

FINAL MEETING SUMMARY

**HANFORD ADVISORY BOARD
HEALTH, SAFETY AND ENVIRONMENTAL PROTECTION COMMITTEE**

*October 11, 2012
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.

Opening*

Mike Korenko, Health, Safety and Environmental Protection Committee (HSEP) Chair, welcomed the committee. Mike noted that HSEP has been cancelling meetings due to budget constraints and as a consequence the committee’s focus has been stalled. Time was put on the day’s agenda to discuss priorities over the next three months in an effort to sharpen the committee’s focus.

Susan Hayman, EnviroIssues Facilitator, introduced committee members to the new “Things to Consider” poster, and invited them to keep these bullets in mind during their committee deliberations. These were developed in a meeting with HAB leadership and agency liaisons as a way to help keep the discussion focused for all committees.

Worker Training

Issue Manager framing

* Please see Attachment 1 – Transcribed Flip Chart Notes for key points/follow up actions recorded during the committee discussion.

Becky Holland, HSEP Vice-Chair and Hanford Atomic Metal Trades Council (HAMTC), opened the discussion. Worker training became a topic of committee discussion as a result of the asbestos issue and concerns with adequacy of training at Hanford. Some training courses have transitioned to computer based trainings instead of classroom trainings, which Becky believes does not encourage knowledge retention and makes it difficult for workers to get their questions answered. The committee is interested in learning how the effectiveness of training is measured and if online courses meet Occupational Safety and Health Administration (OSHA) requirements.

Presentation

Paul Kruger, Mission Support Alliance (MSA) provided an overview of worker training (Attachment 2), including training drivers and DOE's application of the ADDIE (Analysis, Design, Development, Implementation and Evaluation) Model for training.

Agency perspective

Pete Garcia, U.S. Department of Energy-Richland Operations Office (DOE-RL), oversees contractor training and has SME (subject matter expert) responsibility at Hanford. Pete described the requirements and contractual drivers for training and continuation of training (Attachment 3). The *10 Code of Federal Regulations (CFR) 830* applies to safety at nuclear facilities specifically, and is a general training requirement. *DOE Order 414.1* covers all other requirements related to initial training of personnel. Beyond that, *DOE Order 426.2, "Personnel Selection, Training, Qualifications, and Certification Requirements for DOE Nuclear Facilities"* applies to contractors responsible for nuclear facilities. Order 426.2 is incorporated into CH2M Hill Plateau Remediation Company (CHPRC) and Washington Closure Hanford (WCH) contracts, but is not included in the MSA contract. However, a clause in the MSA contract does require worker training. HAMMER (Hazardous Materials Management and Emergency Response) is managed and operated by MSA. They develop training courses to meet federal requirement regulations regarding work at nuclear sites.

Committee Questions and Response

Note: This section reflects individual questions, comments, and agency responses, as well as a synthesis where there were similar questions or comments.

C: Site specific training is especially important at tanks farms.

C: Last year a worker shared his concerns about the inadequacy of a Hanford General Employee Training (HGET) course with the trainer. When the trainer raised his concerns to management, both the worker and trainer were censored for it.

R: [WRPS] There shouldn't have been any censoring of the worker. Systems are now in place to prevent this type of situation.

C: There is anecdotal evidence to suggest that contractors are more worried about the cost of the training than the effectiveness.

C: A Washington River Protection Solutions (WRPS) worker who completed the Radiological Control Technician (RCT) emergency response refresher course online shared an instance of submitting an inquiry to the trainer and received a generic, automated response from Vivid Learning Systems that did not adequately address his questions.

R: [MSA/HAMMER] Last year this training was done as a hands-on course. HAMMER agreed to check with Vivid learning Systems and look into the effectiveness of responses to workers overall.

Q: Who is Vivid Learning Systems?

R: [MSA] Vivid Learning Systems is contracted by MSA; they partner with the Mission Support Contract (MSC) and provide HGET training. They generally do not have a role in responding to students. Responses should be handled by MSA, HAMMER or contractors.

Q: What factors are used to determine if a course will be in a classroom or online?

R: [MSA] The needs analysis helps determine this and is focused on ensuring skill proficiency. Also, the DOE Handbook: A Systematic Approach to Training and the DOE Guides to Good Practices assist in making these determinations.

Q: What is the difference between field training and 'prop' training?

R: [MSA] Field training is performed at the site. Prop training uses simulators and/or props to imitate on-site scenarios. A slip simulator was recently purchased to reduce the number of slips at Hanford during icy months. United Parcel Service (UPS) saw a 70 percent reduction in broken bones after using a simulator of this type. MSA/HAMMER has a goal of getting 100 people through the course before snowfall.

Q: Are other cost effective measures implemented to encourage safety?

R: [MSA/HAMMER] Yes. Safety is encouraged in a number of ways and people are taught that wearing gloves during cold weather is a way to prevent injuries. Hundreds of gloves were distributed to the workforce as part of the Hand Out Of Pockets (HOOP) campaign. Regarding safety culture, DOE recently launched an initiative called Safety Conscious Training. Managers are trained how to appropriately handle and address issues raised by workers. There is an interesting role playing element to the training.

Q: What are the specifics of the Level 3 evaluation? Are Level 3 evaluations random?

R: [MSA/HAMMER] Level 3 Behavior evaluations are done when workers have been out in the field for awhile. Feedback is collected on how things have been going since their initial training and if they felt adequately prepared. HAMMER looks for classes that will provide useful data. The Level 3 evaluation process is time consuming and labor intensive. Only three are being done this year. It is not random.

Q: Are evaluations tracked and entered into a database?

R: [MSA/HAMMER] Every student's Level 1 Reaction evaluation goes into a database. Instructors receive a report of student feedback. If applicable, some issues raised in evaluations go into the Corrective Action Management (CAM) system and are tracked that way as well. HAMMER sells safety for the work force and evaluations are a critical element of what they do.

C: The issues have not been with HAMMER but with the contractor tailored trainings. Instances mentioned earlier about managers suppressing issues raised by the work force is a behavior no one would endorse but it falls under the category of safety culture.

Q: When a contractor conducts their own trainings, where is the oversight to validate its effectiveness?

[MSA/HAMMER] HAMMER does evaluations to analyze their own training programs and identify if specific skills are missing. MSA and HAMMER do not have a mandate to oversee other contractors' training. HAMMER is always looking at opportunities to have other contractors elect to use their programs.

[DOE] Employees at DOE-RL are not experts on training, but DOE-RL and DOE-ORP do monitor their contractors.

[MSA/HAMMER] HAMMER standardized the Site-wide Safety Initiative and it took leadership from DOE and the labor force. HAMMER has been able to capitalize on expertise and pool resources and their training programs have greatly improved because of it. HAMMER offers 14 programs and is recognized nationally and by DOE Headquarters (HQ) for the Site-wide Safety Standards.

Q: Is Site-wide training required for DOE employees?

R: [MSA/HAMMER] DOE did a spinoff class and HAMMER was brought on to train people. It is a large group; mid-level managers and supervisors are the first ones being trained. In case studies, whistle blowers often call out first time supervisors.

[DOE] All DOE-ORP and DOE-RL managers attended a four hour safety conscious training. It is a step in the right direction.

Q: Is Pacific Northwest National Laboratory's (PNNL) extensive safety training related to HAMMER?

R: [MSA] No.

C: It appears that people are often required to attend training they don't need,

R: [MSA/HAMMER] Overtraining does happen sometimes. In cases where training is recommended but it is not necessary or the worker has already completed a similar course, HAMMER may challenge the training request. Assessments are done to ensure processes remain efficient.

C: It seems like HAMMER is doing well, but the challenge is when contractors opt out of HAMMER or when training rigor is not focused on what is really important, like emergency response.

R: [MSA] Contractors collectively agree on training. There is a Site-wide standard for all training programs. Trainings are conducted through HAMMER for various contractors but there are other facility-specific training programs available.

[WRPS] WRPS takes their training programs seriously for all on-site workers, including electricians, builders, etc. All DOE requirements under Order 426.2 and DOE's Guides to Good Practices are followed, and WRPS operates under the same requirements as HAMMER. Contractually WRPS workers are required to take HAMMER's Site-wide standard program; however, WRPS offers facility-specific trainings focused on training workers so they do not get injured and are prepared when they walk on site. Emergency Response training was recently moved back into the classroom.

Q: Why was WRPS Emergency Response training transitioned to a computer course initially? How many classes went from the classroom to online? Have people raised concerns about online courses?

R: [WRPS] An analysis showed that the dialogue presented in the training was not overly complex and ultimately it came down to listening to worker evaluations. Sometimes web based seems appropriate at the time but evaluations show something different. WRPS instructors take their job seriously; it is upsetting to hear that an instructor disregarded suggestions from a worker. Regarding which courses are web based versus in the classroom, this information is available online when workers log in using their HID (Hanford Identification). Both emergency response and sexual harassment trainings were moved back into the classroom. If someone recommends for a course to go back to classroom their recommendation is taken seriously.

C: Hands on training is not cheap but it is effective. Some people need this type of training to learn.

Q: Can a language be written into contracts requiring HAMMER to handle all training and note that resources will be devoted to training so as not to distract from contractors' bottom line?

R: [DOE] Anything is possible. HAMMER training is required for a lot of things but not everything. As far as standardizing training, everything that needs to be standardized already is.

[MSA] MSA tries to optimize the use of HAMMER but there are programs so specialized that training may be better accomplished by contractor programs, not HAMMER.

C: HSEP should be careful not to tell MSA and HAMMER how to do their jobs; they are the experts.

C: Bob Legard, Central Washington Building and Construction Trades Council (CWB & CTC) Director, said he was lucky to work with HAMMER for four years and watch the ADDIE process work well. CWB & CTC supports HAMMER in their method of training and their commitment to labor involvement.

C: Glad to see that having a safety conscious work environment is getting the attention it needs. It will be years before the safety culture at Hanford changes because there is little worker trust with leadership. While worker evaluations are important, HAMMER and contractors need to critically evaluate their own programs, too.

C: Contractors need to have a process for examining and continually improving their implementation of DOE's Integrated Safety Management Systems (ISMS) as it relates to their training programs.

The committee will continue to track this topic. HSEP discussed potential advice regarding consolidation of training programs and possibly recommending language be incorporated into contracts incentivizing HAMMER training. Since this topic relates to contracts at Hanford, the group suggested tracking it jointly with the Budgets and Contract Committee (BCC). The HSEP issue managers will look for a future update on Site-wide safety training, work with BCC to examine how training is written into contracts, and look into how training is evaluated on the basis of Integrated Safety Management (ISM).

Worker Safety Issues

Issue Manager framing

Tom Carpenter, Issue Manager (IM) for the workers safety issues topic, said (via phone) that Hanford has a history of underreporting illnesses and injuries. Inspector General reports from 1997 and 2004 identified that it is a problem with contractors. When DOE changed their performance criteria, the number of lost work days dropped dramatically from approximately 200 to zero or 1, so there is a financial incentive to not report issues. Tom reported hearing instances of injured workers sitting in trailers all day to make contractor's numbers look good or not reporting injuries as work-related. This is a safety culture issue; Tom believes workers are pressured by management or their peers not to seek medical attention because bonuses, particularly at Bechtel National, Inc. (BNI), come with the accumulated hours worked without an accident.

Tom noted that the Hanford Advisory Board (HAB), might not be able to do anything about this issue but he wanted to bring it to the committee's attention for discussion.

Agency perspective

Pete Garcia, DOE-RL, said there are general requirements built into contracts to report illnesses and injuries sustained onsite in compliance with OSHA. Pete said his staff provide oversight of contractors and they issue findings as needed. If staff report that a worker had an injury on-site those reports are sent to HPM Corporation Occupational Health Services (HPMC OMS), DOE's on-site medical services provider. OSHA does paypays close attention to whether injuries are reported because they are driven to keep injury numbers down. Pete noted the Conditional Payment of Fee (CPOF) Clause speaks to site-specific Environment, Safety and Health (ES&H), and Security Performance Criteria/Requirements; that is where DOE meets expectations. The Clause is not tied to specific numbers, but an overall review.

Committee Questions and Response

Note: This section reflects individual questions, comments, and agency responses, as well as a synthesis where there were similar questions or comments.

C: Years ago injuries or illnesses would not be reported until employees were gone more than three days. Contracts have been altered based on HAB input to make safety a priority and encourage reporting; it is puzzling that employees would not report an injury or illness.

R: [CWB & CTC] Rumors continue to be heard about workers sitting in the shop until an injury or illness goes away to preserve safety numbers and it is unclear how to stop this from happening completely. CWB & CTC believes Hanford is one of the safest places to work and sometimes requirements go overboard but the underreporting needs to change, possibly by building a check and balance system into the process. ISM is a tool that can be used to identify issues but its application may need to be improved.

C: Is there a way to find out if a worker went to see a physician on-site and if they felt treatment was adequate?

R: [DOE] Brian Harkins, DOE-Office of River Protection (ORP), noted the definitions of "lost time" and "recordable" come from OSHA. By law, DOE is required to review OSHA logs every six months for all contractors and review federal logs every three months. There is independent review of HPMC medical files to ensure cases are recorded properly. However, if a worker seeks outside medical attention and does not disclose that information, DOE will not know about it because of privacy rules. Brian noted that going to work and getting paid to do nothing is fraud and, while there have been a few documented cases of this, it is very hard to find or prove. DOE's independent review reports of OSHA logs are available to the public for review.

C: Tom has completed his own review of DOE's reports and has received a list of employee concern files. A good percentage of people that filed complaints through the Employee Concerns Program (ECP) complain about retaliation for reporting concerns related to work. He has heard first hand from workers that their serious injuries are being characterized by contractors as non-work related, and there are issues with workers not receiving appropriate compensation for injuries sustained on-site. It is difficult to bring

these cases forward in the context of the HAB but the committee would like DOE to look more into why workers are not reporting.

C: The Building and Construction Trades Council has concerns with the labor force being discussed as a whole, all-encompassing entity. There are several different labor groups (e.g. metal, building, etc.). When a Corrective Action is made to fix a labor force issue, it does not always align with the different collective bargaining agreements (CBAs). Involving the labor force in discussions is an important part of fixing on-site issues. Working with the CWT & CTC directly to identify proactive solutions is also encouraged.

C: The issue is not always with workers not reporting injuries, but medical providers not classifying injuries as work related or recordable. Becky has heard recent accounts of workers being denied oxygen or stitches because their injuries would be classified as recordable. Workers talk to one another and instances like these are demoralizing for the workforce. HSEP could investigate policies and how medical classifications affect the way a person is treated.

R: [HPMC OMS] Dr. L.B. Sandy Rock, MD MPH explained that as the medical contractor, HPMC is not allowed to do much more than apply first aid. Sandy was familiar with the case regarding oxygen. A nurse had suggested oxygen but the patient's pulse was at a rate that he did not require it. Someone in the same room overheard a nurse mention if the patient had received oxygen, it would have been a recordable injury. HPMC is trying to ensure their providers are clear communicators so a comment is not taken out of context. HPMC would not withhold oxygen or hesitate to refer a patient to someone else. Regarding the case where a man was allegedly denied stitches, Sandy was not familiar with this case but noted the steri-strip tape is proven to work as well as stitches, particularly for head and face cuts.

Q: What are the medical contractor's limitations?

R: [HPMC OMS] The list of treatments allowed is in essence nursing care. There are distinct limits to what physicians can do. For example, HPMC's contract states that suturing is not allowed but physicians can apply steri-strips, and if a patient requires oxygen they would be sent immediately to the emergency room. The root issue is miscommunication between workers and physicians.

C: Physicians should not be discussing whether injuries are recordable or not. That is outside their purview. Their responsibility is to treat the person appropriately.

C: Union Leaders should be emphasizing the concept that small, seemingly benign injuries can turn into more serious ailments if they are not addressed early on.

HSEP discussed next steps regarding worker issues (Attachment 1). Becky, Keith and agreed to further review the issues and determine if it is worthwhile for HSEP and the HAB to pursue. The group agreed to discuss this topic in greater detail based on recommendations by the issue managers.

Defense Nuclear Facilities Safety Board (DNFSB) Letter – Integrated Safety Management (ISM)

Issue Manager perspective

Mike Korenko, IM for the DNFSB ISM topic, said the HAB issued advice on ISM in September, which included a description of ISM's hierarchical nature. The advice raised concerns about systemic safety culture problems at Hanford, many of which are related to an unnecessarily complex ISM process. Recommendations to DOE for improving ISM behavior were provided in the advice.

The HAB met with DOE in August as part of developing this advice; it was a good meeting and the Board received a lot of feedback. Some of DOE's comments indicated that DOE believes the HAB may not fully understand ISM.

Mike walked through an outline of the levels of ISM (Attachment 4). He noted that the DNFSB's letter identified specific weaknesses with DOE's implementation of activity-level ISM at the "Define and Analyze Hazards" and "Development and Implement Controls" levels (Attachment 5). A handout was provided to the committee highlighting these areas on the ISM outline (Attachment 6)

Mike also provided the committee with a handout outlining specific areas of weakness with ISM implementation as they relate to topics HSEP is concerned about (Attachment 7), including the HSEP Work Plan, ISM advice, beryllium, vitrification plant safety culture, Employee Concerns Program (ECP), and DNFSB double shell tank (DST) gas. Mike noted the purpose of the handout was for discussion and to provide a framework for observing how issues are related to ISM. The committee does not need to write advice on these topics right now.

Agency perspective

Brian Harkins, DOE-ORP, said it is important to understand that DNFSB's review of ISM at the activity-level was across the DOE complex. The review process began in 2008 with Hanford reviewed second. Brian worked at Hanford during the review process and feels DNFSB stopped short of analyzing how ISM failures resulted in accidents after 2010; the review could have continued on.

Either coincidentally or because of the letter, DOE-Environmental Management (EM), who advises the development of the ISM Declaration Process, would like requirements incorporated into this year's Declaration for review of Work Control and how ISM is implemented in the Work Control Process. There are two activities involved in ISMS related to Work Control, including URS work elements and criteria documents that URS says they will use to be consistent across EM. The other is DOE-EM's oversight process, which is what DOE-ORP implemented. Brian said Work Control is an important element for DOE to implement and get right.

Brian did not disagree with the conclusions of DNFSB's letter or their position on ISM failures at Hanford. He could see where some pieces of the review stepped down to his level, such as the Declaration. Others stepped down to the contractor, such as the work planning portion. DOE oversight

will not be stepped down; DOE-ORP will do it themselves. Brian said the Work Control Processes will be thoroughly updated, but he did not have a strong opinion on URS. Brian noted there are different ways to do Work Control; he is not concerned with the way it is done, as long as it is a successful process. DOE wants to have a well implemented program that makes work at Hanford safe. Brian was unaware if the URS process had been implemented at Hanford, but members of the Energy Facility Contractors Group might know this. DOE-ORP will need to review the Work Control Processes and have a response to DOE Headquarters (HQ) by February. Brian strongly suspects they will find areas for improvement.

C: It is important that when safety procedures are improved, contractors change their systems to accommodate these new procedures and facility representatives understand their role in the process.

C: There is committee interest in tank gases and “burping” tanks, and there was a lot of energy behind DNFSB’s letter to Secretary Chu regarding risks posed by flammable gas events at the Hanford Tank Farms (Attachment 8). However, because Secretary Chu has not had a chance to respond to Washington’s first letter regarding the Consent Decree, this topic should be put on hold and discussed in six months.

C: The beryllium issue was not an ISM failure. There is a denial aspect and DOE cannot identify solutions to problems that are not being recognized. The committee has already written advice about denial and behavioral issues.

R: [Committee member] Ignoring feedback and not recognizing a hazard are where failures with ISM arise. It is a failure of the principles of behavior causing the problem.

[Hanford Beryllium Awareness Group (BAG)] Richard Bloom, previous Environmental Manager at the Plutonium Finishing Plant (PFP) and current member of BAG, was exposed to beryllium. People must look at the unintended consequences of ISM and put the issues into perspective. Workers may not want to say they were injured on-site because they may have done something wrong, which puts their job at risk. In addition, denial sometimes comes from managers, not just the agencies.

C: ISMS is just one tool for managing safety. It should not be the only tool.

C: It is unclear to some committee members all of what this topic entails (e.g. safety culture, just ISM, etc.) and where HSEP sees an opportunity to provide input. This topic needs further refinement.

The committee will table this topic for six months and give DOE an opportunity to implement ISM improvements, and provide additional time to see how Secretary Chu and Deputy Secretary Poneman respond to the flammable gas and ISM letters from DNFSB.

Committee Business*

Announcements

Barb Wise, MSA announce that the DOE Site-Wide Safety Culture Survey has been completed and the results are posted on the Hanford website. A brief update of the survey results will be provided at the November Board meeting.

3-Month Work Plan and 2013 Work Plan-Priorities

HSEP discussed work priorities for the next three months including topics to be discussed in greater detail in January (Attachment 1).

The group agreed they would like to meet the new medical contractor, HPMC, in January to learn about changes that have implemented since taking over as the onsite medical provider. Tiffany Nguyen, DOE-RL, encouraged committee members to develop specific questions for HPMC so they have time to prepare a presentation that will adequately respond to their questions.

Susan H. agreed to ask during the EIC call for further clarification regarding the radiation/concrete Waste Encapsulation and Storage Facility (WESF) topic, joint with TWC and RAP.

The group requested to switch the regularly scheduled committee conference call time from early morning to after lunch. Susan agreed to ask during the EIC call.

Attachments

- Attachment 1: Transcribed flip chart notes
- Attachment 2: MSA Worker Training Presentation
- Attachment 3: DOE Regulatory/Contractual Drivers for Training Handout
- Attachment 4: Integrated Safety Management (ISM) Outline
- Attachment 5: DNFSB Integrated Safety Management Letter
- Attachment 6: ISM Outline – DNFSB Areas of Concern
- Attachment 7: ISM Outline – HSEP Topics and Areas of Concerns
- Attachment 8: DNFSB Flammable Gas Letter

Attendees

Board Members & Alternates

Richard Bloom	Laura Hanses	Liz Mattson
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* Please see Attachment 1 – Transcribed Flip Chart Notes for key points/follow up actions recorded during the committee discussion.

Antone Brooks	Becky Holland	Keith Smith
Tom Carpenter	Mike Korenko	Margery Swint
Sam Dechter		

Others

Brian Harkins, DOE-ORP	Erika Holmes, Ecology	Bob Legard, CWB & CTC
Ray Corey, DOE-RL		Chelsey Funis, EnviroIssues
Pete Garcia, DOE-RL		Susan Hayman, EnviroIssues
Tiffany Nguyen, DOE-RL		Jim Gamin, HAMMER/MSA
		John Jeskey, HAMTC/MSA
		LB Sandy Rock, HPMC OMS
		Karen McGinnis, MSA/HAMMER
		Sharon Braswell, MSA
		Barb Wise, MSA
		Doug Gay, TOC Training
		Annette Carey, Tri-City Herald
		Angela Day, University of Washington
		Rob Roxburgh, WRPS
		Frank Hejmanowski, WRPS/TOC Training