National Institute for Occupational Safety and Health (NIOSH)

Worker Outreach Meeting for Sandia National Laboratories

Meeting Date: Wednesday, September 26, 2007, 9:00 a.m.

Meeting with: New Mexico Building and Construction Trades Council, AFL-CIO, Albuquerque, New Mexico

NIOSH Team:

Sam Glover, PhD, National Institute for Occupational Safety and Health (NIOSH) Office of Compensation Analysis and Support (OCAS), Health Physicist

Steven Reed, Oak Ridge Associated Universities (ORAU) Team, Dade Moeller, Inc., Health Physicist and Dose Reconstructor

Mark Lewis, Advanced Technologies and Laboratories (ATL) International, Inc., Senior Outreach Specialist

Mary Elliott, ATL, Technical Writer/Editor

Wilfrid "Buck" Cameron, ATL and Center to Protect Workers' Rights (CPWR), Senior Outreach Specialist

Proceedings:

Buck Cameron opened the meeting with the New Mexico Building and Construction Trades Council (BCTC or the Council) at approximately 9:00 a.m. He stated that the NIOSH Team would discuss the site profile for Sandia National Laboratories as well as address any concerns that the BCTC may have about Sandia or Los Alamos National Laboratory (LANL).

Mr. Cameron asked the NIOSH Team and the Council members to introduce themselves. Also present at the invitation of the Council was Loretta Valerio, recently appointed by New Mexico Governor Bill Richardson to serve as Director of the newly established New Mexico Office of Nuclear Worker Advocacy.

Before turning the meeting over to Steve Reed, Mr. Cameron encouraged the Council members to feel free to comment and ask questions during the presentation.

Mr. Reed stated that he is a dose reconstructor for the ORAU Team. He explained that site profiles and other documents are used in the dose reconstruction process for Part B claims under the Energy Employees Occupational Illness Compensation Program Act (EEOICPA or the Act). These documents give the dose reconstructors specific information about sites where the energy employee worked.

Mr. Reed stated that the purpose of the meeting was to discuss the Sandia site profile and the impact of worker input on its development. The ORAU Team reviewed and incorporated a vast amount of information from the Sandia site while developing the site profile. The site profile team is still seeking additional information about the site including a large file containing internal dosimetry data from 1951-1986. The Internal Dosimetry section of the site profile will be revised when NIOSH receives that information.

Sam Glover stated that the NIOSH/ORAU Team had met with the New Mexico Building and Construction Trades Council in 2005 to discuss how the site profiles are developed. The site

profile team for Sandia was just beginning to gather data at that time. Dr. Glover stated that the recently completed Sandia site profile is now posted on the NIOSH Web site.

Mr. Reed explained that the site profile has six sections that contain information on workplace facilities, activities, processes, technology, and events that took place at Sandia National Laboratories from its inception in the 1940s through the present.

Worker input is important during the development of the site profile because workers can provide detailed information from their employment that may not be available in the records that NIOSH receives from the U.S. Department of Energy (DOE) or its contractors. Worker input may also be useful to verify information that an EEOICPA claimant gives during the CATI (computer assisted telephone interview) that is done at the beginning of the dose reconstruction process. The dose reconstructor may also use the site profile to look for information that can fill in gaps in the claimant's personal information based on the types and dates of work that the employee performed in various work areas.

Dr. Glover said that the Sandia site profile is a "living document," which means that it will be revised as necessary when additional information becomes available that can be used in the dose reconstruction process. When the site profile is revised, it may be necessary to re-evaluate a worker's dose reconstruction to determine if the new information causes an increase in the dose that the employee may have received. Another reason that a dose reconstruction may be re-worked could be that the U.S. Department of Labor (DOL) returns the case to NIOSH because a claimant provided additional information or reports an additional cancer.

Mr. Reed stated that in addition to the worker's personal information from the CATI interview, several other sources of information are considered during the worker's dose reconstruction. These include the worker's film badge readings, medical X-rays, urine bioassay analyses, whole body counts, incident reports, coworker data, and environmental exposure records from the site. Site profiles describe the site, work activities and processes, sources of radiation, potential exposure scenarios, and other important details that help the dose reconstructor determine a worker's occupational radiation exposure.

Mr. Reed explained that the Sandia site differs from other sites because there was not a lot of radioactive material present during the early years of operation. As the site became more established as a national laboratory, more contracts were awarded that involved radioactive materials. There is not a lot of information from the early years regarding radiation exposures.

Mr. Cameron asked what period was considered to be the "early years." Mr. Reed replied that the "early years" were the 1940s and 1950s. Based on the information that the ORAU Team has gathered to date, the site saw an increase in the amount of radiological work in the late 1950s. Mr. Reed stated that if anyone knew of radiological operations prior to that time, the Team would like to know about it.

Mr. Reed continued the presentation. The Sandia Site Profile has six sections: the Introduction, the Site Description, the Medical Dose, the Environmental Dose, Internal Dosimetry, and External Dosimetry.

The Introduction is a brief general description of the purpose of the Sandia site profile.

The Site Description identifies key facilities at the site, including the dates and types of operations, radionuclides used in the different radiological areas and their quantities, the types and energies of various machines that produced radiation, and descriptions of the reactor facilities. This section provides the dose reconstructor with a chronology of the significant

programs and events at the site as well as any major incidents at the site. The health protection practices are described in detail, including the badging program, area radiation monitoring, and access control to the radiological areas.

The Medical Dose section provides the dose reconstructor with the amount of dose to assign for X-rays that were required by the worker's job. Records of these X-rays are provided in the employee's DOE records. This section discusses the frequency of X-rays during various time periods and gives default frequencies to use when an individual's records are not considered adequate.

The Environmental Dose section describes a worker's environmental exposures from sources on site. This section is primarily used in the dose reconstructions of unmonitored workers. It includes annual intakes of radionuclides from inhalation and inadvertent ingestion from 1948 to 2004, as well as the radiation dose from ambient external exposures for the same period. Information for 2005 doses will be incorporated into this section when the 2005 Annual Site Environmental Reports are available to the ORAU Team.

The Internal Dosimetry section provides information to the dose reconstructors for calculating internal doses based on a worker's bioassay results. When the missing file that contains the bioassay data from 1951 to 1986 is retrieved, the information will be added to this section. Since the site profile was completed in June, there is now enough information for 96 Sandia claims to be released for processing. These claims were on hold because the Internal Dosimetry Section was not yet complete and there was not enough information to perform those dose reconstructions.

Business Representative of the New Mexico BCTC:
How long have you been waiting for the information and what was the hold up?

Dr. Glover:
The primary reason for the hold up was that NIOSH was developing coworker studies to use when there is not appropriate monitoring information available. The coworker studies were developed because as the Sandia site profile was being developed, NIOSH realized that the Sandia site had not provided enough information to process some of the claims. Coworker studies help dose reconstructors determine the radiation exposure levels of workers who may not have been appropriately monitored. NIOSH evaluates these claims on a case-by-case basis using the co-worker studies to fill in the gaps using the data from either the 50^{th} percentile (lower exposure) or the 95^{th} percentile (highest exposure), looking at the highest exposure the unmonitored worker could possibly have received. An example could be a group of individuals from the construction trades that may have worked in "hot" areas but did not have any bioassay testing to document their exposure: NIOSH would assume that these workers had the highest documented radiation exposure for that area to determine whether the claim is compensable. A special technical basis document, Parameters to Consider When Processing Claims for Construction Workers (OTIB-0052), is used for guidance for construction worker claims and gives a correction factor of 1.4 that yields a radiation exposure for these workers that is 40 percent above that of the highest exposed worker at the facility.

Business Representative of the New Mexico BCTC:
You requested the information from the site but it was not provided.

Dr. Glover:
One of the issues was that the data are on archaic media – Bernoulli drives. NIOSH is still waiting for them to provide that data in a usable form.

Business Representative of the New Mexico BCTC:
When was this program signed and started – seven, eight, nine years ago?

Representative of Sheet Metal Workers Local 49:
President Clinton signed the Act in 2000.

Dr. Glover:
The implementation of the program took a year or two. NIOSH received an order to being work in 2002, but did not have enough data to begin dose reconstructions until 2003.

Business Representative of the New Mexico BCTC:
When did the DOL Resource Center in Española open?

Response from Ms. Loretta Valerio, Director of the New Mexico Office of Nuclear Workers' Advocacy:
It opened in July 2001.

Business Representative of the New Mexico BCTC:
I am looking at the statistics in your handout. There are not a lot of cases for the Sandia site. I have never worked at Sandia, but I represent workers that are there now. I worked at Los Alamos National Laboratory (LANL) for a long time.

I went to town hall meetings when the program began. The stories that I heard from the people who worked at Sandia were just amazing. It seems like they are the forgotten stepchildren. There is nothing going on with that. It doesn't make sense that they have not been paid. Whoever is dragging their feet have let this go on for six or seven years. These are the same illnesses that are affecting the same people who did the same type of work – not just construction workers, but lab workers, technicians, and whoever was exposed. Sandia workers are not seeing the same rate of compensation that even Los Alamos is. At the beginning of this, I spoke with Congressman Udall – and I think that [name redacted] was there – when we went to that first town hall meeting in Española. Congressman Udall and Senator Bingaman helped to sponsor this law and pushed to get it passed, but yet New Mexico is one of the least compensated states in the whole program. It doesn't make any sense. I asked them how they could sponsor this without realizing that the compensation rate for their state is one of the lowest. I think that will change a little bit since the Los Alamos Special Exposure Cohort (SEC) class was added, but it is disturbing to see that so few of the Sandia claims have been compensated so far for whatever reason. This is taking so long. These people are becoming ill or dying daily. In my opinion, it is just not moving forward.

Dr. Glover:
These numbers only represent the cases that have come to NIOSH for dose reconstruction under EEOICPA Part B. There are other cases that do not come to NIOSH from DOL such as the Part E cases for illnesses caused by toxic chemical exposure. These numbers are the NIOSH Part B statistics as of September 11, 2007. Of the 244 cases that NIOSH has received to date, 16 cases are compensable, 73 are non-compensable, and 139 cases are being worked.

Representative of Sheet Metal Workers Local 49:
Are these cases non-compensable based on the dose reconstructions?

Dr. Glover:
Yes, based on the dose reconstructions.

Representative of Sheet Metal Workers Local 49:
How many of those 73 cases are also Part E?

Dr. Glover:
I do not know, but I believe that anyone who is considered for Part B is also considered for Part E.

Mr. Cameron:
Is everyone here aware of the difference between Part B and Part E? You might want to briefly cover that, Sam.

Dr. Glover:
Part B compensates cancers that may be caused by the employee's occupational radiation exposure. A claim is submitted for evaluation by DOL. If radiological evaluation is required, DOL forwards the claim to NIOSH for dose reconstruction.

Part E cases are for cancers or other illnesses that may be caused by the employee's occupational exposure to toxic chemicals – such as beryllium and that type of work. These cases used to be sent to DOE. Now these cases are handled solely by DOL. NIOSH does not have anything to do with these cases.

Representative of Sheet Metal Workers Local 49:
I am upset that there are a lot of chemicals out there that might increase susceptibility to the cancer from the radiation. Yet the program is still divided.

Dr. Glover:
You're talking about the synergistic effect. I do not know how they administer it. In the outreach meetings they talked about that possibility, but I do not know how they would evaluate it independently.

Mr. Cameron:
Are there specific chemicals that you are talking about?

Representative of Sheet Metal Workers Local 49:
I am speaking in general. I would have to go through a lot of the documentation for specific chemicals. I am not a physician or anything like that. When they started this program, it should have been started with the chemicals as well. They are doing site profiles for radiation, but workers were exposed to chemicals at every one of these sites as well. That would have made them even more susceptible to developing cancer in many of these cases. But still, it is administered as two separate programs. The technical basis documents should have included chemicals from day one.

Ms. Valerio:
I have worked with the Program since the day the Resource Center opened. One of the main concerns that I have heard is that Sandia National Laboratories did not keep accurate records on contractors and subcontractors. So, especially in cases where the claim is filed by a surviving spouse or child, it is very difficult to verify employment there. How much validity do the affidavits have for putting in writing that person on the site at Sandia – if the claimant can even find someone who worked with the energy worker on site? My other concern is that some of those buildings no longer exist – both at Sandia and Los Alamos. How can you accurately perform a dose reconstruction if the facility is no longer there? I understand that you can go back and use the coworker data, but it doesn't seem that the information that the facility has provided is enough to help these people go through the dose reconstruction process. It is very tedious, very cumbersome, very confusing for the elderly employees – for the retirees. They can't remember that far back. So what can NIOSH do, what can DOL do, what can the unions

do, what can my office do, what can the Resource Center do to help them through the dose reconstruction process?

Mr. Cameron:
Let me follow up to that question, Ms. Valerio. My assumption is that, within your crafts, workers could be dispatched to Los Alamos and Sandia from the same local. Those individuals probably remember where they went, but would the surviving family of a deceased worker be aware that the worker went to Sandia or to Los Alamos during that time or would they just be aware that their loved one went out to work at the nuclear place?

Business Representative of the New Mexico BCTC:
I would think that if the deceased worker was there for some time, the family members would know. But many of our workers will have 10 or 15 different employers, or more, all over the United States, so their families may have no idea. We have several who work at Los Alamos and have been there 15, 20, or 30 years, and I'm sure it is the same at Sandia. They have worked there several years, but those workers are in the minority. I would say that the majority of family members wouldn't have any idea. They wouldn't know if they went to work for this contractor or that. For the most part, if they worked for another contractor, they bounce all over the state. They may have a project at Sandia for 3 months or 6 months, but then they are out of there to some place else.

Mr. Cameron:
So a contractor that was doing work at Los Alamos might also be doing work at Sandia and doing work in town?

Business Representative of the New Mexico BCTC:
Yes, unless the contractor happened to be Zia or KSL (the current contractor) or whoever was the support contractor at Los Alamos, you got bounced from one site to the other. Unless he landed with the Metal Trades Council at Sandia, a worker might have been assigned to a construction project that may last from three months to two years depending on the size of it, and even possibly sent to work someplace else in between that. Some of my members didn't report to a contractor office on site, so they don't show up as a contractor at Sandia because their office is somewhere off site. It doesn't show that they worked there officially because they didn't have a Sandia site office. They worked out of their offices in Albuquerque or Los Lunas or (inaudible).

Representative of Sheet Metal Workers Local 49:
To back that up just a bit, whether you were working for KSL, Zia, or Pan Am – if you are in the construction trades, you show up and you get an assignment. You may get sent to S Site one day and TA 55 the next. There are no records for where those guys worked. As far as the coworker studies go, I do not understand how coworker data could apply to building trades at all. I can understand for a lab worker or someone that is reporting to a specific site doing the same job every day. But within the building and construction trades, our job changes day-to-day. Our job progresses or we do demolition. [Name redacted] is an Ironworker. We might all be working in the same building, but we are not doing the same job at all. I might be working under a glovebox and he might be installing hangers. I just don't understand how the coworker studies could work.

Mr. Reed:
Coworker studies use all the information that is available. The information is compiled into a set of data. There are three different levels in the distribution of the data that represent a worker's probable exposure. The 50th percentile is for the non-radiation workers or those who don't work

all the time with radioactive materials. The 95th percentile is for radiation workers who are exposed regularly to high levels of radiation. NIOSH also uses the 99th percentile of the distribution for workers who may have received extremely high exposures.

Representative of Sheet Metal Workers Local 49:
I understand what you are saying, but as a construction worker I am never going to be classified like that. For example, I may work at TA-21, the DP site at Los Alamos, or somewhere here at Sandia. I'm going to be in construction trades doing maintenance work or Davis-Bacon work. I may be around the radiation every single day in my job duties, but I am never going to be a material handler.

Mr. Reed:
You don't have to be a materials handler. We look at workers such as pipefitters or electricians that were all over the site. Their day-to-day work locations cannot be verified. We try to assign 95th percentile dose to those workers. We use the information from the CATI interview with the claimant. If they can tell us where they worked or that they worked around radioactive materials all the time, we try to assign the higher end of that. If they tell us that all they worked on was new construction, then we go the other way with it. The information from the claimant and the site is all considered when we make the decision for the dose reconstruction.

Ms. Valerio:
If it was a truck driver who transported radioactive materials from one site to another – say Los Alamos to Sandia, or Sandia to the Nevada Test Site – and they were essentially a handler because they were transporting material, but didn't physically load or unload the materials, are they still considered to be a 95th percentile worker in the dose reconstruction?

Mr. Reed:
We like to get as much information as we can during the interview. There are limits to how much radiation the truck driver would be exposed to in the cab area of the truck during transportation. We can use that information if we need to.

Ms. Valerio:
Does this apply to the very early years, the 1940s and 1950s?

Mr. Reed:
No, it doesn't always apply. The records were not very good back then.

Ms. Valerio:
Going back to the survivors: How can they possibly prove that their spouse or their parent was on site if there are no records? I see more of that from Sandia where they say that there are no records for an individual when we ask for information. We have tried union workers. We have tried coworkers. We have tried foremen. There are other avenues that we can use to verify employment, but that doesn't seem to be helping them to even get to the dose reconstruction point of the claim because they can't verify their employment. That is a big issue for Sandia

workers from the earlier years.

[Name withheld] was a truck driver for LANL in the 1950s. He went to the Nevada Test Site. He drove onto a site, picked up a badge at an exchange location, and kept on going. He didn't physically handle the material, but he had to secure it. If he had a cancer, would he fall into that 95th percentile?

Mr. Reed:
Without additional information, I cannot make a decision. Normally, truck drivers wouldn't fit into the 95th percentile group. If we looked at the data that we have for other truck drivers through the years, we would see that they normally would fall somewhere into the middle – into the 50th percentile. We cannot make that kind of decision without seeing the whole package. We don't know what kind of materials were in the shipments. Many truck drivers loaded the trucks and unloaded them as well.

Ms. Valerio:
If it was a classified transport, where would those records come from? If it was someone at Sandia who was traveling to the Nevada Test Site for a short time for a specific project, Sandia has no specific documentation that they were a Sandia employee. If the survivors know that worker was on site, how do they convince NIOSH that the worker was potentially exposed to radioactive sources?

Dr. Glover:
I would like to clarify that DOL verifies the employment, not NIOSH. When NIOSH gets the case, the employment is already verified by DOL. The decision is made outside the auspices of NIOSH. When NIOSH gets a case, DOL has already assigned a claim number.

Mr. Reed:
When we do our dose reconstruction, we are already looking at the files that DOL has given us. If we notice that DOL has missed an employment period, we will put the case on hold and ask for additional information or ask to have the employment reviewed. We do not discount a workers employment, we ask for more information.

Ms. Valerio:
I have seen that – where more information has been requested because DOL hasn't sent all the employment information. But if Sandia has no records, how do survivors prove that the worker was at the site? If that was the only DOE facility where the individual worked – and I understand that it is up to DOL to verify the employment – if DOL verifies six months and the survivor says during the NIOSH interview that the worker was at the site for 18 months at this building and that building but there are no records, is there any way for NIOSH to verify the information if that building no longer exists?

Mr. Reed:
DOL has strict rules for employment verification, but they can look at names of coworkers that the survivors have given in the interview and try to locate that person. It is unfortunate that survivors sometimes do not know the names and locations of coworkers. NIOSH can only work with the information that DOL provides.

Dr. Glover:
NIOSH recognizes that survivors cannot provide the same level of information that an employee can. Claimant-favorable assumptions must be made that put the deceased worker in the building with the radiological facilities when there is doubt. For example, many of the Bethlehem Steel workers from the 1950s are no longer alive, so the model for the highest radiological exposure

must be used in their dose reconstructions. NIOSH can never assume that a worker was not there. Survivors do not always have all the necessary information.

Mr. Cameron:
Has there been any luck with using security records to establish employment?

Ms. Valerio:
Yes. Medical records have been very beneficial. If they find additional employment evidence or medical records from the facility and those records are provided to DOL, is that information forwarded to NIOSH to be considered in the dose reconstruction? Is it more beneficial for the claimant to submit that information directly to NIOSH if they are already going through the dose reconstruction process?

Dr. Glover:
If the case has been assigned a claim number and is undergoing dose reconstruction, employment has already been verified. I believe that all information is still collected by DOL. I do not work in that area, but I think that DOL is the repository for the records.

Ms. Valerio:
If I was in the dose reconstruction process and I got my exposure records from the facility and found information in my medical records that I think is relevant to my dose reconstruction, would it beneficial to send those records directly to NIOSH?

Mr. Reed:
The information has to go to DOL. In the files that I look at when I start a dose reconstruction, there is one called "DOL Initial File" that contains all of the information from the claimant. I have seen handwritten personal letters outlining everything the person did, at what time and in what buildings. All of the medical records are in those files. Anything that DOL receives that is pertinent to the case when it comes to us is in that file. It can be revised as any additional information comes to DOL. If the claimant does not agree with the dose reconstruction, they are not required to sign the letter. The claimant can ask that the additional information be used in the dose reconstruction and the case is pended. The file is sent back to DOL until the information can be included and sent back to NIOSH.

Dr. Glover:
It is better if the information is given before the dose reconstruction begins so that it can be completed in a timely manner. DOL is the claimant's contact for the collection of information. That is not part of what we do.

Mr. Cameron to the representatives of the New Mexico BCTC affiliates:
This is to follow up with Ms. Valerio's question. Is there a possibility that NIOSH may need a more correct understanding of the Teamsters' description of what is expected from a truck driver? Is that something that needs to be remedied?

Representative of Sheet Metal Workers Local 49:
That is a difficult question to answer because each DOE site has been operated differently, whether by the Metal Trades or the Building and Construction Trades. In the case of LANL, almost all the work has been done by the Building Trades. In other places such as Pantex or Paducah, the work may be done by PACE or the Steelworkers or the Metal Trades and the job classifications may differ from the Building and Constructions Trades. At LANL, sheet metal workers changed out the "hot" HEPA filters throughout the laboratory. The pipefitters would have worked on them from the wet side of the filters. At Mound or Paducah, this work may have done by someone with an entirely different job classification.

Mr. Cameron:
So the job descriptions can be site specific and trade specific. I was particularly thinking about sheet metal workers. I hadn't thought about pipefitters in the containment operations or in the gloveboxes. A process worker using a glovebox to work with radioactive material may be characterized as a worker having low exposure because the material is contained. But the Building Trades worker that comes along to take the glovebox apart to change the filter gets an entirely different exposure than the process worker who is not a coworker in that sense at all.

Representative of Sheet Metal Workers Local 49:
That has been one of my biggest complaints about coworker data. [Name redacted] and I worked up at LANL for a long time. There is no way that data from my dose reconstruction would work for him, and vice versa. The classifications on the crafts are site-by-site.

Question from Mr. Cameron to Dr. Glover:
Do you feel that the information that you have for the particular trades is sufficient? If not, how do we remedy that so that the building and construction trades feel confident that the information that you are using for dose reconstruction properly reflects the jobs they are doing at these sites?

Dr. Glover:
There is a series of things. If there are bioassay records, NIOSH is going to look first for the internal dose. The issues are site specific and NIOSH addresses them on a site specific basis. NIOSH is in the process of putting the coworker data together for Sandia. When that document is completed, NIOSH can say this is reflective or not reflective of what we should be talking about here. If there are no bioassay records for the trades workers, NIOSH can ask if that covers it. I think that will be a fair question when that document is done – or as we produce that and are looking at the data – the real question about coworker data is: Did we monitor the highest exposed group? If we did, it is valid analysis. If we did not, then we are wrong.

Representative of Sheet Metal Workers Local 49:
My question is: How do you make that determination? A glovebox is an environmental chamber. The technician that is working in that glovebox handling the radioactive material might be the highest end. But how do you determine, once we break open that glovebox if that's a window change, glove change, filter change; or whether it is on the wet or dry side, or brackets that an ironworker would install. You are talking about a short-term period of high exposure. How do you determine that it is the highest exposure for that person?

Dr. Glover:
You are familiar with the way things are done from your service on the Board (Advisory Board on Radiation and Worker Health, or ABRWH). When NIOSH assigns dose, we are basically giving a constant chronic intake. These doses are typically at the high end. Usually, there will be other performance indicators – nasal wipes, for example. It all depends on how things were done at the site. NIOSH recognized that Sandia didn't have a big bioassay program. It is one of the issues that affected the amount of time it has taken to put the Sandia site profile together. The LANL site profile also took a long time because it is a very complex site. There are many different exposure types, a lot of short-term jobs. It has been difficult to get access to Sandia's records. I understand what you are saying: "How do you know if they monitored the highest exposed workers?" We have to be certain those workers are covered in the document. Was the guy who was working on the plutonium glovebox lines in the 1950s at LANL the highest exposed worker? Is there anyone who would have gotten a higher exposure than the worker who handled unprotected plutonium as they oxidized it out of the furnace in the CMR Facility? Probably not: that is about as bad as it's going to get. That worker probably represents the 95th

percentile. He is directly handling that material. If he is part of the coworker study, it is probable that the workers with the highest exposures are included.

Mr. Cameron:
Let's go back to that glovebox example. Do you feel that trades people might be the highest exposed?

Dr. Glover:
That is addressed in TIB-0052 (Parameters to Consider When Processing Claims for Construction Workers). If they don't agree with TIB-0052, which is what the point of this should be.

Mr. Cameron:
Maybe we should talk about TIB-0052 now.

Dr. Glover:
NIOSH worked with the Center to Protect Workers' Rights and the unions to determine the best method to evaluate the trades for dose reconstruction. We developed an exposure scenario that, basically, uses the exposure of the highest exposed monitored worker at the site and then multiplies it by a factor of 1.4 to account for the additional uncertainties – essentially making the trades worker the highest exposed worker at the facility.

Mr. Reed:
But that does not apply to the internal exposure.

Dr. Glover:
The factor is for the external dose, but we do use the 95th percentile internal dose. It depends on the classification of the worker. It allows the dose reconstructor some flexibility. If you disagree with the document, NIOSH welcomes your comments on our written policy for dose reconstruction for construction workers.

Representative of Sheet Metal Workers Local 49:
Where can I find that document?

Dr. Glover:
It is a technical information bulletin (TIB). It is on the NIOSH Web site.

Mr. Cameron to the representatives of the New Mexico BCTC affiliates:
On the right side of the OCAS home page, there is a list of the resources available. There is a link for technical documents. NIOSH and CPWR spent a lot of time in meetings that specifically addressed that correction factor. I think we are still arguing about the correct value of that factor. I feel comfortable with the correction factor for most construction workers because the method does take a peer group and multiply the exposure by 1.4. I still have concern about the term "most exposed worker." You are orders of magnitude different than people with whom you are being compared. I would appreciate it if you would take the time to look at that document and let NIOSH know – and let me know as well – if you are comfortable with that document and that ratio being representative.

Dr. Glover:
If you can't find it let us know and we can get hard copies to you. We do want to make the information available.

Representative of Sheet Metal Workers Local 49:
The Web site is actually pretty user friendly.

Mr. Reed:
I would like to add one more thing about why it has taken so long to do a lot of these cases. In the initial part of the dose reconstruction, we use efficiency methods. We use the highest doses that we can possibly assign initially for those types of workers to see how it comes out. If we assign the highest doses that we can to a particular claim and the result is still less than 50%, then we are comfortable that it is the final outcome of that case and we will complete the dose reconstruction at that point. If we feel that we need to refine the data, then we go to these other avenues. If there are gaps in the data, like the employment history, then we use the coworker studies if they are available.

Ms. Valerio:
What about the crafts? I am not excluding the other crafts, but I am thinking more of the laborers – the custodians. What about the laborer who is working at the old DP at Los Alamos, involved in the D&D work there for a week, then working the next week at the firing sites working in the manhole where there is legacy contamination, and then the next week working at TA-54 in Area G? The next week the worker could be at the Mesa. When you are doing the dose reconstructions for these workers that go to all these different areas, do you use coworker data for each technical area since there are different exposures and different radioactive sources in each area?

Mr. Reed:
The external dose data in the coworker studies is put into a distribution that plots it on a curve. It includes all workers from all areas. The worker you are talking about probably fits in that 50th percentile category since he goes to all those areas. He is probably not a 95th percentile worker, although if we can show that if he worked in one of those areas on the higher end, we will give him the 95th percentile for the entire employment period if we can. That is the efficiency method that I was talking about earlier. When we look at the internal dose, we really have to refine the intakes that we assign to an individual based on the areas where he worked. That is when it becomes more difficult. The Internal Dosimetry section of the site profile is one area in which we are still lacking information. As we get that information, it will be revised. We are able to complete some dose reconstructions for some individuals with the site profile in its current form. We may not be able to complete dose reconstruction for some of those high-end radiation workers like the radioactive materials handlers until we get more information. We will wait for that information so we can do more accurate dose reconstructions.

Mr. Cameron:
What is the time frame for waiting for this information?

Mr. Reed:
The site profile team thought that the document was in their possession when they retrieved data from the site. When they began working on the document, they realized that the file did not transfer over. They made another request to Sandia for the information and still have not received it. The request is still in process so I cannot give you a time frame for getting it incorporated into the site profile at this point.

Mr. Cameron:
Are we talking about months or years?

Dr. Glover:
I would say that it is a matter of months. We have to get the document. It has already been identified. Apparently it was too big, or it did not transfer to the disk. They are remedying that. They will have to put the data into a coworker analysis in a separate TIB that will supplement the

site profile. The dose reconstructors will apply that to sections in the site profile that are lacking the information they need to complete the more difficult dose reconstructions. The dose reconstructors use other documents like TIB-0052 when they see that they need to take a different approach for other types of workers.

Mr. Reed:
If you have specific information that we can use, we would like to have it. For example, your work in the glove boxes: How long did it take you to do the job? Did you wear respirators? Did you wear two pairs of coveralls? That type of information is useful for dose reconstruction and coworker studies.

Ms. Valerio:
Have you seen very many claims where the individual received a substantial intake and had to go through chelation therapy? How does that affect the dose reconstruction?

Dr. Glover:
There have been a few such cases from Los Alamos. The dose reconstruction can be done in a couple of different ways. The dose reconstructor can do an overestimate that does not take the chelation into account and come up with a dose estimate. If it did not make the claim compensable, we have overestimated the dose. The dose reconstructor can also make a best estimate that evaluates how the chelation affected the urinalysis and determine an intake that can be evaluated.

Mr. Reed:
Those are not normal situations. Those are situations where the dose reconstructor may ask for additional help from a site expert or a company expert to evaluate that case on an individual basis.
Mr. Reed continued: Sandia contracted for a time with contractors (CEP and IntraTech) to perform bioassay analyses at the site. NIOSH has determined that the information from these two companies is not usable because it is "questionable data." Many Sandia employees were sent to LANL for bioassay, especially if they were involved in an incident. Since NIOSH is not using this data, there is a big gap in the Sandia internal dosimetry records.

Representative of Sheet Metal Workers Local 49:
Why can't the data be used?

Dr. Glover:
The companies used a random number generator to come up with a "0" reading. They did not actually perform the bioassays. They were found guilty of fraud.

Representative of Sheet Metal Workers Local 49:
Are the employees who are affected by the fraudulent data automatically eligible for an SEC class?

Dr. Glover:
NIOSH is not using that data. If a plutonium bioassay is done five years later, it can still be used to get a dose estimate. NIOSH is still determining how best to handle it.

Representative of Sheet Metal Workers Local 49:
Doesn't the statute say that if there is documentation that is fraudulent, they can be classified as an SEC class?

Dr. Glover:
The criterion is whether the dose reconstructions can be done. At present, NIOSH is not using the fraudulent data and determining how to do dose reconstructions for those workers who are

affected by the data. There are only a couple years in the early 1990s that are in question. They weren't the bioassay contractors for a long period of time.

Mr. Reed:
The affected dates are August 1992 through April 1994.

Ms. Valerio:
Why is chronic lymphocytic leukemia excluded from the radiogenic cancers?

Dr. Glover:
There is no evidence that it is radiogenic. There is a study under way to determine the certainty of that.

Representative of Sheet Metal Workers Local 49:
That is what I was saying about Parts B and E. Many of the chemicals may have made people more susceptible to cancer from the radiation, or vice versa.

Ms. Valerio:
Let's say that someone has a probability of causation (POC) that is almost 50% – say 48.85% – and is denied under Part B for the radiogenic cancer, but they are accepted under Part E for the toxic substances, which I believe includes radiation exposure. If these exposures are documented, it seems that it would not be that difficult to get that claim over the 50% threshold so that it can be compensated under both Parts B and E. That is my opinion.

Mr. Cameron:
So much of what we are talking about comes down to the people who end up around 48% POC. No details are going to take a person from 5% up to 50%, and if it is 51% POC then no one cares about the details. It comes down to the relatively small population who are so close to the line. The building and construction trades representatives want to be sure that NIOSH has all of the relevant information that could take them from 48% to 50% if, in fact, that would be the correct evaluation.

Representative of Sheet Metal Workers Local 49:
I have always struggled with how that is determined. If NIOSH or ORAU can do a low estimate and comes up with a 51% POC, there is no reason for them to do a dose reconstruction to determine if a worker is compensable, right? If they did the high end and the worker has a 51% POC, does NIOSH or ORAU go back and try to do a best estimate?

Dr. Glover:
A claim cannot be compensated on an overestimate. To make a claim compensable, either an underestimate or a best estimate dose reconstruction must be done. If a dose is overestimated and comes up over 50%, then the dose reconstruction must be refined.

Question from the representative of Sheet Metal Workers Local 49:
I understand that. If NIOSH does an underestimate and comes up with a POC higher than 50%, there is no question that the claim will be compensated. If NIOSH does an overestimate and the POC is, say 55%, do you automatically go back to see if you need to do a best estimate? At what point do you do that?

Dr. Glover:
Typically, once the POC gets into the 48% range. NIOSH does not like to send out a POC that is 49% having done an overestimate. If the claimant provides more information, then an efficiency method no longer works. A full dose reconstruction takes more time and the new information may cause the POC to decrease significantly. Another case may be that the claim is resubmitted

due to a second cancer and the full dose reconstruction takes the overestimated initial claim below 50% POC for the sum of the two cancers. That can be difficult to explain.

Ms. Valerio:
What if the worker's cancer is an unknown primary cancer the first time they do a dose reconstruction and the POC comes back at over 50%? What happens if they go back through the medical evidence and identify the primary cancer?

Dr. Glover:
If DOL sends NIOSH a claim with an unknown primary cancer, NIOSH uses the most claimant-favorable organ to do the dose reconstruction to come up with the highest possible POC. Obviously, if the POC is over 50% we had to have done a best estimate or an underestimate. When we send it back to DOL, they may look for a way to refine the organ. NIOSH does not have that responsibility.

Ms. Valerio:
If an individual has five or six different cancers, which are basically all primary, based on exposure records, it can bring the probability causation below 50%?

Mr. Reed:
Yes, that is possible if we originally did the claim using efficiency measures and claim is reworked using the worker's exposure records after it is resubmitted with additional cancers. We have to use the actual records for the second round of dose reconstruction.

Dr. Glover:
In some cases, we have the exposure records and it is clear that it is a noncompensable cancer. Using efficiency methods, we can move through the dose reconstruction without doing a detailed analysis of the internal dosimetry using an overestimate. If NIOSH gets the claim back with a second cancer and uses the efficiency method on both cancers, then that may put the POC over 50%. Because a claim cannot be compensated using an overestimating method, the second dose reconstruction has to be refined using the worker's records. Sometimes that can significantly reduce the POC.

To get the claim processed in a timely manner, it is important for the claimant to write down all of cancers at the beginning of the claim. It may not be as much a concern now. DOL may do a better job of making sure that all of the information is there. When NIOSH first started doing dose reconstructions, we would send out the dose reconstruction report and the claimant would ask why their other cancers weren't included. The reason was that DOL had not included that information in the claim file that came to NIOSH. If all the information had been included, the claim could have been processed more quickly with a compensable decision.

Representative of Sheet Metal Workers Local 49:
Early in the program, there were issues with the claimant interview and what was coming out on the report because there was a limit to the amount of information that the interviewer could enter.

Mr. Reed:
That is not the case now.

Ms. Valerio:
Can you give me a very clear definition of "incident" in the claimant telephone interview?

Mr. Reed:
An incident is something that is unusual, not in the routine work activities of the individual. For example: a CAM alarm and a positive air sample, or a positive bioassay result based on that CAM alarm. That would be incident information that we would use in a dose reconstruction.

Dr. Glover:
There may be a string of bioassay results right in a row. At some sites, they may have done a good job getting incident information; others didn't. The claimant may say they had an incident here, but the site reported "0" dose. Instead of using that "0" dose, NIOSH uses a "missed dose" component using an estimate of the possible intake based on the threshold. The verbal confirmation of the incident from the interview helps the dose reconstructor decide how to use the information in the most claimant-favorable manner. The claimant interview helps NIOSH make sure that everything is included in the records. By statute, it is DOE's responsibility to provide the worker's records. NIOSH uses them as best we can to do the dose reconstructions. NIOSH has to recognize when records are not as good as they should be.

Representative of Sheet Metal Workers Local 49:
Are the facilities here in New Mexico providing the information in a timely manner?

Dr. Glover:
There was a miscommunication regarding what they needed to provide. They did not give us all of the information that was necessary. The sites are working now to get us the information that we need. But it is late in the game.

Ms. Valerio:
Has Sandia encountered the same issues that LANL did getting the historical records from the medical facility? I know that has been a big issue.

Dr. Glover:
That is still an issue that has not been resolved.

Ms. Valerio:
I had a call from Washington, D.C., that confirmed that the medical facility has agreed to turn over those records to the University of New Mexico to decontaminate the records. Are you encountering the same problems with getting records from the Sandia medical facility?

Dr. Glover:
The LANL issue is unique because they were owned by the Lab. NIOSH has the bioassay results and the external dosimetry data from Sandia. I don't think that we have had any problems getting the medical X-ray information from them. I don't think the same issue exists for getting the records for a Sandia employee.

Ms. Valerio:
If a Sandia employee is working in a radiological environment and has to go to the medical facility for a wound count, are those records used in the dose reconstruction?

Dr. Glover:
The wound counter was not available until very late. They had to go to LANL because Sandia did not have a whole body counter. NIOSH would have to query LANL to get the records if they were not in the claim file. NIOSH recognizes in the Sandia Site Profile that LANL did some of the bioassay and the bioassay follow up because Sandia did not have its own whole body counting facility until the 1990s.

Mr. Reed:
The dose reconstructors often have to ask for additional records for Sandia claims. Many of the workers from Sandia worked at many different sites – LANL, Lawrence Livermore, Nevada Test Site, Clarksville, and Pantex. We do not always get the worker's information from all these different sites in the initial claim. We have to ask for them and that takes additional time. The claimant-favorable thing about asking for records from these additional sites is that some of these

other sites badged everyone, while Sandia did not – for example, the truck driver that you mentioned earlier. Everyone that went onto the Nevada Test Site after 1961 received a badge, and Lawrence Livermore was very good about badging everyone that went into the facility. We get these records and they help fill in some of the gaps. We realize now that we need to ask for these records at the beginning of the claim and that has not always been the case. Sandia claims have had to be put aside when we have to wait for records.

Mr. Reed continued with the presentation: At Sandia, the workers that had the potential for exposure to radiation were monitored. There are some gaps, but NIOSH gets fairly good records as far back as the 1950s for external dose monitoring. Based on information about the Sandia site external monitoring, when there are no records for a worker who was previously badged, NIOSH assumes that the worker's job changed and no longer required monitoring.

Since Sandia is not a high dose site, a worker's dosimetry records may not always show a recorded dose. NIOSH adds the "missed dose" component for "0" badge readings to account for uncertainty. The "missed dose" is added based on the minimum detectable limit (MDL) of the badge.

As stated earlier, NIOSH is still waiting on information from the site to develop the coworker study for unmonitored workers. If a worker is classified as a radioactive material worker, NIOSH assigns the 95th percentile dose. If the worker is classified as an intermittent radioactive material worker, the 50th percentile dose is assigned. If a worker is in a nonradiological classification, such as an administrative assistant, NIOSH assigns the environmental dose based on the site monitoring table in the site profile. Because Sandia does not have high ambient environmental radiation, the highest environmental dose is 10 mrem/year.

There is not significant neutron exposure at Sandia, with the exception of the workers who handled plutonium, highly enriched uranium, or those who worked in proximity to the neutron generators. NIOSH typically assigns neutron dose only to these workers.

Representative of Sheet Metal Workers Local 49:
What was used as the time weighted average (TWA) for the external dose? Was it a 40-hour week or an 8-hour day?

Mr. Reed:
If we have the records, we use those.

Dr. Glover:
If you have a badge, that is the record of your external dose.

Representative of Sheet Metal Workers Local 49:
I have heard from a lot of our retired workers that they were working seven days a week during the height of the Cold War. They were told often to leave their dosimetry badges out of the area. How does NIOSH take that into account?

Mr. Reed:
If they were monitored workers, we have to use their monitoring data.

Representative of Sheet Metal Workers Local 49:
Do they get a missed dose because they had to leave their badges outside the area so that their external doses wouldn't be too high?

Mr. Cameron:
Does that make the data fraudulent?

Representative of Sheet Metal Workers Local 49:
During the height of the Cold War, they worked a lot of overtime. Yet a lot of the NIOSH documents, all of the TWAs seem to be based on a 40-hour work week or an 8-hour work day.

Mr. Reed:
The NIOSH documents are generally geared toward a 50-hour work week, 52 weeks per year, or 2600 hours per year. That may be a little light for some of those tech workers. But in the instance in which a worker says that he had to leave his badge out of the area, we can look at the actual recorded dose. If the recorded dose is high, maybe we can double the dose as a claimant-favorable assumption. But if the recorded dose is always "0," it is probably safe to assume that the worker's job did not involve much work in a radiation area.

Dr. Glover:
Dose reconstructions are done on a case-by-case basis. If the record shows that the worker's dose was getting near the threshold and stopped accumulating suddenly as he got near the dose limit, then NIOSH can make assumptions based on the record to explain the gaps.

Mr. Cameron:
Does a person need to specify that he was asked to leave his badge out of the area or if he feels that his data is questionable?

Mr. Reed:
We cannot continue with the dose reconstruction if there is a situation like that. The claimant has to go through DOL and the case will be pended until they get the information or investigate further. We will not continue the dose reconstruction if they cannot verify the situation.

Representative of Sheet Metal Workers Local 49:
In this type of situation during the height of the Cold War, this type of work is all that the worker knew for a long time. If he or she knew that they were getting close to their dose limit, it meant not working overtime. It meant a lot of different things. They were compelled to leave their TLDs (thermoluminescent dosimeters) behind.

Dr. Glover:
This issue came up in front of the Advisory Board for the Rocky Flats site. It has been discussed. Essentially, if the site required that the dosimetry be worn and the decision was made not to wear it, NIOSH is going to use the dosimetry record. I know that certain factors can affect that, but I don't know if that policy is down. There are site-by-site and case-by-case requirements on how to handle the situation.

Mr. Reed concluded the presentation by stating that worker input is necessary in the development of the document to make it as accurate and complete as possible. Because it is a "living document," it can be revised when new information comes to light that can be used in dose reconstructions. When the site profile is revised, claims that are complete but noncompensable are re-evaluated to determine if the changes will positively affect the compensability of the claim. Comments about the site profile can be sent directly to NIOSH. Mr. Reed also encouraged the BCTC members to review OTIB-0052 and send any comments they might have to NIOSH.

Mr. Reed stated that a good site profile ensures that a dose reconstruction is done right the first time. Dr. Glover added that it is important for a dose reconstruction to be as accurate as possible so DOL can make its decision on the correct side of compensability.

Ms. Valerio:
If a claimant does not sign the OCAS-1 form because the dose reconstruction report states that the POC does not meet the "at least as likely as not" threshold, is there a time frame before NIOSH sends the claim back to DOL with or without the signed OCAS-1?

Dr. Glover:
If the OCAS-1 form is not returned within 60 days, then NIOSH administratively closes the claim.

Representative of Sheet Metal Workers Local 49:
If new documentation is provided for a claim or the site profile is revised, does the claimant have to reapply or is that just automatically run? Does NIOSH or ORAU do it, or does it have to go through DOL?

Dr. Glover:
The same case number is still there. A case can be opened in a couple of different ways. If a claimant gives DOL new information, DOL returns the case to us. You will see those cases in our statistics. That can be for a new cancer or a variety of reasons. If a site profile is revised and the new information affects a case, NIOSH can reopen those cases and evaluate them as appropriate.

Ms. Valerio:
If a claimant disagrees with the DOL compensation decision, they have 60 days to submit additional information to DOL. If DOL determines that the new information could make the claim compensable, they return the claim to NIOSH for a rework. Is that correct?

Dr. Glover:
Yes. If you have any questions, don't hesitate to ask. Call us if you think of something to ask later. Don't hesitate to contact us. We want to make sure that we do the best job we can to help your people. Larry Elliott, the OCAS Director, says that our goal is to be on the correct side of compensability. We want to make sure that everybody who should be paid gets paid.

Mr. Cameron:
I have followed this program for a long time. I would have to agree with what Sam said. The Program is trying to do the right thing to follow the requirements of the law to be claimant-favorable. NIOSH welcomes any input that you have that will help them do that. If there is anything that I can do to help you, please do not hesitate to call me or e-mail me at any time.

Business Representative of the New Mexico BCTC:
I have one last comment. What can we do to help push so that we can help the Sandia workers get caught up – with possibly an SEC or whatever we can do to help the records that you need? The reason I ask is that I looked at the compensation figures yesterday on the Web site and the figure for Parts B and E combined for Sandia was $7,398,000. The figure for LANL was $56 million. That is a big disparity. The workforce at Sandia is not any less than the workforce at LANL.

Dr. Glover:
The disparity is going to get much larger with the LANL SEC class.

Business Representative of the New Mexico BCTC:
I have never worked at Sandia, but I am working at LANL and seeing what is going on up there. I have been going to some of the meetings with former workers from Sandia. It is a nightmare listening to what they have gone through and the fact that their compensation is not there. They are just as ill as the people who worked at Los Alamos. They are exposed to the same things, yet

the disparity between the compensation at Sandia and LANL is in the millions of dollars. And like you say, it is going to get worse with the LANL SECs. I just want to know what direction the BCTC can take to help our workforce that is being exposed at Sandia.

Dr. Glover:
If NIOSH can do dose reconstructions to evaluate the exposures, then the dose reconstruction is the appropriate framework to evaluate them. LANL was deemed an SEC because we could not reconstruct the internal dose for several claims. There are 2 different SEC periods at LANL. NIOSH has an SEC Outreach person who comes out to help people learn how to file SEC petitions. I think it would be helpful to look at what has been done at Hanford. Do situations like that exist at Sandia for which NIOSH does not think that it can do dose reconstructions? For example, if your coworker data is not the highest exposed person, then it is wrong. Whether that may be thorium measurements, or inappropriate monitoring for work at the accelerators, or lost badges, or whatever the case may be that NIOSH feels these things are specific and there is a very vague definition of why there are not any records. Instances help. NIOSH has people who can help you formulate the idea behind the petition and provide an overview of the process. Specifics help us in the process because then we have a problem that we can evaluate. Then we look at the TBD and come to the conclusion that the problem is not fixable. That is what an SEC really says – that the problem is not fixable.

Representative of Sheet Metal Workers Local 49:
There are still things wrong with the SEC that need to be fixed, too. There are guards, janitors, laborers, all the trades people who work for a contractor. To qualify for the SEC for Area G, you have to have worked there for 250 days. If I worked for a contractor, the contractor is not going to have the information that I worked for 250 days in Area G. The 250 days is in the statute and I understand why. That way a delivery person who puts Coke in a vending machine isn't part of the class. How does a person become compensable under the SEC if he or she worked for a contractor that didn't keep an accurate record of the areas where the laborer worked at that facility? NIOSH cannot determine that the laborer worked 250 days at Area G.

Dr. Glover:
NIOSH does not make the determination of who is compensable under an SEC. DOL makes the decision for employment verification. If DOL cannot put the employee at a place, then they have to make the determination whether that person can be included in the class. SECs are site specific. Some of the LANL SECs are vague. Some others are very specific, like the one for the Calutron workers at the Y-12 facility. Whether a person is compensable under an SEC depends very much on how it is written.

Mr. Cameron:
I have a question on the LANL SECs. There are two classes – 0051 and 0061. When I read them, they seem to be identical except for the 250-day requirement. Is that a typographical error, or are they two very distinct classes?

Dr. Glover:
There are two very distinct SECs. One is for the RaLa process and the other one is a much more broad scope class for 1943 to 1975. You do not have accurate information.

Representative of Sheet Metal Workers Local 49:
The point that I was getting to was that the 250-day requirement is written into the statute. NIOSH and DOL have to go by the statute.

Dr. Glover:
I believe that the issue is before the Advisory Board. Obviously, you can't change the statute but

you can make recommendations. The Board can make a recommendation to the Secretary of the Department of Health and Human Services (HHS) who in turn makes a recommendation to Congress to change the legislation. That is how the SEC class actually becomes law.

Mr. Cameron:
There are a number of Special Exposure Cohorts and usually a person might be impacted by one of them. But building trades people may have worked at Los Alamos and Oak Ridge or somewhere else that has an SEC. Would those 250 days accumulate across all of those SEC facilities where the trades person worked?

Dr. Glover:
If you read the letters, they are very specific to that point. They say, "… or in a combination of workdays established within the parameters of one or more other classes of employees established within the SEC." So it can be 250 days in combination. If they worked at Oak Ridge and met the definition of that SEC class, then worked at Mound and met the definition of that SEC class, then worked at Los Alamos and met the definition of that SEC class, and then worked at the Pacific Proving Grounds and met that SEC class, all of that time would accumulate. If it totaled 250 days, the claim would be compensated.

Representative of Sheet Metal Workers Local 49:
What happened with the SEC for the Pacific Proving Grounds? How are they compensating those people? They were sent to work there for a month or two and shipped out. How will they get the 250 days there?

Dr. Glover:
If the worker was a LANL employee that was sent to the Pacific Proving Grounds to work, he may not get the 250 days.

Mr. Cameron:
But if he also worked at another SEC facility, he could add that time to the time that he worked at the Proving Ground.

Dr. Glover:
If the worker was sent there from Sandia as part of the shot program, then there might be a problem with cumulative time unless you also worked at NTS (Nevada Test Site) and your time between NTS and the Proving Ground added up to 250 days.

Representative of Sheet Metal Workers Local 49:
The intent of the SEC is great, but how is anyone ever going to prove that they spent 180 days at Sandia and then went to NTS for 40 days. The intent is awesome. I don't have any problem with the intent.

Dr. Glover:
That depends. At NTS there is badge information from the external dosimeters. If you were onsite at a shot, we probably have a pretty good idea of how many days you were there. I don't have any of the specifics, so I really don't know.

Mr. Lewis:
I think that they discussed waiving the time requirement for Pacific Proving Ground. I don't know where it is at now.

Representative of Sheet Metal Workers Local 49:
I brought up the fact on the Pacific Proving Grounds that the worker was there all the time, 24 hours a day so that should be considered three days.

Mr. Lewis:
I don't recall exactly what the decision was, but I think that the Advisory Board decided that the time at Pacific Proving Grounds should be considered differently than the other SEC facilities. It had to do with the time.

Dr. Glover:
This discussion is in front of the Board and it certainly has come up before.

Ms. Valerio:
When the uranium mines started closing down in the early 1980s in Grants and Farmington, a lot of those individuals went to work at LANL, a DOE facility. Is the radiation exposure that they received in the mine environment included in the dose reconstruction or is it just their DOE employment?

Dr. Glover:
The miners are covered under a separate act (RECA).

Ms. Valerio:
If they don't have one of the compensable illnesses covered under Section 5 of RECA, but they came to work at a DOE facility and worked for 250 days and developed one of the 22 cancers, is their exposure to radiation in the mines factored in? It's not.

Dr. Glover:
Not to the best of my knowledge.

Ms. Valerio:
There are a lot of crafts people – operating engineers, electricians, mechanics – who worked in the mines when they shut down. They were too young to retire, so a lot of them went to work at Sandia or LANL.

Representative of Ironworkers Local 495:
There were also ironworkers, cement masons, sheet metal workers, and the laborers who worked right there at the mills right inside the yellowcake building. The laborers shoving in and out so the ironworkers could get in there and do what some of the other crafts couldn't do. I actually brought yellowcake home in my pocket from working in a yellowcake building that I was refurbishing – adding some beams. I didn't know any better. I figured the yellowcake wasn't going to hurt me. I know a lot of other guys who worked there also – laborers, electricians, pipefitters, sheet metal workers.

Dr. Glover:
There were some recent changes made regarding the mining. What I would like to do is summarize this item on a trip report to show as a trackable issue. Are there specific issues on which you would like a response from me? There are different levels of official responses. If it is a letter to my boss, there is an official response mechanism. If we get an official letter, then we are going to send an official response back to the unions. If I get an e-mail inquiry, then I am probably going to respond in kind.

Representative of Sheet Metal Workers Local 49:
On that specific question about including the mines, I would like to see an e-mail back on that. That was a really interesting question because I think that all of the building and construction trades may be in that situation.

Dr. Glover:
Buck, please make sure that we mark that for follow up so we can respond back. I think we can get a fairly quick turn around on that. It is a new change and I want to make sure that you get the

right answer.

Ms. Valerio:
I sent a letter to Larry Elliott regarding the C division. It was a quick letter that I put together after doing some research on my own. At the end of the letter, I asked for a written confirmation for those employees who may or may not be eligible under the LANL SEC.

Dr. Glover:
Did you include their names or claim names? I can look them up because I know the time frame.

Mr. Cameron:
Does anyone else have any additional questions that you would like to pose now?

Representative of Ironworkers Local 495:
I have been working on my dad's case and I gave up working on my case. I have some affidavits from some of his surviving coworkers and friends that I would like somebody to take a look at before we submit them. I just gave up on the idea, but this morning I spotted them in the trunk of my car. I would like for someone to take a look at them or just give it up. Or maybe I could get some additional information.

Dr. Glover:
I will be happy to look at them in a way that is Privacy Act protected. This is associated with your dad's claim so that is Privacy Act information. Unfortunately, I have to leave at 11:00 a.m. because I have to catch my flight. My colleague can stay for awhile or I can help you at a later date.

Mr. Cameron to Ms. Valerio:
Is that something that you can help him with?

Representative of Ironworkers Local 495:
She has helped me out a lot with it.

Dr. Glover:
Is it to get his case into the DOL system or is it to add more information? Maybe we can talk separately if you would like.

Representative of Ironworkers Local 495:
With me, these are open issues.

Mr. Cameron:
You might want to call the CPWR office and talk to Trish Quinn. I can give you her number.

Dr. Glover:
Is it associated more with getting his employment into the system as a worker or is it more associated with his dose?

Representative of Ironworkers Local 495:
(Attendee describes his father's work history to Dr. Glover. This information has been withheld in accordance with the Privacy Act.)

Mr. Reed:
Now that there are SECs at both LANL and NTS, I think you may have a better chance.

Ms. Valerio:
But that goes back to proving that he was on the site. If there are no records, how do you show that he was onsite? I have had several claimants from when I was at the Resource Center who are my clients now. They have repeatedly told me that their foremen completed the EE4 affidavit, but DOL still didn't consider it. What other options do they have? We have tried

union records. We have tried everything and we are still hitting roadblocks. What other avenues do we have to show that these workers may fall under that SEC and to prove that they worked at the site?

Dr. Glover:
Maybe you should file a FOIA request to NTS for badging information. If everyone at NTS was badged, as we say, maybe they can find a record. If the records show 250 days of badging, that should drive that point home.

Ms. Valerio:
But didn't they start badging at NTS in 1961?

Mr. Reed:
They started badging everyone in 1961. Prior to 1961, there are usually records for workers who had potential for radiation exposure. We get dosimetry records back into the mid-1950s at NTS.

Dr. Glover:
Maybe he has a "Z" number up at LANL. If so, they may be able to give him identification. I know the medical records are up at LANL. Maybe he has some medical reports and you can request them. Anyone can request their medical records from the LANL Medical Center. They may have to dig them out.

Representative of Sheet Metal Workers Local 49:
Have the records been exhumed yet?

Dr. Glover:
I don't know the final status on that. I went to look at the facility. It is pretty bad. The hospitals are only required to keep records for so long and some of them destroyed records a long time ago. What does DOL do in that situation? I can't speak to that, but I know that it makes it much harder on the claimants.

Dr. Glover thanked the Council members for meeting with the NIOSH Team again and for their input on the dose reconstruction program. The meeting adjourned at approximately 11:00 a.m.