Date:
July 1, 2004

Meeting with:
Bethlehem Steel Claimants Action Group – Retired plant workers advocacy group. The group was established as an advocacy group to assist retired Bethlehem Steel workers and survivors with claims filed under the Energy Employees Occupational Illness Compensation Program Act (EEOICPA) and to represent their interests. The meeting was requested to clarify the dose reconstruction process and to offer detailed information to augment the Site Profile.

Attendees:
The following are the participants who signed in at the beginning of the meeting. This list is incomplete, however, because the attendance exceeded expectations and people continued to arrive after the scheduled start time.

Edward Avery	Adolph Ajganik
Joe Bager	Ed Walker
Jerome Livingston	Terry Sweeney
Joyce Walker	Janice Bartoszek
Colin MacDonald	Norman Downe
Sterios Gogos	Don Lackens
Leonard Kozaczka	Jerry Barry
Fred Stockwell	Thomas Donavan
George Grace	Edwin Sasiadek
John Dimitroff	Tom Aszewski
Tony Sack	Joseph Skrzynski
Michael Kosowski	Frank Tundo
Ron Hayes	Eugene Emden
Eugene O'Brien	Frank Green
George Kull	Albert Tobias
Ed Trell	John Bonfatti (Buffalo News)
Rev. Livingston	
Mephie Joohi and Laura Kroclyk –Senator Hillary Clinton's staff	
Marla Greenburgh – Senator Charles Schumer's staff	
Tom Wisniewski and Ron Hayes – Representative Jack Quinn's staff	

NIOSH and ORAU Team Representatives:
David Allen – National Institue for Occupational Safety and Health (NIOSH) Office of Compensation Analysis and Support (OCAS)
Tom Tomes – NIOSH/OCAS
William Murray – Oak Ridge Associated Universities (ORAU)
Dawn Catalano – ATL International Inc.

Also Attending:
Dr. Arjun Makhijani – Sanford Cohen & Associates

Proceedings

Mr. Edward Walker, meeting coordinator and Head of the Claimants Action Group, opened the meeting by welcoming everyone and announcing that the NIOSH team was present to discuss the Site Profile and answer questions. He said that he would give a summary of the two issues at hand, which were residual radiation contamination and the people who worked at the site at the time that the radiation was at issue (1949-1952). He said that he represents the Bethlehem Steel Claimants Action Group (those who worked at the site at the time), which was established to act as an advocate and to assist retirees and survivors who filed claims under the Energy Employees Occupational Illness Compensation Program Act (EEOICPA). He added that there was much frustration and dissatisfaction with results from claims submitted so far. He then gave a background synopsis to offer perspective on the issues faced by former Bethlehem Steel employees.

Following World War II (WWII), many war veterans returned to the US seeking employment and found it at Bethlehem Steel. For several years, work at the plant included rolling uranium billets into bars, but the employees were never told that this was taking place. Mr. Walker said that no protective equipment was provided to the workers to protect them from the uranium. Further, he said that the government lied to the workers and they denied that uranium was there. That information was considered secret, was classified, and was only revealed on a 'need to know' basis. Fifty years later (1990s), the government admitted that the uranium had been present. The resolution was the passage of EEOICPA in 2000.

When the workers and retirees first found out about the Program, they were told that the criterion for compensation was simply to sign up – there was no information given about dose reconstruction. Approximately 10 months later, when claimants were expecting payment from their claims, notice was received about the dose reconstruction program. The government claimed that there was not enough information to process the claims and each had to be evaluated through a considerably longer process. Former Bethlehem Steel workers were already aware that they had not been monitored and they were sure no records existed. They were sorely disappointed that the program did not result in payment of benefits that they had been expecting. Mr. Walker pointed out the table that was situated in the center of the room (pictures in Attachment A), saying that the heavy dust and dirt exemplified what the working conditions were like at Bethlehem Steel and that workers were constantly surrounded by such material during any normal work shift. With the addition of the uranium, the dust and dirt became deadly.

After his opening comments, Mr. Walker introduced Mr. David Allen of NIOSH, saying he was in charge of the dose reconstruction program at Bethlehem Steel. Mr. Walker added that the Site Profile included no worker information, no air samples, and no evidence that there was any protection from dangerous elements such as those set out on the center table, and that Mr. Allen could address those issues.

Mr. Allen thanked everyone for coming then introduced the rest of the NIOSH and ORAU team, and Dr. Arjun Makhijani, who was present as part of an audit contracted by the Advisory Board to monitor program progress. Mr. Allen explained that the Site Profile had been written using hundreds of pages of Bethlehem Steel documentation along with information from Simonds Saw & Steel that confirmed the facts. He concluded his remarks by saying that he believed the team

was ready to update the Site Profile and fill in gaps with information provided by attendees. Mr. Allen then turned the meeting back over to Mr. Walker.

Mr. Walker then began a discussion of Special Exposure Cohort (SEC) sites, explaining that only four sites have been granted that status, all being government-owned facilities. In his opinion, those sites were included in the SEC because their records were so poorly kept that it was impossible to produce an accurate Site Profile. The main objection in this regard was that the sites included in the SEC had been monitored, while Bethlehem Steel had not. He said that it did not seem fair that the claims from workers at the SECs are not subject to dose reconstruction as a requirement for compensation while the claims from Bethlehem Steel are. He expressed a belief that NIOSH had procrastinated in the process for Bethlehem Steel workers between November 2001, when they were told they could sign up for compensation and February 2002, when they were told dose reconstruction would be necessary. Mr. Walker quoted the Buffalo News, saying that claimants were to be compensated around April or May of 2002, but the dose reconstruction process was only getting started then. He said the questionnaire was impossible to answer since it was too technical for elderly widows to comprehend. There were questions about protective gear, but there could be no real answer to that since they were not issued any. He also noted that the last three pages were specific to the work that had been done in the plant, and survivors had no way of knowing those details. Complaints about NIOSH never calling back to follow up when someone else was referred were common in the Claimant Action Group's discussions on the matter. Another matter of contention was a letter received from NIOSH asking for technical data that widows could not access. Mr. Walker thinks that the dose reconstruction process may work for the 350 other sites with claims, but it was impossible for Bethlehem Steel considering their unique situation, specifically since they had never received protective gear or safety training.

Mr. Walker then asked for comments from Mr. John Dimitroff, the plant's former Safety and Health worker, since he was most knowledgeable about the procedures used in the plant and was among the workers who had to handle the materials. He knew first hand how things really were during those shifts. (Editorial comment: Mr. Dimitroff did not work at Bethlehem Steel during the uranium rolling operations. He started work at the plant in 1960, but he was able to provide information about how the plant operated in general.

Mr. John Dimitroff said that there were 1,900 rollings since 1951, but no incidents or accidents at all were reported in the Site Profile. He also pointed out that between 1949 and 1952, a period for which no records were found, the dose reconstructions allowed only one rolling per month, but the actual number was far greater. His concern is if no one knows how much they rolled or if they were processing uranium or not, then why would the government make any payment for those years? That doesn't make sense.

David Allen:
This meeting was set up to gather information as well as to clarify other issues. It is no secret that misinformation was given early in the program. It was, however, included in the original version of the 2000 (EEOICPA) law that dose reconstruction was part of the process.

Concern:
I attended a meeting with representatives high in the program structure who said that information was deliberately omitted so that people would make applications.

David Allen:
I can't respond to that since the Department of Labor (DOL) runs that part of the program. The NIOSH and ORAU team are responsible for technical support such as the research and performing dose reconstructions. Going back to the issue about the interview, NIOSH was attempting to gather the most information possible and expected a lot of answers to be 'I don't know' but did not think it would be a deterrent to people making claims. NIOSH is aware it was not well communicated and that was a mistake on our part. There was information available saying that Bethlehem Steel workers were not monitored. The idea was to at least ask the questions to get the process started.

Concern:
People here wonder why Bethlehem Steel did not receive SEC status; the presumed answer is that the reasons were political. We are seeking a recommendation for SEC status.

David Allen:
The SEC regulation was added into the law to allow certain sites to bypass dose reconstruction. The site does not have to be government-owned. There was no explanation for why those particular sites were included.

Concern/Comment:
Bethlehem Steel records are just as bad and misrepresented as those sites.

David Allen
Other sites can petition for the SEC status. The procedure is in place; you can get information on the NIOSH website.

Concern:
New, modified procedures do not allow the same cancers as part of the SEC.

Concern/Question:
How long does it take for the application process to be completed and a site approved for SEC?

David Allen:
I do not know of a specified length of time for the process since it is new. Regarding the records, 1949-1950 documentation shows work at Bethlehem Steel as contract work – there is documentation of a rolling in 1951 called 'Experimental Rolling #1.' It didn't make sense for the 1951 rolling to be the first, so NIOSH assumed something was going on and gave a credit for a monthly rolling of that sort for the contract work.

Concern:
What about accidents and incidents? Are they figured in? NIOSH never asked the workers who were there about what happened when they were writing the Site Profile; instead, it relied on misrepresented documentation.

David Allen:
Today is the first time NIOSH and ORAU have met with claimants as a group for such discussions. Claimants have been interviewed individually but NIOSH and ORAU did not have the information being discussed today.

Concern:
The advocacy group talked to a claimant who was rejected on the basis that he has multiple cancers and no determination could be made on what to make the claim for. He was told that there was no specific incident to investigate despite his contention that every day was an incident. NIOSH said that the dust could not be inhaled in contrast to his doctor's opinion that it indeed was inhaled, and that the uranium affected various organs. The dose reconstruction stated that there was little or no dust even though it was clearly visible everywhere he worked. This has to be an issue. People were afraid of losing their jobs and continued to work under these conditions because Bethlehem Steel said everything was cleaned. Our opinion is that the building should be leveled – it is unsafe but still being used for regular steel work today.

David Allen:
It is important for you to know that NIOSH takes all cancers into consideration. This claimant should call his DOL examiner with this information. The claimant can request that the claim be re-opened if there is a new cancer.

NIOSH has heard about similar problems at other meetings. Plants were very secretive during the Cold War; the government went about it wrong. The compensation program was passed to make up for those wrongs, but information is needed to quantify the doses for the fair and accurate processing of claims.

Concern:
There is a general belief that NIOSH is dragging its feet on these questions. There appears to be a political agenda and people are double talking to get around the real issues.

Comment: (Tom Wisniewski, Congressional Staff):
Congressman Quinn has been working with Mr. Walker on a regular basis in an attempt to pass new legislation to designate Bethlehem Steel as a SEC site. He was in the shop for 20 years so he has complete empathy for your situation. Even though he is not seeking another term he is using every means available to help while he is still in office.

Concern:
We were under the impression that individual operational information was going to be gathered today. People came prepared to talk about their experiences.

Concern:
We understand the efforts made on our behalf, but this is a very emotional issue for the workers while the government deals in facts. A Mr. John Fitzgerald was an auditor who had been to Bethlehem Steel to discuss the Standard Review Plan (SRP). He had tons of data, but that caused a problem because dose reconstructions can not be done when there is too much information. Flawed data is not helpful either – too many assumptions have to be made. How

can NIOSH determine if people are affected or not when the information they base the documentation on is inaccurate, incomplete, or flawed? The model used in dose reconstruction came from a different set of circumstances. Assumptions are not the same; therefore NIOSH can not make a qualified prediction of probability of causation.

David Allen:
NIOSH has some air sample data from 2-3 days of rolling, but does not consider that data all-inclusive.

Concern:
We know of 85 government documents that say Bethlehem Steel was declared a safe zone. The same reports claim that the areas used for uranium have been destroyed, but they are still there today as we can see from driving out Rte. 5. This constitutes more lies.

Concern/Question:
Workers never got the results of their dose reconstructions. Where did NIOSH get information regarding air sample reports?

David Allen:
Records from rollings matched area air samples from the Fernald plant.

Concern:
More than 2,000 uranium billets were rolled but the Site Profile only shows 220. Obviously the records are inaccurate; they do not match declassified government documents.

Concern:
I worked in health and safety but never knew about any air monitoring.

Concern:
Uranium cleaning was impossible; only the floors were cleaned but even that was minimal. The dust could never be removed so there had to be uranium present as well.

Concern:
The group has a mailing going out soon to explain where the radiation came from. The South Buffalo Railroad company was wholly-owned by Bethlehem Steel, not a contractor as NIOSH contends. The conductor died of cancer in the 1970s. No one else was allowed to make delivery of the bars. The railroad cars went inside the plant and the railroad workers had to ride with the bars and were therefore exposed. Documentation of this has been provided and is now under review.

Comment: (John Dimitroff provided this information based on his experience after 1960.)
There were two (2) types of rollings: salt bath and semi-finished. The salt baths were the ones that came from Ohio – that could have been what was rolled in 1949 and 1950. The 5”x5” billets weighed 1,000 pounds and were too big to break down to 1-1/2 inch, the same as with regular steel. If it was done with uranium, it would have been the same process. The 5” billets would probably have been heated in a furnace because the salt baths would not get them hot enough to roll. There would have been more exposure from the furnaces required to heat the

billets. They had to be run through the stands multiple times to get to the 1-1/2 inch size and, with each pass, there would be heat, fumes, and dust. Water was used during rolling to keep the dust down, but the uranium was still at 2200˚and created scale that went down into the scale pits. The pits were cleaned rarely or occasionally and the scale and residues were reintroduced into the furnaces. Wrecks or "cobbles" created even more problems – people had to run out of the way. The cobble had to be cut wherever possible and put into the scrap pan, but some got into the sub-basement. The dust went into the air.

Comment:
The South Buffalo railroad was not owned by Bethlehem Steel.

Comment:
The bricklayers worked all around the furnace and could never get away from the dust or the heat. The only kinds of protective gear provided were gloves and helmets, but they didn't do much to help. The dust gets everywhere and sticks to you in the heat. At the beginning of the Monday morning shift, we were told that the area had been cleaned, but there was still visible dust all over.

Comment:
Rollers were unaccounted for over time. There were up to 18 stands used for the 10 inch mill, each with 2 rollers. They would get worn out and need to be replaced. The old ones would be tossed into a car and be re-melted.

Arjun Makhijani:
Were there any injuries from handling the cobbles?

Reply:
There were many burns and scratches. Workers had to get around the rolls to figure out where to cut it so slag popped out all over. The ends had to be trimmed to keep the shape right.

Concern:
Government documents show a loss of four pounds per billet. Where did it all go? That adds up to four to six tons of uranium unaccounted for over time.

Concern/Question:
Considering all that missing uranium, plus slag and cobbles, has NIOSH done any soil samples on the site? This needs to be investigated for accurate dose reconstructions.

David Allen:
Current levels wouldn't tell where it was in 1949.

Concern:
A document published in 1972 states that the project was completed in 1952 and that the personnel present during the roll out had been *apparently* checked. It seems obvious that they were not.

Concern:
I have submitted medical records to NIOSH but am still waiting. I have cancer of the throat so I can't talk, I can't eat – where do I go from here? I might be dead by the time I get an answer and it seems that would be the easy way out for NIOSH.

David Allen:
DOL verifies cancer and NIOSH performs dose reconstruction. Your information needs to be forwarded to NIOSH before your claim can be re-examined.

Question:
Can we do individual interviews to get the full story? Is the roundtable sufficient to get enough information?

William Murray:
This is your meeting – we can proceed any way you feel is best for you to provide as much information as possible.

Arjun Makhijani:
Perhaps it would be best if you just tell us what kind of conditions you worked under.

Comment:
The bricklayers worked all around the furnace. Management called us in when they had a hot job; everyone on the crew had asbestos exposure from that kind of work. We had to use asbestos blankets around the furnace and it got in our lungs. There are only three survivors from the hot team left and two of them have cancer.

Concern:
I worked in the bar mill between 1949 and 1953. The job was cutting bars as they came down the runway but we never knew where they were going. The rods went all over but it was our job to put them in the furnace. At the lime plant, they blew lime off the walls and floors. We had to ask for masks or we didn't get them. When I worked as a crane operator, I could see the dust all over the rolls.

Comment/Concern:
The South Buffalo Railroad moved anything that came into the plant. Workers had to ride with the load, never knowing what they were carrying. I also worked on maintenance in every part of the plant. I was in the mill in 1968 and there was a greasy greenish substance that covered the ground. It had to be blasted away from the work area but no one knew what it was. The workers assumed it was film/fallout from the plant. No gloves or masks were issued, the crews had to work barehanded if they didn't bring their own. Besides having to work in these conditions, the workers also had to eat in contaminated areas. There were ten supervisors/foremen on that job – eight of them have since died.

Arjun Makhijani:
Would the greasy substance be left over from the cleaning process?
Reply:

That is a possibility; grease was used to keep the dust down. It was also used for lime but it still blew all over and clung to the walls.

Comment:
Scale that went into the pits went in the railroad cars as well. From there it was taken to the waterfront and dumped in the lake.

Concern:
Workers brought the dust and filth home on their clothes. Wives were also exposed when they did laundry and have also died of cancer. The wash water would turn the reddish color of the dust and no one knew if there was uranium in there.

Concern:
Workers also carried a tool bag and would set it down anywhere they could while performing their tasks. They could have been right in the uranium because workers were never told about the danger. There would be plumes of dust that settled all over your lunch, in your coffee – there was no way to get away from it.

Arjun Makhijani
Were billets and rods stored in those areas as well?
Reply:
Sometimes they were.

Concern:
Records show that between August 17 and 31 of 1952, there were failures in every rolling. That encompasses 370 rollings – these should have been considered incidents.

Concern:
The furnaces did not have very big openings for the workers to get through – they were only about 18 inches. When there was a mishap in the furnace they used fire extinguishers with poison chemicals. Workers had to crawl through those openings with the fumes. It was only after the unions found out about these practices that doors were put in. The brick workers had to go in every time the furnace needed repair, which is to say they had to go in there constantly. Young men at the age of 20 did not want to risk their jobs and would do anything they were instructed. In doing so they came into direct contact with anything that was in the furnace. There were times they had to go in and re-build walls while the furnace was running. The temperature could be anywhere from 300 to 700 degrees. Cars full of scrap metal would sit in the area for weeks. They would become covered with 2-3 inches of silt/dust, and then be put back into the furnace. These were open hearth furnaces, and the uranium could very well have been in there while the crew was in there working.

Concern:
Rods had to be trimmed as they came off the rollers, and the dust was everywhere. The crane operators cleaned up after the uranium was run (even though they didn't know what it was) but

the process was minimal. All they did was sweep up; they never really cleaned up enough. So there was always residue left for the Monday morning shift.

Concern/Comment:
Sixteen hour days were the norm and at $1.35/hour it was necessary to rack up the hours for a good paycheck. The bricklayers would wait six to eight hours to get into the furnaces so they could do repairs after it had cooled down sufficiently. They still could only go in for about ten minutes at a time. There always had to be enough workers on the clock to keep operations running. Sometimes they had to build the wall back up from inside the furnace –it was intense, dangerous work but they were dedicated and did what they had to do to get the job done.

Concern/Comment:
As far as cleaning up and shutdowns went, there were none to my knowledge. I never saw a single broom. The only time the furnace was shut down was for a re-build and there would always be another one running. Bethlehem Steel claimed to clean up during a regular eight hour shutdown, but the bricklayers were always there. It was the same with the electricians – they also continued to work during shutdowns.

Concern/Comment:
My father worked at Bethlehem Steel from the 1930s to the 1970s. He died of pancreatic cancer in 1987. He had worked throughout the plant – all three miles of it – he worked everywhere but his claim was still denied. For the survivors, it's not about the money. We want Bethlehem Steel to take responsibility for contributing to the illness and death of loved ones.

Concern/Comment:
Bethlehem Steel should get SEC status because of faulty information. It is clear that facts are missing that would be necessary for accurate dose reconstructions. Nagasaki is not relevant as a model for Bethlehem Steel. The NIOSH study is incomplete compared to military studies.

Concern/Comment:
My brother-in-law worked for the South Buffalo Railroad and got the compensation but he's still going to die. I am dying myself from leukemia, but I accept that there's nothing that can be done about that. But I do have questions that I doubt will ever be answered. For one thing, I would love to know where the missing bars went. Behind the lake? I took pictures and radiation readings out there and got levels over government allowances. NIOSH doesn't know what it's doing.

Concern:
We're told that it takes special considerations to get into the SEC but it seems too politically motivated. People are dying – we don't have enough time to resolve the issues they ask about.

Comment:
Geiger counters were issued at the plant. Some workers did studies back in the 1960s for James Rhoades. They measured gamma, beta, and alpha but were most concerned with the beta. After hearing about what came out of the furnace, it might have been better to look for more. In 1990

the Environmental Protection Agency (EPA) set up screening procedures for steel meltdowns in order to find uranium traces. They detected orphaned sources of radiation which is scrap metal on the steel belt. The plant stopped making steel in 1983 so the orphaned sources were overlooked.

Concern/Comment:
The furnaces were adjusted to melt just about anything. Steel, uranium, even bricks that fell in would burn. Records with this kind of information were simply tossed in a dumpster in the 1980s and 1990s. They included x-ray data, names – everything required for the dose reconstruction – and now they can't be retrieved.

Concern/Comment:
After I took the readings with the Geiger counter, I gave them to my supervisor. I have no idea what he did with them. For me, it was just a job for extra money. But with my technical background, I figured out what it was about. I became a whistleblower in 1974, forwarding the pictures I took and readings to the EPA. In 1975 I was fired for overblown charges; nothing warranted such action. This was done to keep me from sending more information to the EPA. They followed up with screenings in 1990, but it was too late.

Comment:
The scrap was sold to scrap yards even if it was radioactive.

Arjun Makhijani:
Did people toss uranium butts back into the furnace? Does it need to be hotter to melt them?
Reply:
Knowing the way the plat operated, it is very likely that the butts went back in. They were kept in different areas of the scrap yard. And yes, uranium has a higher melting point.

Question:
Does Mr. Walker know the chain of command in NIOSH? Who has the last word? Who sent you here?

David Allen:
Dr. Jim Neton is in charge of this program and Mr. Larry Elliott is his boss. The meeting today was arranged as a means of communication coordinated by Mr. Murray and Mr. Avery.

Mr. Walker:
I already have all that information from previous meetings. NIOSH and ORAU staff is doing a good job with dose reconstruction around the country. They have been helpful and responsive to our questions and concerns, including coming for today's meeting. These are not the people who lied to us and put us in harm's way. They know what we're going through and I believe their concern is genuine. I will not release phone numbers of NIOSH and ORAU management to people who want to harass them. We need to work through the proper channels for a common goal.

Members of the Advisory Board (on Radiation and Worker Health) were completely unaware of the lies about the uranium. The workers have been willing to support each other and testify

without question. World War II veterans living with shell shock had their family lives ruined for the benefit of our country and government. Then the government denied them compensation. It's not about the money – it's about treating people with dignity and respect, with appreciation for what the veterans did to keep them safe.

47% of the claimants are still denied; it's very hard emotionally. We're here based on principle, trying to help people who had the government turn their back on them with denials.

Comment:
The members of this group are willing to waive privacy rights if necessary to get the SEC status. Things have been said today that are out of the purview of the people in attendance but it is necessary to get a response wherever they can.

Comment:
The process won't work if people don't show respect. Mr. Murray has come through for us by getting this team here today. They would like to get more information from us as well as other good sources. I am confident he will work hard to get all the information possible back to us.

Question:
My father worked on the line for the experimental uranium rollings. How many rollings does a worker have to be involved in to be eligible, and what types of cancer make one eligible to get approval and their claim paid?

David Allen:
Approval depends on a lot of factors in addition to proximity to the rollers and length of time on the line. Some people have been paid on fewer rollings than others, taking those other factors into consideration. Dose reconstruction is written into the law so NIOSH has to do it that way.

Concern:
The law doesn't take lifestyle into account. People didn't go to doctors as often back in those days. It is a very discouraging process and makes many people feel like giving up.

Question:
The records that the Department of Defense (DOD) is trying to get from the facilities were mentioned at the Manhattan Project Family Reunion. The leader was encouraged to bring them to us. What is NIOSH doing with the records they're sending or already have?

William Murray:
ORAU puts the documents together and has a team of about 5 or 6 out in the field looking for more records. This is in addition to the Oak Ridge staff. The teams go through many boxes of records, scan applicable documents, and go all over the country following up on leads on additional records. There may be places NIOSH and ORAU do not know about, but there is a constant push to get all the information available.

Comment:
Bethlehem Steel lied on their records and reports to OSHA.

William Murray:
NIOSH asked ORAU to do a worker outreach program to go out to sites and get this kind of information. That is why we have been working with Mr. Walker to get everyone around the table today to talk about what information is needed.

Comment:
Bethlehem Steel said the building was leveled and went on the inactive list. Now that the company has been sold, the new owners won't let you in for an investigation.

William Murray:
The present union at the plant has to contact NIOSH directly. The fact that the plant is owned by a new company has been makes things difficult.

Concern:
Past medical conditions of unknown causes are likely to be related to the exposure workers got at Bethlehem Steel. They couldn't be diagnosed in the past because the workers didn't know about the uranium and so couldn't give their doctors adequate information.

There is a local creek that runs past the bar mill, about 500-1,000 feet away from it. It runs right across the road and into Lake Erie. Contaminants and outfalls could have been dumped into the creek. It occurs to me that this probably happened because I was doing some work as a contractor about 50 feet from the bar mill, digging a foundation actually, and the next thing I knew I had bladder cancer. This does not seem like a far fetched correlation to me.

Arjun Makhijani:
Was there a stack ventilating the rolling mill?
Reply:
No, there was only a stack on the furnace, and the plant would shut down ventilation at night to spare the expense.

Edward Walker:

At this point Mr. Walker commented that some people needed to leave but if anyone else wanted to come back at 3:00 pm, the NIOSH and ORAU team would be available and would like to get more details. He thanked everyone for coming and reminded them of the group's weekly meeting on Thursdays, commenting that more than 250 people came to the last one. Concluding remarks for the main session of the day included Mr. Allen's view that the forum worked out well with each comment jogging other's memories. All agreed it was a good first step.

After a one hour break, the NIOSH and ORAU team reassembled to meet with the group members who wished to continue discussions. Mr. Walker returned from picking up Mr. Ross Early. He had not been able to make the morning meeting but had worked at the plant for over forty years and had much to tell. The following summarizes Mr. Early's recollections.

Mr. Ross Early:
Acid tanks in the strip mill were longer than this building – I had to travel the length of the tanks inhaling the dust and filth for forty years. I ran the crane in Spring Perch at the mill and I spent

my days hanging in a cage inhaling the dust all day. There were 48 cranes throughout the plant, and there was always plenty of overtime for good operators.

We had to pick up hot coils and then feed the lines. In doing so, I probably handled uranium in the bar mill. I never saw any guards or people in special suits to indicate that there was any danger.

I started working for Bethlehem Steel in late 1941 and became ill in 1987. The sickness stared with chronic headaches and bowel problems. It turned out to be colon cancer, and now I have to wear this bag everyday. I had to have my rectum sewed closed after not having control over my body functions for 17 years. I can't eat or drink anything. I have had 2 tumors and 3 polyps removed and have 70 inch incisions, front and back, from all the surgery. The cancer ate away all of my lower bowel, although it was caught in time to save my life. I asked my doctor if I got the cancer from the plant and his response was to ask 'where else would it come from?'

The working conditions were terrible. Men would urinate in the bucket in the crane and then again down the side of the crane and leave it there. No cleaning went on at Bethlehem Steel. The pits were only cleaned once a year; I have seen rats the size of cats in them. I ran a crane in the slab yard picking up the billets; the only protection I had was a pair of gloves. We did get masks in the acid area but it was not too effective; guys would choke as they walked through the area. There were five regular workers there and all died of cancer of the throat from inhaling those fumes.

We picked billets up with tongs, cables, scoops, or magnets and they got piled all over the place. Some went on a car, some ended up on the floor. There were stacks of the billets 10-12 feet high. There were times that the rolls in the mills had to be changed and you could see that they were covered with silt as well. It was the same around the acid tanks; I had to shovel 12 inches of dust from around the tanks for overtime. In forty years, I never saw that place clean. They were only concerned with getting the job done fast. They would have us load fifty-five trucks in an eight hour shift. There were a few 'Job Safety Analysis' meetings but afterwards they would always take you to the side and say 'be careful but don't lose no speed.' They weren't really concerned about safety; the meetings were just for show.

Mr. John Dimitroff:
The uranium rods were rolled and crated the same as the steel. They started out 10-12 feet long and would be rolled out to 20 or 50 feet. Then they were moved to the cooling bed which was about 250 feet long with a flying shear on the end for multiple cuts. They were not run as hot as steel, but they were still red hot when they came off the rolls. The furnace would re-heat the slabs, and then they would go to the roller. Water was used to keep the rollers cool during the process. Then it flooded the basements. In the winter, the water on the floor of the sub-basement caused more hazards because of the ice.

Mr. John Dimitroff provided the following information that was allegedly based on a deposition from a Mr. Stanley Tomaczeck, a roller at Bethlehem Steel in the 1950s:

At that time, around 1951 and 1952, there was a young office clerk who said he saw people in uniform typing reports. He said they took all papers with them when they left the area. They had acted very secretively. There were documents about bundling but not crating – these may have been the people who worked on that. There was a new process after the rollings starting in 1956. Army trucks and personnel appeared – soldiers and armed trucks. Coils were sent to the cooling bed, cut, and sent to be straightened out on the trucks. The government denied anything about the military being there and tried to get around the issue. There were depositions about it.

Mr. Ross Early:
There was oil all over the strip mill floor. The customer wanted to keep it saturated to keep the steel from rusting, as well as the coils and sheet iron. Anywhere close to the bar mill uranium could have been tracked out. I worked as a heat chaser then; there was no seniority at the plant and the mill paid the most.

Arjun Makhijani:
Did you ever hear the word 'thorium' used?

Reply:
No, but we never heard 'uranium' either.

Comment:
As a kid we heard stories from old timers about rolling uranium; that men would come into the plant in white suits when the uranium bars were brought in.

Arjun Makhijani:
How did they clean it?

Reply:
They tried vacuuming up the dust but that didn't really do much.

There were people around the plant who looked secretive and we were told that the reason for being there was classified. Of course we suspected they were from the government. They watched that people who were not on the job didn't come around the machinery during rollings. They also didn't let workers out of the area if they were on that job. People knew there was something going on but didn't know what. They just wanted to keep their jobs, so they didn't ask many questions.

The mills were taken over during WWII to produce shell steel and gun barrels. When uranium came along, it was just another product the country needed as far as workers were concerned. Some workers might have known it was uranium, but that didn't mean anything to them since there was no training or safety advice given by the company or government. The word out was that it was only worked on weekends and some nights, but it didn't matter what day it was; uranium was done on midnight shifts and there was no way it could be cleaned up for the morning crew.

There was no protective gear issued until sometime during the 1950s. It seemed reactive, as if the plant only took precautions after someone had already been hurt. Urine samples were never taken until the OSHA standards were put out in 1973. There was an asbestos curtain hung around the furnaces because the flames would shoot out eight to ten feet – the curtains would just crumble then be replaced but there was no real protection. Workers inhaled that flake as well.

Arjun Makhijani:
Were there any fires? Uranium catches fire easier than steel.
Reply:
There was a fire from the fumes out of the acid tanks; the area burned down in the 1970s.

Arjun Makhijani:
What did they do with the cut ends? Did they quench them?

Reply:
No, they put the ends on the floor. The crane would move the product and leave the scraps in little pieces that workers had to pick up by hand.

Arjun Makhijani:
Declassified information is being pulled back because of September 11. There is a belief that too much geographic information has become available to the general public and terrorists about DOE sites.

Realizing that you are interested in SEC status, here are some facts to help you decide which way to go: three out of four are uranium enrichment plants, and the uranium was contaminated with plutonium (which is more dangerous than uranium). The workers in these plants were not monitored for plutonium and there was a lot of press about it. The Amchitka Island, Alaska site was a site of three underground weapons tests. There were no records whatsoever but the Congressman was very powerful and on the right committee to help them get in.

The current structure of the cohort is more limited. There are only twenty-two cancers covered under the SEC, and dose reconstruction still has to be done for any cancer besides these twenty-two.

The first case was the result of a lawsuit initiated by a Lisa Crawford near the Fernald plant. They discovered contaminated water that was used unknowingly, even to feed her baby. She filed the suit and the plant ended up settling for $78 million split among 14,000 people in the area. The factory shut down soon afterwards and the results of a study showed overexposure up to 90% in the 1950s and 1960s. They worked with pure uranium with no steel in it.

In the 1990s the government started looking at practices at other plants. Urinalysis was done but not calculated into doses. In 1999 the Washington Post went to Fernald. They commissioned samples and found plutonium present, and beryllium was also mentioned. That started the talk of legislation. What passed in 2000 was a messy compromise that did not yield many results.

Only two chemical workers were compensated, and no one wanted the radiation program to end up the same way.

The Act set up a multi-step process that is slow and bureaucratic, but it seems like the best way to look at sites for their perspective on what's happening. The Site Profile meetings are used to help evaluate how complete the documents are.

The audit team will present findings to the Advisory Board at a public meeting and make recommendations. The manager will get notes, reports, and recommendations. There are many potential radiological factors to be considered. I'm not saying it will change anything; progress is slow but everyone needs to keep working towards a common goal. The way I see it, you have three options as an advocacy group:

Continue with the dose reconstruction program and use public pressure to bring about change
Look into SEC applications and rules. Work towards new legislation.

You are doing all three now; try to remain focused and positive towards change.

Mr. Murray asked if there were any additional comments or questions. There were none, so he thanked everyone again for their time and participation and the meeting concluded approximately 6:00 p.m.

Attachments:

- Sign-in sheets
- Attachment 1 – pictures of dust samples at meeting.