March 25, 2008 ESH-RPS-2008-00163

SITE ALARA COMMITTEE MEETING MINUTES-03/25/08

The Site ALARA Committee met on March 25, 766-H rm.1047, 2:00 p.m. – 4:00 p.m.

Attendees:

Bobby Oliver	Frank Vick	Michael Gilles	Tim Bolen
Darrell Howe	Gary Chandler	Mike Matheny	
Dave Potocik	Henry Bolen	Scott Booth	
Donald Mosser	Jim Wilson	Tad Goodwin	
Ellen Parrish	Joe Biggerstaff	Ted Padezanin	
F. Lee Fox	John Gall	Terry Pifer	

The Quorum was met.

1) Tungsten Gloves: Michael Gilles

For jobs that have the potential to expose workers to elevated extremity exposure, the use of tungsten gloves and lead-loaded sleeves can help reduce the dose to the hands/forearms. Finger rings are required to be worn underneath the tungsten gloves.

Tungsten gloves manufactured by International Biomedical, Inc. and lead-loaded sleeves by Pacific Northwest X-Ray Inc. were tested by Health Physics Services in 735-2B using a Sr/Y-90 beta source and resulted in a 40% exposure reduction for the gloves and 50% for the sleeves. Based on the test results, the gloves along with sleeves should be considered in situations where extremity exposures from beta and low-energy gamma or X-ray fields are encountered.

Use of the gloves/sleeves will require approval from the Facility RCO Manager and shall be documented on the RWP and Assisted Hazard Analysis. Complete OSR 4-631 and include task/location where dosimetry was worn. Submit dosimetry along with ProRad printout and OSR 4-631 to External Dosimetry for analysis.

In some situations the use of sleeves may not be practical. If tungsten gloves are worn without sleeves, in conjunction with finger rings, forearm dosimetry is required to account for the unshielded exposure to the forearm.

The gloves shall be worn as the inner pair, not taped, with another pair of anti-contamination gloves taped over the inner pair of coveralls. Upon completion of the work evolution, the gloves will be disc-smeared to verify <20 dpm alpha and <200 dpm beta-gamma, and have no detectable fixed contamination.

Due to hygienic concerns, the gloves should be issued to individuals primarily responsible for dip sampling, gasket replacement and other identified activities that warrant extremity exposure controls. Upon completion of the assigned activity, the gloves will be cleaned by the user with a sanitary wipe and/or mild soapy water and air dried. The gloves will be stored in a plastic bag labeled with the users name in the RCO office. Along with RCO FLM, the user shall inspect the glove prior to each use to ensure there is no degradation that may compromise the effectiveness. If degradation is suspected, cracks, holes or signs of stress related fatigue, contact the H-Tank Farm GCO for disposal instructions.

Tungsten gloves are not to be credited for anything other than exposure reduction, and as such the selection of PPE will be through the Assisted Hazard Analysis process.

2) Current Performance Indicators: Ellen Parrish

- ORPS Personnel Contamination Events total **two**. YTD = 2.
- Non-ORPS Personnel Contamination Events total **two** YTD = 2.

- ORPS Area Contamination Events total **six**. YTD = 6.
- Non-ORPS Area Contamination Events total **thirteen**. YTD = 13.

- The 2008 Cumulative Exposure Goal was set at 120 rem in December, 2007.

- The maximum individual dose is 256 mrem. This is assigned to F-Canyon TRU.

- The Maximum YTD Extremity dose is 3096 mrem for an FCA TRU employee.

- Internal Exposures: >100 mrem = 0 & >500 mrem = 1 (assigned to 2007 3rd Qtr.)

3) Saltstone Annual Goal Increase: Tad Goodwin

Saltstone requested an increase in their 2008 Radiation Exposure Goals for 2008. The base routine operations and special work that is already in progress was discussed in detail. After Saltstone completed their presentation the committee approved the increase in goal. The Site estimated goal for 2008 was 120 rem and will be increased to 128 rem. Methods to reduce dose are pouring of a clean cap in Cell D and installation of automatic valves on the Vault 4 roof during a facility outage. Additional upgrades during the outage will also include: flammable gas detection system installation on Cells B & H roof and sides, sealing of Cells B & H vault walls, installation of electrical raceway and cabinets on Cells D, E, & F, and installation of straps on the leachate line in Cells B & H. A contamination and airborne activity control will be the installation of particulate filters on Cell D

roof. The work scope planned will cause an increase in the Site overall dose for 2008.

4) TRU ACL Increase: Darrell Howe

WMAP requested an increase in the ACL for the FCA TRU operators and SWMF drum miners. A request for an increase from 500 mrem to 1000 mrem was presented before the SAC for both processes. FCA TRU has considerably more hazards to deal with while handling the contents of the TRU drums, which increase their dose significantly. Several ALARA concepts provided by the ALARA Center will be incorporated to reduce exposure. SWMF has been challenged to try to increase the spacing around the drums so that the dose for the miners can be decreased. The committee voted on the 500 mrem increase for FCA TRU and challenged the facility to an increase of 300 mrem for SWMF. The ACL for FCA TRU is 1000 mrem and the ACL for SWMF is 800 mrem.

ACTION 1: ALARA Center to provide dose reduction methods to SWMF
ACTION 2: Consider increasing the spacing around TRU drums on Pads to assist in the decrease of the miner's exposure.
ACTION 3: If Operators that were assigned the higher ACL are transferred to another facility review the current dose versus the receiving facilities ACL to see if the ACL can be reduced for that worker.

5) FTF Pump Pit 1 Review: Joe Biggerstaff

A presentation of the FTF Pump Pit 1 job evolution was presented by RCO FLM Joe Biggerstaff. Additional transfers from FTF to HTF required new jumper alignments within Pump Pit 1. The job included the removal of 13 jumpers, replacement of three, reworked six, and reinstallation of ten, which included three new jumpers. There were many obstacles that the team had to overcome, such as; weather, negligible ventilation into the pit, limited access, high levels of contamination, high dose rates, and total containment was not feasible due to crane access. Additionally, two official Timeouts were taken due to structural interferences and one of the jumpers would not fit onto the wall nozzle due to adjacent piping. One dose saving technique was the performance of mockups to practice the use of extended tools. Primary engineering controls were windbreak around the pit, storage and repair huts, heavy sleeving and sleevers, and glovebags for jumper repairs, supplemental ventilation, internal and external flushing of jumpers, application of Blue Fog, TeleTrax System to remotely monitor dose fields and dose received, and a windspeed limit was set. The highest individual dose was 0.200 rem out of 130 workers and the actual cumulative exposure was 3.64 man-rem.

One question by a member was why hasn't the pit been housekept during previous entries? An entry in the fall of 2008 is being considered to perform housekeeping of the pit according to Biggerstaff.

6) Comments:

I have scheduled the remainder of the Site ALARA Committee meetings for 2008. Please mark these on your calendar. The location is TBD.

2nd Quarter	June 24	2-4 pm
3rd Quarter	Sept. 23	2-4 pm
4th Quarter	Dec. 16	2-4 pm

Michael Gilles requested the SAC to support the Radiological Focus Period during the week of 3/31/08 and to focus on the radiological aspect of the jobs being planned and executed.