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 DELAEWARE 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.