Aug/Sept 2011 Volume 3 Issue 3

BERYLLIUM HEALTH & SAFETY COMMITTEE

BHSC NEWS

Fall 2011 Meeting at Hanford in Richland, WA

The plans are in place and the speakers identified in the draft Agenda on pages 6 and 7 of our newsletter. The facility where the meeting will be held is a public building and does not require any extra security badging and contains a modest cafeteria. We are blessed to have Michele Gerber, Author of "*On the Home Front: The Cold War Legacy of the Hanford Nuclear Site*" and a well known Hanford Historian, to lead a tour for our meeting participants. You can sign up for the tour when you register for the meeting. There will be travel and local hotel information that can be printed out after registering. Our hosts are planning some evening activities that sound fun and intriguing, and there are some excellent speakers that will be presenting some new information to our members and others that may choose to participate.

Special points of interest:

- New Be Articles
- Update on NIOSH Be research program, including some recently completed work

Inside this issue:

Chairman's Corner

BY MIKE BRISSON

Chairman, BHSC

The calendar might say summer, which to many means vacations and slowing down just a bit, but for the BHSC the calendar seems to be saying "busy as usual". We have confirmed the location for the fall BHSC meeting, and assembled a preliminary schedule (found elsewhere in this newsletter). The BHSC has never met at the Hanford site, and I believe our meeting there is timely. Our hosts are working on a historical tour as part of the meeting that should be quite interesting. Our Spring 2012 meeting may also be at a place we have not gone to before; more on that in a future newsletter. In addition to planning for the fall meeting, our Meetings and Symposia subcommittee is about to begin planning for our next major symposium (the last one having been in 2008), which will be in fall 2012 and will be hosted by National Jewish Health in Denver.

Other subcommittees have been busy as well. The Sampling and Analysis Subcommittee has formed two new working groups, one on inhalable sampling and wall deposits (led by Geoff Braybrooke), and one that will work on a beryllium literature survey (led by Linda Youmans-McDonald). Risk Communications has finished work on updated training modules that will be presented to the full membership for voting in the near future, and is now working on a list of frequently asked questions for the web site. Med/Epi continues working on a white paper that also should soon be ready for voting by the full membership.

Another project that has begun, but will take time before you see the tangible results, is for revamping of our publicly accessible Web site. The goal is to make it more useful and informative. Steven Lee at LLNL is leading this effort.

Our informal partnership with ASTM Committee D22.04 on Workplace Air Quality has resulted in yet another standard, D7707, which is a specification for wipe sampling materials for beryllium in settled dust. This specification allows for a smaller wipe with less than 0.5 nanograms of background beryllium content. Work is proceeding on a dermal wiping standard for metals and metalloids (including beryllium).

Other than that, the BHSC doesn't have much going on this summer …

Note: the Chairman's Corner does not necessarily reflect the views of the BHSC, U.S. Department of Energy, or any of its contractors.

Volume 3 Issue 3

BHSC Board Report

MIKE BRISSON
Chairman, BHSC

This report covers the May 11 and June 28 Board teleconferences.

The Board continues to look into viable options for electronic voting and registration. We have been offered the use of a system managed by ORISE for DOE-HSS which appears to have more flexibility and reliability than the "free" services we had been trying. Test registrations using this system will be tried in July and, if successful, used for general registration for the fall meeting.

Options for the spring 2012 meeting were discussed in both May and June. We had contacted the DOE Kansas City Plant, but they are not able to host us at that time. Two other options are now being explored.

Voting earlier this year on the Research Needs white paper on alternative medical testing procedures drew negative comments from a few voters that have not yet been resolved. A meeting of the concerned parties (either in person or by webinar) will be arranged to resolve the issues.

Kathleen Noonan made available the services of a technical editor (much appreciated!) to polish the Med/Epi white paper, which should be available for membership voting in the near future.

Note: BHSC Board teleconferences are normally held on the third Tuesday of each month at 11 AM Eastern time. In May, the teleconference was held on Wednesday, May 11, to avoid conflict with the AIHA conference. Board calls are open to anyone interested.

MEETINGS: JOWOG [US-UK Joint Working Group] - BHSC BOARD - BHSC

MEETING LOCATIONS

Locations for the 2012 meetings (Spring and Fall) and the Spring 2013 meeting are now being arranged. The Fall 2012 meeting will include the Fourth International Symposium on Beryllium Particulates and Their Detection.

Fall meetings are typically in the western U.S

Spring meetings are typically in the eastern U.S. (or at AWE).

Locations typically need to be at a DOE, DoD, or AWE site.

Conference Call Schedule—August and September 2011

(All times Eastern Standard Time)

If you are told that the subscriber has not yet arrived, please do not hang up; wait about 15 seconds and you will be prompted for your name, and then you will be connected to the call.

If you are interested in using a time marked below as "open" for a BHSC conference call, contact Mike Brisson.

*Although every attempt is made to maintain the schedule, conference calls are sometimes subject to rescheduling and cancellation. If you are not a member of a specified subcommittee and wish to receive the latest notifications/call agenda, please notify the appropriate person.

August 2011				
Conference Call	**Normally Scheduled**	**Date**	**Time (EDT)**	**Contact Name**
Technical Standards SC	1st Tuesday, 11 AM	**2-Aug**	**11:00 AM**	Steven Lee
Open	1st Wednesday, 11 AM	**3-Aug**	**11:00 AM**	Mike Brisson
SAS Fluorescence WG	1st Thursday, 11 AM	**4-Aug**	**11:00 AM**	Anoop Agrawal
Sampling/Analysis SC	2nd Tuesday, 11 AM	**9-Aug**	**11:00 AM**	Amy Ekechukwu
SAS Literature WG	2nd Wednesday, 11 AM	**10-Aug**	**11:00 AM**	Linda Youmans-McDonald
Risk Communication SC	2nd Thursday, 11 AM	**11-Aug**	**11:00 AM**	Lisa Barker
BHSC Board	3rd Tuesday 11 AM	**16-Aug**	**11:00 AM**	Mike Brisson
Med/Epi SC	3rd Thursday, 11 AM	**18-Aug**	**11:00 AM**	Paul Wambach/ Kathleen Noonan
Sampling WG	4th Tuesday, 11 AM	**23-Aug**	**11:00 AM**	Geoff Braybrooke
Research Needs	4th Wednesday, 11 AM	**24-Aug**	**11:00 AM**	Mike McCawley
Meeting/Symposium SC	4rd Thursday, 11 PM	**25-Aug**	**11:00 AM**	Linda Youmans-McDonald
Open	5th Tuesday, 11 PM	**30-Aug**	**11:00 AM**	Mike Brisson
Open	5th Wednesday, 11 PM	**31-Aug**	**11:00 AM**	Mike Brisson
September 2011				
SAS Fluorescence WG	1st Thursday, 11 AM	**1-Sep**	**11:00 AM**	Anoop Agrawal
Technical Standards SC	1st Tuesday, 11 AM	**6-Sep**	**11:00 AM**	Steven Lee
Open	1st Wednesday, 11 AM	**7-Sep**	**11:00 AM**	Mike Brisson
Risk Communication SC	2nd Thursday, 11 AM	**8-Sep**	**11:00 AM**	Lisa Barker
Sampling/Analysis SC	2nd Tuesday, 11 AM	**13-Sep**	**11:00 AM**	Amy Ekechukwu
SAS Literature WG	2nd Wednesday, 11 AM	**14-Sep**	**11:00 AM**	Linda Youmans-McDonald
Med/Epi SC	3rd Thursday, 11 AM	**15-Sep**	**11:00 AM**	Paul Wambach/ Kathleen Noonan
BHSC Board	3rd Tuesday 11 AM	**20-Sep**	**11:00 AM**	Mike Brisson
Meeting/Symposium SC	4rd Thursday, 11 PM	**22-Sep**	**11:00 AM**	Linda Youmans-McDonald
SAS WG	4th Tuesday, 11 AM	**27-Sep**	**11:00 AM**	Amy Ekechukwu
Research Needs	4th Wednesday, 11 AM	**28-Sep**	**11:00 AM**	Mike McCawley
Open	5th Tuesday, 11 PM	**29-Sep**	**11:00 AM**	Mike Brisson

Conference Call Number 803-725-1403 Pass code 2227011 *Scheduled duration is one hour for all calls*

Beryllium Aggressive Air Sampling Demonstration Project

By: Kent Kerr

The Kansas City Plant (KCP) of the Department of Energy's (DOE) National Nuclear Security Administration (NNSA) is planning to relocate to a new campus and transfer ownership of the plant's facilities to the private sector. The plant's existing manufacturing facility includes some areas used to manufacture copper-beryllium components. These areas have amounts of beryllium in residues on surfaces that vary from below levels of detection to above the DOE housekeeping limit. Many of these surfaces are difficult to access. The areas above the housekeeping limit are administratively controlled. NNSA wants to assure that legacy residues that contain beryllium on facility surfaces have been adequately addressed prior to transferring ownership of the facilities. There is no generally-accepted standard for cleaning, sampling, and releasing DOE facilities with beryllium-containing surfaces, so KCP has been considering various options. The General Services Administration (GSA) leases part of this building to DOE and occupies other parts of it. Discussions with GSA led KCP engineers to conclude that releasing DOE's facilities based on sufficiently low results of aggressive air sampling might be a preferred option.

KCP engineers, industrial hygienists, and statisticians enlisted the help of other subject matter experts from DOE and NNSA at DOE headquarters, and other contractors with beryllium control experience at other DOE sites. That team developed and executed the KCP Beryllium Aggressive Air Sampling Demonstration Project during 2010. Modeled after the EPA's asbestos clearance method at 40 CFR 763, the Demo Project involved: enclosing the study area; maintaining a negative air pressure in the study area; air "washing" all room surfaces with 1HP leaf blowers (>300 MPH wind) for 15 minutes per 1,000 ft^2 of floor area to re-entrain the residues into the air; using a 30" fan for each 10,000 ft^3 room volume to keep airborne the resuspended residues; and using randomly-located IH air sampling pumps, cassettes, and filters mounted on 4' camera tripods to collect the samples. Samples were collected over 10 ½ - 12 hours and analyzed using ICP/MS. Wipe samples were collected from equipment used in the study area prior to release in compliance with 10 CFR 850.31.

Two sampling events were conducted. The first sampling event was performed in the study area prior to cleaning. This was a departure from the standard use of aggressive sampling but deemed useful to obtain the results of aggressive air sampling of an area in its "as-is" condition. The second round of sampling and analysis was conducted subsequent to HEPA vacuuming the study area floor and walls to remove residue that had been re-suspended and subsequently settled out of the air after the first round. For the first round of results, the 95% upper confidence limit of the estimated 95th percentile (95/95 UTL) for the distribution of results was 0.0107 $\mu g/m^3$. This value slightly exceeded the team's pass/fail value of 0.0100 $\mu g/m^3$. The second round result for the 95/95 UCL was 0.0020 $\mu g/m^3$ which is well below the pass/fail value.

Conclusions:

- Results for the study area indicate that, for beryllium surface contamination up to 0.85 $\mu g/100\ cm^2$, aggressive re-suspension can reasonably be expected to result in air concentrations up to about 0.01 $\mu g\ Be/m^3$.
- The aggressive air sampling method is adequately sensitive to distinguish between areas that have been adequately cleaned and areas that have not been adequately cleaned.
- Following cleaning, the study area was sufficiently free from beryllium surface contamination to support a conclusion that future operations in the area could not be reasonably expected to re-suspend enough airborne beryllium to exceed occupational or environmental health-based standards.

The DOE Beryllium-Associated Worker Registry Updated Web Site

Background: The DOE rule 10 CFR 850 "Chronic Beryllium Disease Prevention Program" was issued after it became well understood that the long standing exposure limit of 2 micrograms beryllium per cubic meter air was not preventing chronic beryllium disease (CBD) and that the Department's health protection efforts needed to be improved. Because of the uncertainty on whether implementing the requirements of the rule would prevent CBD, it included requirements for reporting information that could be summarized and used as an indicators both of success in implementing the rule and whether implementation is providing the desired level of protection. The Beryllium-Associated Worker Registry (BAWR) is primarily a tool for planning and prioritizing CBD prevention efforts. It has a secondary benefit of potentially identifying questions for additional investigation or research and subjects that would be good candidates for research or investigation.

The BAWR web site has been revised to provide summary data with less lag time than the data provided in published reports in the past (see http://www.hss.doe.gov/HealthSafety/WSHP/be/bery_wr.html.) The web based summaries use charts and tables to provide information with minimal comment or conclusions so that it is available to those who need it on a more timely basis.

The charts and tables summarize health and exposure data that are generated by organizations operating CBD prevention programs. Summaries include roll-ups of the data from across the DOE complex and break-outs of the data by selected categories.

The BAWR is a tool that is available for use by any element of the DOE to help manage CBD risk. It is supported by funds provided by the DOE Office of Health and Safety and operated by the Oak Ridge Institute for Science and Education (ORISE), Center for Epidemiologic Research.

Reporting sites have access to their own data and in some instances the BAWR is a collection of information that is easier to use for analyses than their own site's data bases. Sites can also request special analyses of their own or other sites data by contacting the DOE project officer Paul Wambach at 301-903-7373 or by email at Paul.Wambach@hq.doe.gov.

It is DOE policy to support occupational health research by proving funded projects access to data and research subjects. Interested researchers can also contact Paul Wambach for further discussion.

PRELIMINARY AGENDA

Fall 2011 BHSC and Affiliated Meetings – November 8th -10th, 2011

Hanford Site, Washington State

*On-line registration is requested for in-person AND remote participants by **October 20th** at*

http://orise.orau.gov/beryllium-registration/

All times are local (Pacific or GMT -8). Remote viewing of presentations will be available using GoToMeeting™. The web link and associated phone numbers will be provided to those who have registered for remote participation. Remote users should ensure in advance that the computers they intend to use are compatible with webinar software, such as GoToMeeting™. ABIH points will be requested and sign-in sheets will be provided to attendees at the conference. Instructions for remote participants who wish to obtain ABIH points will be given to those who register. Telephone conferencing will be available for all sessions except the JOWOG meeting.

Security information, prohibited items, required identification, room/building numbers, and instructions for reporting to the facility will be provided to those who have registered for the conference. Hotel information, driving directions, and maps will also be included.

There will be a group function/dinner on the evening of November 9 All participants are welcome to attend. More information, including estimated costs, will be provided at a later date.

Tuesday, November 8th

08:30-10:30	BHSC Board Meeting – Open to all interested
10:30-10:45	Break
10:45- 12:00	JOWOG (Joint Working Group) meeting (no telephone conferencing for this meeting)
12:00-13:30	LUNCH
13:30-15:30	Hanford Tour, Michele Gerber, Author of "On the Home Front: The Cold War Legacy of the Hanford Nuclear Site" (2007) Contact Information: **509-375-5416 or at egerber@charter.net**

Wednesday, November 9th

08:00-08:30	Registration
08:30-08:40	Welcoming Remarks: Mike Brisson, BHSC Chair
08:40-08:50	Hanford Welcome: (TBD)
08:50-10:00	User's Meeting for the Beryllium Registry : Paul Wambach, DOE-HQ
10:00-10:15	Break
10:15-11:30	Update on case-control studies of Y-12 and Rocky Flats beryllium workers, Mike Van Dyke, Ph.D., National Jewish Health (tentative)
11:30-13:00	Lunch
13:00-14:00	Update on Epidemiological Study, Christine Schuler, NIOSH (tentative)
14:00-14:30	Update on Beryllium to Metals Ratio Study, Charles Davis, Environstat Inc., et al.
14:30-14:45	JOWOG Update
14:45-15:00	Break
15:00-17:00	Subcommittee Breakouts
18:00	Group Activity

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Thursday, November 10th

08:00-08:30	Registration
08:30-09:00	Business Meeting Items that require a vote
09:00-9:30	Abstract: IOM samplers for Be, Pam Shirey, AMTRP Idaho National Laboratory (tentative)
09:30-10:00	Abstract: Beryllium Sampling at Hanford, Vern Holden, CIH, CSP, ARM, Hanford
10:00-10:15	Break
10:15-11:45	Roundtable: Facility Characterization, Release of Building for General Use. (TBD)
11:45-13:15	Lunch
13:15-14:30	Technical Issues/reports resulting from Hanford CAP, Scott Seydel, CH2MHill, Hanford, et al.
14:30-14:45	Break
14:45-15:30	Remainder of Business Meeting
15:30-16:00	Subcommittee Reports

- Medical/Epidemiological (Paul Wambach/Kathleen Noonan)
- Meetings and Symposia (Linda Youmans-McDonald)
- Research Needs (Mike McCawley)
- Risk Communication (Lisa Barker)
- Sampling and Analysis (Amy Ekechukwu)
- Technical Standards/Practices/Measures (Steve Lee)

16:00 Dismiss

BERYLLIUM HEALTH & SAFETY COMMITTEE

The **Beryllium Health and Safety Committee (BHSC)** is committed to preventing beryllium sensitization and chronic Beryllium Disease (CBD) and other adverse health effects that can be cased by workplace exposure to beryllium.

The Mission of the BHSC will be accomplished by:

- Promoting the safe use of beryllium
- Obtaining a better understanding of exposure risks
- Improving exposure monitoring
- Fostering improved controls
- Accumulating and Disseminating information concerning beryllium process best work practices, as well as, data from the health studies concerning the hazards associated with beryllium
- Training / mentoring of beryllium health professionals
- Identifying and promoting research that has the potential to enhance or improve our worker safety programs

BHSC Contact Information

Position	Name	Phone	Email
BHSC Chair	Mike Brisson	1-803-952-4400	mike.brisson@srs.gov
BHSC Vice-Chair	Geoff Braybrooke	1-410-436-7391	Geoffrey.Braybrooke@us.army.mil
BHSC Vice-Chair (VC and Membership Secretary)	David Weitzman	1-301-903-5401	david.weitzman@hq.doe.gov
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Risk Communication (formerly CBD prevention) Subcommittee	Lisa Barker	1-303-398-1723	barkerL@njhealth.org
Sampling and Analysis Subcommittee	Amy Ekechukwu	1-803-725-1236	amy.ekechukwu@srnl.doe.gov
Technical Practices, Standards, and Measures Subcommittee	Steven Lee	1-925 423-6294	lee144@llnl.gov
Research Needs Subcommittee	Mike McCawley	1-304-293-8042	mmccawley@hsc.wvu.edu
Medical and Epidemiology Subcommittee	Paul Wambach	1-301-903-7373	paul.wambach@hq.doe.gov
Meetings and Symposia Subcommittee	Linda Youmans-McDonald	1-803-952-3010	linda.youmans-mcdonald@srs.gov

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