September Mixed Waste Subgroup Highlights

The Hanford STCG Mixed Waste (MW) Subgroup met on September 27, 2000 in the ETB Spokane River Room. Kevin Leary introduced himself as the new DOE MW Subgroup Lead.

Kevin is to present the status of the MW Subgroup at the STCG Management Council (MC) meeting tomorrow. He has prepared a viewgraph presentation. The subgroup reviewed this presentation and provided feedback to him. Kevin went over the status of five areas that the MW Subgroup deals with. The first area is waste size reduction. The scope of this FY2001 -2003 effort is to evaluate the remote size reduction of oversized equipment and waste containers and to work on waste container design for TRU waste to meet the WIPP WAC. For FY2001 there is non-baseline funding of $881K with outyear funding of $5 million included in future plans.

The second area discussed was the remote handled TRU Technology Insertion Point (TIP) which is part of the PMP for TRU/MTRU waste. The PMP identifies requirements, actions, and costs to provide the capability of retrieving and processing Hanford RH-TRU waste.

The third area is the result of the Project Management Plan (PMP) technical review that investigated the scope, assumptions and technical basis for the PMP document dealing with the M-91 TPA milestone. The scope includes all facilities that are needed to retrieve, transport, and package RH TRU and MTRU waste. The technical review identified seven fundamental uncertainties facing the path forward and provided recommendations to reduce the risk in these areas. One of the most significant concerns is related to the control of Pu contamination and the corresponding decision impacts it has on facility cost, personnel dose, and operating flexibility.

The fourth area highlighted by Kevin is the TRU waste retrieval mobile assay system effort. Fluor Hanford was selected to receive funding for a Pollution Prevention proposal for the mobile system. The FY 2001 total funding is $556K and it was estimated that the LCC savings from using the mobile system are $6.3 million. The objective of this effort is to assay CH containers using the mobile system at the storage location thereby avoiding transporting the containers to WRAP for assay. Those containers assayed as LLW will be returned to the burial ground for storage while the others will be sent to WRAP.

The last area addressed by Kevin is the FY2001 MW Science and Technology (S&T) needs. The list of needs was submitted to DOE-RL on September 8. There are four new MW technology needs identified this year:

- RL-MW-027, Chemical Analysis to Meet WIPP WAC

- RL-MW-028, Integrity of Buried Large Containers
- RL-MW-029, Non-Destructive Assay of Large Buried Containers
- RL-MW-030, Pu Contamination Control Large Container Load-In/Load-Out Systems

The needs process, including STCG review, will be completed by November 3, 2000 and the needs will be input into the IPAB-IS database by January 12, 2001.

In addition to reviewing the status of MW projects, Kevin also has six recommendations to make to the STCG Management Council:

1. Combine all of the needs into four primary categories: Treatment and Chemical Waste Separation/Waste Minimization; Robotics and Remote Handling; Industrial Process Design; and Characterization.

2. Conduct a programmatic cost/benefit analysis. This is to evaluate the level of effort we spend on trying to obtain funding from the MWFA with the available funding so as to structure the level of effort accordingly.

3. Write an STCG Business Plan each year to include the following items: a flyer touting the EM-50 Hanford success stories to be assembled for PR purposes; a list of the S&T needs that are prioritized and ranked across all subgroups with input from stakeholders and regulators; an evaluation of opportunities to partner with other DOE sites on technology deployments. The STCG should also target workshops, conferences, and committees that encourage networking to ensure that Hanford STCG personnel are attending them.

4. Evaluate funding mechanisms to bring in new contractors to energize the program and/or rotate existing members with new people.

5. Evaluate the potential of establishing a DOE funded research co-operative program with the WSU-TC branch campus and university experts.

6. Conduct an annual workshop with Focus Area representatives, project leads, contractors, and national lab researchers to develop new needs and refine the old needs.

Kevin would like our subgroup to be more connected to the MWFA and meet with them more often. This would allow us to get more technical support from the MWFA including help from their staff experts.

Jim Sloughter will have the S & T needs sent out for review by all subgroup members. The subgroup needs to get all comments back to Jim by October 11 and then we will endorse them off-line in late October.

In addition to the four new technology needs discussed above, there are 16 old technology and three old science needs that have been updated. Also, there is a need from the SNF program to be sent in with the MW needs. This need deals with the disposition of the TRU Ion Exchange Columns. Bill Bonner stated that PNNL has three TTPs in place on MWFA work this year.

Mixed Waste Subgroup Meeting Attendees – 09/27/00

Bill Bonner	PNNL	372-6263
Kevin Leary	DOE-RL	373-7285
Ken Quigley	WMH	376-7779
Bruce Reynolds	PNNL	376-2342
Jim Sloughter	FDH-TM	375-2413
Steve Weakley	PNNL	372-4275