# NIOSH Dose Reconstruction Project
# Introductory Meeting on
# Development of Site Profile
# For Sandia National Laboratory

### Meeting Date:

August 15, 2005

### Meeting with:

Security Police Association (formerly IUPA Local 7002)

### Attendees:

| Name | Organization |
|---|---|
| Steven G. Rivera | Security Police Association |
| Daniel Barela | Security Police Association |
| Dale Meredith | Security Police Association |

### NIOSH/ORAU Team:

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

William Murray, Oak Ridge Associated Universities (ORAU)

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

Mary Elliott, ATL

### Proceedings:

Mark Lewis opened the meeting at approximately 12:30 p.m. by asking everyone to introduce themselves. Mr. Lewis gave a brief introduction of the Energy Employees Occupational Illness Compensation Program Act (EEOICPA), describing the need for workers to provide information for the Site Profile as "taking a snapshot of the past," recalling information that may be helpful to make the document a claimant-favorable instrument for reconstructing radiation doses. He described his own background as a Department of Energy (DOE) site worker and union representative and his current role on the ORAU Worker Outreach Team.

Mr. Lewis stated that the purpose of the meeting was to discuss the types of information that would be important in developing the Sandia National Laboratory Site Profile. Mr. Lewis introduced Sam Glover of NIOSH/OCAS and Jack Buddenbaum of ENSR, who is the site profile team leader for Sandia National Laboratories. He said that Mary Elliott was present to take notes to ensure accuracy of the minutes.

Sam Glover explained three NIOSH brochures that were handed out: *NIOSH Office of Compensation Analysis and Support; NIOSH Fact Sheet What a Claimant Should Know;* and *What to Expect During the Dose Reconstruction Process.*

Dr. Glover said that the Site Profile is a "living document" that can be changed at any time as new relevant information becomes available. He stressed the importance of getting workers'

input while the Site Profile is being developed. This improves the site profile and can make the claims process less frustrating for claimants.

Jack Buddenbaum said that he is the team leader of the Sandia Site Profile Team, which consists of six people. The team is gathering information from various sources and Sandia is cooperating with records retrieval, but there is still a lot of information that is not yet in hand.

Mr. Lewis introduced Bill Murray, the Worker Outreach team leader, who began his presentation by describing three phases in which it is important to involve the workers in the development of the site profile:

1. At the beginning of the Site Profile development process, when the ORAU team meets with workers to get their input.
2. A rollout meeting after the Site Profile is completed.
3. A continuing dialogue with the workers and union representatives, which allows for additional input that can lead to revisions in the document.

Mr. Murray said that the site profile is a collection of historic information about a specific DOE or Atomic Weapons Employer (AWE) site. The information is assembled from records provided by the government and the contractor, but the workers are the true "site experts" and their input is needed for historical accuracy. The site profile gives details about work practices and the dosimetry, environmental monitoring, and medical X-ray programs at the site. The health physicists who perform the radiation dose reconstructions use the site profile as a technical handbook. Getting the workers' perspective as the site profile is being written ensures that it is not biased in favor of the employer or the government.

Mr. Murray explained that the Energy Employees Occupational Illness Compensation Program Act was enacted by Congress to compensate workers who became ill as a result of occupational exposure to radiation or toxic chemicals in the nuclear weapons industry**.** All claims are submitted through the Department of Labor (DOL), which processes EEOICPA claims under two different Subtitles of the Act. DOL forwards the Subtitle B claims for radiation-induced cancer to NIOSH. If the claim is approved (the radiation dose reconstruction shows that the probability of the cancer being radiation-related is greater than 50% ), the claimant may receive $150,000 and medical expenses for treatment of that cancer from the date the claim is filed. Subtitle B claims also cover berylliosis and silicosis, but the DOL does not forward those claims to NIOSH. DOL handles all claims for Subtitle E cases for exposure to toxic chemicals. A claimant may be eligible for both without offset of benefits.

To date, the DOL has sent NIOSH approximately 20,000 claims for radiation dose reconstruction. Because of the large volume of cases, NIOSH contracted with ORAU to perform the dose reconstructions.

**Question:**
Are any local people working on the Site Profile?

***Bill Murray:***
When the program began, several site profile team leaders had work experience at the sites they were documenting. In theory, their experience would make them the "experts" on radiation

exposure at the site. But since they may not be objective about the programs at their home site, it is considered a conflict of interest for people who monitored the exposure at their plants to prepare the Site Profiles.

Mr. Murray discussed the main components of a Site Profile: the description of work and activities at the site, external dose, internal dose, environmental dose, and medical dose. He described how the dose reconstruction is done using this information -- the more information that is available, the more accurate the dose reconstruction.

The External Dose section of the site profile primarily concerns people who were assigned dosimeter badges to measure their dose. It is important to know if workers wore dosimeters to measure radiation exposure, what types of radiation exposure were measured, how often badges were exchanged, the location on the body that the badges were worn, which workers received badges, how missing and lost badges were handled, and any problems that may have occurred with the badges. Estimates of missed doses are applied where there is any doubt.

For the Internal Dose section, it is important to know what radioactive materials were at the site, how the radioactive contamination was controlled, what type of air monitoring was performed and how often, and what types of radioactive materials were monitored for and where. It is also important to know whether chest counting or whole body counting was done. If urine samples were taken to measure how much radioactive material was in the body, it is important to know how often and which employees participated in the program.

**Comment:**
Guards move around the facility a lot. You'll have to look at them from a different perspective than other employees.

Mr. Murray explained that the Occupational Environmental Dose section of the site profile considers both internal radiation dose and external radiation dose. For internal radiation dose, it is important to find out if the air was monitored for radioactive materials at the site. For external radiation dose, it is important to know if any monitoring was performed in outside areas at the plant.

Mr. Murray said that because the occupational medical dose is also considered, it is important to know what X-ray practices were used. For most workers, a chest X-ray was required as a condition of employment. We need to know who received X-rays, how often X-rays were performed, what type of X-rays were performed, and the type of X-ray equipment that was used.

The Site Description section of the site profile describes what went on at the site over the years. It details the radiation sources that were present, the processes and activities that took place at the plant and their locations, as well as information regarding incidents and accidents.

***Sam Glover:***
The site description section cites specific radiation exposure incidents that affected a large population of workers.

***Bill Murray:***
There are several opportunities during the claimant's telephone interviews to give information on smaller exposure incidents that involved primarily the worker. This is more difficult for

survivors who file claims because often they do not know specifics of their relatives' work. In these cases, information from co-workers can be considered to give the claimant every possible advantage.

Mr. Murray said that if a person has classified information that could be used in the Site Profile, secure interviews can be arranged.

The ORAU Team has a data capture group that has an ongoing mission. They travel to different sites, as well as federal records facilities, searching for information on all DOE and AWE sites. When new information is found, the document is captured electronically and brought back for the information to be entered into a database. The database is used in developing site profiles and doing dose reconstructions. If the new information impacts the dose reconstructions for a particular site, claims can be reopened and the dose reconstructions may be recalculated.

But employees and retirees may have information that wasn't included in the government and company records; or they may be able to identify other sources of information. If any such information is available, it should be sent directly to NIOSH by mail or e-mail.

**Question:**
How many sites were involved in the nuclear weapons complex?

***Bill Murray:***
There are about thirty DOE sites and three hundred AWE sites.

Mr. Lewis concluded the meeting at approximately 1:20 p.m. by thanking the union representatives for meeting with the ORAU Team.