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 46

ADVISORY BOARD ON

RADIATION AND WORKER HEALTH

DAYS ONE AND TWO

ROCKY FLATS EXCERPTS

The verbatim transcript of the 46th Meeting of the Advisory Board on Radiation and Worker Health held at The Westin Westminster, Westminster, Colorado on May 2 and 3, 2007.

C O N T E N T S

May 2, 2007

May 3, 2007

TRANSCRIPT LEGEND

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MAY 2, 2007

PUBLIC COMMENT

DR. ZIEMER: Good afternoon, everyone. This is the public comment session of the Advisory Board on Radiation and Worker Health. I've been asked to announce that our session this afternoon is being videotaped by CBS and by Denver Post On-Line. Apparently if we have a good program here we'll replace American Idol or something, but... -- or CSI, right.

I'd like to ask if there are any members of the Congressional delegation -- Colorado delegation here tonight?

DR. WADE: Staffs?

DR. ZIEMER: Would -- would you just quickly identify yourselves for the folks that are here?

MR. THIELMAN: Jason Thielman with Congresswoman Marilyn Musgrave's office.

MS. MINKS: I'm Erin Minks with Senator Ken Salazar's office.

MS. BOLLER: Carolyn Boller with Congressman Udall's office.

MS. ALBERG: Jeanette Alberg with Senator

Allard's office. Thank you.

DR. ZIEMER: And...

MR. (UNINTELLIGIBLE): My name's Greg (Unintelligible) with Congresswoman Marilyn Musgrave's office.

DR. ZIEMER: Thank you. Any others? And we thank them for being with us tonight, as well. I'm Paul Ziemer. I serve as Chair of this Advisory Board and I want to remind you all that this is an advisory board. We are -- we are not part of the government. We are independent individuals that have been appointed to this task. We are not the ones that make the decisions on dose reconstruction compensation. We are advisory for the program. One of the things we do is we do give advice, for example, on whether or not there should be addition to the so-called Special Exposure Cohort, but we do not make that determination. We are one of the groups that give advice to the Secretary of Health and Human Services. So your input to us helps us in giving advice. We're not the guys that make all the decisions. Sometimes we're glad we're not; sometimes we wish we could, but we do have the opportunity

to provide input to the program, particularly the dose reconstruction program and the Special Exposure Cohort portion of the program that's administered through Health and Human Services by the National Institutes for Occupational Safety and Health.

But the individuals that you see before you here are individuals who are not connected with those agencies. We do not work for them. We've been appointed separately by the President of the United States to serve in this capacity.

The Board recently established a time limit for public comments, a ten-minute per person time limit. Now that's -- that's sort of an upper limit. It's not a goal to be achieved, necessarily. I have over 30 individuals who have indicated that they would like to speak this evening, so you can do the math. And although our agenda says that we are meeting from 5:00 to 6:00, we are quite willing to stay here much longer, if needed. But if we stay here, we want you to stay here, too. So we ask that those who are speaking -- that you be cognizant that there are others.

I'm -- I'm usually not a very nasty guy, but I'm going to try to be nasty in the sense that I've asked Lew Wade -- Lew is a Designated Federal Official. And although the rest of these are Board members, appointed Board members, Lew is the Designated Federal Official. He does work for the government, and all of these boards are required to have one of those government guys around. But I have to put him to work and make him earn his money, so he's going to help me keep track of the time tonight. And when Lew nudges me and says ten minutes are up, I'm going to try to stop you if you're still talking. I hope I can be somewhat successful without hurting your feelings, but -- in fact, if you have 20 minutes worth, we're willing to give you the other ten at the end of the line, so you know, you can do half and half -- if anyone is still around to hear you at that time.

But nonetheless, be cognizant of other individuals who may wish to address the Board. In general, we looked at this as -- as it's called, a comment session, simply for you to make your comments. Some of you have provided

written material for the record. Everything that -- all of these comments are transcribed by our court reporter. They will go on our web site. Everything is -- is open to the public. This Board does not do anything in private, so any comments you make will be on the web site very soon for all the world to see, as well as your written comments.

So I'm just going to go through the list in the order given. You can come here and use the mike, and if you need any assistance, let us know. We do already have handout materials from some of you. If others have materials for the Board members, you can make them available at that time.

So we'll begin with Kay Barker, who's a Rocky Flats claimant. Kay, you can kick us off this evening with your comments. Welcome.

DR. WADE: I'll point out that there are chairs up here, too, if people need to sit. We have some chairs up here.

DR. ZIEMER: Additional chairs in the front. We're -- we're running out of space. I don't know, the fire marshal's probably cringing somewhere, but -- and maybe -- maybe NIOSH is,

too -- or the OSHA people, but anyway, we're -- we're packed in here, but there is room -- if you're standing and want to sit, there are seats back...

MS. BARKER: Thank you, Dr. Ziemer and members of the Board. Thank you -- thank you for allowing me these few minutes to speak. I'd like to address the one Board member who hates to hear from the same claimants offering the same comments Board meeting after Board meeting. If you would listen and try to understand what we are saying rather than shutting us off, we wouldn't have to continue saying the same things over and over again. You think we like having to repeat ourselves all these times? No. But until you accept and understand we are telling you the truth and that we have proof, we'll have to continue. My repeat comment is that there is a conflict of interest here in allowing NIOSH to go forward with the dose reconstruction project per the ORAU OTIB-0058 effective January 8th of 2007 that was released on March 30th, 2007. As I told you in September of 2006, the NDRP was written by Roger Falk, co-authored by J. M.

Aldridge and Nancy M. Daugherty, all of whom once worked for Rocky Flats and have a major conflict of interest on anything that has to do with Rocky Flats.

Approximately 2003 NIOSH developed a COI policy which stated that no person who worked at the site would be involved in performing dose reconstruction or authoring technical documents used in the dose reconstruction, yet you have Roger Falk, Jim Aldridge and Nancy Daugherty, who did just what NIOSH said they wouldn't allow.

I understand that it is NIOSH's policy not to have health physicists who have testified against employees in a Workers Compensation claim participate in site profiles where the claim originated. Well, I would like to bring to your attention that Roger Falk was an expert witness for Rockwell International and Travelers Insurance against [name redacted] Worker Compensation claim in 1996, which is another conflict of interest that NIOSH said it wouldn't allow.

In any science field this would be considered a conflict of interest. How many of these

conflicts do the Rocky Flats claimants have to accept that are SEC issues that NIOSH said they would never follow? The NDRP is not only a conflict of interest, it is not accurate. NIOSH never had the NDRP independently reviewed before accepting and using it for dose reconstruction. Dosimetry records are not complete nor present for 1997. Now isn't that the definition of an SEC petition?

The NDRP, under 2.0, Application and Limitations, states except for the application of the NDRP ratios as described in section 4.1.6, the methods described in this TIB apply only to workers at Rocky Flats Plant plutonium facilities during the period of 1952 to 1970. There are three important cavets (sic) or limitations. The final NDRP neutron dose for 1997 may not be accurate. Recorded dosimeter data was not always complete. The gamma dose information for 1997 may not be present. The information on gamma dose was collected only when applicable to the NDRP effort.

If the original NDRP lists these cavets (sic), how can NIOSH assume they can use it for dose reconstruction?

I gave each one of you a copy of my late husband's NDRP showing that he has doses for two years before he even started working at Rocky Flats, which in itself makes the NDRP inaccurate. Not only does his report show the two years before, but of the 316 incidences, 15 of those exposures were for years he wasn't at Rocky Flats. How can [name redacted] NDRP be accurate, or anybody else's as well? I'm still waiting for an answer as to why my late husband's – [name redacted] -- NDRP is so inaccurate.

The second area I wish to address tonight is your allowing NIOSH to have answers for all the zeroes in the claimant files, claiming they are applying claimant-friendly dose. In [name redacted] dose reconstruction NIOSH has listed, under external dose, 143 dosimeter cycles recording zeroes for a 30-250 keV photons. They also listed his missed neutrons as having 163 dosimeter cycles of do-- zeroes, yet NIOSH feels they can give him accurate, claimant-friendly dose for these missed cycles when they don't even know where he was working during a missed cycle as his work required him to be in

the plant all the time and not just sitting at the desk that was in another location.

Lawrence worked in the hot -- following hot buildings: 991, 771, 776, 777, 778 and 444.

You don't even know why the cycle was missed.

According to Brian with NIOSH, who stated -- during my final interview before NIOSH rendered its first decision to DOL in November of 2004 -- that [name redacted] file seemed to have a lot of missing data. I would agree with this, considering he has a total of 306 dosimeter cycles reporting zeroes.

In SC&A's report on the completeness of records there is a chart on page 4 and 5 of the report which I've enclosed in the packet you have been given. As you know, they found that for 1969 and 1970 approximately 36 percent of the records are missing. However, this is also noted in the report. From 1977 onward to 1989, the percentages of missing data are equal to or greater than the ones for '69 and '70. 1981 has a whopping 63 percent missing. SC&A has not investigated the reasons for so much missing data. You cannot reconstruct dose with reasonable accuracy without reliable data.

On Friday, September 1, 2006 I e-mailed Mr. David Sundin of NIOSH a FOIA request asking for a search of the logbooks in NIOSH's possession for a copy of each entry, including badge destruction, contamination incidents, trip to lung counter, references to contaminated scrub-downs and any other entries the logbooks might show. On that same date at 10:56 a.m. Mr. Sundin replied, stating we will respond to your request when we obtain images of the logbooks, which I am told will be very soon. I am still waiting for this information and today is May 2nd, 2007. I'm wondering how much longer I'm going to be waiting for this information.

My third and final comment is that, without good reason, you accept the credibility of NIOSH/ORAU, but yet you refuse to accept the credibility of the very people who worked at Rocky Flats. They know what they did, where they worked, what chemicals, toxins, solvents and metals they worked with or around. I know all of them would be more than happy to tell you about some of their frightening experiences and what it was like to work at Rocky Flats. Yet you refuse to accept their word, but would

rather take the word of somebody who never set foot on Rocky Flats soil.

I hope you will give the Rocky Flats workers your full attention and be open to what they have to tell you. I hope you will really listen and take the witness seriously. If you do, I believe you will understand why you should vote in favor of the Rocky Flats SEC petition.

In closing I want to remind you that the NDRP is a conflict of interest, as well as a conflict of NIOSH's own rules, which makes it an SEC petition issue and a positive vote for the SEC petition. Also you can't reconstruct dose with reasonable accuracy without reliable data. This makes it an SEC petition as well. Thank you.

DR. ZIEMER: Thank you very much, Kay. Next we'll hear from Dr. Charles Milne, representing a claimant. Dr. Milne.

DR. MILNE: Thank you. I'm glad to be here. I got my PhD in entomology from Ohio State University. My master's is in genetics from the University of Washington in Seattle. I worked with [Name Redacted], Nobel laureate, and

he is now the current head of the Fred Hutchinson Cancer Institute. I teach biology at Mountain State University in West Virginia, so I'm a long way from home. I teach human genetics and genetics, as well as some other biology courses, and one of the topics I do cover is the relationship between cancer and genetics.

I'm the son-in-law of [name redacted], who was a contract worker at Rocky Flats from 1963 to 1991. He died of male breast cancer in 2005. His [Identifying Information Redacted] and I attended his first hearing because he was denied compensation because of a calculated probability of causation of 36.36 percent. He did have exposure to radiation. It was documented in the few radiation records that they have, dosimetry readings.

There's a number of other known risk factors for male breast cancer. He didn't have any of those, but he had exposure to radiation. The incidence of male breast cancer in the white American population is eight in a million males. And if you take the -- I don't know how many people actually worked at Rocky Flats. If

we just assumed 20,000 workers at Rocky Flats, half of them male and only eight in a million get male breast cancer, that would be only an eight percent chance that a male at Rocky Flats would contract male breast cancer. You'd have to have 12 Rocky Flats facilities spread across this country to reach the probability of having one person die from male breast cancer. That's how rare breast cancer is.

Now I'm a scientist and I've been looking at the dose reconstruction, the assumptions, the models, and I -- I'm not an epidemiologist, but I have the ability to look at these kinds of things and to study them and to make some comments.

The reason we're here today is because the government wrongly assumed that there was no threshold for exposure to radiation. There has been no proof that there is a threshold. A threshold would mean there's a level below which you can be exposed to a certain amount of radiation and not have a detrimental effect of some -- of some kind. Government assumed there was a threshold. There's no proof that there is a threshold. In fact, a threshold would be

very difficult to measure because you'd have to expose a large number of individuals to radiation and then follow them to find out what fraction of them might have contracted cancer. That experiment would actually be fairly unethical to run on humans. If we did it on lab rats, you may be able to get enough rats to do it and to run it, but it would be questionable as to whether you could take that and apply it to humans being exposed to radiation.

But I would argue that actually the U.S. government's actually done the experiment at Rocky Flats of taking a large number of individual humans and exposing them to radiation. I'm not an epidemiologist. I've not looked at the known cancer rates among the U.S. population and among workers at Rocky Flats. Is it higher than the normal population or is it the same? I don't know. But if it's higher, that would indicate that the experiment has been successful in showing that there probably isn't a threshold for radiation exposure.

Now I want to address dose reconstruction, the

whole process. Missing doses -- the previous lady addressed missing doses. Apparently they exist. They exist for [name redacted] exposure record, and they just assumed -- as far as I can understand, assumed claimant-favorable averages that were among individuals at a facility. But that ignores the fact that individuals at the facility -- I never worked at Rocky Flats; I'm a university professor -- but those that worked at the facility did different jobs and they had different exposures. That ignores that entire fact and making assumptions like that is -- is really unwarranted.

Let's look at the models of how we are able to arrive at -- after dose reconstruction to be able to say an individual had enough radiation exposure to say there's at least a 50 percent probability that it was caused by the -- by the radiation exposure. To do that you must develop what's called a -- a dose response curve, and it's a curve for a cancer that represents how much dose and the chances are of causing that cancer in a population of individuals. And then when you determine how

much dose an individual had, if you can do it accurately, then you just -- you'd use the curve and determine the probability of -- of causation from that curve.

The dose response curves are arrived at by looking at a cohort of individuals that survived the atom bomb blast in Nagasaki and Hiroshima. And first of all, their doses -- they weren't wearing badges, but their doses were estimated based on the distance from ground zero. But again, that's an estimate based on how far they think they were from where it hit. That's not that accurate.

They also are -- have a different genetic makeup than do the U.S. white male population. I refer to white males because -- not because I'm one, but because my [identifying information redacted] was one, and the cancer rates in different populations -- such as Japanese-Americans, Filipinos, white Americans -- are going to be different for different cancers. And that's not taken into account in this procedure.

The radiation that was received through those atomic bombs was probably different than the

radiation that was received by different individuals at Rocky Flats, and we're trying to compare apples and oranges here.

The NCI/CDC working group to revise the 1985 NIH RadioEpidemiological Tables wrote that, quote, The choice of the transfer model involves considerable uncertainty. Transferring information about the Japanese cohort to American workers involves considerable uncertainty.

And also it's possible that the workers that were -- that survived the atomic bomb might be healthier than the average American that was exposed and working at Rocky Flats. We're taking average Americans and those that survived. They may have been healthier and that's the reason they actually survived.

After locating this group of individuals that survived the atom bomb blast, they were followed for a period and determined basically the rates of occurrence of various cancers. The dose response curves that were developed were for a massive, acute dose of radiation.

My [identifying information redacted], and other individuals that worked at Rocky Flats,

most of them had chronic exposure, low levels of exposure over a long period of time. We're trying to compare massive exposure to chronic exposure. There's no evidence that acute and chronic exposure to radiation are equivalent, or that dose response curves for cancers developed from acute exposure cohorts are appropriate for chronic radiation exposure. You need proper dose response curves for chronic exposure to be able to really calculate any accurate probability of causation. Probability of causation calculations are based on a large number of assumptions. And for a scientist, the more things you assume, the less certain your result becomes. And there's a large number of assumptions in the calculation of reconstructing the dose -- I don't care if it is claimant favorable; we're talking about assumptions here. The calculation for the probability of causation for a cancer involves numerous assumptions for dose, and assumptions in the model which render the calculated PC value one with great uncertainty. Also there's a whole principle of anytime you measure anything in science, it has an error

that's associated with it. I don't care if it's weighing a lab rat, it's going to have a certain amount of error associated with it. The more error you have in calculating an end result, the more error that end result has associated with it.

I took my -- the matrix of exposure, went to the IREP -- the NCI web site, put it in and calculated my own probability of causation based on the values that was provided from the dose reconstruction. His matrix had over 1,000 input variables, each with an associated error, and there are numerous internal values. The probability of causation that was calculated -- 36.66 percent in mine, 36.36 -- has a huge error associated with it. You have to understand that 36.36 is being used to deny my [identifying information redacted] claim, and yet it has a tremendous error. There's no confidence interval given on this value. Is it 36 percent plus or minus two, or 36 percent plus or minus 40? That is a serious shortcoming in the calculations.

There are also -- somehow, I'm not sure how, but there's uncertainty distributions involved

in calculating the probability of causation. And those are also part of the uncertainty, assumptions and errors that goes into calculating probability of causation.

It's -- with -- with the numerous assumptions made, compounded errors and uncertainties that are used, the calculated PC value has little confidence, in my mind, as a scientist. I'm not trying to disdain those scientists that came up with the science behind it, but you have to understand that every value that's calculated has a certain amount of confidence associated with it. It just doesn't convey any confidence to me as a scientist.

I have two quotes to read. I'd like to read two quotes. One is from the 1985 Oversight Committee report by the National Academy of Sciences, National Research Council, 1984. They held that the ratio called the probability of causation applies to populations and not individuals, and cannot be interpreted as a probability that a given cancer was caused by a given radiation exposure. You cannot -- according to these individuals that developed the probability of causation, you can't use it

to determine if an individual's cancer was caused by it.

Here's another one. The NCI/CDC working group to revise the 1985 NIH RadioEpidemiological Tables wrote that the PC is not intended to represent the probability that a particular individual's cancer was caused by his or her radiation exposure, but rather the fraction of cases of a particular kind of cancer in a populations (sic).

The PC calculations were never intended to be used this way. It is scientifically inappropriate to use the PC calculations to calculate and to deny the claims of individuals. I'm addressing this to the whole approach that NIOSH uses. It's scientifically invalid. And of course Special Exposure Cohort -- these apply also. Thank you.

DR. ZIEMER: Thank you very much. Next we'll hear from Richard Olds, a claimant. Richard.

MR. OLDS: Thank you. My name is Richard Olds. I'm the owner of NIOSH tracking number [Identifying Information Redacted]. Basically I'm probably rehashing things that you've already heard. I started work at Rocky Flats in 1984.

I worked as a security guard. I talked with the Department of Labor and everything else about the numbers that NIOSH came up with. I told them I had no argument with that. I said they had their numbers, where they got them, what they -- how they used them. They knew what they were doing. The only part about it was that it didn't take into effect all of the other areas of exposure that we dealt with, that we didn't have dosimetry badges. We were in offices, we were in hallways. We were in cafeterias. We were in break rooms that were right next to contaminated areas. We picked up background radiation that you people wouldn't want. We -- the exposures, even to myself, I wanted to tell somebody about -- I sat in a hallway as a security guard, with a conveyor belt running over my head that took contaminated parts from one building to the next building. My job was to get off -- get up off my chair and turn the alarm off, so I -- obviously I was exposed.

Another job that I had was sitting in a hallway, supposedly a cold hallway, which meant there was no radiation in that area. We didn't

wear dosimetry badges. I leaned on a wall for about three and a half to four years. Then somebody decided to check the wall and found out it was low level contamination from the americium that was behind the wall. So, I get the cancer.

Right now I'm sitting on basically a -- my claim has been deferred. Eventually it may be heard. Probably some of that depends on your -- ladies' and gentlemen's -- decision to forward their recommendations.

The other numbers -- if they're missing data and the other information that's necessary, that's not even in their info-- in their data or other exposures, I can't see how you can use their information. Thank you, I'm -- take up your time.

DR. ZIEMER: And thank you, Richard. Then next we have Terrie Barrie. Terrie.

MS. BARRIE: Good evening, Dr. Ziemer and members of the Board, and thank you once again for listening to our public comments that we feel that -- must be -- keep on going.

Tomorrow you will be tasked with deciding the Rocky Flats SEC petition. There are so many

issues that need to be addressed -- tenth-hour discovery of documents, NIOSH is adopting NDRP without independently verifying that the data is valid, not accepting affidavits as the truth from the workers.

But I'm going to focus basically on just one issue tonight, and that issue is I get very upset and disturbed when I hear that an issue discussed among the working group is not an SEC issue but is rather a site profile or TBD issue. An excellent example of this is the thorium issue. Now I have a whole lot of issues going on in here.

SC&A's report, as far as I know, says that this is an SEC issue. The reason for this decision is that NIOSH stands by using the NUREG-1400 as the model to reconstruct dose for thorium workers. NIOSH objected to the status as a SEC issue, and there was quite a lively debate on April 19th working group meeting. NIOSH and some Board members thought that this issue was resolved and that it would be designated a technical bulletin issue.

I wonder if you realize what it means to have an item classified as a TBD issue. Once the

scientific debate is over and NIOSH and SC&A come to an agreement, with the Board's approval, claims will need to be reopened. I'm aware of two such revisions, the NDRP and the target organ for the lymphoma procedure. These revisions were finalized at two separate times, the NDRP I believe in 2005 and the target organ for lymphoma this year.

Theoretically, a claimant who worked in the early years who has lymphoma, has had his dose reconstructed three times already -- once by submitting the original claim, once again -- once to have the NDRP applied, and lastly to have the target organ procedure applied.

Hanging out there of course is the concern of the OMB pass-back memo, the memo that wanted to control the cost and growth of benefits for this program. Has any federal official considered controlling the growth in administering this program? Do you realize how many times the claims will need to be reopened each time NIOSH revises a procedure? For the high-fired oxide calculations that was agreed upon, if the thorium issue is ever resolved, when someone finally realizes the Building 881

did have a foundry in it. I have, by the way, a copy of a DOE document about this.
It sounds to me and a lot of other claimants now because it -- there's a pretty nice bureaucratic empire that has been set up.
According to the *Rocky Mountain News* article last Saturday, approximately $4 million per month goes to ORAU to reconstruct dose. Yes, let's make most of these issues TBD issues that have nothing to do with the SEC petition.
Let's have prolonged scientific debate on which methods are the best to use to reconstruct dose. And yes, let's be very, very thorough.
God forbid one person who worked 250 days at Rocky Flats is allowed to receive compensation that may not deserve it.
And while this debate goes on, workers die.
This program was not set up to give job security to dose reconstructors and the administrative personnel. It was set up to compensate the workers. If any document used in dose reconstruction is in error today, and there are, then NIOSH cannot reconstruct dose with reasonable accuracy. That is true now, as well as when the petition was first filed.

Please, vote yes tomorrow to compensate all the workers who have one of the 22 cancers from the Rocky Flats facility, and make them an SEC cohort. Thank you.

DR. ZIEMER: Thank you very much, Terrie. I'm hesitating here because I don't want to mess this name up too much. I think the last name is Padilla --

UNIDENTIFIED: Judy Padilla.

UNIDENTIFIED: Judy Padilla.

DR. ZIEMER: Okay, you guys know who it -- who it is, okay. And yes, that -- that -- I got to work on my -- maybe my Spanish pronunciation, Padilla -- Padilla. I stand corrected -- it's P-a-d-i-l-l-a, for the court reporter, who probably is worse than me in Spanish. No? Okay. Thank you.

MS. PADILLA: Hi, I'm Judy Padilla. I worked out at Rocky Flats for 22 years. I saw this written on a wall during the demolition of Building 771, considered the most dangerous building in America. We walked with the dust of plutonium, which cannot be shaken away. It lives deep within us for we've breathed it every day.

I think that I'm one of the fortunate ones. My cancer was diagnosed early, and so far I'm a survivor. But with a lot of people, by the time their cancer is diagnosed, there's nothing they can do because it's terminal.

As a nuclear worker at Rocky Flats Plant, I was a Cold War veteran. I feel that I sacrificed my health, even my life -- like the soldiers in Iraq are doing -- and we got no acknowledgement from our government, no thank you. We don't even get the courtesy of a flag on our coffin when we die.

I would like the advisory panel to know my story. In 1983 I came to Rocky Flats as a metallurgical operator in Building 707, the foundry. The first six years I handled thousands of grams of weapons-grade plutonium on a daily basis. My specific task was to put pure plutonium buttons in tantalum crucible and place the loaded crucible in the melt coil of a Stokes* furnace. After the temperature of the furnace reached the classified degrees, the molten plutonium metal was poured into a graphite mold to cool. The plutonium ingot was then broken out of the classified-shape mold

and transferred via a chainveyor into a storage vault, or to the rolling mill for processing. These operations were performed in an inert gas, oxygen-free atmosphere glovebox. Glovebox work consisted of placing your hands and arms into lead-lined gloves fixed onto a box so that you can manipulate the radioactive material safely. Your face and chest are pressed against the window inside of the box so that you can see what you're doing.

Due to the fissile nature of weapons-grade plutonium, high gamma and neutron exposures were created. We were expected to turnover each furnace at least three to four times per shift, three shifts a day. These were production days, and we had a tight schedule to maintain. The interior of the furnaces were regularly cleaned of splashed metal particles and oxides with carbon tetrachloride and perchlorethylene chloride, perc, known carcinogens.

Two coworkers, [Name Redacted] and [Name Redacted], died from brain stem tumors. My foreman, [Name Redacted], had breast cancer -- very rare in men. He has also passed away. My

cancer was diagnosed in June, 1998. I had worked there for 15 years. I had a radical mastectomy, which is an amputation, of the right breast and I had aggressive chemotherapy. I returned to work in eight months, March of 1999.

You may wonder why I would go back to work there if I thought my job had caused this cancer. Well, [identifying information redacted] [Name Redacted] and I had three children in college, so I went back to Rocky Flats Plant and I stayed there till they demolished the whole plant in 2005. I received genetic testing twice for the BACR4 gene, with negative results. My oncologist, [Name Redacted], stated that my ductal carcinoma in situ was most probably linked to my radiation exposure.

It is well known that Rocky Flats Plant records were notoriously sloppy, and the results of our dosimetry badge analysis were frequently returned stamped no data available. The RCT training manual states, on page 1.08 through .09 in the biological effects section, and I quote, cancer is a non-threshold disease.

Which means stochastic effects, those in which the probability of the effects occurring, increases with dose, without a limit or threshold. Any dose, therefore, no matter how small, has a certain probability of causing the effect. Carcinogenic cancer inheritable effects are examples of stochastic effects. Cancer may be shown to exert an almost universal carcinogenic action, resulting in tumors in a great variety of organs and tissues. The main sites of solid tumors are the breasts in women, thyroid, lung, and some digestive organs. These tumors have long latent periods, approximately ten to 30 years, and occur in larger numbers than leukemia. Leukemia has a much shorter latent period, and I close quotes.

But I'm singing to the choir here. You are all scientists and doctors, so you know these facts to be true. If -- if not, why would they be taught to all radiation control technicians as part of their DOE training?

Realizing these facts to be true, I applied for the compensation for nuclear workers in August of 2001. Imagine my surprise when a mere four

and a half years later my claim was denied. My dose reconstruction was determined to be 43.19 percent, 15 years worth of exposure. What kind of bogus statement is "as likely as not"? How can there be a 50 percent limit on a non-threshold disease?

I appealed this decision, but was told that NIOSH has the final say in these matters, another denial. I have read that dose reconstruction is an inexact science. It is also hugely expensive, and NIOSH takes many, many shortcuts, with only 80-- 88 quali-- semi-qualified employees. How can this scientifically-invalid equation stand up to scientific scrutiny? Ask yourself, is it really worth it?

Put yourself in our shoes for one moment. Is it worth mere money to be cancer-free or pain-free? How much is it worth to be able to see your children grow, to graduate or get married? Boy, what some of us would give to be in your shoes. You have your health and you have all that power. Our lives and peace of mind rest in your hands. We -- we're like the men on death row waiting for the governor's phone

call.
I believe in my heart that people are basically good. And given the chance, they want to do the right thing. But I have a few questions for you. Is there any truth to the newspaper article of February 18th, 2006 in the *Rocky Mountain News* that the Bush administration has proposed a 44 percent reduction, $686 million, from the program for the sick nuclear workers? Can you honestly say that that's fair?
And just who were the lawyers that got $350 million for the property owners downwind of Rocky Flats Plant? Are we less than property? And who will be the one with the integrity to step up to the plate, the one with true honor, who loves his fellow man as much as himself, the real American? America is watching and waiting and wanting a hero. Is it you? Will you give yourself an honest act of courage? Will you take the -- or will you just take the coward's path? Is the American spirit still alive, or have we been corrupted beyond all hope? This is a priceless opportunity for a selfless act. What goes around comes back to you. We Cold War veterans did the right thing

for America. Now it's your turn -- all of you, it's your turn.

In conclusion I would like to say that I feel my government has stooped to a new low to prey on cancer victims, to promise compensation, delay for five years, and then to deny claims based on trumped-up estimations. It's not only cruel, but it's also criminal.

The Reverend Martin Luther King once stated everything that Hitler did was legal, but it was still wrong.

Your conscience will tell you the truth. You'll be able to look at that person in the mirror with clean, clear vision. And when accounting for your life you can credit yourself with a pure act of genuine generosity and kindness, a real American. Let us live so that when it's over we can all look each other in the eye and know we have acted honorably.

Judy Padilla, nuclear worker, Cold War veteran, cancer survivor and American citizen. Thank you.

DR. ZIEMER: Thank you, Judy, and very well said, with great passion.

And now we'll hear from Robert Carlson.

Robert's a claimant. Robert, welcome.

MR. CARLSON: Ladies and gentlemen, in 1961 -- my name is Robert I. Carlson. In 1961 when I came out to Colorado, I quit drinking and quit smoking, so that has no effect on the cancer I had. I worked at Rocky Flats for 27 years. I worked as a janitor, assistant chemical operator, monitor and experimental operator. I worked in every building they had out there. When I first put my application in for a job at Rocky Flats, I had to pass a test consisting of math, chemistry, physics and mechanical aptitude. If you passed this test, you had to get a Q clearance, that was the top secret clearance in the country. If that -- if you had any kind of a act against any law in the country, you would not be hired. At a place in Michigan where I worked I -- the government checked everyone that I worked with back there. There was about 28 people. So the people at Rocky Flats were the top of the working class. They did not lie, they did not steal. They -- even today they do not lie or steal. What they tell you is the truth.

What we have in our body is like a stick of

dynamite, and each one of us seems like it's going to explode at any time. This dynamite is plutonium.

In a square mile -- in -- in a -- in a square mile, in each square inch there is a 149 trillion, 956 billion, 796 million, 500 thousand, 357 atoms if one gram of material was spread evenly over this square mile.

[Name Redacted] and [Name Redacted], head of health safety and environment, trained the monitors and said it was far worse to have internal contamination than external contamination.

I have 50 disintegrations of plutonium per second in my body and five disintegrations of americium in my body. That is 3,300 disintegrations per minute. That is 188,000 disintegrations per hour. Disintegrations means that an alpha particle is given off, so in an hour 198 (sic) alpha particles are given off in your body. An alpha particle is an ion. It extracts two electrons from a body cell and kills that cell. Killing body cells cause cancer, according to four cancer doctors on Charlie Rose last week.

Working at Rocky Flats for 27 years as a monitor for more than 17 years, I was exposed to many accident, fires and alarms. Every time plutonium was in a building, accidents happened. Reversal of fans, gloves stood out straight, no vacuum on a dry box, more contamination. I was there. Glovebox burned off and fell on the floor contaminating room 149. I was there. Holes in dry box gloves contaminated yourself. I was there. Changing filters on the incinerator all upstairs of 771 building got contaminated. I was there. Nash pumps leaked and caused contamination. I was there. Snake pit or the infinity room where Nash pumps leaked was highly contaminated. I was there. Floors in 771 building were contaminated and I threw a lot of booties away when I was a monitor when they were over 20,000 counts per minute. SAAM alarms went off frequently in 771 building, indicating plutonium was in the air. 776 building, trying to take tape off the underside of a dry box contaminated a large area of 776 building, including three workers and myself. They had insulation on a dry box in 776 building, and

they were trying to remove the insulation, but it was foam. And every time you touched that foam, the SAAM alarms went off. I was there. 776 fire contaminated all of 776 building and could have contaminated Denver if it wasn't for the fire department, the monitors, guards and helper -- helpers. I was there. Drums outside the helicopter pad leaked plutonium and oil in the ground. I was there. The evaporative ponds outside had plutonium in them and -- because I checked a bulldozer that was -- had 10,000 counts on the tracks from mixing this sludge in this pond. This was outside now. It was like a big egg beater. Someone missed the stainless steel cans that was brought over to the monitor station at 776 being to smeared out (sic). It was highly contaminated and it contaminated me and the person I was training, along with our desk and monitoring equipment. More internal contamination.

I was there and got contaminated 100,000 counts per minute on my head and face in 71 -- 771 building, and breathed some plutonium. I was taking drums to 80 building. It was named something else later on. And my film badge was

overexposed and health physics told me not to go back in the 80 building, but the supervisors made me an exception because I knew where everything was in 80 building. I went back into 80 building, even though health physics tell me not to go back in the building.

If you got contaminated, you washed off what you could in the building you worked in. You couldn't get the rest off, you were sent to medical where they washed the rest of it off with Clorox. I was there. The original amount was not noted because the -- it could be infinity. Only the contamination you couldn't get off in the building where you worked in was recorded.

They were checking the film badges by the color of the film for gamma, and had to actually count the tracks for neutrons on the film. How accurate was this? I was one of the first people to check out the new TLDs for accuracy. I followed the worker around all day, testing him for radiation, comparing it to the TLDs. I was there and did everything that was required of me. When I first worked at Rocky Flats they had Frieden calculators that were

mechanical. I ran a computer program later on in 865 that the results were very critical in every unit that left Rocky Flats.

I had to stop at a place that Rocky Flats had that had in Broomfield and was amazed by what I saw. There were items that had purple tags on them that were contaminated. How did they get to Bloomfield? Purple tags meant that they could not get out of the building. How did they get out of the plant site?

Every chemical that they had at Rocky Flats I was exposed to. You can look at the list I have.

When wearing respirators for any length of time, you could dump liquid out of the respirator. If you were in an area where plutonium was in the air and a SAAM alarm was ten feet away, you could inhale some plutonium before the SAAM alarm went off. If you coughed wearing a respirator, you swallowed what you coughed because you couldn't take your respirator off. This is how plutonium got throughout your whole body. Thank you.

DR. ZIEMER: Thank you. And Bob, do you have a -- could you provide our court reporter with a

copy of your remarks?

MR. CARLSON: Sure.

DR. ZIEMER: That would be helpful. Thank you. The next person will be Laura Schultz.

(Pause)

Would you like to use a chair there, Laura, or -- you're okay? Okay.

MS. SCHULTZ: It's -- I have something quick to tell you. My name is Laura Schultz. I worked the majority of my working life at Rocky Flats Plant. I started in the process engineering and design, and later become a technical support for Building 771. I spent a lot of time in the process buildings. I found out that my designs would be successful if I did extensive field work and met the users, the people that installed the equipment specified in the designs.

While my records may say that I was an engineer, I was really a 771 resident. I had numerous medical problems. I've had cancers that are li-- covered listed. I applied for compensation under this program in May of 2003. I have been denied.

It is not normal for a woman my age, I'm 49

years old, to have all the medical problems. The NIOSH model apparently says that my radiation and chemical exposure had nothing to do with my current condition. I got 39 percent -- 39.9 causation. Do you believe that they are current -- the current model is biological -- system, a human body was -- with bad missing data. I certainly do not.

NIOSH has gathered a wonderful group of mathematicians and scientists together to model an extremely complex set of daily exposures to both radiation chemicals. Listening to them on the teleconference yesterday you can tell that they really enjoy technical challenge and their work, and each other. They seem to really like their jobs. Unfortunately, they never set foot on Rocky Flats Plant site. They can only guess at what it's like. What they didn't seem to realize is that there are human beings associated with these calculations.

We have been more than patient and understanding. Two years for dose reconstruction? Sure, why not? By now, years later, we see that DOL has a plan to deny our benefits because of the high cost of paying

claims to so many people from Rocky Flats. We waited many years assuming that you would not (sic) deal with us fairly. We are now approaching the point we cannot believe anything that you say.

We come from a very secret, private community. We are the invisible fighters of the Cold War. When something in the plant was broken, we fixed it. When there was a fire, we put it out. When there was a spill, we cleaned it up. Our weapons were needed to defend our country. Do you believe that our plant was 100 percent cleaned after a spill or a fire? Our health was affected by the past and present events. We were trained to do our jobs safely. We were given equipment to protect us from the hazards of the workplace. We were surrounded by support personnel whose sole job was to monitor our safety. We were told that we were safe. I guess they were sadly wrong.

Years ago I never would tell anybody about the working and the operations of the plant. We were all part of a working -- a very difficult and dangerous job. If something went wrong, we considered it to be our business on the plant

site, and we fixed it. Why would we involve our neighbors or the press, or who would co-- who were against us?

Today the table is turned. My friends and family are getting sick and are denying -- are dying at an alarming rate. My own government has offered me compensation for unknowingly giving me cancer, but is turning to weasel out all their promises. They have gathered a group of high-dollar scientists to prove that the DOE is innocent and that our cancers are just a big coincidence. They have us beat.

They have people who speak in babble, a language that only the people in their fields, the years of experience could ever understand. I believe they are wrong. Unfortunately, it would take a lifetime for me to come to up a speed (sic) in their field to try to show them that their calculations are wrong.

The claimants do not have an unlimited amount of time and budget like NIOSH does. When NIOSH is informed they have a problem with the neutron dose recalculation, the answer is simply make the claimants wait another six months and give us more guys and money and

we'll work out the problem.
Well, claimants are faced with a problem. DOE is not our friend. NIOSH is certainly not our friend. Our plant has been flattened. Our friends are res-- and our colleagues are sick and dying. What do we do next?
Our senators and congressmen say they're trying to help us. The press is very interested and compassionate about our dilemma. I think I have no choice but to start telling the really embarrassing stories about the plant that the public really never needed to know. It's time to seek legal help and counsel class action suits against the government and operating contractor. If we had been dealt with fairly, this probably -- subject would have never came (sic) up. The public has a right to know how many people from that plant has been sick and are dying across this country. Well, let them decide who is at fault. Thank you very much.
DR. ZIEMER: And thank you, Laura, for taking the effort to be with us today.
MS. SCHULTZ: Thank you, Dr. Ziemer.
DR. ZIEMER: Jeff Schultz -- Jeff, you also have -- oh, okay.

Kevin Newby, and I think I have some written comments also. Kevin, I'll distribute these.

MR. NEWBY: I want to start by thanking the -- you for giving me the opportunity to share this story. My name is Kevin Newby and I worked at Rocky Flats for 22 years. I was 25 years old and very healthy when I started working at Rocky Flats. I had various jobs throughout my 22 years with the Flats. I worked in buildings 883, 865, 444, and in gloveboxes in 707, and also at the warehouse.

On January 21st, 1994 and April 20th, 1994 and March 6th of 2001 I had positive blood tests showing beryllium ac-- sensitivity. This entitled me to enter into the beryllium program. At that time I had no idea the price I would pay for working in this environment.

In June of 2002, on a routine visit to my beryllium doctor in Philadelphia, I had a CAT scan that concerned my doctor, nothing serious. He did a blood test the day of my procedure that came up negative, which meant I was not showing beryllium sensitivity in my blood. But the doctor thought it was a good idea to do a lung biopsy, as long as I was okay with it.

The procedure is called a bronchostomy (sic). This is only true way to prove chronic beryllium disease. When they do the blood work, they have both false negative and false positive readings. This is the only way to diagnose beryllium sensitivity, even though the test is flawed and false readings, they have not come up with a better way to do this. The bronchostomy (sic) or lung biopsy did show lymptocycius (sic) in my BAL cells. The conclusion is I have chronic beryllium disease. Remember the day of this procedure I had a negative blood test.

When I got back from Philly I filled out the paperwork and a claim under Section B. This was in 2002. And of course I was denied. They did not feel disease was far enough along to entitle me to compensation under Subsection E (sic). My problem was I was still alive.

In 2004 I resubmitted my claim and all the same information and I was approved.

In summary, I -- had my doctor not offered the lung biopsy, I never would have been found out that I had chronic beryllium disease. There's only a certain stage that they can do the lung

biopsy. This is not a standard procedure. Remember, the blood test for beryllium sensitivity is flawed with false negatives and false positives.

Had I not had the fortune to persevere, I still would be sitting there thinking I was denied. We worked in a adverse situation. If you, like me, were exposed to metal poisonings, you need to know. This does not just affect you. This affects your entire family and down the road when they take care of you and you can come incapacitated. Being in the program has opened many doors that would otherwise have been closed. The average doctor does not understand metal poisoning. You need a specialist, and they're expensive.

I'm not advocating the system is set against you. All I'm saying is that most health care situations you need to be your own etiquette (sic). Get informed, don't settle for no.

The moral to this story is persevere. I felt it was my moral obligation to share this story with you. Please do not give up hope. If I can help anyone with their paperwork, please let -- feel free to call me. Thank you.

DR. ZIEMER: Thank you, Kevin. Next, Walter Mobley. Walter Mobley.

MR. MOBLEY: Good evening, and thank you for taking the time to listen to us. I began working at Rocky Flats in February, 1991. Before we had any training, my foreman took myself and three carpenters down to Building 991. We were uncleared at that point. He took us down a hallway and told us to build a scaffold. We started building the scaffold. He left. A yellow light started flashing and an alarm went off. We continued building the scaffold for another five, ten minutes before I walked down the hall to find someone to ask them what this yellow light meant. We were told it was a faulty SAAM alarm, that there was no problem. The SAAM alarm was the problem, not that we had actual airborne radiation. We didn't know what that meant at that point anyway.

I did receive extensive training over the next year, teaching me how safe Rocky Flats was. And they convinced me that Rocky Flats was a safe place to work.

A year and a half later, it was about August or

September, 1992. We were working in the vaults. We were working in high radiation areas. We were receiving dose greater than 100 millirem per hour. I, as a carpenter, did not work in there a lot, but I did do some work. The electricians in our group worked in there a lot. They were getting close to their annual dose limit. We came to work one morning. In the pre-evolution briefing we were told all of the dosimeter records have been lost. Your dosimetry reading is zero. Go in and go to work.

One of those electricians was [Name Redacted]. In 2004 [Name Redacted] was diagnosed with stomach cancer, and he was dead in three months.

I thought the electricians might have been over-reacting a little bit. I was still new at Rocky Flats. I'd been there for a year. They were way below the -- the DOE annual dose, and the Rocky Flats annual dose is half of that, so I think they're just making a mountain out of a mole hill. Well, I find that that's not true. In 2001 I contracted non-Hodgkin's lymphoma. I began doing a lot of research on my own. I

found that the Department of Energy, on their web site, admits that they do not know what the biological effects of a chronic low dose of ionizing radiation will do.

I was more fortunate than [Name Redacted]. I had a pain in my back. I had this pain for five months before I went to the doctor. When the doctor found out where I worked, he began looking for cancer. He wasn't looking for other medical problems; he began looking for cancer. I don't believe that was a lucky guess. I believe that was an educated diagnosis. He found my cancer on the first visit. Because of the early detection, I am in remission right now. But I don't know when it's going to come back.

All through my medical treatment the nurses and the doctors that I talked to all agreed that there was a good chance that I contracted lymphoma because of where I worked, at Rocky Flats.

I applied for compensation through the EEOICPA in 2001, shortly after the program was initiated. After five years I have become fatigued with the bureaucratic process,

constantly asking for more information, asking for phone interviews. After five years I was denied. I appealed the denial.

On the notebook that we signed up on tonight it asked if we had a written statement to submit. I didn't know that was going to be on the form. I feel like I have submitted my written statements more than once.

Six months later, after my first appeal, I was denied again. A year later I was denied again under Part B. I believe that DOE, DOL, NIOSH, Oak Ridge University -- I believe pretty much all of them have probably spent considerably more denying my claim than it would have cost to pay my claim and let me enjoy my life.

Thank you.

DR. ZIEMER: Thank you, Walter. Next I have Ron Buffo.

MR. BUFFO: Thank you for letting me speak before you tonight. My name is Ron Buffo. I'm here to speak on behalf of [name redacted] who worked at Rocky Flats from 1952 until 1987, one of the original guys who started out there. He was a machinist. He was a tool grinder for at least 23 of those years, those first 23 years,

and he worked in buildings 44, 881, 776 and 460.

He has had prostate cancer. He has skin cancer. At this point he's 75 years old. And just to sort of reiterate some of the things that some of the other people have been saying, and I think it's very basic stuff -- I mean this -- this isn't global warming. This is -- these are real things that we know are happening to these real people.

[identifying information redacted] was a machinist working with uranium and working on a lathe where he was shaping uranium. Uranium has a tendency to catch on fire without proper ventilation, and when it caught on fire he was breathing in the fumes, of course, and I think certainly has shown the effects of what's happened with that.

Along with that -- he was exposed to that on a daily basis, but he was also exposed to a thing called perchlorethylene, a cleaning solvent. He cleaned machines every day when work was done, with his bare hands and this cleaning solvent. And we know that to be carcinogenic in nature, as well. He also lost his hearing

because there wasn't adequate hearing protection. So I mean there are just a variety of things that -- that all of these -- these wonderful people had to go through.

I will tell you this. A true patriot, like all of these people. When I was growing up in Lewisville, not too far from Rocky Flats, I knew [identifying information redacted] worked at Rocky Flats, but I'll tell you what, I didn't know what he did until about five years ago. He said no, that's -- that's -- I don't talk about those things, I signed a security clearance. And I had no idea. Kids at school would ask what does your dad do? He's a machinist. Oh, yeah? I don't know what he makes, but he's a machinist, that's for sure. It was strange coming to my house when I -- you know, I'd go down to the bathroom and I saw all these little bottles down by the toilet and I -- what the heck is that stuff for? I had no idea. You know, the fact of the matter is, very few of these people in the early stages, and I'm sure for many, many years, really had no idea what radioactivity could do to them. I really believe the safety training programs

were inadequate. These men and women were not told what these kinds of things could do to them, and today they are suffering because of that.

So I'm here on behalf not of just [identifying information redacted], but -- but of all these people. You know, we talk about the bureaucratic red tape that is -- that has been going on for years now. He made a claim five years ago. Last fall he was denied. We wrote a letter back to the Department of Labor -- and I'm not kidding you, we got a response back in one week on the appeal -- denied. It took five years to get that first one, but it took about a week to get that second one. And when I -- I helped [identifying information redacted] sit down and write the letter, and what we said was, you know, you need to look at this. You're denying our claim. You say that prostate cancer is not caused by his exposure to radiation. We don't agree with that, and that's why we are not going to sign this claim. We consider our case to continue to be active and we're going to see what happens here.

Two months later he got a phone call from a man

with the Department of Labor who said hey, what's this letter all about? [identifying information redacted] said it's about my claim. And he says well, you know, where you going to go with this? He goes well, it's pretty obvious I can't go too far with it, but he said I'm not signing it. And that's the way that it's going to be. We are going to stay with this and we're going to stay the course on -- on fighting for what we think is right, and these are from people who are very patriotic. They have no huge beefs with their patriotism and what they've done for this country. These are the original Cold War warriors, and -- and we have to honor them and we have to show them that we are responsible for the things that they were exposed to.

And I think -- when I look at all these wonderful people here, I think we have to ask, if not us, then who? And if not now, then when? Thank you.

DR. ZIEMER: Okay. Thank you, Ron. Next I have Charles -- Charles Milne -- didn't we have a -- I think we already had Charles Milne, somehow got on the list twice.

Dennis Romero -- is it Romero?

MR. ROMERO: Romero.

DR. ZIEMER: Correct.

MR. ROMERO: Yeah, I'm pretty short. My name's Dennis Romero. I worked out at Rocky Flats as -- four years as a building trades pipe fitter, 18 years as a steel worker. I've had three job classifications out there, as a production welder, chemical operator, radiological control tech at the end.

My first job was 444 as a production welder. Worked with beryllium, uranium, stainless, titanium, machining it -- not machining, but welding it, plating it, coatings. While working in that building we would often have air reversals because we'd have a power (unintelligible). Instead of the air coming out of the main vents, it'd be coming out of the return air vents that were filthy. We'd have dust everywhere. We'd get the evacuations and evacuate the back area because they don't know what's in the air.

We'd have fires, just like the gentleman mentioned about uranium. They'd have uranium -- 55-gallon drums where the machines would

throw the shavings in there. Occasionally they'd throw a hot chip in there. When they would machine this uranium it would glow red, red under the liquid. That's how hot it was. And they would throw a chip in there that's too hot, it'd catch on fire and then we'd have a fire in the back area and they would say if you're not in immediate danger, stay where you're at; if you are in danger, evacuate the area. Be smoke in the air.

I worked in that building about five years as a production welder and then went down -- 707 as a production welder. Worked with plutonium, beryllium, uranium assembling the pits that we used for final product to ship off site.

Every month we'd have a thing we'd call IP, that we'd meet a certain quota every month to get parts out. If we didn't get the parts out on time, management would say well, we're going to lose our funding, maybe be layoffs, so we'd have to work the overtime to meet our quota every month.

At times our dosimetry badges would be peaking out, and if they peaked out they would pull us out of the area and then we couldn't meet our

product every month. So naturally management would make a suggestion -- put your TLD in your back pocket. Don't have it up on your chest where it's getting the right exposure; put it in your back pocket. Or there were times when we'd leave them in our lockers because management did not want to lose their funding, did not want the trucks not to be able to come in and DOE would be unhappy with their progress. So we would do whatever we could to meet IP every month, and that went on for years out there until they finally shut us down.

When I was done being a production welder, I went down to 771 as a chemical operator. Our job down there was do (unintelligible) inspections, decontaminate floors, gloveboxes, tanks -- basically the cleanup people for the building. That's our job is to clean up, decon workers. We'd go in the back area, we'd have a spill. Of course everybody knows 771 was (unintelligible) with all kinds of chemicals -- hydrochloric acid, sulfuric acid, nitric acid, numerous other chemicals been on my shirt right here.

When we'd go back in the areas and decon the

floors 'cause there'd be a tank leak, spill. Recontainments on the valves were leaking, flanges were leaking, gloveboxes were leaking because everything's been taken out of service, wasn't maintained. It was set -- 'cause they thought they were going to start back up, but it never did happen so we'd have to go back there and baby-sit the place.

We'd go back there in a full-face respirator, particular air purifying filter, cleaning up chemical spills. The only people in the building that had chemical respirators were the painters, because they did the epoxies. Workers in the back area were doing decon coverage, did not have chemical respirators. We'd have a particulate and that was it. Times we'd have SAAM alarms. 771's notorious for having a lot of SAAM alarms. Problem with 771 during thunderstorms, we'd have a high concentration of radon. The SAAMs would not be able to distinguish between radon buildup or plutonium particle, so it would go off and we'd have to deal with that. We'd go out in the hallway and wait for RCTs to come, see what the problem was.

At that same time I had went across to be an RCT so I'd learned a lot more. I went through rad con training, radiological training, and they -- what we'd do is we'd have SAAM papers that were contaminated with Pu or radon. We would let them sit for four hours. We'd count them initially, wait for four hours, take the people's names that were in the rooms at the time the SAAM went off 'cause we didn't know if they were positive or negative SAAM alarms. We'd wait for four hours, wait for the decay, see how much decay would happen on that sample. If there wasn't enough decay, we'd give it another four hours. There was times they would wait up to maybe a day and a half to two days to count that sample to see if enough decay would drop out so we could blame it on radon, because the room was posted and the workers were having a hard time getting the work done because working in a full-face is hard. Management wasn't happy with that scenario, they'd make us go back and do additional air samples so we could de-post the room and get it down to less than a tenth of a DAC. A DAC was a Derived Air Concentration of plutonium in the

air. It had to be less than a tenth of a DAC. One DAC equates to 2.5 millirem.
When we started doing D&D out there, we had procedures -- even production had procedures. Full-face respirators, 50 DAC; you exceed it, you shut the job down till you increase your engineering controls, your PPE controls -- keep it down to less than 50 DAC because the respirator's only certified up to 50 DAC. Anything above that, they couldn't quantify how much of it was getting in your respirator. They needed to be, we'd go to PAPRs, PAPRs were good for 1,000 DAC. We couldn't keep it down below 1,000 DAC, supplied breathing air, in-line supplied breathing air was used. That was still 1,000 DAC protection factor.
When management couldn't control the back areas properly when D&D happened because everything was going on, piping's being cut, gloveboxes being dropped off, the DAC started going out of control. It would exceed 50 DAC. They just changed the RWPs to warrant what they wanted to get done, because our training told us anytime you exceed protection factor respirator, a certain amount was getting in the respirator.

When we exceeded 1,000 DAC on PAPRs, that happened quite often -- they'd be 100,000, 200,000, maybe even up to 500,000 DAC on an air sample they would be counting. We was told in training that for every DAC that you exceeded -- the protection factor 1,000, for every 1,000 that you exceeded at, one DAC was (unintelligible) be in your respirator. So if you're in a DAC atmosphere of 500,000, you tell me how much DAC was probably -- how much plutonium might have been inside your respirator.

They would wear these respirators on 10, 12-hour days. There was a job going on in 774 that guys were in DAC atmosphere about 100,000 DAC. They were cutting out these four large tanks, using a plasma cutter. They used liquid -- a fixative to spray on the linings of these tanks, the gloveboxes, to try to keep the airborne concentration from going higher than that. The problem with when you're using liquid, spraying in the atmosphere where using a air-purified respirator, it's a paper filter. That paper filter starts degrading when it gets wet. And they would use liquid or water to try

to keep the concentration of the plutonium down.

Workers would come out of the back area after a 12-hour day, take their filter cartridges off their respirators, dump the respirator in a bin, dump the cartridges. They would look in their cartridges on the inside of that cartridge where -- that's the closest part to your face and a lot of times they'd be green. That was the color of the fixative they were using inside the tanks. So if that respirator was filtering, how much of it was it really filtering?

We would survey respirators on a daily basis so we could send them back off to laundry. Wasn't no -- no big deal to find 10,000, 500,000 on the outside of the respirator. Was that person given a PI factor worksheet to find out how much of it they got inside their lungs? Was any incident reports done?

Management, towards the end, starting not documenting things because of a thing called Price Anderson out there. Price Anderson was a group that went around when companies could not do radiological control practices safely, they

would fine them. People have skin contamination, internal contamination, they would get fines. Well, in order to not get fines, you don't do the documentation, so you didn't have the PI factor worksheets. You didn't have the radiological deficiency reports. You didn't have any logs to denote that this stuff happened on the job. There's so much more information that your dosimetry cannot tell you because a lot of the information wasn't done -- or it's scattered all over the place, 'cause we did records. We did DAC hour tracking whenever the DACs were too high. But my question is to you people, of all the records you got, do you have all of them? I don't believe you do. Thank you.

DR. ZIEMER: Thank you. Thank you, Dennis. Now we'll hear from Richard Olds -- Richard?

MR. PRESLEY: He's already spoken.

DR. ZIEMER: Maybe he -- yes, was --

UNIDENTIFIED: (Off microphone) (Unintelligible)

DR. ZIEMER: Yeah, he's ended up on the list twice, too. Sorry.

Let's see, then next I have Larry -- Larry

Pazier or Pazier -- P-a-z-i-e-r.

MR. PAZIER: That's close enough.

DR. ZIEMER: Close enough? You can give us the correct pronunciation, Larry.

MR. PAZIER: It's Larry Pazier.

DR. ZIEMER: Pazier, thank you.

MR. PAZIER: [name redacted] was a Rocky Flats employee, and I -- I'm not a Rocky Flats person, and all I did was hear these things second-hand, but I know that she was exposed at least twice. Five years later after she was exposed, she was diagnosed with colon cancer and two months ago she passed away.

She was a vegetarian. No -- no cancers in the family, went to the gym five or six days a week, only exposed twice. And I hear the probability and the statistics that some of the people are saying, including a doctor, but what does it really mean? One in a thousand? What if you're the one? One in 100,000, what if you're the one?

My -- my concern is really not for what's going on here today. The money, sure, is going to help the people out that are living, help them with their doctor bills, et cetera. What I

would like to do is suggest and somehow get out to the public that there needs to be more testing done. It's my understanding that -- you know, that they had testers -- test indicators that give you an idea if you've been exposed. But when the people leave working for a nuclear facility, are they getting PET scans and CAT scans to test, if they have been exposed, if they have cancer? If this could have been done, it may have saved my wife. The other thing I'd like to say is, you know, to -- to just -- to get the word out to other workers in nuclear facilities of the risks they're taking. I don't believe that they understand the total risk that they're working under. Thank you.

DR. ZIEMER: Thank you. I have what I think is Larry -- Ramos?

UNIDENTIFIED: Rands?

DR. ZIEMER: Or Rand, maybe it's Rand -- Larry Rand, yeah. Okay.

MR. RANDS: Hi. As Paul said, my name is Larry Rands. I spent 20 years at Rocky Flats. I had the opportunity last year to provide you with a summary of my jobs on the site and my lung

cancer that was diagnosed in 2003. I donated a lung to the cause, went through chemotherapy after and I'll play with the side effect of the chemotherapy the rest of my life.

It's my understanding that you folks are an advisory board to tell health and safety or someone to -- that's going to make a decision on the outcome of the future of the workers of Rocky Flats. And I thank you for that opportunity to talk to you last year, and I'm happy to be able to be here this year. I would ask, and I implore you, to unite to advise the people that are going to make the decision for the efforts that are being expended and for these people that have suffered and are suffering, please help them. Thank you.

DR. ZIEMER: Thank you. Then Cheryl Meaney.

MS. MEANEY: Hello. My name is Cheryl Meaney and I worked at Rocky Flats for 21 years. At the present time I am not ill due to working at Rocky Flats. [Identifying Information and Name Redacted],also worked at Rocky Flats for 32 years as a security guard. He couldn't be here this evening so he asked me to come and speak for him.

In 2005 he was diagnosed with thyroid cancer. As a result, he had surgery to remove his thyroid that same year. His physician says there are only ways to get thyroid cancer. Heredity is the first reason, and the other is radiation exposure. There isn't any known thyroid cancer in [identifying information redacted] family, so one must assume that his cancer is the result of radiation exposure at Rocky Flats.

He is missing quite a lot of his dose records due to poor radiation record-keeping at Rocky Flats. Records show he worked in Building 123 for the majority of the time, but that was only his base building. He went to Building 123 every day to change into his uniform, get his gun and have his morning meeting for the plan of the day. His regular job duties consisted of the following:

He walked routes throughout the entire complex, including the radiation and contamination areas. He was required to sit on the docks in close proximity to all radioactive material as it was loaded onto trucks for shipment. He was required to watch people and guard material in

the various vaults. Even if the alarm sounded, he had to stay to guard the vault he was assigned to. Everyone else could evacuate. He was part of the team that loaded trucks for transport to other facilities. This material was the completed product, so it was very radioactive. He had to crawl on and around the radioactive drums in order to secure them properly. He also had to transport radioactive material samples in his security vehicle right in the seat beside him.

All of this was done without wearing a lead apron or shielding of the samples.

He took great pride in the job he did to protect our national security, and now hopes his government will take care of him. We pray that [Name Redacted] cancer does not reoccur. But if it does, it would be helpful for him and his family to have a little financial security to help cover the medical bills as a result of his radiation exposure in his work at Rocky Flats.

Please vote yes and give all Cold War veterans peace of mind. Thank you.

DR. ZIEMER: Thank you, Cheryl. Next, Juan

Abilu -- Abilu?

MR. ABILA: The last name's Abila, A-b-i-l-a.

DR. ZIEMER: A-b-i-l--

MR. ABILA: A.

DR. ZIEMER: --a.

MR. ABILA: Right. I really don't have much more to say, other than what everybody else has said. The only thing that I would like to ask is why are we having to prove what, in most cases, a DOE or Rocky Flats doctor has verified or diagnosed us with? I think -- I think everybody else has covered what I had to say and I appreciate it and thank you.

DR. ZIEMER: Thank you. Okay, thank you, Juan. And then Jack Weaver.

MR. WEAVER: Good evening. Thank you for letting me speak. I also want to thank the people that are here in the audience, my brothers and sisters that worked with me at Rocky Flats.

This is an emotional time for everybody that's here, me included. I happen to be in fairly well -- fairly good health, but I have some relatives that worked at Rocky Flats for a number of years that -- that are not in such

good health, so hopefully I'm here to represent them.

I -- I started to work at Rocky Flats September the 5th, 1961. I left there June 5th, 2002, so you know I've been there a long time. I worked in just about -- well, I did work in every building on the plant site at one time or another in some capacity. I worked 12 years as a hourly individual and the rest of my time was spent in various supervisory positions, all the way up to a deputy AGM under EG&G, so I've been the gamut from all the way at the bottom to all the way to the top.

I also participated in -- in -- starting in 2001 on the oversight committee for the ORISE dose reconstruction. I was asked to come and participate in that, and after talks with [name redacted] and his group, I decided I would do that. And the main reason I participated in it was because the people -- very intelligent, very smart individuals -- didn't have a clue about Rocky Flats, and my job was to try and make them understand, teach them what we did, how we did it, why we did it and what the consequences of some of that stuff were.

Just like everybody said, I -- I understand that there are missing pieces of information in the -- in the dose and stuff. I think they did the best they could with what they had, they just didn't have everything, as -- as people have said before.

The other issue that I have that -- that doesn't seem to get across at these meetings is that Rocky Flats was a chemical processing facility to recover plutonium from scrap and to produce the final product, pits. Okay? The plutonium processing in these buildings was -- was a -- a -- primarily a nitric acid process, although there were a lot of other chemicals. And when we were doing the cleanup in -- in the '90s, or preparing for the destruction of the plant, one of the things that we did was a -- was a chemical inventory -- and at the time I was working in 71 building; I spent 32 years in 71 building. And I have this document. I provided it to the -- to the group last year when we met. It's a 53-page document of excess chemicals. It has 5,700 containers listed on it of everything imaginable.

And with [Name Redacted] permission -- I was

working in the building with [Name Redacted]. She was doing part of the -- the inventory. We were working on the inventory with [Name Redacted] and a lot of other people, names that you are familiar with. Exposure to these chemical -- I mean there were things that -- that -- I'll give you a for instance. One of the things that -- that people don't associate too much wi-- or don't know about at Rocky Flats from the outside is hydrogen peroxide. Most people think of hydrogen peroxide to be put on -- on a cut on a finger, color your hair or something like that. We used hydrogen peroxide in the plutonium processing to make plutonium peroxide precipitate. We used 50 percent hydrogen peroxide. That's the same stuff they use in rockets to fire them off, you know? And after a couple of explosions, we went to 35 percent because it wasn't quite as volatile.

But we had numerous ex-- explosions. We had fires. We had everything you can think of under the sun. And as these people have already stated, and I don't -- I don't think you want to hear all my war stories 'cause you

ain't got enough time left in this week to hear all the stories that I could tell you about Rocky Flats and 71 and 371 and all those.

I just want to say that -- that Abe just made a very good point. We worked under the AEC, IRTA and DOE, and yet when it comes down to this issue that we have here on the table today, the burden of proof is on these people here to provide something.

Now when I went to work at Rocky Flats you were supposed to keep records, and I always thought there should have been a place where all the records that were kept -- everything from a piece of paper that somebody scratched on, a note or something, all the way up to plans, procedures and everything -- should have been kept in a place where they could be gotten to. That never happened, so a lot of stuff got lost. And all these exposures to -- to radiation and the exposures to chemicals, they're -- there are missing records for -- primarily with the chemicals, because there was no -- there was no activities on the site until 1986 when we put in an HF monitor to monitor hydrogenfluoride gas, there was nothing that

monitored releases to the atmosphere of chemicals. So these people were exposed to concentrated nitric acid, hydrochloric acid, hydrofluoric acid, everything you can think of. And to me, that's just as dangerous as the plutonium.

So I'm not going to stand up here and spout a bunch of war stories right now 'cause you don't need to hear those tonight. I've taken up enough of your time on that. I'd just like to say that Rocky Flats provided a service to the United States of America during the Cold War, and we handled a lot of the most dangerous chemical in the world, as the -- as it's been called, plutonium. What we pushed out the door was a product for the government to use as a deterrent to keep the rest of the world away from our doors. Some of those were used at Nevada for tests. I recently read in the paper where Nevada got their SEC. Those people handled the final product, had very little radiation connected with it. And when I go to Nevada and talk to those people, and I have many times, they're scared to death of anybody from Rocky Flats 'cause they know that most of

the people at Rocky Flats were exposed. You know? So they -- they don't understand why we ever did what we did and why we would continue to work at Rocky Flats when -- they thought they had issues; they don't even begin to compare to Rocky Flats.

So I'd just like to say please consider what all of these wonderful people have told you about their experiences at Rocky Flats. And as I told the people last year when we met and I gave them the documents, you've got my name and address and phone number. If you want to hear any story from the time I got there, 1961, to the time I left in 2002, I'll be glad to sit down with you and tell you any of it. I was involved in the fires and the cleanup and all that. I have an extremely large -- for most people -- radiation exposure. But I'm just one of hundreds of people that had large exposures -- larger than what was allowed by the DOE regs. Those -- those, to me, aren't being considered.

The arbitrary number that's been set is -- is another thing that's of great concern to me because -- again I'm going to use [Name

Redacted] as a -- as a for instance because we worked side by side. What affects me maybe not affects her. What affects her maybe does not affect me. Our genes are different, our backgrounds are different, everything. So how can you set an arbitrary number on somebody who's had the problems that she's had?

I thank you for your time.

DR. ZIEMER: Thank you, Jack. I -- I want to find out how many would like about a ten-minute comfort break or -- we have quite a few folks to go yet, but --

UNIDENTIFIED: (Unintelligible)

DR. ZIEMER: Shall we keep going? We'll keep going, and individually if you feel like you need to slip out -- Board members, too, just don't stay out long -- but we'll keep going then. Okay. I -- I don't want any of you to feel like you -- if you really need to slip out, please do that.

Hannah Marschall.

MS. MARSCHALL: Hi. I'm Hannah Marschall. This is the first time I've been in front of a board like this, so don't have any notes. I worked at Rocky Flats from the early 1980s

until they -- Kaiser Hill declared physical completion in 2005. I think all of us that worked out there knew that we were working around danger-- dangerous materials. However, we trusted our government to keep us safe. And I -- I just think it's incomprehensible, to me, that our government now is making those of us that are sick grovel for such a stippance (sic) of money. There aren't that many of us left, and it's not that much money. And it just seems as though the government could take the high road and admit that possibly they put us in harm's way and those that -- of us that only have a couple years left to live, that they could approve our claims and allow us, our spouses and our children to have whatever time we have left to live it with dignity and with some peace of mind.

DR. ZIEMER: Okay. Thank you, Hannah. Mary Ann Rupp.

MS. RUPP: Hi. I also want to thank you for the opportunity to address this Board.

DR. ZIEMER: Mary Ann, pull the mike down just a tad. Thank you.

MS. RUPP: Thank you.

UNIDENTIFIED: Us short people got to stick together.

MS. RUPP: I want to thank you for allowing me to address the Board, as with everyone else. I am here tonight on behalf of [name redacted], who could not be here as he died 11 years ago at the age of 49 from lung cancer. I've had a hard time with this because when he was diagnosed his diagnosis was -- the primary site was lung. However, it metastasized to the brain.

I'm here to put a face to his claim tonight, because he was a vibrant man, a family man, a patriotic man -- as with everybody else in this room -- and he believed in what he was doing, also.

He was diagnosed and he was considered terminal as soon as we had his diagnosis. He was a man who -- he -- he was active, and I -- as I said, vibrant. He lost his ability for speech. He wa-- suffered paralysis. We spent a lot of time playing charades because he couldn't communicate with the family like he wanted to do.

I have here which is what many of these people

have heard from NIOSH and it's called findings of fact. The evidence of record does not establish that exposure to toxic substances experienced at the DOE facility was a significant factor in aggravating, contributing to or causing the lung cancer of [name redacted] Rupp. Therefore, Mary Ann Rupp is not entitled to the benefit because she did not establish that he developed a covered illness through the toxic substance at the Department of Energy facility, pursuant to 42 USC 7385S-4. And I'm sure many of you are familiar with this very same letter.

This is my third appeal, and I'm not only appealing on behalf of my family, but on behalf of everyone in this room. You can do little to help [name redacted] and now, but you can do a lot to help the people that are left here.

I just basically wanted to tell you how I came to this. [name redacted] worked at a pipe fitter out at Rocky Flats. He was also out there as a field engineer and an iron worker. He was there from 1983 till approximately 1992. The first two years that he was on site he had absolutely no dosimetry monitoring. We've --

you know, we received -- I, as the other lady did, talked to David Sundin, requested all the dosimetry records, and I received a partial list -- and I do stress "partial". He was there for nine years and the dosimetry records I have consisted of approximately three pages, the majority of which said zero because there was no monitoring, as I said, for the first two years.

What brought me to this was that [name redacted] was exposed while he was working on the plant site. He was not in a building. He was working outside of building 776, along with a coworker. They unearthed some contaminated items there. And I had not realized this had happened until this whole program started and his fellow worker, a [Name Redacted], who was the [Identifying Information Redacted] for pipe fitter Local 208 out of Denver, came to me and he says I think you and [Name Redacted], who was the wife of the other exposed worker, need to put in a claim. And then he told me why.

And when I first started the whole process with NIOSH, you know, I went through the interview. I told them that I -- I had come to this for

this reason, that I'd found out of his exposure, and it was never considered a valid reason. In all the times that I spoke with NIOSH, all the interviews, all the letters, other meetings I've been to, I -- I always told them that this was what was in the forefront. This was why I was here. But they never once investigated it, which to me is unbelievable. And I'd like to read to you just basically what I've sent to them, and hopefully, as I said, it'll put a face to my claim and help put a face to many of the other claims and that the -- that you will consider Rocky Flats for the SEC.

I am again objecting to the fact that [identifying information redacted] was on site from July of 1983 to September of 1992, as corroborated by the District Office of NIOSH. Information obtained from the Freedom of Information Act on partial dosimetry records -- and I stress partial, as I have supplemental badge reports that were not listed on the dosimetry badge report in the dosimetry and radiation monitoring. Those records, which I have included, state that they absolutely had

no monitoring data for -- in 1983 or '84, and the first dosimetry readings on [name redacted] did not begin until September of 1985. The two -- the two full years without dosimetry monitorings of any type.

I am also objecting to the lack of investigation of an incident that initially prompted me to file the claim in 2003. It involved both [identifying information redacted] and another employee, whose wife has also filed a claim on his behalf as he is also deceased. They died approximately a year from one another. [Name Redacted] cancer was cancer of the brain, brain was primary site; Martin's was lung that metastasized to the brain.

The incident of exposure was witnessed by their supervisor/coworker, who is also [Identfying Information Redacted] of the pipe fitter Local 208 in Denver. No interview regarding the incident was ever conducted. It appears to have been totally disregarded by NIOSH investigators.

During my telephone interview of March 3rd, 2006 in which I stated in section six, radiation incidents, that yes, there had been

an incident of contamination; and in section eight, identify coworker and other witnesses, in which I identified the coworker and also his former owner and operator of the company for which he had worked. He was one of the subcontractors who [name redacted] worked with at Rocky Flats for many years and had detailed information on job sites and locations, which specified buildings and specific duties. According to the NIOSH report of dose reconstruction under dose from radiological incidents, the record of the telephone interview was evaluated carefully, and while the telephone interview was used to assist in determining whether [name redacted] worked there, there had been no mention of any incident of exposure -- which was not true, I had mentioned that several times. The events of the contamination were mentioned several times throughout the course of the process. The job of NIOSH was to investigate any and all forms of the -- throughout the course of the process, phone interview and witnesses to look at all the data, gather from all possible sources and then determine its validity.

Without adequate investigation into this incident and without interviewing the witnesses who could give insight into the circumstances of exposure and the background to Martin's activities while employed at Rocky Flats site, I don't feel the claim was given credence it deserved.

NIOSH has based its evaluation of potential exposure on inadequate and incomplete information supplied by Rockwell International, a company that was allowed to plea bargain out of their culpability into alleged environmental crimes to the tune of $18.5 million, to forever seal from the public the information uncovered by a grand jury in 1992.

I have attended several of the neighborhood meetings that have been held by the Department of Labor, and the same information rings true, that Rockwell International has falsified information regarding dosimetry readings of former Rocky Flats workers. Over and over I have listened to individuals tell their own experience of -- of readings from wrist dosimetries that were never assigned, and reports that for many years they were required

to wear their dosimeters under lead aprons, with no reading to cover their heads and extremities.

[name redacted] worked on the water main building in 771, the plutonium production building, which has been labeled by the Bulletin of Atomic Scientists in 2001 as the most dangerous building in America.

Microscopic particles of plutonium were extremely toxic if inhaled. [name redacted] and his coworker were both exposed when working outside of Building 776 while digging a trench with a backhoe, and they unearthed something hot -- a direct quote from my witness.

According to the EPA Superfund record, USEPA Region 8, Congressional District Number 2, EPA ID number 890010526, bore hole data indicated that radioactive contamination is generally contained in the top 12 inches of native soil. That plutonium, uranium and americurium (sic) contaminated soil in the central and eastern portions of the site, with the most contaminated areas being on the eastern edge of the industrial area. That alone should have strongly suggested that further investigation

of the incident of contamination should have been conducted.

It is also stated that significant amounts of plutonium were in liquid form contained within the deteriorating piping systems, which is what [name redacted] did as a pipe fitter. He also worked on process piping systems, water heaters, flumes, exhaust fans, heat exchangers, steam conversions, cooling towers, plenums, heating and air conditioning.

I respectfully ask that -- that reconsideration of my claim -- claim be seriously reconsidered due to the lack of investigation into incident of exposure and all the areas that [name redacted] worked in on plant site.

I am not confident in the fact that NIOSH has estimated his exposure adequately without investigating all the facts I have submitted.

I believe that many of the people in this room have the same problem. I have dosimetry readings that were scrawled on pieces of paper, just handwritten, no scientific data, nothing to back it up. And I believe that along with [identifying information redacted] and everyone in this room, they deserve the right to have

everyone consider this and take it out of the hands of NIOSH and the Department of Labor, and please consider their claims. Thank you.

DR. ZIEMER: Thank you, Mary Ann. Next we'll hear from -- I think it's -- could it be [name redacted]? I'm have a little hard time reading the first name -- [name redacted]?

(No responses)

Okay. Yvonne Garrimone -- Garrimone? Yvonne? Okay.

MS. GARRIMONE: Hi. Yes, my name is Yvonne Garrimone and I'm here to speak on behalf of my [Identifying Information Redacted], who passed away [Identifying Information Redacted].

He started at Rocky Flats in October of 1981. There he was a NDT tech, and I only know these things second-hand and just through talking through it with his coworkers, speaking with people from the steel workers' union and trying to do research on my own through the incomplete records that was provided to me and [identifying information redacted] from the Rocky Flats Plant.

Every time -- he first -- when we first found out he was ill, it was April, 2001. After an

extensive stay in the hospital in ICU and trying to recover, he placed his claim for -- with -- with NIOSH. He -- we -- we actually received his dose reconstruction I believe a month after he had passed away and to which [identifying information redacted] got a phone call asking her if she wanted to stay with what my [Identifying Information Redacted] had gone on record as what he believed, which we do believe, what he was exposed to. And just having to go through this fight and be denied time after time after time is a slap in the face, not only to us, the survivors, but to people who are living with the illnesses and various diseases that they got through their exposure at Rocky Flats doing their job, doing what they thought was right to protect, you know, not only their country, but to protect their families and to provide for them.

I know that not only did my [Identifying Information Redacted]-- was he diagnosed with pancreatic cancer, but two other people in his group, as well. He never once, through the whole ordeal that he was put through, complained. But the one thing that he did make

me promise and as well as [Identifying Information Redacted] is that we would fight, not only for him, but for everyone else that has been put through this whole ugly, ugly mess.

The only thing that I really want, more than anything else -- not the money. It doesn't matter. But for my [Identifying Information Redacted] to be able to see his ten-month-old granddaughter, to see everything that he's missing. When [Identifying Information Redacted] died at the age of 47 from pancreatic cancer, and I will tell you, that is the most horrible way to watch somebody die. My [Identifying Information Redacted] was a very active man, and that ugly disease took him away from me, [identifying information redacted], his grandson and everybody else who loved him and knew him. And I did not mean to get this emotional, but please, for -- not just for me, but for everyone else and anyone else who gets sick from this place, pass the special cohort status for these people so that we don't have to do this fight and get slapped in the face every single time. Thank you.

DR. ZIEMER: Thank you, Yvonne, and for being brave enough to share that.
Don Saber.
MR. SABEC: Sabec?
DR. ZIEMER: Could be Sabec, S-a-b-- S-a-b-e-k, is it?
MR. SABEC: C, c, c.
DR. ZIEMER: B-e-z.
MR. SABEC: S-a-b-e-c.
DR. ZIEMER: Okay, S-a-b-e-c, get it on the record here correctly. Thank you.
MR. SABEC: My name's Don Sabec, as you well know now. I started at Rocky Flats in April of 1961 and I retired the end of June of 2004. What I want to talk to you about is these dose recalculations. You know, it -- it took 33 years before I finally got a true dose assessment. And July 28th of 1994 they notified me that they did a dose reassessment on me and had to add 30-- 36,108 millirem to my exposure. And at the time I had a calculated dose of 71,415, and when you add it all up I ended up with 107,523 millirem.
But 23 years later is -- or 33 years later, excuse me, is just a little too late on -- on

that. And during that calculation they happened to add in two years that I missed Rocky Flats -- I got to go to work for the Department of Army for a couple of years -- and they did give me a dose for that. And I brought it to the attention in the meeting -- the summer meeting at Jefferson County Airport that they added that two years that I wasn't even at the Rocky Flats, and I don't know what -- the numbers they come up with or how they come up with it. And there was a gentleman there from NIOSH that heard me make that statement. Well, again, I was down at the Marriott with -- with [Name Redacted] last -- in the -- in the -- I guess it was the fall that we went in there, and said something about it when I made a testimony again, and he got me after I made my testimony and says Don, he says, I -- I remember doing yours 'cause I remember the two years that you said that you had an exposure from Rocky Flats that you weren't even there, he says, and I did a dose recalculation on you. But he said I had to add another eight rem to your exposure. And I said well, that -- not too good. He said -- and I

thought he was going to mail me a -- a copy of that -- that exposure value. I never received anything from that, and I kept telling everybody I'm pretty lucky, I haven't had any symptoms at all from Rocky Flats. Until October -- it was early October they found cancer in my eye -- I don't remember the date. Anyway, October 11th they removed it and I -- I don't know, I go back tomorrow to see if it's coming back again, but when I talked to the Department of Labor when I -- I made a claim. That's the first time I've ever done anything like that, and I told them it wasn't malignant; it's very hard to get malignant cancer in your eye, they said well, if it's not malignant, we don't even compensate you for it. But I did have an interview over the telephone, thought everything was -- they would contact me and make -- have a hearing. That -- that didn't happen. They -- they sent me another form to fill out that they want to know my entire history of the jobs I performed.

Well, in 44 years of work out there, I don't know if anybody could remember the jobs -- all the jobs they performed. I -- I was a chem op

for seven years. That's when the -- I probably got my -- most of my neutron excess, but -- and I really feel that this dose recalculation thing is -- is just about like a dart board effect. You -- you throw a dart, hit a number and that's what you're going to get, because there's so many incidents that we had that was not reported -- spills, contamination. We'd take them in -- in 771 we'd taken them in there if they had their hands contaminated and their face contaminated, we -- we'd wash them down in the area in a decon room and there -- most of the time there was never even a record made of it. So I -- I don't know how you people can make an intelligent decision on the exposures of people at Rocky Flats, when -- when I can't even get records -- I -- I had to really cry the blues to get my own records. Rocky Flats -- when I retired I requested a copy of them. It was two and a half years before I even got anything from them.

So I just want to say that the dose reconstruction is -- is almost impossible for -- for the lack of record keeping Rocky Flats did because the number one game was production.

When you're in production, you know, it's damn the torpedoes, full speed ahead. And -- and the same -- same criteria, same mentality, was the same way when we're in D&D. That's one of the reasons I got out as early as I did 'cause I felt very healthy and felt I could keep working, but the way things were going, I thought -- you know, somebody's going to really get hurt -- which they didn't; they lucked out.

Anyway, I appreciate you people coming down here and looking at this and -- and hopefully that you -- you can come up with something that is going to compensate people for what they really deserve. Thank you.

DR. ZIEMER: Thank you. Then – Jack -- is it – [name redacted] or --

UNIDENTIFIED: He left.

DR. ZIEMER: Oh, he left? Okay. How about [name redacted]?

(No responses)

Michael Logan.

MR. LOGAN: I just want to thank you for hearing us and all, and hopefully we can get things squared away. But I started at Rocky

Flats in October of 1978, worked there until June 19th of 2003, got laid off and took the early retirement. In the meantime, in '94 I left for ten months and then came back, take care of some family business. And there's so many stories you can hear, you know, starting out out there.

For example, I started out as a janitor, then I progressed to a service attendant, working in the garage servicing the fleet vehicles. And then I went to a metallurgical operator working in the foundry with the plutonium and dealing with all the castings and material with stuff like that.

Some days we'd have SAAM alarm go off probably ten, 15 times. The way they did the air flow is that the air may be flowing towards you, the SAAM alarm's behind you, and by the time it goes off you've already got an uptake. A lot of times if you request to go to body count, if you're fortunate enough to let someone agree to send you up there, it come back as background. But yet if they do nasal smears or anything like that, it comes out that you've got an intake.

Far as the radiological records, I've been fighting for three months now trying to get mine and I keep getting the runaround. I talked with a gal in Washington, D.C., her name's [Name Redacted] at Rad Records, and she keeps referring me to someone else, they refer me to someone else, but I -- I keep getting the runaround. I don't know what else to do.

A lot of the people here have very, very viable complaints, issues over it that needs to be addressed. You know, we hope everything will come out okay and everything's done right. You know, it's kind of like when I was brought up as a kid, you know, you -- you're taught to do right and do the right thing, but it doesn't appear that it's either, one, it's the system or the people handling the system.

Every time I get on the computer I just -- I get real angry, looking at the different issues with Rocky Flats. [Name Redacted] has diagnosed me of having asbestiosis (sic). National Jewish says it is inconclusive, but all the symptoms are there as far as the thickening of the pleural lining of the lungs, which also has the same consistency as berylliosis, which I've

worked with that also. Now [Name Redacted] also wrote an article on the beryllium testing, the program, and gone into great detail on how it works. But there was another partner with them, another doctor, and this kind of scares me to death, he was a doctor of veterinarian medicine. Now either, one, he does have some knowledge of the background of radiation or beryllium; or two, were we guinea pigs? I mean I don't mean to sound nasty, but there's a lot of inconsistencies of them losing records, records come back incomplete, or they're changing our dose to zero when we've been in the area. So what you're saying is by waving the magic pen, we don't -- we automatically don't get any radiation, we don't have no dose? Right now I'm fighting with a tumor in my spinal cord. I haven't had any comment back on that from the Department of Labor. Far as the asbestos of that, I've been denied the financial. They say they would like to do the medical surveillance on it, but I haven't seen anything on paper.

I had to fill out some paperwork the Department of Labor sent me far as have I ever filed a

suit against any labor department or workmen's comp or do I have any claims pending, which I don't. We FAXed it to them. I get a call today, where -- where's the paperwork? Well, you guys have -- it's been FAXed to you. I have the paperwork that shows that you have it. I hate to see it, it's kind of scary, but either, one, they're hiding stuff, which I would not like to believe; or two, somebody's just not doing their job.

I don't think we're asking for every -- you know, there's no way that DOE can come up and just wave their magic wand and everything's right. We want them to stand up and at least make an honest effort. You know, at first, when I was really scared and mad about the tumor in my spinal cord, I thought that the Department of Energy didn't care about us. I thought we were just a piece of meat and a number, but a piece of meat's a precious commodity. I'm not sure, we were just doing our job, what we were told to do. We were also told that the radiation exposure that we got by going to the dentist or having a couple of X-rays a year -- you know, chest X-rays -- you

know, you get more radiation exposure there than you did at Rocky Flats in a full year. I'm still at the point now, there's only two things they've told us: Lies, and more lies. If I was to go out and get drunk and run over somebody, I'm held accountable. But is our government held accountable for what they do? It's got to be a two-way street. I was brought up to do things right and do the right thing, and I've done my best to do that, working for Rocky Flats doing what I felt was in the best interests of my country. I cared. And a lot of these people here, you -- you won't find a more dedicated group of people. We're a honest bunch of people, and more caring. Thank you.

DR. ZIEMER: Okay. Thank you, Michael. Cheryl Hewitt-Ballou.

MS. HEWITT-BALLOU: Good evening. [Identifying Information Redacted] is why I'm here. His name is [Name Redacted] and he was diagnosed with berylliosis chronic disease and asbestosis. He was one of the first people that actually helped build Rocky Flats in the late '50s and going through the '60s and into the '70s. He's been in every single building

on the facility.

His job was working for the sheet metal workers Local Number 9. He would crawl in and out of ductwork that had been contaminated with beryllium dust. He had it covering him. There was no security. There was no OSHA, if you will. There was nothing to let him know that the dust that he carried home to his family was actually radioactive dust, and that he had inhaled it, he had also ingested it. He had it all over his lunch pail.

As a child growing up and watching [Identifying Information Redacted] come home from this facility, I would of course greet him when he came home with loves, kisses and hugs. He also had a little trick that he did every day for me. He'd always leave a little tidbit in his lunchbox for me to eat. Well, I did this every single day that he brought home his lunchbox. This box was covered with dust. We had no clue as to what the dust actually was until many years later.

Now I am as mad as hell, and I don't want to take this anymore -- if I may quote a famous actor in a movie. He yelled out the window.

All of these people that are here, and the ones that did not get the information that this meeting was being held this evening due to lack of correcting themselves and making sure that you address the people the correct way with notification of ample time to get them here to this meeting. One newspaper article isn't enough.

These people are sick and they're dying. I'm sick and I'm dying. I went through a double mastectomy at the age of 49 years of age due to the beryllium poisoning that I have in my system. I documented this beryllium poisoning in my system when I was pregnant with my son that is now 16 years of age, because I was so concerned of it being transmitted. I realized [Identifying Information Redacted] had brought the dust home. I realized that we had contact with it physically, by inhaling it and ingesting it. I was so concerned I went to National Jewish Hospital with [Identifying Information Redacted] on a specific appointment, and I asked the doctor specifically, is this transferable to my child that I'm carrying. And of course he could not

answer me. But now at this point of my life, at 51 years of age, after going through a double mastectomy, I am now looking at where it's involving my liver and my kidneys and my lungs.

Now these beautiful, wonderful Americans stood by the country and they did their job. They were screwed. I'm sorry, I'm not very polite. I like to put things black and white. They've been screwed by the government by lack of keeping records, by lack of truth, by lack of supplying ample, complete records for them to be able to go to doctors that should be supplied by the government to take care of them. They did nothing wrong but to do their job.

We're not asking for any miracles because we already know that we've been contaminated. We already know what our outcome is. You're not one of those people. You're being paid to sit here and listen to the sob stories and then you'll walk away and you'll dismiss it, just like all the rest of these meetings have done. All of these years we've talked, we've begged, we've pleaded and we've asked nothing but to do

the right thing by these people, the Americans that supported the country that we believe in. I don't think that's too much to ask.

The families have been affected so much that they've been basically put back on the shelf, shut up, nothing to do about it, the government will eventually get their act together. Well, you know what? I don't believe that the government's going to actually get their act together. And the reason why? You haven't done it yet. How many more years do you wait? You'll wait long enough for every one of these people and their family members to die, and then you'll go oh, guess what? I guess we were wrong. Thank you.

DR. ZIEMER: Thank you, Cheryl. Diane Jensen? Is Diane with us?

MS. JENSEN: As you stated, I'm Diane Jensen. I spent 22 years out at the Flats, and my first eight years I spent as a chemical operator. That meant hands-on processing with plutonium. And as a chemical operator, we went through progression period. That meant we learned how to handle plutonium in a liquid form, a solid form, a metal form. We bagged in, we bagged

out. We touched it hands-on every day, moving it from one glovebox to the next.

The remaining years I spent in technical support in a production building. I was always within 50 feet of the production area.

In 2003 I was diagnosed with breast cancer. I'm currently in -- was in remission. I now have a growth on my thyroid.

I want to thank you very much for this venue to tell you about our concerns, the inaccuracies that I've found in struggling with this huge system. I want to address my concerns to you because you are the audience that can make the decision. You are the decision-makers for our future, so that we can quit fighting and get on with our lives.

Special Exposure Cohort status is extremely important to those of us who have been ill, but I need to let you know that the system that's in place is broken, how it is broken, and that the administrators of the program cannot fix it. They do not have the expertise, the ability or the resolve to handle the issues.

The Department of Labor is currently tasked with administering this program. They have no

knowledge of radiation. I spent some time with a hearing officer for the FAB board. My report from that meeting lists my exposure, measured in grams. Now I was under the impression it's millirem, rem -- again, they have no concept of radiation.

The hearing officer is not the least bit concerned that they don't understand radiation, because NIOSH is the determining factor. They are only in place to make sure that the NIOSH determination is enforced. And they hide behind that law. It is on-- and it is the only tool they have to make their determination because NIOSH is the rule that determines least as likely or not. It is not their job to understand, but only to implement. They have no idea of the relevancy of radiation dose.

And to make it more frustrating, you cannot question the methodology. You cannot question the numbers they use, because only NIOSH can handle that. They can send questions back to NIOSH, but they can't address concerns, and they forbid you from questioning the methodology because NIOSH is the governing body.

Well, I have many questions, and they have a common theme for many of the people here. I have missing doses. I have zero readings, and I have inaccurate readings.

NIOSH also makes assumptions about the readings they have, and -- for example, they assume that if you have a zero reading, or if you have a missing dose, that the dose was too low to calculate, so they apply a small value to your dose to say this accounts for the missing dose. Well, they had it wrong. The assumption is wrong. They are adding a small value, when in actuality the dose that is missing is high. Many doses that I have missing in reality came back as no data available from times that I spent inside vaults, times that I've spent looking for cans or buttons that we had to find during inventory, so you spent hands-on time in a room that has 400 millirem for exposure. And your dose comes back zero or no data available? I'm sorry, that's wrong.

This statement also translates into a statement they put on your dose reconstruction that says everything applied is claimant favorable, so this small factor that they added for a dose

that was too high to calculate was used to say it is claimant favorably (sic) because they added something for that zero.

These statements are also like a narcotic to the claims administrators. Though they have no knowledge of the questions about radiation, they falsely believe that the system is built to compensate the employees with a foreseeable air factor, and that it's been applied. They're confident this mechanism's in place.

I also have concerns about the inaccurate reading due to the process, the procedures to subtract background from actual readings. What if an employee actually received background? In 1991 when I was an office worker, my dose went down drastically from when I had hands-on experience. My dose for the year was 46 millirem. But to be claimant favorable, they gave me 100 millirem. My office was room 101 in building 771, and my wall -- my desk was on -- was adjacent to the abandoned americium line in 771. In 1993 the Department of Defense said hey, we have 300 millirem at the badge board, and this has been adjusted downwards for 2,000 man hours. One, we worked 50-hour weeks, so

there's no concept of 2,000 man hours. And my office is here, between the source and the badge board. A badge board's 300? The source is constant. Tell me how I got 46. I don't know a physics book that comes up with numbers like that.

In the mid-1990s the operator realized that had issues with dose in 771. They'd placed metal shielding in the wall for what was my office. We had people here who'd mentioned the guard posts, the vestibule in 771. The radiation dose coming off the americium line, the abandoned americium line, was so high it was setting off my monitors. They had to install metal shielding. Give me a break. How can you tell me I got 46 millirem?

This affects all office workers in production buildings. By definition of the term "office worker", someone who was not required to wear a badge, we were assigned 100 millirem because, by definition, we were supposed to receive less than 100 millirem.

In the mid-1990s Building 371 housed the majority of the plutonium on plant site. (Unintelligible) said it was 12.9 metric ton.

And you can move that plutonium all you want. You can move drums from one location to the next to change doses in areas, but you still have office areas exposed to dose because the office areas are adjacent to the vaults and are positioned directly above the vaults.

I actually brought with me tonight things I would like to submit, which are dose records for 1996 and 1997, and the dose records for the office areas in Building 371 and 374 you will note significantly the bottom mark is 100 millirem. The bars on the right are 371 and 374 office areas, doses ranging from 200, 300, 400, 500, 600 and 700 millirem, office areas. Us office workers got credit with 1,000 (sic) millirem to be claimant favorable. There's an error here. Something is wrong. We were short-changed. NIOSH's assumption is not claimant favorable. The numbers are wrong, whether intentionally manipulated to meet corporate bonus structures, due to company policy to bring them down to 2,000 man hours, or the natural inclination to disbelieve your indicators when you have high doses. No matter what the reason, the result is the same: The

numbers are wrong.
Office workers got significant dose. The numbers they use are not claimant favorable. And the Department of Labor is not experienced enough to know the difference between a gram and a rem. I have very little confidence in their ability to administrate the system.
When you're voting tomorrow, please consider the accuracy of the numbers that were used to determine our destinies. Think of the false assumptions that contributed to our assigned dose. Think about the consequences of your decision. Special Exposure Cohort status will not make us well. We do not want sympathy. I want acknowledgement. I want to get on with my life. I don't want to spend it fighting the system. So tomorrow please vote yes on the Special Exposure Cohort status for Rocky Flats. Thank you for your attention.
DR. ZIEMER: Thank you. Thank you, Diane. Next, Dennis Virgil (sic). Just for planning purposes, folks, we've got Dennis and then Jerry Mobley and Liz Huebner will complete our list. So Dennis...
MR. VIGIL: Members of the panel, workers --

hi, cuz -- my wing man, another wing man. Not real good at this kind of talking. I'd like to thank the Board. I appreciate your patience. I don't know that I would like your job, either -- paperwork and all that's involved.

Dennis Vigil, I was a Navy electrician and a Seabees lineman, and I came to work. I wor-- and we're part of elite groups, construction, mine workers, maintenance people, production, monitors and operators. We are the band of brothers and sisters. We learned our trades and did our jobs well. Rocky Flats, we gave you the best years of our lives. Along with other families, I was a lineman electrician at Rocky Flats. I have a blood brother that was a 'lectrician at Rocky Flats. He lost a kidney to cancer. I myself have been learning medical terms as far as lung nodules, nodules in the lung, cysts in the kidneys and the National Jewish Hospital has brought some of these records out. Our claims have been denied. All I ask is that we take time so that America, you need to hear our cry. Thank you very much.

DR. ZIEMER: Okay, and Jerry Mobley? Hi, Jerry.

MR. MOBLEY: Hello. First I want to compliment all of you. I'm almost amazed that you have eye contact with the people talking. None of you have fallen asleep or become bored, that I have seen. I've been watching you.

DR. ZIEMER: Well, I hope we don't start now then.

MR. MOBLEY: In a minute, with your permission, I'm going to ask for a raise of hands of the people -- I don't know if it's appropriate or not, but I will.

DR. ZIEMER: Depends on how embarrassing the question is, I think.

MR. MOBLEY: My name is Jerry Mobley. I was a stationary operating engineer in Building 371 for 13 years. I came down with a skin cancer on the scalp -- the worst kind you could have. Then it went into my lymph nodes as mestastic (sic) malig-- anyway, it went into my lymph nodes.

DR. ZIEMER: Right.

MR. MOBLEY: Shortly after that, I had a real balance problem. I still have a balance problem. But they did a CAT scan and discovered I have a ping-pong-sized tumor in my

left cerebellum. When the doctor came to the house, which was unusual, to tell us about this, that I was going to have to have some -- see a brain surgeon the next day, he told my [identifying information redacted] and I that we needed to get my affairs in order. And [identifying information redacted] said so then this next month we should, you know, get things set up. And he said no, this week, before the surgery, 'cause he's not likely to make it. Well, I'm still here, thank goodness.

It wasn't a tumor. You know what it was? Severe radionecrosis. When the surgeon came out to tell the family after the surgery -- which lasted one-fourth of what it was supposed to last in time -- the surgeon was quite baffled. He said how did -- Jerry hasn't been exposed to radiation. And what did my family say? What did my family say? Yeah, he's been at Rocky Flats. And the surgeon says huh? 'Cause this is his first radionecrosis that he'd ever seen as a brain surgeon. They thought it was going to -- they were going to find mestastic (sic) malignant melanoma in my brain.

Well, anyway, to make a long story short, they didn't.

Now, I'm still here, thank goodness. But this last January I had to file bankruptcy. I have been fighting medical bills -- every time I go for a PET scan, they want $400 from me. When I went to work at Rocky Flats, one of the benefits was you're going to have lifetime medical. They're going to take care of all your medical bills. Has that happened?

THE AUDIENCE: No.

MR. MOBLEY: No. $86,000 I had to file bankruptcy on last December. I told the doctor last week when he wants to do another PET scan coming up 'cause I'm having breathing problems, where's the $400 going to come by? He's working on it. Hopefully he can come up with it. I don't have it anymore. I'm busted.

Now, what I wanted to ask for a raise of hands was, there are 12 of you here, the exact number that was in my group in 371 for the 13 years. They weren't all the same group, but when we finished up there were 12 SOEs. Of the 12 SOEs, five have skin cancers, the worst kind. But wait a minute, that doesn't fit the profile

for natural skin cancer according to NIOSH because I'm not even supposed to have skin cancer from radiation. It doesn't happen. Right?

Okay, the numbers are telling me something different. Now when I was going to ask for a raise of hands, how many of you are from -- not from Denver here in Colorado?

DR. ZIEMER: Not from Denver -- not from Denver.

MR. MOBLEY: Not from Denver.

DR. ZIEMER: Not from Denver.

MR. MOBLEY: If you were told when you came here that if you go to this Denver, you're going to have -- five are you are going to come down with skin cancers -- oh, but it's not connected with anything up here; it's just that the probability is so high if you go to Denver -- would you come?

When I -- no, you -- right, you wouldn't. You wouldn't take that risk. I wouldn't take that risk if I'd known what was happening. We didn't know we were coming -- all coming down with skin cancer until all of a sudden it's happening.

And so when you vote tomorrow, a yes -- I don't know if it's going to affect me because they say melanomas are not covered, even though it's cancer. This doesn't make sense. And severe radionecrosis isn't on the list because it's not supposed to happen, but I hope that -- I doubt honestly that I will ever see any of the benefits. I don't think I'm going to live that long. But I would hope for my wife, who has supported me completely, will be able not to have to sell the house. We've mortgaged the house to the hilt to try to -- 'cause I feel that -- I've always felt that I want to take care of my debts. I never wanted to go out and establish a debt and then walk away and say you figure out how -- so with that, thank you.

DR. ZIEMER: Thank you. Okay, Liz Huebner. Liz?

MS. HUEBNER: I -- I'm Liz Huebner and she's helping me here because the other day we made some posters that we were going to put around on our behalf and I started at Rocky Flats February of '98 and halfway through the '98s the doctors told me that my body was starting to be the body of a 90-year-old and I had a lot

of things happen and a lot of muscular and different things. And I worked in 883 building and [Name Redacted] came in and said well, the chairs don't match, we have to take them away. And so we sat on the uranium ingots and the LIPS project and all that and the engineer came through and says well, you shouldn't be setting on that because that affects your production organs and so I've had a full hysterectomy and all that.

But a couple things I'd like to bring up about this reconstruction is we have MSDS sheets, which everybody knows is material safety data sheets, and for chemicals and all kinds of things. That stuff on there gives you things that it affects in your body. Now these manuals were written and so I don't understand why all of a sudden these manuals are in question about chemicals and how they affect your body because some of the chemicals we used, like say in 883 building, when the fans went down the chemicals caused a -- it was as tall as this -- it was a white wall, to turn yellow, and we were told to continue working. We never had respirators. It was a uranium

facility and when we left the building for breaks, we had to take all of our clothes off -- we had our boxer shorts and our T-shirts -- and then we'd go to break. But all the carpets would come up hot all the time and so forth. And another thing is when we went to body count working in the uranium -- and they had beryllium in there, also, because it was the foundry building -- we took two showers to get body counts. We had to take one at the building, and we had to take another shower at the medical building before we took our body count because they knew that the dust would be on us and the dust got in the offices on the second floor. They had to replace the carpets many times because they would come up hot. And so like -- I don't understand the reconstruction part.

The same with radiation. The radiation -- they had standards for those radiation things, and it gave what effects it does on your body. And some of the medical problems I had at the time, I would bring this up and they would say oh, no, it can't be that. Now I know they say it was chronical (sic) over a period of time, but

during production periods people got acute doses. You take the doses over a whole working time, that doesn't matter. They should be taking the times when we got the high doses. When I worked in 707, every other month I had to be taken out of G module because I'd get 100 millirem. They'd take you out a month, then they put you back the next month. You'd get your next 100 millirem, then you're out a month.

Another thing was they used air flow patterns for wearing respirators, so when we worked in D module, if a SAAM alarm was going off at one end of the building, at this end we would continue to work in the gloveboxes and not required to wear a respirator because the air flow supposebly (sic) kept all the radiation at that end of the building, so we continued working.

Then we had another time when the bellows had been leaking, and nobody knows how long, in one of the gloveboxes. And one day they had the janitors come in and do the floor, so they were supposed to clean the floor, and the procedure was supposed to be that you had the floor

surveyed first. Well, the survey was not done. The floor was swept. And that one sweeping contaminated the whole room because there was a bellows leaking that nobody had any inclination that it had been leaking all this time. And once it got spread around the room and we had to decon 24 hours straight for three days we deconned that room.

A lot of procedures were in place but not followed, and we were told to go ahead and do the work anyhow. Things -- I was an inspector out there in the machine shop. I worked all the buildings except of course 111 and 115 -- I didn't work those -- but all the others, and we had training as inspectors and I was an RCT. I was in the labs. In the labs we were working without gloves and that happened to be the time I had my hand surgery. You know, I was getting a lot of radiation exposure to my hands, but they said no, you know, that can't be. But yet you look at the books and the books say with this amount, this can cause this kind of health problem.

So I do not understand. They wrote manuals. They were supposed to be god. We were supposed

to follow them, but all of a sudden these manuals are incorrect and they're not to be used.

The dose out at Rocky Flat was spread among all the people, not just the workers, but they took everybody on site so they would keep our dose down per individual. So all the workers -- you're getting high dose.

[identifying information redacted] -- he was diagnosed with the Be, had the lavages, and he couldn't -- he wasn't supposed to, during the days of -- of decon and cleanup, he wasn't supposed to work around beryllium. And he was on the beryllium program. Now the last lavage they tried to perform on them, they couldn't finish it 'cause they couldn't extract anything back out. Now here all of a sudden he's not in the program. He has to start over. They say you're not in the program now, we -- you have to reapply. And then they said well, your papers aren't original, they aren't this and that, and we're finding that papers are getting shredded, documents, documents that were legal according to the law. I just don't understand how all these documents can be denied.

And I'd like to bring up about a man out there. He lives in Ohio now because he used to be a machinist. He worked in 707 with me and one night the machine got some plutonium in his arm. He waited over 45 minutes for the rescue -- or the rescue team to come and take him up to medical. He now has MS so bad he's wheelchair-bound and nobody's putting anything together for him. I -- I feel that with all the muscular things that went on, those should be considered also because bones and muscular were in the books, too.

And let's face it, Rocky Flats did a lot of things that were illegal, 'specially at the end. I had people that I checked out on the step-out pad that had infinity on the respirators and on their clothes, yet they were not given nasal/mouth smears. There was no record kept of this. I said aren't you to get one? They said it's not required in our work package. So there's all these young people said oh, when I get sick down the road, I'll come and claim. I said there will be no company.

So I just want to make a point that you had

things in writing, and they were connected to things, yet you sweep them under the carpet. Everybody was put in one pot and things were split among 5,000, 6,000 people, when the people who got the exposure -- it -- sure, you know, they say it's chronic over a long period. But there was a lot that was right then and there and it was acute, and that was overlooked.

How can just one month being out of a room help your dose? You get 100 millirem. Okay, we'll keep you out a month, then go back. I mean the things were black and white, yet now they have to be reconstructed and I just don't understand how the government is two-faced.

But anyhow, that's -- oh, one other thing. Bioassay was never taken seriously, either. I had positive bioassay. I never found out for four or five months that I had been in positive bioassay. And so there's so many things, so many loopholes that were made out there that are not being put in the reconstruction, and the workers that were out there -- we were made to look like we were saints, that we came to church, we just did our thing, no harm was

there, yet there was harm all around us.
A bag-out that was done, over 100 millirem of material bagged out and just left to set. The rules were -- were supposed to be in place, but towards the end they weren't, and people were getting acute, not just chronic doses, and we're paying the rest of our lives.
I pray that I don't live to be very old. I don't want to suffer anymore. I live on morphine and pain pills and this and that. I go every two months to get shots in my spine. I don't want to live old. But still I think people should be compensated. We thought we were helping keep America safe. Those bombs were to keep America safe, and now it's like it didn't matter. We're just like the soldiers that they throw aside, too. We want to be considered just like soldiers 'cause that's what we were. We were civilian soldiers, but we were like soldiers. We were keeping America safe.
Thank you for your time.
DR. ZIEMER: Thank you, Liz. Now I had indicated that Liz was the last on the list, but now I have another list. There -- there

are a few more, if you'll bear with us.
Henry Mosely? Is Henry still here? There you are. Henry.
MR. MOSELY: I'm a little bit unorthodox so you'll have to deal with me. They're used to it, you're not. Everybody stand up. Every once in a while during this lecture to these people, a few of you sit down. The ones that are sitting down are the ones that are dying. I want you to look at these people up here. I don't want you people to look at me. These are the people we're talking about. These are the people that, rather than the government say no, we're not going to help you -- excuse my language -- go to hell, you come up with a dose reconstruction. It's BS. I know it.
Everybody else -- shake your heads when you agree with me -- it's bullshit.
You can't -- everybody out here worked at the Flats. Very, very few people did the same job day after day. Very, very few people did the same job from 9:00 o'clock to 10:00 o'clock. To say this is the dose they got that day, you don't know. Nobody knows. We don't know. I was an RCT out there. I was supposed to know.

I tried to know. There's no way. There's too many buildings. There's too many different procedures. There's too many bosses that didn't care. There's too many people that just went and did what they were told to do, whether it hurt them or helped them. So dose reconstruction -- that's a joke.

You need to consider this. Now look at these people out here. These are the ones that you're saying no, they're just here to whine. Well, I'll tell you what. We worked out there -- I worked out there a long time. I probably met 20,000 people, the same 20,000 people that you'll meet through your life, but the number of people that are sick, the number of people that are dying, the number of us that are going to die, the percentage is so much greater than what you'll ever see in the 20,000 people you'll meet in your lifetime. To say okay, let's do a dose reconstruction -- just tell us no. That's a lot -- that's a lot more humane than to say okay, get out there and work, get out there and do this job. We need to close this down. We'll take care of you. And then when we come up sick, to say, you know, we're

going to do a dose reconstruction. You know, that's wrong. I think it's wrong. I think my cohorts think it's wrong. And I think you think it's wrong.

Vote the way we need it to vote tomorrow. Thank you.

DR. ZIEMER: Okay. Thank you for a very articulate presentation, Henry. Donna Quinlan? Is Donna here -- uh-huh.

MS. QUINLAN: Yes, I'm Donna Quinlan. [identifying information redacted] survived World War II, but he didn't survive Rocky Flats. [name redacted], as he was commonly known, worked out there for 27 years. He was in industrial engineering. I knew he did -- he was an industrial engineer, but I had no idea what he did. I didn't know what Rocky Flats did, and I still don't know. All I know is what I've heard from these people at -- a couple of times, some of them.

[name redacted] was a very active man all his life, in extremely good physical condition. He was a loyal employee, he worked hard. He -- I never heard anything from him about Rocky Flats, other than it was where he worked.

That's all I knew -- until it came out in the newspapers. And even after that, he didn't talk about it. He didn't ever discuss anything. All I have learned is -- trying to fill out this paperwork, I talked to fellow employees and learned some horrible things after his death.

He, as I said, was very active, very physically strong and was into everything -- skiing, bicycle riding, motorcycling, running. He could outrun a man half his age. He was still very -- going strong until 70. Then he began to -- I don't know, what's going on with me, you know; I'm sure feeling my age. And then toward the end of his 70th year really had trouble. He'd go out biking and come back and say I can't imagine what's wrong with me. He says it's so hard just to ride a bike anymore. And so -- and this goes on for a while.

Anyway, then in the early -- his early 71st year he -- that's when he was experiencing the problems with bicycling and walking, everything, and just not himself. This is the man who could figure out how to do anything anytime. And yet when he was trying to get

ready for our children to all come back and we were all going up to Pearl Lake for a week, we had rented a cabin, and he couldn't even figure out this -- he'd finished a bathroom, except the shower door. And all of a sudden he couldn't understand the directions, what he was reading. And he just wasn't himself. He just kind of was off in his own world and every time I'd turn around he'd be lying down someplace in the house on the floor asleep.

So we went to the doctor. He sent us on to a neurologist. The neurologist sent us that day for an MRI but without contrast, and called me that night saying that [name redacted] had a brain tumor, and he had probably had it for 26 years. [name redacted] had worked at Rocky Flats at least 26 years -- up to 26, whatever. Anyway, he could have had it for a very long time because it was on a silent part of the brain. It was on the part that affected his coordination and balance, and thus his problems with all he'd been having problems with.

And so then he sent us on to a neurosurgeon and he -- oh, he said it looked bad. So he sent us on to a neurosurgeon. He took a look at it and

said he would have to send us right on for another MRI, with contrast, but he was sure that it was malignant -- a tumor in the last stages. And that's what we found when I carried the X-rays to him.

He had scheduled that -- first appointment, he scheduled -- this was on August 5th he -- that he was -- the -- the first MRI. He set -- scheduled surgery for August 12th and it was very lengthy surgery, and he had said that it was just so far advanced, he told [name redacted] all he could do was buy him a little time. There was no way he could get it all. It was too dangerous and surgery was very lengthy.

And anyway, [name redacted] -- he pulled through. He was then put on steroids, which kept him alive for a while. We had hospice that -- home care, and the steroids made him -- at first made him bounce back, you know. He was doing -- the hospice advised him to live his life as fully as he could, so -- he still had problems all the way, though, and this, like I say, was August 12th when he had the surgery. Hospice said he would never make it

to December or even Christmas. And he says oh, yes, I am. He died January 1st.

I forget what I was going to say. Anyway, my family do-- our family doctor had a very large practice in Arvada at the time, and he told me – after [name redacted] was diagnosed he said, you know, he says every single patient who has prostate cancer works at Rocky Flats -- and he had a very large practice. So he didn't tell me any numbers, but he said that he hadn't kept -- he hadn't done any studies, but it made him very suspicious and other things.

So in all this, [name redacted] never talked about it. He never gave any reason. But in talking to a former worker, he did have occasions where he was exposed and he -- in his early years out there all he did was time studies, at first, because he was in training. He hadn't gotten his degree as an industrial engineer yet. He did go to school at nights for years and years and years. Anyway, he -- he was not in the big fire and I -- I don't know, I'm not familiar with terms, I think it was Building 71 or 76. Anyway, but talking with his coworker, who also has very serious

cancer, lives in Texas, said that yes, they were not in the fire that day, but they were in there next day. And it's been proven in the cleanup it was in the ducts, it was everyplace, so how did this keep from affecting everybody all the time? And yet he -- he was working in all the hot spots all those early years.

Anyway, I just ask you to seriously consider all these things these people have said. I don't know where to go. The last line of the NIOSH claim said you can reopen or you can -- you -- you cannot -- you cannot reopen unless you have medical facts. Where do I get these medical facts? I don't have any access to records.

And I have another thing. Listening to all these people at other times, every single one of them say yes, that first NIOSH dose reconstruction was nearly 50 percent. The second one is way down. And that's exactly what happened with [name redacted].

And another thing. Later, after I had filed, then later I thought, after -- I don't know how many interviews I had, there were several -- after I hung up I thought oh -- so I called

back and said [name redacted] was sent to several plants over the years. I don't know what he did. I don't know what he did there, but he was sent to Oak Ridge, he was sent to Albuquerque, Los Alamos, Lawrence Livermore -- those are the ones I can remember, yet -- so they reopened. They did another -- they contacted all those facilities. There's no record of his even being there.

So anyway, please consider SEC for Rocky Flats. Some -- Las Vegas was just -- is it, Nevada or someplace was just given this status. Rocky Flats should, too.

My grand-- my kids miss [identifying information redacted], their grand-- their father. My grandkids miss their grandfather. My greatgrandkids will never know him. Thank you.

DR. ZIEMER: Got two more folks here, Leslie (sic) Britton and then [name redacted]. Leslie?

MR. BRITTON: Lessie.

DR. ZIEMER: Okay.

MR. BRITTON: Lessie.

DR. ZIEMER: Okay, I -- L-e-s-s-i-e, I --

MR. BRITTON: I'm just sort of a newcomer. My name is Lessie Britton and I worked in Building 707 in G module, and I contracted beryllium there. And the gentleman the put the beryllium in the building, or helped put it in (unintelligible), he's sitting outside there, he told supervisors and managers that we need tiebacks and PAMPRs (sic), and he told them like for six months every day. It never happened.

But see, for me, I have a two-fold thing about the people in this country and the people that run things in this country. The first one, then I'll get back to the last one, is that there were Viet Nam veterans. Okay. Now when we come home, we were the only veterans that got spit on and talked about. All right? When we came home from this war. Saw a lot of my friends die.

Okay. So like I go to Rocky Flats to help close it down, and same thing. I don't understand is that when you have people that go and put their lives on the line to help this country do something, help people in -- that run this country do something good -- other

words, like close the plant site down or where they get rid of some of the nuclear waste -- you throw them away.

Why do you throw them away? I mean I -- this thing about any of your children or your uncles or uncles or dads or aunts was any of these positions, would you want to throw them away? But you do. And it doesn't make any sense to me. And you sit on a board and you sit and you talk. Now it be somebody on that board going to say one thing, they knew the job was dangerous when they took it. Now that didn't run across everybody's mind in here.

But anyway, being patriotic and being part of America, you want to try to help do things right, but we do people so badly once they get a job completed, once they put their lives on the line for this particular job, and then you turn your back on them. I never understood that.

And I never understood anybody that sit in a high place to dictate policy that haven't done any of this, haven't been in any of the wars or haven't come out and went to these plants and been exposed to any of this junk that we

created.
I asked an engineer one time, I said well, you know that that piece of plutonium has a half-life of 21,000 years. And the first thing come out of his mouth -- well, we had a cold -- we had a war going on. You didn't think about how you're going to get rid of this junk when you invented it? Never crossed your mind. But then when you have people to put their lives on the line to get -- or to try to neutralize it some kind of way, you know, you throw them away, or you hide them or you kill them.
I been fighting the VA for ten years. But I surprised them. I'm still alive. I'm 62. And they're wondering when are you going to die. Only when God says for me to die.
But like when you get ready to vote on anything, you think about how folks have sacrificed themselves, you know, and how people are sitting in places that make decisions and write policy have not participated in any of these dilemmas, you know, just sit and talk about it and have your -- your peons or whatever sit off to the side there, get a earful and come back and give you information.

You are not going to get all the information that you need.

And this lady said that her [identifying information redacted] went to six different facilities. Now we have to sign in and sign out, some of them with computers, and all of a sudden you're not listed? I mean just think about it, now who -- who is the jackass here? You know -- you know, I'm serious. You know, how can you lose those records, and how can you be so proud to stand up and say that, well, like, you know, something sharp or smart about that they knew the job was dangerous when they took it.

But then all of a sudden, like this gentleman up here the way he -- he asked -- he made one statement, why do you have to prove something that's been already designated that you have? Why do you have to do that?

I've had two bronchoscopies. The last one I had was in January. I call it a wash and dry, but the (unintelligible) -- the first one didn't hurt, the second one did. And like, you know, this young doctor, he made a statement about being forgetful or having hallucinations,

and he's 39 years old, he was talking about his mom. I said, you know, your mother has to love you because you're an idiot, you know. We tell you something is wrong with us and it hurts us, but yet we're hallucinating. I don't know what happened to this man's neck, but I know he's in pain sometime. I have no idea what happened to him, and I'm going to sit and look at him and say oh, you just got that around your neck to look cute, you know, and try to draw some money.

People sitting in this chair -- when I left [name redacted], she was walking up straight. She used to watch over me. She was RCT. Charlene (unintelligible) back here, that lady took care of me, literally took care of me. She worked there 35 years, from what I understand. Tonight I asked her, I said are you sick? She said no, ain't nothing wrong. She got blessed. But you have people to take care of -- we took care of one another as best we could with what we had, and then we have people sitting in high places that's going to throw us away.

However you vote, think about how you got here.

Think about why you're here, and look at the people around. You've got folks dying like flies.

Now one other thing I just don't understand, and I'm going to leave it alone. You spent $93 million on some paperwork. Tell me what -- about that paperwork. How did that happen? When they first started this thing about -- during -- trying to get the paperwork together for the people that had beryllium and whatever, berylliosis, you spent $93 million for people sitting on their behind shuffling papers? I'd like to know who -- I'd love to have that job because you're making good -- you threw away -- you threw away good money on some BS, and you lose records purposely. You deny yourself the things you shouldn't deny yourself. You lie to yourself, and how do you do that, I don't know. So whatever you decide to do, you know -- because I figure that God will keep me around here. Whatever you decide to do, think about your -- think about your country. Think about when you wake up in the morning and shave your face and put your lipstick on or whatever it is you may do, look in the mirror and look at

yourself. And when you walk -- if you -- all of a sudden you grab a hand and all your hair come out. That's not happening to you, but it happened to your friend or somebody you know. Think about what you're going to do. You know, you need to tell these people that's in charge of this stuff you all are BS-ing the public. Very serious. You make bad decisions and you stand on it and you compound it with bad decisions.

Only thing I ask you is don't throw us away again. You did that in '65.

DR. ZIEMER: Thank you, Lessie. Richard Gaffney. Richard?

MR. GAFFNEY: Yeah, hi. My name is Richard Gaffney. I spent 23 and a half years at Rocky Flats. I started out as a chemical operator and moved up into management and managed maintenance and utilities. I was probably one of the last production managers before production shut down in Building 771.

And first of all, I just want to say to all you guys here, I really love you and, you know, I don't know if anyone else in the world appreciate us but I just appreciate the hell

out of you guys for the incredible job that you did. And I got to tell you, thank God you guys were doing that job and not the people that have been supposed to been taking care of you, or we'd have lost the Cold War and we'd be speaking Russian right now.

Yeah. You know, I am -- other than [name redacted], I think I'm (unintelligible) people that can say that I'm not sick -- at least, you know, not right now. And you know, knock on wood or -- or whatever -- thank you, [name redacted]. He was pointing out the wood for me. We -- 'cause we have -- every, you know, two or three months we'll have a party and all us old guys'll get together, and everybody's sick. You know, it's not, you know -- you know, like your regular place that you go to, you know, that you socialize where this person's sick or that person's sick. Everybody's sick.

And the whole idea -- you know, I'm just a simple country boy, but the idea of a dose reconstruction, when you're talking about tritium, uranium, plutonium, a whole bunch of other things that are classified that I can't

talk about, thousands of different chemicals used in hundreds of different conversation, I'm not too bright but I can tell you a dose reconstruction is impossible. And anybody with an eighth-grade education can tell you that. You know, I mean it's just impossible. I can sit down and just, you know, start doing the math with, you know, trying to combine a hundred -- can't be done.

The second thing is, we are sending our stuff to the wrong agency, 'cause I got to tell you, I wrote a check for $10,000, sent it to the IRS, it was taken care of within a week.

The -- and then -- I was a shift manager, shift tech-- you know, a technical advisor. People probably remember me from 771 and 991. It was my job to determine whether a job was safe. And if I shut down a job, which I did many, many times and people here are probably still mad at me for that, but if I shut down a job, I could take a look at my watch and it wasn't two minutes before a vice president or a manager, you know, a building manager or facility manager would be in there wanting to know why I shut it down. And you know, that was a lot of

pressure -- that was my job. I got paid to do that and basically if I shut it down I just could look at the requirements and say this is why.

And you guys all remember the work packages. Right? Okay.

UNIDENTIFIED: (Unintelligible) you used them.

MR. GAFFNEY: Yeah. Well -- you know, 'cause I -- you know, someone would bring (unintelligible) that packages and there -- there would be signoffs for nuclear safety and radiological engineering and health and safety. And I got to tell you, maybe one in a hundred packages, if that, you know, do I personally believe that anybody read. They just signed them off because I would look at the job that was going to be done, and I kind of knew what all these people would be doing because I've probably personally handled enough plutonium to blow this world up two or three times. I'd go -- do you got any idea what you're sending these people in to do without having properly reviewed this work and the safety controls. And it was -- it was not, you know, like, you know, one out of a hundred package. It was

like the majority of the work packages that were done, the reviews were incredible. I mean it was just non-existence (sic) because people -- I don't know if anyone ever got to be in one of my closed-door meetings when I pulled somebody in from health or safety or radiological engineering and our nuke safety and did the old famous ass-chewing, but it just -- it just didn't -- it just didn't happen. The controls weren't there then, and obviously they're not there now because I can't believe we're talking about reconstructing a dose when everybody knows, that's got any kind of brain at all, that's impossible, can't be done. But I'll tell you what, you know when you have emphysema. You know when you've got cancer. You know when you have an autoimmune disease. And this is just a point. Everybody knows that's been working there, they're -- you know, they're -- probably got a little time bomb clicking. Ain't nobody saying this is what you could do now to be proactive to keep me from getting sick.

And I got to tell you, I will never file a claim. If I got a cancer and my doctor says

you've got two years left, the last thing I'm going to do is waste my precious time trying to get benefits that are obviously impossible. So that's all I've got to say, and like I say, love you guys and I hope we all see you at the next get-together because we're dropping like flies here.

DR. ZIEMER: Thank you. Okay, there's a couple of individuals who've already spoken that maybe have a question or comment. We need to, with respect to everybody here, respect the time. But go ahead, a quick question or comment.

MR. ROMERO: My name's Dennis Romero. I've already talked once, so --

DR. ZIEMER: Yes.

MR. ROMERO: -- bear with me. We talked about our stories and stuff happened at work. 444 building, prior to me getting there, people had berylliosis, for whatever reason. They used to eat, smoke and drink in the back area of 444 at their work stations, and then they'd take the stuff home to their kids and families. Like the one woman said, her daddy's lunchbox was -- BE on it. Well, there's why. We used to have this stuff in the back or you'd eat in the back

area.
771, 750 cafeteria, 771 cafeteria, 371 cafeteria, the locker rooms -- Don could access (sic) to this -- these areas would predominantly come up contaminated. Somehow somebody got the rooms contaminated.
Common work areas, people working there don't even go in the back, they went to the cafeterias and they went to the locker rooms. They took the stuff home.
There's been numerous times, you don't see it on TV, people's homes were gutted, people's cars were taken away because they found contamination in their homes and their cars.
DR. ZIEMER: Okay.
MR. ROMERO: What kind of doses are you going to give the people and their families for that?
DR. ZIEMER: Thank you.
MR. ROMERO: Oh, I got one question. I forgot to mention my medical problems. I've had two prostrate (sic) surgeries, two knee surgeries, reconstructed shoulder surgery. In year 2005 when I had to leave the plant I came down with Graves disease. I want to ask Dr. Lewis, can Graves disease be caused from working at Rocky

Flats? I want a answer.

DR. ZIEMER: He doesn't know.

MR. ROMERO: Is that your answer? Can Graves disease be caused from working at Rocky Flats?

DR. WADE: I don't know.

MR. ROMERO: That's all I want to know.

DR. ZIEMER: Okay.

MR. LOGAN: Mike Logan, I've already spoken before, but when I left for ten months and went back to work for British Nuclear Fields, which is part of the national conversion pilot program, a private firm, upper management -- not all management, we had some decent managers out there, but some of those select upper ones had a really bad attitude about the hourly workers. They didn't really care. And one of the British guys from British Nuclear Fields -- and I'm going to quote word for word -- the American worker is the most unsuccessful, unmotivated, laziest bastard on the face of this earth.

UNIDENTIFIED: (From the audience and off microphone) (Unintelligible)

MR. LOGAN: Yeah, we do. Now we had to clean up places of nitric acid baths that had dried

powder in the bottom. They put us in full-face with chemical respirators, all the proper anti-Cs. And you're cutting it up with wood saws that's got metal blades in it, and after five minutes you're going -- you're tasting it in your mouth. The people who manufactured those respirators, the full-face -- or anyone, even a chemical, whatever it is -- it will not protect you. The only thing that'll protect you is supplied air. They wouldn't do it because of the money.

Now why is it now -- okay, they've got it closed. They got it done ahead of schedule. Certain management got up to $3 million per person bonus, but yet the hourly people who did the job, who were in the trenches, got maybe between $1,000 and $4,000 a year for maybe four years as a bonus. Isn't the success of any company, any business, is the people in the trenches?

DR. ZIEMER: I hear you.

MR. LOGAN: Why do we get kicked to the curb? I mean the whole key -- doing things in life is attitude.

DR. ZIEMER: Yeah.

MR. LOGAN: How can you expect to have a good attitude when we keep getting beaten down, getting turned down and getting treated like second-class citizens?

DR. ZIEMER: Okay.

MR. LOGAN: I mean put yourself in our shoes.

DR. ZIEMER: Understood.

MR. LOGAN: I mean I'd sure love to be able to stay around and watch my grandkids grow up --

DR. ZIEMER: Yeah.

MR. LOGAN: -- see my great-grandkids. Wouldn't you folks?

DR. ZIEMER: Sure. Sure.

MR. LOGAN: I mean -- but we've been put down.

DR. ZIEMER: Okay. We've got another -- try to make it quick, want to respect people who haven't had a chance to address us yet.

MS. RUTTENBER: My name is Margaret Ruttenber and I'm a research scientist, epidemiologist, who studied this worker cohort for the last ten years, from 1990 through 2000 -- both [identifying information redacted] and I did. And I don't really want to address the dose reconstruction. I think enough has been said about that.

What I would like to address is a missed opportunity that the Department of Labor had, and just give you one example of several, and I'll be brief.

Two years ago Brady White from the Department of Labor came to my office and asked for my assistance in doing a new match with the cancer registry at the State Health Department to identify those workers from our -- the Rocky Flat cohort, of which we have the database for it -- who were -- who had cancer, and then also do a match with our vital records department at the health department to make -- to see who -- you had to do a mortality match to see who was still living so we would not -- we were sensitive to the issues of either contacting a worker or survivor. This was two years ago. We concer-- we designed a letter. It was to be sent through the University of Colorado Health Sciences Center to the workers. We contacted them several times and have heard nothing more from the Department of Labor.

I was contacted by a reporter last week questioning what I knew about the worker study and -- and you know, I've done the definitive

study on this cohort, as I said, with [identifying information redacted] as well. And it appears that the Department of Labor has kind of dropped the ball in terms of communicating. And if they really wanted to identify and connect with these people, they've had many opportunities, both through our databases with the registry.

Today the director of our cancer registry came to me and said didn't that letter already go out? And I said no, it never did. So there are certainly -- probably a large number of people aren't even aware of this compensation program, but they -- both NIOSH and the Department of Labor have been given ample opportunity and access to our data and information and have not chosen to use it. Thank you.

DR. ZIEMER: Thank you. Very quickly, a comment here, and then I think we need to come to closure. Go ahead.

MS. NORMAN: My name is Joan Norman and I worked for Rocky Flats for 21 years. I, like the rest of us, voluntarily went to work for Rocky Flats and the United States Department of

Energy. Ironic that three of us in this room have had -- been diagnosed with breast cancer, and breast cancer happens to be on the list of no pay, no claim.

And in 2005 I was diagnosed with colon cancer. Again, the doctors had asked for medical proof that this was related. I did receive information from my gastroenterologist. I will read one sentence, and it says this is based on a scientific review journal article by a Dr. Sandler in gastroenterology in 1983, volume four, page 51, radiation-induced cancers of the colon and rectum, assessing the risk, and I was told this is merely a study.

Excuse me, but as I said, I'm not repeating what everybody else said because what everybody else said here is true. We gave of ourselves. We gave to the government. Why is the government not supporting us? I am going to continue to be a little gnat on the government's head, and I will not go away until the government -- until we get our justice.

DR. ZIEMER: Thank you.

MS. NORMAN: Please vote for us.

DR. ZIEMER: Folks, I want to remind -- oh, I'm

sorry, do -- okay.

UNIDENTIFIED: (From the audience and off microphone) (Unintelligible)

DR. ZIEMER: You'll have to use the mike. We have a -- everything's being recorded, so we need to be able to hear you through the ear phones here. Give us your name and...

MS. BOWIE: My name is Marie Bowie and I'm here as a representative for [name redacted], who was [identifying information redacted] . He worked for Rocky Flats from January of '58 until September of '73.

In 1979 he was diagnosed with pancreatic cancer, and within nine months he was gone. He went through two major surgeries, bypass surgeries, because the pancreas was unable to be removed and the first bypass didn't take. He was only able to go through one session of chemotherapy treatment due to the fact that his body had deteriorated so badly from the penetration and the continued growth of the cancer cells throughout his body. By the time they did his second surgery, which was two weeks after the first one, it had already infiltrated into his lymph nodes.

So he passed away in 1980 and unfortunately the program was not initiated until 2000. Along with that information, by the time 20 years had gone by, there was very little access to additional medical information, other than what I could get from Pacific Records.

We just received the first denial of [identifying information redacted] claim on behalf of [identifying information redacted], and his dose reconstruction -- that took time to do -- was at 43.77 percent probable cause, which was exclusively done just for the pancreas itself. I would like to know how I could possibly get that extended, with the limited time that I have, to continue his claim with the infiltration of the cancer to the other organs.

DR. ZIEMER: We have some NIOSH people here, they may be out in the corridor, but we can -- we'll -- after the meeting we'll hook you up with someone who can help you with the next steps for you --

MS. BOWIE: That will be great.

DR. ZIEMER: -- to follow that up. Yeah.

MS. BOWIE: I also have a couple of articles in

here, the very first one when President Clinton was the one who initiated --

DR. ZIEMER: Right.

MS. BOWIE: -- the program.

DR. ZIEMER: Right.

MS. BOWIE: And also of a family that, together combined, has 130 years of service out at Rocky Flats. And in the article that was written they said that in the beginning, in the '58 into the early '60s, the only protection the men had in -- going into hot spots – [identifying information redacted] was a maintenance person, pipe fitter -- was double coveralls. So --

UNIDENTIFIED: (From the audience and off microphone) (Unintelligible)

MS. BOWIE: Yeah, exactly. So I just -- you know, I'm hoping that -- that this Board will vote for the people, all of them here, all of them that have gone beyond that are family members hoping to be benefited in some form or fashion for the loss of their loved ones. [identifying information redacted] served eight years in the Navy. And hope that you guys will see that this gets pushed through for us. I

know that other plants that are still standing have been given this benefit, and it would just really be nice to see Rocky Flats get that benefit as well.

DR. ZIEMER: Thank you very much. Folks, I want to remind you that tomorrow morning at 8:15 this Board will begin the official deliberations on the Rocky Flats SEC petition. So -- and that -- that part of our agenda will consume most of the morning. That will be presentation from our workgroup. There will be presentations from the petitioners, as well as from NIOSH, and then deliberations by the Board. So -- and the -- the meetings are open, so you're welcome to be back at that time. Thank you all very much for being here tonight.

(Whereupon, the meeting was concluded at 9:00 p.m.)

P R O C E E D I N G S

(8:00 a.m.)

WELCOME AND OPENING COMMENTS
DR. PAUL ZIEMER, CHAIR
DR. LEWIS WADE, DFO

DR. ZIEMER: Thank you very much. I do want to remind you, if you've not already done so, to please register your attendance with us today, and you can do this during the break if you haven't already done it. There's a registration book in the foyer.

There are also a variety of documents on the back table, including the agenda and some Rocky Flats-related materials, as well as other materials that the Board is dealing with. We have a number of SEC petitions actually that we're dealing with today, and if you need copies of those, those are on the back table, as well.

Pardon my early-morning voice, but we'll make it through if you can bear with me.

I'm looking to see whether we need more chairs, and if -- if any of the staffers, or maybe Larry Elliott can make a quick assessment and see if we need to request more. And if I see too many people standing, maybe we'll need to

request more, but I think there are apparently some seats yet. Okay. Thank you.

Let me call upon -- oh, I also want to point out that Dr. Melius has joined us today, was able to arrive last night. Dr. Poston will not be able to be with us today. Josie Beach is not at the table, and we'll explain why in just a moment. In fact I'll ask Mr. -- Dr. Wade to do that when he makes his opening remarks now.

DR. WADE: Well, thank you, Paul, and welcome, all, again. We very much appreciate your being here. We appreciated your comments last night. It was a -- it was a long night, but a very important night I think for the Board to experience, so thank you for your patience and we appreciate your comments.

As Paul mentioned, Josie Beach is conflicted with regard to this particular petition at Rocky Flats and is not at the table, following the Board's procedures.

DR. ZIEMER: Okay. Thank you very much. Let me outline quickly how we will proceed here. We're going to begin with the presentation from NIOSH where they give us an update on the SEC petition evaluation. The evaluation report is

an official part or step in the SEC process. Following that we will hear from the petitioners. Then there will be an opportunity for members of the Congressional delegations, and there are a number of those here this morning, to add official comments for the record.

We will then hear from the Board's working group. The Board has a working group on Rocky Flats and they will provide their report. Then after that, the Board will have a discussion period and deliberate on the -- on the SEC petition material.

I do want to remind you, in case you had forgotten, and that is that the Board's final product is a recommendation. We're not the ones that determine whether or not there will be a class added to the Special Exposure Cohort. We make a recommendation on that. That recommendation goes to the Secretary of Health and Human Services, together with recommenda-- any recommendation from NIOSH. And from that the Secretary of Health and Human Services passes along or makes an official recommendation to Congress. It is Congress

that ultimately makes the decision in this process. So what we do here today is part of that process.

There are time limits on it, though, so we -- for example, whatever the Board's recommendation is, that will go immediately -- after this meeting -- to the Secretary. He will act rather promptly on that, within -- I think it's 30 days, yes, and then Congress has another 30 days to react to that. So there's a little time delay there.

But that is the process, so I want to make you aware that this Board -- or remind you that this Board is advisory. We're -- we're not the folks that make the ultimate decision on that. Ultimately it really rests in the hands of Congress.

ROCKY FLATS SEC PETITION

So with that as preliminary remarks, we're going to begin first with the Rocky Flats SEC petition evaluation update. That will be presented by Dr. Brant Ulsh, who is a member of the staff of NIOSH, and Dr. Ulsh, we welcome you to the podium to present the SEC petition update -- or petition evaluation update.

DR. ULSH: Thank you, Dr. Ziemer. Good morning, everybody. As Dr. Ziemer mentioned, I'm just going to give a brief update. Many of you were here a year ago when I presented NIOSH's evaluation report on Rocky Flats, and I'm not going to repeat that whole presentation. There are a couple of members of the Board who were not seated on the Board at that time, so I will just give a brief update for their benefit, and just to remind everyone since it's, you know, been some time since I last spoke to you.

I would like to start today the way that I started a year ago, and that is to say thank you. I think a lot of times we don't say thank you to the people who really deserve it. And first of all I'd like to thank the petitioners. Tony DeMaiori, who I understand is not here today, but Tony was intimately involved in this process -- he even attended a couple of the working groups, and it was very valuable to have him at the table and to get his insights -- and Jennifer Thompson, who I see is going to present next. Both of these people worked tirelessly on your behalf, and so I think that

there's a debt there, too. So I'd like to thank them.

Most importantly, I'd like to thank the former workers. You gave a valuable service for your country, and I have benefited from it, we've all benefited from it, and we recognize your sacrifices. So I want to say thank you to the workers.

The question that the Board is going to be deliberating on today has nothing to do with the workers' loyalty or dedication. That is beyond reproach. There is no question in anybody's mind about that.

There is also no question that the workers are suffering. All of you here today have been touched by cancer personally or a member of your family has been touched by cancer personally. My family has been touched by cancer. I understand what that's like, and there's just no question the suffering that -- that you all are going through.

But the question that the Board is wrestling with today is upon what basis should compensation decisions be made, and so I'd just like to give you a brief update here.

First of all, the -- the proposed class included all United Steel Workers who were employed at Rocky Flats between 1952 and 2005. NIOSH expanded this class because we determined that it wasn't really feasible to limit it to the United -- to the union members, so we expanded it to all workers between those time periods.

I'd like to talk to you about the information that we have available to complete dose reconstructions, and the primary source of information that we use is dosimetry records, both internal dosimetry and external dosimetry. Now in terms of internal dosimetry, we have over half a million results. And by that, I'm talking about primarily urinalysis samples, but also lung counts, fecal samples -- so there is a wealth of internal bioassay results.

Now on the other hand, we also have external dosimetry results, and this is a little bit difficult to pin down the exact number. We have 231,500, more or less, external annual dosimetry totals. Now to get the number of actual external dosimetry results, you would have to multiply that by the number of exchange

cycles, and I can tell you that that translates to well over a million individual external dosimetry results.

We also have access to an extensive records collection at DOE's Mountain View facility, and we have called upon them numerous times throughout the course of the working group's investigation.

And finally we have interviews with former workers. Both NIOSH and SC&A have availed ourselves of talking to the people who actually worked at Rocky Flats, and that has been one of the greatest pleasures for me over the past -- well, year plus, is getting to know some of the people who contributed to the Rocky Flats story.

So in terms of the dosimetry results that I just told you about, here's what this translates into. We have received 1,207 or so cases referred to us from the Department of Labor for dose reconstruction. Of those 1,200 we have completed dose reconstructions on 1,061. You might have noticed Larry gave -- Larry Elliott gave some numbers yesterday. I think his were just a touch higher. He might

have gone onto the database a little bit later in the day, so... What this breaks down to is we have external dosimetry for 1,100-plus of these claims. We also have internal dosimetry for almost 1,100. And so when you look at the total number of claims, 1,207, we have some dosimetry -- at least -- of both type for 1,068 claims.

Now just to briefly review -- I'm not going to go into detail here. I think we're at the stage of the process where getting into the details is the prerogative of the working group and so I won't really get down into the details. Just to review, though, the bases of the petition as it was submitted -- there were, I believe, seven -- and four of those bases qualified the petition for evaluation, and those bases are listed here. The ones in yellow are the ones that qualified.

And those were external (sic) to highly insoluble plutonium oxides. You might have heard this called "super S" or "super Y". And here is one -- this is one topic where I think it should be pointed out that going through this arduous process of evaluating the SEC

petition has had some real benefit to the workers, because we were certainly aware of this super S issue, but going -- considering this in the course of the working group investigation accelerated our thinking and our putting together a position on this, and we have promulgated methods to handle super S -- potential exposure to super S plutonium in dose reconstruction. So I think that -- that is something you can certainly point to and say that it was information that was provided to us by the public. We have heard it. We have seriously considered it and we have responded. The next basis of the petition was an inability to link exposures to specific incidents. And a year ago I acknowledged that yes, it's not always possible to -- in fact, it's often not possible to link particular exposures to specific incidents. But we have methods of handling that in dose reconstruction.

The next basis was periods of inadequate monitoring. And I'm trying to recall back into the petition, I think the examples that were provided were the super S again, exposure to super S and concerns about whether or not that

could be accounted for, and also neutron monitoring.

And similarly, the neutron monitoring issue came up under the context of unmonitored exposures, because in the earlier years there were people who were at risk of neutron exposure who were not monitored.

And then there were three more bases of the petition that did not qualify. Those are listed here.

Okay, so that takes us through the time period where the petition was presented and NIOSH presented our evaluation of the petition, and that was April 27th of last year. So what has happened since then?

Well, at that time the Advisory Board referred the matter to a working group, which is a subset of the people that you see sitting up here in the front. And between April 27th of last year and now, so a little over a year, the working group embarked on a very extensive, very comprehensive investigation of your concerns. And the other parties involved in that investigation were NIO-- the NIOSH/ORAU team and also the Board audit contractor, SC&A.

This has been a very active working group. I think you can come away from this process confident that we have kicked over every rock that we could. We considered your concerns very seriously. The topics that were covered throughout the course of that investigation are listed here. One of the biggest concerns I think was data integrity, and also data completeness, which is closely related. Another topic was coworker data. We also spent a lot of time on other radionuclides at Rocky Flats, and by that I mean other than uranium and plutonium, the main radionuclides. And also early neutron doses.

Now again, I'm not going to get into details here. I think that's the prerogative of Mark Griffon, and you'll be hearing from him a little bit later.

And finally, this is the position that we presented a year ago, and it is our position today, that we feel that we have the ability to do dose reconstructions with sufficient accuracy.

Now I know that that may not be a popular decision. I'm aware of that. But at the end

of the day, what we're faced with is making compensation decisions based on an SEC designation or based on dose reconstruction. And NIOSH is required to bring to bear the best available science and to conduct these dose reconstructions where it's feasible. Because I think, at the end of the day, what I owe you, what NIOSH owes you, is an answer to the question: Did the cancer that has touched me or my family, as a -- as a former worker at Rocky Flats, was that a result of the radiation exposure that you received at Rocky Flats. It is only through dose reconstruction that we can answer that question and provide you with closure, and we owe you that.

So with that, that ends my presentation. I would be happy to entertain any questions from the Advisory Board, if there are any.

DR. ZIEMER: Thank you, Brant. Board members, do you have questions at this time on Brant's comments, or anything related to the evaluation report?

I -- I do want to ask one question. Maybe you can elucidate this, in case -- and I think it's been discussed before, but we -- we've heard a

number of cases where individual records have zeroes entered where -- in -- or minimal dose values entered. And on many sites we understand that that reflects the fact that the dose was low enough it could not be detected. But we also recognize there's some limit of the device and therefore the agency assigns a number that's above zero to account for the fact that the dose may really not be zero. Now we've heard I think from a number of folks at Rocky that allege that in their case the zeroes may really represent cases where they were either told not to wear their badges or, for one reason or another, the true dose was shall we say hidden. Do you have a way to account for that on individual dose reconstructions if the -- if the person ha-- makes that allegation re-- with respect to their own record?

DR. ULSH: Well, Dr. Ziemer, this was a topic that I spoke about a year ago in -- in -- well, the part of it that I spoke about a year ago was the concern where workers might have left their badges in their lockers. I went through some logic as to why we don't feel that that is a -- that systematically compromises our

ability to do dose reconstruction.
Now, in terms of the individual case, certainly if we are aware of a situation or the workers tell us of a situation where this might have been done -- well, we have coworker distributions that could be applied, if necessary.
DR. ZIEMER: So in the individual case, you wouldn't necessarily always use that other value, which is basically halfway between the minimum detectable and the zero point --
DR. ULSH: Well --
DR. ZIEMER: -- if you know, for -- if -- if there were an affidavit that indicated that there was some shenanigans going on.
DR. ULSH: If it -- if we had credible evidence that that kind of thing was going on, and we could pin it down, certainly that would call that particular reading into question. And you know, at the end of the day, if necessary, you could just treat that as not a -- not a datapoint that we should use and we could certainly assign coworker data.
Now I don't want to leave you --
DR. ZIEMER: No, I --

DR. ULSH: -- with the impression that we routinely do that --

DR. ZIEMER: Right.

DR. ULSH: -- but if, you know, a worker was -- you know, could pin it down for --

DR. ZIEMER: There -- there is a method for handling that --

DR. ULSH: Yes.

DR. ZIEMER: -- in those cases. That -- that's the point I wanted to make.

DR. ULSH: Yes.

DR. ZIEMER: Other Board members, questions or comments?

Yes, Dr. Lockey.

DR. LOCKEY: Yesterday one of the petitioners had mentioned -- I think she was an office worker -- that the vaults were near the office area, and how is that handled? I'm just curious about that.

DR. ULSH: Dr. Lockey, I'm reluctant to get into individual dose reconstructions. I can tell you that in terms of -- in the general situation where we have a worker who was monitored, we would use their dosimetry results. But if we're talking about a worker

who was not monitored, we have methods in our dose reconstruction where we can evaluate where that person worked, evaluate their potential for exposure to radioactive materials, and we have coworker data. You know, if the worker was not monitored, we apply either the 50th percentile -- I'm talking external dosimetry now -- the 50th percentile if they were intermittently exposed to radiation, or the 95th percentile if they were routinely exposed to radiation. So in a situation like this -- again, I don't know the intimate details of this particular situation, but if a worker were not monitored but they had the potential to be routinely exposed to radiation, we would give them a -- a dose that is higher than 95 percent of the people who were monitored on site.

DR. ZIEMER: This is off the subject, but the AV man has reminded me that if you're on-line listening by phone, would you please mute your phone. We're apparently getting a lot of background noise. For those who are on the phone lines, if you're simply listening in, if you would please mute your phone. Thank you very much.

Okay, Board -- other Board members with questions? Yes, Michael Gibson.

MR. GIBSON: Brant, you mis-- mentioned that there's well over one million individual results. Do you know how many employees were employed at Rocky Flats between 1952 and 2005? And of that number, how many of those employees should have been monitored?

DR. ULSH: Between 1952 and 2005. Well, Mike, I can't -- I can't give you the exact numbers of workers who were employed. I can tell you the badging policies at the site, which can give you -- give you some clues about this. Pretty much throughout the site I think, at various times, if a worker was expected to receive greater than ten percent of the exposure limit they were required -- let me restate that. If a worker had the potential to receive greater than ten percent of the exposure limit, they were required to be externally monitored.

Now during the D&D era, the DOE limit was 100 millirem per year, and so if you were expected to have the potential to receive greater than 100 millirem per year, then you were required

to be externally monitored.
Now to answer your question directly, no, I don't know the exact number of people employed at Rocky Flats by year. Those are the policies that were in place at the time that dictated who was to be monitored.
MR. GIBSON: Well, I guess -- to follow up on that, I guess what I'm trying to get at is --
DR. ZIEMER: Use the mike -- use the mike, Mike.
MR. GIBSON: Out of these in excess of one million results, could you give us an idea of what that equates to as far as how many monitoring records per employee that you're basing this on?
DR. ULSH: Well, that gets to the other part of the discussion which -- let me see if I can find it -- nope, wrong way. You actually bring up a good point and I'm glad that you did because I can clarify a little bit here.
When I talk about the numbers for whom we have external and internal dosimetry, these third and fourth bars, there's another part of the equation and that is the completeness of the monitoring. And as you know, Mike, on the

working group we did look at data completeness and we evaluated 52 workers, 32 who -- who were randomly selected by SC&A and 20 who were known to be among the workers who received the highest cumulative doses at -- on site. And we looked at their records and what we found was that they were by and large complete. And what I mean by that is there were certainly periods where there was no monitoring data, but those largely corresponded to periods when either the worker was not on site or they were in jobs that had low exposure potential such that they would not be required to be monitored.

So again, Mike, I can't give you exact numbers of how many people worked at Rocky Flats over the years. It was certainly in tens of thousands, if not higher. And I can tell you that the people who we expected to be monitored, the evidence -- the weight of the evidence points us to that they were. So I -- I can't answer your question directly about how many -- of the workers, what percentage was monitored.

DR. ZIEMER: Thank you. Follow-up, Mike?

MR. GIBSON: Yeah. And then that -- the

results of when they should and should not have been monitored is based on site characterization records or what...

DR. ULSH: No -- no, it was based on -- well, the analysis was completed in two steps. SC&A completed the first step, and that was to look at the records and determine when there was monitoring present and when there was not monitoring present. And then NIOSH took that a step further and looked at those periods when there was not monitoring data. And again, the -- the goal of the data completeness investigation was to decide -- was to evaluate whether there was any evidence that there were missing records. In other words, here's a person who clearly should have been monitored, we would expect them to have monitoring information, but do we see it or don't we. And what we found was that in every case where we saw a period without monitoring data, there was a very logical explanation for that. It's not like you had a process operator in 771, who were among the high-- highest exposures on site, who was not monitored.

DR. ZIEMER: Okay, thank you. Other questions?

Brad.

MR. CLAWSON: Brant, I understand, you know, and NIOSH has done an excellent job, I'm -- and I'm not criticizing this, but using coworker data I have a very hard time with. Out of anybody on this Board, I still suit up day after day and go into these zones. I'm going to give you an example, because two weeks ago there were four of us that went into the cell, did the same work, same respiratory, and when we walked out we were sitting with 50 to 75 MR difference between the lowest guy and the highest guy. And I -- I really have a hard time using coworker data because, you know what, you can get into a lot of different things because I've brought the same questions up. When I can go into a zone or in -- into a cell handling the actual product myself, with my hands and my finger rings, and it shows that my dose to my hands is half what it was to my body, I -- you know, there's -- there's integrity of a lot of this stuff and I really have a hard time with worker -- coworker data.

DR. ULSH: Thank you, Brad. You bring up a very good point, and I'm glad you did. In

terms of -- in terms of coworker data, I think that there's a great misunderstanding about how we apply coworker data, and you've exact-- you've just hit on the exact reason that we apply it the way that we do, because if you have two workers who work on the same job, for instance, the recorded doses can be very different for those two workers. As you probably know -- I'm sure that you do -- distance from the source, shielding, there are vari-- various factors that can make those two workers have different doses. And so you would have to be extremely cautious to -- to apply one worker's data to another individual worker, and that's why we don't do that.

What we do is we look at all of the workers who were monitored on site, all of them, and we apply the 95th percentile. That means that that particular worker would have had to receive greater than 95 percent of the workers who were monitored. So we understand that that's a concern, and so we don't apply one worker's dose to another worker.

DR. ZIEMER: Phil.

MR. SCHOFIELD: I got a question on the

bioassays. Now some people I assume were on annual, some semi-annual and maybe some quarterly. Particularly some of those people who are on the manual (sic), they may -- had a job where they worked or passed through an area and could have actually picked up some low-level intake. If, during their interview, you find this -- that they said look, you know, I -- I remember once I had positive nasal smears but they never had me submit a bioassay sample out of that, how are you going to account for those missed...

DR. ULSH: That's a very good question, Mr. Schofield. Again, what we go back to is -- there's a couple of issues that you've mentioned there. If the worker was monitored -- be it on an annual basis, a quarterly basis, whatever basis -- and let's say they're going along, they have a nega-- they have a zero bioassay result or lower than limit of detection, another one, another one, and then all of a sudden you show up with a positive bioassay result. Well, this gets to the concern that was expressed in the petition: At what point did that exposure happen.

Well, it was sometime between the last two bioassay points, and what we do is assume -- we take the situation that gives the highest dose to the worker and we say it was the day after that last bioassay result. Now, what that leads to -- since we consider a chronic intake exposure, that leads to the highest possible -- it's essentially a bounding estimate.

Now what happens if you've got a situation where the worker was unmonitored, completely unmonitored. Well, that's where we resort to coworker data, again. Normally we apply the 50th percentile intake. In other words, the average intake at the site. However, in the case of Rocky Flats, due to some concerns that Mark may talk about later, or may not, I don't know, we have agreed to go at the 95th percentile there, as well. So if you've got a worker who walked through a contaminated area and picked up some material -- some plutonium, uranium, whatever it was -- we will be assigning for unmonitored workers the 95th percentile, and that means we're giving them credit for a higher dose than 95 percent of the workers -- including the operators, the people

who were dealing with plutonium on a daily basis -- for that very reason.

MR. SCHOFIELD: One more question. How about the people who were exposed to potentially maybe a mixture of maybe plutonium, americium or thorium or uranium, but their bioassays -- they were only really being looked at for like plutonium. How you going to account for that when the person says look, you know, I didn't work just with plutonium. I also did work with uranium, I did work with thorium. But in their bioassays they were only looking for plutonium, so how you going to account for those missing things?

DR. ULSH: We do account for that. In terms of an overestimating dose reconstruction, we have methods to look at the highest doses across the complex -- or highest intakes, rather. We also look at the individual's job history. We have job history cards that tell where they worked and when. If we know that they were working in Building 71, we know that they were potentially exposed to plutonium and americium, for instance, and we consider that. If they were working in Building 881, we know that uranium

should be added to the mix. So we do -- we do explicitly consider the radionuclides that they could have been exposed to in various areas of the site.

MR. SCHOFIELD: How accurate are these job cards? I mean how often were they actually updated or reflected a person's work history?

DR. ULSH: What we found -- what we found is that these cards were pretty detailed. They were primarily available for employees of the prime contractor. I'm trying to remember how far up we have those -- from the early years up through the later years, I can't remember exactly what year. And they're very detailed. They talk about any time there was a job change, any time there was a salary increase, they're on those cards, so they're very detailed. And that's actually quite different from what you might see at other sites. I don't know, I haven't been involved intimately -- as intimately at other sites as I have with Rocky Flats, but these are a very valuable resource for us.

Also, the -- well, the -- the NDRP also used those job history cards, so that's not really a

separate source of data, but they're pretty detailed.

MR. SCHOFIELD: Okay, what about people like some of the crafts you would have, some of the guards who may on their cards actually be assigned to a certain particular area or certain particular building, yet because of the nature of their work they actually -- or the RCTs would be another case -- could actually be floated or moved around, and yet those cards are not going to necessarily reflect all the areas they were in.

DR. ULSH: You're right, there are certain job categories -- like the trades workers, for instance; fitters, for instance -- who could have floated around the site and we do consider that. I don't want to say at all times periods, but certainly at some time periods in -- during the Rocky Flats history, some of the crafts were located -- headquartered in one particular building, but they went where the work was needed. And so we're aware of that and we consider where they could have possibly went and to what radionuclides they could have possibly been exposed, and we do take that into

consideration in their dose reconstruction.

MR. SCHOFIELD: So exactly how are you handling that information on their dose reconstruction?

DR. ULSH: Well, for instance -- well, if they were monitored, it's pretty straightforward to -- well, as straightforward as, you know, dose reconstruction ever is. If they were not monitored, again, we resort to the coworker information that we have, and we know that those parti-- in those particular situations where you're talking about the trades who might've worked anywhere on site, we know that we have to consider not only plutonium but also uranium, whatever they could have been exposed to, and so we do assign coworker or missed dose on that basis.

DR. ZIEMER: Thank you. Further questions?

(No responses)

Okay. Thank you very much, Brant, and we'll now move on to the petitioners. And let's see, who's going to start for the petitioners? Oh, okay, please...

(Pause)

MS. THOMPSON: My name is Jennifer Thompson and I'm a representative of the petitioner. As

noted earlier, Tony DeMaiori, the most recent former president of the steel workers, could not be here today. He's the primary agent for the petition; however, he's working at a nuclear power plant in South Carolina and could not come away for the meeting today and he sends his -- his apologies to you, as well as his thanks to you for all of your efforts on -- on this Special Exposure Cohort petition.

I've been involved in the petition process since the beginning. I volunteered to help the United Steel Workers in drafting the petition, and that was about two and a half years ago, and never dreamed then that two and a half years later I'd be speaking to you today, so it's been a very -- very long process and I appreciate everybody's involvement and dedication to the process throughout.

I worked at Rocky Flats for 14 years, starting in 1991. I worked in plutonium facilities, Building 707, Building 776, Building 777, Building 371, so I'm familiar with the site. I am not a scientist. I'm not an industrial hygienist. I'm not a radiation protection expert. But I do have a good understanding of

the methods, processes and procedures that were in place and used at Rocky Flats throughout the time period that I was there, and am familiar with the history of the site as well, having drafted history documents on the site.

Again, I just want to thank the Board for its service so far. We appreciate your dedication.

I want to thank Mark Griffon and the entire working group, who have spent many, many, many hours, and we appreciate their hard work.

I want to thank some of the folks in the Rocky Flats community -- Terrie Barrie, Laura Schultz and others who have worked countless hours. There's many of you, too many names to mention, but -- but thank you to all of you.

I also want to thank our Colorado Congressional delegation, who have done an outstanding job delivering unprecedent (sic) bipartisan support of this effort, as evidenced by the letter that you all received yesterday, the public statements that they have made. It is -- it is refreshing in -- in terms of renewing faith in government to know that our elected officials care deeply about the people that they represent, and we greatly -- greatly appreciate

that.
Last night the Board patiently heard from dozens of Rocky Flats workers, those that have cancer, those that have other illnesses, those who have family members who have cancer and other illnesses. And this petition process is -- is really for them, and we are very -- very concerned and one of our goals is that we don't believe that our workers should have to fight with the government over dose reconstruction at the very time that they are fighting for their lives. This -- the process that is put in place -- the process itself is not feasible, and so beyond the science, even if the science were perfect, the process does not deliver timely, accurate dose reconstruction.
I'm going to speak for a while and then I have a few other folks who are going to come up and speak, so I hope you'll bear with us when we go through the transition. The major things I want to address during my presentation are the timeliness factor, the fairness factor, feasibility, the law and -- and -- and what is the right thing.
We were asked when we went into this petition

process to prove that there was a class of Rocky Flats workers for whom it was not feasible to accurately estimate -- estimate the radiation dose they received. We believe that our petition has done that, as evidenced by the two-year process, and I'll get into that later. We also know that they had their health endangered by their exposure to radiation, and we do not feel we had to prove that because the government itself has said that there's 22 cancers for which radiation is a causal factor, and so we feel like that was taken care of. As the gentleman of NIOSH went over the basis of our petition already, we submitted it on February 15th. Our major factors were exposure to the high-fired oxides, which was a unique form of plutonium; inability to link exposure to specific incidents; periods of inadequate monitoring; lack of monitoring; changes in methodology and inconsistency in procedures; unmonitored/undetected exposures surfacing throughout time; and the negative effect of site closure on the accuracy of dose reconstruction. And I know that that one was kind of thrown out, but we still consider that

to be a valid factor.

The timeliness of the petition has been a big issue, and those of you that were here over a year ago heard me speak on this and I'm going to hit upon it again. The law required that NIOSH make a recommendation within 180 days of receipt of our petition. The -- Health and Human Services implemented its own rules to implement the law, and they said that the 180 days actually meant 180 days from when NIOSH determined the package was certified. In either case, that deadline was not met. The petition -- the recommendation from NIOSH did not come until 440 days after submittal. And now here we are, two years, two months, 18 days, 807 days from submittal. I'm not going to go over the details of the time frame here, but as you can see, it's been a long and arduous process.

And while the petitioner was required to meet every deadline in the process or run the risk of having our petition thrown out, the same has not held true for the government. We had 30 days to respond to the questions initially during the validation process. We responded

with over 500 pages of additional information, and we met that 30-day deadline, even though we are all volunteers.

The length of this process severely hindered the petitioners' ability to respond. We have -- we no longer have any union -- access to union resources or backing. We have no money, and most of us are gainfully employed, thank goodness, in -- in other areas and so difficulty in attending daily working group meetings and things like that, whereas if Rocky Flats was still open, our employer was flexible and would have allowed that participation.

We have a handful of volunteers at this point versus the Goliath that NIOSH has created on the other side of the table. You know, when we're in meetings, it's fairly intimidating when you're one person and -- and you've got over 20 people with PhDs and -- and science backgrounds and everything, and access to the records that we can't even get, you know, on the other side of the table, so that's a little frustrating.

Closure has made records retrieval difficult. NIOSH has the ability to command the records,

and still sometimes it takes them months to get them. The workers do not have that ability. When they request their records, sometimes they wait as long as a year to get their files, and then the files that they get are incomplete. This severely hinders their ability to present their case during the individual claim process. *The Rocky Mountain News* has been covering this topic very closely and has provided a bunch of information, and I want to thank them, and I quote a lot from their articles today -- and I've tried to give attribution where due. [name redacted] -- I'm not sure the sp-- how to say the name -- is someone who's a biophysicist and an expert in dose reconstruction, and he said that government scientists have ongoing discussions about the validity of dose reconstruction, and he says -- he says that -- basically that if you can spend enough time and enough money, you may get it right. But the question is, timeliness is one of the factors in delivering the conditions of this program. And if you can't do it in a timely manner, it becomes unmanageable and it's no longer feasible.

Members of the Congressional delegation for Colorado have asked NIOSH not once, not twice, but four times now to grant this petition a fair and timely review, and to date have been unsuccessful in securing that. The U.S. Congress required NIOSH to make a timely recommendation, and Congress has never intended for this process to drag on for years while scientists search for new methods.

Another petition we're aware of was recommended for approval based on the timeliness factor. We believe that sets precedence for the Board today with respect to the Rocky Flats petition. If timeliness were ever an issue, at Rocky Flats it definitely is.

The question has never been could NIOSH ever reconstruct dose at some point in the future time with accuracy. The question was, when we submitted the petition February 15th of 2005, could dose accurately be reconstructed. The law did not say Petitioner, point out flaws in the government's ability to reconstruct dose. NIOSH, fix some of the flaws, admitting inabilities, and then recommend denial of the petition based on a new set of standards that

did not exist at the time the petition was submitted. The law clearly states the purpose of the compensation program is to provide timely, uniform and adequate compensation. Justice delayed is justice denied.

We have learned, and as evidenced by the empty chair at the table today, that some members of the Board have been instructed that they cannot vote on the Rocky Flats petition based on relationships with the United Steel Workers.

As a direct result in NIOSH delaying this petition, if this -- if this conflict were ever valid, such a restriction is no longer valid today for the following reasons: The Rocky Flats workers on behalf of which this petition was filed no longer have any financial or contractual relationship with the United Steel Workers. Local 8031 no longer has a single nuclear worker in its membership. United Steel Workers no longer receive any dues from the former Rocky Flats members, nor do they provide representation or services to the members. The United Steel Workers, as an organization, does not benefit in any financial way from this petition being granted.

NIOSH, on its own right, expanded the class to include all Rocky Flats employees, so this is no longer a steel worker petition. This is now a Rocky Flats petition. Therefore, no relational conflict exists, and we urge that all members of the Board demand their right to vote today. And if they are not allowed to vote, we request of NIOSH to provide, in writing, the legal basis for any restrictions on voting to the petitioner within 14 days.

It appears that there's a double standard on the conflict of interest issue, as the Board is being -- members of the Board are prevented from participation due to conflict of interest, but NIOSH repeatedly relies on experts that have conflicts of interest. And experts who have testified against workers in worker compensation hearings are serving key roles in this process. The government's own General Accounting Office identified conflicts of interest in this process as an issue.

As you well -- as the Board is, I'm sure, too closely aware, there's been a tremendous amount of political pressure to not approve Special Exposure Cohort petitions, in particular the

Rocky Flats petition. This dates back to -- to 2005 when an OMB pass-back memo encourages administrative clearance on petitions before they could be approved and asked the interagency to address any imbalance on the Board and -- and actually resulting in changing out of members of the Board and things along those lines.

This is a excerpt from an e-mail from a Deputy of La-- Depu-- Deputy for the Department of Labor, who stated that we should do everything possible to oppose these SEC petitions.

Further evidence of the tampering is this address any imbalance in membership of the President's Advisory Board on Radiation and Worker Health, require NIOSH to apply conflict of interest rules and constraints to the Advisory Board contractors. The government is clearly trying to manipulate the process.

Getting back to the feasibility of the actual science, F. Owen Hoffman stated that this is -- that dose reconstruction is an inexact science, that -- that it depends on an extensive amount of judgment; that two different investigators, given the same data, would come up with

different doses. The -- the people that are doing the dose reconstruction, 88 of them, not all of them have degrees in health physicists (sic) and with the workload that they're placed with, reviewing one and a half cases each workday, we believe that this process leads to a situation where it is not feasible for them to accurately reconstruct dose.

Further evidence of this has to do with -- I'm sure you -- you all will recall who were here last year [name redacted], who presented with us, and he couldn't be here today because he's volunteering at a cancer clinic up in Loveland. He -- his case was denied three times, and then approved finally just recently based on inaccuracy of records. And what this points to, and we're going to hear more about this later, but what this points to is [name redacted] had a tremendous perseverance, tremendous capabilities and resources to be able to fight his process for four years. He kept at it and kept at it. He could have given up after the second denial, but he didn't. How many other workers are like [Name Redacted] who have submitted and been denied but haven't had

the ability, capabilities or financial strength to continue through this process? How many other workers in the end would NIOSH have to come back and say we can't do it because the -- the records are inadequate? How can they three times deny [Name Redacted] based on science, and then finally approve him, throwing up their hands, saying we -- we don't have the records? Another person, [name redacted], had a dose reconstruction done. She's -- she's -- was -- talked to you guys last night, and she came out with a 42 rem dose reconstruction. Then they reconstructed her dose and came out with 25 rem. So one time 42 rem, one time 25 rem. Where's the accuracy in that?

We have heartbreaking stories of people with 47 percent probability that are denied. How do we know that their doses weren't off by ten rem and they should have been approved?

NIOSH would like you -- the Board to believe that the issue with high-fired oxides is taken care of. We do not believe that, as the petitioner. In 2003 it was stated that the precise nature of super class Y material is not known, and here we are just four years later

saying we have the whole problem figured out, that we've got a new model -- although it's not tried and validated, tested or proved, that we have a new model now and that just fixes everything. We believe that there's no way that we could know enough today about high-fired oxides. Where's all the research? Where's the scientific expertise that looks into this? Usually challenges like this take decades for the scientific community to resolve.

SC&A pointed out upper bound dose limitations having to do with coworker dose models, and that's not a new factor. The Defense Threat Reduction Agency dose reconstruction program found the same challenges when dealing with dose reconstruction.

And this is an interesting dichotomy. I think you'll remember [name redacted] from a previous e-mail I showed you, but in 2004 he was singing a different song. In 2004 he said if there's a justification for an SEC anywhere, common sense suggests that it should be Rocky Flats. He also said does it make any sense to continue to defend a do-- a dose reconstruction process

that will just get more complicated and attenuated.

We believe there's many unresolved petition issues to date. We believe that the neutron doses between 1952 and 1970 are still problematic. We believe that the issue of missing records is -- is still prominent. The issue of the zeroes in 1969 to '70 was fully looked at and NIOSH was proud that only 26 percent of the ones they thought were missing were actually missing. Twenty-six percent is not good enough when you have cancer.

And they looked at one year in detail. What would happen if they looked at every year in detail? Would they not find similar examples of missing data every single year?

SC&A -- there's large gaps in internal dose data, notably from 1964 to 1992. We're still concerned about the adequacy of the coworker model, in particular for workers that are involved in high-dose work activities. A 95 percent of the average site employment is not appropriate for high-dose workers.

We're concerned about the thorium dose reconstruction abilities. I've already talked

about the dose records for people with high-dose rate jobs. We're concerned that the new models have not been sufficiently tested or proven. We're concerned that when they are proven or when -- when things are researched that the -- the sample size looked at is statistically invalid when you're talking about a population of potentially 20,000 people and you look at 52 cases -- okay? If I was giving a PhD dissertation and I turned that in, I would get laughed at -- okay? That is not a statistically accurate sampling.

We're concerned about lack of independent verification on the use of the neutron dose reconstruction project. And SC&A was also concerned about NIOSH's ability to validate or to demonstrate that it can apply its stated methods, approaches and coworker models to enable dose reconstruction with sufficient accuracy. Again, I would say even if your models were perfect, could this be done, could it physically be done?

We're still concerned about high-fired oxides and their effect on the human body, and the fact that this is a relatively recent

phenomenon and that it hasn't been given the attention that it deserves.

We're still concerned that the site profile still fails to recognize plutonium production mission in Building 881, even though NIOSH has been repeatedly told that there were plutonium operations in that facility.

We are concerned that no effort has been made to determine the radioactive cocktail effect described in the petition whereby plutonium, in combination with chemical exposure, could have implications to how plutonium is metabolized in the body.

These are a lot of issues, two years and three months into the process.

We believe that just the fact alone that the working group met this week to discuss issues that are still unresolved means that our petition was valid, and that it should be approved. We believe that since it's been more than two years and significant factors are still unresolved means the petition was valid and should be approved. The fact that NIOSH has made the changes to the site profile, added new TIBs, changed the particle size for high-

fired oxides, developed new coworker models, added adjustment factors, tweaked other models -- all of these changes prove that the petition was valid. If the petition was not valid they would not have had to make all these changes. The law asked us, when we submitted that petition on February 15th of 2005, to show that you could not accurately, feasibly reconstruct dose. We proved that when we submitted the petition. The law never said submit a petition, have all of the challenges addressed over a long, arduous process, and then have that petition denied based on a new set of standards that did not exist at the time the petition was submitted. These new factors, these new models, they are unproven, they are untested and unvalidated.

We believe that the Board has no legal or moral choice other than to approve this petition in its entirety today. We ask you to consider the law, ignore the politics. A law is a term for -- for dose and radiation exposure. A law is not a term for cost of worker health benefits. We ask you to look deep into your heart and ask yourself what did Congress intend, what does

the American public intend, and what do our workers deserve? Someday is not good enough. The fact that maybe tomorrow or five years from now or two years from now we may be able to reconstruct dose, that is not good enough. The law requires timeliness. The law meant today. At this point I would like to invite Jerry Harden, the former president of the United Steel Workers of America, Local 8031, to come present on behalf of the petition. Thank you.

DR. ZIEMER: Thank you very much. Jennifer and Jerry, before you take the podium, I understand we have Senator Salazar now on the phone, so if you would concede the mike for a few minutes, we'll hear his comments.

MS. THOMPSON: Yes, we will gladly concede to the Honorable Senator.

DR. ZIEMER: Thank you. Senator, welcome. We have just heard from the peti--

SENATOR SALAZAR: Hello -- Dr. Ziemer?

DR. ZIEMER: Good morning. We've just heard from the petitioner. We're pleased to hear your comments to the Advisory Board at this time.

(The following statement was greatly distorted

by faulty telephonic transmission.)

SENATOR SALAZAR: Thank you very much, Dr. Ziemer and let me welcome you and members of the Board to Westminster, Colorado. Also welcome to the Rocky Flats workers and their families.

To the Board, I appreciate your service to our country. I know that you work very hard carrying out your responsibilities, so I want to thank you for doing so and I also want to thank you for allowing me to speak to you very briefly this morning. I know you have a full agenda and I have a number of issues that I'm trying to work through to develop a bipartisan approach to (unintelligible) whole host of things, so I wanted to take time out today just to speak to you about the workers at Rocky Flats (unintelligible) other nuclear weapons facilities. I believe that the workers really are part of that generation of World War II and Cold War heroes of our nation and we need to make sure that we are (unintelligible) what they have done for our country. They risked their lives and their health to help us prevail in our long struggle against the Soviet Union

(unintelligible) recognition of their service and the price they paid in terms of illness and mortality, Congress enacted the Energy Employees Occupational Illness Compensation Program Act. The mission under that program is to compensate those workers for illnesses or (unintelligible) exposure to radiation and other harmful substances.

In passing the legislation, Congress explained (unintelligible) the purpose of the compensation program is to provide for timely -- and I underscore timely -- uniform and adequate compensation, end of quote. And Congress (unintelligible) also recognizes there would be circumstances where there isn't (unintelligible) information about what workers were exposed to or when or in what amount, so these workers would be able to (unintelligible). In recognition of that fact, Congress created the Special Exposure Cohort to reduce the burden of proof off these workers. (Unintelligible) workers should become part of the Special Exposure Cohort when their dose -- doses can't be calculated with sufficient accuracy.

Well, now it's been more than six years after the passage of the Act and more than two years after the filing of the Rocky Flats workers' SEC petition. (Unintelligible) painfully clear that there's (unintelligible) about how to calculate the dose of radiation (unintelligible) Rocky Flats workers with sufficient accuracy. (Unintelligible) the Board's own workgroup struggled over this issue for nearly (unintelligible) to determine (unintelligible) methodologies or (unintelligible) would be able to (unintelligible).

I don't question the capabilities or the (unintelligible) of all those who participated (unintelligible) over the last (unintelligible). But (unintelligible) the issue is sufficient accuracy, we have totally lost focus of the essential purpose of this law that says timely compensation (unintelligible). The Rocky Flats SEC petition was submitted on February 15th, 2005 (unintelligible) about the methodologies sufficient accuracy 22 months later and whether or not (unintelligible) workers (unintelligible) Special Exposure

Cohort all nine members of the Colorado delegation (unintelligible) this happens we consider to be the most important issue that's facing our state (unintelligible) Republican, Democrat, Senator Allard and myself coming together (unintelligible) delegation joining together (unintelligible) the Rocky Flats workers to ask you (unintelligible) this petition. So today I am calling you, Mr. Zimmer (sic) and members of the Board, to expressly request on my behalf as a U.S. Senator, on behalf of my colleagues here in Congress, to reinforce the request (unintelligible) my request is to (unintelligible) the timely approval of what was (unintelligible) Congress stated in the statute passed by Congress and so I'd ask of you to move forward and to (unintelligible). Thank you, Mr. (sic) Ziemer -- Zimmer (sic) again for the opportunity to speak to you and the Board.

DR. ZIEMER: Thank you very much, Senator, for your comments, and we will be continuing our deliberations. David Hiller is here with us today from your staff and will keep you

informed of the progress. So thank you for being with us.

SENATOR SALAZAR: (Unintelligible) appreciate that and I look forward to the (unintelligible) the Board. Thank you very much (unintelligible).

DR. ZIEMER: Thank you. Okay, now we'll be pleased to hear from Jerry Harden.

MR. HARDEN: Good morning. Once again I'm appearing in front of you nice-looking people that have toured the country, staying in good hotels, listening all day to sad stories.

Now with that being said, my name is Jerry Harden. I was a 37-year employee at the Rocky Flats nuclear weapons site. I was also a three-term president of United Steel Workers of America, Local 8031, representing the hourly production and maintenance workers at the plant.

Today I want to point out two important anniversaries. First is the 38th anniversary of the 776 building fire, causing the biggest dollar loss in U.S. history to that point, and that occurred on May 11th. Second is the one-year anniversary, April 27th, of my appearance

before this panel pleading for cohort status for sick Rocky Flats workers. How much has that year cost in lost dollars and heartache? This was a well-intentioned program that has since been grossly mismanaged. It has meant windfall profits for contractors, administrators, intellects, bureaucrats and attorneys, providing only token relief for the sick Rocky Flats workers.

As you on the Board should know, U.S. Department of Energy has been funding studies and gathering data on its radiation workers for approximately 40 years through the United States Transuranium and Uranium Registries. This effort analyzed thousands of organs and tissue samples from dead DOE radiation workers. Hundreds of dead Rocky Flats workers were part of this effort with their donations of organs, or in some cases their whole bodies, to be dissected and studied to determine the effects of their work exposure to specific medical conditions. Today Rocky Flats workers are still waiting for cohort status, recognizing the health conditions caused by their job site exposures.

These previous and ongoing efforts should have provided the information to handle these claims. Why hasn't it? How many more millions of dollars and years of time will be squandered on other pseudo-science projects such as dose reconstruction in the ongoing effort by the Department of Energy and its contractors to ignore, deny and minimize the health damage to Rocky Flats workers?

I will offer some other related examples of the mismanagement of the Rocky Flats plant by the Department of Energy and its contractors that have been recognized by truly independent agencies. The first is the Colorado State Workers Compensation process, and we have had four provable radiation deaths that have proceeded through that, proving that those workers' survivors' claims were valid.

The first of the claims was [Name Redacted], the second was [Name Redacted], followed by[Name Redacted], and [Name Redacted]. All of these men were Rocky Flats workers who were employed in the hot areas.

The second item I'd like to mention today is the [Name Redacted] landowner lawsuit decision

in Federal Court. They took over 15 years and $30 million by the contractor and DOE to prepare for the case. But we were headlines in the *Rocky Mountain News* with a $350 million settlement, and this is of course being appealed by the DOE.

The third case is the [Name Redacted], false claims lawsuit decision, in Federal Court as well. His attorney claims that $500 million has been spent by DOE and the contractors to -- to pursue that case. The Department of Energy has appealed these verdicts, using their typical strategy of denying, stalling and creating more red tape to prevent settling these cases.

This is similar to the way that the sick Rocky Flats workers' claims have been handled. The federal government and the Department of Energy have been proven unable to provide a meaningful way for these affected by their actions to have a realistic and timely justice provided. How did Department of Energy hold these corporations involved accountable? By providing them additional bonuses and by paying for their legal fees for their disgraceful

performances. I wish that the sick Rocky Flats workers could benefit from some of their generosity as well.

In summary, there is autopsy data on hundreds of dead Rocky Flats workers establishing health effects; one of the worst industrial fires in U.S. history; two very large Federal Court judgments against the Department of Energy and the contractors for safety conditions at Rocky Flats; four proven radiation death cases through the State Workers Compensation Program; and numerous out of court settlements. What is it going to take to prove that employ at -- employment at Rocky Flats hurt some of the workers?

And with that, I would say I'm open for any questions or comments -- chickens. Please help the sick Rocky Flats workers, granting them cohort status. Thank you.

DR. ZIEMER: Thank you very much. Jennifer?

MS. THOMPSON: Thank you. At this time I would like to introduce Mr. Jack Weaver, long-time Rocky Flats employee, particularly focused in Building 771 as a subject matter expert noted by DOE and numerous others. Thank you, sir.

MR. WEAVER: Oh, I tore up the equipment. Thank you, Jennifer. Good morning to the Board. Good morning to my brothers and sisters from Rocky Flats -- appreciate you being here again.

I'm going to take a little different tack at what's going on here. I'm going to talk a little bit about me personally because obviously I have a long tenure at Rocky Flats. Then I'm going to talk about some of the issues that we had.

I started at Rocky Flats September the 5th, 1961. I started on a labor gang 'cause that's one of the ways you got into the plant to get a job. Two months later I had signed a posting, passed the test and became an assistant chemical operator. I was supposed to be assistant chemical operator for -- for two years, but for -- because of the need of -- of operations personnel, operators to run the production equipment, six months later I took a test, I became a chemical operator. I worked 12 years as a hourly chemical operator and a chemical operator crew leader. I became a foreman after that. After foreman, a

supervisor, building manager, operations and building manager for 771 and 371, ultimately became an assistant dist-- or general manager, deputy general manager under EG&G.

So I -- I had a chance to work in all positions from the lowest on the hourly rung to almost the highest at the plant site. I had the chance to work in many different situations, so I'll go back and start with some of those.

The first day I worked in 771 building as an assistant chemical operator I was taken in and given a briefing about the building and the rules of the building, went to lunch. Came back from lunch, was taken to the locker room, shown how to dress out, given a half-mask respirator and told to follow the crew leader. We went back into the hallway at 771 building and he says climb up in those pipes, we're going to decon the overhead. What does that mean? You know, I had no clue what that meant. Well, what it meant was take a bunch of chem wipes and what we called KW and go clean the pipes -- literally wipe down the contamination. There was no check on the respirator. It was a single-strap half-mask respirator. I was in a

space approximately four foot by four foot with a multitude of pipes running through it. I was a pretty skinny kid at that time so I could get through it pretty easily. I don't know I could do that today. But that's what we did.

As an assistant chemical operator you were kind of a go-fer and a -- and a do-all for the operators; all the dirty jobs, the decon job, we got them.

Well, when I became an operator I started learning the processes. Initially at Rocky Flats, in the '50s and early '60s, you were assigned to a job, you stayed on that job. Well, as it -- as the production schedules changed and need for increased production and because of radiation exposure, people started having to be rotated. And so we were rotated from job to job to job, so we had to learn every job, and we worked every job. And that included an operation called chemical makeup, some people called it chem prep, in which you had to prepare chemicals for the processes in which you were -- you had no respiratory protection, no monitoring or anything. But you were working with raw chemicals --

(unintelligible) nitric acid, hydrofluoric acid, hydrochloric acid, all kinds of things like that that were used in the process -- and so you inhaled those.

Do we know what that does to you? I don't. All I know is that a lot of people became sick because of the chemicals that -- that we dealt with.

Anyway, moving on. Working in 771 building was a -- was a very unique experience in the early days because we didn't have a lot of -- of safety programs. You walk in and you might work on this side of the glovebox through a set of gloves, looking on the back side of the glovebox. There weren't any gloves; they'd rotted off, but they were taped over. You were not in respirators, but the back side of the glovebox was posted for respirators, you know? You had dosimeters -- or you didn't have dosimeters; you had film badges in those days. And our frequency was a change of every two weeks. And sometimes you would -- you would come back, as people have stated, no data available, or less than readable data and stuff. I had some of that -- I had -- I

changed my badge frequently, every two weeks. I got information back, but it wasn't always the information that -- you know, you'd go ask well, what happened? I mean I worked beside this guy; he got 100 millirem, I didn't get any. How come? No answer.

Anyway, things changed somewhat. We in-- we in-- installed some programs like the glove quality program where we changed gloves on a periodic basis so we wouldn't have those gloves falling off the gloveboxes and stuff. But we worked in a chemical processing building that had 26 miles of processing piping; 200 tanks with sight gauges on them, each with a potential for a leak; 12,000 flanges, 15,000 welded joints, that sort of thing -- every one of them with a potential to leak, and most of them did. So we had a lot of issues with -- with deconning and dealing with radiation exposure, alpha contamination, et cetera.

For me personally, I got data in 1962 -- and if you -- if you know the history of Rocky Flats, 1962 was -- summer of '62 was the first year that Rocky Flats suffered a strike by the union. It went on for 28 days, in August.

When I got back from strike I was called into the office and told I was -- we were back about a week and I was called into the office and told you've exceeded 5,000 millirem for the year; you're going to have to go to 774 building and cool off. So I went to 774 building to cool off. First of the year I was back in 771, doing my normal thing. It went on like that.

'69 I was working midnight shift. I had a call on May the 11th about 6:30 in the evening from my boss, [Name Redacted], and he says get your carpool and get to work now. I said what's wrong, [Name Redacted]? He said I haven't got time to explain it, just get here. So I called my carpool, said I'll be by and pick you up in five minutes and we're going to work. What's up? I don't know, we're going to work. So we get out on the hill there at 128 and we look over towards Rocky Flats and all you can see is red lights flashing all over the place and you go -- do I really want to go to work? I'm not sure, but we did.

We pulled into the east gate. Guard said where the hell do you guys think you're going? Well,

we're going to work down in 71. Oh, well, don't go near 76. And I said well, what's wrong? He said there's a big fire going on down there and they haven't got it contained. Well, we got down to 71 building, got dressed out, went to the office and boss said there's a fire in 76 building. They're putting water on it. It's running down the elevator, through the tunnel and into the back of 71 building. Go get the floor pickups and decon -- start deconning the hallways and get it back to the -- the tunnel. So we did that, worked all night long getting water picked up and stuff. About an hour into this, boss came in and says you guys come out here. He says I got something for you. So we went out to the -- the clean area. He says here, put these on. Say what the hell's that? He says that's a new type of respirator, called a full-face mask. We were wearing half-masks when we first got there. He gave us a full-face respirator, but actually what it was was an old World War II gas mask with a particulate filter on it. Well, as you can see, I wear glasses. My vision at that time was 20/800, 20/850, so I

didn't see real well without them. But I pulled my glasses off, put this thing on and bumped into a few walls and stuff and spent the rest of the night deconning.

The following weeks we wound up going into the tunnel, which was between 71 and 76, and cleaning that, then eventually going up to 76 building and into supplied breathing air suits and -- and cleaning -- packaging oxides and bringing them to 71, drying them, storing them and processing.

We processed a lot of material. We processed millions of grams of plutonium. People talk about plutonium. They don't really understand or know the amount of material that went through that site. I'm not talking a few grams. When I read the books and -- and hear the stories and talk to the people from Los Alamos and they talk about what they did back in the Manhattan Project, and they were dealing with micrograms and milligrams of plutonium. We dealt with kgs per hours, kgs per shift, hundreds and thousands of kgs per year, millions of grams of oxide that went through the process.

What we did it for was to keep this country safe, and we did it very well. But we paid a price, because if you talk to people at other plants, and I've been to every one of the other plants, save Paducah and -- and the one in Ohio. Every one of them, when you talk about Rocky Flats, they just can't understand why -- why we did what we did and how come we put up with what we did because they don't have the people that have been exposed like we do. They don't have the hundreds of people that have high exposures and -- and internal depositions that we did. And it's hard to deal with that kind of stuff because some people it affects and some people it -- it doesn't affect, but probably will in the future, and I'm probably one of those.

I continued to work, as I say, Rocky Flats. Through the years I -- I became a foreman in '73 in 71 building on midnight shift. I worked there until 1980 and I went up to 371 to start that building up, and I did. I started it up. I also shut it down, because it was not what we had asked for. In 1968 the government came to the people in the building and asked for --

what we would like to see in a new facility because they felt that 71 building had a 25-year life span and it ought to be closed down after 25 years, so they were going to build a new facility called 371 and 374 to replace 771 and 774. It was supposed to be on line in 1976. I went there in 1980; it was still not on line. We didn't put the first plutonium in until 1981.

A lot of things that we asked for did get put into the building. A lot of things we didn't ask for got put into the building. The building was not designed properly to handle acid atmosphere plutonium recovery, and therefore it did the same thing as 71 building -- it leaked. People got exposed.

One of the things -- and I'll back up for just a moment and talk about -- is americium. Americium is a byproduct of plutonium. It in-grows in the plutonium in the -- in the weapons in the field, and after a period of time has to be brought back and reprocessed and -- and the americium removed from the plutonium because in the field what it's doing is giving the military folks high doses of gamma, and the

military doesn't want to put up with that. I don't blame them. So they send them back.
So we had a process in which we recovered the -- the plutonium and the americium, did a separation process, purified the plutonium, sent it back into the weapons product. And we separated the americium, purified it, made it into an oxide and we sent it to the americium pool down at Oak Ridge for a number of years until we filled the pool up so full they said that we didn't need any more americium because there'd be more than five lifetimes worth of americium for everybody to use.
So we quit saving it, so it became a waste product. And it went into the waste in what was now a cold process for buildings like 774 and 374, now became a hot process because of all the -- the gamma that was going through the system in the waste -- americium waste. So those people got exposed where they weren't exposed previously to the higher levels.
Another thing I'd like to speak about for a minute is when I went to work there in 71 building, the talk in radi-- in the radiation field was obviously about alpha and gamma and

beta. Nobody talked about neutrons. Nobody had an idea what was going on with neutrons. It wasn't until about 195-- or 1965, 1966 that they determined that neutrons were an issue, and that we ought to do something about it. And what they did was they started installing plexiglas and benelex around the gloveboxes. Makes it harder to work in the glovebox, makes it a -- a tougher job for you to do your job and therefore you spend longer exposure time in the glovebox. And it really got, in a lot of cases, more exposure, especially to your -- your hands and wrists and chest area, than you did without the -- the benelex and plexiglas. What they didn't realize or didn't pay attention to was benelex and plexiglas are extremely hazardous, flammable-wise. And so when the fire started in '69 in 76 building, as it burnt through the first window and got to the outside protection, benelex and plexiglas, and started burning that. When it started into the benelex, benelex is -- comes in sheets about a quarter-inch thick and they laminate it together -- one inch, two inch, three inch, four inch -- whatever thickness you need. So

it would get into this benelex and get to the glue and start burning. And one of the reasons that the fire continued to burn as long as it did was because they couldn't get the benelex put out.

They put water on the plutonium. That didn't put it out 'cause water won't do anything to put out a plutonium fire. The only thing you can do to put out a plutonium fire is take the oxygen away from it. So all the plutonium burned into oxides, so we spent a lot of time taking care of the oxides and getting all of that stuff out of the building before we ever got to the point where we were tearing out the equipment and cleaning up the building. Although it was never completely cleaned; a lot of it was covered over with paint.

Anyway, moving right along, I continued to work at the Flats and participate in the programs. One of the things that I saw early on was that I'm getting exposed.

Oh, I forgot to tell you that right after the fire in '69 we were working cleaning up and stuff. Well, in -- in August of '69 again I come into the office on midnight shift. The

boss says you're out of here. I said what's up? He says you're over-exposed. Well, '69 was the only other year that I got notice that I had exceeded the five rem limit for exposure. And the reason I'm talking about this is because I'm going to bring something up here in a few minutes about my exposure.

So anyway, we continued to work. I continued to -- to ask questions and -- and participate in the programs. I talked to you about the frequency earlier. One of the questions was about how frequent was -- were people's badges changed, how frequently were they body-counted and how frequently did they have urinalysis and that sort of thing. My personal situation was that after I was identified with an internal deposition and a high -- high dose and exceeded the -- the guideline, I had a body count every six months. I got a pee bucket every six weeks. Every one of those came back extremely high in plutonium and americium. I could do one today and it would still do the same thing. The last one I did, just before I left, the information was you're still in the category of extremely high.

So I'm sitting here with -- with plutonium and americium in my system. I'm fortunate. I haven't had what a lot of these other folks have had as far as health issues. I've had some minor health issues, but I haven't had the heavy issues, the cancer issues and that sort of thing. Will I? I don't know. Probably. I mean how can you not have, if you've got an internal deposition and a large body burden -- I mean a large dose.

I just want to share this one piece of paper here with you. This -- this is the Rocky Flats Environmental Technology Site annual report card for the year 2000, individual lifetime report, Jack Weaver. Cumulative TEDE reported since 1/1/89, 659 internal -- no, I mean external; no internal; 659 millirem total dose for the year.

Now in 2000 I was working in a situation where I was doing contract work and oversight, reviewing work packages and et cetera, so I wasn't on the floor every day, but I would go out and review the packages on the floor with the workers and such. So I still received 659 for the year, even though I didn't have hands-

on in the -- in the gloves or hands-on to the equipment.

But here's -- here's the results on a lifetime dose. External, 89967; internal, 119796, for a total of 209763. How many people in here are you going to find that's got that kind of a dose? Not many. I'm probably one of those 20 or 30 people that they talked about that -- that got reviewed because I'm in the high end of things. There are other people that are higher than I am, and quite a few of them that are in that area of 100 to 200 to 300 rem over the -- over the -- or millirem, I'm sorry, over the -- no, rem -- over the lifetime of -- of working at Rocky Flats.

Anyway, what I -- what I wanted to convey was -- was this. There are a lot of great people, brothers and sisters that worked at Rocky Flats, that did a hell of a job maintaining the integrity of -- of our armed services so this country could stay free and -- and be able to stand here today and talk to you people. It's a shame that these people have not been treated with the dignity that they haven't 'cause they deserve better than what they've been getting.

I just want to say that I hope you people find it in your hearts and in your heads today to listen to what Senator Salazar had to say, to listen to what Jennifer -- by the way, who did an outstanding job, in my mind, of presenting this morning -- to what Jerry said, to what Tom will say here in a few minutes, what [Name Redacted] will say, and what the people said last night, and please, please pass the SEC cohort. When you go to other sites and you ask them about how many of their people are -- are exposed, how many of their people have had internal depositions and stuff, you won't find any site, not even Hanford and Savannah River, that have the people that have been exposed like Rocky Flats people have. These people deserve to be treated with justice and dignity. Please do that for them. Please vote for the cohort.

I thank you for your time.

MS. THOMPSON: Thank you, Jack. Now I would like to introduce Mr. Bill Brady, a law professor at the University of Denver Sturm College of Law, who teaches an advanced law class in hazardous waste and toxious (sic)

torts. He represents cancer victims and others who've been exposed to toxic substances. Thank you.

MR. BRADY: Mr. Chairman, members of the committee, it's already been a long morning and I don't know if you had a break planned at all, and I would offer you the opportunity -- if it was your preference -- to take the break now. The --

DR. ZIEMER: Well, I'm (unintelligible) --

MR. BRADY: -- derriere can only endure --

DR. ZIEMER: -- you so much time afterwards that --

MR. BRADY: Yeah.

DR. ZIEMER: -- no, I -- unless you are going on for an extended period, I think -- we have a few moments yet. We'd be --

MR. BRADY: Okay, great.

DR. ZIEMER: -- pleased to have you --

MR. BRADY: I don't plan on going on for an extended period, but I am a lawyer, so...

DR. ZIEMER: Well, we -- we've been duly warned. Thank you.

MR. BRADY: Mr. Chairman, members of the committee, I was here last night and heard some

of the testimony, and actually I also read much of the transcript from last April. And it struck me that there has been a huge disconnect in what has been going on. One thing I've learned in 30 years of -- of practicing law and teaching law students and trying cases to juries and judges and teaching young lawyers and older lawyers in post-doctorate programs is that human nature doesn't change much. Most people are not impervious to the kind of gut-wrenching pain and suffering that have -- have been presented over the last two days. Whether you're a steel worker, a scientist, a lawyer or a -- a member of a blue-ribbon government panel, you can't be impervious to this kind of pain. You'd have to be awfully cold and callous and anesthetized to the hu-- human condition we've heard about.

So how then, given the constraints of your abilities under the law and your charge as members of this Board, how can you help? Well, what I'd like to do is very, very briefly talk to you about a client of mine, who many of you know and have heard from, and that is [Name Redacted]. [Name Redacted] is a -- is a very

special person. Now I know that this is anecdotal and you've heard tons of anecdotes the last few days. And many of you are scientists, and I've worked with scientists before, and experts, and I know that anecdotal evidence is only indicative of that one person's case. But I think [Name Redacted], case is very, very illustrative of many of the cases here, and I'd like to take a few minutes to talk to you about it. [Name Redacted], came to me seven months ago. He had been denied three times in various petitions that he had submitted under the EEOICPA, and he was a very frustrated person because he had now just been diagnosed with a second primary cancer. His first primary was a glioblastoma multiform, an extremely deadly form of brain cancer. The reason I say [Name Redacted], a very special person is because [Name Redacted], is still alive. He's lived four and a half, almost five years now from his diagnosis in June of 2002. But unfortunately, he now had been diagnosed with a second primary, a myelodysplasia syndrome, which is a form of bone marrow cancer. And he was very frustrated.

[Name Redacted] has degrees from Ohio State University, both a bachelor of science and a master's degree in nuclear engineering, and is a very smart guy, and I had a lot of respect for him. He was 42 years old at the time of his diagnosis, way outside the profile for this particular condition. [Name Redacted] and his wife, who is also an engineer, had been trying desperately to get the government's attention. I brought a banker's box over there of materials that I've accumulated in the last seven months on this case. [Name Redacted], has three others of those, documents that he had submitted over time. His first petition was filed in September of 2002, over four and a half years ago. The process has gone on interminably.

Well, I looked at his case. I talked with his oncologist. We talked with an expert over at the University of Colorado Health Sciences Center, Dr. Jim Ruttenber, and they were as perplexed as I was as to why [Name Redacted] claims had been denied.

We talked to him about his work. [Name Redacted] had spent 16 years at Savannah River

as a project engineer, manufacturing plutonium triggers; another six years doing the same work at Rocky Flats, and another six months doing similar work at Fernald. He left Rocky Flats in June of 2000. And what was curious to me was when I looked at some of the site exposure matrices, I found that [Name Redacted] was listed as still being employed at Rocky Flats in the fall of 2003. He'd left in June of 2000. He was diagnosed with the glioblastoma multiform brain cancer in June of 2002, and they still had him at Rocky Flats working there some -- more than a year later.

So we started taking a look at some of the other records, and we found that there were numerous calculation errors, mathematical errors, based upon the doses to which he had been exposed. In addition to that, there had been chemicals which had never been factored into his dose reconstruction process, chemical exposure -- not just radiation.

[Name Redacted] had had significant amount of neutron radiation and described to me how he used to wear a bellybutton dosimeter under two layers of protective equipment, and that very

often he would stick his head into an area where there was plutonium and have to work with it, yet there would be no reading on the dosimeter. This whole issue of neutron radiation and some of the issues that were raised in the petition today by Jennifer, the areas that she had raised, we raised in [Name Redacted] case. We got into the whole issue of high-fired oxides and the inaccuracies of bioassays. We further studied plutonium, a number of other issues that have been raised by the committee in their questions to Dr. Ulsh earlier, as well as by Dr. Ruttenber raised -- who raised them to us.

Well, we got a hearing in front of the Department of Labor Final Adjudication Board, and I had [Name Redacted], the oncologist, testify. He stated that he'd only had one other case that he treated of a glioblastoma multiform, and that was an individual who had worked at Rocky Flats, and [Name Redacted], -- two cases. [Name Redacted] has been practicing oncology in the Denver metro ar-- metropolitan area for over 20 years. He was amazed that [Name Redacted] had been denied, and basically

said to me you can't look at an elephant and keep calling it a zebra. That's what they're doing. It is absolutely clear that this man's cancer, at 42 years of age, outside of every profile, is absolutely caused by his chemical and radiation exposure. But the chemical exposure had never ever been considered in the dose reconstruction process.

So we went forward. We presented the evidence. And about a month ago we got a decision. And the decision is very, very instructive because of the findings that were made in [Name Redacted] case. And I'd like to read just a short portion of that decision to you. (Reading) The Final Adjudication Board reviewed your case and the new statement of accepted facts was written based upon the extensive research of toxicants you presented as having been exposed to during your employment. The toxic substances you identified were researched through other site exposure matrices not previously available, a repository of information related to toxic substances potentially present at covered DOE sites. It has now been accepted that you were exposed to

the following toxicants while employed: plutonium nitrate and chloride solutions, plutonium oxide, plutonium oxalate, plutonium fluorides, plutonium dibutylphosphate, uranium oxides, neptunium oxides, acids such as hydrofluoric, sulfonic, oxalic, ascorbic, nitrous and hydrozene, sodium tetraphenylborate, volatile organic -- organic compounds and organic solvents such as TCE, carbon tetrachloride, MEK, PCBs, mercury, heavy metals such as lead, chromium and cadmium, thorium, ferrous sulfumate and aluminum nitrate nonhydrate -- nonahydrate. None of that had been considered previously.

Based on this new information, the case was then referred to a new district medical consultant, different from the prior district medical consultants who had denied [Name Redacted] previous petitions. The new district medical consultant, who this time was a doctor skilled in occupational medicine and not the cardiologist who had previously denied [Name Redacted] claim -- a cardiologist who, by the way, stated that he spent three hours reviewing[Name Redacted] case and consulted

WebMD in order to research his condition. The new district medical consultant stated the development of cancer is a multi-stage process which can best be understood as involving -- promoting malignant conversion and tumor progression. In general, carcinogen-related cellular DNA damage that is not reversible is term initiation. The process of promotion occurs when DNA-damaged cells begin to replicate. Known chemical promoters include many of the toxicants to which [Name Redacted], was exposed, and are capable of promoting the initiated cells. Some of the toxicants to which [Name Redacted] has been accepted as having been exposed to are suspected human carcinogens, and he cites a whole list of them. In summary, although the literature and epidemiological basis of evidence is non-confirmatory of an occupational toxicant exposure etiologic basis of brain cancer, there is insufficient evidence to suggest any alternative causal etiology. An assessment of the medical evidence and all potential causal factors for brain cancer suggest that it is at least as likely as not that the occupational

toxicant exposures at Savannah River were a significant factor in contributing to [Name Redacted] cancers.

Now, I don't know how many other folks here have submitted petitions and have received the same treatment that [Name Redacted] received the first three times. I suspect that there are quite a few.

I listened to Dr. Ulsh's answers today. They troubled me. The scientific process permits reasonable assumptions giving the applicant, as the law requires, the benefit of the doubt so long as there is a modicum of evidence, a modicum of competent evidence upon which to base those reasonable assumptions. But when there is no longer a residuum of competence evidence, confounding factors are too great to overcome. The science of risk assessment and causation conclusions based upon that science is reduced to little more than junk science when you rely upon irrelevant, irrational, incomplete, inaccurate and unreliable evidence. The operative -- the operative -- the operative phrase I think these days, in the words of my kids, is garbage in/garbage out.

There's a wall of human suffering out here, and they deserve better treatment than they've been given. When Rocky Flats contractors provide evidence that is incomplete, inaccurate and unreliable, the logical result mandates approval of the Special Exposure Cohort. These people from whom you've heard do not have, as [Name Redacted] apparently has had, the luxury of time. Time is a commodity many of these folks cannot afford.

[Name Redacted] case took four and a half years. Fortunately, thank God, he's still with us. But other people are dying, and their families -- as you know -- are being left economically, as well as emotionally, devastated.

You can end that suffering today. Please, by the grace of God, approve the petition. Thank you.

MS. THOMPSON: Thank you, Bill. I would now like to ask Michelle to come up. You heard from Michelle last night, but she'd like to add one additional comment on -- on behalf of her family.

MS. DOBROVOLNY: Good morning, panel. Thank you for taking the time. I actually didn't get

a chance to speak last night, but that's okay. I believe there's just been so much said here that it doesn't need to be repeated, but I just want to give you a very quick synopsis of my situation.

My name is Michelle Dobrovolny. I'm 42 years of age. I am also sick. I have been denied six times. I don't know if I'll have the luxury of a seventh. I have watched many of my family members -- whom all worked out at Rocky Flats -- die, one right after another, of cancer -- hideous cancers. It's a very sad and difficult situation. [identifying information redacted] is sick with berylliosis. He, too, will succumb to death.

As I stand here before you, I don't really need to go into a lot of detail because I think many have covered everything that needs to be covered. But as you make this decision for our lives and the compensation that could help some of us, I want you to remember that you are going to affect those that have died, those that are in the process of dying, and those that are in the future that may face the same consequences that we have. Please also keep in

mind that sometimes calculations of the smartest people don't apply to this. It's simple common sense.

Your cause to action would be to vote yes for us. When we left that plant site and ended with the chemicals that we worked with, that's when your job really began. We gave 100 percent of our time, our effort and our lives in dedication to doing what we needed to do to support our country. It's time that you give 100 percent back to us as employees. I speak on behalf of -- this is a family. We're not individuals. We are a Rocky Flats family, and we deserve the very most integrity, the same integrity that we gave our job when we showed up every day at plant site. Thank you very much.

MS. THOMPSON: We have one additional gentleman who wasn't able to come last night. Mark Danhauer has a brief comment that he would like to give, and I appreciate your indulgence on this matter. Thank you.

MR. DANHAUER: Good morning. I started working out at Rocky Flats in -- I think it was beginning of '02. I worked out there a year,

and I started working in G mod and about two months later I was going into kidney failure and I found out that I had stage three large B-cell non-Hodgkin's lymphoma that was from my chest to my pelvic area. They gave me about a 25, 30 percent chance to survive as I've been in remission now for three and a half years now, thank God.

I'm 41 years old and I'm totally disabled. I can't work. I have so much chronic pain that they can't even figure out what to give me anymore. They've tried the -- you know, the morphine, the fentanyl patch, which I have on right now, and the methadone and I take 19 and a half pills a day. And I look like I'm in pretty good shape, look like I can work. I mean I worked construction for 20 years. But at the end of the -- probably right around the middle of the day, I have a hard time climbing ten stairs to go up to my bedroom. It -- I -- I can't even begin to explain or make you understand, unless you are a cancer patient and have gone through the intense chemo, you know, that I've been through and I know some of the people here have been through. It is the most

humiliating and degrading and painful thing I've ever gone through in my entire life, and I went through that for eight months, and I continue to go through it.

Just because I'm in remission for three and a half years doesn't mean that I have no more pain. I just went in for a checkup a couple of weeks ago, and they found a spot on my lung. I'm going to keep an eye on it. It's not really -- I'm not too concerned about it yet, but it's still a big concern for me and my family and [identifying information redacted] and -- I'm not going to sit here and try to beg you guys to -- to pass this bill, but the monetary and the health insurance -- I think the health insurance is more important than the money, even though I've been financially devastated from this. I've gone through the bankruptcy 'cause of the medical bills, everything.

It's just the peace of mind I think for having the health insurance and not having to worry about that because right now it costs me probably -- I'm filing for Social Security disability. You know how that works. I'll

probably never get it, or if I do, it'll be four or five years down the road.

I -- I have no income. [identifying information redacted] supports me. I'm supposed to be the man of the house. Instead, I'm at home, doing little chores here and there, trying to get through the day. It's not the way it's supposed to be. I guess sometimes I don't feel like a man 'cause I can't take care of my family, and that sucks.

And I know I'm one of the younger ones to have this type of problem, but I'll always have it, and I know I'll never be able to work again. I was 37 years old when I got sick. I almost needed a kidney transplant, you know, all kinds -- by the grace of God, I made it through it, but the aftereffects are just inexplainable -- unexplainable. You can't even begin to understand it unless you've been there.

And I'm not going to sit here and try to convince you to pass this bill or, you know -- I'm kind of at a loss for words. I'm a little nervous, little upset. I just hope that you guys take the time to realize this affects so many people, down to my grandkids, down to my

step-grandkids. They're -- they're still my babies. I can't even play with them. So take all that into consideration, that that just doesn't affect us. It affects everybody, our whole family, the kids. So -- I've been up here long enough and made a fool of myself, so -- but thank you for your time.

MS. THOMPSON: I want to thank the Board for all the time that you've given us, and it's for people like that that we've applied for Special Exposure Cohort, 'cause we really believe that people like Mark should not have to fight for compensation at the time they're fighting for their lives. I ask you to please consider the law -- again, ignore the politics -- to look into your heart and to do the right thing. It was never the intent of this program that it should go on this long. It was never the intent of this program that the petitioners' findings would result in all these changes and then the petition would be denied based on that. And don't get me wrong. We're really glad that our petition has been the impetus for better science and for a better model and for all those things. But what we're saying is

that the models are unproven. You still can't accurately reconstruct dose. I'm asking you to look at the fact that someday is simply not good enough, that accuracy and feasibility means today, and I ask that you please today approve our petition.

DR. ZIEMER: Thank you very much, Jennifer, and other folks from the petitioning group. We do want to hear from the -- the Congressional delegation, but I think it would be appropriate that we -- we take our break first, so let's take a 15-minute break. Try to be back here promptly about 25 of, and then we'll have an opportunity to hear from a number of the members of the Congressional delegation.

(Whereupon, a recess was taken from 10:23 a.m. to 10:45 a.m.)

DR. ZIEMER: We have a number of individuals from the Congr-- Colorado Congressional delegation that are going to provide some remarks for the record. We'll begin with Jeanette Alberg, who is on the staff of Senator Wayne Allard. Jeanette, we'd be pleased to hear from you at this time.

MS. ALBERG: Thank you. It is a pleasure to be

here today to speak on behalf of U.S. Senator Wayne Allard. David Hiller with Senator Salazar's office and I will be reading a letter from the Colorado Congressional delegation. Before we read the letter I did want to preface the letter with a couple of comments, basically echoing Senator Salazar's earlier comments. It's important to note that this letter has bipartisan support. All nine members of the Colorado Congressional delegation have signed onto this letter in support of the Rocky Flats Special Exposure Cohort petition, so thank you for your fair consideration of that.

I mentioned the bipartisan aspect because today's decision, the decision that you're faced with, is not about politics. It's about making the right decision and making -- being fair to the people at Rocky Flats. So thank you for your fair consideration of these comments.

(Reading) Dear Dr. Ziemer, Dr. Wade and members of the Advisory Board: As members of the Colorado Congressional delegation, we write to you again in support of the Special Exposure Cohort petition of the former Rocky Flats

workers. The men and women who served at the Rocky Flats nuclear weapons plant throughout the Cold War are national heroes. Many in the Rocky Flats workforce knowingly and unknowingly risked their lives to help protect our country. They deserve to be honored and cared for by the nation they served.

The intent of Congress in passing the Energy Employee Occupational Illness Compensation Program Act was to ensure that the men and women who put themselves in harm's way by working at Rocky Flats and other nuclear production facilities had a clear and just process for applying for appropriate financial and medical benefits and compensation under the law and authorized by Congress. By law, Cold War veterans who became ill from exposure to radiation, beryllium and silica while working at DOE facilities were to be provided timely, uniform and adequate compensation.

As you know, the administration of the EEOICPA program has not been without controversy. Tragically, administrative waste and programmatic difficulties have delayed the payment of program benefits author-- authorized

by Congress. Numerous reports have accused the Department of Energy and the Department of Labor of mismanaging the Energy Employee Occupational Illness Compensation Program, and delaying and wrongfully denying benefits due to Rocky Flats and other nuclear workers. Agency documents suggest that the Department of Labor delayed and denied such benefits as a result of conscious administrative policies.

In a few instances, NIOSH, too, has contributed to some delays and denials by insisting that it can reconstruct workers' radiation doses in the absence of adequate data, spurring public skepticism. While NIOSH has worked with the Board's contractor to develop alternative methodologies, the resulting changes in methodology have led to long delays in the demon-- in the determination of claims. In these instances, NIOSH's defense of its methodologies in the face of legitimate and documented criticism has frustrated the Congressional intent to provide timely benefits and has raised questions regarding the fairness of the EEOICPA program.

The Advisory Board, too, has been dragged into

this sorry history, through no fault of your own, with the disclosure of communications between the Office of Management and Budget and the Department of Labor. These communications suggest a deliberate effort to -- by some to reduce compensation to nuclear energy workers by stacking the Board with opponents of compensation who would vote against Special Exposure Cohort petitions.

The history of Rocky Flats offers its own examples of misconduct and mismanagement, from inadequate monitoring of workers, efforts to disguise the absence of data or the intentional destruction of monitoring data, disastrous fires, and even a raid by the Federal Bureau of Investigation to seize and protect records. Many Rocky Flats workers who helped clean up the extremely toxic contamination from fires at the plant have been denied benefits for illnesses, even as a federal judge has determined that neighboring landowners are entitled to compensation for financial losses due to contamination of their properties from these very same fires.

As a result of this long history, many Rocky

Flats workers and their families wonder if their government has abandoned them. These workers, the people of Colorado and their elected officials are justifiably upset by the conduct of the responsible agencies.

DR. ZIEMER: And we'll hear from David Hiller from Senator -- oh, from Senator Salazar's staff. Thank you.

MR. HILLER: Let me conclude the -- the delegation letter that Jeanette began. (Reading) We remind you of this unfortunate history because you do not write on a blank slate. Instead, the Board's actions over the coming days will be viewed by the people of Colorado and the nation with these sad facts in mind.

On February 15, 2005, the United Steel Workers of America, Local 8031, filed a petition to have its members who worked at Rocky Flats included in the Special Cohort -- Special Exposure Cohort under the Energy Employees Occupational Illness Compensation Program Act. Much has changed since the petition was filed. The cleanup at Rocky Flats has been completed, all of the workers have been laid off, and the

Steel Workers Local 8031 no longer counts a single former Rocky Flats worker among its current membership. As a result, Local 8031 is a representative of the petitioners in name only. The Steel Workers provide no financial, technical or legal support to the petitioners. It is also worth noting that NIOSH elected to expand the class of workers subject to the petition far beyond the class of workers who were formerly represented by the Steel Workers. By NIOSH's action, the class of workers subject to this petition now includes all employees of DOE, DOE contractors or subcontractors who have worked at the Rocky Flats plant from April, 1942 through February, 2005.

Approval of the pending petition and membership in the cohort would not guarantee benefits to this broad class of workers, but it would make it easier to obtain benefits for workers with the kinds of cancer known to be caused by radiation. NIOSH has opposed this petition, as it has opposed other petitions, claiming to have adequate data and methodologies to calculate the exposures of Rocky Flats workers. However, the Advisory Board's contractor,

Sanford Cohen & Associates, has documented areas of inadequate data and unreliable methodologies.

Two years after the filing of this petition and more than six years after of the Act, NIOSH's methods and dose reconstructions of Rocky Flats workers remains subject to substantial doubt. The Advisory Board is now tasked with making a recommendation as to whether or not it is feasible to estimate with sufficient accuracy the radiation dose that members of the Rocky Flats SEC petitioning class received. NIOSH, Sanford Cohen & Associates and the Advisory Board's Rocky Flats workgroup have debated this issue for nearly 18 months. Congress did not intend to create an endless program that would re-evaluate constantly-evolving sets of data with ever-changing methodologies. To the contrary, the Act expressly states that the purpose of the compensation program is to provide for timely, uniform and adequate compensation.

We are long past the point of timeliness in compensating the Rocky Flats workers. Many of these Cold War veterans have already died, and

many of their surviving families continue to struggle economically due to lost income and unpaid medical bills. Many more are ill and continue to suffer, medically and economically. Granting Special Exposure Cohort status to these workers will not resolve all of the injustices that have been inflicted upon them, but it will allow some of these workers and their survivors to receive benefits while it can still provide meaningful relief. Many seek only the comfort of knowing that their survivors will be taken care of.

We therefore urge the Advisory Board to act promptly on the Rocky Flats SEC petition request, while keeping in mind that there are documented concerns regarding NIOSH's ability to accurately reconstruct doses for all class participants, and that it is far too late to further postpone a decision with the hope that accurate doses can yet be calculated. Thank you in advance for your full, fair and prompt consideration of this petition.

Signed by all nine members of the Colorado delegation: Senator Salazar, Senator Allard, Representative Diane DeGette, Representative

Doug Lamborn, Representative Marilyn Musgrave, Representative Ed Perlmutter, Representative John Salazar, Representative Tom Tancredo, Representative Mark Udall.

And I would now like to introduce Carolyn Boller, representative of Congressman Udall.

MS. BOLLER: I just want to thank you all for the work that you've put into this. I think I've rewritten my comments at least 45 times in the last 24 hours.

I just want to say that I've had the honor of working with the Rocky Flats workforce for 15 out of the last 20 years. I worked for Congressman David Scaggs prior to Congressman Udall, and over that period of time I've heard those stories. I've heard them from the Department of Energy. I've heard them from the plant site managers who bo-- and the workforce, who all tell me we don't have records.

As of January I had a conversation with the Kaiser-Hill representative who said I don't understand why this petition can't be granted. We don't have records that support the ability to do accurate dose reconstruction.

So what I'd say to you is grant this full

petition. Let's move on, let's get these folks the help that they need, the security that they need, and the recognition. And I appreciate your consideration.

DR. ZIEMER: Thank you. And also we have Jason Thielman representing Representative Musgrave's office.

MR. THIELMAN: Mr. Chairman, members of the Advisory Board, thank you for giving us an opportunity to address you today. Behalf of Congresswoman Marilyn Musgrave and the scores of residents from the Colorado Fourth Congressional District, I request that you make a recommendation for the special SEC status. In my preparation for visiting with you this morning I visited with the Congresswoman, and she reminded me that for years the workers of Rocky Flats have put their health on the line for the security of our nation, and that they should not be given the runaround by the federal government when Congress has made it clear that they should be given indemnity for prolonged exposure to radiation. Yesterday in listening to the testimony from the many impacted workers, I was particularly struck by

a comment from Laura Schultz describing the service of the workers of Rocky Flats as invisible Cold Warriors. She and many others also additionally mentioned that they felt they could no longer believe anything their government says.

Many of us here work for the government and believe in public service. And probably what is most disturbing to me is something that we believe in passionately and work for has been so undermined in the face and the hearts of people who have committed so much to their country. These folks are invisible and have been treated as they are invisible. And we cannot correct the wrongs that have been done to them, but we do have an opportunity to set it right. And I urge this committee to do so. You probably have it within your ability to address the form of the law and allow you to not grant the status. However, the substance of the law, I believe, demands that we treat these pe-- these people and their family with the respect that they deserve for the commitment and dedication they have given this country. Thank you.

DR. ZIEMER: And then we're pleased to hear from Bill Holer, who represents Representative Perlmutter's office.

MR. HOLER: Thank you, Dr. Zimmer (sic), members of the working group, it's an honor to be here today and I've had the opportunity, though have not been involved with the working group as long as some of the -- my other colleagues here, but I participated in several of the meetings and am very, very impressed with the quality and the professionalism that -- that's entailed in this group.

Congressman Perlmutter has signed the Colorado Congressional delegation letter and is in full support of its recommendations to approve fully and completely the Special Exposure Cohort petition to grant relief to the Rocky Flats workers. Congressman Perlmutter, since taking office, has worked closely with several Rocky Flats workers who are seeking relief under the provisions of the EEOICP Act, and working with those individuals to hear their personal stories, their problems and their frustration over lack of timely and -- and decisions in the matter have -- have certainly made Congressman

Perlmutter and myself aware that these delays have gone on too long.

As has been demonstrated by the independent evaluation by Stanford (sic) Cohen & Associates, many of the NIOSH evaluation procedures, methodologies, the missing data, and in some cases by, quote, an order of magnitude in inaccurate measurements of estimated exposure data when tested against known data. In other words, in spite of all the work, when tested, the evaluations and exposure levels can vary in -- in significant numbers, and I think that points to the fact that -- that we don't have an accurate picture. And it's time to stop -- to stop doing the evaluations and it's time to really move forward and -- and -- and take care of this class of worker that deserves it so much.

Accordingly, Congressman Perlmutter urges that this working group grant the SE (sic) petition today. Thank you very much.

MR. HILLER: Dr. Ziemer, let me also introduce my colleague on Senator Salazar's staff, Erin Minks, who many of you know because she has been doing a great deal of direct constituent

work with members of the Rocky Flats community. Erin Minks.

MS. MINKS: Thank you, David, and my colleagues here and members of the Board, I didn't know if I wanted to speak this morning because generally when your -- your boss speaks, you don't always need to follow. It's kind of a tough act to follow. But this does have a personal meaning for me so I guess this morning I speak on behalf of other Congressional aides who are tasked with working with their constituents during these process, and I wanted to, first and foremost, thank the Board and the working group members for -- for allowing and -- and working with us as we try to participate and understand this process to interpret to the folks here in the audience.

We understand, regardless of how adversarial this can become, that ultimate this is a huge sacrifice of your personal time, and we really respect the work that you do and really appreciate that. But generally, as -- as having worked with a lot of the folks in the audience on individual cases, I will say, as a caseworker, that there are many different

layers to the story of the site. There are many different chapters. There are different patterns of monitoring. And this program itself fundamentally, based on the scientific evaluations, needs to have that affirmation to go forward to substantiate what we're talking about today.

However, I speak for not just me but other folks here in the audience and other Congressional aides, that when it comes to explaining how zeroes after the '69 fire are not reconciled, and yet folks who have cancer from those years still don't go over 50 percent in their POC. That's -- as a policy-maker and as an aide and as someone trying to interpret and represent their interests, that is a challenge which I imagine we may continue to have to work with.

And so once again, we appreciate your work and we ask that you continue to work with us as we interpret your decisions. But it's -- it's been an interesting road and we just generally -- there is no easy answer to this process and we understand that, so thank you again for letting me speak today.

DR. ZIEMER: We thank all the representatives of the Congressional delegation who are here, and I suppose just on a personal note, you know, sometimes it's pleasing to see that there are things that we can get bipartisan support on now and then.

Now, we're going to hear from our workgroup chairman. While he's getting ready there, let me point out and maybe share with you a moment one of the sort of struggles this Advisory Board has, because what you see here at Rocky Flats is multiplied over the country -- at Hanford, at Savannah River, at Oak Ridge Y-12 -- the same kind of issues. And we are struggling, this group of 12 people, to address these same kinds of issues all over the country, as -- as is NIOSH and as is our Board contractor. And -- and indeed, a lot of time and energy has been put in, particularly by this workgroup, the Rocky Flats workgroup, in trying to be diligent in saying what is there, what -- what do we have in the way of information, because we are obligated by law to look at that. We -- we are also obligated to consider the issue of timeliness, and we

struggle with that, too, realizing that the timeliness issue is countrywide and we're trying to deal with multiple sites almost simultaneously and try to handle that issue of timeliness.

But be that as it may, one of our sort of required responsibilities is in fact to look at the NIOSH evaluation report. We have help from our contractor to do that so that we get basically an independent look at it. Recognize that we have a mix of individuals on this Board. We're not all technical people -- some are, some are not. But we -- we rely on outside help, too, to get an independent look. Now whenever you do that, obviously not everybody will see things the same way, and then we face the issue of sorting out NIOSH's view, our contractor's view, our individual views, the viewpoints of the constituents, so all of these -- all of these aspects are here before us.

So we want to hear from our workgroup that has looked very hard at the NIOSH evaluation report. They've worked with our contractor very closely in trying to evaluate what data we

have here at this site, its validity, its -- its extent in terms of missing or adequacy, missing data or adequacy of data, its reliability -- all those issues, we're obligated to do that under law. We -- we recognize that this has taken time, and that timeliness issue comes upon us as a -- in some cases, an overriding issue because we recognize that this kind of process, particularly for scientists, they just love to study things, you know, and keep studying things. But we realize at some point you have to make a decision, and -- and that point is upon us.

Now we -- we have a working group that's really been a hardworking group. Mark Griffon's been chairing it. Mark, introduce the members of the workgroup for the folks here, and then give us your report and then we'll have a discussion period.

MR. GRIFFON: Okay. Yeah, the workgroup is myself and Wanda Munn, Bob Presley and Mike Gibson. And I -- I have a few slides which you're -- are going to help me advance here. I -- I have so many notes I could-- I didn't want to stand at the podium, but I think everyone

should be able to hear me from here.
It -- the -- you can go to the first slide, I guess.
I think one of the -- one key point here is -- is, you know, just to reinforce, for those of you who weren't involved in all of our workgroup meetings, we -- we did have -- I think we say 12 -- down there 12 workgroup meetings, 19 conference calls, some of those technical calls were in between workgroup meetings. We did keep minutes for all those conference calls, so you know, to -- to say we -- I -- I -- I think I agree with NIOSH on this that, to the extent we could, we certainly looked at -- at everything and we -- you know, we -- we dug into these issues as -- as completely as we could, for sure. I think everybody's effort was commen-- you know, to be commended in that regard. SC&A certainly put an extensive amount of work to support the Board in this effort, and -- and all the work -- all the information provided by the petitioners and their -- their attendance on the conference calls, as well as Congressional staffers attended several of our workgroup

meetings via conference call, so it was a -- a lengthy process and a lot of issues were -- were certainly considered.

For those of you who were not involved so closely in the workgroup, through the course of the workgroup we had a -- a -- a matrix that we developed, and I probably have nine iterations of this matrix. I believe the final one is in the back -- is that -- is that correct? The final one, dated April 30th, should be available in the back with the materials. It's not? I'm seeing -- do we have that available, Lew?

DR. WADE: I believe it is.

MR. GRIFFON: We'll check on that, but we'll make additional copies if they're not there. This matrix details -- and I think we have a total now of 38 comments, 38 items on the matrix, and some of them have sub-items actually on them, but this is our detailed way of sort of tracking what we were reviewing and if it was resolved or not resolved. And as we went along, sev-- a lot of -- many of these items in the matrix are -- are sort of -- they fall into one broader category, so when I

present today, I'm going to touch the mean broad categories, not necessarily every matrix item. But I think this is certainly very useful to look at for the -- a little more in-depth read on what we -- what we went through. So I think we'll go to the first slide and some of these -- for those of you who have followed our workgroup, you'll recognize these issues from Brant's introduction, as well as Jennifer's presentation. But these are the main -- I think there's nine items on this list that we covered and I'll -- I'll go -- I'll just go through these one by one. They're not necessarily in any order, but starting with the -- go to the next slide.

The question of -- of super S and, you know, we -- we examined this in the workgroup for -- for an extended period of time. It is correct that a model was developed during the process of this review, finalized during the process of this review, and we -- or -- or some of us were certainly -- wanted to see further proof that actually this was a bounding model, so we asked -- and this is -- this was part of our balance of -- of how to do our job in the workgroup.

You know, we wanted this demonstration that the model worked and bounded all workers in the class. That -- that's sort of our criteria. To do that, we asked for more information, for more proof from NIOSH, and that took a little lon-- a little more time.

The proof -- some of the things we asked for was the model relied on six cases to develop sort of an ov-- overarching approach that would be bounding for all workers with regard to super S exposures. We knew that there were several other workers that could have been defined as -- as having a -- a super S exposure that could have been considered in developing this model, and we asked for all that case data so that we could compare to see if -- if, in looking at those other cases -- I think there were about 25 of those -- if those other cases were in fact bounded by the -- the approach offered by NIOSH, put forward by NIOSH. And in fact at -- at the end of this, and it did take an extensive period of time, SC&A did agree that the model provided -- this -- this TIB-49, which is this new super S model, did bound the doses for all worker-- and was claimant

favorable for all workers, with regard to this super S situation.

I think we can go to the next one.

External and internal data completeness. We -- this was -- this was mentioned a little earlier this morning, and -- and this sort of came at the -- in the -- in the middle to the end of our -- our cycle of workgroups. We -- we had some questions originally about some of the database data and -- and some of the databases that are used in this program, had some questions about the data that populated the data. I think someone earlier said garbage in, garbage out. We certainly were -- were -- you know, had concerns with that regard. We wanted to check the integrity of that data.

As -- as we evolved in this, we realized that at Rocky Flats there's less extensive use of coworker models and more extensive use of individual radiation files. So then we said well, you know, it -- it certainly seems, based on some presentations, that most workers had some radiation fi-- some radiation records, internal and external, but were they complete records. So we wanted to see -- you know, when

-- when you say a worker has radiation records, does that mean one record out of 20 years or does that mean, you know, pretty complete for all their years of employment. So we did this analysis.

It was 52 case-- cases selected. We did try to stratify that a little bit so that we had some statistical validity to the analysis. We did look at -- at production workers, which would have been the -- the likely higher exposures, and we did another set -- subset that was a randomly-selected set. I won't get too far into the details of this, but a -- again, the -- and -- and we looked at -- at -- I think we also looked at annual gaps. We didn't necessarily look at every badge cycle, so you know, it wasn't a perfect analysis, but we wanted to get a sense of whether these individual radiation files were complete.

And a -- a couple sub-items came out of this review. We -- we did note some -- or SC&A's report noted some gaps in the early period, especially in the early years, for -- related to some of the workers. And we also had this sort of separate issue that we were tracking

independently, but it certainly fell into this same range of data completeness, and that was with regard to the '69-'70 -- we did find, and NIOSH agreed with this, that there were cases where there were zeroes in the database, and the individual actually had not been -- or their dosimeter had not been measured. And -- and we actually tracked back memos that explain why this -- when this policy was sort of put into place and there was some rationale for it based on the -- the risk of exposure. Nonetheless, here we are -- are. We had people that were not measured and they had zeroes ente-- entered into the database. So that was troubling.

NIOSH did agree, through this workgroup process, that for '69 and '70 all those zeroes would be removed out of the database. And this -- this really only affects the -- these coworker models that we do. All these coworker models are year by year. So if we remove all those zeroes, at least we're -- we're biasing the average results higher, so any time we have to use that coworker model we're going to be a little more claimant favorable anyway. So that

was the idea, is we can't trust these zeroes. NIOSH agreed, let's just get rid of them.

We did ask -- and I think Jennifer sort of alluded to this, we did look at the question -- and I know I specifically asked this question -- how do we know when this policy stopped or when it started. You know, we had this memo we were kind of hanging our hat on, or NIOSH was hanging their hat on, but we -- we were questioning on the workgroup, you know, when did this stop or start. We had SC&A look into this through this data completeness analysis, and we couldn't find any other year where we -- we found this practice. So we looked at -- we had hard copy records comparing against database. We didn't -- we just did not find this to be pervasive in any other year, so that correction was acceptable at the workgroup level.

Two other sub-groups came out of that. Building 81 -- some of the gaps we found in the early records from -- I -- I -- I'm -- I think it was the fi-- mainly in the '50s, I don't think it extended into the '60s, involved some individuals that worked in Building 81 or -- or

some -- some of the uranium buildings, and they did not have any monitoring rec-- any external monitoring records. And at this point we -- we've had a presentation for -- sa-- and NIOSH -- NIOSH agrees to this point. They -- they do say, however, that the -- they've looked at their coworker model that they have and -- and given what they know about the processes, they've made a strong argument to the workgroup that the -- the -- they would apply the 95th percentile for all those years. Probably from '52 up to '60 they'd apply the 95th percentile. In other words, some of the highest doses -- external doses found on site would be applied to those individuals, and they made a -- a compelling case to the workgroup that that would be a bounding approach for that -- for those uranium workers in -- in -- I think it's just Building 81. I might -- there might be related buildings there.

Now that -- I -- I should also point out that -- that we -- we -- we had compelling evidence. We didn't necessarily see a -- a -- I don't think that, at that stage of the game, we had a -- a sort of demonstration case on the table

for that.
Okay, I think -- oh, one more thing on data completeness. Another issue related to sort of the Building 81 issue was -- Building 44 came up in the discussions and we had a similar question as to whether they had data that could bound penetrating and non-penetrating doses for Building 44. And actually through the workgroup process, they identi-- they -- they brought out raw film badge records that supported their -- their case that they could in fact bound those individuals. They -- they -- that -- that particular building had some fairly significant skin doses in -- especially in those early years, but they did -- through this process we -- they made available the -- the hard-copy records of film badge data for those workers and, you know, it -- it was compelling to the workgroup that they could bound all doses for those workers in that building.
Okay. The neutron data for 1952 through 1970, this is the NDRP -- Neutron Data -- Neutron Dose Reconstruction Project doses. I -- I know it's come up earlier. You -- you can note by

the timing of that bottom report, SC&A submitted a supplemental -- April 30th, so I -- I don't even know if this is posted on the web site at this point, but it certainly -- this has been the last sort of sprint to Denver for us. We've had, you know, two workgroups and probably four technical phone calls in the last couple of weeks working through this issue, and -- and it -- it -- we had this on our -- on our matrix early on. It's just that as we -- some of the issues didn't sort of come to the surface until later in -- in the -- in the process, and we do have some issues and specifically the lack of records in the early period requires some back-extrapolation for one time period. And then throughout that whole time period there's a reliance on -- in the NDRP what they call notional dose, which is basically an -- an estimated dose. It's not a -- an individual's film badge measurement. It's -- it's a -- it's a -- an estimate based on a neutron-to-photon ratio, so a lot of these people had badges with gamma measurements, but they didn't have a neutron badge. So this NDRP project tried -- attempted to calculate

neutron-to-photon ratios that could be applied, and they calculated these notional doses and these were added into the individuals' dose records. But certainly they're not -- they're not original film measurements. They're -- they're -- they're estimates. And -- and I -- we -- we'll go more into the neutron thing at the end of -- get through the rest of these and then we have -- I have a little more to say on the neutron question, so...

The data reliability question, one -- one slide does not do this service for what we went through for looking at data reliability, or for what the petitioners provided in terms of affidavits and testimony, even as of last night and -- and this morning. Your petition that was put before us provides a -- a wealth of -- of information that we -- we did, in the workgroup level, attempt -- and I think we captured all of them -- attempted to go through the petition and include those all in our matrix and cover all those issues. Many of those fall into the broad category of data reliability, and that -- so when you see the matrix, there's items -- I think 12 through 27

or so -- a lot of those are the specific issues brought out in the petition regarding data reliability. And -- and we -- in -- in looking at this, we looked at several different components, but we -- we -- we did want to look at -- we had database data, and you know, my -- my inkling with -- as -- as a member of this Board for the entire time, as most of my colleagues know by now, is -- you know, I tend to -- if you have an electronic database, that's fine, but show me the raw data and I want to validate that electronic data to make sure that everything's -- everything's kosher within that database, and that was part of the effort.

And then additionally we looked at the raw records -- and these would be logbooks, urinalysis logs, a number of different things that we looked at -- and we compared them to individuals' radiation files to see -- you know, okay, did this information get into the individuals' files correctly. We also looked at -- at safety logs, as another just check. So we looked at a number of different kind of logbooks to check this data reliability

analysis.
Generally speaking, what -- I -- I guess what we -- we -- the bottom line on this is that we didn't really see any systemic problems with data reliability. But we did see some discrepancies, and that doesn't -- that doesn't mean that, you know, some of the allegations that are made are not correct. We -- we -- SC&A's report does note some discrepancies when -- when looking at some of the issues raised by the petitioner. But in general, in looking it as a -- an overall question of do we see this as a broad issue for the entire class and does it impact, you know, the ability to be able to reconstruct doses for all members of the class, we didn't see a systemic problem, so...
I think I'm ready for the next one.
The -- other radionuclides, we -- we also spent a -- a -- quite a bit of time on this. At -- at the end we got down to -- some of the significant ones we discussed were americium operations. We also discussed neptunium, several other nuclides, and -- and we basically found that -- that they -- they did have sufficient either individual records or -- or

other information that they could bound doses for those nuclides.

We did come down to -- to thorium as a problem or -- or a little more of a problem. We had to -- we took a little longer in assessing this problem. The -- basically the -- the final result on the thorium was that -- NIOSH provided an approach using a certain method, a NUREG-1400 method, and SC&A concluded that that basically was not an appropriate approach and it was not bounding. However, what -- what NIOSH has given us in addition to that was they have other -- other process-specific information that gives us a -- a -- strong evidence to the workgroup that in fact that they can bound the doses on -- on these cases, so -- now this -- this also is one of those that we haven't seen a demonstration of this other data being used, so we haven't seen this proof of principle necessarily. But there's a strong impression at the workgroup level that they do have process-specific data that would be applicable to this situation and could bound doses for these -- these thorium workers.

Internal dose -- and this is one of the -- the

coworker models. I -- I think the -- one -- one important thing to preface th-- with this slide is that it -- it appears, at least on NIOSH's review of the current claimants -- now that doesn't necessarily mean that population might not -- we -- we certainly understand that population could change, and will change. But based on the current claim files they have, there's a very limited number of individuals that will be required to use the coworker model for internal dose assessment. And our data completeness review sort of supported that -- or it did support that. You know, individuals, for the most part, had urinalysis records. They might not have had them for every cycle for every year, but -- but there were urinalysis records there that we felt were sufficient to be able to reconstruct internal doses.

Now if you get to the coworker question, where -- where we -- and I think Brant alluded to this earlier in his presentation for NIOSH, the coworker model is based on HIS-20, this database data -- actually a -- a pedigree of that original HIS-20 database. We -- in -- in

our analysis we did find some discrepancies between the raw data and this electronic database, and -- and we did note that there were -- there were some discrepancies. NIOSH concedes that there's some discrepancies in there. We did, however, find that -- that all upper-bound values that we could check seemed to be in the database, and therefore NIOSH is saying we -- we acknowledge limitations in the database, in the data itself, and therefore we will rely only on a 95th percentile, or the upper bound of this data, to use for coworker dose assessment. And you know, I think that is a reasonable approach, especially considering the fact that most -- most individuals have their own individual bioassay records, or -- or some rec-- you know, enough records to do dose reconstruction.

Oh, okay, this goes back -- this goes back a few workgroups for -- the -- the lung count -- the question of the adequacy of the lung counting data came up, and I believe -- I want to make sure I get this right, but I believe early on NIOSH basically conceded that there were problems with the lung counting data in

the database, and that -- but however, they point out that they're not going to use any of that data for dose reconstruction for the cases. They're going to rely on urinalysis data. The only way they might use the lung counting data is to -- to -- along with the urinalysis data, to check dose determinations that way, but they will not just solely rely on lung counting data. So they acknowledge that there's some problems with that data, but their method doesn't rely on that data. So this goes back to the TIB-38, which is the model that uses the urinalysis data along with that -- TIB-49 references that super S model that we talked about earlier on, so we -- we felt this was reasonable.

And the decontamination/decommissioning period, specific questions on this period came up. We actually -- and this is another situation where a TIB was actually developed during the time the workgroup was meeting, so -- but this was sort of a TIB -- a Technical Information Bulle- - the bulletin that extended the coworker model out to the D&D period and -- similar to TIB-38 and a similar approach would be used regarding

the 95th percentile. And I think given those two factors, we -- we still believe it -- it is a bounding approach, al-- although I -- I agree, it was developed, you know, kind of during our workgroup process, so...

Are there any more? Okay.

Okay, and -- and this is the external and internal -- or I mean ext-- external gamma and external beta, and -- and the conclusion on this really was that the external gamma models and external beta models -- coworker models seem adequate for reconstructing doses. Some of these models also have a neutron com-- these models also talk about neutrons. We've separated that issue out 'cause we -- we do have some remaining concerns on the neutron monitoring, so the coworker models seem applic-- or seem sufficient with regard to gamma and beta exposures. We have the separate remaining questions regarding the neutron NDRP data, and that would also revert to this coworker model because it is populated with NDRP data.

And that's it -- and then I -- I think the -- the -- the final -- I think some of the conclusions that we have here is -- are

primarily focused on the neutron NDRP -- the adequacy of the neutron NDRP data and we -- we've kind of -- this is -- this is a complica-- this is a complicated issue to discuss. We -- we've spent, like I said, these last several weeks digging hard into this issue. And at this point I think it's best to sort of present it the way the workgroup sees it over different time periods, 'cause I think there were definitely different factors to consider in different time periods.

1952 through '58, and I'm sorry I don't have these on slides, these are -- well, you saw the report came out on the 30th, so I don't have these on slides yet. But 1952 through '58, one thing -- it appears to the workgroup in reviewing this that many of the highest exposed people to neutrons for that time period were not measured for neutron exposure. They -- they were assigned notional dose, as we talked about before, but they weren't measured. A couple of different -- and these are just factors that we considered in this time period. The proposed method for '52 through '58, or the NDRP method, is to -- basically they rely on a

-- a ratio developed for 1959, and they apply it backwards into the earlier years. And we have some concerns about that, for a few reasons. One is we -- we think there could be a large -- they -- they use building-specific ratios, and we've seen that there could be a large variation of -- of neutron/photon ratios at the worker level or -- or, you know, sub-building level, sort of, so you've got a wide variation and you're using one central estimate of a neutron/photon ratio to do your estimates, and we think that's problematic.

Another very important piece for this -- this sort of back-extrapolation period is that there were some significant process changes during that time period and -- you know, this included mo-- they -- they -- they moved certain operations, including -- assembly went from Building 91 to Building 76, I believe, and there was some other significant changes. I don't want to detail them here in this presentation, but we have them and if -- if this comes down to a motion, they'll be detailed in that way. But there were several process changes and we couldn't be sure that

all these process changes were going to either have no effect on the neutron/photon ratio in 19-- you know, when comparing to 1959 or if they would bias it one way or another, we just weren't sure. There were many changes that made it uncertain and we couldn't determine whether -- which direction it could go.

And finally, the NDRP report itself acknowledges that they -- they had no independent validation of the NP ratio during tho-- those years of interest. In other words, they had no measurement data from '52 through '58, field surveys or things like that, that would support that those building NP ratios from '59 were in fact in the right ball park, so that was one time period where they had the least amount of data. I want to stress that.

The next time period -- we've got four little time periods here -- '59 through '64. It appears still that many of the highest exposed workers were not measured for -- for neutron exposures. A lot of them had -- a lot of the individuals seemed to have notional doses assigned, so that problem remains.

Again, the proposed -- we have the same

question of the NP ratio, the proposed NP ratio, relies on this central estimate by building. And if we look at -- at that, at the worker level there seems to be a wider variance of those NP ratios, so we're not certain that -- we can't be certain that that's approp-- appropriate for bounding the doses. And I -- I think those are the -- the main two issues there.

The -- the strength during that time period is that they have a lot more measurement data, and they -- I -- I believe they do have some independent measurements during that time period to sort of support the -- the NP ratios of that time.

Going on to '65 through '68, at this point -- '65 we do see a transition in the data where -- and -- and this is supported by some of the expert -- that we heard from -- that -- that worked on -- on the project, but nonetheless, the data sort of -- of supports it, which is that most of the highest exposed now from '65 onward seem to be -- seem to have been measured. There -- there are film badge measurements there for them. In other words,

you don't see this trend of the highest exposed being all notional or estimated dose. It -- it's more of the individual film badge-measured data.

'65 through '68 still has that remaining question of a building-wide neutron/photon ratio, central estimate, being assigned to individual workers. And you know, how do you know if that average is appropriate for every worker, so we still have that remaining question.

And finally, the last sort of sub-group is '69 and '70. This period of time has a high number of original films which were not recovered or -- - or -- I -- I guess just not recovered. In the process of doing this NDRP project, they recovered all these films and reread a lot of them for -- for inclusion to do this better estimate of dose. And for '69 and '70, a lot of the original films could not or were not recovered for this project. So you have a lot more sort of missing data and a lot more notional dose in that time period. And then -- and then I gue-- so that's one distinction for that last -- those last two years. Again,

still the remaining issue of the -- one central estimate for the neutron/photon ratio versus a -- a -- you know, a building-wide central estimate used.

So that's the four periods. In this -- I did want to say, from '59 on through '70, so -- so we have four time peri-- I know this gets a little confusing, but looking from '59 forward, the -- the one issue that -- that was consistent through all those, that kept coming up, was this use of the neutron/photo ratio -- a building-specific central estimate of the neutron/photon ratio to estimate these -- these neutron doses. And NIOSH has indicated, and -- and I -- I'd actually like NIOSH, if Jim Neton or Brant Ulsh is available -- has indicated that they have -- within the NDRP data itself, that they have data that they could possibly use something other than a central estimate for the neutron/photon ratio but rather more like a 95th percentile approach, but I'll let Jim speak to that.

DR. NETON: Thank you, Mark. Jim Neton, Associate Director for Science in OCAS. It's correct, we -- we have a large amount of

information between '59 and through '70. I believe there's a total of 87,000 neutron measurements that were reread for the NDRP, and most of those are in this period. Admittedly, in '59 there are fewer, and they become more prominent as you go forward, but we believe there's sufficient data there to estimate the 95th percentile of the distribution by year. Currently the model -- the -- the variance of the model has already been calculated and used in our dose reconstructions at the 95th percentile. For example, overestimating dose reconstructions do use the 95th percentile of the building-specific ratios. And for best estimates, we apply -- Mark correctly identified -- a central estimate and an associated uncertainty distribution about it. But we believe there are sufficient data available to allow us to calculate the 95th percentile, either through the variance of the model or just the straight 95th percentile of the distribution of the NP ratios observed, to bound the neutron doses for workers in -- in the '59-forward time period.

I don't know if there's any questions on that,

but --

MR. GRIFFON: Thank you. And -- and you know, I guess -- I -- I think that's -- that's kind of where -- I guess that completes my report out. I would ask other workgroup members if they had anything to add or -- or comment on at this point.

DR. ZIEMER: This -- this is for workgroup members. Workgroup members?

(No responses)

Okay, Board members, do you have questions for Mark? Jim Melius.

DR. MELIUS: Yeah, I have a number of questions, so --

UNIDENTIFIED: (Unintelligible)

DR. MELIUS: Yeah, I know, I got to -- figure out all these cords here.

That's my last question. Fir-- first of all, I'm a little confused on the April 30th report from SC&A as to whether that was made available to the petitioners and to the general public in any way?

UNIDENTIFIED: Can someone (unintelligible) --

DR. ZIEMER: My under--

DR. MELIUS: (Unintelligible) available here at

this meeting?

DR. ZIEMER: My understanding is that -- I think -- is Joe Fitzgerald here? Joe, did we get copies of that to the petitioners? If -- if we did, it's been within the last hour, I think. It's -- it's not been -- if you want to talk about timely.

MR. FITZGERALD: Yeah, we -- we made one hard copy which we gave to Terrie -- Ms. Terrie Barrie.

DR. ZIEMER: And the electronic copies were distributed to the Board, probably after you left home or --

MR. FITZGERALD: (Unintelligible)

DR. ZIEMER: -- I -- I don't believe I got a copy of it yet.

MR. FITZGERALD: My understanding was the electronic copy was cleared through General Counsel at NIOSH probably Friday sometime. From there, I'm -- I'm not sure.

DR. ZIEMER: There were some Privacy Act issues with that report that required a -- I guess a legal review, but in any event, I don't -- my guess is Board members have not seen it.

MR. GRIFFON: Our -- our intention in -- in the

workgroup process, for those who followed it, was to -- to get a report to all petitioners and Congressional staffers at least a month in advance of this meeting, and I think we -- I think the main report was put out -- I hope they got SC&A's main report about early April -- no? I'm seeing --

UNIDENTIFIED: (Off microphone) (Unintelligible)

DR. ZIEMER: Yeah, there -- there were two -- there was I think two volumes -- or two parts to that report. Those were distributed a couple of weeks ago, I believe.

MR. GRIFFON: But this supplemental certainly is -- was -- I mean just completed, you know, within the last, you know, four or five days, so -- but we need to at least get it now to everyone.

DR. MELIUS: Yeah --

MR. GRIFFON: It's been --

DR. MELIUS: -- I -- I mean I would just like to point out, I -- I --

MR. GRIFFON: Yeah.

DR. MELIUS: -- I hardly think that's a fair process for the people that are -- the

petitioners nor people trying to address this issue, and I think we need to -- also as -- the Board and working with NIOSH, come up with a better process for communicating these -- and distributing these reports. I understand the -- the need for reviewing and so forth, but this process seems to keep breaking down and -- in terms of that. I mean, for example, I have the -- the pre-- pre-privacy-cleared copy of it, the April 27th draft, which I -- and I have no idea -- I don't think there are major changes, but there are only a few changes in it and I really don't think it's fair for the petitioners or for the people interested in the site to come here and not have this information made available to them in a -- in any fashion here, other than I guess within the last hour. I -- I have some questions. I'd like to know more, and I don't know if -- who -- whether Mark, you're the person answering this or -- or Joe Fitzgerald or who -- the basis for the -- the sampling of the -- the 52 cases that were looked at where we're looking in terms of data integrity issues and -- and so forth. I think there was a comment from I believe one of the

petitioners that commented on --

MR. GRIFFON: Yeah.

DR. MELIUS: -- how that hardly seems to be an adequate sample, and I'm trying to understand the sampling better. I --

MR. GRIFFON: Yeah, maybe Joe -- Joe or -- or Arjun, if you can speak to that, I -- I would appreciate it.

Go-- going -- I -- I will say that going through 52 full claims files was, you know, a rigorous amount of work, so --

DR. ZIEMER: Dr. Makhijani --

MR. GRIFFON: -- we did want a good set of records, but --

DR. ZIEMER: Dr. Makhijani perhaps can answer that.

MR. GRIFFON: Yeah.

DR. MAKHIJANI: Yeah, I'm Arjun Makhijani from SC&A. As was mentioned, the 52 cases consisted of two groups. There were 32 randomly-selected and that was done with the help of our statistician, Harry Chmlynski, and we sampled a sufficient number to get an idea of the size of the gaps. It wasn't at a level where you could tell what was going on for individual workers,

but it was to explore whether there were significant gaps overall in the data record for the groups of workers. They were split up into two periods, '52 to '63, inclusive, and '64 to '92. And that was done because in the earlier period there were a large number of workers who were not badged because they were thought to be at risk of low exposure or -- for instance, Building 881 was not badged in the '50s. And then in '64 the policy had been -- said that all workers were badged, but then it turned out that it wasn't quite all workers, but it was in the 90-plus percents of workers who were badged. So we wanted to examine the extent of the gaps in monitoring in the two different periods, and we did that.

In the second piece of it, we identified a number of gaps in -- in both periods in internal and external monitoring records and so the second part of the exercise was to look at 20 workers who had the hi-- among the highest cumulative exposures. This was workers in the 1990s whose records were looked at by Rocky Flats retrospectively, and they were grouped into categories, one to four, and three and

four were the highest exposed cumulatively, and we selected ten from each group to see if there were gaps in the records of workers who were acknowledged by Rocky Flats to be the most exposed cumulatively.

And there -- in the internal dose records we did not find big gaps -- that is, annual gaps -- but we did find some gaps in the external dose records. And so that's why subsequently -- particularly in the '50s. And so that's why subsequently a lot of the effort of looking into the adequacy of data focused on external dose in the 1950s.

Sorry for the long reply.

MR. GRIFFON: Thank you -- that's good, thanks.

DR. ZIEMER: Jim, a follow-up and --

DR. MELIUS: Yeah, just to fol-- I mean I would just point out that -- I mean while I understand the amount of effort involved in this, I don't want to, you know, downplay that, but at the same time, for -- a small sample like this would not necessarily identify sub-groups that may be -- where there may be issues with. It -- it may be adequate statistically if the -- we're assuming that whatever these

gaps are, problems are, are there systematically, but -- and cover everybody. But certainly for sub-groups of workers in certain buildings or certain parts, it would not address that and would -- would not identify that, and I -- I think that still would be an ongoing concern.

I also have related to that the issue of --

DR. MAKHIJANI: (Off microphone) (Unintelligible)

DR. ZIEMER: Yeah, Arjun has an additional comment on that, and then we'll move on.

DR. MAKHIJANI: Yeah, I think Dr. Melius is right about that, but the statistical sampling was a very -- it was a very broad-mesh sampling. It was not designed to reveal say gaps in monitoring for individual radionuclides, and it was not designed to yield information that was statistically valid on gaps for individual job types and so on. It was are there -- you know, what's the size of the group of workers in these two periods that have gaps, and so it was a very broad-screen take. So you're -- you're right about that.

DR. ZIEMER: Thank you. Proceed.

DR. MELIUS: Thank you. And I think related to that in sort of a -- as a separate effort, there was an issue of these data discrepancies and so forth which were I think individual reports of potential problems, and so forth -- that -- and on that my understanding is that, again, there was no systematic problem found with that in -- in the investigation of that, but there were a number of individual reported discrepancies that were, you know, verified by -- by the process. And my question there is then -- then -- then what happens with those? How are those individual discrepancies identified, because one of the problems with this overall process is it -- to me, that -- I would think that would end up being dependent on the claimant being aware of the potential discrepancy and pointing it out. And given the problems in getting access to records and giving the problems in -- you know, many times the original worker has died and so it's a family member with, you know, very little information trying to file the claim. So I guess my question is more for the -- the workgroup and maybe for NIOSH, how do we -- how

are these then identified or are we just sort of, you know, getting rid of them, not -- pretending they don't exist?

DR. ZIEMER: And perhaps Dr. Ulsh from NIOSH can address that.

DR. ULSH: Yes, Dr. Melius. Actually the integrity of the individual radiation files were approached by the working group, NIOSH and SC&A via a number of different approaches, one of which was to look at -- as Mark has mentioned, at the database itself which was used for -- in situations of generating coworker data. But in terms of this exercise, looking at the 52 -- the 52 hard copy radiation files, the objective of that exercise was to determine whether or not there were -- first of all, whether there were periods where monitoring data didn't exist; and secondly, if so, were there reasonable explanations for that. So we did not find in that particular piece of the investigation -- I'm speaking only for NIOSH -- we didn't find any unexplainable gaps in either internal or external, with one exception. We looked, as -- as Arjun has mentioned, there were 52 workers, and you

multiply that -- that by the number of years that they worked, and then double it for internal and external. And what we found was that for internal, they were complete. In other words, there were no gaps that -- where you would expect them to have been monitored and the records were not present. And secondly, in the external dosimetry, we found out of the 52 workers with several years of employment each, we found only one case where a worker was missing -- didn't have dosimetry data for one year, and that was clearly noted in his radiation file. So as I think Mark said, and you can correct me if I'm wrong, Mark, we didn't find anything that compromised our -- our ability to -- at least systema-- systemically, to accurately reconstruct doses.

DR. ZIEMER: No, I -- as I understand the question you asked, though, in an individual case if the -- if the individual did not self-identify that they thought records were missing, how would we know it. Is that --

DR. MELIUS: Yeah --

DR. ZIEMER: -- the nature of the question?

DR. MELIUS: -- I mean the issue is when

there's the discrepancy reported, and part of the problem with -- is that the -- since these are individual data, the SC&A report on this is -- does not identify the examples very well and so it's a little hard -- I'm just trying to get an asses-- assessment of -- of this issue and -- that. I think Arjun already addressed the issue with the -- the sampling of the 52.

MR. GRIFFON: Right.

DR. ULSH: You might perhaps be thinking of -- and I -- again, I don't have SC&A's report in front of me. There was another piece of this data -- data integrity investigation and that involved the -- we looked at every single concern expressed in the petition, every single concern that was expressed by the public at the last work-- Advisory Board meeting in April --

DR. MELIUS: Uh-huh.

DR. ULSH: -- and the concerns expressed by members of the public throughout the working group process. And NIOSH captured all of those and we went through and evaluated each one of those to determine whether or not they presented a systematic problem for us. I think it's fair to say that NIOSH and SC&A, on a few

individual instances, may not be in agreement whether or not there is a problem in that particular case. But we certainly did not find anything systematic that would prevent us from doing dose reconstruction. Does that --

MR. GRIFFON: Yeah, that -- and that's what we tried to look at and -- and -- and I know what you're saying, Jim. If -- you know, if we had some individuals that were -- were -- you know, not everyone's going to dig into the data the way some of these individuals did, and -- and -- for example, there was a particular case, the question of zeroing the dose, and the person felt that they -- they -- you know, they have affidavits saying worked a high rad job for a couple quarters and dosimetry's basically zeroes or whatever, and so we -- we had several of those. And some of them -- which I agree that we didn't reach agreement on between SC&A and NIOSH. We did, though, try to look and say okay, by looking at the database and other records and other reviews that we did, do we see any sort of pattern that would indicate that this was going on, and -- and I -- you know, we -- we didn't find any systemic

problems like that.
Now I'm not sure that we had a perfect, you know, method to be able to detect those problems, but we -- we did try several different approaches to try to find those kinds of problems, 'cause they were raised in several -- either in open testimony or -- or in -- as part of the petition, so we were aware of those problems and we did look into those. But it -- it remai-- you know, the question remains -- I guess the other question would be, and I think it came up in earlier public comments, is how -- how do you -- would you basically acknowledge that in an individual DR, and you might treat that differently than just using LOD over two for assi-- for fixing that zero. But in the case where a person doesn't have the information to support as much, then it's probably treated as -- you know, as -- as zero, so -- you know.

DR. ULSH: It depends on the --

MR. GRIFFON: Yeah.

DR. ULSH: It's hard to speak generally about --

MR. GRIFFON: Yeah, right.

DR. ULSH: -- about this. It would depend on the specifics of the individual case.

MR. GRIFFON: Yeah.

DR. MELIUS: Brant, before you sit down, I have another question I think maybe you can answer. My understanding then would that be as a result of this review, NIOSH has made a number of changes in how they're handling certain aspects of dose reconstruction? And so I presume that in effect the site profile is being re-- redone or up-- updated. My question is, for -- for the record is will you then follow the usual policy and go back and recalculate dose reconstructions for all the people that have already had those done who would be affected by these changes?

DR. ULSH: That process is already underway. Some of the issues that have been captured we have completed Program Evaluation Reports. Some of them we're going to have to wait for the dust to settle here today to go back and, you know, put those changes into place. But yes, Dr. Melius, the answer to your question is yes, we certainly will in cases where the changes -- you know, in response to public

comment and -- and the investigation that the working group has conducted, we certainly will go back and look at cases that have been completed in the past that have a probability of causation of less than 50 percent and evaluate the impact of any of those changes on those case.

DR. MELIUS: Okay. Thank you. I have one more set of questions. These are for Mark and -- do that. If I understand you correctly, the -- as a result of your review, there are I believe -- well, three areas that -- where NIOSH has not demonstrated the ability to do adequate individual dose reconstructions? One is the thorium issue you mentioned in one slide? Thorium and some related (unintelligible) --

MR. GRIFFON: As far as seeing proof of -- of the -- of the process yet, the thorium question remains in -- in that SC&A did not believe that the approach was appropriate for bounding. But we -- we have seen the other documents and the data that are available that we believe could be used to bound. So they -- they haven't given us a -- a necessarily case example, but it's only because they -- they still bel-- you

know, th-- we had a -- a situation where the -- SC&A and NIOSH were not in agreement on the final comment as sort of a -- a backdrop. They're saying they have this other information --

DR. MELIUS: Uh-huh.

MR. GRIFFON: -- which could be used to bound, and so that's where that stands. We haven't seen the case demonstration of it, no. That's right.

DR. MELIUS: And -- and the -- the second area is the neutron dose, '59 to '70 that I think Jim Neton -- I may have it --

MR. GRIFFON: Yeah, I --

DR. MELIUS: -- time period wrong.

MR. GRIFFON: -- I should actually clarify the -- the neutrons -- time frame I just discussed. I -- I -- I think, as a workgroup, for the '52 through '58 time period, I believe we have, you know, come to consensus on that, that that time period just -- the concerns I've stated exist and I -- and cause problems in terms of being able to -- to reconstruct doses.

DR. MELIUS: Uh-huh.

MR. GRIFFON: For '59 beyond, those other time

periods, I still have those concerns, but we don't have a consensus in the workgroup --

DR. MELIUS: Well --

MR. GRIFFON: -- on all those items, so I -- I just wanted to say that for -- for the record.

DR. MELIUS: Okay, and I understand, I'm just trying to -- the sort of the factual --

MR. GRIFFON: Yeah.

DR. MELIUS: -- question is is has -- I think if you remember right, our, you know, SEC review process was to take into account -- it's a demonstration that they can actually do the dose reconstruction in the way they say they can, and -- and my understanding is that, both for the thorium and the neutron '59-'70, they have not yet. There may be data available for doing so, but the-- there's a question --

MR. GRIFFON: Right, the '59-'70, right now the approach stands as -- as they've -- I mean they -- they've given us a case example, but it uses their current approach.

DR. MELIUS: Okay.

MR. GRIFFON: What Jim Neton said today on the record is -- is, again, a -- another option that they may use, but they haven't demonstra--

we haven't seen a demonstration of that, no.

DR. MELIUS: Okay.

MR. GRIFFON: That's correct. And -- and I think lastly, just -- I -- I did point this out in my presentation, but it might have got lost a little bit, but the pre-1960 Building 81 uranium workers for external dose -- again, we -- we -- we had ample evidence put in front of the workgroup that they could bound these doses, but we haven't seen a -- a case example for that, so that's another one, just for completeness.

DR. MELIUS: Okay. Thanks, Mark.

DR. ZIEMER: Mark, you -- you've been largely silent on the period beyond 1970. Does the workgroup have any conclusions or position on the ability to reconstruct doses for the period beyond 1970? Or did you not address that?

MR. GRIFFON: I -- no, we -- we certainly addressed it. We -- I mean part of -- what -- what Arjun said is cer-- is -- is accurate, that we -- in this data completeness review we were looking at all time periods, and the reason that we ended up targeting the '50s was -- was that we found some of these data gaps

and -- and issues. So I agree, that wasn't a perfect -- you know, necessarily a robust statistical sample, but we did do sort of -- when we found areas that looked like potential issues, we did sort of drill down to more probative investigations. Those went into the areas such as Building 81 and -- and such as the early '50s for neutrons and other things. Post-1970 -- well, the NDRP, they -- they went from film to TLD at that point. The -- but -- but we didn't find any indication for internal or external dose that there'd be a problem for reconstructing.

DR. ZIEMER: Thank you. The reason I asked that question, certainly in a number of other sites the Board has made recommendations where certain years are covered and other years are not covered by SEC status, and it wasn't clear to me whether the workgroup was comfortable -- maybe that's not the word to use, but was suggesting that the question of reconstructing dose after 1970 was not, in their minds, a -- a problem as compared to those earlier years. That's sort of rhetorical at this point --

MR. GRIFFON: Yeah.

DR. ZIEMER: -- but I was trying to ascertain that.

Okay, other -- other questions, Board members? Let -- let me suggest a couple of things here. We have some options before us, one -- one of which -- well, all of them involve some sort of action, I want to push the Board to take some sort of action. Your -- your options are, number one, to accept or agree with the NIOSH evaluation. Number two, to disagree with the NIOSH evaluation -- that is, to basically state that doses can-- cannot be reconstructed with sufficient accuracy and therefore to recommend SEC.

You would have an option, although I would certainly be uncomfortable with it, to extend this process further to tie up loose ends. There clearly are loose ends, but those loose ends seem to continue to occur month after month. We tie up one set of loose ends and others appear. It reminds one a little bit of "Fantasia" and the brooms that multiply exponentially.

Or you would have an option of subdividing this, I -- I guess, as has been done in other

cases, and saying yes, part of this is straightforward. We're -- we -- we feel an SEC is clear and perhaps part of it not.

So those are four options. You may want to cogitate on this for a bit. I -- I know some of you want to get refueled with food. The lunch hour is upon us. We hadn't wanted -- I -- I had hoped we could come to closure to this, but we've heard -- we've heard a lot of different -- we've heard testimony from the petitioners, we've heard testimony from the Congressional staff, we've heard testimony from NIOSH, from our working group, we've had a lot of input. You may want to reflect on this for a bit and then come back and be prepared to make a motion, but I'd like some comments on whether you would like to do that or proceed at this point with some action. Wanda Munn.

MS. MUNN: I had hoped that your fourth option would be lunch. Clearly this is not going to be a closure that's reached in a matter of five or ten minutes. This will be a discussion that will be of significant time constraint, I think. Pushing past the lunch hour to undertake that probably is not wise for us.

DR. ZIEMER: Other comments?

(No responses)

What is your pleasure, Board members? You want -- you want to continue now or -- our lunch break was scheduled for 11:45 so we're into that hour. You're too numb to react? Is that --

MR. PRESLEY: Let's go eat lunch.

DR. ZIEMER: Okay. Well, that gives the Chair the prerogative then, if no one has any particular opinions, we'll go with mine. That's the way it works, you know. Let us take a one-hour lunch break and come back. We will continue deliberations on the Rocky Flats petition, and we will adjust the other items on the agenda accordingly. So those will slide back in-- into place. So thank you all. We will reconvene as quickly as we can after 1:00 o'clock, probably about 1:15. Thank you very much.

(Whereupon, a recess was taken from 12:15 p.m. to 1:35 p.m.)

DR. ZIEMER: If you would take your seats, we'll try to come to order, please.

(Pause)

Thank you very much. I'll declare the meeting to be back in order. Before we continue our deliberations, I -- I have received a hand-carried letter from Governor Bill Ritter. I'd like to read this rec-- letter into the record. The record -- the letter says (reading) In care of: Paul Ziemer, Chairman; Lewis Wade, Executive Secretary; and members of the Advisory Board on Radiation and Worker Health, Regarding Rocky Flats United Steel Workers of America, Local 8031, Special Exposure Cohort petition. Dear Drs. Ziemer and Wade and members of the Advisory Board: I am writing today to join in and endorse the letter you received yesterday from the entire Colorado Congressional delegation seeking justice for the Special Exposure Cohort petition of the former Rocky Flats workers. That letter compellingly documents the reasons why this petition should be granted. Simple fairness dictates that give these workers the benefit of the doubt in light of their exposure to radioactive materials, beryllium and silica. In an ideal world, the Department of Energy would have maintained comprehensive and useful

dose records. In the absence of such records, and given adequate time, perhaps NIOSH could adequately reconstruct dose and exposure records and calculate likely health consequences. But as you know, this is far from an ideal world. The dose monitoring records and other data accumulated at Rocky Flats were, in too many circumstances, less than adequate to the task at hand. NIOSH's efforts to reconstruct doses and exposures have encountered methodological and data challenges and have dragged out far too long.

Mr. Chairman, working together with the State of Colorado and the federal government -- working together, the State of Colorado and the federal government made dramatic and even unprecedented progress in cleaning up the Rocky Flats site and converting much of that site to a wildlife refuge. Surrounding property owners are moving forward in their efforts to be compensated for the damage done to their properties by releases of radioactive materials. One enormous task remains unfinished, and it is the task with -- with by far the greatest human element. It is time,

far past time, that fair compensation is provided to the people who worked and toiled at Rocky Flats on behalf of a great national purpose, and who may have been stricken as a result of their work.

I urge you in the strongest possible terms to act promptly on the Rocky Flats special exposure petition.

Respectfully, Bill Ritter, Jr., Governor.

Now Board members, you've had time to cogitate over your lunch, brief as it may have been, and I'd like to urge that we take action on the proposal that is before us. The Chair recognizes Jim Melius.

DR. MELIUS: I'd like to offer a --

DR. ZIEMER: Get -- get closer to the mike, Jim.

DR. MELIUS: Yeah, I will. Can you hear me now?

DR. ZIEMER: Yes.

DR. MELIUS: Yeah. I'd like to offer a general motion that would cover two separate steps. The first was I believe that, based on the reports we received and the discussions we had earlier, Mark's presentation, the SCA reports

and so forth, that we should move forward approving a Special Exposure Cohort for the people exposed to neutrons or who should have been monitored for neutrons from 1952 through 1958; that --

Number two, that we need further review on three particular issues that, again, were discussed this morning and which would be requesting that NIOSH come back to us with further information; that we -- also that we work with our contractor, SC&A, to evaluate three separate issues. One is the neutron exposure from 1959 to '70. Second I believe is the exposures in I believe it's Building 81. And then third is this issue of thorium exposures and some related nuclides that -- in -- in some areas of the facility. All those are where there -- involve where there's some monitoring data, but we really haven't had an adequate evaluation of whether that data is sufficient for use for individual dose reconstruction.

I would propose that we -- for the latter three that we try to move that along as quickly as possible. I understand the timeliness issues.

And that, if possible -- and I -- this may be a question for NIOSH to consider -- is that -- try to get that work done and that we, at our next Board meeting, would be I believe scheduled for June 12th, that we have that meeting to -- a person -- in-person meeting rather than a telephone meeting, to consider those three issues.

DR. ZIEMER: You've heard the motion. Is there a second?

MR. CLAWSON: (Off microphone) (Unintelligible)

DR. ZIEMER: There is a second, Brad Clawson. Let me ask for a clarification. The first part of your statement you referred only to individuals exposed to neutrons. I assume that we're talking about all individuals who were monitored or should have been monitored --

DR. MELIUS: Yeah, I should have --

DR. ZIEMER: -- in that period --

DR. MELIUS: Yeah.

DR. ZIEMER: -- not just those exposed --

DR. MELIUS: Right, right --

DR. ZIEMER: -- to neutrons.

DR. MELIUS: -- yeah, yeah, yeah.

DR. ZIEMER: Okay. Let me also add that,

should this motion carry, I'm going -- I will ask that the mover re-- reconstitute the motion to put it in the usual form that would make it useful to send forth to the Secretary, which specifies that -- for example, that the Chairman take certain actions within 30 days and -- and we have some sort of standard, boilerplate language that has to go forward, so we -- I would ask for a formal rewording of that, but this gives at least the intent of what the motion would be.

DR. MELIUS: Correct, and I would propose that we do that -- the second part, should this Board agree on this, that we would do that tomorrow morning and we would work on -- this afternoon and tonight work on a specific letter with the justifications and the format that's required.

DR. ZIEMER: Okay. Now should -- should this motion pass, my understanding is that we would proceed to make the recommendation for the Special Exposure Cohort status for the early group immediately; that the other group time frames -- and actually I think you've only spoken to addressing issues dur-- for the time

frame up to '70, you haven't said anything be-- beyond '70, but that would, by implication, have to be addressed, as well.

DR. MELIUS: Yeah.

DR. ZIEMER: What this would do would be to postpone action for approximately one month on the rest of the time frame until I -- I believe it would be proof of principle on the dose reconstructions for the neutrons, or was it for the thorium?

MR. GRIFFON: Those three items.

DR. ZIEMER: Oh, neutrons, thorium and the other issues, okay.

MR. GRIFFON: And 881.

DR. ZIEMER: And 881 -- is it 881?

MR. GRIFFON: Yeah.

DR. ZIEMER: Okay. Discussion. Dr. Roessler.

DR. ROESSLER: I was so concentrating on the first part, which you now clarified, that I didn't really get all the points in your second part. So my question is, with regard to procedure, are we going to -- before we vote -- see this written so that we can fully understand it? Or are we going to be required -- if we're going to be required to vote right

now, I need to have Jim go over that second part again.

DR. ZIEMER: We'll ask for a rereading of this in a moment. Other comments?

DR. WADE: Well, I -- I would like to just get clarification on the first part of the motion relative to monitored or should have been monitored. Are we talking about neutron dose or what are we talking about?

MR. GRIFFON: Monitored or should have been monitored for neutron exposures, yeah.

DR. MELIUS: Right.

DR. WADE: Okay, for neutron exposures.

MR. GRIFFON: Yeah. Was that not what...

DR. ROESSLER: I'm still not clear on that. Does that mean then the whole population of workers during that time period, or is there some way to determine which workers should have been monitored for neutrons? I think that's the big question on that one.

MR. GRIFFON: Yeah, I -- I guess I was trying to avoid defining by various buildings, but -- you know, that may be possible, but I was trying to avoid -- you know, basically not charging the Board with doing that, but having

that be determined by NIOSH. But I don't know, to the extent we can specify, I guess -- I'm not sure how we want to go on that.

DR. WADE: Well, you know, the Board has adopted its procedures of sort of passing a motion in principle and then reviewing it that night and consulting in fact with the Department of Labor as to how these issues might be adjudicated. So I think that's appropriate to do here. I don't know that this issue's been broached yet with the Department of Labor.

DR. ZIEMER: Okay. Wanda Munn.

MS. MUNN: Unless I'm mistaken, the working group had general consensus with respect to this cohort that exists from 1952 to 1959, although it is not clear that any meaningful worker exposure could have occurred during 1952. That being the case, then there still is confusion, from my perspective, with respect to why we're focusing specifically on neutrons. It would appear to me that since one of our key arguments was there were very few actual records that were available because very few people were monitored for anything during that

early period, why are we specifying neutrons? My other question is, if we are in fact going to delay the vote on our post-'58 cohort, and we're doing so ostensibly to ask for proof of principle from NIOSH, must we not be very clear with respect to our directions to NIOSH as to what we will and will not accept as proof of principle? Must not that be a basic part of our motion here?

MR. GRIFFON: I can respond to that --

DR. ZIEMER: Yeah.

MR. GRIFFON: I -- I can respond to the first part. The -- we're focused on neutrons because we -- we did not find that there was a deficiency with regard to bioassay data for those early time periods, and in fact they do have gamma data -- penetrating measurements. That's sort of how they had -- neutron/photon ratio has to be multiplied by something. It was the gamma results from those early periods, so they did have more monitoring, it's just that they had very little neutron data. That was the -- so -- so it is targeted on neutrons, I think limited to neutrons.

DR. ZIEMER: So as this has been defined, the

special cohort status would be restricted to individuals, perhaps in certain locations, for whom neutron monitoring should have been or was -- or should have been provided, but would not provide special cohort status for others on the site during that period if they were not in the identified areas. Is that the correct understanding?

MS. MUNN: So again, aren't we going to have to be very specific with respect to what those buildings are and what those areas are when we make this kind of designation?

MR. GRIFFON: Well, I -- I guess that's the question I would -- I would say what Lew says is that, you know, if we need to be more specific to allow DOL to adjudicate, then we can do it. I -- I just didn't -- I didn't have a -- a complete listing and I didn't want to miss any buildings, so I said -- the easier way for me to define it right now, just for our discussions, was to say "monitored or should have been monitored". I didn't want to miss any building or anything, so -- but we can -- you know.

DR. ZIEMER: But the practical question will --

MR. GRIFFON: Yeah.
DR. ZIEMER: -- arise in specific cases as to how will DOE --
MR. GRIFFON: Right.
DR. ZIEMER: -- not DOE, DOL identify whether or not a worker was or should have been monitored for neutrons. I suppose that would fall back on the NIOSH report then, would it not? Would they iden--
DR. WADE: I don't want to speak for DOL. Jeff, do you want to run the risk of standing before us and talking about this?
DR. ZIEMER: We'll hear -- hear from DOL, but I can anticipate that that would be a difficult question unless we provided some sort of information on what parts of the site this covered.
MR. KOTSCH: Yeah, I'm not certain. I haven't seen their information if you could put it by building, but then I don't know how you determine that people were in that building if they -- I don't -- is there a lot of bioassay data for that period of time that would put people in buildings?
MR. GRIFFON: They -- they -- they -- well,

they have work history cards -- I mean I'll let Brant respond to that maybe, behind you, but...

DR. ULSH: As I understand the status of your discussions, the part of the NDRP that is under question has to deal with the methods that were used to estimate doses from '52 to '58. What the Neutron Dose Reconstruction Project provides, aside from that -- from the methods of estimating neutrons -- is a very fine cohort in that it included people in the plutonium buildings who were at risk of neutron exposure. So all of the buildings where people at Rocky Flats could have received neutron exposures were considered explicitly in the NDRP. That would be --

MR. GRIFFON: See, that -- that -- I wasn't ready to take -- that next step was -- I wasn't sure that NDRP had included every building that could have had neutron exposures, so I wanted to at first define it more broadly saying -- and then make sure we get the full list of --

DR. ULSH: Okay.

MR. GRIFFON: -- buildings with that potential. And how we define that I think it -- it's either defined by the Board or --

DR. ULSH: Okay.
MR. GRIFFON: -- you know.
DR. ULSH: Would you be looking for action from NIOSH on that to provide a list of those buildings, or -- or --
DR. MELIUS: Well, I -- I think we need to have some discussion, if I can speak to this. One is my understanding from our last discussion with Pete Turcic about this general issue a few Board meetings ago was that it -- it appeared to be better that -- to have this "monitored or should have been monitored" was a more workable approach in most instances, not all instances, but in most instances that seemed to be more workable than -- than a building by building issue, for some of the reasons that have been stated. But I -- I think that we need to sit down and talk about that a little bit and would offer something more specific tomorrow for -- for consideration. I also -- in response to what -- Wanda's comment, second comment about the proof in prin-- of principle and the follow-up. What I would propose is that we would offer up a -- a more fleshed-out motion tomorrow that would be more -- as specific as -

- I won't -- well, more specific about what would be expected back. I -- I -- I think there's -- hard to be, you know, too precise about that, but I -- I think we can make something that's more clearly understandable by everybody involved so that when we come here -- come back on June 12th to discuss it, that it can be -- will be addressed by that time, hopefully.

DR. ZIEMER: Thank you. Other comments? Okay, Phil.

MR. SCHOFIELD: I think we need to leave a little broader than --

UNIDENTIFIED: We can't hear you.

DR. ZIEMER: Use your mike.

MR. SCHOFIELD: I think we need to leave it a little broader than just specifying certain buildings because until we can actually prove people were not in those buildings, rather than having each individual -- a lot of these claimants are doing this for loved ones who have already passed on, and they're not going to be able to say well, we know they were in Building 770 or 881. Rather, we need to leave it a little broader because there's -- has to

be the assumption that at some time they may have been in those buildings working. So it's almost the burden of proof to show they weren't in those buildings, I think.

DR. ZIEMER: Thank you. Mike Gibson.

MR. GIBSON: Dr. Ziemer, I'm going to voice a little bit of a -- I guess a difference of opinion here. I feel that NIOSH has had ample time, close to two years now, to determine -- to determine the scientific validity of these exposures. In my opinion, they've used people who are conflicted to put together the evaluation report and I've heard the scientific end of it and I've heard from the people, and in the spirit of the legislation, us working in a timely manner, I think it's time to vote on the petition.

DR. ZIEMER: So Mike, are -- you're speaking against this particular motion or in this form, at least, I guess?

MR. GIBSON: Yes, yes.

DR. ZIEMER: Thank you. Other comments or questions?

(No responses)

Dr. Roessler, did you want Dr. Melius to read

that motion again -- or Dr. Melius, are you prepared to -- to reread the motion or not?

DR. MELIUS: Yeah, I can. I'll be glad to. The motion would be that we would move ahead and approve an -- as -- to add to the SEC those people that worked at the Rocky Flats site from 1952 through 1958 that were monitored, or should have been monitored, for neutron exposure.

And the latter part of that would need to be -- we need to talk to NIOSH and -- and to DOL, make sure that that's the right way to essentially def-- define the class.

Then secondly, there are three areas that we need to get further information from NIOSH, basically demonstration that areas that they believe can -- they -- they have adequate information to do dose reconstruction but have not demonstrated that adequacy of that data to us or to our workgroup yet. Those are the 1959 through 1970 for neutron exposure. There's a building 81 issue and, as I understand it, an issue with exposures to thorium in certain areas of the facility. All three of those -- there are some monitoring data, but that data

is not -- been evaluated in the sense of -- of being -- showing that it is adequate for doing individual dose reconstruction -- asking that that information be brought back to our next workgr-- or next Board meeting and for -- for further consideration, and we'll have to make a determination whether that data is adequate or, if it is not adequate, then whether -- adequate for dose recon-- individual dose reconstruction, as to whether additional groups should be added to the Special Exposure Cohort.

DR. ZIEMER: Dr. Roessler, did that clarify the points for you or do you still have questions on --

DR. ROESSLER: I -- I understand everything except -- tell me about Building 81.

DR. MELIUS: Mark, can you help me?

MR. GRIFFON: Building 81 -- actually what we found was that workers were not monitored in the early period, actually up to 1960, so there was a question about back-extrapolating to determine -- being able to bound external doses for that early period. We -- we've also heard today -- the only -- and this is my -- also reluctance to further define the buildings for

neutron exposures, but we've heard today -- and which was brought to us before, but we probably -- may have overlooked it, the use or potential use of plutonium in that building. So I think we should also evaluate -- make sure that, you know, there's not other things going on in that building that might affect our outcome, as well.

DR. ZIEMER: Wanda?

MS. MUNN: We did however in the workgroup identify the fact that the first plutonium arrived in Building 81 in 1983. At some juncture during our deliberations we defined that.

MR. GRIFFON: 198-- I don't recall that, so -- but you know, I just asked that we -- we might want to consider closing that out. If that's been closed out, that's -- I accept that, but it was brought up today so I just wanted to make sure we --

MS. MUNN: (Off microphone) (Unintelligible) '53.

DR. ZIEMER: Dr. Roessler?

DR. ROESSLER: Okay, one more clarification. I think your motion indicated that we would meet

face-to-face on June 12th rather than teleconference. My schedule is kind of difficult to do that, but I think we should get a feeling from other people on the Board how many of us could actually do that.

DR. ZIEMER: Okay. You -- you all presumably have blocked some time out for a face-to-face -- or for a -- at least a phone call meeting --

DR. ROESSLER: But not traveling.

MR. GRIFFON: We might -- we might want to look at potential other dates because I'm just thinking -- I'd hate to be in the same position where we have a report one day before, or the same day, and we're giving it to the petitioners and all interested parties. We want to be able to do that in advance, so I don't want to be in this, you know, position again. And June 12th -- by the time we get the workgroup back together and work on these issues, you know -- comes up kind of quickly.

DR. ZIEMER: Other comments? Again I remind the Board that if -- if you pass this motion, you also are extending the -- the issue further, but that's -- that is certainly an option that's open. It closes part of it and

keeps part of it open, in effect. And I think, Mike, that's what you were speaking against at that point.

Other comments? Board members, just -- this is not on the main motion, but if the motion pass, how many of you are prepared to meet in person on June -- is it June 12th?

MS. MUNN: It was June 12th, but I think that ought to depend largely on whether or not NIOSH can get the requested information back, as -- as Mark said.

DR. ZIEMER: And I don't know if anyone from NIOSH is prepared to make a commitment on that today. Brant is sort of moving -- he's -- he's deliberating with Jim Neton, I think, and -- kind of put -- put them on the spot, as well, Brant and...

DR. ULSH: Could -- on the second part of Dr. Melius's motion about additional clarification that you would like to see, could we get a little better feel for what kind of a product you're asking for from NIOSH on those three issues -- thorium, Building 81 prior to 1960, and I believe neutrons after 1958.

MR. GRIFFON: Yeah, I think we -- should we

flesh that out tonight? I think that -- you know, I -- generally we're looking for that proof of principle question, but I think Wanda has already asked that we might want to be clear in exactly what we're looking for there, and maybe just -- you know, just discuss schedule tomorrow morning or whatever, but --

DR. WADE: We could leave schedule till tomorrow morning.

DR. ZIEMER: Well, unless we know -- unless NIOSH knows what we're talking about, they would be very, I think, reluctant to commit to a timetable, number one. Number two, unless we spell it out, we've just added uncertainty to the -- to the system. So I want to press the Board a little bit. We need to have some clarity here if -- if this is to be the -- the case, we need to be very clear on what is to be expected, what the Board product will be -- again, I don't want to drag this on. I don't want to come back in a month and say well, we need another month or whatever it is.

MR. GRIFFON: Right.

DR. ZIEMER: I think the -- the timeliness issue is upon us. Mike's point is well taken,

and if -- if we are to delay, we have to have a good reason with an expected outcome that we will be able to make a decision then -- within a few weeks. The Chair certainly can tolerate that, probably more so than the workers, but -- but we simply need to move ahead on this, so --

MR. GRIFFON: I'd just ra-- I'd just rather try to write something out than try to describe, you know -- I'd rather put a little thought into it and write it out and provide it tomorrow morning, if that's okay, rather than just trying to do it ad hoc here around a table.

DR. ZIEMER: Okay. Now let me now suggest a strategy then, Board members. You have a motion. We've had some discussion. We've had -- the Chair's trying to get a sense of the level of support for this motion, because if there's not a lot of support, then we need to defeat it and move on. If there is some support, then I'm going to suggest that we table the motion and get the wording defined for action tomorrow morning. I think Mike has spoken against the motion. Phil, do you have a comment?

MR. SCHOFIELD: Yes, I've got just one comment. On the timeliness issue, we need to set a deadline where we give these people either a yes or no answer instead of dragging this on and on and on.

DR. ZIEMER: Okay, precisely my point. Thank you, Phil.

Others? Anyone wish to speak for or against the motion? I think it would be helpful to get some idea of the level of support here. That will help us...

MR. GIBSON: Dr. Ziemer?

DR. ZIEMER: Mike, another comment, then Wanda Munn.

MR. GIBSON: Yeah, I'd just like to point out, you know, we're -- looks like we're in a way marching down a path to ask NIOSH to go back to the well and -- and do something else, when in Section 8.0 of their SEC evaluation report they've said that they have enough information to determine it is feasible to estimate the dose with sufficient accuracy for this class. So if that information is available to them, in their opinion, you know, why -- why should we give them more time to go back and then try to

come up with some other information?

DR. ZIEMER: Thank you. Wanda.

MS. MUNN: Anything that requires a further postponement of this issue is difficult for everyone concerned. It's difficult for every single one of these petitioners, and it's difficult for everyone sitting at this table. And I think, from what we have heard today from Congressional staff, the Senator and from the Governor, they are quite eager to get on with this.

NIOSH has said that they are capable of doing these -- these dose reconstructions, and we have an abundance of evidence that they can and have in the past done so. I personally would like to see us make a definitive decision one way or the other today, if we can possibly do so. I understand the concern with respect to establishing precedent and proof of principle, but the proof of principle with respect to every other aspect of these dose reconstructions has been shown to us repeatedly, especially in the working group, on more than one occasion. I would prefer to see the vote on the entire SEC request done today,

segmented or not.

DR. ZIEMER: Thank you. Jim Melius and then Gen Roessler.

DR. MELIUS: No, I'll -- I don't have any comments right now.

DR. ZIEMER: Okay. Gen?

DR. ROESSLER: I think as a Board, we have mostly been able to reach consensus or close to consensus on many things, and I think at this point I see the Board fairly divided on this issue. If we were to vote today on the whole petition, I think we'd be divided. Plus we're missing one Board member. I think that this is a -- I -- I don't like to see the people in this area put off for a while, but I think we can reach a fair decision if we do allow a little more time, so I -- I'm willing to vote in favor of Jim's motion.

DR. ZIEMER: Other comments? Mark?

MR. GRIFFON: Reluctantly. I think -- I just want to remind fellow Board members that our -- our SEC procedures do ask for this proof of principle. You know, we -- we say that we will look at this, so you know, when -- and then there -- there -- there is a -- I guess there's

a difference between do they have the information -- you know, NIOSH'll probably say, in the case of the neutron issue, they have the information, but they haven't necessarily shown us how they're going to mo-- so we're asking -- well, show us how it's going to work and how it's going to be bounding. I think their evaluation report was -- was stating that they had the information available, but -- you know, so we -- and that's specifically why we wrote those procedures that way, because we said well, you know, that's kind of a -- there's a lot in the middle there, and we want to sort of see how this is going to work and -- and give ourselves assurances that we're going to be able to bound doses for all members of the class. So I -- I think we have to remember that that is in our own procedures and, to that extent, I think we should, you know, follow our own procedures.

DR. ZIEMER: Dr. Lockey.

DR. LOCKEY: I -- I've -- I think this working group and Mark in particular have put an extensive amount of time into the Rocky Flat issue and a very complex exposure situation, no

doubt about it. I think NIOSH has put in an extensive amount of time, as has our consulting group. I think that I would support Jim's motion in that if we can get this done relatively quickly, within 30 days, particularly under the direction of Mark and how knowledgeable he is in this -- in this particular situation, it's worth that 30 days. I don't think it's worth any longer than that, but I think it's worth that 30 days.

DR. ZIEMER: Okay. Other comments, pro or con, in support or in -- in opposition to the motion that's before us?

MS. THOMPSON: (From the audience and off-microphone) (Unintelligible)

DR. ZIEMER: Now since we -- we don't have the exact wording, you can -- I can ask the Board if you wish to have what we might call a straw vote, with the understanding the final wording would come back for review. Or we can table.

MS. THOMPSON: (From the audience and off microphone) (Unintelligible) decide.

DR. ZIEMER: Do you wish to vote now on the motion as it's been presented, Board members? (Whereupon, multiple Board members responded

simultaneously.)

DR. ZIEMER: Okay, we will vote by a show of hands. Those who favor the motion, raise your right hand.

(Affirmative responses)

One, two, three, four, five, six, seven.

Opposed, raise your hand?

(Negative responses)

One, two, three.

So the motion carries by a vote of seven to three. We will have a final wording of that motion, the refined wording which would be in a form that could go forward to the Secretary, tomorrow for a final review. That wording would specify that the 1952 to '58 period -- it would recommend that that group become part of the Special Exposure Cohort; it would recommend that proof of principle on those identified items be provided within basically one month by NIOSH and that we would be committed to voting up or down on the rest of those time periods within one month. Okay?

Yes, a comment from the petitioner.

MS. THOMPSON: With all due respect, we came here today wanting a vote on the petition as a

whole. Okay? It is clear that the law is not being followed. The law states that as the day we submitted the petition could you or could you not accurately reconstruct dose. I think you have proven, by all the changes that have been made, the new models and everything, that you could not accurately reconstruct dose, or NIOSH could not -- excuse me, I'm not blaming the Board -- NIOSH could not accurately reconstruct dose at that point in time. This delay is unacceptable to the people that are dying, and I will defer to my previous statement that our workers should not have to fight with the government when they're fighting for their lives. The purpose of this legislation was to grant timely and fair compensation to our workers. These models are not tested, they're not proven, they're not tried, they're not true. It's science and it -- the question is not at some future day can NIOSH reconstruct dose, although I'm not sure they ever can do it accurately. This has gone on long enough. Please vote.

DR. ZIEMER: Thank you. The vote has been recorded. We will review the wording tomorrow,

and then we will plan to meet again -- we will try to make an effort to have that meeting here in one month, if we can make the arrangements.

UNIDENTIFIED: (From the audience and off microphone) (Unintelligible)

DR. ZIEMER: Thank you very much. We -- we're going to move on to our next agenda item. I'll allow -- this is one of the petitioners. We'll allow an additional comment here.

MR. HARDEN: Sir, with all due respect, if this is prolonged, I would ask that the petitioners have a chance to rebut some of the information that has occurred this afternoon. For instance, we haven't had access to this report that was just revealed today.

DR. ZIEMER: Right.

MR. HARDEN: And the other thing I would do is, in support of Jennifer Thompson, I think this has developed into some kind of a charade and that -- that's not a reflection on you as individuals. It's a collection of information that we've suffered for two years, and I think it's long overdue that we put these intellects in their places and we bring a decision to these folks that have been waiting by the

sidelines all these months and years to have their claims answered one way or another.

DR. ZIEMER: Thank you.

MR. HARDEN: Thank you for the opportunity.

UNIDENTIFIED: Could I just ask a point of clarification? Did you just vote against the majority of the petition or not?

DR. ZIEMER: No, we --

UNIDENTIFIED: Or did you just postpone the majority of the petition?

DR. ZIEMER: -- we -- the vote was in favor of the motion. The motion was to grant -- or to recommend SEC status for the period of 1952 to '58 and to defer action on the -- the remaining time periods for one month until we could get the proof of principle information from NIOSH, at which time --

(Whereupon, multiple audience members spoke simultaneously.)

DR. ZIEMER: The rest of those time periods. The recommendation is to include '52 to '58, to recommend that time period as part of the Special Exposure Cohort.

UNIDENTIFIED: The motion has three specific issues in the second part for the post-1958, so

are you limiting the discussion to those three specific issues, are you -- and saying everybody else is out, or not? I don't think people here understand what you just did.

DR. ZIEMER: Okay, let -- let me try to clarify.

UNIDENTIFIED: For the post-'58, I don't think they understand whether you've rejected most of them or you're only going to look at those three issues, or is the whole post-'58 still open for discussion?

DR. ZIEMER: Oh, the whole post-'58 is open, but those are the issues that the Board needs closure on. I think we're clo-- we have closure on the other items. Those are the issues that the Board has not -- has asked for additional clarification from, so those other time periods -- we're not recommending that they not be included. We're simply saying we -- we will vote on those in one month. The first period -- the Board has recommended that that period be added to the Special Exposure Cohort.

Did -- did -- is that clear, or did I not say that very well?

MR. GRIFFON: I guess -- I guess to -- out of tho-- out of those three follow-up items that we have, the only -- the -- the neutrons extend from '59 through '70, that issue. The -- the 881 is an early time period issue, pre-1960. The thorium one would potentially affect the entire time frame of the site. So I think, to that extent, the entire time per-- period's left op-- open, but only really with regard to thorium in this case. I think that's -- to be clear, you know.

UNIDENTIFIED: (From the audience and off microphone) What about (unintelligible)?

UNIDENTIFIED: (From the audience and off microphone) Case by case.

MR. GRIFFON: I -- I just said post-1970, thorium still is potentially an exposure potential, so we have to see proof of principle on the thorium. We've asked for that, yeah.

UNIDENTIFIED: (From the audience and off microphone) (Unintelligible)

DR. ZIEMER: Okay. Dr. Roessler, a comment?

DR. ROESSLER: I think we have members of the press here who will want to meet some deadlines for today and not wait for these details for

tomorrow, and I'm not sure that they're clear on that first period. I think we said for those workers who were monitored or should have been monitored for neutrons, so it could mean it's not the whole group.

MR. GRIFFON: That's correct.

UNIDENTIFIED: (From the audience and off microphone) (Unintelligible)

UNIDENTIFIED: (From the audience and off microphone) (Unintelligible)

UNIDENTIFIED: I'm from Associated Press and I would like to know how you decide who should have been monitored and who was monitored. Can I simply declare that I worked in building 771 and therefore qualify, or is NIOSH or somebody else going to decide whether I should have been monitored or whether I was monitored?

DR. ZIEMER: Okay. Yeah, Mark, can you clarify that for us? You can't right now, but --

MR. GRIFFON: No -- yeah.

DR. ZIEMER: -- it will be part of what we provide, because we have to provide that same information to the Department of Labor to administer this. So the likelihood is it will relate to building locations, is my

understanding.

A question here.

UNIDENTIFIED: I'm from the *Rocky Mountain News*. I'd like to clarify whether the thorium issue can apply to everyone or just certain people who worked with thorium.

MR. GRIFFON: Just -- just certain people who worked with thorium, and that's correct, yeah.

UNIDENTIFIED: (From the audience and off microphone) (Unintelligible)

MR. GRIFFON: Just the individuals who have worked with thorium, yeah.

UNIDENTIFIED: So the effect of this vote is you've excluded almost everyone. Is that right?

UNIDENTIFIED: (From the audience and off microphone) You can't prove (unintelligible).

UNIDENTIFIED: I think they want to know the answer to that question --

UNIDENTIFIED: (From the audience and off microphone) (Unintelligible)

UNIDENTIFIED: -- on how you voted.

MR. GRIFFON: Well --

DR. ZIEMER: Well, right now the periods from '59 onward are not acted upon. They are

deferred till the next meeting. The issues will be individuals who were exposed -- or were monitored or should have been monitored for neutrons, so that's a -- probably a large number of people, individuals exposed to thorium, and then the -- the building 81 issue, so --

MR. GRIFFON: Yeah.

UNIDENTIFIED: (From the audience and off microphone) How are you going to (unintelligible) the contractors are (unintelligible) documentation (unintelligible) prove you were out there?

UNIDENTIFIED: (From the audience and off microphone) (Unintelligible)

UNIDENTIFIED: (From the audience and off microphone) (Unintelligible) report.

DR. ZIEMER: I'm -- a question --

UNIDENTIFIED: (Unintelligible) the steel workers signed the cards, they kept records for the steel workers. You have numerous vendors, contractors, people that moved in and out of those buildings prior to '59. How you going to prove who it was that came and gone? How -- how you going to prove it? A lot of them are

probably not even around anymore.

DR. ZIEMER: Thank you. Gen, did you have an additional comment, or -- okay.

Members of the press, do you have any additional questions that you need clarified? Okay.

Dr. Lockey has a comment.

DR. LOCKEY: This comment is -- is more generic in nature, and it has to do with when the EEOICPA law was passed, it was a laudable effort initially to recognize and provide at least some compensation for people who were injured in the nuclear production industry. It was a patched-together law -- I think Jim would probably support that -- trying to get it passed through a very difficult political situation.

Over the ensuing years, as NIOSH and SC&A and this Board have tried to work -- and petitioners, particularly petitioners -- have tried to work with this law, there are parts of it that don't work. It's created conflict and it's created frustration and it's been very time-consuming. And there's no -- there's no question about that. So there's parts of this

law that need to be streamlined and fixed -- fixed.

Now you know, we go to St. Louis and we pass Mallinckrodt, and the Congressional delegation is there, like they are here today, supporting their constituency. They get their SCE (sic). But you know, I'm not -- it's not clear to me that, other than representing their state, we're representing everybody in the United States. This is a bipartisan issue -- Republican, Democrat -- 'cause these plants were spread throughout the United States. The law needs to be updated, streamlined and made more user-friendly.

If I was in your situation and I got a 48 percent PC, and my neighbor that I worked with for 30 years got a 52 percent PC, then I would be just beside myself. That's understandable. That is clearly understandable, and that type of conflict needs to be eliminated. There's ways to do it and Dr. Melius has suggested ways in the past.

It's really your Congressional people who need to step forward and not just represent you here in Colorado, but represent the rest of the

workers in this industry throughout the United States to streamline this law and update it to make it more user-friendly. It's their duty. We're trying to work within the law, and we have good people in NIOSH who are -- who are public servants, who are preventive health, public health oriented. They're doing their damnedest to get the work done, and SC&A's the same way, and people on this Board are the same way. But we were constrained by a law that has a catch-22 -- 180 days to reconstruct radiation doses, generate new science that takes -- that can take years? That's what the law is -- it put us into conflict, and it needs to be changed. It needs to be updated. It needs to be streamlined, and the conflict needs to be taken out of it. Thank you.

DR. ZIEMER: Okay. Thank you very much.

MS. FRANK: I'm Laura Frank from the *Rocky Mountain News*. So the press just wants to be clear for what we report next. The petition before you includes everyone who ever worked at Rocky Flats. You have carved out, if I'm clear, a 1952 to 1958 piece of people who were exposed -- potentially, who -- which should

have been monitored or were monitored for neutron dose. Does that mean the rest of the potential class is still before you, or only those people who fall into the three categories that you're continuing to look at for next month?

DR. ZIEMER: Only th-- only those other categories that we're looking forward to.

MS. FRANK: So everyone else is out.

DR. ZIEMER: Yes.

UNIDENTIFIED: (From the audience and off microphone) (Unintelligible)

DR. ZIEMER: That's right.

UNIDENTIFIED: (From the audience and off microphone) (Unintelligible)

DR. ZIEMER: No, no, next month we would be looking at the other time periods.

UNIDENTIFIED: (From the audience and off microphone) (Unintelligible)

DR. ZIEMER: Right --

MR. GRIFFON: Only three categories.

DR. ZIEMER: -- right.

UNIDENTIFIED: (From the audience and off microphone) (Unintelligible)

DR. ZIEMER: That's correct. That's correct,

that's correct.
Okay. Let's take a brief ten-minute break. I know the press folks may have additional questions. We'll -- we'll catch our breath here and then we'll resume. Thank you.
(Whereupon, a recess was taken from 2:20 p.m. to 3:00 p.m.)
DR. ZIEMER: Okay, let's -- I'd like to ask you to be seated and we'll come back to order.
It's -- it's very clear to the Chairman that there's been a lot of confusion on what action was taken and -- and what was covered and what wasn't. Let -- let me try to clarify and I -- I'm aware that sometimes clarifications make things even more confusing.
The action that the Board has taken will recommend to the Secretary the addition of special cohort status to a group of individuals from the '52 to '58 time frame who were monitored, or should have been monitored, for neutrons. So it's a subset of the total group in that time period.
We have not taken specific action on the rest of the time periods, including '59 to '64, which was segmented out; '65 to '68; '69 to

'70; or '70 and onward.
Now there was some question as to -- since the neutron, the -- and thorium in Building 81 issues tend to focus on those three middle groups, did that automatically exclude '70 and beyond. It's the Chair's ruling that the '70 and beyond is still an open question for two reasons. Number one, the thorium issue could indeed extend beyond '70; we don't know that. Number two, it would be my intent that the Board specifically go on record with '70 and beyond period, to either vote it up or vote it down, so it's very clear where the Board stands on that; that it not simply be -- fall by the wayside simply by exclusion. So it would -- it's the Chair's intent that at our next meeting we take specific action on all of the remaining time periods so that everybody knows what the recommendation is on all of those and what groups are specifically covered.
So what is -- what has transpired is the recommendation to add one subset to the Special Exposure Cohort, and the possibility then is open to add additional subsets from the remaining time periods. So I hope that is a

little more clear than it apparently was at the time of the break. And we're --

UNIDENTIFIED: (From the audience and off microphone) (Unintelligible)

DR. ZIEMER: -- we're not -- we're not sure whether the media will make it more or less clear as they attempt to explain this, because they've talked to different folks and I think have gotten different versions of what Board members thought they were voting on, and so -- and that's unfortunate, and I'm -- I'm sorry if that occurred. But we -- we -- we hope that that adds some clarity.

Yes, I'll allow a question here.

UNIDENTIFIED: May I ask a question?

DR. ZIEMER: Yes.

UNIDENTIFIED: Okay, you say you're going to vote on people prior to '59 on for thorium and -- 'cause the neutron -- photon thing -- photon thing. How you going to prove from '59 on up for everybody else that might have been exposed to thorium?

DR. ZIEMER: Well, I think that remains to -- for the Board when we get our material next time. I can't predict what the Board might do

at that point, but at least those time periods are still open before us, so that will be the main order, and basically the only order of business as we return, hopefully in a month, and -- and try to pin down the final answer on those.

MAY 3, 2007

PUBLIC COMMENT

DR. ZIEMER: Good evening, everyone. We're going to go ahead and start the public comment session of the Advisory Board on Radiation and Worker Health. I have a list of individuals that have indicated they wished to speak to the assembly this evening and we'll just take the list in the order given.

I do want to -- many of you were here last night, and I will repeat a couple of things in case you weren't here, and that is that this Board is an advisory board. We're not a board that makes the final decisions on anything. That's sometimes good and sometimes bad. Sometimes we wish we could, but the fact of the matter is we simply give advice. We're -- we do not adjudicate the cases. We evaluate the program, really is what it amounts to. That is the dose reconstruction program.

We do have a -- we do have a responsibility to provide an opinion on Special Exposure Cohort petitions. We have -- before the Board at this meeting there are five petitions that are being examined, one of which is Rocky Flats. And as

many of you know, we had an extensive discussion, a public comment on that last night. The Board had that action before it earlier today. And if you weren't here for that, you may not know that the Board recommended approval of a portion of the time frame for the Rocky Flats for the neutron workers. There are some other portions of that petition that will be finalized in -- at our next meeting, next month, which we hope will be back here so that those of you from Rocky Flats can be present.

There are several folks -- well, I -- I also want to mention, because it's sometimes confusing for folks, and that is that the folks you see here -- we do not work for NIOSH or for Department of Labor. We are just an independent board. I often introduce the individuals. A number of these, like -- like me, I'm a retired educator, and we have a mix of people on this Board, some of whom are retired, some of whom are still working; some of whom have technical backgrounds, some who are in the medical field, some who are individuals who are union workers. So we have

a cross-section of folks here on this Board. We are not part of NIOSH. We are not part of Department of Labor. So we're -- our job is to give kind of an independent look at things. We have to struggle, as it were, with a lot of viewpoints -- the viewpoints of the petitioners, the viewpoints of the agencies, and we even have our own contractor that we hire to help us evaluate the various issues. So it -- it's a job that this Board does, not only here at the Rocky Flats, but dealing with sites all over the country.

We will be hearing from individuals from some of those -- representing some of those other sites in fact tonight, but I notice here there are still a few Rocky Flats folks and I'll just take them in the order that they are. We have imposed now a ten-minute time limit on people. That's something new, but in order to provide time for everyone to -- to give their remarks, we ask you to -- to stick with the ten-minute time limit. Also, as I mentioned last night, the ten-minute is not a goal to be achieved but is an upper limit. So if your remarks are less than that, that's quite fine.

Jack Weaver, who identifies himself as a retired Rocky Flats worker. [name redacted]

DR. WADE: [name redacted] has left.

DR. ZIEMER: Signed up earlier today but perhaps couldn't make it.

Cliff DelForge? That's Cliff, you've got the first mike here.

MR. DELFORGE: My name is Cliff DelForge -- Clifford DelForge. I worked at Rocky Flats for 35 years, primarily in the areas of radiological safety. I'm not here on my behalf 'cause I'm not sick. I -- primarily involved in here because of my [Identifying Information Redacted]. He worked at Rocky Flats for 24 years and he is ill, and he is -- his illness was -- I think I was able to prove pretty significantly that it was caused at Rocky Flats -- by his work at Rocky Flats.

I'm not here to talk about [Name Redacted] either. I'm just going to make some general comments, if I may.

You've heard a lot of testimony from people. Some of it -- a fair amount of it was not probably technically appropriate for dose reconstruction, but all of it was morally,

ethically and emotionally valid for the SEC. I think we've kind of missed the boat on some of this stuff. Otherwi-- some of the people who got up here and talked were talking about specific instances where they were showing that, because of the work that they were doing and the places that they were, that they should have had a -- some dose on their dosimeters, should have had some dose, and that in most cases it came back either as a zero dose or as no current data available.

I got -- that got me thinking about my own personal situation, and there are a couple of things that I'll discuss here shortly on my own personal experience regarding the validity of our dosimetry program. And that's fairly important 'cause you're talking about making a recommendation on whether or not to approve Rocky Flats for the SEC status.

The last time I went out to the Rocky Flats plant -- I retired in 1995, and the last time I actually went out to the plant proper was as part of one of the many programs that I was involved with -- the uranium study, the plutonium study, the americi-- I mean the

beryllium study and the chemical study. And while I was out there I was talking to a gentleman and he was explaining to me that they had just started a new program where they were bringing back the film badges from the Denver Tech Center and they were going to reread these badges and then they were going to compare that data with the data that they had on the existing documentation. And the very first batch of badges they brought back, one gentleman, they reread his badge; his documentation showed zero, his bad (sic) was reading 1,000 millirem. They were off by a factor of 1,000 on that one individual.

I don't know how far they went with this. I -- I would be willing to bet that they did not read every badge and bring every badge back, 'cause they're talking about a lot of badges over many, many years. But that one instance should have indicated at least that they should have probably done that.

The reason that -- if I understand it correctly, the reason that there were so many no current data available on the documentation was because they didn't read the badges. They

didn't have the time. It was just physically impossible to read all the badges, so they just put down no current data available.

I'm personally aware of three unauthorized experiments that were done to determine the validity of our dosimetry program. Now americium salts are the highest level of radiation that I've ever seen at Rocky Flats, and that was my job as a radiation monitor when I first got into radiological safety. I had a reading off of a fiber pack of the beryllium salts that read 22,000 millirem, which is extremely high, especially for Rocky Flats. A gentleman was -- I don't know if he was coerced into it or anything, but he -- several -- a couple of the RCTs or the radiation monitors said we ought to test this program, so they had him put his badge in a can of americium salts for 30 minutes. I don't know what the reading on that particular can was, but it had to be fairly high and there had to be some exposure to that badge. And his results came back zero. Another guy -- a different period of time -- put his badge in a glove on the americium line, which was the highest gamma radiation line at

the -- in 771 building, and he left it in there for the majority of his shift and he sent it in, and there had to be significant radiation exposure to that badge. It came back zero.

I personally -- I was assigned to a special project as a radiation monitor. We had to have special badges because the material we were working with had a very robust gamma associated with it. I must have been in a union frame of mind at the time because I decided I was going to do my own test. All the other people who had the special badges wore their badges on the inside of their lead aprons and they were required to wear lead aprons the entire time they worked with the material. I set my badge on the outside, looking for some -- there had to be some difference between my badge and everybody else's -- and it came back zero. There was no difference.

In my son's case, doing some investigation, I found two instances where they'd found a small amount of -- of exposure on a badge on two of his different badge, and they said well, you know, this -- this can't be real. It's not -- it's bogus, so we're just going to knock

everything back to zero.
I firmly believe that their standard operating procedure was whenever there was any kind of an anomaly with their program, if they had a high reading here or something like that, they simply said well, this can't be right, it can't be true so we'll just forget it and knock it down to zero. I mean if they were doing anything else, they would have come and investigated. And in my case if there was -- I had a high exposure on my badge, somebody should have come down and said, you know, what's -- what's the problem here, at which case I probably would have been in a little bit of trouble because I did this in an unauthorized manner.
I think -- and I think we missed the boat because, with the people that talked about their specific situations and my own experiences, we should have gotten together with all the people that -- from Rocky Flats, all the people work in the back areas, and sat down and interviewed them and said what personal experiences do you have that would show that the documentation of the dosimetry

program was not up to snuff, it wasn't doing what it was designed to do. I think we could have provided you with a very large document. I think everybody -- 'cause everybody that I talk to just casually said yeah, yeah, I know this situation. This happened in my case, and everything else.

It's kind of disheartening to sit and listen to Mark say, you know, that he -- he's perfectly comfortable that there was no credible evidence, I guess, to -- that there was any problems with the dosimetry program. I don't believe that. I believe that there were some problems with it. I think that the -- with the numbers of no current data available, I don't know how you can possibly extrapolate -- and that's another thing.

If you're talking about well, we're going to extrapolate here, we're going to calculate here, we're going to -- you know, you -- just making up numbers, is all you're going to do is make up numbers, and I don't think you can do it accurately. I don't think there's enough information that you really need to have to do that.

The -- you can't use situations with other plants with regard to Rocky Flats. We had -- we had unique materials, we had unique mixtures, we had unique processes. You can't say well, what happened over here -- we're going to say well, we can say that the same thing happened over here.

You can't use common denominators. You look at people as individuals, and you don't know if a person got a exposure in a -- in an hour, or in a week or in a month if his badge was on a monthly basis and he got a total over that period of time, or if he was in a back area one hour and got that -- that exposure. You don't have that kind of information to know who was working what lines and how long they were there and anything else. There's just so much information out there that's -- that you need to have in order to do a valid thing -- at least in my opinion.

It's kind of funny, it's -- it's almost like this program, this compensation program, was like a fresh zebra kill. And the top predator, the Department of Energy, got in there ripping off huge chunks of flesh, to the tune of $90

million in paperwork that went in their pockets. And isn't it amazing that the two people that were involved in that program resigned shortly after that came to light -- not because of that. No, it didn't have anything to do with that. They were going to retire anyhow. And -- and now the vultures and the jackals are picking at the -- the bones of this thing. And they've apparently done a pretty good job, at least on one leg of the beast.

I saw this article in the paper today, *Rocky Mountain News*, and it says here that the government is about to run out of money to complete dose reconstruction. They're about to run out of money. So the vultures have picked that leg clean, pretty close to it.

And now I ask you, what are we going to do now? Are we going to -- when it runs out of money are we just going to say well, we're just going to put it on hold until we get some more money and start doing our job again? I got a good idea. Maybe what we can do is do a kind of a pool and see how many more Rocky Flats employees are going to die in the interim.

We need to have some processes done -- we need them done now. We need to have -- I think the things that you've heard -- what they do to me. Obviously I have an agenda of my own. I've got a son who's ill. I've got friends who are ill. I would ask you right now -- I would ask that you all unanimously recommend to whoever is in charge that any further dose reconstruction should be discontinued immediately. It's a waste of time and a waste of money. And I'd also recommend that you unanimously recommend that Rocky Flats be given the SEC status. I don't ask you to do this because you feel compassion for the people who are ill. I don't ask you to do this because you may be angry at some of the way that some of the people were treated. I ask you to do this because it's scientifically appropriate to do it. Thank you.

DR. ZIEMER: Thank you, Cliff. Then [Name Redacted], -- is [Name Redacted], with us?

(No response)

Okay, we'll come back and check. [Name Redacted] I think is the last name. I'm trying to read the first name. Is there a [Name

Redacted]? Rocky Flats retired person -- [Name Redacted]?

UNIDENTIFIED: (From the audience and off microphone) What was it? I can't hear you very well. The sound system is very muffled.

DR. ZIEMER: [Name Redacted] is --

UNIDENTIFIED: No, I'm sorry.

DR. ZIEMER: Not [Name Redacted]? Okay. Next is Dr. Dan McKeel, and I believe Dr. McKeel's representing the Dow Madison petition.

DR. MCKEEL: Good evening, Dr. Ziemer and the Board. Actually tonight I want to talk about our other site, General Steel. I do have --

DR. ZIEMER: I think tomorrow you'll have an opportunity then I believe as the petitioner to --

DR. MCKEEL: Yes.

DR. ZIEMER: -- talk about the Dow site, yes.

DR. MCKEEL: Dr. Ziemer was kind enough to allow me -- I had a rather complex comment tonight, so I made that in writing, appropriate to what the Board has just decided, and I'll try to keep this short for you. The remarks I want to make tonight are for my colleague, John Ramspott, who you all know. And I have

basically two brief remarks.
The first one is about the Battelle task order 16 contract, and as you heard yesterday, Larry Elliott announced that due to fund shortages at NIOSH, this contract would soon be terminating, at the end of this month, with no further work done and all monies spent. This is an important contract to us because both the Dow site and the General -- General Steel Industries sites are under this contract.
As you know, the original contract was to have been for 12 months and was to have ended last October, and has been extended. There were, as far as I'm aware, three dose reconstruction guidance documents that have been produced, TIBs 5000, 6000, 6001. I heard Larry yesterday say that there were 16 site-specific appendices to cover the 256 sites that were charged to Battelle to review. General Steel is apparently one of those 16 appendices. We don't know when that appendix will materialize, although I was very encouraged to see that the first four appendices were posted on the -- on the OCAS web site today.
Mr. Elliott also told us -- told our group that

Dow, which is another site, will not have a site-specific appendix and Dow also has no site profile. The original intent, and the reason I'm bringing this up tonight, was to generate appendices for all 256 sites. And I derived that idea because the OCAS web site right now says the following about Battelle TIB-6000. Quote, Following the main body of this document is a collection of appendices, with one appendix for each AWE site that performed metal-working operations, and the TIB is about uranium and thorium -- end quote.

Only 308 of the more than 1,400 claims, or about 22 percent of the total, have been completed dose reconstructions at Battelle. An unstated number of 83.14 SECs may be forthcoming, and added work remains for other branches of NIOSH to complete undone tasks.

My comment is that this doesn't really seem like very satisfactory overall performance on this contract, given the significant time extension. And the comment for the whole EEOICPA program is that in a time like this of constrained funding for NIOSH operations is -- was the Battelle task order -- was it a wise

investment, considering basically the low overall productivity on all the major goals.

The second comment tonight is -- in a -- in a way I apologize, but I came to you tonight, again, about the General -- I mean the Granite City Steel naming issue because, although we have brought that up repeatedly to the Board, that problem still persists today, and I want to give you a -- a very practical reason why it's important.

John Ramspott and I have jointly written in our written comments a detailed recounting of two claims, and both of those together show the Department of Energy, Department of Labor and NIOSH have really not dealt adequately with this Granite City Steel naming error and the description of the facility at DOE.

Claim number one was from a [Identifying Information Redacted] filed EEOICPA claims in 2004. He went through the entire dose reconstruction process, was assigned a probability of causation of 36.23 percent, and then he was denied in April of 2005.

The problem is that Granite City Steel did no AEC uranium work, and was a different site at a

different location from Gra-- General Steel Industries, which was the real covered site. GSI did perform Betatron non-destructive testing on Mallinckrodt uranium ingots from 1953 to 1966. In contrast, Granite City Steel didn't have any Betatrons.

We had obtained the redacted version of this claim from NIOSH by the FOIA process, and we got that because this was one of the four dose reconstructions that have been performed for Granite City Steel -- or correctly named, General Steel Industries.

We then located the worker's children, one of whom verified that it -- one of her -- that her claim was one of the ones that was dose reconstructed. She verified that her father always [Identifying information Redacted] from Granite City Steel, always [Identifying information Redacted] work, and never set foot at GSI, even after Granite City Steel bought the GSI grounds and property in 1974.

Well, we were interested in that because, as I say, there've been a very low production of completed dose reconstructions. John and I believe in fact that probably all four DRs that

have been attributed to General Steel Industries may have actually been done on Granite City Steel workers in error. In our written comment we provide indisputable documentation that the original facility misidentification occurred at the Department of Energy, and went unrecognized by Labor and NIOSH during the dose reconstruction process, including assignment of a POC of 36.23 percent. The second claim highlighted in our written comment is that of an authentic [Identifying Information Redacted] GSI employee who was a [Identifying Information Redacted]. He was told by a Department of Labor supervisor and by Social Security that he really worked at National Roll Company in Pennsylvania, and that GSI was not a covered site. It took multiple calls and a FAXed newspaper story to convince Labor that claimant number two worked at GSI, that GSI was a real covered site, and that his claim would be processed. And -- and that was effective, but he still awaits his dose reconstruction, along with 208 other people with claims at NIOSH from General Steel Industries.

In light of these two claims that I think are well documented, we therefore are requesting that the Department of Labor re-examine all of the 305 denied Granite City Steel and GSI claims with respect to the site employment issue. After this meeting is over we will work with the Illinois Congressional delegation to request a remedy in a formal way. Therefore, we will assist the agencies with the -- this effort if -- if they ask us to do so.

We think that several hundreds of claimants could have been affected. There are now 819 Part B and E ostensible GSI claims, and 546 ostensible GSI cases. We need to know for sure how many claims were denied (a), from people who never worked at GSI, and (b), from workers who worked at GSI but were denied in the early years because both Department of Labor and Energy misconstrued the name and location of GSI as the authentic covered facility, thinking it was Granite City Steel.

The DOE facilities list database and the DOL statistics by state web sites have only been partly corrected in this regard.

And -- and the final comment is that John and I

at least hope one day that the children claimants of claim number one worker will get an apology, and I think it needs to be a special apology from all three of those agencies. Thank you very much.

DR. ZIEMER: Thank you, Dan. And I have the -- the more extensive copy. I think we can get this onto the web site perhaps and I'll ask the -- NIOSH to do that.

DR. MCKEEL: (Off microphone) (Unintelligible)

DR. ZIEMER: Also, Dan, I believe you have been in contact with Pete Turic (sic), have you, from Labor? I --

DR. WADE: Turcic.

DR. ZIEMER: -- or Turcic. We want to make sure that you're not relying on our --

DR. MCKEEL: No, sir.

DR. ZIEMER: -- our --

DR. MCKEEL: Right, that's what I meant to say. I --

DR. ZIEMER: -- proceedings to see that this gets --

DR. MCKEEL: -- obviously this has to be taken up with all three --

DR. ZIEMER: Yeah.

DR. MCKEEL: -- agencies, so --
DR. ZIEMER: I -- I think I knew that you were going to do that, I just want to make -- confirm --
DR. MCKEEL: I did transmit my e-mail copy sent to you to Mr. Turcic and to Libby White at Department of Energy --
DR. ZIEMER: Very good.
DR. MCKEEL: -- so they would be of this --
DR. ZIEMER: Very good.
DR. MCKEEL: -- and -- and to Larry Elliott.
DR. ZIEMER: Yes. Okay, thank you. Jerry Mobley from Rocky Flats -- is Jerry with us tonight?
(No response)
Sometimes folks sign these things early in the day thinking that they are registering their attendance, and they end up on the -- the speaking sheet.
How about Stan -- is it Beitscher?
MR. BEITSCHER: Yes, it is.
DR. ZIEMER: Stan.
MR. BEITSCHER: Would it be better if I spoke from that podium?
DR. ZIEMER: You -- you can do either one --

MR. BEITSCHER: The sound is very --
DR. ZIEMER: -- whatev-- whatever you prefer.
MR. BEITSCHER: It may be my ears. The sound is very muffled.
DR. ZIEMER: Okay, you can try that one, if you prefer.
MR. BEITSCHER: My name is Stan Beitscher. I worked at Rocky Flats from 1963 to 1993. I came there when I was 30 years old. I left when I was 60 years old, with a number of medical conditions. I look very healthy from the outside, but I have a number of situations internally that are not apparent. But my first comments have to do with the special cohort program, and I'd like to add to Mr. DelForge's comments from a slightly different perspective. Let me tell you what my background is. I was a research scientist at Rocky Flats in the area of metallurgical engineering. I graduated from the Colorado School of Mines with a degree in metallurgical engineering, with a minor in minerals beneficiation. I went to Rensselaer Polytechnic Institute and received a master's degree in metallurgical engineering with a minor in nuclear engineering. I then went back

to the Colorado School of Mines, received a PhD in metallurgical engineering with a minor in physics.

So I can't really claim that I did not know that radiation and toxic material exposure is dangerous. I was very well schooled in these areas. I'm not a world expert in these areas, but I have read thousands upon thousands of pages concerning the effects of radiation and toxic material exposure in my lifetime. I've written hundreds of research papers dealing with material science.

And I can tell you, first of all, that the emphasis at Rocky Flats was production first; safety, yes, but came second. Nothing would take -- would stand in the way of meeting production schedules. And although there was concern for safety, safety was second.

Furthermore, the implication that working -- for working at Rocky Flats was that largely radiation effects on biological systems is largely unknown. This is a very crude science. In 1963 very little was known about the limits of -- of dangerous exposure, not only to radiation but to the host of other extremely

dangerous materials that were handled at Rocky Flats. The list is staggering and almost amazing. Every -- virtually every toxic, dangerous material was at one time or another present in my work area in my -- in the research building of Building 79 where I spent about 28 of the 30 years. The other year and a half was spent in Building 771, which is acknowledged as the most dangerous building in the United States.

So to limit compensation based on perhaps the absence of some information or some material is preposterous. The radiation was widespread and the exposure to other toxic material was extremely widespread at Rocky Flats. Furthermore, you cannot predict biological effects based purely on some sort of reconstructed dosage effects. Large amounts of radiation can-- cannot -- and in some cases, not cause biological effects. Small amounts of radiation in other species can cause enormous effects. And to limit -- to limit compensation for horrible conditions for some imaginary limit of -- of exposure is preposterous. And I stand behind what Mr. DelForge said.

First of all, I'd like to add just one other comment on that. Dosimetry, and that's a subject that I followed very closely in my career because I was subject to dosimetry. I worked in a hot area. I worked in a glovebox. I worked in a very high radiation area.

Dosimetry is -- is not an exact science, and it is impossible -- I think, and from my opinion -- to reconstruct dosage at Rocky Flats. I -- I don't know what else I can tell you, and that's the reason that I feel fairly strongly that the cohort program should be approved at Rocky Flats. The dosimeter program at Rocky Flats was run probably you might say to the best of the ability of the people running it, but that doesn't mean it was run very well. There were a great deal of unknowns.

And dosimetry -- dosimeters are not accurate. The placement of dosimeters are not always at the right location. People didn't always wear their badges. They were not read correctly.

And furthermore, the science of dosimetry is -- is -- is work -- is a work in -- a work in progress. It is not an exact science.

Okay. Let me just switch gears a little bit,

if I may, and talk about the compensation program. I've studied this compensation program for five years. I still don't understand it. And let me explain why.

I have a -- I have a claim in for a number of illnesses that are not cancers. I don't believe they're cancers yet. To -- without being really specific or explicit, I have respiratory problems. I also have a very large particular gland that causes me tremendous discomfort and I have respiratory problems and I have a hearing defect, and I feel that all of these were at least greatly caused by my employment at Rocky Flats.

Part B -- as I understand the compensation program, Part B covers 22 cancers, beryllium disease, silicosis and beryllium sensitivity. Part E, on the other hand, covers other things, but will only compensate you for loss of income.

Now there is no way I can -- I can just-- I can understand this. In other words, if you don't have these -- one of these 22 cancers, berylliosis or silicosis, you're not subject to compensation. If you don't have these cancers

and you have other conditions, you're only compensated if you have -- if you can prove a loss of wages. Well, I'm retired. I -- I can't prove a loss of wages. But yet I have what I consider to be extremely serious medical conditions -- perhaps not as serious as some, but fairly serious. When I wake up in the middle of the night gasping for breath, I think it's fairly serious, although it's not cancer. I don't understand. I mean I think -- I think some reasonable effort was -- was made to make the program fair, but there's a great big hole in it. And for the life of me, I don't understand -- I don't understand why I'm not covered for compensation because -- simply because I don't have one of these 22 cancers yet, or berylliosis or silicosis.

There are very serious health effects that are not cancer, and let me just name three that I can think of. There may be a number of others, and I just can't think of these others. Non-cancerous tumors are not cancers, but tumors are very serious medical effects. They're not covered by Part B. They may be covered by Part E, but my experience is Part E is not very

sympathetic to these conditions, and proving that these conditions are caused by some sort of exposure at Rocky Flats seems to be virtually impossible.

Asthma and other respiratory conditions such as congestive obstructive pulmonary disease are not cancers, but they're very serious health effects, life-threatening health effects, and they're not covered by Part B. They're only covered -- perhaps, I think -- by Part E. But my experience is not very sympathetically.

So I think there's a ways to go, and I think that a greater consideration should be given to some of these claims that are not presently given, and certainly, to go back to dose reconstruction, I think that people working on dose reconstruction are benefiting themselves by their employment and not really doing anything for anyone else.

Thank you for listening to me.

DR. ZIEMER: Okay, thank you, Stan. I understand that we have an individual who's called in by phone, [Name Redacted]. [Name Redacted], are you on the line?

(No response)

Is it [Name Redacted]?

DR. WADE: Yeah.

DR. ZIEMER: [Name Redacted], are you on the line?

(No response)

Okay, perhaps not. Let me check back again on the other names -- Jerry Mobley? [Name Redacted]? Mr. [Name Redacted]? Mr. Weaver -- Jack Weaver?

(No responses)

UNIDENTIFIED: (Unintelligible)

DR. ZIEMER: Is this [Name Redacted]?

MR. EARLEY: No, Lynn Earley.

DR. WADE: Say again, please?

MR. EARLEY: Lynn Earley.

DR. ZIEMER: Would you like to speak?

MR. EARLEY: Yes, I would.

DR. ZIEMER: Please proceed. Tell us your name again, Lynn --

MR. EARLEY: Lynn (unintelligible) Early --

DR. ZIEMER: E-a-r-l--

MR. EARLEY: -- (unintelligible) analyst, organic (unintelligible).

DR. ZIEMER: Okay, thank you.

MR. EARLEY: And I am also chair of the

International Science Oversight (unintelligible), newly-formed (unintelligible) to analyze (unintelligible) government agencies (unintelligible). I have (unintelligible) that I would like to go over. I don't know how much time you have, but I have some (unintelligible) that I --

DR. ZIEMER: You have a ten -- you have a ten-minute limit, sir.

MR. EARLEY: -- would like (unintelligible) I have to get (unintelligible) to get those so I'll (unintelligible) 20 seconds.

MS. MUNN: I don't think he heard you.

DR. ZIEMER: He's switching phones, I --

DR. WADE: Putting the dog out.

(Pause)

MR. EARLEY: (Unintelligible) serious question relative to the whole question of low dose exposure. These exposures have been analyzed by independent scientists down through the years and have been underestimated by many of the international bodies, including IAEA and the International Commission on Radiological Risks. I would hope that this advisory committee would take (unintelligible) some of

these low dose issues. There is a book that recently was published that is entitled *Chernobyl, 20 Years (unintelligible)*. It documents a whole host of non-cancer effects from these Chernobyl exposures, many of which were quite low doses. But he Japanese A-bomb studies did not document -- in fact, they only looked at the mortality (unintelligible) from (unintelligible) bomb blast and they were looking at cancer mortality exclusively. This book, which just came out last year, documents a whole host, a whole range of issues (unintelligible) anybody on the internet (unintelligible) by the European Committee on Radiation Risk -- a simple Google for ECRR will come to that text -- and interestingly, the IAEA, the World Health Organization, the ICRP had these Russian studies in hand but never translated them. Consequently, they have ignored many non-cancer risks. And I listened to the testimony quite carefully last night and was shocked to find that -- and some of the testimony today indicates that there are several -- and of course the last speaker alluded to other non-cancer risks.

Now this of course is something that is being overlooked, disregarded and the scientific literature has been underestimated because the scientists that are doing this work have been uniformly almost shunned in the scientific community. Give you a classic example. The BEIR VII committee, which was organized to take cognizance of the latest updated information on low dose risk. Unfortunately there were members of the (unintelligible) community that -- and I was doing freelance and still do freelance medical writing -- there were many organizations in the public interest community that nominated several members to BEIR VII. These members were independent scientists, well qualified to analyze the effects of low dose. There were about a dozen of them. None of them were appointed to the BEIR VII committee, and obviously many of the people -- and I've been doing conflict of interest studies -- many of them had conflicts. In fact, right on the Advisory Board that I'm addressing right now there are three members that I can recognize quickly who are in the Health Physics Society, two with official positions. Health Physics

Society has a position statement, and I quote, Below five to ten rem, and which includes occupational and environmental exposures, risk of health effects are either too small to be (unintelligible) or are non-existent. This is a (unintelligible) unscientific and completely unethical statement.

The -- there was a paper put out by (unintelligible) National Academy of Sciences, November 25th, 2003, and the -- there are 15 cancer experts on this study. Cancer is attributable to low doses of ionizing radiation, assessing what we really know. You'll recognize those in the field. Their names (unintelligible) Richard (unintelligible) Goodhead, Charles Land of the NCI, John (unintelligible) of Harvard, Dale (unintelligible), President, Elaine (unintelligible), National Cancer (unintelligible), Jonathan (unintelligible), Richard (unintelligible) and this study that they did indicated that there is good evidence existing in epidemiological data that suggests ten to 50 millisievert exposure an acute dose and 50 to 100 millisievert for a protracted

exposure, but the scientists will not accept -- and this of course refers directly to the exposures at our weapons labs -- that protracted exposure of small doses of any radioactive elements over time have a greater effect than the same acute dose that is given -- one exposure. Now you will find that most of the so-called experts in the field reject this theory completely, and yet there's sufficient evidence to show otherwise.

So there are numerous studies in the low dose field to absolutely question the recommendations that ICRP has put out, primarily because it's based upon the A-bomb study, as much of the literature is. Consequently, what they're not looking at is internal emitters, the alpha emitters. Certainly the A-bomb study did not, and all of the subsequent studies of course do not take recognition of these internal emitters, which are at least 20 times more serious than external emitters, and this has been documented again in the literature.

I've been studying radiation health effects for 35 years. I'm a retired consumer economics

teacher. (Unintelligible) testimony as vice president of consumer (unintelligible) Michigan in the 1970s, became an early opponent of nuclear power because of what I was reading about radiation and health effects. What nobody has alluded to is the fact that when these weapon labs were first organized, the Atomic Energy Commission and all of the other governmental agencies were given the power to put a (unintelligible) label on all radiation research, and that meant restricted data and it was only available to a few limited persons. That of course took place all through the Cold War. The (unintelligible) atomic audit by Brookings Institution documented how the United States (unintelligible) $5.8 billion on these atomic weapons development, and it is a wealth of information that is contained in that book certainly attest to the fact that the secrecy that took place (unintelligible) us a tremendous amount of (unintelligible) and a lack of information in dissemination of information, at least up until 1982 -- 1992 when President Clinton of course put out the order -- Executive Order to declassify many of

these studies (unintelligible) --

DR. ZIEMER: Mr. Earley, we'd ask you to --

MR. EARLEY: -- (unintelligible) --

DR. ZIEMER: Mr. Earley, I'm going to ask you to try to wrap up. You're at your ten-minute limit, so if you could wrap up quickly, thank you.

MR. EARLEY: All right. I would certainly conclude by stating that the dose reconstruction program, which not only affects these workers in our labs but also applies to the atomic veterans, some 400,000 or more atomic veterans who were at -- in Japan and in the Pacific Theater during the atmospheric tests. This process of utilizing dose reconstruction is unscientific, has no basis in fact. Indeed, much of that information in many of the early years was either destroyed, was never taken accurately and for anyone to think that this is an accurate measure is completely preposterous, as has been alluded to by many of the speakers. I would say that the speakers I heard last night, all of them, certainly deserve a honorary degree because they could run circles around many of the experts, many of

whom I've interviewed as I was doing medical writing, so I commend those persons who have taken a stand and come out with their testimony and I hope that it will bear upon decisions that are made, not only by the advisory committee but by the agencies themselves that will of course make the final determination. So again, thanks again for the tremendous work that you people have done, who are the workers at the labs, and I certainly appreciate and am looking forward to working with you because we'll be developing some of the issues in the future and our (unintelligible) oversight for will certainly take cognizance of your testimony. Thank you for your work.

DR. ZIEMER: Thank you very much, Mr. Earley. Let me open the floor, if there's any others that didn't sign up but do wish to make a comment tonight, we've completed the list here. Are there any others who wish to make comment? Yes, and give us your name for the record here.

MS. BAYES: Certainly. My name is LeeAnn Bayes. My [Identifying Information Redacted] was [Name Redacted], who was the [Identifying Information Redacted] at Rocky Flats for a

number of years. He worked at Rocky Flats from 1971 until September 12th of 1988. That was the morning he died.

I consider my [Identifying Information Redacted] very fortunate because he had the opportunity to have excellent medical care for the duration of his illness. And I think it is reprehensible that our government has denied that same coverage to these people who have given so much to grant us our civil liberties and to guarantee us our Constitutional rights.

I know nothing about dosimetry. I know my [Identifying Information Redacted] didn't get to see me graduate from high school, college, graduate school, get married or have children. And I don't think that it's fair that you should deny these people the opportunity to have every chance at surviving their illnesses or bearing through them with some degree of comfort and especially dignity.

I don't have a scientific background, but I do know what it's like to be an orphan of the Cold War. And that needs to be taken into consideration. Thank you.

DR. ZIEMER: Thank you very much. Well, let me

thank all of you again for coming out this evening. Been a long day for many. We -- the Board will reconvene tomorrow morning. We will be taking up the SEC petition from Dow Chemical and the SEC Petition from Chapman Valve. So some interesting additional activities. You're all welcome to join us at that time. We begin tomorrow at basically 8:15. The agenda says 8:00 to 8:15 is the, quote, welcome. That means a chance to get here and have a cup of coffee and say hello, and then we'll get underway at 8:15.

We will be meeting in a different room tomorrow. I understand it's the Sherman Room?

DR. ROESSLER: (Off microphone) (Unintelligible)

DR. ZIEMER: Savannah Room.

DR. WADE: No, Stanley -- Stanley --

DR. ZIEMER: Close enough for an old guy -- begins with an S. Let me get it straight, Stanley 1, somewhere down the hall, I understand. We'll try to find each other. Thank you. Good night.

(Whereupon, the meeting was concluded at 8:35 p.m.)

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 days of May 2 and 3, 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 5th day of June, 2007.

_____

STEVEN RAY GREEN, CCR

CERTIFIED MERIT COURT REPORTER

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