Record of Meeting
Tank Retrieval Technologies Workshop
Augusta, Georgia
January 22-26, 1996

A meeting was held between specialists working on the problems of remediation of high level waste tanks. Participants from the Russian Federation were:

Yury Revenko, Mountain Chemical Combine, Krasnoyarsk-26
   Head of Delegation
Alexander Vasilyev, Mining Chemical Combine, Krasnoyarsk-26
Michail Logunov, P/A “Mayak” Chelyabinsk
Yuri Belikov, P/A “Mayak”
Elena Zakharova, Institute of Physical Chemistry
Elena Merculova, SAIC (Interpreter)
Tatyana Medvedeva, TEA Associates, Inc. (Interpreter)

Participants from the USA included:

James H. Lee, SNL
   Head of Delegation
Rebecca Keen, SAIC
Peter Gibbons, WHC
Cyrus Afshar, SAIC
Barry Burks, ORNL
Tony Gouge, WSRC
Gary M. Johnson, WSRC
Don Fisher, WSRC
Roger Gilchrist, WHC
Brenda Lewis, WSRC
Mike Rinker, PNNL
Betty Carteret, WHC
Cal Christensen, INEL
Bill Parish, WSRC
Thomas Gutmann, USDOE
Thomas E. Albert, TEA Associates
Patricia Kespelher, TEA Associates

On the first day of the workshop, a series of presentations were made by the US side. These presentations focused on US site baseline retrieval approaches, waste challenges and retrieval needs. On the second day, the Russian participants visited the Savannah River Site and went on a tour of the Defense Waste Processing Facility, the TNX site, and drive-by inspections of the tank farms. On the third day, a series of presentations were made by the Russian side. The proceedings of the workshop will be published by the US side.

On the final day of the workshop, an open discussion was held between both sides to identify opportunities for future cooperative efforts which should be recommended to the DOE/EM Tank Focus Area and JCCEM for consideration. It was agreed that the following topics were appropriate to recommend to the JCCEM as potential areas of cooperation:

- Safety and risk of tank retrieval operations
- Sludge retrieval experience and retrieval hardware test data
- Hard heel removal processes (both chemical and mechanical)
- Tank decontamination and decommissioning experience
- Physical and chemical characterization of sludges and development of simulants
- Solid-liquid filtration hardware and experience
After a discussion of these potential areas of cooperation, it was agreed to proceed as follows:

- The Russian side agreed that safety was an important issue for tank remediation. The Russian side will decide how they should be involved in tank retrieval safety issues and inform the US side by the time of April/May JCCEM meeting in Phoenix.
- The Russian side presented two specific proposals dealing with sludge retrieval hardware and processes and sludge modelling. The US side will evaluate these proposals and respond by the time of the April/May JCCEM meeting.
- Since both the US and Russian side are now actively engaged in tank retrieval operations and since some of these operations present difficult and unusual problems, it was agreed that both sides would benefit from an open and timely exchange of ideas and experience. It was agreed that a mechanism should be created which would facilitate such an exchange. The Russian side recommended that the Khlopin Radium Institute should coordinate this exchange for the Russian side and will designate a point of contact by the time of the JCCEM meeting in April. The point of contact for the US side will be Dr. James Lee, representing the Tank Focus Area. Since there is an active program of sludge retrieval currently underway in the Mountain Chemical Association and certain data from these operations would be of great interest to the US side, the US side will specify the physical and operational data that would be desirable to be collected during these operations and provide this specification to the Russian side before the JCCEM meeting in Phoenix. This specification will be the basis for further discussion of cooperation by the US side in the Russian sludge retrieval activities.
- The US side will specify the requirements for the possibility of testing the Russian developed pulsating pump and hydroelevator for evaluation in the upcoming Modified Density Gradient Method (MDGM) and hard heel removal demonstration tests at the Savannah River Site. The Russian side will evaluate these requirements and consider the submission of a proposal to provide hardware and technical support for these MDGM tests.
- The US side will specify the requirements for the possibility of testing Russian developed filters on the upcoming ORNL gunite and associated tanks solid-liquid separation demonstration tests. The Russian side will evaluate these requirements and consider the submission of a proposal to provide filter hardware and technical support for these tests.
- As a result of the visit to the Defense Waste Processing Facility, it was recognized by both sides that a unique opportunity exists for sharing operating experience on large vitrification facilities. Such a proposal has previously been offered by the Russian side. It was agreed by both sides to recommend to the JCCEM and the appropriate DOE/EM technical program area to include the sharing of operating experience of large vitrification facilities for high level waste.

Signed in Augusta, Georgia

For the US side

Dr. James H. Lee
US DOE/EM Tank Focus Area

For the Russian side

Dr. Yury A. Revenko
Mountain Chemical Association
MINATOM