FINAL MEETING SUMMARY

HANFORD ADVISORY BOARD

HEALTH, SAFETY AND ENVIRONMENTAL PROTECTION COMMITTEE MEETING

March 12, 2009

Richland, WA

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This is only a summary of issues and actions in this meeting. It may not represent the fullness of ideas discussed or opinions given, and should not be used as a substitute for actual public involvement or public comment on any particular topic unless specifically identified as such.

Welcome and Introductions

Keith Smith, Health, Safety and Environmental Protection (HSEP) Committee Chair, welcomed the committee, introductions were made, and the committee adopted the October meeting summary.

Beryllium

Steve Bertness, Department of Energy – Richland Operations Office (DOE-RL), gave a presentation on the Chronic Beryllium Disease Prevention Program (CBDPP). To characterize facilities on the site, contractors use historical knowledge, worker interviews and sampling to take a baseline inventory of information related to the presence of Beryllium in a facility. Steve said Washington Closure Hanford (WCH) has 42 known or suspect facilities, only eight of which are still standing. The Plateau Remediation Contract (PRC) has 11 affected facilities in its inventory. Steve said among DOE-RL's contractors, a total of approximately 60 facilities on the site have been identified. After the baseline inventory is completed, a hazard assessment is completed using work scope and examinations of existing site conditions to determine potential exposure to Beryllium. Steve said this originally focused on airborne exposure and inhalation, but now also includes consideration of possible issues with skin exposure. He said there is little data available on skin exposure risk, but DOE has reacted to initial data to do as much as possible to protect the work force.

Steve said DOE conducts worker monitoring using air sampling through initial monitoring, periodic monitoring and negative exposure assessments. Air sampling is used primarily for long-term tasks with a consistent crew of workers repetitively doing work, and is helpful in collecting a block of data to reach a statistical conclusion. He said a negative exposure assessment must be conducted on the same work scope with the constant factors of operations, training and worker conditions. Worker monitoring is also done using surface sampling, including wipe samples for areas with no visible dirt and bulk samples for areas that have accumulated dust and dirt. Steve said bulk samples are more applicable to DOE-RL's scope of work, and are used for facilities that have been shut down for decades. Bulk samples allow for a weight-to-weight calculation rather than a wipe sample's weight-to-surface calculation.

Steve reviewed airborne Beryllium data from June 2005 through February 2009. He said 117 out of 2,450 samples in the decontamination and decommissioning (D&D) section of the 300 Area during this time period had reportable levels of Beryllium. The exposure limit established by the Occupational Safety and Health Administration (OSHA) is 2.0 ug/m^3 (0.02 microgram), and 2,213 of the samples were below that limit. Steve also reviewed contractor data from 2000 through 2008, which is based on a lower number of samples but had similar results. Of the 412 samples, 203 had less than 2.0 ug/m^3. Steve said many Beryllium tasks last for 45 minutes to one hour, and since air exposure cannot be determined for the flow rates required to obtain a sample these samples register as less than 1.0 ug/m^3 (0.01 microgram).

Steve said workers who have been affected by Chronic Beryllium Disesase (CBD) go through training and counseling on medical, employment and worker's compensation. There are restrictions on where affected employees can work, and their work areas are monitored. Steve said current and former site workers are eligible for a voluntary medical surveillance program, for which they self identify and request to be tested. AdvanceMed Hanford (AMH) provides testing and informs contractors of positive diagnoses because the contractor has the obligation to protect these workers.

If a worker is identified as Beryllium sensitive their future exposure must be monitored. Steve said if this monitoring cannot be done in their current job, the worker must be transferred to another location and retain their level of compensation for at least two years. If a worker cannot continue to work, they are provided with total normal compensation. Steve said DOE-RL is self-insured and its claims are managed by Contract Claims Services Incorporated (CCSI), a third-party administrator. The Energy Employees Occupational Illness Compensation Program Act (EEOICPA) provides lump sum payments for medical expenses and work loss. Steve said this compensation covers

contractor and federal employees, and its requirements are set up and administered by the U.S. Department of Labor (DOL).

Steve said they are currently moving forward with improvements to the site program. In July, a working group was initiated that includes representatives from DOE-RL, Department of Energy – Office of River Protection (DOE-ORP), primary contractors, the Hanford Atomic Medical Trades Council (HAMTC) and the Beryllium Awareness Group (BAG). The group conducts bi-weekly meetings to discuss ways to clarify expectations for contractors and workers and eliminate inconsistencies. Steve said they have completed a document that establishes expectations for facility characterization, employee monitoring, action levels, managing affected workers, medical surveillance, and training and counseling. The document is currently undergoing a review process during which it will receive comments from contractors. Comments will be incorporated into a resolution that will be sent back to the contractors then to DOE for approval. The working group will evolve into the Hanford Site CBDPP Committee, which will have more involvement with contractors.

Regulator Perspectives

- Beth Rochette, Washington State Department of Ecology (Ecology), said Ecology thinks the DOE program for monitoring is important and needs to continue. She suggested that workers should be allowed to refuse to complete work that may expose them to Beryllium without having to worry about losing their jobs.
- Mark Fischer, BAG, provided a worker's perspective on Beryllium issues. He said he has CBD and thinks the CBDPP document will alleviate some fears and concerns and implement many positive changes. For the program to be effective, however, contractors have to believe there is a Beryllium problem and complete required activities. Mark said training and education of the workforce is also needed so workers have a full understanding of the program, and trust between workers and contractors needs to be rebuilt. Training and education, as well as adopting a Beryllium work permit based on the radiological work permit are two key elements of implementing the CBDPP. Mark said the program is a living program, and contractors will report back to the CBDPP Committee if they find any issues. Additionally, the maintenance of facilities capability (MFC) will keep a list of facilities including those that have been torn down. Mark said MFC is currently building a Web site so people outside of Hanford can have an avenue to provide input.
- Mark said the medical process has caused stress for many people. He said people have reported problems with satisfying compensation requirements. Since CBD is not curable, medications are used to stop its progression, but these can cause side effects.

Mark said the use of the language "fixed and stable" to describe a patient has caused problems with the claim process. Julianna Yamauchi, DOE-RL, said "fixed and stable" does not mean cured; it means there is no additional treatment needed. She said the claim would then move to closure until the condition worsens and the claim can be resubmitted. Theresa Hammer, EEOICPA Hanford Resource Center, said rather than "fixed and stable," DOL uses the term "maximum medical improvement," (MMI) which means the patient will not improve with treatment. She said sometimes doctors say MMI to support the program. Keith suggested that new terminology may be helpful for these purposes.

- Mark invited the HSEP to come to a BAG meeting to meet with those affected by CBD.

Committee Discussion

- Keith asked if workers go through decontamination when they adopt protective gear, and Steve confirmed that they do.
- Keith asked if samples in buildings are still only taken from the eight-foot level. Steve said this depends on the scope of work. Facilities under long-term surveillance and maintenance are only sampled to the eight-foot level, but buildings going through D&D are sampled all the way to the ceiling.
- Mike Korenko asked if, when sampling for activities such as decommissioning, inconsistent exposure is taken into account. He used the example of a worker who was hammering within a facility, which resulted in spikes in the levels of Beryllium. Steve said short-term exposure limits (STELs) are taken into account, and structure monitoring plans are created to measure levels within an eight-hour, time-weighted period.
- Mike asked if new exposure limits will be reduced to 2.0 ug/m^3. Steve said for the new site-wide program contractors will manage workers who have been exposed to Beryllium so they are not exposed to more than this limit, which is the lowest they are capable of measuring. Steve said they would like affected workers' exposure to be zero, but this cannot be measured. He said one requirement of these rules is that the program must be updated on an annual basis.
- Bob Suyama asked if training and counseling are only for those with CBD, or if these are provided for all sensitized workers. Steve said this covers anyone who has been medically affected by Beryllium exposure. Sensitized workers still employed by Hanford can go through AMH for medical surveillance, and those who are no longer Hanford employees are covered by EEOICPA or worker's compensation. If a worker has been diagnosed with CBD, Steve said their medical expenses are covered.

- Mike asked if international data can be applied to Hanford's Beryllium program. Steve said the National Beryllium Association interfaces with the United Kingdom to keep up with new analytical techniques.
- Susan Leckband said historically there have been problems with workers getting their claims processed. She expressed concern that CCSI was involved with this issue. Steve said there is a core of requirements that must be met and, as with any program, there are delays and issues that arise.
- Susan asked the average time to process a worker's claim. Theresa said CBD or Beryllium-sensitivity claims can be processed in three to four months. Claimants are required to show medical evidence and proof of employment for their claim to be processed.
- Susan asked if workers must have evidence of exposure from National Jewish Hospital. Theresa said any hospital can provide this evidence.
- Mike said issues with compensation often relate to the transition between Beryllium sensitivity and CBD, and all criteria must be met to qualify for CBD. He said National Jewish Hospital criteria is different from DOL criteria, and he thinks this is where employees need help. Theresa said changing the criteria is a Congressional issue. If workers choose not to have the tests and they are having symptoms, Congress has said DOL cannot approve their claims.
- Mike asked if steroids interfere with blood tests. He said this is an issue, as steroids are often used to treat symptoms associated with Beryllium exposure. Theresa said the steroid Prednozone has been known to create false negative. Congress changed its criteria in 1993 and this was accounted for.
- Mike said there has been one fatality of the 27 workers that have had CBD, but it was diagnosed as lung cancer rather than CBD. He said Beryllium exposure causes a propensity for lung cancer and CBD, and asked what the compensation would be in this case. Theresa said if there is a surviving spouse or child, they could be compensated $125,000 if a doctor states that Beryllium was a contributing factor to the death. Mark said it can be difficult to find a doctor who will admit that, and Beryllium is not well known among doctors. Theresa said she has seen cases where it is shown as a contributing factor, and DOL will also look at whether it is listed as a cause of death on the death certificate. Mike asked whether there is a Beryllium specialist in the Tri-Cities area. Mark said Dr. Lee Newman is the leading expert at National Jewish Hospital, and there are a couple of doctors in the Tri-Cities that people with CBD see. He said doctors can be reluctant to take new patients that have CBD because of the paperwork their claims require.
- Mike said CCSI claims are more suitable for standard industrial accidents, and this may need to be re-examined for CBD because of the lifetime effects of this disease.

Mark said the CCSI process is for short-term injuries, and the system is designed to close a claim once the injury is healed. He said since CBD is not curable, the claim is never closed. Julianna said the claim stays open as long as a doctor says treatment is needed. She said any Beryllium claim would go to a doctor who understands Beryllium.

- Susan said she applauds the increased emphasis on protecting workers from Beryllium exposure. She expressed concern about integration between DOE-RL and DOE-ORP on this issue, because many workers travel between contractors. She questioned why this is not a site-wide program. Steve said DOE-ORP is involved in a site-wide program, and the Pacific Northwest National Laboratory (PNNL) is choosing not to participate in the program. Ken Hoar, DOE-ORP, said PNNL has a very limited use of Beryllium. Ken said DOE-RL and DOE-ORP have been working on an integrated program since last June.
- Susan said entire buildings should be sampled for Beryllium, rather than just to eight feet, because seismic events can shake materials loose. Mike noted a building with a roof leak had only been decontaminated to ten feet, which resulted in Beryllium exposure. Steve said the roof leak constitutes a change in conditions, and work should have been halted.
- Mike asked why surface contamination is not included on the facility list, and why the list is not broken down into zones. Steve said facilities can be a whole building, a room in a building, or a geographic area like a waste site. He said waste-site cleanup would be treated as a Beryllium job if evidence indicates Beryllium in the waste. Contractors will not dig unless the area has been characterized.
- Charlie Weems expressed concern that PNNL elected not to participate in the site-wide program. He said the Board has been recommending a site-wide program for several years. Charlie asked when the program would be implemented. Steve said comments on the CBDPP group's report are due from contractors March 13, and DOE would then use these to develop resolutions, within two or three days. Charlie asked who would oversee contractors to make sure they are complying with CBDPP's rules. Steve said this is DOE's responsibility.
- Charlie said additional blood testing is needed, which ties into educating workers about Beryllium. He asked what follow-up is completed on workers who are known to have worked in a Beryllium area. Brian Fawcett, AMH, said there is an ongoing protocol that conducts a blood test on workers. He said as long as they continue to test negative they are evaluated every three years for as long as they wish to stay in the program. He said workers assigned to a job that has potential exposure are evaluated yearly.

- Keith said the CBDPP training and education for workers could be modeled after radiation training and education.
- Mike suggested that representatives from DOE and the regulatory agencies attend a BAG meeting. Ken said DOE attends monthly BAG meetings. Mark said the relationship between DOE and BAG is improving, and they want DOE to see BAG as more of an asset than a hindrance.
- Mike said in 2004 the practice of interviewing employees about where they may have been exposed to contamination was stopped. He said based on the percentage of workers who test positive, the number of employees exposed to Beryllium is high. Steve said of the number of employees who have been potentially exposed, two to six percent of them would react to it and test positive. Mark said testing is strictly voluntary. DOE can only advise testing and cannot force workers to get tested. He said he recommended including an informational flyer on Beryllium as part of workers' required physical in order to make contact with everyone on the site.
- Mike asked whether testing was a requirement for anyone working with Beryllium, and Steve confirmed yes. Mark said they are revamping the system for those facilities not classified as Beryllium facilities to encourage more worker testing by the manager and industrial hygienist. Additionally, a building can be labeled as a Beryllium-controlled facility if only one room contains Beryllium. Mark said DOE must be careful with labeling because Beryllium-affected people cannot work in these facilities, and if they are relocated their salary can decrease after two years. He said some workers do not want to get tested because they may lose their job.
- Committee members said they would like to review the CBDPP document when it is ready, and Steve said he would work with Paula Call, DOE-RL, to do this.

Committee Discussion on Draft Advice

Mike reviewed the TWC's draft advice on Beryllium, which they have the intent of bringing forward to the April Board meeting.

Agency Perspective

- Steve said he believes DOE is most of what the advice recommends in its site-wide program. He said mandating testing for all workers is a policy-level recommendation, but suggestions about ways to get workers tested more often would be helpful. Ken said they have spent a lot of money encouraging workers to get tested but they are still seeing the same percentage of workers getting tested.

Committee Discussion

- Susan suggested that the advice should consider that stimulus money has to be used on scopes of work that are shovel-ready. She said for DOE-RL, D&D is a likely recipient of this money, and its application to Beryllium sensitivity issues should be considered.
- Keith suggested condensing the background section of the advice and including more bulleted information, as this would make the document more readable.

Mike will work on incorporating the committee's edits on the draft advice to be sent to the full committee to get consensus.

Committee Business

Future HSEP meeting topics include the plutonium toxicity tutorial, which is a joint topic with the River and Plateau Committee (RAP), reviewing the CBD document when it is released, attending a BAG meeting, reviewing the tank-vapor issue, and environmental monitoring.

Action Items / Commitments

- Keith will monitor the above issues which will determine the next committee call and/or meeting. The next possible committee meeting will be in the fall. .
- Cathy McCague, meeting facilitator, will send the draft advice on Beryllium to the full committee the week of March 16.

Handouts

NOTE: Copies of meeting handouts can be obtained through the Hanford Advisory Board Administrator at (509) 942-1906, or tgilley@enviroissues.com

- Chronic Beryllium Disease Prevention Program, Steve Bertness, March 12, 2009.
- Energy Employees Occupational Illness Compensation Program Act, Theresa Hammer, March 12, 2009.
- Chronic Beryllium Disease & Beryllium Sensitivity, Theresa Hammer, March 12, 2009.
- Beryllium Contamination at Hanford - Revision 7, Mike Korenko, March 12, 2009.

Attendees

HAB Members and Alternates

Gerald Dagle	Mike Korenko	Bob Suyama
Sam Dechter	Susan Leckband	Charlie Weems (On phone)
Harold Heacock	Keith Smith	

Others

Paula Call, DOE-RL	Madeleine Brown, Ecology	Brian Fawcett, AdvanceMed Hanford
Pete Garcia, DOE-RL	Beth Rochette, Ecology	Mark Fisher, Beryllium Awareness Group
Gail Splett, DOE-RL		Barbara Wise, CHPRC
Geoff Tyree, DOE-RL		Theresa Hammer, EEOICPA Hanford Resource Center
Julianna Yamauchi, DOE-RL		Molly Jensen, EnviroIssues
Lori Gamache, DOE-ORP		Cathy McCague, EnviroIssues
Ken Hoar, DOE-ORP		Annette Cary, Tri-City Herald