You are invited to attend and participate in the
Federal Interagency Public Workshop on
Concrete Materials Performance for Nuclear Facilities

Sponsored by
U.S. Nuclear Regulatory Commission (NRC),
Office of Nuclear Regulatory Research (RES) and
National Institute of Standards and Technology (NIST),
Materials and Construction Research Division (BRFL)

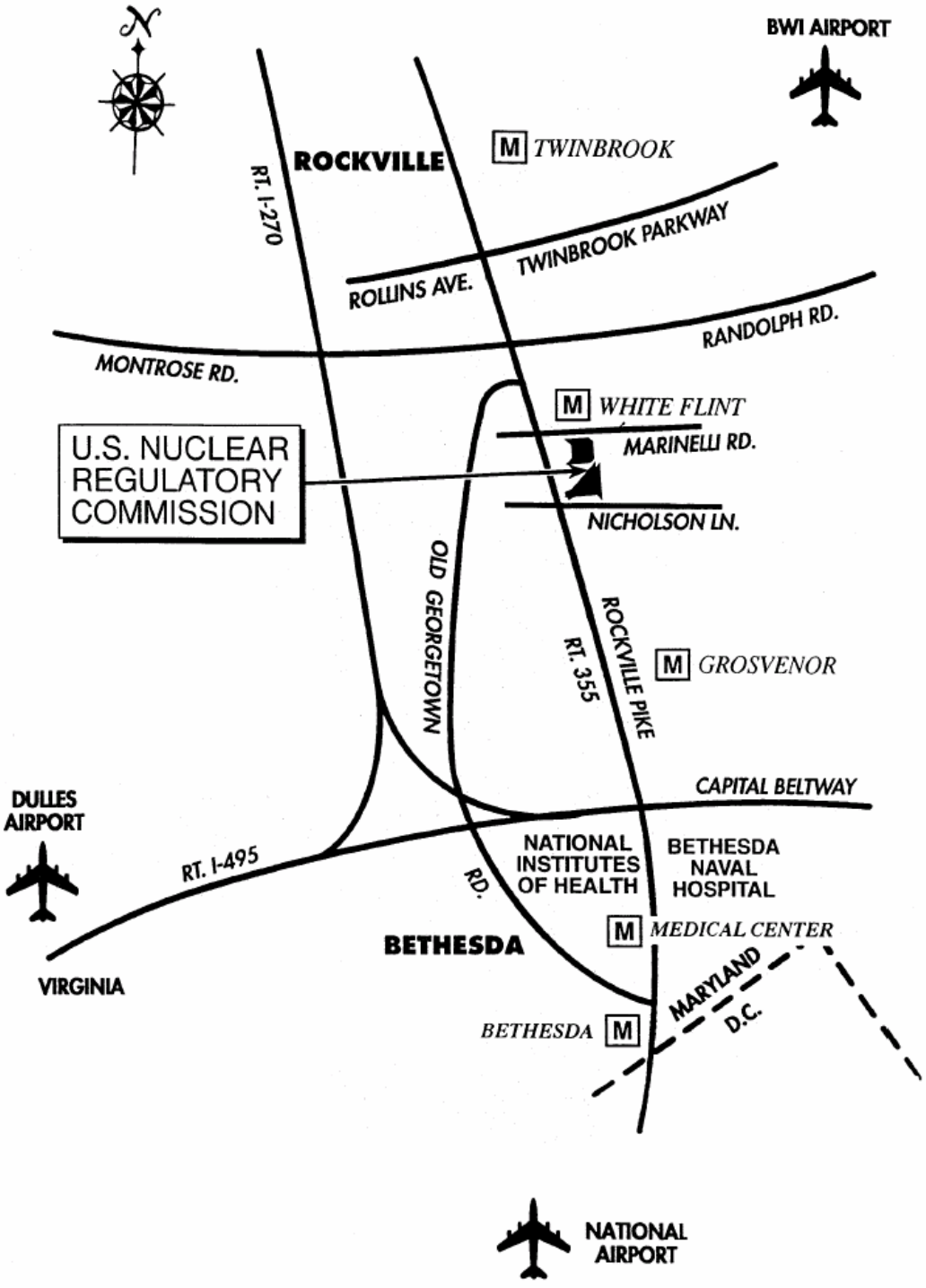
To be held June 2, 2005
at the NRC Headquarters Auditorium
@ White Flint METRO Stop on the Red Line
11545 Rockville Pike, Rockville Maryland 20852

DIRECTIONS (for participants other than NRC staff)

The U.S. Nuclear Regulatory Commission (NRC) Headquarters Auditorium is located in the **Two White Flint North Building at 11545 Rockville Pike, Rockville, Maryland 20852-2738**. {NRC telephone operator can be reached at 1-301-415-7000, and will connect you to any NRC Headquarters employee.}

Directions:
The easiest access to NRC's Headquarters complex is via the **METRO** on the **Red Line**. The NRC complex is located directly above the **White Flint METRO stop**. Reagan National Airport and Union Station (AMTRAK) both have METRO stops. Dulles International Airport is not serviced by METRO but there is shuttle bus service available to the METRO (20 minute ride). Baltimore-Washington International (BWI) Airport is not directly accessible to the METRO but is accessible to AMTRAK (at scheduled times) which stops at Union Station which has a METRO stop on the **Red Line**.

For those driving, the NRC Headquarters complex is at the **intersection of Rockville Pike (Maryland State Route 355) and Marinelli Drive** which is approximately 2 miles north of the Washington Beltway (I-495) on Maryland State Route 355. There are a very limited number of visitor parking spaces outside the NRC complex with additional metered parking spaces on Marinelli Drive and also at the METRO parking lot further down Marinelli Drive. [METRO parking is setup for commuters (commuters must have a bus transfer coupon obtained from a METRO station other than the White Flint stop. Others who may park there pay a very expensive fee.]


N
BWI AIRPORT
ROCKVILLE
M TWINBROOK
RT. I-270
TWINBROOK PARKWAY
ROLLINS AVE.
RANDOLPH RD.
MONTROSE RD.
M WHITE FLINT
MARINELLI RD.
U.S. NUCLEAR REGULATORY COMMISSION
NICHOLSON LN.
OLD GEORGETOWN RD.
ROCKVILLE PIKE
RT. 355
M GROSVENOR
CAPITAL BELTWAY
DULLES AIRPORT
RT. I-495
NATIONAL INSTITUTES OF HEALTH
BETHESDA NAVAL HOSPITAL
M MEDICAL CENTER
BETHESDA
VIRGINIA
MARYLAND
D.C.
BETHESDA M
NATIONAL AIRPORT

Draft Agenda

Federal Interagency Public Workshop on
Concrete Materials Performance for Nuclear Facilities

Date:	June 2, 2005
Location	U.S. Nuclear Regulatory Commission (NRC) Headquarters Auditorium, @ White Flint METRO Stop on the Red Line,11545 Rockville Pike, Rockville, MD
Technical Topics:	Dissemination of Research Information on Concrete Materials Durability and Performance for Nuclear Reactors and Waste Facilities: • Degradation Mechanisms • Degradation Modeling • Service Life Predictions including Aging Effects • Performance Monitoring including NDE and Sensor Technologies • Maintenance
Workshop Objective:	Facilitate communication among Federal Agencies and interested stakeholders on research studies and their findings on concrete materials, performance for nuclear reactor structures, and waste disposal facilities that may employ concrete-based engineered barriers for waste isolation. The workshop will provide an arena to obtain and discuss: (1) state-of-the-practice information from technical experts involved in research activities for the NRC staff related to the performance of concrete materials, (2) applications to NRC-licensed facilities, and (3) new and emerging research needs.
Attendance:	Cognizant NRC staff from the Offices of Nuclear Regulatory Research (RES), Nuclear Reactor Regulation (NRR), Nuclear Material Safety and Safeguards (NMSS), State Programs (STP); Concrete materials performance researchers from the National Institute of Standards and Technology (NIST); Oak Ridge National Laboratories (ORNL) and Department of Energy (DOE); Participants from the U.S. Army Corps of Engineers (USACOE), National Science Foundation (NSF), and National Research Council; and Interested Stakeholders (e.g., American Concrete Institute (ACI)).
Documentation:	Abstracts along with viewgraphs or PowerPoint presentations will be requested of the presenters one week prior to the meeting date, and distributed to the attendees.
Additional Info:	Jake Philip, 301-415-6211, jxp@nrc.gov, Herman Graves, 301-415-5880, hlg1@nrc.gov, Tom Nicholson, 301-415-6268, tjn@nrc.gov

June 2, 2005

8:30 a.m.	Welcome and Opening Remarks.....	Carl Paperiello, Director, RES, NRC Director, BFRL, NIST
8:45 a.m.	Meeting Objectives, Technical Themes, and Goals.....	William Ott /Anthony Hsia / Section Chiefs, RES
9:00 a.m.	Overview of Concrete Materials Research: Radiation Protection and Waste Management Branch/DSARE/RES..... Structural and Mechanical Engineering Branch/DET/RES	 Jake Philip, RES Herman Graves, RES
9:30 a.m.	Experience of Concrete Materials Performance: Nuclear Reactors: Nuclear Waste Isolation Facilities	 Hans Ashar, NRR Goutam Bagchi, NRR Dave Esh, NMSS
10:00 a.m.	BREAK	
10:15 a.m.	Concrete Aging Research for Nuclear Power Plants	Dan Naus, ORNL
11:00 a.m.	Overview of Concrete Materials Research at NIST	Ed Garboczi, NIST
11:20 a.m.	Sustained High Temperature Effects on Concrete	Long Phan, NIST
11:40 a.m.	Discussions	Tom Nicholson, NRC (moderator)
12:00 noon	LUNCH (NRC Cafeteria)	
1:00 p.m.	Concrete Degradation Modeling and Validation.....	Jeff Bullard, NIST
1:30 p.m.	NDT Methods for Durability Assessment of Concrete Structures	Nick Carino, ex NIST
2:15 p.m.	Cement Solidification of Radioactive Wastes	Chris Langton, NIST Contractor
3:00 p.m.	SEM and X-Ray Diffraction Evaluations of Concrete Degradation and Inputs to Concrete Degradation Modeling	Paul Stutzman, NIST
3:30 p.m.	BREAK	
3:45 p.m.	The Virtual Cement Concrete Testing Laboratory (VCCTL)	Jeff Bullard, NIST
4:20 p.m.	Discussions	Herman Graves, NRC (Moderator)
4:45 p.m.	ADJOURN	