January Mixed Waste Subgroup Highlights

The Hanford Mixed Waste (MW) Subgroup met on January 9, 1997. Joe Waring stated that he presented the MW technology needs at the December STCG management council meeting and had very minor changes to make based on comments from the council members. Joe sent the MW Focus Area (MWFA) an advanced copy of the needs statements so they could start evaluating them. The official copy is still in the concurrence/sign-off cycle at DOE. The MWFA has expressed an interest in visiting the Hanford Site and meeting with the STCG MW Subgroup and Management Council in February. Joe will coordinate with the council on this visit and set up a subgroup meeting accordingly.

Moses Jarayssi (WA Department of Ecology) introduced Jim Divine, who is working part-time for Ecology. Jim presented a viewgraph presentation on the Rapid Commercialization Initiative (RCI). The purpose of RCI is to expedite selected technologies into the market place. RCI is sponsored by several Federal Agencies, primarily DOE, DoD and the EPA and many States are also involved including Washington and California.

Ten technologies were selected for demonstrations in various states. Washington State will have three technologies demonstrated here: Solvated Election Chemistry (SEC), Multi-Sampling Lysimeter (MSL), and Waste Inspection Tomography (WIT).

The SEC vendor is Commodore Applied Technologies, Incorporated, of Columbus, Ohio. At the present time SEC is being demonstrated to show the destruction of PCBs in clay soil. Jim is trying to find out what the reaction products are of this process. The vendor hopes to eventually go to a continuous process rather than the concrete truck size batch system now being tested. The SEC system will also be tested on PCB containing oils as well as soil.

The MSL vendor is Bladon International of Oak Brook, Illinois. The MSL is being used to take samples of water and vapor using a cone penetrometer. It is to be tested at SRS the week of January 27, but has not been tested in arid soils yet. This characterization technology does not require drilling for installation, produces no secondary waste, and results in reduced worker exposure to hazardous materials and low sample costs. Jim was not sure if sonic means could be used to install the MSL.

The WIT vendor is Bio-Imaging Research of Lincolnshire, Illinois. A partner with the WIT vendor in this demonstration is Lockheed Martin Specialty Components of Largo, Florida. Lockheed has developed APNEA, Active and Passive Neutron Examination and Assay. The combination of WIT and APNEA is being demonstrated as a TRU drum assay method. WIT uses x-ray and gamma ray technology to determine the drum wall thickness, matrix geometry, free liquids, and the location and quantification of gamma sources in the drum. APNEA is used determine the location and quantification of TRU in the drum. A January demonstration of this system was scheduled. We need to compare this to the WRAP system as this one could be quicker. The goal of this RCI demonstration is to meet the WIPP WAC.

Gary Ballew presented information on the MWFA Technical Requirements Working Group. This

group is gathering stakeholder concerns from across the country in order to help develop requirements for technologies so that developers will know what needs to be met. Molly Mayo at the Colorado Center for Environmental Management in Denver and Jodi Townsend for the MWFA were on the speakerphone and presented what this group is doing for the MWFA. Molly is tasked with collecting the stakeholder concerns at each DOE Site. The first step which she is doing now is to collect documented comments from RODs, EISs, etc. The next step is to talk to the stakeholder representatives at each site to gather more concerns. She would like to meet with the MW Subgroup to focus on what is needed for MW technology. Do the tribes and HAB agree with the regulators on clean-up levels, for example? Molly stated that they will try to not only focus on the top 30 MWFA funded technologies but look at each site's top needs also. Of our needs, characterization technologies were likely to make the MWFA list as funded technologies. Gary Ballew is going to be at a January 21 meeting and he will try to note matches between the Hanford needs and the MWFA funded technologies. The requirements being gathered could be very specific and extensive or could represent broad stakeholder values also. The result may be guidance rather than detailed regulatory standards. Anyone wishing to talk to Molly can contact her at (303)297-0180, Ext. 115.

Norm Olson distributed a PNNL proposal to the subgroup for review. He would like comments back in two weeks. The proposal is based on the TechCon program approach which is an ER method to identify currently deployable technologies that companies around the world have available. Please provide comments directly to Norm Olson via cc:Mail or at (509)372-4810.

The next MW Subgroup meeting is scheduled for February 6 at 1:00 pm in the ETB, Spokane River Room. Anyone wishing copies of Jim Divine's RCI presentation, contact Steve Weakley via cc:Mail or at (509)372-4275.