

National Institute for Occupational Safety and Health (NIOSH) Worker Outreach Meeting for Weldon Spring Plant

Meeting Date: Wednesday, September 2, 2009, 7:00 p.m.

Meeting with: Laborers Local 660, St. Charles, Missouri

NIOSH Team:

Stuart Hinnefeld, National Institute for Occupational Safety and Health (NIOSH) Office of Compensation Analysis and Support, Technical Program Manager

Melton Chew, Oak Ridge Associated Universities (ORAU) Team, Site Profile Document Owner, Health Physicist

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

Mary Elliott, ATL, Technical Writer/Editor

Also Attending:

Corrine Nelson, Sanford Cohen & Associates (SC&A), on behalf of the Advisory Board for Radiation and Worker Health (ABRWH)

Proceedings

Mark Lewis opened the meeting at approximately 7:00 p.m. by greeting the attendees and introducing himself. Approximately 60 members of Laborers Local 660 were in attendance. Mr. Lewis thanked them for their interest in meeting with the NIOSH Team regarding the Energy Employees Occupational Illness Compensation Program Act (EEOICPA or the Act).

Mr. Lewis described his background as a long-time employee from the Portsmouth Gaseous Diffusion Plant in Ohio. He served for many years with the unions representing workers at that site.

Mr. Lewis asked Mary Elliott to explain that she was recording the meeting and taking notes for the purpose of writing minutes of the meeting. Ms. Elliott added that the contents of the minutes are protected by the Privacy Act so they do not contain any personally identifiable information. She explained that the sign-in sheet was also being circulated and noted that by initialing the second column, the attendees could give permission to be contacted by NIOSH personnel who might need additional information from them.

Mr. Lewis introduced Stuart Hinnefeld of NIOSH. Mr. Hinnefeld explained that EEOICPA is a compensation program for a range of diseases resulting from exposures to ionizing radiation or toxic chemicals in the workplace. EEOICPA Part B provides compensation to workers whose diseases may have resulted from occupational exposure to radiation (cancer only), beryllium, or silica. Part E provides compensation for a wider range of illnesses caused by exposure to toxic substances in the workplace.

Mr. Hinnefeld explained that the Act assigns responsibilities to several government agencies: the U.S. Department of Labor (DOL) takes the claim initially and verifies the worker's employment and medical diagnosis; the U. S. Department of Energy (DOE) provides the worker's personal dosimetry

records, as well as site records; and NIOSH, a division of the U. S. Department of Health and Human Services (HHS), is responsible for doing radiation dose reconstructions for individual cancer claims under Part B, developing site-specific technical documents that are used in the dose reconstructions, and evaluating Special Exposure Cohort (SEC) petitions. NIOSH only handles Part B cancer claims. DOL is the sole administrator for the Part E claims.

Mr. Hinnefeld introduced the NIOSH Team: Mark Lewis and Mary Elliott, both of ATL, who provide support for NIOSH Worker Outreach efforts; and Melton Chew, of the ORAU Team, who led the development of the Weldon Spring Site Profile, a document that contains site-specific technical information about the Weldon Spring Plant. Dose reconstructors use the site profile as guidance when calculating dose reconstructions for claimants who worked at that site.

Mr. Hinnefeld introduced Denise Brock, who serves as the NIOSH Ombudsman for Part B claims. Ms. Brock described her background as a petitioner for a class of nuclear weapons workers from the Mallinckrodt Chemical site in St. Louis, Missouri, which was the first SEC class added through the petitioning process. She works with individual claimants to help them with problems they encounter during the Part B claims process. Ms. Brock briefly discussed the National Building Trades Medical Screening Program, which provides medical exams for craftspeople who have worked at nuclear weapons facilities from time-to-time during the course of their careers. She encouraged the attendees to make use of the free program.

Mr. Hinnefeld turned the program over to Mr. Chew for a presentation on the Weldon Spring Site Profile. Mr. Chew stated that EEOICPA was enacted in 2000 to provide compensation and reimbursement of medical expenses to workers in the U.S. nuclear weapons complex. The Act also set up a SEC provision to compensate workers who may not have had proper radiation monitoring or whose records may have been falsified or destroyed. Four SEC sites were included in the Act: the three gaseous diffusion plants at Paducah, Kentucky, Portsmouth, Ohio, and Oak Ridge, Tennessee; and Amchitka Island, Alaska, the site of several nuclear weapons tests in the 1960s and 1970s.

Mr. Chew explained that the purpose of this meeting was to discuss the Weldon Spring Site Profile, and to gather information from workers who spent at least a part of their careers at the plant. He encouraged the attendees to ask questions.

Mr. Chew stated that the site profile is a series of site-specific technical documents used during dose reconstruction for Part B claims. It was developed using official documents that were provided either directly by DOE or during a series of ORAU Team data capture trips to a number of DOE records facilities. Data capture efforts are ongoing and the site profile is revised when significant new information is discovered.

A site profile contains six sections: the Introduction, the Site Description, the Occupational Medical Dose, the Environmental Dose, the Internal Dose, and the External Dose.

The Site Description tells about the facility and processes during the period of operations. It also discusses the types and concentrations of radiological materials present at the site during that time. Atlas Powder Company was the original proprietor of the Weldon Spring site and produced dynamite (TNT) for the Department of the Army from 1941-44. Atlas ended ordnance production in 1949. In 1955, 220 acres were given to the U.S. Atomic Energy Commission (AEC). The AEC constructed the Weldon Spring Plant in 1956. Mallinckrodt Chemical Works operated the plant for the AEC and processed uranium and thorium ores between 1957 and 1966. The AEC closed the facility in December 1966. In 1967, the Army took possession of most of the plant, but the AEC retained control of the raffinate pits and the quarry.

Comment (from two workers):

Local 660 provided workers during the first clean up period (1966 or 1968) when they cleaned up the raffinate pits and the Weldon Spring Quarry.

Mr. Chew:

In 1975, the AEC contracted with National Lead of Ohio to monitor the pits and the quarry. In 1981, that contract was taken over by Bechtel National. In 1985, the Army transferred the management of the entire Weldon Springs Plant back to DOE.

Comment:

You neglected to mention the first cleanup around 1968 that was run by the Army. But they pulled the plug on that after nine or ten months. Why does the government want to cover that up? The raffinate was what was left over after the yellow cake was produced. They furnished our t-shirts and underwear.

Mr. Hinnefeld:

Only employees of DOE and its predecessors, and their contractors and subcontractors, are covered under EEOICPA. People who worked under other federal agencies are not eligible.

Comment:

Two of my uncles died after working out there, from exposure to dioxin.

Comment:

My father worked out at Weldon Spring for two different subcontractors. There is no record of one of the contractors (Stearns and Rogers). It seems like a cover up. My father had adenocarcinoma of the right upper lobe.

Mr. Hinnefeld:

I understand your anger, but the way the law is written...

Question:

Who wrote it? DOE?

Mr. Hinnefeld:

The law excludes employees or contractors of other federal agencies.

Comment:

Senator Kit Bond...

Ms. Brock:

There is no doubt that some workers suffered horrific exposures. But the legislation (EEOICPA) states who is covered and that can't be changed without additional legislation.

Mr. Chew:

The Army conducted the initial clean up of the site between 1967 and 1969. From 1975 to 1985, DOE hired contractors to monitor the raffinate pits and the quarry. In 1985, the Army gave the DOE control of the entire facility; the facility was remediated between 1985 and 2003. The property remains under surveillance by DOE contractors. The surveillance includes the monitoring of a shallow groundwater aquifer.

During the operations period, the Mallinckrodt Uranium Division processed depleted uranium (U-235 tails), 14 tons per year of natural uranium ore, approximately 400 tons of thorium, and small amounts of slightly enriched uranium (SEU) in the form of scraps and residues from other sites.

At the peak of production, the plant employed 600 workers, approximately half of whom were in contact with uranium.

Comment:

One hundred of those were from the Laborers Local 660.

Mr. Chew explained that the Occupational Medical Dose section of the site profile describes the types and the frequency of X rays that were given to the workers as a condition of their employment, as well as the different types of X ray equipment that were used over time. NIOSH assumes that these X rays caused potential radiation exposure; they are considered as part of a worker's radiation dose in the dose reconstruction.

Question:

What if the worker didn't get any X rays?

Comment:

They gave us X rays on entrance and exit.

Mr. Chew continued: The Environmental Dose Section is used to calculate internal and external radiation doses for workers who were not monitored. The information in this section discusses sources of environmental radiation exposure in the workplace. To calculate internal dose for unmonitored workers, NIOSH assumes that workers breathed U-234, U-238, Th-230, and radon during the period of operation (1957-1967). For these workers, NIOSH also assumes gross alpha radiation and radon in the air during the monitoring and remediation periods (1975-2004).

Since there is no air monitoring data for the Weldon Spring Plant, NIOSH uses surrogate data from Fernald to calculate the external radiation doses for unmonitored workers during the operations period. During the post-operations monitoring and remediation periods, the external dose is based on dosimeters placed on site and radiological surveys. The Advisory Board on Radiation and Worker Health (ABRWH) continues to discuss the surrogate data issue. Sanford Cohen and Associates (SC&A) is working to resolve the issue.

Comment:

During the cleanup period from 1985 to 2001, workers were not monitored very well. There was all kinds of stuff out there. I think we were exposed worse then.

Comment:

A lot of stuff fell out of the pipes when we used cutting torches on them.

Mr. Chew explained the that Internal Dose section of the Weldon Spring Site profile contains information on the bioassay methods and practices at the plant as they occurred over time. The primary sources of internal exposure at Weldon Spring were natural uranium and thorium ores, as well as some depleted uranium (DU), enriched uranium, and recycled uranium. NIOSH has data for uranium urinalysis from 1957 through 1967 and from 1991 through 2001. Lung counts were done for thorium in 1966 and for U-238 and Th-232 from 1985-2001. Air sampling was done from 1957-1967 and from 1985 through 2001. This section also discusses the minimum detectable levels (MDLs).

Mr. Chew asked the attendees if they had given bioassay samples during their employment at Weldon Spring. One attendee responded that he had participated in the urinalysis sampling. Another attendee recalled that he had left a urine sample when he exited the job. Mr. Chew asked if anyone recalled being sent for a whole body count, to which the consensus answer was "No."

The External Dose section of the site profile describes the dosimeter technology at the Weldon Spring Plant. Film badges were used from 1957 through 1967. Thermoluminescent dosimeters

(TLDs) were used during the monitoring and decontamination periods from 1985 through 2001. External doses were measured for beta, gamma, and X ray. This section also discusses the exchange frequency of the dosimetry program and the MDLs.

Mr. Chew asked if anyone recalled wearing a dosimetry badge while working at Weldon Spring. The general consensus was "Yes." Mr. Chew explained that, beginning in 1985, the TLDs measured beta and gamma radiation.

Mr. Chew concluded his presentation by stating that worker input is very important in the development of an accurate, complete site profile. The site profile may be revised when NIOSH receives information that may bring a significant change to the dose reconstructions.

Mr. Chew gave contact information for providing information to NIOSH. He also gave the Web address for the NIOSH OCAS Web site.

Question:

Do workers have access to their personal dosimetry records?

Mr. Chew:

Workers can request their own dosimetry records. These records are subject to the Privacy Act and can't be accessed by anyone else without the permission of the worker or his or her authorized representative.

Question:

What government agency keeps the workers' dosimetry records?

Mr. Hinnefeld:

DOE has those records.

Question:

Does the Army have other records?

Mr. Hinnefeld:

I'm unsure of which records you mean.

Comment:

Many of the men who worked out there are dead.

Comment:

Probably as few as 10-12% are still alive.

Comment:

Lots had cancer.

Mr. Hinnefeld:

EEOICPA Part B cancer claims can be filed by survivors: spouses, children, grandchildren, parents, and grandparents. The rules of survivorship for Part E claims have definitions that are narrower.

Ms. Brock:

Claims for Part E can be filed by a living worker, a surviving spouse, or surviving children (under certain conditions).

Comment:

My father worked out there. He had lung cancer but we don't have the medical records. My mother is 83 and has dementia. We need help.

Ms. Brock:

I helped with a case where they used a 1963 autopsy to confirm the medical diagnosis.

Comment:

He was operated on here. The hospital doesn't have the records. I'll have to see if I can find an autopsy report.

Question:

I worked for MK Ferguson during the cleanup. I was told there was no thorium. Was there?

Mr. Chew:

Did you work in the quarry?

Response:

I worked there, too.

Mr. Chew:

Material from the quarry was taken to the cell. I will check.

Response:

DOE said there wasn't any thorium on site. This was between 1997 and 2001.

Mr. Chew:

I'll get your name at the end of the meeting and get back to you with an answer.

Mr. Hinnefeld stated that SC&A had reviewed the Weldon Spring Site Profile at the request of the ABRWH. NIOSH considered their findings and revised the site profile to include additional information.

Mr. Lewis thanked the attendees for their time and attention, and adjourned the meeting at 8:30 p.m.