

**Joint U.S.-Russian Workshop on
the Collaboration Agreement “Detailed Evaluation of
the NIKIMT Strippable and Non-Strippable Coatings for
Possible Demonstration at the Mound DOE Facility”**

Miamisburg, Ohio
April 17-20, 2000

On-Site Participants:

James O. Johnson, DOE-MEMP
Douglas M. Maynor, DOE-OH
Donald R. Krause, BWXTSI (BWXT Services, Inc.)
Tim C. Marks, BWXTO (BWXT of Ohio, Inc)
Charles F. Draut, Chamberlain Group, Ltd.
Charles J. Sienkiewicz, BWXTO
William R. Tonne, BWXTO
Gregory M. Fullenkamp, BWXTO
Richard L. Bauer, BWXTO
Gerald F. Maul, BWXTO
Joseph C. Geneczko, BWXTO
James P. Fontaine, BWXTO
Lisa A. Turner, BWXTO
Mark C. Becker, BWXTO
Timothy G. Fagin, BWXTO
Kevin D. Kosko, EG&G Management
Steven L. Romage, BWXTO
Eric C. Kirk, LATA (Los Alamos Technical Associates)
Donald K. Hamilton, BWXTO
Jeffrey L. Mathews, BWXTO
Michael J. Holt, BWXTO
Pat Pickett, LATA
Donald E. Griffin, BWXTO
Richard K. Blauvelt, Waste Policy Institute
Marcia D. Vannet, BWXTO

Off-Site Participants:

Nikolai M. Sorokin, NIKIMT, Moscow, Russia
Mikhail K. Khankhasayev, Florida State University (FSU)
James M. Whitney, Science Applications International Corporation (SAIC)
Bryan S. DeHoff, Florida International University
Irene B. Firsow, Thomas E. Albert and Associates, Inc. - Interpreter

Background:

The contract between the United States Department of Energy (DOE) and the Research and Development Institute of Construction Technology (NIKIMT) of the Russian

Federation on strippable and non-strippable coatings is being implemented under the auspices of the Joint Coordinating Committee for Environmental Restoration and Waste Management (JCCEM). The purpose of the contract, the period of performance of which is January 1-April 30, 2000, is to evaluate the coatings developed by NIKIMT to determine their potential for demonstration as part of the Mound Large-Scale Demonstration and Deployment Project (LSDDP) at the Miamisburg Environmental Management Project (MEMP).

The main objectives of the workshop were: 1) to discuss the capabilities of the NIKIMT-developed strippable and non-strippable coatings; 2) to review applicable federal, local, and site regulatory compliance and documentation requirements for a possible demonstration of the coatings at the Mound Site; 3) to provide NIKIMT with information on potential applications of the coatings at the site; and 4) to identify specific action items to facilitate the possible demonstration of the coatings.

Workshop Activities:

Through presentations, facility tours, and discussions, the workshop participants were able to obtain critical information, exchange ideas, and accomplish the objectives stipulated above.

Mound personnel conducted a motorized site tour and three walking tours of site buildings where the application of strippable and non-strippable coatings is needed for the isolation/suppression of the spread of contamination during decommissioning activities.

Detailed discussions of Hazard Communication Regulations, the Material Safety Data Sheet, and Waste Acceptance Criteria of disposal sites were conducted. NIKIMT was provided the necessary information to complete the required documentation for employing the strippable coatings at the Mound site.

Use of the non-strippable coatings to fix loose alpha radionuclide surface contaminants during decommissioning activities at SW Building, Building 58, and Building 38 were identified as potential applications of NIKIMT-developed technologies.

The possibility of employing a non-strippable coating for localizing contamination during site tritium removal activities was addressed, and a tour of the T Building Tritium Emissions Reduction Facility was conducted along with a demonstration of tritium glove boxes and the air purification system. However, before this prospect can be evaluated further, NIKIMT must obtain approval from the Ministry of Atomic Energy of the Russian Federation to release relevant information pertaining to the capabilities of their technologies in this area.

Richard Blauvelt of the Waste Policy Institute pointed out that additional characterization and deactivation and decommissioning technologies developed by NIKIMT may have DOE complex-wide applications.

Signed:

For the U.S. side

Donald R. Krause
Principal Investigator,
BWXT Services, Inc.

For the Russian side

Nikolai M. Sorokin
Principal Investigator,
NIKIMT

Attachments:

- 1) Workshop Agenda
- 2) Action Item List

Attachment 1

AGENDA
For
MEETING ON NIKIMT DEVELOPED STRIPPABLE
AND NON-STRIPPABLE COATINGS (FIXATIVES)

Monday, April 17, 2000

- | | |
|----------------------------------------------------------------------------------------|-------------------------|
| -9:30 a.m. Meet Visitors at Guard Post 8 Entrance to Site; Park in Building 91 lot | Draut |
| -10:00 a.m. DOE and BWXTO Welcome and Introductions
MEMP Conference Room, OSW-206 | Johnson
Krause/Marks |
| -10:45 a.m. Discuss Four Day Agenda | Draut |
| -11:00 a.m. Visitor Training - OSW-112
ML-9605 Occupational Radiation Exposure Info | Vannet
Draut |
| -12:00 p.m. Lunch at Bullwinkles | |
| -2:00 p.m. Motorized Plant Site Tour | Becker |
| -4:00 p.m. Meet in Conference Room OSW-112
Questions & Answers; Tuesday's Agenda | Draut |
| -4:30 p.m. Adjourn | |

Tuesday, April 18

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| -9:00 a.m. Meet Visitors at Guard Post 8
Park in Building 91 lot | Draut |
| -9:15 a.m. Meet in OSW-112; Discuss April 17 Issues;
Review Day's Activities | Draut |
| -9:30 a.m. Present NIKIMT's Coating Development,
Current Status and Achievements | Dr. Sorokin |
| -10:30 a.m. Overview of Hazard Communication
Regulation 29 CFR 1910.1200 | Fagin |
| -10:50 a.m. Discuss Material Safety Data Sheet (MSDS)
and U.S. Norms and Regulations Compliance
Issues for Coatings/Fixatives | Dr. Sorokin
Fagin |
| -12:00 Noon Lunch at Karen Sue Restaurant | |
| -2:00 p.m. Group Tour of SW Building, Room 2 | Tonne |

and Building 58 (R-Building Filter Bank)

-3:30 p.m. Meet in OSW-112; Continue Discussion on MSDS & U.S. Norms and Regulatory Compliance Issues for Russian Coatings/Fixatives

Dr. Sorokin
Fagin

-5:00 p.m. Adjourn

Wednesday, April 19, 2000

-9:00 a.m. Meet Visitors at Guard Post 8; Park in Building 91 lot

Draut

-9:10 a.m. Meet in OSW-112; Discuss Radiological Limits and Issues Pertaining to Coatings/Fixatives and Discuss D&D of WD-Building Penthouse

Kosko

-10:00 a.m. Group Tour of T-Building Tritium Emissions Reduction Facility (TERF)

Sienkiewicz

-12:00 Noon Lunch Olive Garden

-2:00 p.m. Group Tour of Building 38, Rooms 161 and 142E and Corridor 137

Bauer/Maul

-4:00 p.m. Meet in OSW-112; Discuss Waste Criteria for Materials Storage at Burial Sites

Turner/Fontaine

-5:00 p.m. Adjourn

Thursday, April 20, 2000

-9:00 a.m. Meet Visitors at Guard Post 8; Park in Building 91 lot

Draut

-9:15 a.m. Meet in OSW-112; Continue Discussion of Radiological Issues on Coatings/Fixatives And D&D of WD-Building Penthouse Using Aerosol Technologies

Kosko

-10:00 a.m. Discuss Other Technologies of Mutual Interest and Applications of Coatings on Tritium D&DUes

Blauvelt

-12:00 Noon Lunch at Buffet King

-2:00 p.m. Meet in OSW-112; Discuss Unresolved Issues, Draft Follow-up Action Items, Develop a Path Forward Plan, and Wrap-up Meeting

Draut

-5:15 p.m. Adjourn Visit

Action Items:

- 1) MEMP/Mound Site will identify the terms and conditions of demonstrating the NIKIMT coating technologies at the site.
- 2) NIKIMT will provide documentation on the recommended coatings in accordance with Hazard Communication Regulation 29 CFR 1910.1200. This information will be submitted within the framework of the current DOE-NIKIMT contract as part of the final report.
- 3) NIKIMT, through the Ministry of Atomic Energy of the Russian Federation, will explore the possibility of releasing information pertaining to the capabilities of available technologies in the area of decommissioning buildings and equipment contaminated by tritium. NIKIMT will provide a response to the Mound site request by June 1, 2000, through FSU/SAIC.
- 4) SAIC/FSU will investigate any restrictions associated with the import of the NIKIMT coatings into the United States.
- 5) In the event that the NIKIMT coatings are selected for demonstration at the Mound Site:
 - At least one month prior to the demonstration, NIKIMT will provide samples of the selected coatings so that the U.S. side can perform a Toxicity Characteristics Leaching Procedure (TCLP) analysis;
 - NIKIMT will provide the necessary coatings and the application technology;
 - NIKIMT will also provide two technology experts to monitor the application of the coatings;
 - The Mound Site will provide the necessary spray equipment and labor;
 - The Mound Site will also be responsible for waste disposition activities associated with the use of coatings on site.

