National Institute for Occupational Safety and Health (NIOSH)

SEC Worker Outreach Meeting for the Los Alamos National Laboratory (LANL)

Meeting Date: September 16, 2008, 9:00 a.m.

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

NIOSH Worker Outreach Team

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

Sylvia Rodriguez, New Mexico Office of Nuclear Workers' Advocacy, Assistant Director

Proceedings:

[Name redacted], President of the International Guards Union of America (IGUA) Local 69, opened the meeting at approximately 9:10 a.m. by introducing the union members and the team of contractors for the National Institute for Occupational Safety and Health (NIOSH) Worker Outreach. He explained that the team from NIOSH was present to discuss the Special Exposure Cohort (SEC) petition that has been filed for a class of workers at the Los Alamos National Laboratory (LANL or the Lab). [Name redacted] introduced the petitioner, [name redacted], who is a member of the union.

Mr. Lewis thanked [name redacted] for hosting the meeting and the union members for attending. He explained that Greg Macievic of NIOSH was unable to attend the morning meeting but would be present for the afternoon sessions. He asked Mary Elliott to explain the purpose of recording the meeting and the privacy policy that prohibits disclosure of personal information.

Mr. Lewis explained that [name redacted] had assembled a list of information that may be helpful in the evaluation of the petition. Mr. Lewis asked [name redacted] to speak about the petition.

[Name redacted] began by introducing [name redacted], the author of a petition that had successfully added a class of LANL employees who worked from at the Lab from 1943 to 1975. He stated that her efforts had resulted in payments to LANL workers who were eligible for the class or their survivors. He briefly described the Energy Employees Occupational Illness Program Act (EEOICPA) and the benefits available to eligible energy workers under Part B. Part B claims for radiogenic cancer normally undergo a dose reconstruction process to determine whether they are compensated. Part B claims for members of a class covered under the SEC do not. In order for a petition to be successful, NIOSH must determine that dose reconstruction is not feasible for the proposed class of workers because the monitoring records are either

inadequate or unavailable.

[Name redacted] explained that the purpose of the meeting was for NIOSH to gather information to use in the evaluation of the SEC petition. He said that he had prepared the Work History Information worksheet (see Attachment A at the end of this document) to help the attendees provide exposure and monitoring information for the work areas at LANL. He urged the union members to share their work experiences with NIOSH. As examples, he cited incidents such as the spills at DP Site that were painted over with lead paint, the contamination in Sigma Area, and the Cerro Grande fire. He stated that NIOSH also needed information regarding their involvement in bioassay (urinalysis, nasal swipes, and whole body counts) and dosimetry programs (TLDs, film badges, and area monitoring).

[Name redacted] stated that he had worked at LANL since 1982 and shared some of his personal experiences:

- While working as a security guard in the very highly contaminated DP Area, he was stationed outside the door to a work area in which production workers wore full personal protective equipment (PPE), but he was not issued any protective gear. He stated that guards were often asked why they were not stationed farther away from the contamination. The guards were under orders to man their post outside the door.
- In SM-39 (South Mesa Building 39) Machine Shop, the machinists wore masks while machining metals such as beryllium but the guards assigned to protect the material were not issued PPE.
- Radiography areas in S Site in Technical Area (TA) 22 had area dosimeters to measure background radiation. Personnel were also issued dosimeter badges, but never had more than "0" readings on their personal dosimetry reports nor were they ever informed of the readings from the area dosimeters.

  Mr. Cameron asked if [name redacted] recalled giving bioassay samples. He replied that a radiological control technician (RCT) took swipes from the walls. [Name redacted] said that there was a list of all the contamination incidents that had occurred at LANL over the years but he had never seen it.
- Guards were always in close proximity to the Kivas when high energy radiation was emitted from Godiva. Several guards were reprimanded when they placed their own dosimeters on the fence.

[Name redacted] asked [name redacted] whether guards are routinely given contamination information before they respond to incidents so they can get the proper PPE or if they find out only after they have responded. He answered that guards have sometimes responded to incidents before they have been equipped properly or prior to the evacuation of the area. Since they are first responders, the guards are responsible for clearing the area. [Name redacted] asked whether [name redacted] had ever been issued a bioassay kit to submit urine samples after an incident. He responded that guards had been issued kits on a monthly basis in the 1980s in TA-55, TA-18, CMR (Chemical and Metallurgical Research), DP Site, and TA-41, but that practice stopped in the early 1990s after the Mason & Hanger contract ended. [Name redacted] asked him if guards were tested as first responders to a critical incident in the same manner as the health physicists or other personnel in the area at the time of the incident. [Name redacted] and others replied that the guards' main duty was traffic control during critical incidents. They were trained to read signs posted in areas with hazardous materials and used pocket HAZMAT guides to maintain

patrol perimeters at the proper distance.

[Name redacted]continued to describe his personal work experiences:

- When the S Site was active in the 1980s, guards routinely checked roped-off bunker areas used for hazardous chemical storage. Another guard added that depleted uranium (DU) was used in destructive testing in D-33, D-36, and D-39. [Name redacted] said that her father had worked at S Site in the early 1960s when there was a fatal explosion in Building 260 that had contaminated the area. [Name redacted] stated that guards were cautioned to stay on established roads. (Some discussion followed about locating retired guards who might recall policy prior in the mid-1970s to determine whether they were required to patrol off-road in contaminated areas.)
- Several guards recalled that security patrols had unrestricted access to controlled areas in the 1980s and 1990s prior to the installation of the personnel badge readers that limit access to restricted areas. They did not know if an area was restricted unless it was roped off. One attendee stated that since the CMR (Chemistry and Metallurgy Research) Building was downgraded, only guards have access to the building between 6:00 p.m. and 6:30 a.m.

[Name redacted] stated that the availability of RCTs has improved over time. Now they are around during most jobs, which limits who can be in the area.

The petitioner introduced Loretta Valerio and Sylvia Rodriguez of the New Mexico Office of Nuclear Workers' Advocacy as they joined the meeting.

[Name redacted] asked the union members if they had worked in all of the Technical Areas before PTLA (Protection Technology Los Alamos) introduced the "zone concept," and how often they worked in the areas. They replied that prior to the zoning in 1993, in a one month period their patrols could take them through the entire Lab. They were assigned to 8- to 10-person work groups and rotated through the zones on a quarterly basis until they had worked through all the zones over the course of a year. They all worked a great deal of overtime and their overtime assignments did not generally keep them in the same areas where they worked during their regular shifts. [Name redacted] stated that they often worked as many as 16 hours every other day because there were fewer guards and the turnover was high during that period.

[Name redacted] recalled working at a security post in DP Site in TA-21 during the same time period. He stated that the RCTs would come around periodically and pull out the table and chair where the guards sat so they could read the area dosimeter on the wall behind them. When the reading was high, they would send a painting crew out to coat the wall with lead paint and then come back to take an acceptable reading. He also remembered having an assignment at a security post in the SM-102 machine shop in TA-3with an assault rifle to guard material wearing a smock and booties while the material was being machined. The machinists wore dust masks and other PPE as they machined the material and as the material smoked and chips fell to the floor, he often wondered why the guards were not offered the same protection as the machinists. When he asked, he was told that he was "safe". [Name redacted] added that the guards patrol only the exterior of the building now.

[Name redacted] explained that the area affected by the Cerro Grande fire in 2000 had many structures that contained equipment used in nuclear weapons production as far back as the creation of the Fat Man atomic bomb during the Manhattan Project. The guards who responded to the fire were exposed to heavy smoke both inside and outside the buildings. He recalled being

inside the Communications Center and the smoke being "so thick that it was really unbearable sometimes." [Name redacted] recalled that the guards were issued dust masks. [Name redacted] stated that he worked ten 16-hour shifts during that time. He remembered that his home in Los Alamos had been filled with smoke, but he had gotten special permission from the National Guard to stay there because of his duty assignment. There was no electricity in his home and the beam of his flashlight seemed more like a solid object because the smoke was so thick. [Name redacted] asked whether he recalled any bioassay monitoring because of his duty assignments during the fire. He replied that only those who complained to their immediate shift supervisor or the shift commander were sent for bioassay testing. [Name redacted] questioned whether there had been mass testing of the guards and the firefighters who were working on the front lines during the fire. [Name redacted] stated that he did not recall being tested. [Name redacted] said that there was no special testing unless someone complained of feeling ill during a shift. [Name redacted] asked [Name redacted] how long the power was out at his home; he replied that it had been off for 10 to 15 days. He told [Name redacted] that his home was located approximately a quarter mile from TA-55, as well as in close proximity to the canyon at TA-41 and TA-42.

Ms. Valerio stated that she had been assigned to TA-42 prior to the fire. When she returned to work after the fire was contained, a sooty residue still covered everything in the office even after the area had been cleaned. She recalled that S Site and R Site were worse. [Name redacted] said that FEMA (the Federal Emergency Management Agency) had paid for crews to thoroughly clean the smoke damage to his residence after the fire but the ashes and soot were still in evidence. [Name redacted] asked if the government ever tested the residue from the homes to determine the contamination. [Name redacted] replied that he was never given any information to that effect. [Name redacted] stated that the entire city of Los Alamos was evacuated during the fire and the period that followed, so the area was restricted to emergency personnel only – National Guard, Los Alamos Fire Department, LANL guards, and monitoring personnel. They were exposed to a lot of smoke but were never told what contaminants were in it. The canyon in S Site burned as well as many contaminated buildings. [Name redacted] did not recall being told of any readings that were taken during or following the fire. He stated that many people are complaining of breathing problems and some are beginning to receive medical benefits under EEOICPA. [Name redacted] said that many people in Los Alamos are reporting thyroid problems and that LANL has documented the increase in thyroid illnesses in a report.

[Name redacted] stated that they are mostly concerned with the period through the 1990s because the conditions at LANL have improved in more recent years. Guards who worked prior to that time were exposed to many more contaminants than they are now. He asked [name redacted] if he wanted to talk about LANL refusing to issue smocks to guards who work in TA-18. [Name redacted] said that would fall outside the timeframe of the petition, which covers the proposed class through the end of 2005. He then asked [name redacted] if he was working in TA-18 during the "movements" that ended in approximately 2005. [Name redacted] recalled that there had been many Stop Work Orders issued in TA-18 and particularly in Building 127, where there was a lot of testing. He recalled an occasion, possibly in 2005, when guards were training in a building there that housed a reactor in the basement. They had completed about a half month of training before the RCTs came in to check the building and found that it was "hot." They were not permitted to use the facility for training after that. The guards who had been training – approximately half of the security force – were offered testing if they felt ill but he was unsure if anyone had chosen to do so.

[Name redacted] stated that the area in TA-18 around the kivas was contaminated, particularly the building near Kiva 2. Guards patrolling the area were required to check two doors in the

building on their patrols and were told that they were "safe" there and in the area around the Godiva testing facility.

[Name redacted] stated that when he sat in the Assessment Room where the guards watched the monitors around the perimeter of Kiva 3 where the Godiva testing was done, the blasts from the experiments were so severe that they caused some of the monitoring equipment to shut off or become distorted. He was concerned that the security guards who were stationed about 100 yards from the outside of the kiva were exposed to contamination that resulted from those blasts. The kiva was shielded internally but the guards were not issued PPE. The road to the area was closed off to traffic during the experiments. The guards stationed at the perimeter of the area during the testing were shielded only by their vehicles (one by the road, one on the hilltop, one by Kiva 2, and one by Building 211). [Name redacted] said that all of the monitors inside the guards' station would go off at the burst. When [name redacted] asked if the area was monitored during the experiments, [name redacted] replied that area dosimeters were posted approximately every 50 feet on the fences along the road and at the kiva. He did not recall whether there were air monitors in the area. Testing in four reactors in TA-18 was ongoing through approximately 2004, when the equipment and material were moved out of the area. Some of the equipment was sent to the Nevada Test Site and the material was sent to TA-55).

Ms. Valerio stated that she rarely sees evidence of *in vivo* testing when she gets bioassay records for LANL security guards. [Name redacted] replied that LANL stopped regular bioassay testing for the guards in 1989 or 1990. Ms. Valerio stated that when she worked at TA-55 scheduling whole body counts for employees, some of them had not had one for seven or eight years. She often received phone calls from the medical testing department because their *in vivo* equipment was not working properly. [Name redacted] responded that the security force does not receive *in vivo* monitoring now because LANL considers them "administrative" personnel.

Mr. Lewis asked what type of shielding was used at the kivas. [Name redacted] recalled that lead bricks were used for shielding in the earlier years. He said that the primary duties of the guard force now are perimeter patrol and traffic control.

Mr. Lewis asked if any of the attendees knew any other guards who could talk about their work experiences from 1976 through the late 1970s. He commented that he was pleased with the quality of the information the union members had shared during the session and hoped that others would share their stories with Mr. Macievic during the afternoon sessions. [Name redacted] replied that the guards with the most seniority work day shift and would likely attend the 6:30 p.m. session. [Name redacted] added that those guards are more knowledgeable about the areas and more likely to report safety issues.

[Name redacted] said that many LANL employees from the earlier years were so grateful to have a high-paying job that they did not concern themselves with safety issues and paid for it later with their health and their lives.

[Name redacted] stated that even up through the 1980s, workers feared retaliation if they spoke out against the Lab's safety policies. He said that safety at LANL has improved a great deal since then. Employees are now required to complete safety training before the badge readers will allow them access to restricted areas. [Name redacted] added that the older guards continue to tell the younger ones that safety should be their main concern and that they can request a Stop Work Order when they do not feel safe.

[Name redacted] stated that even in 2008, workers have limited access to reports and other Lab documents due to national security. He has waited for eight years to get a document describing

why a former employee was let go and expects that he will have to wait until it is declassified to get it. Only those with the "need to know" have access to records. Mr. Lewis said that if a worker has classified information to share, NIOSH can arrange a secure interview with personnel who have security clearances.

[Name redacted] stated that he has worked at LANL as a security guard since 2002. He cited an incident at TA-55 in 2003 or 2004 when materials that were stored too close together started to react. He and several other guards were stationed at the entry of Building PF-4 as workers entered the area with full-face respirators and other protective gear. When he asked why guards did not have PPE, he was told to be quiet and do his job. This continued for approximately one month. Now, the guards must keep anyone who is not properly dressed-out from entering the area, but the Lab will not approve the guards' request to wear smocks while stationed there. Recently, the Lab has prohibited eating and drinking at the post. [Name redacted] asked whether drinking, eating, and smoking had ever been allowed inside the plant. [Name redacted] replied that there had been designated smoking areas on the mezzanines and the hallways. Workers were allowed to have beverages inside the work area. [Name redacted] stated that the fire personnel in the building had an area where they could prepare food.

[Name redacted] recalled eating at Post 315 in DP West, which was about 20 feet from a highly contaminated area; [name redacted] added that Post 316 in the back was the same. Security guards had to patrol the area every half hour to make sure the doors were locked, often walking among pipes that leaked on the floor. Areas were often roped off due to spills. The guards were not informed what had spilled or leaked. He said that if they did not turn off the area monitors, they would go off all night. [Name redacted] said that guards only patrol the exterior of the building now.

[Name redacted] stated that production workers who go into contaminated areas have locker rooms where they can change into work clothes before their shifts and shower after their shifts so they can wear their street clothes home. The security guards who man the posts in those areas do not have shower facilities and wear the same clothes home that they wore during their shifts.

[Name redacted] asked the attendees to describe working conditions in the reactor area in the canyons prior to the reactors being shut down. [Name redacted] replied that one of the guard posts at TA-2 was about 30 yards from the reactor. The reactor did not run all the time, but when it was up, a mist of water droplets would fall on their heads and other exposed skin. He recalled breathing in the mist as well. When Mr. Lewis asked about the timeframe, [Name redacted] replied that he had started in 1986 and the reactor was used periodically through 1992. [Name redacted] recalled that when he began working in 1982, the guard post at TA-2 was an 11-hour patrol and the reactor was always running. [Name redacted] said that it was an access control post and the patrolling was generally during non-work hours. [Name redacted] recalled that the guards could eat at the post. [Name redacted] stated that there was a break room in the building.

[Name redacted] said that he often wondered if the droplets were radioactive, but didn't question it. He said that training in the 1980s was limited but had improved since the Rad 2 Training started about 10 years ago.

[Name redacted] asked the attendees if they had ever worked at the Beam Line, at the LANSCE (Los Alamos Neutron Science Center), or at the Lagoon. [Name redacted] stated that security guards only accessed the administrative area in Building 6 at LANSCE. [Name redacted] added that security guards are posted outside the doors during occasional experiments at LANSCE and the area is roped off. Mr. Lewis recalled taking a tour at LANSCE in the past, but was recently

told that the Lab no longer offers the tour. [Name redacted] stated that the LANSCE facility still houses some isotope testing activity, but has more recently been used for weapons physics.

Ms. Valerio asked whether the RaLa (radioactive lanthanum) testing areas were still in operation at the Bayo Canyon site (in TA-10). [Name redacted] replied that the Lab has been cleaning up that area recently and disposing of the waste at TA-54. He added that an area in TA-35 that was used for RaLa testing in the 1950s and 1960s is still there, but an open field near Building 27 was fenced off at some time during the past two years and posted as a radioactive contamination area. He recalled stopping to have his lunch and walking in the area prior to the posting. [Name redacted] recalled that security guards used to patrol four levels of that building and that there was a vault on the bottom level that they checked every two hours. [Name redacted] did not recall any special monitoring in the building. [Name redacted] stated that the LAMPRE (Los Alamos Molten Plutonium Reactor Experiment) ended in the 1960s and the equipment was removed from the building (either Building 2 or Building 27). The area is now marked as a material disposal area (MDA).

[Name redacted] stated that Wing 9 of the Chemistry and Metallurgy Research (CMR) facility (Building 29) in TA-3 is so "hot" that guards who patrol it are required to wear booties and a smock. He recalled a tandem truck that was used to transport material from CMR back to a vault. The truck became so "hot" that it had to be buried at the TA-54 Waste Disposal Site. He replied "No" when Mr. Lewis asked if they were required to wear respiratory protection in Wing 9. [Name redacted] stated that guards were stationed outside the doors during the experiments, but the workers inside wore full PPE.

[Name redacted] stated that the CMR facility at TA-3 has been downgraded and access is restricted. Guards responding to an alarm are required to don booties and smocks and must monitor themselves. If the alarm goes off because they become contaminated, they must call an RCT to be checked. They are subject to disciplinary action if they do not follow procedure. A new CMR facility is being built at TA-55.

[Name redacted] stated that Buildings 410 and 411 at S Site in TA-16 were fenced in because they were highly contaminated areas. In the 1980s, extra security guards were stationed there because the doors had to be checked every half hour. [Name redacted] said that the building had been the assembly/disassembly area.

Several guards recalled having to patrol the exterior of Building 30 at K Site in TA-11 every four hours. The site is posted for depleted uranium shrapnel and guards must stay in designated patrol areas so they will not become contaminated. Mr. Lewis asked if the Cerro Grande fire had affected the area. Several attendees responded that it had, but they did not answer when Mr. Lewis asked if anyone left the roadway to fight the fire. One attendee stated that the fire damage could be seen from a distance of approximately two miles.

[Name redacted] asked if any of the attendees had ever patrolled at PHERMEX (Pulsed High-Energy Radiographic Machine Emitting X-Rays) or DARHT (Dual Axis Radiographic Hydrodynamics Test) facilities. [Name redacted] responded that the patrols around DARHT involved a lot of walking because the guards have check the facility on the hour, around the clock. [Name redacted] asked if there was extra security during the shots. [Name redacted] said that the area around the facility is shut down. [Name redacted] added that shots at TA-39 are a daily event and evacuation alarms are common. [Name redacted] stated that TA-36 is patrolled daily, but he was not certain whether daily shots are done there.

[Name redacted] asked those present to describe their duties at TA-8. [Name redacted] stated

that they are inside the building during E shift while the radiography shots are being done. In the course of the discussion, it was established that there are approximately three security guards and five radiographers inside the building during the shots, as well as five guards on patrol about 50 yards from the outside the building. The guard closest to the outside of the building might be asked to move farther away during the shot. The inside guards are stationed inside the door to the building and the material is in the next room. The guards use a V-100 armored personnel carrier to transport the material and escort it into the building. They are always told that it is "safe." All personnel, including the guards, are given an additional dosimeter to measure neutron radiation but they are never given information about the dosimeter readings. [Name redacted] explained that the security guards at TA-8 rotate inside and outside positions for this patrol. Ms. Valerio asked him if the guards are issued the same PPE as well. He responded that the guard going inside the control room may have worn a smock but the technicians did not always wear PPE either. A metal door separated the shooting room and the inside guards.

[Name redacted] introduced [name redacted], who joined the meeting at this point.

Ms. Valerio described a recent tour of the CMR facility: They were watching technicians work in a hot cell when the alarm went off. The tour was immediately evacuated to a safe area. She said the event gave her cause for concern regarding the contamination in Wings 5, 7, and 9. Several attendees said that Wing 9 has a break room where they had been allowed to eat and smoke.

[Name redacted] stated that when DP Site was decommissioned, contaminated soil was removed to a depth of 12 feet outside the building's concrete walls. [Name redacted] stated that 12 truckloads of soil per day were transported for burial in Nevada over a month's time. [Name redacted] added that the walls and shielding were also transported to Nevada, along with additional contaminated soil past the 12-foot mark.

Ms. Valerio asked whether any of the attendees had been on patrol during the mid-1970s when TA-1 was decommissioned – a 200-page report on the decontamination efforts apparently states that the area will never be 100% decontaminated. Many contaminated items from LANL's early days were taken to waste sites for burial. [Name redacted] stated that he did not begin working at LANL until the late 1970s but, historically, security personnel have escorted transported material.

Mr. Lewis asked if the guards wore dosimetry badges in all of the areas they had discussed. [Name redacted] responded that he had always worn a dosimetry badge but the reports always came back with "0" dose. He was not aware of any guard ever receiving more than "0" dose, except when the two guards placed their badges on trees to see how high the background reading would be. [Name redacted] stated that readings for those badges were extremely "hot" because they were so close to the burst. The DOE conducted a Class A investigation of the incident.

Ms. Valerio asked if any of the attendees recalled an incident, possibly in 2003, at TA-50 that involved a couple of RCTs. The attendees did not recall such an incident. They responded that they are not sent to TA-50 for regular building checks, but occasionally are sent out for visual checks. [Name redacted] asked if there is a badge reader on the gate to restrict access to TA-50 and was told that the area is open.

[Name redacted] revisited a topic that [name redacted] had addressed before his arrival. He recalled that the monthly tactical training had been scheduled in Building 127 in TA-18 after the area was shut down so the guards could practice clearing the vaults. The guards had completed several days of training when the RCTs came in to do a survey and found that the building was highly contaminated. The class was cancelled and the building was shut down. Several of the

guards went to the medical facility for testing because they felt ill. [Name redacted] stated that the union documented the incident.

A short discussion followed during which the attendees discussed other training areas of concern: TA-41, both inside and outside the buildings; and TA-3 Building 16, where the Van DeGraaf generator is housed. Building 16 was also used for tritium storage at one time. The guards may have used beryllium sheets for targets in Building 16. (The beryllium sheets were moved back and forth between this building and Building 102 across the street.)

[Name redacted] asked if the others recalled response drills in TA-55. The guards went into the area to practice defensive positions behind discarded bathospheres and other equipment. The practice was stopped when the equipment was found to be contaminated. He stated that there was an area on the west side of TA-55 where boxes from inside the plant were refurbished. [Name redacted] remembered that contaminated dirt was brought into the area from around the plant. [Name redacted] stated that the response plans changed because of the contaminated material in the area. [Name redacted] added that the area where they trained is roped off now. Ms. Valerio said that contaminated dirt from the fire area was brought into TA-55 in dump trucks.

[Name redacted] described a more recent contamination event in TA-55. The guards used to raise and lower the American flag daily. The flag set off the pedestrian radiation monitors several times when they brought it into Building 111 at night. The alarms also went off when they checked the flag with a handheld monitor. He reported it as a safety incident and was told later that radon in the flag had set off the meter. He was not satisfied with the answer since the flag is flown at 30 feet in a windy area and radon tends to stay in low lying areas because it is a heavy gas. He found out later that the company did not file the report in its records. Now the flag is flown round the clock and replaced when it becomes tattered.

[Name redacted] stated that although they have some issues, safety at LANL has improved since the Tiger Team investigation in 1991.

Mr. Lewis thanked the attendees and closed the meeting at approximately 11:00 a.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 evaluation 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