



NIOSH Dose Reconstruction Project Meeting On Mound Site Profile

Meeting Date:
January 18, 2005

Meeting with:
Dayton Building and Construction Trades Council

Attendees:

Charles Morton	Dayton Building Trades
Mike Thomas	Dayton Building Trades
Roger Peck	Sheet Metal Worker
Jerry White	Laborer # 1410
Henry Poff	Iron Workers Local # 290
Dennis Jones	Iron Workers Local # 290
Michael Moore	Sheet Metal Workers' International Association Local # 24
Tony Hammond	Sheet Metal Workers' International Association Local # 24
Dan Franklin	Sprinkler Fitter Local # 669
Grady Mullins	International Brotherhood of Electrical Workers Local # 82
Doug Sesecy	International Brotherhood of Electrical Workers Local # 82
Phil Reynolds	Bricklayers and Allied Craft Workers Local # 22
Dan Miller	Bricklayers and Allied Craft Workers Local # 22
Dale Herzog	Bricklayers and Allied Craft Workers Local # 22
Scott Springer	United Brotherhood of Carpenters Local # 104
Joe Smith	United Brotherhood of Carpenters Local # 104
Todd Lipinski	LU 162 Dayton
Michael Moore	Millwrights Local # 1066

NIOSH and ORAU Team Representatives:

Peter Darnell – National Institute for Occupational Safety and Health (NIOSH)

William Murray – Oak Ridge Associated Universities (ORAU)

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

Melissa Fish – ORAU

Jeff Vollmer – Environmental Dimensions Inc.



NIOSH Dose Reconstruction Project Meeting On Mound Site Profile

Proceedings

Mark Lewis began the meeting by introducing himself and thanking everyone for taking the time to meet with the Worker Outreach team. Mr. Lewis explained that the Worker Outreach team makes every effort to utilize the collective memory of former workers. The information that workers provide assists with the dose reconstruction process of the Energy Employees Occupational Illness Compensation Act (EEOICPA). Mr. Lewis then introduced the members of the Worker Outreach team who were present (William Murray and Melissa Fish), Peter Darnell from the National Institute for Occupational Safety and Health (NIOSH), and the Mound Site Profile Team Leader—Jeff Vollmer.

Mr. Darnell explained that EEOICPA is administered by the Department of Labor (DOL): EEOICPA is a DOL program and NIOSH works with the DOL. Mr. Darnell said that NIOSH is essentially performing “Health Physics Archeology” by trying to calculate the maximum amount of dose that a worker could have received. If the Probability of Causation (POC) calculation is above 50% it is assumed that the radiation exposures caused the cancer and compensation would be rewarded. If the POC is below 50%, it is assumed that the radiation exposures did not cause the cancer and compensation would not be awarded under Subpart B of EEOICPA. Mr. Darnell let the group know that they were free to ask him any questions that they might have.

Before turning the floor over to Mr. Murray, Mr. Lewis pointed out that the meeting was being recorded so the team could accurately record individual concerns and comments. Mr. Lewis emphasized that the team only cares about the concern/comment and not who made the comment.

Mr. Murray began his presentation by thanking the group for giving the Worker Outreach team the opportunity to come and discuss the Mound Site Profile as it relates to EEOICPA. Mr. Murray told the group that he would be willing to answer questions or address concerns during any part of the presentation.

Mr. Murray explained the significant dates regarding EEOICPA and that EEOICPA consists of two types of compensation claims that are sent to DOL. There is a Subtitle B portion of EEOICPA as well as a Subtitle E portion of EEOICPA. He provided general information regarding both Subtitles of EEOICPA and explained that NIOSH and the Worker Outreach team deal with the Subtitle B radiation claims. Mr. Murray went on to explain that NIOSH is the federal agency that performs the dose reconstructions under Subtitle B. The Office of Compensation Analysis and Support (OCAS) is the department within NIOSH that is concerned with reconstructing radiation doses for Subtitle B claims. Because of the magnitude of the EEOICPA project, NIOSH hired Oak Ridge Associated Universities (ORAU) as the primary contractor.

Mr. Murray told the group that the purpose of the meeting was to discuss the Mound Site Profile, to describe how a site profile is used, to collect suggestions and information from the former workers, to document concerns and issues brought up in the meeting,



NIOSH Dose Reconstruction Project Meeting On Mound Site Profile

and to answer any questions. Mr. Murray explained that the audio recorder is used to capture concerns and assist us in generating minutes. Once the meeting minutes for this meeting are generated, people who attended the meeting will have the opportunity to review the minutes and provide their feedback. Mr. Murray stressed that the Worker Outreach program wants workers to have input into the site profiles so that the program does not rely strictly on Department of Energy (DOE) data.

Mr. Murray explained that the site profile is used by radiation specialists to reconstruct radiation doses. The site profile provides site-specific technical information and minimizes the interpretation of data so that all claims at a site are handled in an equitable manner. Mr. Murray emphasized that all site profile documents can be revised if new information is discovered that would impact the dose reconstruction results. Mr. Murray pointed out that the Hanford and Savannah River Site Profiles have been revised based on worker feedback.

Mr. Murray explained that the site profile is made up of five major sections: site description, external dosimetry, internal dosimetry, occupational environmental dose, and occupational medical dose. The site description describes activities that went on at the site. The external dose and internal dosimetry sections use information from the site dosimetry programs. The occupational environmental dose section has information on the radiation exposures that workers might have been exposed to through the environment (i.e. air) even if the workers were not included in the dosimetry programs. The occupational medical dose section looks at exposures to radiation that workers experienced from x rays that were required as a condition of employment, such as employer required chest x-rays. The whole philosophy behind reconstructing the doses is to make sure that the reconstructed doses favor the claimant.

Mr. Murray stated that the Mound Site Profile team was established in July 2003 and that the Team Leader is Jeff Vollmer. The Mound Site Profile has been completed and has undergone an intense and stringent review process and has been approved by NIOSH. The Mound Site Profile is used to reconstruct radiation doses to workers at Mound. The Mound Site Profile and all other posted site profiles can be obtained from the NIOSH website at <http://www.cdc.gov/niosh/ocas/ocas/ocastbds.html#>.

Mr. Murray told the group that the Mound site description provides general but not detailed information in presenting an overview of the facilities and activities at the Mound site since 1943. Included in the Mound site description are the radioactive materials and radiation sources at the site, as well as the potential radiation exposures from work activities that occurred at the Mound site.

The Occupational External Dosimetry section includes information about dosimeter technology, exchange frequency, workplace radiation fields, and worker locations around radiation sources. It specifically includes information regarding the sources of exposure at the site, methods and practices used by the site over time, and adjustments to recorded doses. This section also looks at the minimum detectable levels (MDLs) of



NIOSH Dose Reconstruction Project Meeting On Mound Site Profile

badges to see the lowest radiation dose that could be detected. Mr. Murray explained that the dose reconstruction attempts to account for the MDL by assigning a dose even when a claimant's recorded value after reading the badge is zero. In cases of recorded zeros, half of the MDL is the dose that is assigned to the claimant for each badge exchange. In assigning an external dose for every recorded zero, NIOSH believes that the dose reconstruction is claimant favorable.

The Occupational Internal Dosimetry section looks at the methods and practices used by the site over time, sources of exposure at the site, reporting levels, and minimal detectable activity (MDA) for whole body/chest counting and urinalysis. The Mound Site had a program to measure internal dose and they looked at the same types of issues for measuring internal dose as for measuring external dose. Mr. Murray explained that the Mound Bioassay program started in 1944. Urine and fecal samples were analyzed for selected radionuclides. Gamma-emitting radioactive materials were measured inside of the body by whole body counting from 1960 to 1970 and by chest counting from 1970 to 2003. Information from the Bioassay program is looked at and incorporated into the dose reconstruction.

Mr. Murray explained that just because a worker was not monitored does not mean that the worker did not receive a radiation dose. Workers who were not monitored could still be exposed to radiation on site from radioactive materials in the air and in the work environment. Site-wide monitoring data are used to calculate the external dose for unmonitored workers. The annual intake of radioactive material is calculated from the average annual air concentration to calculate an internal dose for unmonitored workers.

Mr. Murray explained that the Occupational Medical Dose section assumes that most employees were required to receive annual chest x rays during employment and prior to being hired. Information used to reconstruct occupational medical radiation doses includes the frequency of employer required x rays and the x-ray equipment and techniques used. Mr. Murray noted that the x-ray equipment at Mound changed over time and that older equipment gave off more x-ray radiation, resulting in higher doses.

Mr. Murray added that because building trades' workers faced different work conditions than other employees, new guidance is being created to handle issues and concerns that are specific to the building trades.

In conclusion, Mr. Murray reminded the group that developing a usable site profile is an important task and that the site profile can change based on worker input. Mr. Murray asked the group to send comments regarding the site profiles directly to NIOSH. Mr. Murray provided the mailing address, the fax number, and email address for submitting site profile comments. Mr. Murray also provided the NIOSH Office of Compensation Analysis and Support website address.

Discussion Session



NIOSH Dose Reconstruction Project Meeting On Mound Site Profile

Question: What about residents who became ill, not just workers?

William Murray: The EEOICPA does not cover residents, only workers. If people are specifically concerned about non-worker issues one point of contact is an organization called FRESH—Fernald Residents for Environmental Safety and Health.

Question: My father worked as a contractor in a plant years ago and had cancer. What type of documentation is required to file a claim?

Peter Darnell: The DOE knows which contractors worked at each site. I have seen claims with an affidavit signed indicating that an individual worked at a specific plant.

Mark Lewis: The DOL Resource center might be of assistance in providing advice about what can be done to prove that someone was employed at a specific plant for a particular number of years.

Concern: It is difficult to piece the puzzle together so that a former worker can file for compensation.

William Murray: We understand that it is difficult, especially considering that some contractors are no longer in business. However, there is an affidavit process in place to verify that an undocumented worker worked in a specific area or at a specific location. NIOSH is working with the Center to Protect Worker Rights to best address these issues.

Question: Who do we contact if we have work history information?

William Murray: Contact the Department of Labor

Mark Lewis: 1-866-363-6993

Question: Which three plants are included in the Special Exposure Cohort status?

William Murray: The three gaseous diffusion plants that are included in the Special Exposure Cohort Status include Portsmouth, Ohio; Paducah, Kentucky; and Oak Ridge (K-25), Tennessee. Legislation is in place to let people apply to get Special Exposure Cohort status. Currently, the Mound site is not a Special Exposure Cohort.

Question: Will NIOSH or the Worker Outreach team attend a meeting with other members of the union to explain this program?

Peter Darnell: NIOSH will send out the Worker Outreach team.

The meeting was adjourned. Mr. Murray and Mr. Lewis thanked everyone for taking the time to attend the meeting. Mr. Murray reminded the group to send their comments to NIOSH and that the contact information for NIOSH was included in the presentation packets.