SEC did not cover enough areas  
11 because there were exposures to areas aside  
12 from the ones listed in the SEC because of the  
13 experiments that were conducted. There were  
14 radioactive clouds that went to local  
15 communities, as well as into the Los Alamos  
16 area, and there are documented incidents in the  
17 human radiation experiments report prepared by  
18 the President's Council in the '90s that refer  
19 to these experiments and the fact that there  
20 was contamination on the main (unintelligible)  
21 road and Technical Area 1 from RaLa clouds.  
22 I think we have a chance to correct this with  
23 the upcoming SEC that Harriet Ruiz has -- her  
24 petition that Harriet Ruiz has submitted, that  
25 will be reviewed I hope in Denver as far as the

1 evaluation report. So I think this gives  
2 everybody a chance to get another bite at the  
3 apple and I'm looking forward to that coming up  
4 in Denver.

5 I'd like to thank you for your time.

6 **DR. ZIEMER:** Thank you. Andrew, if you could  
7 clarify, I'm -- are the records that you are  
8 referring to, are those the same ones we were  
9 talking about earlier or are there two sets of  
10 records that --

11 **MR. EVASKOVICH:** Which are we referring to?  
12 This is with --

13 **DR. ZIEMER:** We were talking about some --

14 **MR. EVASKOVICH:** -- Los Alamos.

15 **DR. ZIEMER:** -- and I think Glen was talking  
16 about some that I got the impression had been  
17 buried.

18 (Multiple off-microphone remarks, none clear  
19 enough for identification of the speaker or  
20 transcription of content.)

21 **DR. ZIEMER:** Were those the Mound records?

22 **MR. EVASKOVICH:** Those are the Mound records.

23 **DR. ZIEMER:** But -- but were buried at Los  
24 Alamos.

25 **MR. EVASKOVICH:** Yes.

1           **DR. ZIEMER:** You're talking about Los Alamos  
2 records that are in a -- some sort of  
3 warehouse.

4           **MR. EVASKOVICH:** Right, those were --

5           **DR. ZIEMER:** Okay, I --

6           **MR. EVASKOVICH:** -- from the hospital, but they  
7 were --

8           **DR. ZIEMER:** Okay. You had talked about I  
9 think sort of biological contamination and --

10          **MR. EVASKOVICH:** Correct.

11          **DR. ZIEMER:** -- and I wasn't sure whether that  
12 was another set of records and that's --

13          **MR. EVASKOVICH:** Yeah, they're two different  
14 sets of records. The --

15          **DR. ZIEMER:** Thank you.

16          **MR. EVASKOVICH:** -- Mound records are different  
17 from these records. Mr. Podonsky (sic)  
18 mentioned that the DOE has been working to try  
19 to recover those records. Michelle  
20 (unintelligible) Ortiz from Tom Udall's office  
21 has been working on this for quite a while, as  
22 well, for the last I believe eight months. And  
23 I just want -- and she had informed me that  
24 people have to request individually for those  
25 records. I -- I think that the whole block of

1 records needs to be saved and they need to be,  
2 you know, combed through to determine what is  
3 valuable for EEOICPA purposes.

4 **DR. ZIEMER:** Is this hospital still controlled  
5 by Los Alamos, or did you say the county now  
6 controls it?

7 **MR. EVASKOVICH:** The county took it over I  
8 believe in the early '60s and I think now it's  
9 a private corporation that has the hospital.  
10 And there was -- that was part of the problem  
11 was who owned the records, who controlled the  
12 records, you know. Several agencies have been  
13 involved, the Department of Energy, the county  
14 was involved for a while, the hospital itself  
15 and that corporation.

16 **DR. ZIEMER:** Okay --

17 **MR. EVASKOVICH:** (Unintelligible)

18 **DR. ZIEMER:** -- Libby and Glen are both aware  
19 of the details on this, are they not? And --

20 **MR. EVASKOVICH:** Yeah, I hope so. I know that  
21 --

22 **MR. SCHOFIELD:** Paul, could I (unintelligible)  
23 on this --

24 **DR. ZIEMER:** Yeah, additional -- Phillip has  
25 some comments --

1           **MR. SCHOFIELD:** Some of those records are  
2           suspected to have low level alpha contamination  
3           on them.

4           **DR. ZIEMER:** As well as the -- whatever --

5           **MR. SCHOFIELD:** Biological contamination, yes.  
6           The other thing is, these -- a lot of these  
7           records, the way medical records were done in  
8           Los Alamos, everybody's records, regardless of  
9           the doctor you saw, went into the same file.  
10          And this is true from the day you started there  
11          or the day you were born. So those records  
12          will cover -- in some cases they will cover a  
13          person's entire life. Others it will cover  
14          from the day they started up in Los Alamos or  
15          moved to Los Alamos, whether they were a child  
16          or a spouse of a worker or a worker. And  
17          that's what the -- that's why these -- this is  
18          such a big issue there is because the fact  
19          that, unlike where most places your doctor  
20          keeps his own set of records. There they were  
21          collected from all doctors, from any time you  
22          saw a doctor, nurse or anybody, they all went  
23          in the same file. And they were just literally  
24          thrown in -- this warehouse is part of the old  
25          Zia shops area, and they were just thrown in

1           there so they've had a lot of water damage.  
2           They've had mice, they've had squirrels in  
3           there, and there is indication, like I said,  
4           that some of them may have some low level alpha  
5           contamination.

6           **DR. ZIEMER:** Thank you. Thank you, Andrew.

7           **MR. EVASKOVICH:** Thank you.

8           **DR. ZIEMER:** Don Kummler.

9           **MR. KUMMLER:** My name is Don Kummler and I want  
10          to thank the Board for the opportunity to speak  
11          tonight. And I'm somewhat hesitant about  
12          speaking and I hope I don't regret this later  
13          on.

14          Today I picked up some information off the back  
15          table and one of the pieces was a VHS tape,  
16          which I took home and looked at it tonight and  
17          upon reviewing the tape, which was -- had a lot  
18          of good information on it, I -- I got a concern  
19          as -- as to -- with the reconstruction process  
20          in determining exposure.

21          I worked at Fernald and the first thing I would  
22          do in the morning is I would go to the laundry  
23          room and pick out the cleanest pair of overalls  
24          and the cleanest pair of gloves I could find,  
25          and then I would go on to the work site and

1 work. Well, upon leaving the site, when the  
2 job was finished, I had a clean pair of  
3 coveralls and gloves in the gang box that I --  
4 I hadn't used. I used -- had them there for a  
5 spare set of clothing in case I would need them  
6 during the day. And upon leaving the --  
7 somebody came out and checked my -- my shoes,  
8 my tools, and he noticed I had this pair of  
9 coveralls and these gloves in -- in the gang  
10 box and he checked them and pegged needle. And  
11 I was concerned because just recently I filed a  
12 claim a couple of weeks ago for skin cancer  
13 and, as you can see, I'm dealing with skin  
14 cancer all the time, pre-cancer, basal cell,  
15 the other one, squamous cell carcinoma.  
16 And so my concern is -- my question is, to the  
17 best of your knowledge, has this concern been  
18 brought to your attention previously, or is  
19 this something you just heard of, you know?

20 **DR. ZIEMER:** That's one of the cancers on the  
21 list, is it -- I need some help here, but  
22 squamous cell and -- what was the other one?

23 **MR. KUMMLER:** Basal cell.

24 **DR. ZIEMER:** -- basal cell, those are both on  
25 the list, are they not? So -- and we've had

1 other cases of cancer that have been brought to  
2 the -- for dose reconstruction.

3 **MR. KUMMLER:** I guess my concern is in -- in --  
4 during -- you know, watching the tape and the  
5 reconstruction process of determining your  
6 radiation exposure, how would that fit in if  
7 you were -- first thing in the morning you're  
8 wearing contaminated gloves and you're wearing  
9 contaminated clothing, and you're sweating all  
10 day and you're wiping your forehead, you know,  
11 and this is where I picked up the -- the -- the  
12 skin cancer is on my forehead and my arms, and  
13 I just wondered if -- if this has ever come to  
14 your attention, you know, that, you know, the  
15 contaminated clothing, you know, that the --  
16 that the workers were wearing.

17 **DR. ZIEMER:** If -- if that information was  
18 provided to the dose reconstructor as -- in  
19 your interview process, I assume you have  
20 provided this kind of information?

21 **MR. KUMMLER:** No, I didn't -- I didn't -- I  
22 didn't tell him about that, I just -- I don't  
23 think I did. I just told him, you know, about  
24 my skin cancers and I didn't explain that to  
25 him. I -- I'm really new at this. I -- just

1 two weeks ago I got some information --

2 **DR. ZIEMER:** But you have -- you have put in a  
3 claim?

4 **MR. KUMMLER:** Yes, I have.

5 **DR. ZIEMER:** I think probably you -- you may  
6 need to talk with one of -- and Larry can get  
7 you -- make sure that that's in your record so  
8 the dose reconstructor can take into  
9 consideration whatever needs to be done in that  
10 case.

11 **MR. KUMMLER:** All right. Thank you.

12 **DR. ZIEMER:** Larry, you can look at that issue.  
13 Right?

14 Brad, you have a comment there?

15 **MR. CLAWSON:** Yeah, I -- I just had a question.  
16 On -- on your coveralls and so forth like that,  
17 Fernald -- did they do their own laundry  
18 service?

19 **MR. KUMMLER:** Yes, they did.

20 **MR. CLAWSON:** So everything was done in--  
21 inside --

22 **MR. KUMMLER:** Yes, in house.

23 **MR. CLAWSON:** -- in Fernald facility?

24 **MR. KUMMLER:** It was all done in house, yeah.

25 **MR. CLAWSON:** Okay, I -- thank you.

1           **DR. ZIEMER:** Phil, did you have an additional  
2 comment?

3           **MR. SCHOFIELD:** I just (unintelligible) one  
4 quick comment on that. Do you know if your --  
5 all the clean laundry was monitored before it  
6 was returned to be put back in service or not?

7           **MR. KUMMLER:** All I know is that when -- at the  
8 end of the day I would turn in my work gloves  
9 and my coveralls, and the next day I would go  
10 back to the laundry room and pick up a new pair  
11 of coveralls. I -- I don't know what they --  
12 how they -- how they monitor them at all. I  
13 just know what I did, you know, just -- I would  
14 -- I would go find the best pair of coveralls  
15 and cleanest pair of gloves I could find to  
16 work with that day, 'cause some of them were  
17 pretty rough so I found the best ones, you  
18 know. I was just concerned because, you know,  
19 of -- you know, I pegged the needle with what I  
20 had.

21           **MR. SCHOFIELD:** Did you ever find any  
22 (unintelligible) imbedded in the clothing or  
23 pockets?

24           **MR. KUMMLER:** I can't say I have, no.

25           **DR. ZIEMER:** Well, again, pro-- provide the

1 necessary information --

2 **MR. KUMMLER:** All right.

3 **DR. ZIEMER:** -- to NIOSH so that they can take  
4 that into consideration. Recognize the normal  
5 practice, and there's always quirks in the  
6 system, the normal practice is to not only do  
7 the cleaning but to monitor the -- the garments  
8 before they go back into circulation. And  
9 there typically is a -- you know, what -- what  
10 is a clean garment, and you know, hopefully one  
11 would be starting at least with a clean garment  
12 --

13 **MR. KUMMLER:** Yeah, these were --

14 **DR. ZIEMER:** -- but that -- that doesn't mean  
15 it would look clean from a -- as far as white  
16 is white, but you want it to be radiologically  
17 clean.

18 **MR. KUMMLER:** Right.

19 **DR. ZIEMER:** But at least raise the issue in  
20 your -- in your information input to the  
21 system.

22 **MR. KUMMLER:** Okay. Thank you.

23 **DR. ZIEMER:** Yes, and we have another comment  
24 from Sandra?

25 **MS. BALDRIDGE:** Yes, I don't know if I have the

1 laundry documents in the SEC petition or not,  
2 but I do have documents and there was  
3 monitoring where they determined that the  
4 inside of the gloves were contaminated and  
5 there were a lot of issues about the expense,  
6 how they were going to do this and -- and who  
7 was going to be provided clothing changes.  
8 Subcontractors came in and worked in street  
9 clothes, left and took the contamination home  
10 with them because they were always looking to  
11 cut the budget.

12 **DR. ZIEMER:** And clearly there could be issues  
13 of that type, or similar issues, at different  
14 sites, depending on their practices and  
15 situations, but at least you want the dose  
16 reconstructor to be able to take a look at --  
17 at the issue.

18 Catherine Tidwell. Catherine wasn't sure  
19 whether she wanted to come or not, but  
20 Catherine, you can make that decision now.

21 **MS. TIDWELL:** Thank you. My name is Catherine  
22 Tidwell. I'm not a site profiler. I'm not a  
23 scientist. I'm the widow of a former Mound  
24 employee. He worked at the Mound from 1963 to  
25 1970 in the SM building, which notoriously I

1           guess was very hot. He was never allowed to  
2           talk about what he did and -- and we had five  
3           little children so there wasn't a lot of chance  
4           for him to talk anyway.

5           Prior to that he worked in the aircraft nuclear  
6           propulsion department, General Electric in  
7           Cincinnati. He worked there from '57 to '61.  
8           They do have record that he worked there, but  
9           all his exposure records -- I don't know, they  
10          just -- they're gone. I don't know where  
11          they're at.

12          In 1987 he was diagnosed with liver failure.  
13          Because I am an RN, I knew the physician at the  
14          Mount, Dr. Jim Ruffner\*, and he worked with my  
15          husband and I and my husband did have a liver  
16          transplant in 1994. He had it at the  
17          University Hospital in Cincinnati, and USTUR,  
18          the United States TransUranium Registry, was  
19          extremely interested in his case. He did not  
20          have cancer, but they very much wanted his  
21          liver when it was removed. We did agree to  
22          give it to them. They said at the time he was  
23          the only living donor of a contaminated organ.  
24          It took four years for us to get a report back,  
25          and it did say that he had a significant uptake

1 of plutonium which was in his liver. And I  
2 don't have exact quote from them, but they said  
3 it wasn't as much as people in Russia, which --  
4 you know, I feel sorry for those people, but I  
5 have no control over that.

6 He did apply, as soon as he was allowed, to the  
7 EEOICP. His case was denied because it was not  
8 malignant. And my question is, will there ever  
9 be any consideration given to anything besides  
10 a malignancy?

11 **DR. ZIEMER:** There -- there's another part of  
12 the program --

13 **DR. MELIUS:** Subtitle E.

14 **DR. ZIEMER:** -- Subtitle E, which -- maybe  
15 Larry can address this a little bit -- that  
16 possibly this might come under.

17 **MS. TIDWELL:** Okay, I --

18 **MR. ELLIOTT:** (Off microphone) (Unintelligible)  
19 better than I.

20 **MS. TIDWELL:** One other thing -- I mean he  
21 suffered for, you know, 18 -- well, 17 years,  
22 and he did have some squamous cell, which I  
23 have submitted and NIOSH is doing a dose  
24 reconstruction but, you know, I don't have a  
25 whole lot of faith in that.

1           **DR. ZIEMER:** Yeah, there is -- there is that  
2           issue on -- as far as the liver's concerned --

3           **MS. TIDWELL:** But the -- you know, the liver  
4           demise was --

5           **DR. ZIEMER:** But Larry will describe for you  
6           the -- the provisions of the...

7           **MS. TIDWELL:** Okay.

8           **MR. ELLIOTT:** Yes, under Subtitle E now -- it's  
9           part of the compensation program Act, there's a  
10          provision that covers toxic chemical exposures,  
11          and you can submit your claim for the liver in  
12          that way. I don't know if you've done that or  
13          not, but Jeff Kotsch is here from DOL. He  
14          could perhaps help you in a little more detail  
15          than I can since --

16          **DR. ZIEMER:** That -- that would go to the  
17          Department of Labor rather than NIOSH.

18          **MR. ELLIOTT:** Rather than NIOSH.

19          **MS. TIDWELL:** Okay. Wasn't that automatically  
20          going to --

21          **DR. ZIEMER:** Well, okay, Labor --

22          **MS. TIDWELL:** -- flip over?

23          **DR. ZIEMER:** -- is involved at the front end of  
24          this, also, but I'm not sure what happens if --  
25          if that came to --

1           **MS. TIDWELL:** I mean do I have to submit --

2           **DR. ZIEMER:** -- to Labor, would -- would -- how  
3 would that sort out if --

4           **MR. KOTSCH:** Normally --

5           **DR. ZIEMER:** Yeah.

6           **MR. KOTSCH:** Normally the -- the case would  
7 transfer from B to -- I mean the B cases are  
8 considered under E automatically.

9           **DR. ZIEMER:** Yeah, so --

10          **MR. KOTSCH:** But B is only, unfortunately,  
11 applies to malignant --

12          **MS. TIDWELL:** Right.

13          **MR. KOTSCH:** -- carcinomas.

14          **MS. TIDWELL:** Right.

15          **MR. KOTSCH:** But I know the way the procedure  
16 was supposed to work was that all the -- all  
17 the B cases that we had in house would -- once  
18 we got Part E and became active with that, were  
19 -- were to be considered under Part E.

20          **MS. TIDWELL:** How -- how do I know if --

21          **MR. KOTSCH:** Let me take your -- take your name  
22 and --

23          **MS. TIDWELL:** Okay.

24          **MR. KOTSCH:** -- (unintelligible) --

25          **DR. ZIEMER:** They can follow up for you and

1 figure out what's --

2 **MS. TIDWELL:** Okay.

3 **DR. ZIEMER:** -- what should --

4 **MR. KOTSCH:** Right.

5 **DR. ZIEMER:** If it didn't happen, they can make  
6 it happen.

7 **MR. KOTSCH:** Yeah, we can make it happen and it  
8 should have -- it should be happening if it  
9 hasn't.

10 **MS. TIDWELL:** Okay. Thank you very much.

11 **DR. ZIEMER:** That completes the list of  
12 individuals who have asked to speak, but let me  
13 ask if there's anyone else -- yes, please  
14 approach the mike and you can identify yourself  
15 for us.

16 **MS. CRAWFORD:** My name is Lisa Crawford. I'm  
17 the president of Fernald Residents for  
18 Environmental Safety and Health, with a local  
19 environmental organization that has fought  
20 Fernald and finally cleaned it up for the last  
21 22 years.

22 I spoke at several hearings on the EICIPO,  
23 whatever initials. I just -- I really -- this  
24 is a really emotional issue for folks around  
25 all the different sites. You know, I'm -- I'm

1 going to be real honest tonight -- which I'm  
2 honest always anyway, that's why we're in the  
3 position we're in now -- and just say that  
4 NIOSH and DOL should be totally ashamed of  
5 themselves. This is a very complicated,  
6 excessive, burden on the individual that should  
7 not be so.

8 I have a sister-in-law who has been through  
9 this process for over three years now. Finally  
10 she was able to get the compensation. Her  
11 father worked at Fernald, not for a very long  
12 time; he was a young man in his early 30s. And  
13 it took three years. It was kicked back. It  
14 was here. They lost the paperwork. This  
15 happened, that happened. She said to me six  
16 weeks ago when it was finally settled, I FAXed  
17 them, I e-mailed them, I snail mailed them, I  
18 FedExed them, I UPSed them and they were all  
19 lost. She said I could have spit them and they  
20 probably would have lost those somewhere along  
21 the way. This clearly shows us that there's a  
22 problem.

23 The gentleman who spoke earlier, this gentleman  
24 right here -- I don't remember his name -- he  
25 hit the nail on the head. Yes, you should be

1 talking to every single worker before you start  
2 anything else. In the early years at Fernald  
3 when they began the cleanup process, we  
4 encouraged our site folks to talk to the  
5 oldtime workers. And I'll be frank about it,  
6 they knew where the bodies were buried. They  
7 knew where stuff was buried around the site  
8 that nobody else knew, because they were the  
9 ones that actually buried it. It's a good  
10 policy to go back and talk to people. That's  
11 one issue.

12 The other issue he brought up was, you know, we  
13 should -- dose reconstructions -- we had one at  
14 Fernald. John Till did it. He was veering in  
15 the wrong direction so we as a community  
16 brought in our own specialist and analyst and  
17 veered him back in the right direction, so we  
18 felt very comfortable that we had a good dose  
19 reconstruction. You can't take overall data  
20 and apply it to individual people. It does not  
21 work.

22 These workers worked very hard under poor  
23 conditions -- I -- I will speak for the Fernald  
24 workers because the conditions were absolutely  
25 appallingly poor.

1 Another issue that this gentleman spoke about  
2 was -- and I think this lady over here -- you  
3 know, those of us who live in the community in  
4 the early years of Fernald when we were  
5 drinking -- I drank from -- my family drank  
6 from a contaminated well. Tons and tons of  
7 uranium dust was distributed all over this  
8 community, and the DOE people would sit in  
9 these public meetings and say to us the dust  
10 never left the site. That's like telling a  
11 worker in a building you didn't get anything.  
12 That's bull and we all know it. You know, is  
13 there a plastic bubble around this facility or  
14 all the facilities? No, we know there's not.  
15 Was there a plastic bubble around these  
16 workers? No. It's -- it's very emotional. We  
17 know that and I know you all, as you sit around  
18 the table, you hear this day in and day out.  
19 It's emotional for those of us, too.  
20 And my final comments are, there's been a  
21 tremendous amount of work done on the Fernald  
22 facility. There were two lawsuits filed, one  
23 by the residents, one by the workers. There is  
24 so much data and information that's available  
25 if somebody will go and look for it. There's a

1 law firm that has reams and reams and reams of  
2 information. Don't put the cart before the  
3 horse. If it's there and it's available, I  
4 would encourage all of you to go and find it  
5 and look for it.

6 And again I would just say NIOSH and DOL should  
7 be totally ashamed of themselves. This is a  
8 long and tedious process. It makes the people  
9 in the community and the people who are  
10 fighting for their loved ones feel stupid,  
11 worthless. You know, if I send you something  
12 five or six times and you lose it, I think  
13 you're incompetent; it certainly isn't me  
14 that's incompetent. And it shouldn't take this  
15 long and this tedious of a process to repay and  
16 compensate these workers for literally, in some  
17 cases, putting their life on the line for this  
18 country.

19 DOE now stands back and says these are Cold War  
20 warriors. These are Cold War American heroes,  
21 and dadgone it, let's make sure we're  
22 compensating them for giving them all these  
23 dadgone diseases and contaminating them and  
24 causing them to have cancers. Thank you.

25 **DR. ZIEMER:** Okay. Thank you, Lisa, for those

1           remarks and we hear what you're saying.

2           Is there anyone else that does want to add any  
3           comments tonight?

4           **MR. GIBSON:** Yes, Dr. Ziemer.

5           **DR. ZIEMER:** Yeah, I think it's Mike Gibson  
6           again. Mike?

7           **MR. GIBSON:** Yeah.

8           **DR. ZIEMER:** Yeah, go ahead.

9           **MR. GIBSON:** This -- this is Mike. Just a  
10          point of order, since we are in session, under  
11          Robert's Rules of Order is it -- is it correct  
12          for me to make a motion at this point?

13          **DR. ZIEMER:** Mike, I -- I think if you want to  
14          make a motion, I'll ask that -- will you be  
15          with us tomorrow?

16          **MR. GIBSON:** Yes, I'll be with you tomorrow.

17          **DR. ZIEMER:** Yeah, let-- let's do it during our  
18          regular business session, if tha-- if that's  
19          agreeable. We've gone a bit over time here  
20          tonight, but if you want to -- if you want to  
21          put the motion on the table, I would prefer to  
22          allow time -- whatever it is, that we can  
23          discuss it and deliberate on it. I don't want  
24          to keep folks here excessively long. But  
25          perhaps if you have a motion you want to make,

1           you can let us -- give it to us tonight and  
2           let's put it on the agenda for tomorrow.

3           **MR. GIBSON:** Okay, the motion I want to make  
4           for the agenda tomorrow is that -- you know,  
5           I've heard these folks from Fernald and from  
6           all around the nation and I agree with them,  
7           and I just think that we need to maybe  
8           establish a working group to look into the site  
9           profiles by workers and not by the people who  
10          ran the program.

11          **DR. ZIEMER:** Okay, the -- the motion is to have  
12          a working group to examine the site profiles  
13          and -- give me the rest of it? I need to --

14          **MR. GIBSON:** Maybe -- maybe go around and visit  
15          the sites and talk to workers and not  
16          necessarily people who have managed the  
17          radiological programs at these site-- DOE  
18          sites.

19          **MR. GRIFFON:** I mean maybe --

20          **DR. ZIEMER:** Okay.

21          **MR. GRIFFON:** -- maybe I can -- there's a  
22          worker outreach effort going on right now.  
23          Maybe we do need a workgroup to sort of look  
24          and get a sense of where that's at and how  
25          effective it's been, what results ha-- how has

1           it influenced the site profile development  
2           process. I think that might (unintelligible) -  
3           -

4           **DR. ZIEMER:** Okay, let -- let me make --

5           **MR. GRIFFON:** Would that -- would that be  
6           consistent with your -- your motion, Mike? I  
7           think that --

8           **MR. GIBSON:** I don't think it's exactly -- I  
9           don't think it's exactly consistent with --

10          **DR. ZIEMER:** Let -- let me --

11          **MR. GIBSON:** -- (unintelligible) --

12          **DR. ZIEMER:** -- suggest that we do the  
13          following, Mike. I -- I think we know the  
14          general -- kind of the gist of it, and maybe we  
15          have some other nuances for it here. Let me --  
16          we'll formally put it on the agenda and call on  
17          you tomorrow and you might, you know, polish  
18          the wording a little bit and then we'll have a  
19          chance to hear from Mark and any others that --  
20          either to provide additional input, but let --  
21          let's have a full Board discussion on how we  
22          can best do this. I think we would be in  
23          sympathy with -- conceptually with doing that.  
24          We need to figure out a way we can do it  
25          efficiently and within the framework of some of

1 the other related activities where we  
2 definitely want to get the worker input. So --

3 **MR. GIBSON:** (Unintelligible)

4 **DR. ZIEMER:** -- if that's agreeable, we'll --  
5 we'll --

6 **MR. GIBSON:** And please, any Board members,  
7 send me an e-mail tonight or tomorrow morning -  
8 -

9 **DR. ZIEMER:** Sure.

10 **MR. GIBSON:** -- giving me your thoughts.

11 **DR. ZIEMER:** Very good. Thank you, Mike.  
12 Sandra, you have an additional comment?

13 **MS. BALDRIDGE:** Yes, I'd like to caution on one  
14 -- one thing about that. After I was getting  
15 the petition prepared, I -- I went to one of  
16 the Fernald workers meetings and presented a  
17 brief summation of my findings, and literally  
18 had people arguing with me that thorium was  
19 never processed in Plant 6, despite the fact  
20 that the documents were there, even working on  
21 site. They didn't always know what was -- what  
22 the processes that were being conducted from  
23 one building to the next, or in one time frame  
24 or the next, or -- I question whether the  
25 people who were actually handling the equipment

1 or the materials even knew what they were  
2 handling. So --

3 **DR. WADE:** (Off microphone) (Unintelligible)  
4 need to stop.

5 **DR. ZIEMER:** Uh-huh.

6 **MS. BALDRIDGE:** -- there is a balance that  
7 needs to be made --

8 **DR. ZIEMER:** Right, right.

9 **MS. BALDRIDGE:** -- so even --

10 **DR. ZIEMER:** Right, good point.

11 **MS. BALDRIDGE:** -- the workers don't know.

12 **DR. ZIEMER:** Right, thank you very much.

13 **DR. WADE:** This is public comment. We need to  
14 -- don't need to have any more discussion.

15 **DR. ZIEMER:** Yeah, we're --

16 **DR. WADE:** I think we need to stop --

17 **DR. ZIEMER:** This is for public comment. I --  
18 I think now we want to thank everyone who did  
19 participate this evening. Thank you for being  
20 patient with all of -- with each other 'cause,  
21 you know, it's been a long day for many of you,  
22 but we thank you for your participation. We  
23 will be meeting again tomorrow. You're welcome  
24 to -- to rejoin us. What time?

25 **DR. WADE:** 8:30.

1           **DR. ZIEMER:** 8:30. That you very much. We're  
2           adjourned for the evening and we'll re--  
3           reconvene tomorrow morning.

4  
5           (Whereupon, the meeting was concluded at 8:45  
6           p.m.)

7

1

2

**CERTIFICATE OF COURT REPORTER****STATE OF GEORGIA****COUNTY OF FULTON**

I, Steven Ray Green, Certified Merit Court Reporter, do hereby certify that I reported the above and foregoing on the day of Feb. 8, 2007; and it is a true and accurate transcript of the testimony captioned herein.

I further certify that I am neither kin nor counsel to any of the parties herein, nor have any interest in the cause named herein.

WITNESS my hand and official seal this the 22nd day of April, 2007.

-----  
**STEVEN RAY GREEN, CCR**

**CERTIFIED MERIT COURT REPORTER****CERTIFICATE NUMBER: A-2102**