



**U.S. Department of Energy
Hanford Site**

NOV 18 2010

11-HAB-0001

Ms. Susan L. Leckband, Chair
Hanford Advisory Board
Enviroissues Hanford Project Office
713 Jadwin, Suite 4
Richland, Washington 99352

Dear Ms. Leckband:

HANFORD ADVISORY BOARD (HAB) CONSENSUS ADVICE # 228, "INDEPENDENT REVIEW OF BERYLLIUM PROGRAM," ADVICE #217, "BERYLLIUM DISEASE PREVENTION AT HANFORD," AND ADVICE #218, "WORKERS COMPENSATION REGARDING BERYLLIUM DISEASE"

Thank you for your advice on the Beryllium Program at Hanford. As you know, the U.S. Department of Energy (DOE) Office of Health, Safety and Security (HSS) released its report June 2, 2010, on the Independent Oversight Inspection of the Hanford Site Chronic Beryllium Disease Prevention Program (CBDPP) during a meeting with DOE Richland Operations Office (RL) and DOE Office of River Protection (ORP) Managers, and representatives of the Hanford prime contractors, the Beryllium Awareness Group (BAG), the Hanford Atomic Metal Trades Council (HAMTC), and representatives from the HAB.

The HSS team evaluated current practices for protecting workers against beryllium hazards, along with the beryllium medical surveillance programs at the Hanford Site. While the team found improvements in the program, they also noted the program could have been implemented more quickly.

The HSS independent inspection report included four findings that require corrective action, 12 cross-cutting opportunities for improvement, and opportunities for improvement specific to various contractors. The prime contractors developed corrective action plans and submitted those plans to DOE. A team composed of representatives of the BAG, HAMTC, ORP, RL, and the prime contractors developed a Hanford sitewide integrated Corrective Action Plan (CAP). Members of the HAB Environment, Health, Safety and Environmental Protection Committee were provided progress updates as requested during the development of the CAP. The CAP was signed by the chair of the BAG, the President of HAMTC, and the Managers of ORP and RL, and the CAP was transmitted to DOE Headquarters on August 30, 2010, with a request for Office of Environmental Management (EM) approval and HSS concurrence. EM approved the CAP with HSS concurrence on September 17, 2010.

In reviewing our response to previous HAB Advice #217 and #218, we wanted to provide some additional information to advice points.

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Advice 217-1.a.: Reactivate the practice of interviewing all employees that are beryllium sensitized to confirm that they worked in the current list of beryllium facilities. Maintain a current Hanford beryllium facilities list and create a list of the remaining facilities posted for beryllium contamination.

Response: The practice of interviewing beryllium-affected workers has been reactivated with the addition of an Industrial Hygienist to aid in the exploration of potential exposure pathways and magnitudes. Additionally, as part of the CAP, AdvanceMed Hanford (AMH) will develop and implement an epidemiological study of the continuing cases of beryllium sensitivity at the Hanford Site. We have also tasked the Mission Support Alliance LLC (MSA) to engage the services of a qualified outside entity, such as a university or research hospital, to perform an independent epidemiological study to help identify opportunities for prevention. Our DOE website (www.hanford.gov/page.cfm/berylliumfacilitiesAreas) has a complete listing of current Hanford Site beryllium-controlled facilities listed (200 Area, 300 Area, etc.) by a responsible cleanup contractor. The website also includes lists of former-controlled facilities that have been decontaminated and demolished.

Advice 217-1.d.: Expand the detection sweeps to areas greater than eight feet above the floor. Include assessing the dust on piping and ventilation above that level; and place special emphasis on the dust generated during decommissioning activities. Spread these improved procedures across the Hanford Site, and incentivize the contractors, if necessary. Ensure that ISMS is being executed at the worker level when there is a potential risk from beryllium.

Response: The scope of characterization in facilities has been based on the scope of work to be performed in a building. Surveillance and maintenance activities in a building are typically restricted to below the 8-foot level, and therefore no characterization above that level had been conducted based on the scope of work. The CAP requires that a more rigorous process for performing beryllium assessments be developed. This process will more conservatively utilize historical knowledge of the types of activities conducted in buildings to identify the potential for beryllium contamination to be present. This process will require that input from the BAG and HAMTC be solicited for making that determination. Activities in buildings deemed to have a potential for beryllium contamination will be controlled to minimize the potential for exposure. The CAP also requires that revised processes for beryllium hazard identification and control at the worker level be developed and implemented.

Advice 217-1.e.: Determine the level of beryllium contamination in the surface soil across the site. The approach suggested in the CBDPP, i.e. the Multi-Agency Radiation Surveys and Site Investigation Manual, seems appropriate. Give special consideration to the grid size near facilities on the Hanford beryllium facilities list and the entire 300 Area and the 200 Area near the coal plant. Use ISMS to formulate a risk mitigation plan based on these surface data.

Response: Beryllium occurs naturally in the soil on the Hanford Site. Naturally occurring beryllium, which does not pose a threat to human health, exists primarily as beryllium silicate, while processed beryllium is typically in an elemental or oxide form. Current sampling and analytical methods and technology cannot differentiate between the various forms of beryllium, but can only identify total “beryllium.” Therefore, it is difficult to identify beryllium “contamination.” We have contracted, through MSA, an expert statistician to assist us in developing a sampling strategy that will allow the site contractors to differentiate between naturally-occurring and anthropogenic beryllium in the soil on the Hanford Site. Once this model is developed, it will be applied to areas such as waste sites and excavation areas.

Advice 217-1.f.: Apply the As Low As Reasonably Achievable (ALARA) philosophy to beryllium and require contractors to remove beryllium contamination where practicable as the first priority in protecting worker’s health. Only when removal is not practicable should administrative controls or personal protective equipment be utilized.

Response: Hanford has developed an integrated, sitewide program to minimize exposure to beryllium at Hanford. The CBDPP covers specific requirements that include air monitoring, identifying and controlling access to facilities where beryllium is known or suspected to be present, requiring medical testing of site employees before they are assigned to areas where beryllium is present, and conducting specialized training for employees who are assigned to work where they may come into contact with beryllium. The CBDPP recognizes that potential workforce exposure hazards are present from legacy contamination and beryllium activities conducted previously at the Hanford Site. Removal of beryllium contamination of this type is rarely practicable. Contractors do utilize work practice controls such as wet methods and fixatives to control exposure, but often personal protective equipment, while the least desirable control, is the only feasible option to ensure worker protection. The Hanford sitewide CBDPP uses the term As Low As Practicable as a commitment to our goal of As Low As Reasonably Achievable.

Advice 217-2.b.: Analyze the reasons why employees are reluctant to volunteer and design approaches within DOE’s authority to mitigate their concerns. Ensure by action and written documentation that workers who do test Beryllium Lymphocyte Proliferation Test (BeLPT) positive will not be subjected to discriminatory practices that diminish their employment rights, legal or defacto.

Response: We have solicited feedback from the BAG and HAMTC on this issue, and those organizations have identified issues that are beyond DOE’s control, such as concerns about future ability to obtain health/life insurance. A primary concern that is within DOE’s control is uncertainty of employment impacts based on a positive BeLPT. We have continually and consistently expressed an expectation to site contractors that a positive BeLPT shall not impact a worker’s employment at Hanford. We will continue to work with the site contractors, the BAG, and HAMTC to ensure this expectation is met. The CAP also includes actions to provide information to workers and encourage their participation in the voluntary testing program.

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Advice 217-2.c.: Since sensitivity to beryllium may surface years after exposure, encourage employees to be tested, at least, every three to five years. Adopt a goal of having 90% of the site's workforce tested for beryllium every five years. Decontamination and decommissioning workers should be tested annually. Include an individualized risk communication program, mailing information to each worker regarding facilities or areas they may have worked in or entered with potential for beryllium exposure. This was the recommendation of the Hanford Joint Council, which the site said it would adopt.

Response: If a contractor employee has a job assignment that could potentially involve beryllium exposure, a BeLPT is a condition of employment. For all other site employees, a voluntary beryllium medical surveillance program has been established to provide BeLPT blood tests and medical evaluations to workers who are concerned about previous or potential exposure to beryllium. This program is available to any interested Hanford employee during normal working hours and employees can participate on "company time" and at no expense to the employee. Any medical test is a serious, personal decision. RL, ORP, and the site contractors support this program and encourage employees to gain as much knowledge as possible through this program before making such an important decision. The results of the testing are kept confidential to the extent allowed by law and employees should know that we expect our contractors to make every effort possible to ensure an individual's work status is not affected by the outcome of the BeLPT blood tests or subsequent medical evaluations.

Advice 217-2.f.: Include strong language in the contracts for all subcontractors describing the beryllium risks and required preventative measures.

Response: Subcontractors, at any level, who work on the Hanford Site, are required to comply with the Hanford Site CBDPP. Site contractors are required by 10 CFR 851, "Worker Health and Safety Program," to flow down the CBDPP to subcontractors at all levels on the Hanford Site.

The HAB's Advice #228 letter, dated February 5, 2010, references prior DOE response to Advice #217 and # 218 states that DOE was not examining the potential of a portable beryllium detection system recommended by the HAB's Health, Safety and Environmental Protection Committee. Actually, RL held a teleconference with the "leading company" referred to in that letter and found that it does not have a viable prototype that can be tested at the Hanford Site. This company is looking to build an instrument for DOE once the technology has been developed and verified. DOE and its contractors are continually monitoring the progress of the research and development occurring across the complex at the national laboratories and Oak Ridge, Tennessee, through active participation in the Beryllium Health and Safety Committee. The Beryllium Health and Safety Committee (<http://www.sandia.gov/BHSC/index.htm>) is open to any U.S. citizen with an interest in beryllium as it relates to occupational health and safety, particularly the prevention of medical consequences of disease through a better understanding of workplace exposure. Membership is also open to any employee of the U.K. Atomic Weapons Establishment or U.K. Ministry of Defense. The current executive board is made up of representatives of DOE, National Nuclear Security Administration, and the U.S. Army. The full

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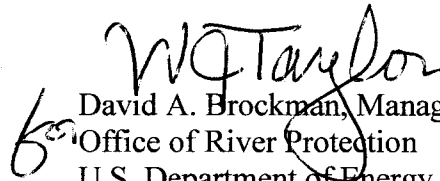
committee meets at least twice a year and holds educational symposiums periodically (e.g., surface and dermal sampling, detection of beryllium particulates).

In summary, implementing the CAP for the CBDPP is a primary focus of RL and ORP, and we ask for your continued support improving the site's CBDPP. For additional information, visit the Hanford Site beryllium website at: <http://www.hanford.gov/page.cfm/Beryllium>.

Thank you for your interest. If you have questions, please contact Paula Call, RL at (509) 376-2048 or Pamela McCann, ORP at (509) 376-7663.



Matt McCormick, Manager
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David A. Brockman, Manager
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OCE:PKC

Enclosures:

1. Advice Letter #217
2. Advice Letter #218
3. Advice Letter #228
4. RL Response Letter to #217 and #218

cc: See page 6

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HANFORD ADVISORY BOARD

A Site Specific Advisory Board, Chartered under the Federal Advisory Committee Act

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US Environmental
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of Ecology

April 3, 2009

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Shirley Olinger, Manager
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Richland, WA 99352

Re: Beryllium Disease Prevention at Hanford

Dear Mr. Brockman and Ms. Olinger,

Background

Beryllium represents a very serious potential risk to many Hanford employees, often without their knowledge. When certain sensitive individuals are exposed to even minute amounts of inhaled Beryllium, they are at considerable risk of becoming beryllium sensitized and contracting a potentially fatal granulomatous lung disease called chronic beryllium disease (CBD) and an increased risk of lung cancer.

To date there have been twenty-seven verified cases of CBD in employees at Hanford. Six of these cases have been diagnosed since 2007. One CBD employee has died of lung cancer and one employee uses oxygen twenty-four hours a day. Many need chronic or intermittent steroids for less advanced CBD. In addition, there have been eighty-eight confirmed cases of sensitivity to beryllium from the surveillance program using the Beryllium Lymphocyte Proliferation Test (BeLPT). This test of activated sensitivity can be a precursor to future CBD.

From a worker safety perspective based on the number of affected workers, beryllium currently rates as a greater hazard than radiation.

Not every individual who is exposed to beryllium will experience adverse health effects. Studies have shown that on average, 2% to 6% of exposed workers develop sensitivity, although the rates can be as high as 20% among workers with the highest exposures, such as beryllium machinists.

Workers are exposed to beryllium, carry a lifelong risk of developing CBD, even if the exposure amount was small or the worker is no longer exposed.

Extent of Contamination

Beryllium contamination may be more widespread at the Hanford Site than is currently appreciated:

- Battelle tested for and found beryllium in surface areas in the 300 area.
- The coal fired plants in the 200 and 300 areas have potentially spread beryllium contamination as they are a source of environmental beryllium
- The fuel rod button processing left a residue of beryllium byproducts.
- Prior to the Federal Beryllium Rule, materials and equipment were transferred across the site without recognizing the beryllium risk.
- Beryllium was used in some circuit breakers, old style fluorescent lights, and some non-sparking tools.
- The Material Test Reactor core mockup contained large quantities of beryllium.
- Testing at Hanford and at other Department of Energy (DOE) sites has indicated there may be beryllium higher up in buildings and in areas that were originally unsuspected.

Hanford Beryllium Facilities List:

100-DR, 1154, 1252, 1713-F, 1240, 1706-KE, 747-B, 2400 Stevens, 6th Street Warehouse, 6266, 202-S, 209-E, 2101-HV, 222-S, 222-T, 231-Z, 234-5Z, 241-A, 2703-E, 2707-SX, 2714-W, 271-B, 272-AW, 272-WA, MSL-5, EDL, PSL, LSLA, 303-K, 303-J, 303-F, 303-M, 306-E, 306-W, 304, 309, 313, 314, 308, 311-TF, 318, 324, 325, 326, 327, 328, 329, 331, 333, 305-B, 303-C, 334-A, 350, 3712-N, 3716 3708, 3706, 3712-S, 3751-A, 3745-B, 3731-A, 3720, RTL-520, 236-Z, 2736-Z, 2736-ZB, 338, and PDL.

Implication of the Affected Employee Data

Testing at National Jewish Medical and Research Center has shown that people do not test positive unless they were exposed to beryllium. The BeLPT test does not reveal a predisposition to the sensitivity. At present, only genetic testing can identify those individuals who have an increased probability of beryllium sensitivity.

Approximately 2.5% (27 + 88) of the 4583 Hanford employees tested have CBD. Since 2% to 6% of people exposed to beryllium develop this sensitivity, one has to deduce that 42% to 100% of the workers that were tested had been exposed to

beryllium. This is an indication of the potential widespread Beryllium contamination at Hanford.

Based on these statistics, for every 1000 workers that have not yet been tested about 25 workers will test positive and six might get CBD. Further or repeated exposure to beryllium of sensitized workers would increase the risk of developing CBD. Therefore, DOE and its contractors have a great responsibility to encourage all Hanford employees to take the beryllium sensitization test and identify which of them are susceptible. Certain employees, such as janitorial, service personnel and machinists, might have a higher potential to have been exposed to beryllium dust.

DOE facilities representatives and contractor employees have a potential for beryllium exposure from unrecognized contamination. Environmental testing for beryllium should include many buildings not historically believed to have contained beryllium. The risk could increase since the surfaces of the old facilities currently not on the beryllium list are being disrupted as part of decommissioning and have not been fully tested.

DOE is to be commended for its proactive approach to this issue. One initiative of particular satisfaction to the Hanford Advisory Board (Board) is the ongoing but still incomplete development of a Hanford Site Chronic Beryllium Disease Prevention Program (CBDPP). The program includes one uniform site-wide set of standards as recommended by the Hanford Joint Council for Resolution of Significant Employee Concerns. The Board recognizes the significance of this achievement to enhance worker protection and standardizing expectations with regard to 10CFR850 requirements, including facility characterization, worker exposure and protecting affected workers from further harm related to Beryllium exposure.

Additionally, the Board recognizes AdvanceMed Hanford for encouraging employees to participate in the volunteer beryllium testing program and assisting the Hanford workforce in all medical aspects related to beryllium. They are taking a leadership role in standardizing the surface and airborne detection techniques and actively communicating the potential risk to encourage employees to take the volunteer test.

Any funding required for testing or compensation is sourced through a separate fund; therefore, there is no financial impact on the cleanup mission.

Advice

1. DOE should enhance the effort to pinpoint the sources of beryllium contamination and mitigate the risks that led to worker sensitivity:
 - a. Reactivate the practice of interviewing all employees that are Beryllium sensitized to confirm that they worked in the current list of Beryllium facilities.
 - b. Maintain the current Hanford Beryllium Facilities List since it is a valuable source of information to current and retired workers and add to it as new areas are found.
 - c. Create a new, shorter list of the remaining facilities, ensuring that these facilities are posted for beryllium contamination and that all current employees in those facilities are either tested or moved.
 - d. Expand the detection sweeps to areas greater than eight feet above the floor. Include assessing the dust on piping and ventilation above that level; and place special emphasis on the dust generated during decommissioning activities. Spread these improved procedures across the Hanford Site, and incentivize the contractors, if necessary. Ensure that ISMS is being executed at the worker level when there is a potential risk from Beryllium.
 - e. Determine the level of beryllium contamination in the surface soil across the site. The approach suggested in the CBDPP, i.e. the Multi-Agency Radiation Surveys and Site Investigation Manual, seems appropriate. Give special consideration to the grid size near facilities on the Hanford Beryllium Facilities List and the entire 300 area and the 200 area near the coal plant. Use ISMS to formulate a risk mitigation plan based on these surface data.
 - f. Apply the As Low As Reasonably Achievable (ALARA) philosophy to beryllium and require contractors to remove Beryllium contamination where practicable as the first priority in protecting worker's health. Only when removal is not practicable should administrative controls or personnel protective equipment be utilized. Because beryllium cannot be effectively and assuredly removed, workers in buildings with potential beryllium contamination should be monitored and given personal protective equipment whenever potential dust

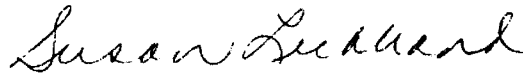
disturbing activities are occurring. Monitoring and characterization results should be posted for workers.

2. DOE should enhance the site-wide educational program to encourage employees to take the Beryllium sensitivity test:

- a. Require/motivate broad participation in the beryllium sensitivity blood test within the restrictions of applicable laws. This includes both active and retired employees.
- b. Analyze the reasons why employees are reluctant to volunteer and design approaches within DOE's authority to mitigate their concerns. Ensure by action and written documentation that workers who do test BeLPT positive will not be subjected to discriminatory practices that diminish their employment rights, legal or defacto.
- c. Since sensitivity to beryllium may surface years after exposure, encourage employees to be tested, at least, every three to five years. Adopt a goal of having 90% of the site's workforce tested for beryllium every five years. Decontamination and decommissioning workers should be tested annually. Include an individualized risk communication program mailing information to each worker regarding facilities or areas they may have worked in or entered with potential for beryllium exposure. This was the recommendation of the Hanford Joint Council, which the site said it would adopt.
- d. Have the entire work force understand the risks of beryllium and beryllium sensitivity. Educate both active and retired workers why they should be tested for beryllium sensitivity especially those known to have worked in the currently beryllium listed buildings, as well as any future sites found to be contaminated.
- e. Make certain that former workers are aware of the Hanford Beryllium Facilities List. Determine the most effective way to communicate the historical risk to temporary employees, e.g. student workers and subcontractors.
- f. Include strong language in the contracts for all subcontractors describing the beryllium risks and required preventative measures.
- g. Include beryllium awareness training in Hanford General Employee Training, including a question about whether an employee has ever worked/been in contact with beryllium in present or previous employment.

Because of the recent contract changeovers, DOE should continue to facilitate the uniform site-wide Beryllium protection program by all contractors and subcontractors as advocated by the Board in Advice #196.

Sincerely,



Susan Leckband, Chair
Hanford Advisory Board

This advice represents Board consensus for this specific topic. It should not be taken out of context to extrapolate Board agreement on other subject matters.

cc: Michelle Pirzadeh, U.S. Environmental Protection Agency, Region 10
Jay Manning, Washington State Department of Ecology
Doug Shoop, Co-Deputy Designated Federal Official, U.S. Department of Energy, Richland Operations Office
Steve Pfaff, Co-Deputy Designated Federal Official, U.S. Department of Energy, Office of River Protection
Richard Campbell, Environmental Protection Agency
Jane Hedges, Washington State Department of Ecology
Catherine Brennan, U.S. Department of Energy Headquarters
The Oregon and Washington Congressional Delegations
Senator Mark Udall, Colorado
Dr. Tim Takaro, Simon Fraser University

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April 3, 2009

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Re: Workers Compensation Regarding Beryllium Disease

Dear Mr. Brockman and Ms. Olinger,

Background

Beryllium represents a very serious potential risk to many Hanford employees often without their knowledge. When certain sensitive individuals are exposed to even minute amounts of inhaled beryllium, they are at considerable risk of becoming beryllium sensitized and contracting a potentially fatal granulomatous lung disease called chronic beryllium disease (CBD) and an increased risk of developing lung cancer.

Both Worker Compensation Laws and the Energy Employees Occupational Illness Compensation Program Act (EEOICP) compensate employees if they have CBD. The U.S. Department of Labor (DOL) is the agency in charge. Affected employees are also entitled to obtain workers' compensation through the U.S. Department of Energy's (DOE) third party administrator for industrial accidents, Contract Claim Services Incorporated/Labor and Industry (CCSI/L&I). Hanford workers are provided free evaluations through AdvancedMed Hanford if they test positive. Most employees take the sensitization blood test as a simple procedure with no issues.

There is a particularly difficult transition period when a sensitized employee is evolving to a full blown CBD case. Currently, these transitional sensitized employees have to prove they are impacted by satisfying the criteria of CBD.

DOL's CBD criteria are conservative. All criteria must be satisfied, not two out of three. The differences in criteria for CBD between the DOL and National Jewish Medical and Research Center further complicate the diagnosis for CBD. Testing for beryllium reaction by injecting under the skin was finally determined to be a risk. There is evidence that steroids taken to mitigate CBD symptoms may interfere with the sensitization test. Testing, such as Lung Lavage Biopsies, is very intrusive. Once patients are diagnosed with CBD, certain doctors are reluctant to take them on for the fees allowed by the DOL. Apparently there is no local CBD specialist physician in the Tri-Cities.

DOE's CCSI/L&I third party compensation process is designed for standard industrial accidents, but may need to be re-examined for CBD due to the lifetime nature of this incurable disease.

Advice

DOE should improve the processes and support the affected Hanford workers, including advocacy for fair compensation. DOE should assume a leadership role beyond their organization to help the Hanford workers:

- a. Lead a program to educate the local medical community as to the potential risk and expected symptoms. This program could be done via Continuing Medical Education (CME), perhaps through the Benton Franklin Medical Society and the Benton Franklin County Public Health Department.
- b. Encourage the University of Washington, National Jewish Medical and Research Center, or other institutions to improve the beryllium sensitivity test, (e.g. using a smaller blood sample), and to improve the pre-sensitivity detection using blood genetic markers.
- c. Interface with DOL as an advocate for current sensitized employees. Review DOL CBD criteria and conduct a lessons-learned from the current sensitized employees on their experiences with the process to obtain compensation from the relief funds as defined by the (EEOICP).
- d. Review the process to obtain compensation currently in place in CCSI/L&I to determine if it is tailored to deal with the special long-term nature of CBD. End the practice of requiring multiple medical exams to receive workers compensation after a worker is already diagnosed under DOE's beryllium program at the nation's leading beryllium medical centers.

Sincerely,



Susan Leckband, Chair
Hanford Advisory Board

This advice represents Board consensus for this specific topic. It should not be taken out of context to extrapolate Board agreement on other subject matters.

cc: Michelle Pirzadeh, U.S. Environmental Protection Agency, Region 10
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Senator Mark Udall, Colorado
Dr. Tim Takaro, Simon Fraser University



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Hanford Site**

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Hanford Advisory Board
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Dear Ms. Leckband:

**WORKER COMPENSATION REGARDING BERYLLIUM DISEASE (ADVICE #218) AND
BERYLLIUM DISEASE PREVENTION AT HANFORD (ADVICE #217)**

The U.S. Department of Energy (DOE) appreciates the Hanford Advisory Board's (HAB) continued interest in worker safety and health programs, which remain an essential component of Hanford cleanup activities. DOE has promulgated two Rules, 10 CFR 850, *Chronic Beryllium Disease Prevention Program (CBDPP)*, and 10 CFR 851, *Worker Safety and Health Program*. Both of these rules establish more stringent safety and health requirements at Hanford than those applied to work done in the private sector.

HAB advice #217 suggests that DOE conduct an enhanced effort to pinpoint the sources of beryllium contamination and mitigate the risks. As required by 10 CFR 850, any work involving potential exposure to beryllium is evaluated prior to performing the work. This includes activities such as decontamination, decommissioning, and demolition. If this evaluation indicates that beryllium exposure is anticipated, the work task will be performed by beryllium assigned workers who have been given beryllium worker training and placed in the beryllium medical surveillance program. DOE is also investigating the feasibility of using a portable beryllium detection system at Hanford.

HAB advice #217 also suggests that DOE enhance the sitewide education program to encourage employees to take the Beryllium sensitivity tests. Currently there are three levels of beryllium training provided. The first course provides general information on beryllium awareness and is included in the Hanford General Employee Training. The second course is required for all identified beryllium associated workers and provides additional details of our CBDPP and the possible health risks of past exposure to beryllium. The first two courses meet 10 CFR 850 37 (b & c) requirements. The third course is for beryllium workers and provides valuable information about how to work safely around beryllium.

DOE insists that worker protection remain a core value for our contractors, and this is reflected by the outstanding safety records at Hanford. Additionally, DOE has established the Integrated Safety Management System, which requires site contractors to integrate provisions for worker safety and health into work planning and execution systems. DOE also encourages contractors to actively participate in DOE's Voluntary Protection Program.

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As the HAB is aware, DOE has worked closely with the Hanford Atomic Metal Trades Council, the Beryllium Awareness Group (comprised of Hanford workforce members with beryllium sensitivity and workers with Chronic Beryllium Disease) and DOE contractors, to develop a Hanford Site CBDPP. The Hanford Site CBDPP is addressing those items identified in HAB Advice #217 that are under DOE's direct control. DOE aggressively promotes the voluntary medical surveillance program available to all Hanford employees as well as the Former Worker Medical Screening Program that is available to retired Hanford workers. DOE will continue to communicate our expectations that site contractors place beryllium affected workers in jobs that protect them from further beryllium exposure, without loss of compensation. While 10 CFR 850 establishes requirements for a medical surveillance program, worker participation in such programs is voluntary. However, DOE contractors have made medical surveillance a condition of employment if the worker's Employee Job Task Analysis indicates that the worker may be assigned tasks with potential beryllium exposure.

HAB Advice #218 suggests that DOE educate the local medical community on the health hazards of beryllium. DOE is working with Hanford's medical services contractor, AdvanceMed Hanford, to develop a strategy to educate the local medical community on the risks and symptoms of beryllium exposure. DOE, through the Office of Science and the National Laboratory system, actively funds mission-related research in a broad number of areas; however, medical research is conducted by other federal agencies such as the National Institute of Health and the Center for Disease Control.

HAB Advice #218 also suggests that DOE review established compensation programs with Energy Employees Occupational Illness Compensation Program Act and Washington State Workman's Compensation Laws, which are not administered by DOE. DOE does actively interface with the administrators of both these programs, the Department of Labor and Washington State Labor and Industries, respectively. In fact, DOE has full-time employees assigned to interface with these agencies on a wide variety of issues, including beryllium.

The Office of Health, Safety and Security (HSS) has revitalized the DOE's Former Worker Medical Screening Program, otherwise known as the Former Worker Program (FWP). The FWP identifies, notifies and makes medical screening services available to the more than 600,000 former employees who have worked in the weapons complex during the past 60 years for DOE, contractor, and subcontractor employees or its predecessor agencies. HSS has developed stronger and more effective relationships with the Labor Department and the National Institute for Occupational Safety and Health to increase the effectiveness of programs addressing the health care of former workers, and enhancing assistance to all eligible workers who had exposures to radiation and other toxic substances. In their annual report, dated February 2009, over 360,000 former workers have been contacted and over 55,000 medical screening examinations have been provided to those who volunteer to participate in the FWP. In addition, follow-up re-screening exams have been provided to over 7,300 former workers. Below is the link to that report.

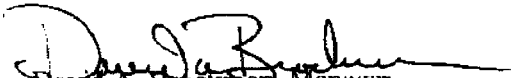
http://www.hss.doc.gov/healthsafety/fwsp/formerworkmed/2008_FWP_Annual_Report.pdf


Ms. S. L. Leckband
09-HAB-0005

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We appreciate the HAB's interest and advice regarding worker health and safety. DOE is implementing a sitewide beryllium program to be consistent across the Hanford Site contractors and to ensure that workers who become sensitized get the best possible care. If you should have any question or would like additional clarification on any of these issues, please contact Steve Bertness at (509) 376-6221.


David A. Brockman, Manager
Richland Operations Office


Shirley J. Olinger, Manager
Office of River Protection

Enclosures:

1. Ltr. from HAB – Advice #217
2. Ltr. from HAB – Advice #218

Ms. S. L. Leckband
09-HAB-0005

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February 5, 2010

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Re: Independent Review of Beryllium Program

Dear Ms. Triay, Mr. Krahn, Mr. Brockman and Ms. Olinger,

Background

On April 3, 2009 the Hanford Advisory Board (Board) provided Advice #217 and #218 to the U.S. Department of Energy (DOE) on the beryllium situation at Hanford.

In July 2009, Assistant Secretary Inés Triay met with the Board's Executive Issues Committee. In that meeting, members discussed the Board's advice on beryllium. Members expressed concerns that recommendations and commitments from two prior independent reviews of the site's beryllium programs had not been implemented. Ms. Triay committed to a review of those past recommendations and commitments. Separately, we understand that DOE made a promise to the affected beryllium workers to have an independent review of the beryllium program, and for the beryllium workers to participate in the selection of the review team. These commitments have not been met. Furthermore, as noted in the Board's letter recently submitted to DOE, there is significant concern that the new

beryllium program is not entirely adequate.

DOE has not implemented previously agreed to recommendations from prior independent reviews, including full characterization of facilities and individually communicating the risks of exposure from specific facilities or locations to workers whose work may include those sites. Prior reviews found that elements of the site's beryllium program existing at that time did not fully meet regulatory requirements or best practices.

A truly independent review of the recently implemented program is essential to establish its adequacy and protectiveness as DOE moves forward to implement the new Chronic Beryllium Disease Program Plan.

DOE has recently indicated that it plans to replace the promised independent review with one conducted by personnel from DOE-Headquarters (HQ). That plan does not meet the Board's definition of independent and is not likely to attain the confidence of the workforce.

Advice

- The Board advises DOE to move forward, expeditiously, with a review of the Hanford beryllium program carried out by a well-credentialed panel independent of DOE (not DOE employees). Such a review might be expedited by recruiting experts who have participated in prior reviews or reports on Hanford's beryllium programs and who have attained the confidence of the affected worker group.
- Independent reviewers, selected with the participation of the beryllium affected workers, should be able to establish the scope and design of the review based on scientific methods and input from affected workers and others knowledgeable of the subject. Furthermore, input by the workforce should be taken under the assurance of strict confidentiality.
- The Board believes this review is essential to ensure the adequacy of the Hanford Site's beryllium program.

Sincerely,



Susan Leckband, Chair
Hanford Advisory Board

This advice represents Board consensus for this specific topic. It should not be taken out of context to extrapolate Board agreement on other subject matters.

cc: Steve Pfaff, Co-Deputy Designated Official, U.S. Department of Energy, Office of River Protection
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