

**Record of Meeting
On the HAMMER Training Facility**

**Richland, WA
January 27-31, 1997**

A technical exchange workshop on the HAMMER Training Facility was held under the auspices of the Joint Coordinating Committee for Environmental Restoration and Waste Management (JCCEM) between the U.S. DOE Office of Science and Technology and the Ministry of Atomic Energy for the Russian Federation. The workshop took place in Richland, Washington, during the week of January 27-31.

Meeting participants from the Russian side included: Dimitri Makukhin, Moscow Institute for Advanced Study; Nelly Egorova, Rosetechnology Training Center; Anatoly Polyakov, Moscow Institute of Non-Organic Materials.

Meeting participants from the U.S. side included: June Ollero, Terri Hale, Bette Haddon-Higley, and Ray Won from DOE-RL; Marie Ramos-Miller, Karen McGinnis, Gary Karnofski, Det Wegener, Don Olsen, Larry Ayre, Paul Vandervert, Jon Juetta, and Barry Moravek from Fluor Daniel Hanford; Roger Frank, Abe Greenberg, and Paul Sato from Fluor Daniel Northwest; James Cochran Washington State University, Tri-Cities; LuAnn White, Barbara Karnofski, and Dan Ollero from Tulane University; Pat Aldridge, Xavier University; Paul Gubanc, Defense Nuclear Facility Safety Board; Sam Volpentest, TRIDEC; Jim Price and Rebecca Keen from SAIC; Jim Worthington, Sheet Metal Workers International; Rick Berglund, Building Trades; Marty Martinez, Bob Stanley, and Jerry Miller from National Training Fund; Tom Schaffer, Hanford Atomic Metal Trades Commission; Lee Thornton and Gary Culbert from Columbia Basin College; Ray Robinson, Ray K. Robinson, Inc. Interpreters: Galina Pendill, and Paul Grenier from Russian Interpreting Services.

Meeting Overview:

June Ollero gave a brief overview presentation of the HAMMER Training and Education Center's purpose, organization and partnerships. A tour of the Columbia Basin College (CBC) was conducted by Lee Thorton. Rick Berglund gave an overview of CBC and Labor Apprenticeship Program. Bob Stanely discussed Labor/Management relations. Gary Culbert gave an overview of the Apprentice Program. A tour of the apprentice program mobile training van was conducted. A driving tour was conducted of the HAMMER Construction Site.

Ray Won gave a presentation on budget and other issues related to the financing of Hammer. The Russian side expressed an interest in HAMMER models for cost reduction. Ray Won said that HAMMER is investigating methods of reducing DOE's costs for developing and maintaining HAZWOPER certification by replacing site and contractor specific requirements with the Superfund certification curriculum used by private industry. HAMMER plans to reduce training costs by hosting training available in the marketplace. HAMMER is developing computer based and distance learning technologies that are suitable for classroom courses. Plans are under way to

reduce the costs by developing reciprocal use agreements with HAMMERpartners.

The following presentations were given to the visiting delegation:

- Environmental Restoration/Waste Management HAMMERProduct Chair, by Det Wegener. A short description of ER/WM 1997 goals and the ER/WM course offerings.
- Fire Operations HAMMERProduct Chair by Don Olsen. A summary of 1997 goals, including formalizing an advisory board to include regional, state, and academic interests; and instructional development and accreditation.
- Occupational Safety and Health HAMMERProduct Chair by Jim Price and Det Wegener. A discussion of development plans.
- Role of the Washington State University at Tri-cities in the development and support of the HAMMERFacility, by James Cochran. A description of the WSUTC, including staff numbers, specialties, and specialty areas. The Consolidated Information Center was a major development, and the relocation of the Hanford Technical Library served as a catalyst to creation of a "library without walls," taking advantage of the INTERNET to expand remote learning. The University Center for Professional Education was relocated to HAMMER, which provides one-stop business assistance.
- Tulane/Xavier Learning Resource Center, by LuAnn White. A brief tour of the center was conducted.
- Enhanced Work Planning, Health Surveillance Environmental Education, by Barbara Karnofski.
- Distance learning and teleconferencing, by Dan Ollero. The Russian side was impressed with the technology of distance learning. Tulane is already working with a Russian organization in video-conferencing.
- Quality Assurance and Quality Control by Jon Juette.
- Emergency Operations Product Line, by Jim Price. Sample training courses in Emergency Planning, Preparedness, Crisis Management, Emergency Response, Event Mitigation, Recovery, Counter-terrorism, and Law Enforcement were outlined. The marketing of these programs to various federal, state, and local agencies in addition to its mission to DOE-Hanford, and the DOE complex, as well as an international clientele was described. The following Innovative Technology Summary Reports will be delivered to the Russian side:

"Frozen Soil Barrier Technology,"

"Six Phase Soil Heating."

"In Situ Bioremediation Using Horizontal Wells,"

"ResonantSonic Drilling,"

"Dynamic Underground Striping,"

"In Situ Air Stripping Using Horizontal Wells,"

"Advanced Worker Protection System,"

"Pipe Explorer System,"

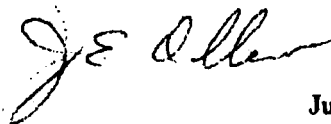
Action Items:

- The Russian side presented five technical papers on the following topics:
 - "Commercial Operation of High-Efficiency Ceramic Melter DII-500 for High Activity Level Waste Vitrification at Spent Nuclear Fuel Reprocessing Plant, Mayak"
 - "HALW Solidification Process using Induction Melter "Cold Crucible"
 - "Development of Technology for Radionuclide Contaminated Soil Remediation by Ground Hydroclassification Method".
 - "Polymers and Technology of Soil Protection Against Erosion".
 - "New Method of "MOX"-Fuel Production by U and Pu Co-Precipitation with the Provision of Low-Dust Formation".
- The U.S. side agreed to review the papers.
- The Russian side requested a list of the hazardous materials at Hanford. The U.S. side will obtain a copy of the Draft Hanford Site Wide Environmental Impact Statement and forward it to the Russian side.
- It was proposed that upon approval by DOE/HQ and MINATOM, the Russian team be invited to participate in the HAMMER facility opening in September, 1997.
- The Russian side proposed that scripts for training exercises on handling hazardous waste be exchanged between the two delegations.
- Dr. Polyakov delivered a proposal that had been submitted for funding to the International Science and Technology Center in Moscow for a project entitled "Development of a Training-Methodological Base and Technical Training Means for the Federal Training Center Focused on Training Specialists in the Handling of Radioactive Wastes." The U.S. side agreed to deliver it to Dr. Clyde Frank and to have it reviewed by technical staff. Upon review, it will be determined if the U.S. side will write a letter of support as an official collaborator to the International Science and Technology Center.
- The U.S. side agreed to deliver to the Russian side a video of an emergency response exercise called "Emergency Roundup".
- It was mutually agreed that all interactions between the Russian side with respect to HAMMER and the above mentioned areas be directed to June Ollero. June Ollero will serve as the central point of contact for the U.S. side.

On behalf of Russian delegation

On behalf of HAMMER Training Facility


A. Polyakov


June Ollero