SEPTEMBER 16-19, 2007
Chattanooga, Tennessee
The Chattanoogan Hotel

“Capturing Decommissioning Lessons Learned”

Sponsored by the:
ANS Decommissioning, Decontamination & Reutilization; Environmental Sciences; and Fuel Cycle and Waste Management Professional Divisions

Cosponsored by the:

OFFICIAL PROGRAM
Table of Contents

4 Meeting Officials
Take a peek at who is planning the sessions for this meeting.

5 Meeting Highlights

6 Meeting Information
Find out important information about hotel accommodations and meeting registration.

6 Special Events

7-11 Technical Sessions
A comprehensive list of the technical papers/presentations for the 2007 Decommissioning, Decontamination and Reutilization Topical Meeting.

12-14 Exhibit Information

Join us Monday evening, September 17th, for a dinner cruise of the Southern Belle Riverboat. Please turn to page 6 for more details.
Meeting Officials

Honorary Chair
Wayne Norton,
Connecticut Yankee Atomic Power Company and
Yankee Atomic Electric Company

General Chair
Joseph E. Carignan,
TLG Services, Inc. (an Entergy Nuclear Company)

Technical Program Chair
James Byrne,
Byrne & Associates, LLC

DD&R Program Chair
John W. Bowen,
Mega-Tech Services, LLC

Exhibit Chair
Sara Pitz,
The Shaw Group Inc.

Technical Program Committee

Ed Abbott, ABZ
Sue Aggarwal, New Millennium Nuclear Technologies
Scott Altmayer, S.M. Stoller Corporation
William E. Austin, Washington Savannah River Company
Larry Boing, ANL
Jim Bollinger, SRNL
Marty Bourquin, W.R. Grace
John Bowen, Mega-Tech Services
Joe Carignan, TLG Services
Cliff Davison, AECL
Edward Doubleday, Energy Solutions
Richard Fil, Robinson & Cole LLP
Pete Fledderman, SRS
William Franz, LATA Parallax Portsmouth, LLC
Lynne S Goodman, Detroit Edison
John Gunning, ORNL

Jack Hayes, NRC
Bob Hergesell, Savannah River National Laboratory (SRNL)
Lane Howard, Southwest Research Inst./CNWRA
Takeshi Ishikura, NUPEC
Jim Jones, BNES
Myron Kaczmarsky, Bartlett
Shinji Kawatsuma, JAEA
Andreas Kronenberg, ORNL
Mike Lackey, Fluor
Michele (Mike) Laraia, IAEA
Georg Mauer, UNLV
Carl Mazzola, Shaw
Richard H Meservy, Idaho Nat Lab
Jean-Guy Nokhamzon, CEA
Sara Pitz, Shaw
Mark Price, SCE

Dennis Reisenweaver, Alion Science & Technology
Randall Ridgway, AECL
Emmy Roos, The Shaw Group Inc.
Pierre Saverot, JAI
Fred Sheil, British Nuclear Group
Albert Solano, Solano Consulting and Field Services, LLC
R. Jon Stouky, Mega-Tech Services, LLC
Andrew Szilagyi, DOE
Julie Tripp, INL
Stephen Turner, SAIC
Jan Van Erp, Van Erp Consulting
Gerry van Noordennen, CYAPCO
Sandra Waisley, DOE
Doug Wyatt, WSMS
Larry Zull, DNFSB
### Meeting Highlights

**Meeting Registration**

<table>
<thead>
<tr>
<th>Date</th>
<th>Time</th>
<th>Event</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sunday, September 16, 2007</td>
<td>3:00 p.m. - 7:00 p.m.</td>
<td>Meeting Registration</td>
</tr>
<tr>
<td></td>
<td>6:00 p.m. - 8:00 p.m.</td>
<td>Opening Reception in the Expo</td>
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</tbody>
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**Monday, September 17, 2007**

<table>
<thead>
<tr>
<th>Time</th>
<th>Event</th>
</tr>
</thead>
<tbody>
<tr>
<td>7:00 a.m. - 8:30 a.m.</td>
<td>Continental Breakfast in the Expo</td>
</tr>
<tr>
<td>7:00 a.m. - 8:30 a.m.</td>
<td>Speakers’ Breakfast in the Mountain Room</td>
</tr>
<tr>
<td>7:00 a.m. - 5:00 p.m.</td>
<td>Meeting Registration</td>
</tr>
<tr>
<td>8:30 a.m. - 11:30 a.m.</td>
<td>2007 DD&amp;R: Opening Plenary</td>
</tr>
<tr>
<td>10:00 a.m. - 10:30 a.m.</td>
<td>Monday Morning Break</td>
</tr>
<tr>
<td>11:30 a.m. - 1:00 p.m.</td>
<td>Walk Around Luncheon in the Expo</td>
</tr>
<tr>
<td>1:00 p.m. - 4:00 p.m.</td>
<td>2007 DD&amp;R: Technical Sessions</td>
</tr>
<tr>
<td>2:00 p.m. - 2:30 p.m.</td>
<td>Monday Afternoon Break</td>
</tr>
<tr>
<td>4:00 p.m. - 6:00 p.m.</td>
<td>2007 DD&amp;R: Poster Session in the Expo</td>
</tr>
<tr>
<td>4:00 p.m. - 6:00 p.m.</td>
<td>Reception in the Expo</td>
</tr>
<tr>
<td>6:00 p.m. - 10:00 p.m.</td>
<td>Evening Event: Southern Belle Riverboat Dinner Cruise</td>
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**Tuesday, September 18, 2007**

<table>
<thead>
<tr>
<th>Time</th>
<th>Event</th>
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<tbody>
<tr>
<td>7:00 a.m. - 8:30 a.m.</td>
<td>Continental Breakfast in the Expo</td>
</tr>
<tr>
<td>7:00 a.m. - 8:30 a.m.</td>
<td>Speakers’ Breakfast in Ballroom 1</td>
</tr>
<tr>
<td>7:00 a.m. - 5:00 p.m.</td>
<td>Meeting Registration</td>
</tr>
<tr>
<td>8:30 a.m. - 11:30 a.m.</td>
<td>2007 DD&amp;R: Technical Sessions</td>
</tr>
<tr>
<td>10:00 a.m. - 10:30 a.m.</td>
<td>Tuesday Morning Break</td>
</tr>
<tr>
<td>11:30 a.m. - 1:00 p.m.</td>
<td>Awards Luncheon</td>
</tr>
<tr>
<td>1:00 p.m. - 4:00 p.m.</td>
<td>2007 DD&amp;R: Technical Sessions</td>
</tr>
<tr>
<td>2:00 p.m. - 2:30 p.m.</td>
<td>Tuesday Afternoon Break</td>
</tr>
<tr>
<td>5:00 p.m. - 7:00 p.m.</td>
<td>Reception in the Expo</td>
</tr>
</tbody>
</table>

**Wednesday, September 19, 2007**

<table>
<thead>
<tr>
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<th>Event</th>
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<tbody>
<tr>
<td>7:00 a.m. - 8:30 a.m.</td>
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<td>7:00 a.m. - 1:00 p.m.</td>
<td>Meeting Registration</td>
</tr>
<tr>
<td>8:30 a.m. - 11:30 a.m.</td>
<td>2007 DD&amp;R: Technical Sessions</td>
</tr>
<tr>
<td>10:00 a.m. - 10:30 a.m.</td>
<td>Wednesday Morning Break</td>
</tr>
<tr>
<td>11:30 a.m. - 1:00 p.m.</td>
<td>Walk Around Luncheon in the Expo</td>
</tr>
<tr>
<td>1:00 p.m. - 4:00 p.m.</td>
<td>2007 DD&amp;R: Closing Plenary</td>
</tr>
</tbody>
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**Thursday, September 20, 2007**

<table>
<thead>
<tr>
<th>Time</th>
<th>Event</th>
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<tbody>
<tr>
<td>9:00 a.m. - 4:00 p.m.</td>
<td>Technical Tour: East Tennessee Technology Park (ETTP)</td>
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**Chattanooga Riverwalk and Park** — On the banks of the Tennessee River, there are river parks, river walks and many unique attractions.

**Chattanooga Waterfront and Aquarium**

Visit “Penguins’ Rock” at the Tennessee Aquarium. This exhibit opened in May 2007.

**Explore the beauty of the scenic Tennessee River aboard the pride of the Southland — Chattanooga’s Southern Belle Riverboat.**

Join us Monday evening, September 17th, for a dinner cruise of the Southern Belle Riverboat. Please turn to page 6 for more details.
The ANS Topical Meeting on Decommissioning, Decontamination, and Reutilization (DD&R 2007) will be held in Chattanooga, Tennessee, USA, September 16-19, 2007. DD&R 2007 is a forum for the discussion of the social, regulatory, scientific, and technical aspects of decontamination, decommissioning, and reutilization, and waste management. The 2007 conference program will include commercial, government, and international project updates as well as present project management, technology, and regulatory developments in the areas of decommissioning, waste management, site closure and legacy management. In addition to a comprehensive technical program, there will be a Technology Expo, a technical tour, and numerous fun activities and opportunities for attendees and guests to enjoy Southern Hospitality at its finest.

Accommodations and Hotel Information
The Chattanoogan Hotel will be the location for the 2007 Decommissioning, Decontamination, and Reutilization (DD&R) Topical Meeting, where all meeting activities and technical sessions will take place. The Chattanoogan, Tennessee’s Urban Resort, is an upscale hotel and conference center located in the heart of downtown Chattanooga, Tennessee. The Chattanoogan is within easy walking distance of museums, shopping and entertainment.

Meeting Registration
Registration is required for all attendees and presenters. Badges are required for admission to all events. The Full Meeting Registration fee includes one (1) copy of the CD of the Meeting Proceedings and one (1) ticket each to the Opening Reception, the Monday, Tuesday and Wednesday luncheons, Daily Continental Breakfast and Coffee Breaks.

NOTE: Additional tickets can be purchased at the ANS Registration Desk for the Sunday Opening Reception, the Monday Evening Event – Dinner Cruise on the Southern Belle Riverboat and the meeting luncheons.

Special Events

PLEASE NOTE: You must be registered for the meeting to attend evening events.

Opening Reception in the Expo
SUNDAY, SEPTEMBER 16, 2007
6:00 p.m. - 8:00 p.m.
The meeting will start with a welcome reception in the exhibit hall. One ticket to the Opening Reception is included with the full meeting registration. Additional tickets can be purchased at $45.00 each.

Walk Around Luncheon in the Expo
MONDAY, SEPTEMBER 17, 2007
11:30 a.m. - 1:00 p.m.
Following the Opening Plenary Session, there will be a Walk Around Luncheon in the Expo on Monday, September 17, 2007. One ticket to the Walk Around Luncheon in the Expo is included with the full meeting registration. Additional tickets can be purchased at $25.00 each.

Evening Event: Dinner Cruise on the Southern Belle Riverboat
MONDAY, SEPTEMBER 17, 2007
6:00 p.m. - 10:00 p.m.
Welcome to the pride of the South and one of the best Chattanooga attractions — the Southern Belle Riverboat! Enjoy the informative commentary on the city’s history as you float down the beautiful Tennessee River. Familiar sights like Lookout Mountain and Chattanooga’s skyline will never look the same again. This is a favorite dinner and will delight all ages with music and a nighttime tour of the Tennessee River. Tickets can be purchased at $50.00 each.

Chattanooga, Tennessee —
The name “Chattanooga” comes from the Creek Indian word for “rock coming to a point.” This refers to Lookout Mountain which begins in Chattanooga and stretches 88 miles through Alabama and Georgia.

Awards Luncheon
TUESDAY, SEPTEMBER 18, 2007
11:30 a.m. - 1:00 p.m.
There will be an Awards Luncheon on Tuesday, September 17, 2007. One ticket to the Awards Luncheon is included with the full meeting registration. Additional tickets can be purchased at $25.00 each.

Walk Around Luncheon in the Expo
WEDNESDAY, SEPTEMBER 19, 2007
11:30 a.m. - 1:00 p.m.
There will be a Walk Around Luncheon in the Expo on Wednesday, September 19, 2007. One ticket to the Walk Around Luncheon in the Expo is included with the full meeting registration. Additional tickets can be purchased at $25.00 each.

Technical Tour:
Technical Tour to East Tennessee Technology Park (ETTP)
THURSDAY, SEPTEMBER 20, 2007
9:00 a.m. - 4:00 p.m.
THIS EVENT IS CLOSED!
MONDAY, SEPTEMBER 17, 2007 • 8:30 A.M.

Opening Plenary, All invited. Session Chair: Joseph Carignan (TLG Services)

Ballrooms 1 and 2

SPEAKERS:
- Congressman Zach Wamp (R–Tennessee)
- The Honorable Ron Littlefield (Mayor of Chattanooga)
- Wayne Norton (President, Yankee Atomic)
- Sandra Waisley (DOE)
- Thomas LaGuardia (PE, CCE, Managing Member, LaGuardia & Assoc)
- Hans Riotte (OECD)

MONDAY, SEPTEMBER 17, 2007 • 1:00 P.M.

International Projects—I. Session Cochairs: Randall Ridgway (AECL), Eric Gouhier (CEA)

Amphitheater
1:00 p.m.
French Decommissioning Feedback Experience and Lessons Learned, Jean-Guy Nokhamzon (CEA)

1:30 p.m.
Challenges for Lithuania: Ignalina NPP Early Closure, Biruta Teskeviciene (Ministry of Economy of the Republic of Lithuania), Peter Harrison (Central Project Management Agency)

2:00 p.m.
Development and Implementation of a Comprehensive Program to Deal with Canada’s Nuclear Legacy Liabilities, Peter Brown, Douglas Metcalfe, Marcia Blanchette (Natural Resources Canada), George Dolinar, Steven Halpenny, David Smith, William Kufperschmidt (AECL)

2:30 p.m.
Decommissioning Plan of the Musashi Reactor and Its Progress, Tomio Tanzawa (Musashi Inst of Technol)

3:00 p.m.
Management of Decommissioning on a Multi-Facility Site, Michele Laraia (IAEA), Peter McIntyre (Private Consultant), Abrie Visagie (NECSA)

Commercial Projects. Session Cochairs: Carl Mazzola (Shaw), Art Paynter (Afranzis LLC)

Rose
1:00 p.m.
Dry Cask Storage Experience for a One-of-a-Kind Decommissioning Project, Robert Lehnert (Energy Solutions), William Trubilowicz (Operating Solutions of Michigan)

1:30 p.m.
Cleanout and Reuse of GCEP Facilities at Portsmouth, William Franz, Mark Hickman (LATA), KristiWiehle (DOE)

2:00 p.m.
Money Related Decommissioning and Funding Decision Making, Lynne S. Goodman (Detroit Edison)

2:30 p.m.
Segmentation and Removal of the Carolinas-Virginia Tube Reactor (CVTR) Moderator Tank, Michael G. Anderson (MOTA Corp)

MONDAY, SEPTEMBER 17, 2007 • 3:00 P.M.

N.S. SAVANNAH Reactor Vessel Metal Extraction and Radiochemical Analysis, Richard Ranelone (Mega-Tech, LLC), John Wiegand (U.S. Dept of Transportation), John W. Bowen, Jon Stouky (Mega-Tech Serv)

3:30 p.m.
The Waste Removal and Disposition Project at Honeywell Metropolis Works, James Miller (EnergySolutions)

Radioactive Waste Management. Session Cochairs: Sue Aggarwal (New Millennium Nuclear Technol), Robert Hiergesell (SRNL)

Kelley
1:00 p.m.
Disposal of Deionizer Vessels Highly Contaminated with 14Carbon at SRS, Robert A. Hiergesell, Daniel I. Kaplan (SRNL)

1:30 p.m.
An Assessment of Using Vibrational Compaction of Calcined HLW & LLW in DWPF Canisters, You-Bo Yi, Robert C. Amme, Zeev Shayer (Unit of Denver)

2:00 p.m.
Concrete Waste Recycling Process for High Quality Aggregate, Takeshi Ishikura, Shin-ichi Fujii (NUPEC)

2:30 p.m.
Alternatives to the Burial of Low-Level Radioactive Waste, J. Mark Price (SCE)

3:00 p.m.
Melting of the Metallic Wastes Generated by Dismantling Retired Nuclear Research Facilities, Chong-Hun Jung, Pyung-Seob Song, Byung-Youn Min, Wang Kyu Choi (KAERI)

MONDAY, SEPTEMBER 17, 2007 • 4:00 P.M.

Poster Session

Ballrooms 3 and 4

Experience of Hot Cell Renovation Work in CPF (Chemical Processing Facility), Toyonobu Nabemoto, Fujio Katahira, Tatatsugu Sakaya (IHI Corp), Shinichi Aose, Takafumi Kitajima, Kouji Ogasawara, Kazunori Nomura, Shigehiko Miyachi, Yoshiaki Ichige, Tatadhiro Shinozaki, Shinichi Ohuchi (JAEA)

Renovation of CPF (Chemical Processing Facility) for Development of Advanced Fast Reactor Fuel Cycle System, Shinichi Aose, Takafumi Kitajima, Kouji Ogasawara, Kazunori Nomura, Shigehiko Miyachi, Yoshiaki Ichige, Tatadhiro Shinozaki, Shinichi Ohuchi (JAEA)

Web-Enabled Analysis of a Large-Scale Deactivation and Decommissioning Program, James S. Bollinger, William E. Austin (SRNL)

U.S. EPA Superfund Program’s Policy for Risk and Dose Assessment, Stuart Walker (EPA), invited

Detroit Edison’s Fermi 1—Preparation for Reactor Removal, Danny Swindle (Sargent & Lundy)

Financial Planning as a Tool for Efficient and Timely Decommissioning of Nuclear Research Facilities, Anna Cato, Staffan Lindskog (SNPPI), Rolf Sjöblom (Tekedo AB)

Low-Level Radioactive Wastes Conditioning During Decommissioning of Salaspils Research Reactor, G. Abramenkova (Univ of Latvia), A. Abramencovs (Hazardous Wastes Management State Agency), M. Klavins (Univ of Latvia)

PHENIX Power Plant Decommissioning Project—Treatment of the Primary Cold Trap, M. Deluge (CEA)

PHENIX Power Plant Decommissioning Project—Removal of Core and Neutron Blanket Components, C. Moitrier (CEA)

Risk-Quantified Decision-Making at Rocky Flats, Jeffrey C. Myers (Washington SMS)

Using the Conceptual Site Model to Remediate Two Sites in New England and Reach License Termination and Site Reuse, Nadia Glucksberg, Jay Peters (MACTEC)

Switching from Deferred Dismantling to Immediate Dismantling: The Example of Chooz A, Jean-Jacques Grenouillet, Gerard Laurent (EDF)


The AREVA NC Cadarache Plant Dismantling Plan, Noël De Sainte-Marie (AREVA NC)

Commercialization of a DOE Laboratory, Barry A. Stephenson (MCL)

Considerations for NDA in Waste and D & D Applications, Bruce Gillespie (Canberra Indus)

Method for Conducting Gamma Walkover Surveys, Sean J. Horgan, Joseph Nardi (ENERCON Inc), Wayne Vogel (Westinghouse)

Making the Optimal Decision in Selecting Protective Clothing, J. Mark Price (SCE)

Uranium Transport Modeling, William D. Bostick (MCL)


Application of Data Quality Objectives in Decommissioning Plans, Ken Duvall (N.E. Research)

Decommissioning Nuclear Facilities: First Lessons Learned from UP1, Marcoule, France, Jean-Michel Chabeuf (AREVA NC), Didier Boya (CEA)

Potential Indoor Worker Exposure from Handling Area Leakage: Dose Calculation Methodology and Example Consequence Analysis, Razvan Nes, Roland R. Benke (CNWRA)

Plutonium Finishing Plant Sub-Grade EE/CA Evaluation of Alternatives: A New Method, Stacy Charboneau (DOE), Rick Bond (Washington State Dept of Ecology), Andrea Hopkins, Ana Sherwood, D. B. Klos (Fluor Hanford), Chuck Negin (PEC)

A New Approach to Development of Voluntary Decommissioning Standards, Lawrence M. Zull (DNFSB), Lawrence E. Boing (ANL), Richard H. Meservey (INL)

System Chemical Decontamination Technology by the IF7 Gas, Akira Ema (JAEA)

Stochastic Performance Assessment Modeling at the Savannah River Site, Glenn Taylor (SRNL)

Regulatory Experiences for the Decommissioning of the Research Reactor in Korea, Kyung-Woo Choi (KINS)

Automatic Estimation of the Radiological Inventory for the Dismantling of Nuclear Facilities, R. Garcia-Bermejo, A. Felipe, S. Gutierrez, E. Salas (IBERDROLA Ingenieria Y Construccion), N. Martin (ENRESA)

Integrating the Clearance in NPP Residual Material Management, R. Garcia-Bermejo, B. Lamela (IBERDROLA Ingenieria Y Construccion)

Development of Digital Mock-Up for the Assessment of Dismantling Scenarios, Sung-Kyun Kim, Hee-Sung Park, Kune-Woo Lee, Chong-Hun Jung (KAERI)

TUESDAY, SEPTEMBER 18, 2007 • 8:30 A.M.

International Projects—II. Session Cochairs: Jean-Guy Nokhamzon (CEA), Dennis Resienweaver (Alon Science & Technol)

Amphitheater
8:30 a.m.
Radiochemistry Lab Decommissioning and Dismantlement at AECL, Chalk River Labs, Ont. Canada, Stephen Kenny (AECL), invited

9:00 a.m.
Decommissioning Operations at the Cadarache Nuclear Research Center, E. Gouhier (CEA)

9:30 a.m.
Decommissioning of the Nuclear Licensed Facilities at the Fontenay aux Roses CEA Center, Michel Jeanjacques, Laurence Piketty, Lionel Mandard, Guy Pedron, Jean Francois Boissonneau, Alain Fouquerneau, Eric Pichereau, Nathalie Lethuaire, David Estivie, Cedric Binet, Igor Meden (CEA)

10:00 a.m.
PHENIX Decommissioning Project—Overview, Michel Soldaini (CEA)

10:30 a.m.
International Research Reactor Decommissioning Project, Leonardo Leopando, Corazon Bernido (Philippine Nuclear Research Inst), Ernst Warnecke (IAEA)
DOE Projects—I: Savannah River. Session Cochairs: William Austin (Washington SRC), Ray Hannah (DOE)

Rose
8:30 a.m.
Facility Deactivation and Decommissioning at the Savannah River Site, John C. Gilmour (CH2M), Helen L. Belencan (DOE-SR)

9:00 a.m.
The Cold and Dark Process at the Savannah River Site, John C. Gilmour (CH2M), Michael L. Willis (Washington SRC)

9:30 a.m.
Decommissioning of the 247-F Fuel Manufacturing Facility at the Savannah River Site (SRS), Joseph K. Santos, Stephen M. Chostner (Washington SRC)

10:00 a.m.
Decommissioning the Physics Laboratory, Building 777-10A, at the Savannah River Site (SRS), John C. Musall, Jeff L. Cope (Washington SRC)

10:30 a.m.
Demolitions of the Savannah River Site’s Concentrator and Finishing Facilities, Paul McDonagh (Bechtel Savannah River Inc)

11:00 a.m.
Area Completion Strategies at Savannah River Site: Characterization for Closure and Beyond, Laura Bagwell, Sadika O’Quinn, Mark Amidon (SRS)

Groundwater Issues. Session Cochairs: Richard Fil (Robinson & Cole), Pete Fledderman (SRS)

Kelley
8:30 a.m.
Myth and Reality in Hydrogeological Site Characterization at DD&R Sites, Yoram Rubin (Univ of California, Berkeley)

9:00 a.m.
Preplanning for D&D: Monitoring the Vadose Zone at Radioactive Waste Trenches, Douglas E. Wyatt (WGSMS)

9:30 a.m.
The Tritium Underflow Study at the Savannah River Site, Robert A. Hergesell (SRNL)

10:00 a.m.
Reaching Site Closure for Groundwater Under Multiple Regulatory Agencies, N. Glucksberg, Gene Shephard, Jay Peters (MACTEC), B. Couture (CYAPCO)

10:30 a.m.
Understanding Contaminant Transport Pathways at Rocky Flats—A Basis for the Remediation Strategy, Ian Paton (Wright Water Engineers)

11:00 a.m.
Groundwater Monitoring and Control Before Decommissioning of the Research Reactor VVR-S Magurele-Bucharest, Mitica Dragusin (National Inst of Physics & Nuclear Eng)

Dismantlement Technology. Session Cochairs: Georg Mauer (UNLV), Lisa Mullen (Bluegrass Concrete Cutting)

Walker
8:30 a.m.
Mechanical Cutting of Irradiated Reactor Internal Components, Michael G. Anderson (MOTA Corp)

9:00 a.m.
Disassembly and Sanitization of Classified Matter, Dwight J. Stockham, Max P. Saad (SNL)

9:30 a.m.
Packaging, Transportation, and Disposal Logistics for Large Radioactively Contaminated Reactor Decommissioning Components, Mark S. Lewis (EnergySolutions)

10:00 a.m.
Repackaging Rocky Flats Legacy Transuranic Waste, Jerri Lynne McTaggart (LANL)

10:30 a.m.
Fast Track Characterization of Highly Radioactive Waste Pits Combining Off-the-Shelf Robotics with Innovative Investigation Protocols, Jean-Michel Chabeuf, Didier Boya (AREVA NC)

11:00 a.m.
Metal Cutting for Large Component Removal, Robert M. Hulick (Bluegrass Concrete Cutting), invited

International Projects—III. Session Cochairs: John Parkyn (Private Fuel Storage), Sue Aggarwal (New Millennium Nuclear Technol)

Amphitheater
1:00 p.m.
Long Term Storage with Surveillance of Canadian Prototype Nuclear Power Reactors, Rick Janzen (AECL)

1:30 p.m.
Application of the New Decommissioning Regulation to the Nuclear Licensed Facilities (NLF) on Fontenay-aux-Roses’s Nuclear Center (CEA), Josiane Sauret, Laurence Piketty, Michel Jeanjacques (CEA)

2:00 p.m.
Maintaining Quality in a Decommissioning Environment, Michael Attas (AECL)

2:30 p.m.
Cleanup of Nuclear Licensed Facility 57, Michel Jeanjacques, Marie Pierre Bremond, Carole Marchand, Cécile Poyau, Cécile Viallefont, Laurent Gautier, Frédéric Masure (CEA)

3:00 p.m.
Issues Associated with Tritium Legacy Materials, Michael Mills (Atomic Weapons Establishment)
DOE Projects—II. Session Cochairs: Andrew Szilagyi (DOE), Jim Bollinger (SRNL)

Rose
1:00 p.m.
K25/K27 Characterization for Demonstrating Criticality Incredibility K-25/K-27 D&D Project, Mahmoud H. Haghhighi, Kathleen E. Howe, John R. Chandler (Bechtel Jacobs)

1:30 p.m.
K-25 Structural Separation and Demolition, Frank Cater (Bechtel Jacobs)

2:00 p.m.
Impacts to Project from $^{99}$Tc Contamination on the K-25/K-27 Decontamination and Decommissioning Project, Paul Larson, Greg Boris (Bechtel Jacobs)

2:30 p.m.

3:00 p.m.
Nuclear Rocket Facility Decommissioning Project: Controlled Explosive Demolition of Neutron-Activated Shield Wall, Jerel Nelson (Polestar Applied Technol), Mike Krutzic (National Security Technol), Rodney Simonsen (Exelon), invited

Decontamination Technology. Session Cochairs: Al Solano (Solano Consulting & Field Svc), Lynne Goodman (Detroit Edison)

Walker
1:00 p.m.
Decontamination of Terrorist-Dispersed Radionuclides from Surfaces in Urban Environments, Robert Fischer, Mark Sutton, Dianne Gates-Anderson, Jeremy Gray, Qinhong Hu, Walt McNab, Brian Viani (LLNL)

1:30 p.m.
Accuracy Analysis of a Robotic Radionuclide Inspection and Mapping System for Surface Contamination, Georg F. Mauer, Chris Kawa (UNLV)

2:00 p.m.
Diamond Shaving of Contaminated Concrete Surfaces, Lisa K. Mullen (Bluegrass Concrete Cutting)

2:30 p.m.
Cleaning Residual NaK in the Fast Flux Test Facility Fuel Storage Cooling System, T. M. Burke, W. R. Church (Fluor Hanford), K. M. Hodgson (Fluor Government Group)

3:00 p.m.
Decontamination of Tritiated Water Using Superhydrophobic Pt-Catalyst Synthesized with Water-in-Supercritical CO$_2$, Youichi Enokida (EcoTopia Science Inst/Nagoya Univ), Ryosuke Shimizu (EcoTopia Science Inst), Kayo Sawada (EcoTopia Science Inst/Nagoya Univ), Ichiro Yamamoto (Nagoya Univ)

3:30 p.m.
The Feasibility Study of Hot Cell Decontamination by the PFC Spray Method, Hui-Jun Won, Chong-Hun Jung, Jei-Kwon Moon (KAERI)

Regulatory Infrastructure. Session Cochairs: Lawrence Zull (DNFSB), Jack Hayes (NRC)

Kelley
1:00 p.m.
U.S. EPA Superfund Program’s Policy for Community Involvement at Radioactively Contaminated Sites, Pat Carey, Stuart Walker (EPA)

1:30 p.m.
Safety of Decommissioning of Nuclear Facilities, B. Batandjieve, E. Warnecke, R. Coates (IAEA)

2:00 p.m.
Safety Oversight of Decommissioning Activities at DOE Nuclear Sites, Lawrence M. Zull, William Yeniscavich (DNFSB)

2:30 p.m.

3:00 p.m.
Memorandum of Understanding Between U.S. EPA Superfund and U.S. NRC, Stuart Walker (EPA)

3:30 p.m.
Potential Indoor Worker Exposure from Handling Area Leakage: Example Event Sequence Frequency Analysis, Roland R. Benke, George R. Adams (CNWRA)

Lessons Learned. Session Cochairs: Mike Lackey (Fluor Hanford), Sandra Waisley (DOE)

Amphitheater
8:30 a.m.
Preservation and Implementation of Decommissioning Lessons Learned in the United States Nuclear Regulatory Commission, Rafael L. Rodriguez (NRC)

9:00 a.m.
Worldwide Overview of Lessons Learned from Decommissioning Projects, Michele Laraia (IAEA)

9:30 a.m.
Fluor Hanford Alara Center is a D&D Resource, L. O. Waggner (Fluor Hanford)
Technical Sessions by Day – Wednesday

10:00 a.m.
Daddy, What’s a Nuclear Reactor?, Dennis W. Reisenweaver (Alion Science & Technical)

10:30 a.m.
Lessons Learned From Radioactive Waste Storage and Disposal Facilities, David W. Esh, Anna H. Bradford (NRC)

11:00 a.m.
Lessons From Love Canal: Considerations for the Effective Use of Institutional Controls, Richard M. Fil (Robinson & Cole)

DOE Projects—III. Session Cochairs: Bill Franz (LATA/Parallax Portsmouth), Larry Boing (ANL)

Rose
8:30 a.m.
Decommissioning the 216-Z-9 Crib Plutonium Mining Facility at the Plutonium Finishing Plant: Issues Characterization, S. Charboneau (DOE), A. Hopkins, C. Sutter (Flour Hanford), J. Teal (Flour Government Group)

9:00 a.m.

9:30 a.m.
Closure of the Fast Flux Test Facility: Current Status and Future Plan, O. A. Farabee (DOE), W. V. Witherspoon (Flour Hanford)

10:00 a.m.

10:30 a.m.
Deactivation and Decommissioning Planning and Analysis with Geographic Information Systems, James S. Bollinger, Larry D. Koffman, William E. Austin, Jr. (SRNL)

11:00 a.m.

Dose Modeling and Radiation Measurement. Session Cochairs: Myron Kaczmarsky (Bartlett), Nadia Glucksberg (MACTEC Eng and Consulting)

Kelley

8:30 a.m.
SRNL All-Pathways Application, Larry D. Koffman, Elmer L. Wilhite, Leonard B. Collard (SRNL)

9:00 a.m.
Carbon-14 Specific Activity Model Validation for Biota in a Wetland Environments, T. L. Yankovich, K. J. Sharp, M. L. Benz, J. Carr, R. W. D. Killey (AECL)

9:30 a.m.
Area Factor Determinations for an Industrial Worker Exposed to a Concrete Slab End-State, G. Timothy Jannik, Patricia L. Lee, Eduardo B. Farfan, Jesse L. Roach (SRNL)

10:00 a.m.
An Innovative Approach for the Calculation of Exposure Point Concentrations for Large Areas of Surface Radionuclide Contamination, F. Winchester Chromec, Jeffrey C. Myers (Washington SMS)

10:30 a.m.
Modern Sorters for Soil Segregation on Large Scale Remediation Projects, J. J. Shonka, J. E. Kelley, J. M. O’Brien (Shonka Research Assoc)

WEDNESDAY, SEPTEMBER 19, 2007 • 1:00 P.M.
Closing Plenary. Session Chair: James Byrne (Byrne & Assoc)

Ballrooms 1 and 2
1:00 p.m.
Plan Now for Decommissioning—Why?, William Mannion (WJM Consulting Svc)

1:30 p.m.
Improving the Identification, Dissemination and Implementation of Deactivation and Decommissioning Lessons Learned and Best Practices, Sandra L. Waisley (DOE), Michael B. Lackey, Lansing G. Dusek (Flour)

2:00 p.m.
The Fernald Closure Project: Lessons Learned, Cornelius M. Murphy, Dennis Carr (Flour Government Group)

2:30 p.m.
Lessons Learned from the Decommissioning of Nuclear Facilities and the Safe Termination of Nuclear Activities: Outcomes of the International Conference, 11-15 December 2006, Athens, Greece, B. Batandjieva, M. Laraia (IAEA)

3:00 p.m.
Back to the Future—Lessons Learned from Recent Power Plant Decommissionings, Gerry VanNoordttenmen (CIAPCO)

3:30 p.m.
Conference Wrap-Up, James Byrne (2007 DD&R Technical Program Chair and Byrne & Associates, LLC)
We thank the following companies for their generous support of the 2007 DD&R Technology Expo

Alaron Corporation, Wampum, PA, Booth # 18
Alaron, together with our teaming partners, has become a ‘one-stop shop’ for all your nuclear service needs. Alaron provides a variety of services including: equipment storage, facility-space leasing, waste processing (wet and dry), asset recovery, service level one coatings, transload operations (truck to rail) and refurbishment of both safety and non-safety related components (pumps, motors including RCPM’s). Alaron has been licensed by the NRC since the mid-80’s.

American DND, Inc., Grand Island, NY, Booth # 8
American DND performs SAFE Environmental Remediation, Demolition & Nuclear Decommissioning on a National basis.

The Management Team of American DND possess extensive “Lessons Learned” from performing over $400M of D-n-D Work at over 500 projects over the past 25 years. Radiological Decommissioning projects have been performed at Yankee Nuclear Facilities, Oakridge Plants, Savannah River Site, Fernald, Rocky Flats, DOE, DOD, USACE, and other NRC Utility Organizations (both fossil & nuclear plants).

Specialty Demolition Equipment includes Hydraulic Excavators with High Reach capabilities and capacities to 125 M Ton. Attachments include the largest shears, grapples, hammers and concrete pulverizers in the industry. Concrete Recycling and size reduction plants with screening and stockpiling capabilities are mobile and easily set up on-site to facilitate Waste Mitigation strategies and Beneficial Reuse Opportunities. We also offer ‘Implosion’ and ‘Explosive’ capabilities.

American DND Partners with a Clients Team to proactively manage the constantly changing Work environment encountered on decommissioning jobsites.

American DND’s Management has successfully designed cost effective ‘work-a-rouns’ to deal with hidden, latent, and unexpected conditions to handle environmental & radiological contaminants with unique Means & Methods to the industry. These alternative demolition techniques reduced the schedule by several months, were 100% regulatory compliant, and saved the Client BIG money.

American DND’s Service Disabled Veteran (SDV) and Small Business (SB) Status provides additional Value for Clients with active Diversity Programs.

When it comes to Decommissioning Work, American DND is THE BEST “Tool” you can use for your Project. Please stop by the booth to discuss how our Lessons Learned can be applied to Your Project.

Barnhart Nuclear Services, Daphne, AL, Booth # 22
Barnhart Nuclear Services provides innovative engineered lifting and transportation services for both large and small nuclear components. They have safely and successfully completed one or more projects at over 50% of the commercial nuclear sites (including first, largest, and shortest critical path timing in the fleet) through their network of 20 branch offices. Their industry leading project approach has provided PWR and BWR projects with hundreds of thousands of incident free manhours.

Bigge Power Constructors, San Leandro, CA, Booth # 21
Bigge Power Constructors has been an integral partner in the application of heavy-lift rigging, heavy specialized transportation and feasibility engineering for the electric power generation and general industry for over eighty years.

Since our founding in 1916 Bigge has pioneered, planned, engineered and developed specialized lifting and transportation equipment and procedures to satisfy the needs of the growing industries. As the fossil fuel plants grew in size and later progressed into nuclear power we continued to evolve with these changes.

Today we serve all aspects of industry and the power generation business from cogeneration new construction, power plant upgrades to nuclear steam generator replacement, reactor vessel head replacement, spent fuel movement and decommissioning.

Bigge has provided large component removal, spent fuel movement, including heavy lift and transportation services on almost every commercial nuclear decommissioning that has taken place in the United States.

Our exhibit provides visual of examples of the unique solutions we have provided to the owners and the prime contractors on these challenging projects. Including Connecticut-Yankee, Trojan, San Onofre Unit, Rancho Seco, and Humboldt Bay Decommissioning projects.

The services we provide also include feasibility studies to determine the viability of large component removal options and transportation either on site or to a designated waste storage facility.

Bigge has provided engineering, transportation and feasibility studies to Nupec (Japan), Southern California Edison, Sacramento Utility District, Pacific Gas and Electric.

We welcome the opportunity to meet with all interested parties at our exhibit booth.

Bluegrass Concrete Cutting, Inc., Greenville, AL, Booth # 24
As a controlled demolition contractor, Bluegrass has completed more than 90 nuclear projects – on-time, on budget – since 1990. A worldwide leader in demolition support services for nuclear plant decommissioning, maintenance and outage projects. Bluegrass offers an extensive resource pool in engineering talent, experienced technicians, and specialized equipment to handle your nuclear project, large or small.

BROKK – AMEASOL, Santa Fe, NM, Booths # 14 & # 15
For over 30 years Brokk remotely operated machines have been saving our customers’ time and money, they have also avoided accidents and injuries in a wide range of remote operations applications. Brokk machines versatility, compact size, maneuverability, wireless remote control and ease of operation bring heavy-duty power into nuclear and other hazardous environments, while keeping operators at a safe distance. Brokk machines have hundreds of standard and specially designed tools and end effectors to meet the specific job requirements.
AMEASOL is a small business technology partner of BROKK specializing in remote measurement and remote operations technologies for hazardous environments. They will be exhibiting their new unique Laser Induced Breakdown Spectroscopy (LIBS) products, which provide instantaneous materials identification and analysis in the field. AMEASOL LIBS systems are operationally proven in nuclear facilities and can be used for remote long range (stand-off) materials detection and analysis, typically in the parts per million range.

Cabrera Services, Inc., East Hartford, CT, BOOTH # 25

With over 40 years of experience in this field, we bring solutions to our customers, not just products or services. The key to our success lies in our ability to identify the right customers and understand their needs, in order to bring them value-adding and innovative solutions. In addition, we strive to meet all of the commitments that we make to our customers.

Edwards Moving & Rigging, Inc., Shelbyville, KY, BOOTH # 3
Edwards Moving & Rigging, Inc. has specialized in the heavy hauling and rigging industry since 1961. Our company is experienced in heavy hauling, rigging, jacking and lifting objects of all dimensions and weights including major plant components which are being decommissioned. Our qualified staff can assist you with the logistical coordination of shipping this equipment which can involve, rail, barge, over the road transport or any combination of these modes of transport. Project specific engineering and rigging plans are developed by our in-house engineering staff that are available to assist with sensitive cargo needs. Our personnel, quality equipment, detailed planning and specialized safety program, illustrates our commitment to the safe, cost-effective and timely completion of projects.

E.H. Wachs Company, Lincolnshire, IL, BOOTH # 16
E.H. Wachs Company is a premier global manufacturer of on-site machining and valve turning equipment. Wachs delivers dependable, effective solutions, while combining solutions with exemplary customer service; rapid response time and a focus that assures customers achieve results within schedule and budget.

Encon Services, Inc., Murrysville, PA, BOOTH # 6
Encon Services, Inc. is an engineering, environmental, technical, management and radiological services firm providing a broad range of professional services to private and government sector clients throughout the United States. Since 1983, the company has consistently provided superior services to clients through innovation, diligence and commitment.

EnergySolutions, LLC, Salt Lake City, UT, BOOTH # 17
EnergySolutions, LLC, is the nation’s leading provider of turnkey waste management services, ranging from characterization of solid and liquid radioactive and hazardous wastes and sites, to treatment of those wastes, and packaging, transportation, and final disposal at various company-owned/ operated or Government-owned/company-operated TSDFs nationwide.

EST Group, Inc., Hatfield, PA, BOOTH # 9
Manufacturer of specialty tools targeted at simplifying inspection, maintenance and repair of tubular heat exchangers/condensers, and at speeding in-service inspection of pipe, piping systems and pressure vessels. Products include Pop-A-Plug® tube plugs; Pop-A-Plug® Tube Stabilizers; GripTight™ test plugs; Double Block and Bleed test plugs; and High Lift Flange Weld Testers.

Hukari Technical Services, Inc., Wheat Ridge, CO, BOOTH # 20
Hukari Technical Services, based in Wheat Ridge, Co, is a solely-owned, small business (Vietnam Veteran-Owned) with the goal of providing only the highest quality engineering and professional services. HUKARI specializes in comprehensive engineering and technical services associated with nuclear facilities (DOE and commercial) including decommissioning and deactivation, hazardous material processing, environmental/waste management, licensing and compliance.

Hydro-Lek Ltd, Berkshire, England, BOOTH # 4
Hydro-lek was founded in 1996 by Chris Lokuciewski. Chris’s background stems from vast experience in the underwater engineering environment. His experience as a manned submersible pilot, ROV pilot and ROV designer led him to set up Hydro-lek.

Hydro-lek’s principal objectives are to provide a range of tooling components for remote handling in all areas where manned intervention is not an option. The products range from simple hydraulic components such as fittings, valves and pumps to fully integrated telemetry controlled remote manipulator systems for integration onto ROV’s and remote access platforms.

The company has grown steadily and now provides products and design services to the subsea, nuclear, defence and transport industries. The company now employs specialist engineers with a wealth of design and application experience across those industries, and provides full design and build services from its facilities in Berkshire England.

Inventure Laboratories, Inc., Knoxville, TN, BOOTH # 19
Inventure Laboratories is a machinery and product development company serving industries ranging from manufacturing to government to R&D. Our mission is to deliver elegant solutions, innovative engineering, robust software, and dependable hardware at an economical price.

Inventure Laboratories develops its own customized proprietary products as well as machinery and instrumentation solutions for our clients. We apply the same high standard of excellence to everything we attempt.

Materials and Chemistry Laboratory, Inc. (MCLinc), Oak Ridge, TN BOOTH # 11
MCLinc offers an experienced technical staff along with a unique and powerful collection of materials characterization and chemical analysis equipment. Equipment includes electron microscopy, x-ray diffraction, x-ray fluorescence, infrared spectroscopy, gas chromatography, ICP for metals analysis, liquid scintillation and gas-proportional counters for radiological analyses, ion chromatography, wet chemistry analysis laboratories, and equipment for explosivity testing.
**MCM Management Corporation, Bloomfield Hills, MI, booth # 7**
MCM Management Corp. provides exemplary services in the nuclear arena as a demolition and environmental remediation contractor in addition to providing construction equipment rental and fleet management services. MCM has demolished and processed over 58,000,000 square feet of nuclear, industrial and institutional structures in recent years. MCM brings a unique set of qualifications that enable it to meet the modern challenges of large scale D&D projects. MCM’s experience includes working on DOE, NRC and TVA projects, in addition to the many industrial demolition projects. Recent accolades include completion at the Fernald Closure Project and implosion takedown of the Fire Water tower at the ETTP in Oak Ridge.

**Mega-Tech Services, LLC, Mechanicsville, VA, booth # 2**
Mega-Tech offers engineering consulting, nuclear operations, spent fuel management, decommissioning and radioactive waste (high and low level) management services. The services also includes supplying standard hand-held tools, modified equipment, and engineered packages which can include all remote capabilities and adaptations of the tools. This superior cutting technology does not leave chips, filings and dross nor volatize paint or release asbestos.

**MOTA Corporation, West Columbia, SC, booth # 12**
MOTA Corporation is a Service Disabled Veteran Owned Small Business specializing in the Decontamination and Decommissioning of Nuclear Reactors, Hot Cells, Laboratories, as well as environmental remediation. MOTA's corporate offices and Service facility are located in Columbia, SC, with regional offices in Los Alamos, New Mexico, Oakland, California, and Glasgow, Scotland (MOTA Europe Limited).

**Rigging International, Missoula, MT, booth # 10**
Rigging International provides heavy lift rigging and heavy haul transportation services. Our nuclear experience spans from the early 1970's to the present and encompasses new construction to decommissioning. Complete engineered rigging plans and experienced supervision are hallmarks of a rigging international project.

**UniTech Services Group, Inc., Springfield, MA, booth # 1**
UniTech Services Group, Inc. is the worlds largest supplier of nuclear protective clothing and accessories. Our nuclear licensed decontamination facilities throughout the US and Europe provide the following services: radiological laundering of protective clothing, decontamination and testing of respirators, and the decontamination of tools and equipment (scaffolding, hand tools, portable HEPA vacuums, etc.) Our products and services are designed to provide our customers cost effective protection of their workers with minimal generation of radioactive waste.

**Waste Control Specialists LLC, Dallas, TX, booth # 13**
Waste Control Specialists provides hazardous, radioactive and mixed waste treatment and disposal services. This includes waste storage services, waste repackaging and waste characterization.

**Xenogenesis, LLC, Alpharetta, GA, booth # 23**
Xenogenesis, LLC was founded in 2002 to provide radar imaging of concrete structures. Some of our most recent projects include the Browns Ferry Plant and the Duane Arnold Plant where we provided the information regarding safe locations to penetrate the concrete. Since its founding we have also added utility location and thermal imaging to better meet our clients needs.