



Liberty RadEx

National Tier 2 Full-Scale Radiological Dispersion Device Exercise
Philadelphia, Pennsylvania April 26-30, 2010

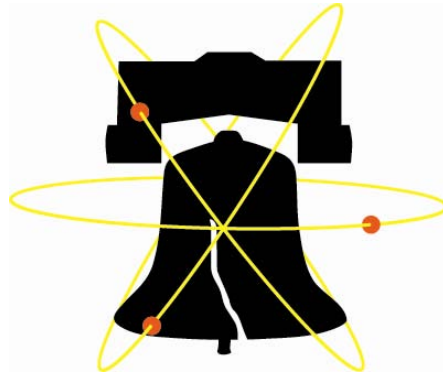


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Liberty RadEx Kick-Off Event Agenda

**Tuesday, April 27, 2010
Sheraton Center City Hotel
17th & Race Streets, Philadelphia**

| | |
|----------------------------|--|
| 9:00 – 10:00 am | VIPs and Media representative registration, Liberty Ballroom Foyer |
| 10:00 am | <p>Sheraton City Center Hotel, Liberty Ballroom</p> <p>Welcome:</p> <ul style="list-style-type: none"> • Shawn M. Garvin, Regional Administrator, Region III, U.S. Environmental Protection Agency <p>Remarks:</p> <ul style="list-style-type: none"> • Deborah Dietrich, Associate Administrator, Homeland Security, U.S. Environmental Protection Agency • Rear Admiral Wayne Justice, U.S. Coast Guard, 5th District • David J. Allard, Director, Bureau of Radiation Protection, Pennsylvania Department of Environmental Protection • MaryAnn E. Tierney, Deputy Managing Director for Emergency Management, City of Philadelphia <p>Liberty RadEx Overview:</p> <ul style="list-style-type: none"> • Bill Steuteville, Homeland Security Coordinator, Region III, U. S. Environmental Protection Agency |
| 10:45 am | Question and Answer Session |
| 11:00 am | Board buses for Philadelphia Navy Yard Tour |
| 11:30 am – 12:45 pm | Tour of Philadelphia Navy Yard, including radiation equipment demonstrations |
| 1:00 pm | Return to the Sheraton City Center Hotel |
| 1:00 pm | Brief Tour of Philadelphia Office of Emergency Management’s “EOC in a Box”, hosted by Everett Gillison, Deputy Mayor for Public Safety, City of Philadelphia and MaryAnn E. Tierney, Deputy Managing Director for Emergency Management, City of Philadelphia |

Liberty RadEx

National Tier 2 Full-Scale Radiological Dispersion Device Exercise
Philadelphia, Pennsylvania April 26-30, 2010

Liberty RadEx...what is it?

Liberty RadEx is a national exercise sponsored and designed by the US Environmental Protection Agency (EPA) to practice and test federal, state and local assessment and cleanup capabilities in the aftermath of a radiological dispersion device (also known as a RDD or “dirty bomb”) incident in an urban environment. Most exercises only focus on the first hours and days of a response. Liberty RadEx is unique in that participants will practice their “post-emergency” phase responsibilities and coordination, and work with stakeholders and the public to plan for community recovery. Liberty RadEx provides the opportunity to share information and procedures while strengthening relationships among federal, state and local partners in Pennsylvania and adjoining states.



EPA Mobile Command Post



Cleanup and assessment

Exercising the National Response Framework (NRF):

Unfortunately, disasters can happen anywhere. The NRF was written to ensure a consistent national response and coordinate the roles and responsibilities of the local, state, and federal government during large and small disasters. The Department of Homeland Security National Exercise Program (NEP) is designed to test the nation’s ability to respond to natural and man-made disasters.

Liberty RadEx will focus on:

- Local, state, and federal management (Unified Command) of the incident;
- Federal support to state and local authorities, including radiological assessment, hazardous materials response, public health protection, mass care, infrastructure restoration, public communication, and community recovery;
- EPA’s NRF leadership role in radiological assessment and hazardous materials response; and
- Public involvement in response planning and community recovery.



US Army Corps of Engineers

Key Participating Agencies:

- US Environmental Protection Agency (EPA)
- US Department of Homeland Security/Federal Emergency Management Agency (DHS/FEMA)
- Pennsylvania Department of Environmental Protection (PADEP)
- City of Philadelphia
- US Department of Health and Human Services (HHS)
- US Department of Energy (DOE)
- US Coast Guard (USCG)
- US Army Corps of Engineers (USACE)
- Also participating: American Red Cross, Department of Agriculture (USDA), Department of Justice (DOJ), Department of Transportation (DOT), Federal Bureau of Investigations (FBI), Food and Drug Administration (FDA), General Services Administration (GSA), Department of Housing and Urban Development (HUD), National Park Service (NPS), Nuclear Regulatory Commission (NRC), Occupational Safety and Health Administration (OSHA), US Postal Service (USPS), US Small Business Administration (SBA), State of New Jersey, and the Department of Veterans Affairs (VA).



Exercise Goals and Objectives:

- Test the effectiveness of Emergency Support Function No. 10 (ESF-10) and the Nuclear and Radiological Incident Annex of the NRF in the post-emergency phase.
- Practice joint local, state, and federal management of the assessment and cleanup of radiation contamination in an urban environment.
- Strengthen overall coordination and relationships between local, state, and federal partners to improve:
 - Community support and recovery;
 - Community involvement;
 - Crisis communication;
 - Cleanup prioritization;
 - Development of protective measures for workers and the public; and
 - Other areas of public/private response.

Exercise Logistics:

Liberty RadEx activities will take place in locations throughout Philadelphia, including:

- Downtown locations;
- Drinking water supply and water pollution control facilities;
- Transportation centers (subways, roadways, port/vessel facilities);
- Public parks and historic areas.

Liberty RadEx Command Center
April 26-30, 2010
Sheraton Philadelphia City Center Hotel
17th & Race Streets
Philadelphia, PA



Photo by Bob Krist/GPMTC

Exercise players may be seen in protective clothing and will be using technical monitoring and assessment equipment during Liberty RadEx. Immediately before and during the exercise, information will be provided to people working and living in the exercise areas to ensure their awareness of exercise activities.

For additional information email: libertyradex@tetratex.com

Liberty RadEx Agencies and Organizations

Hosts and Sponsors

- City of Philadelphia
- Pennsylvania Department of Environmental Protection
- U.S. Environmental Protection Agency

Local Participants

- City of Philadelphia
 - Office of Emergency Management
 - Philadelphia Department of Public Health
 - Philadelphia Water Department
 - Philadelphia Fire Department
 - Philadelphia Police Department
- Port Authority Transit Corporation
- Delaware Regional Planning Commission

State Participants

- Pennsylvania Department of Environmental Protection
 - Bureau of Radiation Protection
- Pennsylvania Emergency Management Agency

Federal Participants

- U.S. Army Corps of Engineers
- U.S. Coast Guard
- U.S. Department of Agriculture
- U.S. Department of Energy
 - Argonne National Laboratory
 - National Nuclear Safety Administration
 - Oak Ridge Institute for Science and Education
- U.S. Department of Health and Human Services
 - Agency for Toxic Substances and Disease Registry
 - Centers for Disease Control
 - Food and Drug Administration
 - National Institute of Health
 - U.S. Public Health Service
- U.S. Department of Homeland Security
 - Federal Emergency Management Agency
- U.S. Department of Housing and Urban Development
- U.S. Department of the Interior
 - National Park Service

Liberty RadEx Agencies and Organizations (continued)

Federal Participants (continued)

- U.S. Department of Justice
- U.S. Department of Labor
 - Occupational Safety and Health Administration
- U.S. Department of Transportation
 - Federal Aviation Administration
- U.S. Department of Veterans Affairs
- U.S. Environmental Protection Agency
- U.S. Federal Bureau of Investigation
- U.S. General Services Administration
- U.S. Postal Inspection Service
- U.S. Small Business Administration

Non-Governmental Participants

- American Red Cross – Southeast Pennsylvania Chapter
- National Council on Radiation Protection and Measurements
- CRA, Inc.
- Dade Moeller & Associates
- Dynamac Corp.
- Guardian Environmental Services
- KEMRON
- Level A Productions
- OTIE
- SRA
- TechLaw, Inc.
- Tetra Tech
- Weston Solutions, Inc.
- WRScompass

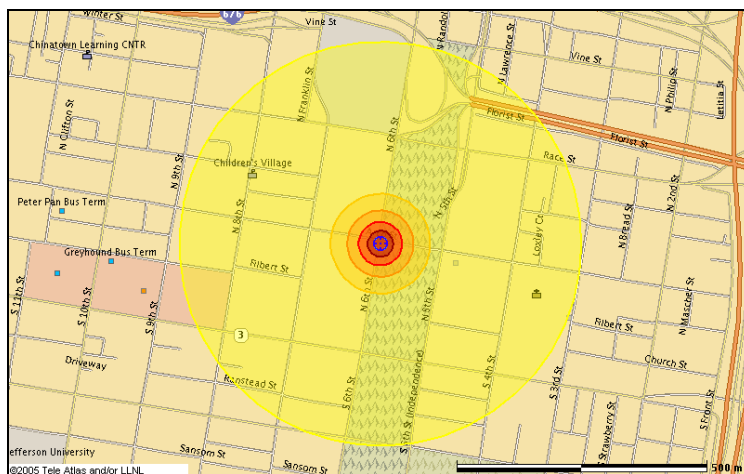
Liberty RadEx Exercise Scenario

In 2010, a suicide bomber loaded a van with 3000 pounds of ammonium nitrate mixed with diesel fuel and 2300 curies of Cesium-137 (Cs-137), drove it to Philadelphia, PA, and detonated it. The explosion injured or killed hundreds, caused extensive damage to adjacent buildings, and broke windows up to three blocks away.

The Philadelphia Fire Department detected radiation within minutes of their arrival to the scene. Life-saving operations continued while radiological protective measures were established. The Pennsylvania Department of Environmental Resources (PADEP) and Department of Energy (DOE) were notified; the Federal Radiological Monitoring and Assessment Center (FRMAC) was deployed. Shelter-in-place was ordered immediately, followed by an emergency evacuation for nearby and downwind areas. The Governor and President issued disaster declarations providing broad federal support and resources to state and local emergency management officials.

The day after the explosion the Governor and the Mayor of Philadelphia ordered the temporary relocation of a large area extending northeast of the blast, displacing thousands. The decision to relocate was based on FRMAC data, air models from the Interagency Modeling and Atmospheric Assessment Center (IMAAC), and consultation with health officials. In total, the wind deposited radiation almost 50 miles through residential, commercial and industrial areas of Philadelphia and suburban and rural areas of Bucks County, Pennsylvania and central New Jersey, impacting major roadways, mass transit, hospitals, schools, and businesses. As rescue operations concluded, federal, state and local officials sought shelter for evacuees and dealt with the impacts of the bombing and contamination in the sixth-most populous U.S. city.

By April 2010, hundreds of federal, state and local personnel, dealing with hazardous materials under Emergency Support Function (ESF)-10 of the government's National Response Framework, the Joint Field Office, other ESFs, and the City's Office of Emergency Management are overseeing radiological stabilization and cleanup activities and an intensive block by block, building-by-building assessment of contamination.



LRE Exercise Scenario Blast Zone

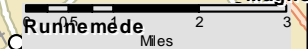
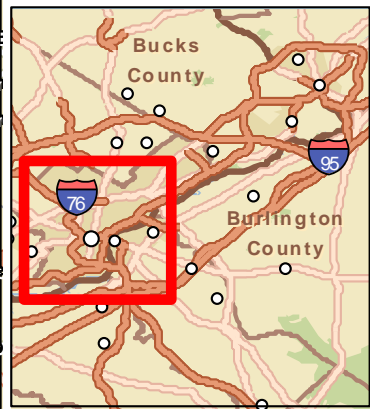
City of Philadelphia

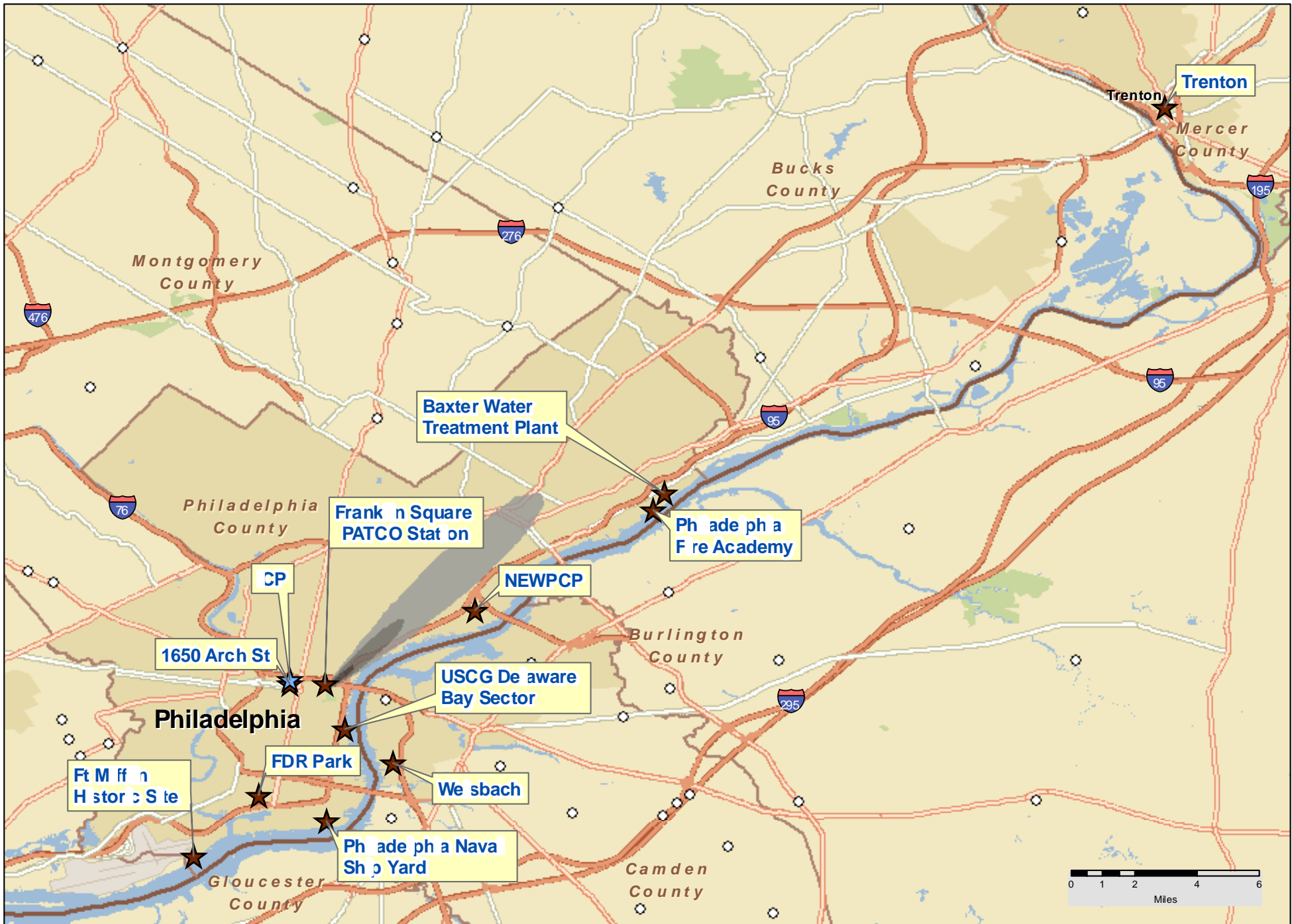


- Population < 300,000
- Major Highways
- Highways
- Major Roads
- Ramps
- Ferry Crossing



Liberty Rad Ex
 For Official Use Only
 Map Created: Date
 Map Number:
 EOC/IMT location





Venue Locations



Liberty Rad Ex
 For Official Use Only
 Map Created: Date
 Map Number:
 ECC/IMT location

Liberty RadEx List of Exercise Venues

**Exercise Command Center
Sheraton City Center Hotel
17th & Race Streets
Philadelphia, PA**

**Joint Field Office (JFO)/
Joint Information Center (JIC)
FEMA Region III Office
615 Chestnut Street
Philadelphia, PA**

Exercise Field Venues:

| | |
|--|---|
| Northeast Water Pollution Control Plant 3900 Richmond Street | Philadelphia Navy Yard 5100 South Broad Street (League Island Blvd. & Kitty Hawk Ave.) |
| Philadelphia Fire Academy 5200 Pennypack Street | Baxter Water Treatment Plant 9001 State Road |
| PATCO Franklin Square Station 200 North 6th Street | Fort Mifflin National Historic Site 1 Fort Mifflin Road |
| USCG Sector Delaware Bay 1 Washington Avenue | EPA Region III Office 1650 Arch Street |
| Franklin D Roosevelt (FDR) Park 2000 Pattison Avenue (Pattison Avenue & South 20th Street) | Boeing 1 South Stewart Avenue (Route 291 & Stewart Avenue) Ridley Park, Pennsylvania |

Liberty RadEx Venue Fact Sheet

VENUE: **NORTHEAST WATER POLLUTION CONTROL PLANT**
<http://www.phila.gov/water/urban>

SITE DESCRIPTION: The Northeast Wastewater Treatment Plant cleans 190 million gallons of wastewater per day and is the oldest water pollution control plant in Philadelphia. The plant was built in 1923 with secondary treatment facilities first installed in 1952, twenty years before such treatment at wastewater plants was required by an act of Congress across the United States. The plant was rebuilt most recently from 1979 to 1990.

ACTIVITIES: The Assessment Team and Water will conduct to determine impact to facility through monitoring, survey, and multi-media sampling. The Water Team will visit treatment facilities and develop an understanding of local processes, determine if processes are hindered and affecting finished water. The Water Team will assist in development of assessment and decontamination strategies if the facility is positive for radiation material, and work with the Health/Ecological Assessment Group and Data Interpretation and Sample Planning Team to develop a long term monitoring and assessment (i.e.; Radiation Protection Program) plan for wastewater treatment facilities.

AGENCIES: EPA Headquarter, EPA Regions 3, 4, 5 & 9; City of Philadelphia and PADEP

**EQUIPMENT
DEMONSTRATED:** Radeco H-810; Thermo-Electron EPD Mk-2; Ludlum 2350-1 data logger; Ludlum 44-10 Sodium Iodide (NaI) detector; Fluke 451B ion chamber; RAT 44-9 detector; Ludlum 180-2 sample holder.

Liberty RadEx Venue Fact Sheet

VENUE: PHILADELPHIA FIRE ACADEMY
<http://www.phila.gov/fire/>

SITE DESCRIPTION: The Philadelphia Fire Academy has been training Firefighters and recruits since 1913 when the "Training School" was located in the rear of Engine 23's Station at 2031 N. 7th Street. Fire class Number One was comprised of 33 Firefighters assigned to various firehouses throughout the City and was taught by two instructors: Captain George Moodie and Captain William Barrett. A total of 101 Cadet classes were instructed at this site until the new Fire Department Training College opened in 1952.

ACTIVITIES: The Debris Zone Assessment Team will characterize the air inside the DZ (around the perimeter of the Philadelphia Fire Academy) for radiological and hazardous materials. The Debris Zone Assessment Team will navigate and mark with pin flags, five pre-designated sampling locations utilizing Oregon 300 GPS device.

AGENCIES: EPA Regions 3,4,5,6,7; EPA RERT; EPA ERT; NSFCC; USPIS; City of Philadelphia; USCG D5; Atlantic Strike TM and DOL OSHA.

EQUIPMENT DEMONSTRATED: Genitron Dose Rate Monitor; AreaRAE monitors; Poly Urethane Foam (PUF); PM-10 High Volume Air Sampler; Summa canister (Summa qss.doc); Radeco H-810; DataRAM 4; 2929 Dual Alpha/Beta Counter; Ludlum model 239; 43-68 gas proportional detector, Test functionality of chemical removal technology

Liberty RadEx Venue Fact Sheet

VENUE: **PATCO FRANKLIN SQUARE STATION**
http://en.wikipedia.org/wiki/Franklin_Square

SITE DESCRIPTION: Franklin Square is an abandoned PATCO train station located at Franklin Square in Philadelphia, Pennsylvania. The station first opened on June 7, 1936, along with 8th Street in Philadelphia and City Hall and Broadway in Camden, New Jersey, as part of Philadelphia Rapid Transit's Bridge Line service.

ACTIVITIES: The PATCO FS Assessment Team will conduct characterization SEL II survey of the PATCO Franklin Square Station platform. The PATCO Franklin Square Mitigation Team will conduct functional test of mechanical and strippable coating applications. The PATCO Franklin Square Assessment Team will support the Mitigation Team in conducting gross personnel and equipment radiation survey and decontamination procedures

AGENCIES: EPA Regions 2, 3, 4, 5 6, 7 & 9; PADEP; EPA RERT; NHSRC; EPA NCERT; DOL OSHA; BRP; PATCO and EPA ERT

**EQUIPMENT
DEMONSTRATED:** Radeco H-810; Thermo-Electron EPD Mk-2; Ludlum 2350-1 data logger; Ludlum 44-10 Sodium Iodide (NaI) detector; Fluke 451B ion chamber; RAT 44-9 detector; Ludlum 180-2 sample holder.

Liberty RadEx Venue Fact Sheet

VENUE: **USCG SECTOR DELAWARE BAY STATION**
<http://homeport.uscg.mil/mycg/portal/ep>

SITE DESCRIPTION: Sector Delaware Bay operates as an Integrated Operations Command, responsible for almost 570 active duty personnel and 195 reservists, in that all our operational missions are combined under one command. In keeping with the "Team Coast Guard" concept of operations, Sector Delaware Bay has thoroughly integrated the Active Duty, Reserve and Auxiliary components of Team Coast Guard into one cohesive operations team.

ACTIVITIES: USCG Delaware Bay Assessment Team will perform SEL II characterization survey of the USCG Sector Delaware Bay Dock area. Configure RAT to stroller configuration. Walk along the length of the dock in 1 meter transects while collecting data will conduct work assignments as identified on USCG Sector Delaware Bay Station Group. The USCG Delaware Bay Assessment Team will assess/survey the dock and boat (deck, intake).

AGENCIES: EPA Region 2, 3, 4, 5; USCG Sector Del Bay; USCG Atlantic Strike Tm; USCG D5 and EPA RERT

EQUIPMENT DEMONSTRATED: Radeco H-810; Thermo-Electron EPD Mk-2; Ludlum 2350-1 data logger; Ludlum 44-10 Sodium Iodide (NaI) detector; Fluke 451B ion chamber; RAT; 44-9 detector; Ludlum 180-2 sample holder.

Liberty RadEx Venue Fact Sheet

VENUE: **FRANKLIN D. ROOSEVELT PARK (FDR)**
<http://www.fairmountpark.org/fdrpark>

SITE DESCRIPTION: FDR Park is known to generations of South Philadelphians as "The Lakes". FDR Park is a bird watcher's paradise, and offers golf, tennis, rugby, baseball and softball. FDR Park's history began in 1914 when the now-legendary landscape architectural firm of the Olmstead Brothers designed the Park, then known as League Island Park. To build FDR Park, 300 acres of marsh were filled and re-graded. This process was considered one of the more remarkable works of land reclamation of its day. FDR Park's existing waterways are remnants of the tidal marsh and channel system that originally occupied this area. The Park also includes two ecosystems that are nearly extinct in Pennsylvania - coastal plain forests and fresh water tidal marsh.

ACTIVITIES: The FDR Assessment Team will determine Cs-137 contamination concentrations in the air, soil, and water at FDR Park. The FDR Assessment Team will navigate and mark with pin flags, all pre-designated sampling locations utilizing Oregon 300 global positioning system (GPS) device for air, soil, and water sampling.

AGENCIES: EPA Regions 3, 4, 8; PADEP; EPA NCERT; EPA NAREL and EPA RERT

**EQUIPMENT
DEMONSTRATED:** Radeco H-810; Thermo-Electron EPD Mk-2; Ludlum 2350-1 data logger; Ludlum 44-10 Sodium Iodide (NaI) detector; Fluke 451B ion chamber; RAT 44-9 detector; Ludlum 180-2 sample holder.

Liberty RadEx Venue Fact Sheet

VENUE: PHILADELPHIA NAVY YARD
www.navyyard.org

SITE DESCRIPTION: The yard has its origins in a shipyard on Philadelphia's Front Street on the Delaware River that was founded in 1776 and became an official United States Navy site in 1801. The Naval Aircraft Factory was established at the League Island site in 1917. Just after World War I, a 350-ton capacity hammerhead crane was ordered for the yard; it was for many years the Navy's largest crane. Its greatest period came in World War II, when the yard employed 40,000 people who built 53 ships and repaired 574. During this period, the yard built the famed battleship *New Jersey* and its 45,000-ton sister ship, the *Wisconsin*.

ACTIVITIES: The Roadway Assessment Team will conduct operations at the Philadelphia Naval Ship Yard. The Assessment Team operations will be performed by utilizing RAT and Gamma Emergency Mapper (GEM). Perform wireless static monitoring with 451B ion chamber. The Assessment Team will deploy air sampling devices to specified GPS coordinates received by Division Group Supervisor.

AGENCIES: EPA Region 3, 5; PADEP BRP; Atlantic Strike TM; EPA RERT; NSFCC; EPA ERT and USCG D5.

**EQUIPMENT
DEMONSTRATED:** Thermo Anderson DataRAM4; MultiRAE 5-gas analyzer, RAT, Fluke 451-B, Gamma Emergency Mapper.

Liberty RadEx Venue Fact Sheet

VENUE: **BAXTER DRINKING WATER TREATMENT PLANT**
<http://www.phila.gov/water/urban>

SITE DESCRIPTION: The Baxter Water Treatment Plant, the largest of Philadelphia's three water treatment plants, processes 200 million gal per day and provides drinking water to 60% of Philadelphia's population, as well as portions of Lower Bucks County. Because the plant is so vital to meeting the water needs of area residents, there can be no disruption in plant operation.

ACTIVITIES: The Drinking Water Team will coordinate with Health/Ecological Assessment Team to determine health effects and safety of drinking water. The Drinking Water Team will estimate secondary effects on drinking water treatment systems from this Radiological dispersion device (RDD) event. The Drinking Water Team will assess potential impacts of radiological decontamination activities on the drinking water system and conduct an assessment of drinking water treatment technologies and their application to an RDD. The Drinking Water Team will conduct an evaluation of site remediation and restoration technologies and implications for water systems.

AGENCIES: EPA Regions 3, 4, 5; City of Philadelphia; ERT; PADEP and BRP

EQUIPMENT DEMONSTRATED: Radeco H-810; Thermo-Electron EPD Mk-2; Ludlum 2350-1 data logger; Ludlum 44-10 Sodium Iodide (NaI) detector; Fluke 451B ion chamber; RAT 44-9 detector; Ludlum 180-2 sample holder.

Liberty RadEx Venue Fact Sheet

VENUE: **FORT MIFFLIN NATIONAL HISTORIC SITE**
<http://www.fortmifflin.us>

SITE DESCRIPTION: Fort Mifflin is located on the scenic Delaware River. Fort Mifflin was originally built by the British in 1771. It is the site of the largest bombardment the North American continent has ever witnessed. In 1777, during the American Revolution, a valiant five-week battle took place when the British Navy attacked Fort Mifflin on Mud Island. The British had the garrison of approximately 400 Continental soldiers surrounded from three sides.

ACTIVITIES: Conduct field visit to document landmark impact, gather information on landmark (i.e.; number of buildings, size of buildings, type of construction, etc), and identify appropriate cleanup/technology and decontamination methods. Select suitable open field areas and indoor surfaces to be assessed. Perform measurements with and without shielding to evaluate potential contamination. Document all measurements and provide digital spectra to the Technology and Mitigation Assessment Group for evaluation.

AGENCIES: EPA Region 3, 5; PADEP BRP; Atlantic Strike TM; EPA RERT; NSFCC; EPA ERT and USCG D5

**EQUIPMENT
DEMONSTRATED:** HpGe In-Situ Gamma Spectrometry

Liberty RadEx Venue Fact Sheet

VENUE: 1650 ARCH STREET
<http://www.epa.gov/epahome>

SITE DESCRIPTION: EPA leads the nation's environmental science, research, education and assessment efforts. The mission of the Environmental Protection Agency is to protect human health and the environment. Since 1970, EPA has been working for a cleaner, healthier environment for the American people.

ACTIVITIES: The Arch Street Assessment Team will conduct foot traffic pattern from Arch Street entrance to each elevator bank. Survey corridor (floor) using 44-10 probe. Walk within the corridor swinging the 44-10 probe back and forth recording cpm readings every few seconds on RRSF900. The Arch Street Assessment Team will be conducted on the second and third floors of the 1650 building only.

AGENCIES: EPA Regions 2, 3, 4, 5 & RERT.

**EQUIPMENT
DEMONSTRATED:** Thermo-Electron EPD Mk-2; Ludlum 2350-1 data logger; Ludlum 44-10 Sodium Iodide (NaI) detector; Fluke 451B ion chamber; RAT; 44-9 detector; Ludlum 180-2 sample holder.

Liberty RadEx Kick-Off Event Speaker Bios

- **Shawn M. Garvin, Regional Administrator, Region III,
U.S. Environmental Protection Agency**
- **Deborah Dietrich, Associate Administrator, Homeland Security,
U.S. Environmental Protection Agency**
- **Rear Admiral Wayne Justice, U.S. Coast Guard, 5th District**
- **David J. Allard, Director, Bureau of Radiation Protection,
Pennsylvania Department of Environmental Protection**
- **MaryAnn E. Tierney, Deputy Managing Director for Emergency Management,
City of Philadelphia**

Regional Administrator



Shawn M. Garvin
Regional Administrator

Shawn M. Garvin

Regional Administrator, EPA Region 3

Shawn M. Garvin was named Regional Administrator on November 5, 2009. Shawn's career in intergovernmental affairs spans more than 20 years at the federal and local levels. In his most recent position as Senior State and Congressional Liaison for EPA Region 3, he provided counsel to agency leadership, environmental program managers, press officers and others involved in complex and controversial public health and environmental matters. Shawn's contributions to high-profile environmental litigation cases, emergency response clean-ups, contaminant investigations, and public health crises have earned him numerous EPA gold, silver and bronze medals. He's worked closely with Congressional Delegations, Governors, state and local elected leaders, environmental agencies and citizen advocacy groups. Early in his career at EPA, he served as special assistant to the Regional Administrator. Prior experience includes working as an aide to then-Senator Joe Biden, D-Del., and working on the staff of former New Castle County (Del.) Executive Dennis Greenhouse. Shawn is a native Delawarean and graduate of the University of Delaware. He lives in Wilmington with his wife and their son.



Rear Admiral Wayne E. Justice *United States Coast Guard*

Commander, Coast Guard Fifth District



Rear Admiral Wayne Justice assumed command of the Fifth Coast Guard District in June 2009. In this capacity, he has overall responsibility for the full range of Coast Guard maritime safety and security missions carried out in the mid-Atlantic region, from central New Jersey through North Carolina.

Rear Admiral Justice previously served in Coast Guard Headquarters as both the Assistant Commandant for Capability (CG-7), where he was responsible for identifying and providing capabilities, competencies, and capacity for Coast Guard forces to meet mission requirements; and the Director of Response Policy (CG-53), where he oversaw the development of operational policy guidance for search and rescue, law enforcement, defense operations, and incident management missions.



His previous staff assignments have included the Seventh Coast Guard District Chief of Staff, Chief of Operations, and Chief of Law Enforcement in Miami, FL; Chief, Office of Programs at USCG HQ; Executive Assistant to Commander, Atlantic Area in Norfolk, VA; and Coast Guard Aide to Presidents Bush and Clinton. Additionally, he served as Aide to the Vice-Commandant, and as the Senior Watch Officer in the Miami Operations Center.

His shipboard assignments have included: Commanding Officer of the Coast Guard Cutters MUNRO (WHEC-724), homeported in Alameda, CA; MOHAWK (WMEC-913), Key West, FL; SHEARWATER (WSES-3), Key West, FL; and CAPE SHOALWATER (WPB-95324), West Palm Beach, FL. Additionally, he served as Executive Officer on DAUNTLESS (WMEC-624) homeported in Miami, FL; and as Deck Watch Officer on HAMILTON (WHEC-715), Boston, MA. In the course of his career, Rear Admiral Justice's cutters seized 40 drug smuggling vessels, over 140 tons of marijuana and cocaine, arrested over 135 smugglers, and have interdicted and rescued over 4,500 Haitian, Chinese, Ecuadorian and Cuban migrants.

Rear Admiral Justice graduated with a Bachelors of Science degree in Management from the U.S. Coast Guard Academy in 1977. He received his Masters of Science degree in Human Resource Management with Honors from Nova University in 1983. He received a Masters of Arts degree from the U.S. Naval War College, College of Naval Warfare, in Strategic Studies in 1996.

His personal awards include the Defense Superior Service Medal, Legion of Merit (four awards), Meritorious Service Medal (three awards), and Coast Guard Commendation Medal (four awards).

NAME: David J. Allard, CHP

ADDRESS: PA DEP, Bureau of Radiation Protection, PO Box 8469, Harrisburg, PA 17105-8569

PHONE: 717-787-2480

E-mail: djallard@state.pa.us

BIOGRAPHICAL SKETCH

Mr. Allard was appointed the Director of the PA DEP Bureau of Radiation Protection in February 1999. He is responsible for the effective implementation, policies, management, and technical aspects of the Commonwealth's radiation protection programs. These programs include: radiation control of radioactive materials, accelerators and x-ray equipment; nuclear safety and independent oversight at nine nuclear power plants on five sites, emergency response and radioactive waste management; decommissioning and environmental surveillance; and radon testing and mitigation. Mr. Allard has been instrumental in the development of a new radiation monitoring program for solid waste facilities in the Commonwealth, as well as Pennsylvania becoming a NRC Agreement State in March 2008.

He is certified by the American Board of Health Physics for comprehensive practice, holds a master's degree in Radiological Sciences and Protection from the University of Massachusetts - Lowell, as well as a bachelor of science degree in Environmental Sciences from the State University of New York at Albany. Prior to joining DEP, Mr. Allard was a consultant to the U.S. Department of Energy's Office of Independent Oversight for eight years, and performed environmental and occupational radiation protection appraisals of various weapons, reactor and accelerator facilities, and clean-up sites. He has been involved in various aspects of government, industrial, medical and academic radiation protection for over 30 years, and is an active member of the HPS, CRCPD and several HPS Chapters. Other memberships include the AAPM, ABHP, ANS, NRRPT and SNM. He recently ended a term as an officer of the HPS, but still chairs and serves on several Commonwealth and national technical committees (e.g., Appalachian States LLRW Compact Commission, NS-GCC, ISCORS, CRCPD SSR H & I, and ASTSWMO Radiation Focus Group). Mr. Allard is an HPS delegate to the IRPA, a *pro bono* consultant to the IAEA and other states, and the CRCPD's liaison to the NCRP. From the late 1990s to 2005 he was an associate journal editor for *Operational Radiation Safety*, and an HPS *Ask the Expert* Topical Editor for instrumentation and measurements. Mr. Allard has authored numerous professional papers and reports, and lectures frequently on a wide variety of radiation protection topics and concerns. In July 2008 he was elected a Fellow Member of the HPS.

MaryAnn E. Tierney
Biography

MaryAnn Tierney is the Deputy Managing Director for Emergency Management in the City of Philadelphia.

Since coming to Philadelphia in November 2006, Mrs. Tierney has overseen a transformation of the City's emergency preparedness program, focusing on developing operational emergency plans, conducting training and exercises for first responders, building partnerships with the private sector and community organizations, and providing the public many avenues to learn about how to prepare for and stay informed during an emergency.

Previously, Mrs. Tierney spent over seven years with the New York City Office of Emergency Management, ending her tenure there as the Assistant Commissioner for Planning and Preparedness. During her time with New York City OEM, Mrs. Tierney oversaw a complete revision of the City's Coastal Storm Plan including redesigns of the evacuation and shelter strategies, including development of a system for evacuating and sheltering individuals with special medical needs and pets.

Mrs. Tierney has extensive experience coordinating large complex emergency response operations in the field and at Emergency Operations Centers. She has managed over 60 Emergency Operations Center activations in New York and Philadelphia and regularly responds to large emergencies to coordinate on-scene response activities. Mrs. Tierney was responsible for coordinating the debris operation at the World Trade Center and the Fresh Kills Landfill and the City's application for Federal funding to reimburse costs associated with the response to and recovery from 9/11, which totaled over \$4.75 billion.

Mrs. Tierney is a principal member of the National Fire Protection Association's Technical Committee on Disaster/Emergency Management and Business Continuity Programs (NFPA 1600) and has served as an adjunct professor teaching graduate-level courses on emergency preparedness

Mrs. Tierney holds a B.A. in political science from American University and a Masters in Public Administration from New York University. She recently completed the Naval Postgraduate School Center for Homeland Defense and Security's Executive Leaders Program.