

TMI-2: HEALTH PHYSICS AND ENVIRONMENTAL RELEASES

- 345** Preface—TMI-2: Health Physics and Environmental Releases / *Carl H. Distenfeld*

TECHNICAL PAPERS

- 347** Three Mile Island Unit 2: The Early Radiological Conditions of the Reactor Building / *William C. Hopkins*
- 361** Radiological Conditions and Experiences in the Three Mile Island Unit 2 Auxiliary Building / *Paul E. Ruhter, Wilbert G. Zurliene*
- 368** Three Mile Island Unit 2 Reactor Building Entry Program / *James W. Langenbach*
- 383** Environmental Measurements During the Three Mile Island Unit 2 Accident / *Andrew P. Hull*
- 395** Three Mile Island and the Environment / *Beverly A. Good, Gordon M. Lodde, Diane M. Surgeoner*
- 407** The Three Mile Island Unit 2 Reactor Building Gross Decontamination Experiment: Effects on Loose Surface Contamination Levels / *Edward N. Lazo*
- 421** Surface Activity Characterization with Thermoluminescent Detector Pseudo Cores / *Robert J. Vallem, Carl H. Distenfeld, Henry K. Peterson*
- 424** A Fast Sorting Measurement Technique to Determine Decontamination Priority / *Carl H. Distenfeld, Barry H. Brosey, Hiroo Igarashi*
- 429** Airborne Recontamination of the Three Mile Island Unit 2 Reactor Building / *James E. Tarpinian*
- 433** Characterization of the Radiological Conditions of the Three Mile Island Reactor Building Basement and D-Rings / *Henry K. Peterson*
- 443** Robotic Characterization of the 86.1-m Elevation of the Three Mile Island Unit 2 Reactor Building / *Dennis E. Ferguson*
- 450** Three Mile Island Unit 2 Reactor Building Basement Concrete Activity Distribution / *Paul J. Babel, Raymond E. Lancaster, Carl H. Distenfeld*

(Continued)

ON THIS COVER

Fuel removal was the unifying task for all Three Mile Island Unit 2 personnel. The transport system that was developed to accept the fuel debris is shown, with the TMI cooling towers in the background.

CONTENTS / OCTOBER 1989—VOL. 87, NO. 2

(Continued)

- 457 RCS Characterization and SNM Accountability: Trace Fuel Circulation in the RCS, Reactor Building, and Auxiliary Building at TMI-2 / *Jess Greenborg*
- 461 Ex-Vessel Fuel Characterization Results in the Three Mile Island Unit 2 Reactor Building / *Ryusuke Kobayashi, Carl H. Distenfeld, Dennis E. Ferguson*
- 470 Reactor Fuel Detection and Distribution in the Three Mile Island Unit 2 Auxiliary Building / *Paul J. Babel, Barry H. Brosey, Carl H. Distenfeld*
- 478 Using Ex-Core Neutron Detectors to Estimate Fuel Quantities in the Reactor Vessel Lower Head / *Reuben Rainisch, Victor R. Fricke*
- 486 Heat Stress Control in the Three Mile Island Unit 2 Defueling and Decontamination Activities / *John S. Schork, Bradley A. Parfitt*
- 490 The Significance of Radiological and Environmental Controls Documentation in Litigation / *Gordon M. Lodde, Thomas D. Murphy*
- 498 Computer System Development to Support Three Mile Island Unit 2 Radiological Controls Operations and Records Management Activities / *Richard D. Schauss*
- 504 A Guide to Technical Information Regarding Three Mile Island Unit 2 / *Kim David Auclair, Joann S. Epler*
- 509 Dealing with Public Perceptions of Health Risks in a Nuclear World / *Robert S. Friedman*
- 514 Exposure of the General Public near Three Mile Island / *Merril Eisenbud*
- 520 An Upgraded Personnel Dosimetry System for Use at Three Mile Island Unit 2 / *James W. Schmidt, Joseph M. Harworth*
- 527 Respiratory Protection Lessons Learned at Three Mile Island / *Earl F. Gee*
- 531 Personnel Contamination Protection Techniques Applied During the Three Mile Island Unit 2 Cleanup / *James E. Hildebrand*
- 535 Assessment and Control of the Three Mile Island Unit 2 Reactor Building Atmosphere / *Gordon M. Lodde, Beverly A. Good, Diane M. Surgeoner*
- 545 The Role of Radiation Instruments in the Recovery of Three Mile Island Unit 2 / *Robert D. Holmes, Gary W. Frank*
- 553 Three Mile Island Unit 2 Reactor Building Dose Reduction Task Force / *Raphael S. Daniels*
- 556 Review of Radiation Shielding Concerns Associated with the Three Mile Island Unit 2 Defueling Systems / *N. L. Osgood, D. S. Williams, R. L. Rider*

DEPARTMENTS

- 335 Authors

(Continued)

CONTENTS / OCTOBER 1989—VOL. 87, NO. 2

(Continued)

Editor's Note: The following summaries, which were presented at the Three Mile Island Unit 2 Embedded Topical Meeting in Washington, D.C., in November 1988, can be found in *Transactions of the American Nuclear Society*, Volume 57 (1988):

Observations on Health Outcome Studies of Exposure of the Worker and the General Population During the Nuclear Reactor Accident at Three Mile Island / *Jacob I. Fabrikant*

Dosimetry Studies Pertaining to the Accident at TMI-2 / *John A. Auxier*

Radiation Protection Training Then and Now / *Thomas Mulleavy*

Dose Reduction: Trim Personnel Transit Exposure to the RB Defueling Platform and Reduce Defueling Exposure / *William J. Cooper, Peter P. Velez*

Programmatic Changes Due to TMI-2 / *John A. Auxier*

Emergency Response Planning in Pennsylvania / *Margaret A. Reilly*

The Three Mile Island Unit 2 Accident and Its Impact on the NRC / *Robert E. Alexander, Jack M. Bell*

Programmatic Changes Due to TMI-2: Accident Planning / *Vernon L. Wingert*

The Department of Energy Response to TMI / *S. V. Musolino*