NIOSH Dose Reconstruction Project
Rollout Meeting for
Los Alamos National Laboratory Site Profile

Meeting Date:

August 16, 2005; four separate sessions were held at 9:00 a.m., 1:00 p.m., 4:30 p.m., 6:30 p.m., in order to accommodate Guards from all shifts.

Meeting with:

International Guards Union of America Local 69, Los Alamos, New Mexico

Attendees:

The following list of attendees is compiled from the sign-in sheets of all four sessions.

Name	Organization
Abe Lujan	IGUA Local 69, Los Alamos National Laboratory (LANL)
Andrew Evaskovich	IGUA Local 69, LANL
Patrick Baldonado	IGUA Local 69, LANL
James H. Lovato	IGUA Local 69, LANL
Randy V. Lovato	IGUA Local 69, LANL
Paul Guthals	LANL Retiree
Eileen Quintana	IGUA Local 69, LANL
Anthony Atencio	IGUA Local 69, LANL
Richard Barry	IGUA Local 69, LANL
Ralph Ortiz	IGUA Local 69, LANL
Leroy Garcia	IGUA Local 69, LANL
Philippa Griego	National Nuclear Safety Administration, Los Alamos Site Office (guest at 1:00 p.m. session)
Two participants chose not to sign in.	

NIOSH and ORAU Team Representatives:

Sam Glover, PhD – National Institute for Occupational Safety and Health (NIOSH), Office of Compensation Analysis and Support (OCAS)
Jack Buddenbaum – ENSR – Site Profile Team Leader (present only at the 9:00 a.m. session)
William "Bill" Murray – Oak Ridge Associated Universities (ORAU)
Mark Lewis – Advanced Technologies and Laboratories International, Inc. (ATL)
Mary Elliott – ATL
Karen Martinez –Department of Labor, Española Energy Employees Occupational Illness Compensation Program (EEOICP) Resource Center

Proceedings

This record of proceedings is a compilation from presentations conducted during four sessions of the regular August meeting of International Guards Union of America Local 69. Comments and questions from each session are given after these Proceedings.

Mark Lewis expressed his appreciation to the union leadership of International Guards Union of America Local 69 for allowing the Worker Outreach Team join them to talk about the Energy Employees Occupational Illness Compensation Act of 2000 (EEOICPA). Since most of the information in the Site Profiles is extracted from documents provided by the Department of Energy and its contractors, the best way to fill in the gaps is to get input from workers regarding such things as past work practices, accidents, dosimetry programs, and other information relevant to the site profiles. He said that the Team was present to talk about the kinds of information that are included in the Los Alamos Site Profile and to document any suggestions, comments, issues and questions.

Mr. Lewis said that his function with the Outreach Team is to serve as a liaison between organized labor at the sites and the Oak Ridge Associated Universities (ORAU) site profile teams. He is a 30-year union member at the Portsmouth Gaseous Diffusion Plant who is currently on leave of absence from the plant. He is presently employed by Advanced Technologies and Laboratories International (ATL), an ORAU subcontractor, as part of the Worker Outreach Team.

Mr. Lewis took a moment to introduce Bill Murray, the Worker Outreach Team Leader; Jack Buddenbaum of ENSR, the Los Alamos National Laboratory (LANL) Site Profile Team Leader; Sam Glover, of the National Institute for Occupational Safety and Health Office of Compensation Analysis and Support (NIOSH/OCAS); and Mary Elliott of ATL. He said that Ms. Elliott would be taking notes and making a recording of the meeting to ensure that comments were captured accurately in the minutes, not to identify who made the comments.

Mr. Lewis requested that the union members introduce themselves. A sign-in sheet was circulated among the participants. Among the attendees was a guest who had worked at LANL for 40 years.

Mr. Lewis asked Dr. Sam Glover of OCAS to talk briefly about the program. Dr. Glover explained that claims are filed through the Department of Labor (DOL) and forwarded to NIOSH after the employment and medical criteria are verified and the claims are determined to be eligible for dose reconstruction. The process can be confusing, especially to those whose claims have taken a long time to process or have been denied. Dr. Glover stated that anyone who did not want his or her name to become part of a public government record should indicate that on the sign-in sheet.

Dr. Glover introduced Karen Martinez, the manager of the DOL Resource Center in Española, New Mexico. Representatives from the center come to the LANL Ombudsman's office once a month to assist people in filing EEOICPA claims, but can come at other times if someone needs assistance. They are also available by telephone to field questions. Ms. Martinez talked briefly about the Subtitle B and Subtitle E Claims that are handled by the DOL. Under Subtitle B of the Act, a claim for $150,000 can be filed by a worker (or the survivors of a worker) who has contracted radiation-induced cancer, beryllium disease, or silicosis. If the claim is awarded, an applicant's medical expenses are also covered from the day the claim is filed. Subtitle E claims are for exposure to toxic chemicals, and range from $2,500 to $250,000.

To date, $8.4 million in compensation benefits has been awarded to claimants from LANL for both Subtitle B and E claims. She encouraged anyone who has questions or needs to file a claim to contact the Resource Center.

Mr. Lewis introduced Bill Murray for the presentation. Mr. Murray stated that the purpose of the meeting was to talk about the Subtitle B radiation-induced cancer claims, and to discuss how the information in the Los Alamos Site Profile is used by health physicists to reconstruct claimants' radiation doses. He urged the attendees to ask questions and make comments during the presentation since their input might prove useful in making the document a more accurate resource for dose reconstructors. Although the site profile is complete, it is a "living document," meaning that it can be revised any time relevant information is discovered that can be used to make dose reconstruction more favorable to LANL claimants. The ORAU team also includes a group that goes to federal records centers and to DOE sites to locate and capture records that may give additional insight to the dose reconstructors.

He summarized three NIOSH brochures that were included in the handout materials: *What to Expect During the Dose Reconstruction Process; NIOSH Fact Sheet What a Claimant Should Know About Radiation Dose Reconstruction;* and *NIOSH Office of Compensation Analysis and Support.* These publications discuss the roles of OCAS and its contractors in the radiation dose reconstruction process.

Mr. Murray explained that the Energy Employees Occupational Illness Compensation Program Act was signed into law in December 2000. In July 2001, the Department of Labor (DOL) began accepting claims for radiation-induced cancer, silicosis and berylliosis. The cancer claims are sent to the NIOSH for radiation dose reconstruction based on records that have been provided by the government and its contractors regarding operating procedures and radiation exposures that occurred at the site. The NIOSH Office of Compensation Analysis and Support (OCAS) was established to handle the dose reconstructions. Due to the high volume of claims, OCAS contracted with ORAU in September 2002 to perform dose reconstructions and related tasks including constructing Site Profiles, performing Worker Outreach, and assisting in the Special Exposure Cohorts process. ORAU has hired several subcontractors to assist with various aspects of the dose reconstructions. To date, DOL has turned over more than 20,000 claims to NIOSH for dose reconstruction. More than 750 of these claims are for LANL employees and dose reconstructions have been completed on 173. A total of approximately 9,000 claims have been processed to date. In October 2004, the law was amended to include Subtitle E for toxic chemical exposure claims. Those claims are handled solely by the Department of Labor.

Dr. Glover stated that one of the reasons the claims for LANL are taking so long to process is that the site profile was not completed until recently. Since the Lab has a long and complex history, gathering all the information needed to write the site profile has been a very time-consuming process.

When a dose reconstruction is performed, a claimant's radiation dose information is entered into a program to determine the "probability of causation," which is the likelihood that the cancer was caused by radiation exposure. If the probability is greater than 50%, then the claim will be

awarded. If it is less than 50%, then the claim will be denied. Nationwide, approximately 25-30% of all claims have been awarded.

The Site Profile is a tool that supports dose reconstruction. The Site Profile provides health physicists with site-specific technical information about the Los Alamos Lab to use in reconstructing the radiation doses of claimants from LANL. This minimizes the differences in interpretation of data – that is, it ensures that all dose reconstructions for LANL claims will be performed using a consistent set of information.

The Site Profile Team began collecting information on LANL in 2003. Besides official dose records from the Department of Energy and its contractors, it includes information about other components of radiation dose. It was recently completed and approved by NIOSH. As more information becomes available, the Site Profile will be revised. When the new information improves the outcome of dose reconstructions, the claims that were not approved may be reopened and possibly approved.

The LANL Site Profile is a collection of historical information that goes back to the early 1940s, when operations began to develop the first atomic bombs. It has five sections: Site Description, Internal Dosimetry, External Dosimetry, Occupational Environmental Dose, and Occupational Medical Dose.

The Site Description provides an overview of the operations at LANL since 1943 and discusses the processes and activities through the present day. Some of these activities include weapons design and testing, nuclear reactor research, criticality experiments, and biophysics and radiobiology research. This section also identifies the radioactive materials and radiation sources at the site, as well as the potential radiation exposures from both occupational and environmental radiation sources. Some of the radionuclides that have been present at LANL over the years are tritium, mixed fission and activation products, uranium, transuranics, noble gases, and many more. The radiation sources are listed by Technical Area in Table 2.1, and the accidents and incidents are listed in Table 2.4. These are the accidents that involve many people in large areas, such as releases and criticalities. Smaller incidents involving just a few people can be documented during a claimant's telephone interview during the dose reconstruction process.

When the EEOICPA legislation was written, Congress made provisions for the dose reconstructions to be claimant-favorable. Any assumptions that are made regarding a claimant's radiation dose must be made to give the highest dose possible, increasing the probability that the cancer is found to be related to radiation and, therefore, the claimant's chances of being compensated. Two of the site profile sections address this requirement: the occupational environmental dose and the occupational medical dose.

The environmental dose applies only to workers who are not monitored in a dosimetry program. This dose has both internal and external components. Although these workers were not badged, they could still have been exposed to radiation on site – radioactive particles in the air, radiation sources in buildings, waste pits, accelerators, reactors, X-ray machines, etc. There is site-wide monitoring data that can be used to calculate an external dose for unmonitored workers. This dose is not a large one – between 1965 and 1970, it ranged between 30 and 100 millirems, and

between 1971 and 2002, from 30 to 60 millirems. Although the site profile currently states that there was no data prior to 1965, the team has recently found data going back to 1959-60.

The section on external dosimetry includes information on sources of exposure, what types of dosimeters were used, what dosimetry practices and bioassay methods were used, badge exchange programs, and whether adjustments were made to the recorded dose. The minimum detectable levels are discussed. LANL had technology for monitoring gamma radiation and X-rays in 1943. They began monitoring beta and neutron radiation in 1949. The radiation badge exchange frequency is documented. The workplace radiation fields and the locations of the workers around the sources are documented. For example, a dosimeter worn on the collar of someone working at a glovebox would not get as accurate a reading as it would if it was worn at his waist. Dose reconstructors can make corrections for these situations as they are calculating the radiation dose. If zeros appear where there should be readings, a missed dose value – usually about half the minimum detectable level – can be put into the equation. If badges were exchanged weekly, this can sometimes be significant. NIOSH is also aware that records are not always accurate and considers trends that appear in the records. Adjustments are made to compensate for this.

The same kind of information is given for internal dosimetry – methods and practices, radiation sources, minimum detectable activity for in vitro urine samples, whole body counting, chest counting, and what levels they reported, because sometimes they reported levels below the minimum detectable level. The bioassay program started in 1944. They originally did nasal swipes, primarily for plutonium. They started *in vitro* bioassay (urinalysis) in 1944. Whole body counting for gamma radiation began in 1955 and lung counting began in 1970. They also did wound counting starting in 1959. There is some site-wide monitoring data going back to 1965.

The section on the occupational medical dose details the medical X-ray program: which workers received medical X-rays as a condition of their employment, as well as the types of X-ray equipment and the frequency and types of X-rays that were regularly required. Only chest X-rays required as a condition of employment are considered. X-rays for injuries are not included. The medical X-ray program changed over time – earlier models gave off more radiation, resulting in a higher dose.

Mr. Murray concluded the presentation by saying that the information provided by workers is an important part in the development of the Site Profile. He asked the attendees to send information directly to NIOSH via U.S. mail or e-mail as shown in their handouts. NIOSH also maintains a website where the LANL Site Profile can be viewed, as well as other information on the EEOICPA program.

A discussion followed the presentation at each session. Following the discussion, Mr. Lewis concluded the meeting by thanking the union leadership for hosting the ORAU Worker Outreach team and the union membership for sharing their experiences and concerns.

Discussion/Questions & Answers

9:00 A.M. Session

Question:
What time period is covered by the law?

Sam Glover:
Claims can be filed for any employee meeting the requirements of the law from the beginning of operations at the Laboratory in 1943 to present day.

Question:
What about radiation exposures received by a claimant while working on a project at another site?

Bill Murray:
Any radiation dose received at any site by the claimant is considered. If a Los Alamos employee participated in a project at the Nevada Test Site, for example, and was exposed to radiation, the dose is counted.

Comment:
I am asking because it seems that the Lab has "lost" many of the records regarding my radiation exposure at other sites over the years. That must make it considerably more difficult to perform a dose reconstruction.

Bill Murray:
Yes, it does.

Sam Glover:
In this case, LANL ran the film monitoring program and lost the data for the Nuclear Weapons Testing Air Monitoring Program.

Comment:
In my case, all of the Air Force personnel who worked with me were in the same radiation monitoring program, and I found out much earlier that the Air Force records had humongous holes in them. As you know, there is a potential claim for those people as well. One of my former associates has filed a military claim and he had no knowledge of the radiation claims program. I go to a lot of reunions, and I will be getting the word out.

Question:
We have X-ray monitors here to check for prohibited articles. What kind of dose would be received if the lead curtains were open and the electrons leaked out of the machine?

Jack Buddenbaum:
It depends upon the machine settings and the time of exposure – usually a few millirem in current machinery. In the 1950s and 1960s, the exposures would have been a little higher, but modern X-ray machines deliver a fairly low radiation dose depending upon the purpose of the machine. At LANL, there was a variety of equipment used over the years, so it is a question of the settings and the operating voltage.

Question:
Are you saying then that the exposure would be below the minimum detectable level?

Jack Buddenbaum:
Typically, for a given shot, that would be true. If there are multiple shots over time, the exposure would begin to add up.

Comment:
We sometimes screen as many as 100 packages per hour. That means that the guard handling the switch is getting one hundred shots of radiation per hour.

Jack Buddenbaum:
Modern X-ray machines are well shielded and the beam is very columnated, pointing directly at the source that is being examined. There is some scatter radiation coming off the target being shot, which may lead to some exposure… some dose. Certainly the amount of dose coming out of the machine would be much lower, but the badge the guard is wearing would pick that up typically. If the guard was not badged, then we would look at the type of machine, the operating voltage, the current of the machine, and the exposure time – how long that shutter is open. We could probably reconstruct fairly accurately the amount of scatter radiation at the point where he was standing.

Comment:
The reason I asked is that a couple of years ago, a worker reached for a package through the lead curtain and the alarms activated because of the X-rays that came out and our dosimetry report for the year did not record that.

Jack Buddenbaum:
Those monitors are probably set at a fairly low threshold. It also depends on where the individual was relative to those monitors.

Response:
I was right in front of those curtains when he opened them. The hand-held monitor was sitting on top of the X-ray machine with a plastic cowl over it and the portal monitor was off to the left side facing it – about 10 feet away from the machine.

Bill Murray:
Was there ever a time when packages were being hand-fed into those machines and they were not shielded with lead curtains?

Response:
Not in the seven years that I've worked here. I don't know what they had before that.

Jack Buddenbaum:
They did not have the same security issues in the 1960s that they have now.

Bill Murray:
That is something that we could check into. Is it listed in the document that they use X-ray package screening?

Jack Buddenbaum:
There are references to X-ray inspection, but more on the side of the business where they use more powerful X-ray units to look for manufacturing issues related to weapons development.

There are so many of those. We did not consider exposure from package screening. We can certainly look into it and add it to our profile. It makes sense.

Sam Glover:
The question is, if the workers were badged would their dosimeters have picked up the dose from the incident? Is there some reason why we would give them less dose? Would additional dose reconstruction be required?

Jack Buddenbaum:
Right… that is the question.

Response:
I know that the Savannah River Site had the issue with falsifying dosimetry reports. I am concerned that might be happening here. There have been other incidents – like testing down at TA-18 – where they give you an additional dosimeter and when they get a report for that temporary dosimeter it shows that they received a dosage. When the annual report comes out, it shows zero.

Jack Buddenbaum:
That is disturbing.

Bill Murray:
Are they wearing some sort of a pocket dosimeter?

Response:
No, they are given an additional thermoluminescent dosimeter (TLD).

Jack Buddenbaum:
Is this a situational TLD, where they turn it right back in?

Response:
Yes. There are several tests that happen every year.

Jack Buddenbaum:
This is something we should follow up with. If those records cannot be resurrected, another option is to have health physicists reenact the incident to see if there is significant dose. They take actual measurements and relate it to a dose for an individual at that location.

Bill Murray:
Does this happen in areas other than the package X-ray area?

Response:
The incident that happened at TA-18 is different from the X-rays.

Jack Buddenbaum:
Where is the X-ray machine for package inspection located?

Response:
(Undecipherable)… and the materials access area. They removed the machines at TA-18 and the Chemical and Metallurgical Research (CMR) building 4 or 5 years ago because they changed the

security requirements there. They're still active at TA-55. I'm not sure where else they have them – if they have X-ray machines at TA-8 or TA-41.

Response** (from another attendee)**:
Yes. We had them up at X site also.

Bill Murray:
Were there situations where situational TLDs were issued in high radiation areas where the dose was expected to be high?

Response:
We did that at TA-18, where they were giving criticality bursts. They would do the burst and we would redeploy the criticality shield.

Bill Murray:
It would be interesting in those areas where there could be some substantial dose whether or not that showed up in the records.

Response:
That is my concern.

Jack Buddenbaum:
Has that been done at any of the DOE sites where things like this could come up? These X-ray machines did not show up in any of the documentation that we reviewed to develop the site profile. We certainly can add it as we need to. Has any mock-up of something like this been done?

Sam Glover:
It sounds like his main concern is the critical assemblies. As far as the X-ray inspection issue… not that I know of for unmonitored personnel who operated that. TA-18 is where they have the BEHR assemblies – and there are a number of them -- one for uranium, one for plutonium, as well as others – and they each have their own neutron spectrum.

Jack Buddenbaum:
Historically, workers in that area have been badged. Maybe the security guards were handled a little differently. The scientists and other area personnel were typically badged. There are external measurements that were taken during the burst shots.

Sam Glover:
They actually shut the road down at times.

Jack Buddenbaum:
That is discussed a little bit in the site profile. We are aware that it has been a source of exposure. But when it comes to unmonitored personnel, when they were temporarily badged for an event…

Sam Glover:
If they didn't have neutron dosimetry there would be a reason for special monitoring.

Response:
With the large X-ray machines – like at TA-8 and TA-16 – there have been some problems there

as far as positioning people and their proximity to the building. The requirements have changed over the years regarding distance – it used to be a lot closer.

Jack Buddenbaum:
So the security guards are back a little further now?

Response:
Yes.

Response *(from another attendee)**:***
Now they are. In the past, they did not even tell you until after the burst was done. The only indication that we had that a burst had been done would be that the hand-held dosimeter would go off. The hand-held monitor would go berserk, and I would wonder what was going on. That was when they would tell you that they had a burst. One night, I closed the road down for a burst at TA-46 and was on top of TA-18 a couple of miles away. I had a handheld monitor because I was curious about the dose, and it went crazy when they had the burst. I also had a neutron bubble dosimeter, and that came back with a small dose reading. But the regular TLD didn't show any dose.

Jack Buddenbaum:
There was none for the gamma? The regular TLD would have been to monitor for gamma radiation. They do try to shield for the gamma radiation to some extent, but the neutron radiation is a much more difficult.

Bill Murray:
These are some important things to consider and try to get more detail.

Sam Glover:
The modern LANL badge assembly has a neutron dosimeter built in. Does it have a higher missed dose compared to a cloud chamber? The cloud chamber may show a small dose, where there would be a missed dose when associated with a TLD.

Jack Buddenbaum:
That is a good question. The cloud chamber is a good screening dosimeter. The albedo dosimeter, which is used at LANSCE, is more accurate. Results from these are generally the ones used in permanent records.

Response:
I have also seen them use the pencil dosimeters. I wonder how much exposure I am getting when I see them looking at the results. Things have changed over the years. They did not tell us anything before the 1980s. Now if we ask, they tell us.

The first session concluded at approximately 10:30 a.m.

1:00 P.M. Session

Question:
Have any recent incidents been submitted?

Comment *(from another attendee)*:

I looked in there… 1996…The CMR fire/explosion was at 218 Building by the distributor *(not sure if this is what he said…very softly spoken).*

Response:
I just gave the Occurrence Report on the Sigma contamination to the Site Profile Team Leader this morning. I think from the information that we have it will be more relative to Subtitle E (for toxic exposure). What year was it that they had the glovebox leak over at TA-55?

Response** (from Commenter)**:
It was in 2002 or 2003… an incident at a glovebox where about 6 people were contaminated. They did nasal swipes and 2 or 3 people had to do chelation therapy right away. They did not inform the guard force until the next day. That is typical, unless the incident involves us. With the Sigma incident, they were monitoring at our post. They also did an evacuation of the building, so we were involved.

Sam Glover:
Their bioassay records show when chelation therapy would have occurred. The chelate "enhances" the plutonium in the urine. This shows up in the record.

Response:
There was also a fire when they evacuated at least part of CMR. I don't have all the information on that, but maybe someone at the afternoon session will know.

Philippa Griego (DOE):
This is an occurrence in 2002 – the fire at CMR?

Response:
There was a fire at CMR, but there was also a contamination at TA-55.

Philippa Griego:
At the same time? Are they related?

Response:
No, these are two separate incidents within the same time frame.

Philippa Griego:
Two separate incidents… and they came up on the ORCS (?) report – the occurrence reporting?

Response:
I don't know, but I'm pretty sure the one at TA-55 did. I'm not sure the one at CMR did. I'm not exactly sure when they were – don't have all the details.

Philippa Griego:
I'll give you my card. If you can get the dates a little closer – DOE and LANL both use the incidents database – we should be able to get whatever information is available on the incidents. That shouldn't be a big problem if you can narrow down the dates. I'm not sure, but I believe you can probably query by facility.

Sam Glover:
These incidents would show up in personnel records. The incidents that are included in the Site Profile are larger.

Philippa Griego:

I don't believe we should have any problems getting the occurrence reports for you on both of those incidents. As far as the personal reports are concerned, you could probably get permission from the people that were involved to see whatever monitoring was done on them. I don't see a problem with that right now. I can go ahead and start down that path and we can see what happened. If we have problems, maybe our senior safety advisor can help us.

Response:
Jack (Buddenbaum) had asked for that information, too. He was not aware of them.

Philippa Griego:
He did? I wonder if he knows about he occurrence reporting. I imagine he would.

Sam Glover:
He may not have access to it though. It is an internal database.

Philippa Griego:
I may be able to get access to that information for him. I can say that right now, but like anything else, if I don't have access to the information…

Response:
He said they are going through boxes of LANL records looking for reports. Health Physics has their own stuff to do, so basically they are leaving it up to the ORAU team to go through the records.

Philippa Griego *(to Sam Glover)**:***
You and I need to talk.

Sam Glover:
I just want to make sure that you understand that some things are more pertinent to personal dose reconstruction and others – the larger incidents – apply to the Site Profile. There is a difference. Yes, we can talk about access to records and make sure we have that.

Comment:
The lieutenants do internal reports called daily activity reports that I'm pretty sure are in the LANL records. I don't know what kind of a database they have, but I don't have access to it.

Philippa Griego:
Do you know if it's automated?

Response:
They are submitted to the captains via e-mail. They've been electronic since I've been at LANL. Prior to that, the reports were kept in a desk log that they did on a typewriter. TA-18 is not on the network so they send the reports via disk.

Philippa Griego:
I don't see why we can't get access to it. We can work on it any way.

Response:
Basically, those just reference incidents from a security standpoint – that PTLA or ProForce personnel were involved in – a brief entry. More detailed entries are made in security incident reports.

Sam Glover:

The security reports probably wouldn't have information related to radiation dose, but if the guards have responded to an incident, the details could be important.

Response:
Yes. It would have information about where the incident took place, what happened and who was involved.

Sam Glover:
I think we need to make Jack (Buddenbaum) aware of this.

Karen Martinez:
Sam, are you interested in any and all occurrences – like explosions and such?

Sam Glover:
From the perspective of the Site Profile… No. It would be a long list. It is important on a personal level though to see how a person was monitored. It is not necessary for the Site Profile to have a list of every specific incident. We are interested in radiological information.

Karen Martinez:
So if, for instance, there was an explosion in a chemistry lab, then that would only pertain to a specific case if there was a claim?

Sam Glover:
For the most part, yes. If there was an explosion, we are going to calculate a dose whether the person was monitored or not. The dose reconstructors would look at additional information to make determinations on a per claim basis.

The 1:00 p.m. session concluded at approximately 2:15 p.m.

4:30 P.M. Session

Sam Glover:
Bill, you may want to tell them about secure interviews.

Bill Murray:
People are sometimes concerned about talking about classified information. Many workers are very reluctant to talk about their jobs for fear of losing them. NIOSH does not want to put any one in that kind of situation. NIOSH can arrange a secure area and send somebody with a security clearance to do an interview. The transcript of the interview is written and reviewed for classified material.

Comment:
There is an "intimidation factor" here at LANL.

Bill Murray:
NIOSH will make every effort possible to set up the interview, protect the identity and then let the individual make the choice. DOE and NNSA would not have to know who the person is. We certainly don't want to put anyone's job in jeopardy.

Mark Lewis:
Do you think people are intimidated now?

Response:
Yes. I'm sure they are.

Response:
If there was an incident where classified information got out, it would be your clearance and your PSAP.

Sam Glover:
Los Alamos is certainly under the microscope for various security infractions. You do not want to be the guy who lets something go out.

The 4:30 p.m. session concluded at approximately 5:30 p.m.

6:30 P.M. Session

Sam Glover:
Something that was brought up at an earlier session is the number of hours the security force works.

Mark Lewis:
You are all seasoned employees. Is there any difference in the protective equipment you have now versus what you had years ago? Are there different safety practices now? Can you think of any one that you may have worked with in the past that could give us important information?

Response:
The safety equipment that was afforded to us is completely different than what was afforded to the Lab. They have a lot of mechanical detection systems in place that we don't have available to us. Most of the time, all we have is our TLD. They have many different types of dosimetry devices to monitor how long they can be in certain areas. We are exempt – we stay as long as they make us stay. We were in the same areas. They were being monitored and we were not.

Mark Lewis:
Have there been times when they were issued protective clothing or equipment and you were there in street clothes?

Response:
That is common practice.

Response:
TA-18 is a good example of that. We were guarding "Lady Godiva" (fast plutonium reactor). Other employees were there in their gloves, masks and overalls. We were sitting less than 15 feet away wearing just smocks and booties. Everything was wide open.

Response:
Areas that we routinely checked are now closed off. Protective equipment is required to get in there. We feel the readings we get back are false because we always get negative readings. The Lab individuals are only allowed to be in there for a limited time, and we are in there all the time.

Mark Lewis:
This situation is common among guards. We have heard the same kind of story at other facilities.

Response:

Another prime example is at TA-21. We were going in there for checks and the material was running off the tables. They painted over it with lead paint. It must be that thick on those floors. *(Speaker gestures a length of several inches).*

Mark Lewis:
We encourage veteran employees such as yourselves to share your memories with us – to help make the LANL Site Profile as complete as possible. We need your help so you can help others. Do you know anyone who was here before 1965?

Response:
(Name withheld) has been here 46 years.

Mark Lewis:
I am sure he has valuable information if he could talk to us. There are very few who have been around that long.

Sam Glover:
Do you get collective dose reports on TA-18? This would be for guards who would be down there. We can compare dosimetry history to try to figure out why there are discrepancies. I do not know if you had different badges than what the Lab personnel had, but it sounds like they may have had temporary dosimetry which you may not have been afforded.

Response:
They had two different types of badges. They usually had temporary badges when they were doing special assignments.

Response:
Maybe other groups get reports from their dosimetry, but we are never given any group information.

Response:
None at all. We do get individual reports.

Sam Glover:
There is a radiation safety principle known as ALARA (as low as reasonably achievable).

Response:
They don't give us any information that we don't inquire about.

Mark Lewis:
Sam, if they take the personal identifiers off the dose reports, can't labor organizations request them?

Sam Glover:
Usually in a radcon program, there is an ALARA (As Low As Reasonably Achievable) program. As part of that, there is an ALARA program officer who oversees exposures to a group of personnel. Their doses are monitored to see if there are any changes. If doses exceed the set limit, there is an evaluation. TA-18 seems to be an area that comes up quite often.

Response:
That was one of the questions asked in one of the town hall meetings. But it really pertained to

CMR. One of the personnel there said that 6 out of a group of people in his wing had developed the same kind of cancer. He was concerned about it because he was doing the same kind of testing. But this was pertaining to chemicals.

Sam Glover:
Especially the chemicals in the CMR building. Things like changes over 35 years – plutonium monitoring practices – on again, off again. Urinalysis, no urinalysis. There had to be some justification for why someone was put on a plutonium bioassay program. Are the guards currently on at least a limited plutonium bioassay program?

Response:
No. The guard force is not. People at the Lab are testing, TA-55 for example. The company is in the process of figuring out why we were taken out of the program.

Response:
We don't even have the initial entry test right now. Well, we do for *in vivo*, but for the past couple years they have not been doing the initial screening. There currently is no screening in TA-55 for personnel that are inside.

Sam Glover:
I know that in 2002 they were doing some low-level plutonium bioassay screening. Evidently, it has changed. It was my understanding that the guards were being evaluated then, but I could be wrong.

Response:
Not that I am aware. That issue came up recently. None of us has had bioassay on a regular basis.

This fourth and final session concluded at approximately 7:30 p.m.