

National Institute for Occupational Safety and Health (NIOSH)
SEC Worker Outreach Meeting for the Los Alamos National Laboratory
(LANL)

Meeting Date: September 16, 2008, 6:30 p.m.

Meeting with: International Guards Union of America (IGUA) Local 69, Los Alamos, New Mexico

NIOSH Worker Outreach Team

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

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

Wilfrid “Buck” Cameron, ATL, Senior Outreach Specialist

Mary Elliott, ATL, Technical Writer/Editor

Also present:

Loretta Valerio, New Mexico Office of Nuclear Workers’ Advocacy, Director

Proceedings:

[Name redacted], President of the International Guards Union of America (IGUA) Local 69, briefed the attendees who joined the meeting in progress, explaining that NIOSH representatives were collecting information on safety concerns and radiation monitoring practices to help in the evaluation of the Special Exposure Cohort (SEC) petition filed by [name redacted]. (The 4:30 p.m. meeting had not ended, so those arriving for the 6:30 p.m. meeting joined the ongoing discussion.)

Dr. Macievic explained that NIOSH is evaluating the site to determine whether dose reconstructions can be done for Los Alamos National Laboratory (LANL or “the Lab”) workers from 1976 to 2005. NIOSH is seeking information on radiation safety and monitoring practices during that period, especially for guards, firefighters, and trades workers who were often sent into radiation areas without being properly informed of potential radiation exposures or given proper protective equipment. NIOSH is particularly interested in information regarding the guards’ job conditions in radiation areas during the time period from the late 1970s to the early 1980s.

[Name redacted] stated that in the early 1980s many of the guards patrolled inside the facilities at DP site without personal protective equipment (PPE). The guards went into the glovebox areas where high radiation signs were posted without the booties and smocks that were worn by production workers. The guards had to check in hourly at Detex clocks at certain doors and storage vaults throughout the facility. Dr. Macievic asked if [name redacted] could recall any specific locations or years. [Name redacted] stated the he recalled that Posts 310, 315, and 316 were located in the area. [Name redacted] recalled that the material was stored in Buildings 1 and 2 in TA-21. Another attendee recalled that guards checked in at Detex clocks in PF4 and patrolled in that area for the entire night shift. [Name redacted] stated that the guards wore lab coats and booties in that facility.

[Name redacted] stated that he has worked all over the Lab in the 26 years he has worked there. Dr. Macievic asked him if the areas were posted as contamination or radiation areas at the beginning of his employment in the early 1980s. [Name redacted] confirmed that the areas were always posted, but the guards were not informed of the extent of the contamination or radiation. [Name redacted] stated that the guards did not have Rad 2 training until 1993. Other attendees who worked in the early 1980s added that they were not educated about the contamination and radiation hazards when they started working at LANL.

[Name redacted] asked Dr. Macievic if NIOSH is involved with the beryllium or asbestos claims. Mr. Macievic replied that NIOSH only handles the dose reconstructions for Part B radiation claims but is aware that there was a lot of chemical exposure at LANL.

[Name redacted] asked the attendees if they had worked during any of the experiments at TA-41. [Name redacted] responded that the experiments were classified, so the guards were not given any information. They were instructed to control the area and given a list of personnel who were authorized to enter the area.

Dr. Macievic asked if the attendees who worked in the early 1980s recalled bioassay testing or special dosimetry in radiation areas, or leaving bioassay samples after responding to specific incidents during the early 1980s. [Name redacted] recalled that he gave urine samples when he worked in a “nuclear facility” as well as occasional *in vivo* monitoring but did not remember specific dates. [Name redacted] added that he had never received results from any of the bioassay or *in vivo* monitoring. Dr. Macievic stated that information of this type may help NIOSH find survey reports from facilities during that period so that actual data can be used to model potential radiation doses. [Name redacted] stated that several of the guards he worked with during that period had died from cancer during the late 1980s and early 1990s. The common factor for all of the deceased was that they all worked in TA-18 during criticality experiments.

[Name redacted] commented that safety has improved 100% since those times, including the increased presence of RCTs who monitor the time limits for employees in the radiation areas. Dr. Macievic asked if the number of RCTs has remained about the same over time. [Name redacted] responded that one RCT may have covered a large area in the earlier years but now there is an RCT for nearly every job at the Lab – including a “mini-army” in TA-55.

[Name redacted] addressed a topic that had recurred throughout the day: guards who were assigned to protect material in the machine shop in Building 102 did not have the same PPE as the machinists. The guards wore only booties, while the machinists who machined beryllium, uranium, and other materials wore lab coats, booties, and masks. [Name redacted] confirmed [Name redacted] statement.

[Name redacted] stated that the Lab recently determined that the guards do not need to wear lab coats at the plutonium facility (PF4) even though everyone else in the facility is required to wear appropriate PPE. The Lab told the guards that their job classification does not require PPE other than booties in the PF4 facility. The recent finding is based on a study of the guards’ assignments in other areas. Dr. Macievic asked if the guards had worn PPE in that facility during the early 1980s. [Name redacted] responded that they had worn PPE then, but were going into different areas of the facility to check the Detex clocks. The guards’ present assignments in that area confine them mostly to “clean” areas. [Name redacted] said that the Lab’s report also notes that the smocks may interfere with tactical equipment the guards might wear during an event. Dr. Macievic commented that he is interested in seeing the report since it may provide recent information regarding how “clean” the areas are now as compared with historical data.

[Name redacted] responded that the union had received a letter from the Lab summarizing the study less than a month ago. [Name redacted] noted that the postings in the area say that all personnel must wear PPE and do not make an exception for the guards. [Name redacted] stated that he was told that the postings will be changed. Dr. Macievic asked if postings in the early 1980s had numbers reflecting the radiation levels. [Name redacted] said that the postings only gave the level of radiation (for example, High Radiation Area).

A discussion ensued regarding the division of responsibilities between NIOSH and DOL for Part B claims. [Name redacted] stated he is as concerned about his exposure to asbestos and beryllium in addition to uranium and other materials is as he is about his exposure to radiation. Dr. Macievic reiterated that NIOSH is only involved in claims for radiation-induced cancers and does not perform dose reconstruction for other illnesses. The DOL has sole responsibility for the Part E claims process. Mr. Lewis explained that, along with Mr. Cameron and Ms. Elliott, he is part of the contractor team that assists NIOSH with worker outreach meetings to engage workers in the information gathering process for documents used in dose reconstruction and SEC petition evaluation. Dr. Macievic works in the NIOSH Office of Compensation Analysis and Support (OCAS).

[Name redacted] asked about the purpose of the Work History Information worksheet (see Attachment A). Dr. Macievic explained that [name redacted] had developed the worksheet to help other LANL workers submit information to NIOSH regarding radiation safety and monitoring practices during the time period in the SEC petition (1976 to 2005). Several attendees noted that many of the guards from the earlier years of the petition period could not attend the meeting because they were not aware of it until the previous day. Dr. Macievic indicated that written statements are also valuable sources of information.

Mr. Lewis asked if any of the attendees could provide any information about the Cerro Grande fire. [Name redacted] replied that the guards who responded to the fire had no idea what types of materials had been used around many of the old test facilities that were destroyed by the fire. Dr. Macievic stated that specific information about those facilities may help NIOSH find reports during the data capture efforts. The reports may contain information that can help NIOSH estimate the amount of dose the guards may have received during the fire. [Name redacted] commented that the guards were stationed at roadblocks for 12- and 16-hour days during the fire. [Name redacted] added that the guards were probably exposed to many contaminants since the only PPE they were issued was paper masks. Other LANL personnel were sent home and the city of Los Alamos was evacuated.

Ms. Valerio asked if any of the attendees had responded to an incident at PF4 in 2003 in which four employees were contaminated. [Name redacted] responded that the employees had been “doing the (sounds like) space locks on one of the gloveboxes.” Ms. Valerio recalled another incident when pipefitters broke a line during weekend work. Mr. Lewis stated that attendees at an earlier meeting had talked about hazardous materials response training in TA-49, an area that had once been used for underground explosive testing.

[Name redacted] commented that the Los Alamos Fire Department would likely have a lot of incidents to discuss. Dr. Macievic stated that he had seen many quarterly reports in which mention was made that firefighters had been tested after an incident because RCTs had found that radioactive material was involved.

Dr. Macievic commented that he now has a better picture of the LANL guards’ activities; because LANL has more high-security materials, their duties take them into high radiation areas more than guards at some other DOE facilities. He thanked the attendees for their time. [Name

redacted] thanked Dr. Macievic and the NIOSH outreach contractor team for coming to listen to their experiences.

Mr. Lewis thanked the attendees and closed the meeting at approximately 7:15 p.m.

ATTACHMENT A:

Work History Information

Use the following as a *guide* to prepare your statement for NIOSH. Try to provide as much information as possible to include dates, locations, who, what when, where, why, and how. The key information to be obtained is radiation exposure and inadequate or no monitoring for those exposures. NIOSH will use this information to evaluate a petition to add a class to the Special Exposure Cohort of the Energy Employees Occupational Illness Compensation Program Act. If this class is added, eligible claims will be compensated without the completion of a radiation dose reconstruction of the probability of causation.

Employment History

Job title, start date, end date

- Number of hours worked per week
- Number of hours per week the job involved potential exposure to radiation and/or radioactive materials
- Buildings/locations in which you worked (include the type of duty performed at each location)
- Types of radioactive material(s) present or processed, and what form(s) (solid, liquid, gas)
- Amount of radioactive materials present or processed (ounces, pounds, kilograms, drums, etc.) over what time period
- Types of radiation-generating equipment (X-Rays, criticality reactors, or accelerators) that were present or used
- Exposure/contamination control measures used
 - Hoods, gloves, respirators, booties, smocks, etc.
 - What type of shielding was present
 - Were only some workers provided with this equipment
 - What was the distance from the material, process, or equipment

Radiation Monitoring Information

- State whether you or co-workers (same job category) routinely wore radiation dosimetry badges
- Badge information: how often worn, how often exchanged, and where was it worn
- If worn on front of the body, did you face toward or away from the radiation source
- Did other workers (different job category) in the same area wear radiation dosimetry badges
- Did other workers (different job category) wear different radiation dosimetry badges than you
- Did you participate in a biological radiation monitoring program (**nasal smears, urine samples, fecal samples, whole body counts**)
- State the time period(s) you participated

- Was the urinalysis kit provided for a particular radioisotope (i.e.: plutonium, uranium)
- Do you have copies of your dosimeter badge or biological monitoring records?
 - Are you aware of any discrepancies in your records between special, monthly, and annual monitoring?
- State whether you routinely surveyed yourself (frisked) for external contamination.
- Was there general air monitoring for radiation performed in the work environment (if yes, indicate when this occurred)

Radiation Incidents

- Were you ever involved in an incident potentially involving radiation exposure or contamination (LANL examples: Cerro Grande Fire, Sigma Americium Contamination; individual contamination, spill, exposure)
- If yes, tell:
 - what happened
 - when it happened
 - what form was the radioactive material in, what quantity of radioactive material was present
 - which radiation-generating equipment was involved
 - where it took place
 - who was involved
 - what actions were taken to remedy the exposure contamination
 - your location and activities during the incident, precautions taken to protect you
 - types of personal protective equipment used
 - length of time exposed during the incident
 - chelation therapy or other medical treatments, type of biological monitoring after the incident
 - indicate whether you have records of the monitoring