TMI-2: HEALTH PHYSICS AND ENVIRONMENTAL RELEASES

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

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)
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. Epier

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 / Merrill 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)
(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