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SAB Science Integration for Decision Making Fact Finding Interviews
EPA Region 2
December 17, 2009

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Schedule for December 17, 2009

Science Advisory Board Fact-finding Meetings
Region 2 – 290 Broadway
Room 27D
December 17, 2009

10:00 am **Welcome & Overview of Region 2**
 Rollie Hemmett – Region 2 Science Advisor

10:15 am **Meeting With Division Directors and Managers**

Division of Environmental Planning and Protection

Barbara Finazzo – Director
Doug Pabst – Leader of the Dredging Sediments and Ocean Team
Jeff Gratz – Chief of the Clean Water Regulatory Branch
Phil Sweeney – Chief of the New York City Water Supply Protection Team

Emergency and Remedial Response Division

Walter Mugdan – Director
Doug Garbarini – Chief of New York Remediation Branch
Ray Basso – Strategic Integration Manager, Chief of the Passaic River Study
Vince Pitruzzello – Chief of the Program Support Branch

11:45 am **Lunch**

1:00 pm **Meeting with George Pavlou – Deputy Regional Administrator**

1:45 pm **Break**

Science Advisory Board Meeting
Region 2 – 290 Broadway
Room 27D

Afternoon Session

2:00–3:30 pm **Meeting with Technical Staff**

Division of Environmental Planning and Protection

Clean Water Regulatory Branch

Doug Pabst – Leader of the Dredging Sediments and Ocean Team
Mark Reiss – Dredging Sediments and Ocean Team
Wayne Jackson – TMDL Standard Team
Rosella O’Connor – TMDL Standard Team

Watershed Management Branch

Mark Tedesco – Long Island Sound Office
Rick Balla – New York Watershed Management Section

Emergency and Remedial Response Division

Alice Yeh – Passaic River Study Team
Jon Josephs – Superfund and Technology Liaison
Marian Olsen – Program Support Branch

Division of Environmental Science and Assessment

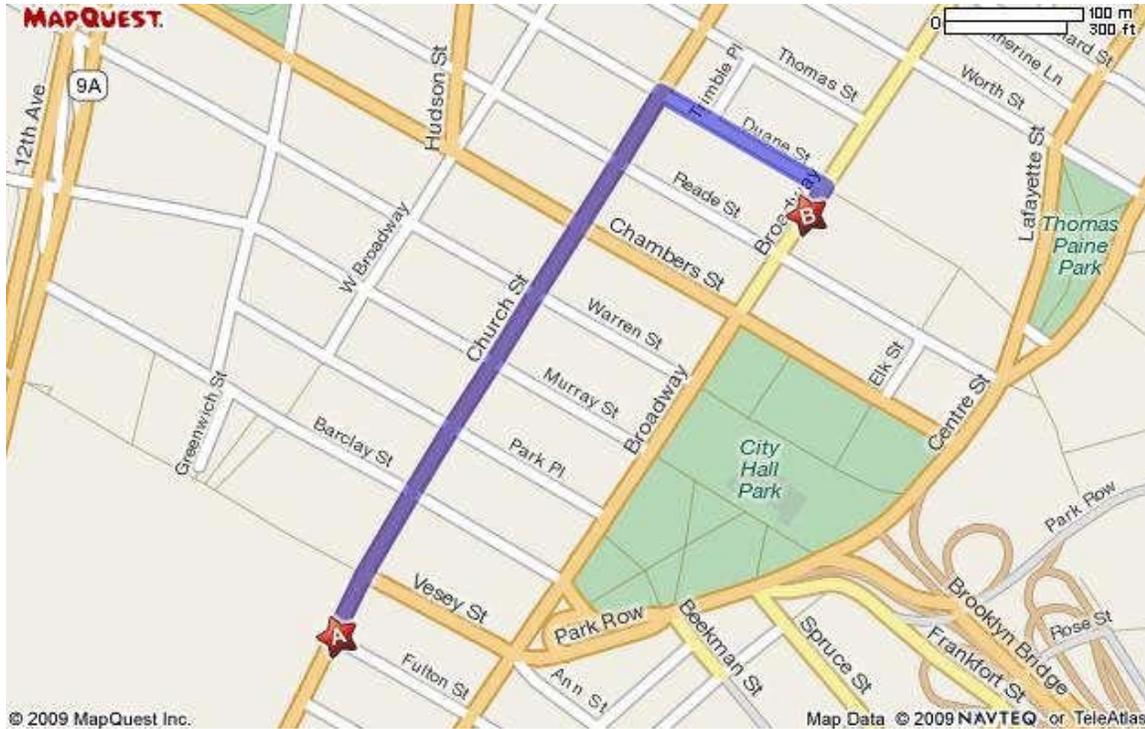
Marie O’Shea – Regional Science Liaison

Logistical Information – EPA Region 2 at 290 Broadway

EPA Region 2's offices are located at 290 Broadway in Lower Manhattan. The meeting will be held in Room 27D.

The following map shows the location of the building. Our office is located one block north of City Hall Park on Broadway and across the street from 26 Federal Plaza.

The map shows directions from the Hilton Millenium Hotel to the Offices.



Following are walking directions from the Hotel to 290 Broadway and also from the Path Subway Station.

Starting at the Hilton-Millennium, 55 Church St, New York, NY 10007 –
(212) 693-2001

1. Start out going NORTHEAST on CHURCH ST toward VESEY ST. 0.4 mi
2. Turn RIGHT onto DUANE ST. 0.1 mi
3. Turn RIGHT onto BROADWAY. 0.0 mi
4. 290 BROADWAY is on the LEFT. 0.0 mi

290 Broadway, New York, NY 10007-1823

Total Travel Estimate : 0.48 miles - about 1 minute

Security Procedures at 290 Broadway.

At 290 Broadway, the main entrance includes an area for visitors and for federal employees. It is possible that the Card Reader for federal employees may be specific for New York employees and the attendees at the meeting will need to pass through the non-federal section.

The Non-Federal includes an X-ray machine for all packages, bags, etc. that come into the building. A metal detector is located next to the X-ray machine where individuals need to walk through the detector.

After leaving the Security Area there is a "Sweet Shop" which has sodas, coffee, etc. This is the only place for food/drinks in the building.

To reach Room 27D, walk across the area with the Columns and Marble Floor to the elevator Bank. The elevators are on the right after the column area. Take the elevator to the 27 floor. We will have signs directing you to the elevators and also Room 27D on the 27th floor.

Hotel Exemption Forms.

Following are Hotel Exemption Forms from New York State and New York City. These forms are useful to waive the taxes on occupancy of hotel rooms in New York.

ST-129 (10/70)

STATE OF NEW YORK
Operators of hotels, etc., should not accept this certificate unless the officer or employee presenting it shows satisfactory credentials.

TO BE RETAINED BY OPERATORS OF HOTELS, MOTELS, AND SIMILAR ACCOMMODATIONS AS EVIDENCE OF EXEMPT OCCUPANCY

EXEMPTION CERTIFICATE
TAX ON OCCUPANCY OF HOTEL ROOMS

NAME OF HOTEL, APARTMENT HOTEL, OR LODGING HOUSE _____ DATE _____ 19____

ADDRESS _____

This is to certify that I, the undersigned, am a representative of the United States Governmental department, agency or instrumentality indicated below; that the charges for the occupancy at the above establishment on the dates set forth below have been or will be paid for by such governmental unit; and that such charges are incurred in the performance of my official duties as a representative or employee of such governmental unit.

DATES OF OCCUPANCY _____ (SIGNATURE) _____

GOVERNMENTAL UNIT _____ (TITLE) _____

NOTE - A SEPARATE EXEMPTION CERTIFICATE IS REQUIRED FOR EACH OCCUPANCY AND FOR EACH REPRESENTATIVE OR EMPLOYEE



Taxpayer Identification
and Processing Division
25 Elm Place, 3rd Floor
Brooklyn, NY 11201

**EXEMPTION CERTIFICATE FOR
GOVERNMENTAL AGENCIES**

TAX ON OCCUPANCY OF HOTEL ROOMS

Pursuant to Section 112502 (c) of Chapter 25, Title 11 of the Administrative Code

To: _____
NAME OF HOTEL, APARTMENT HOTEL OR LODGING HOUSE

_____ ADDRESS _____ DATE _____

This is to certify that I, the undersigned, am a representative or employee of the governmental agency indicated below; that the charges for the occupancy at the above establishment on the dates set forth below have been, or will be, paid for by such governmental agency; and that such charges are incurred in the performance of my official duties as a representative or employee of such governmental agency.

DATES OF OCCUPANCY ▼

_____ GOVERNMENTAL AGENCY _____ SIGNATURE OF REPRESENTATIVE _____

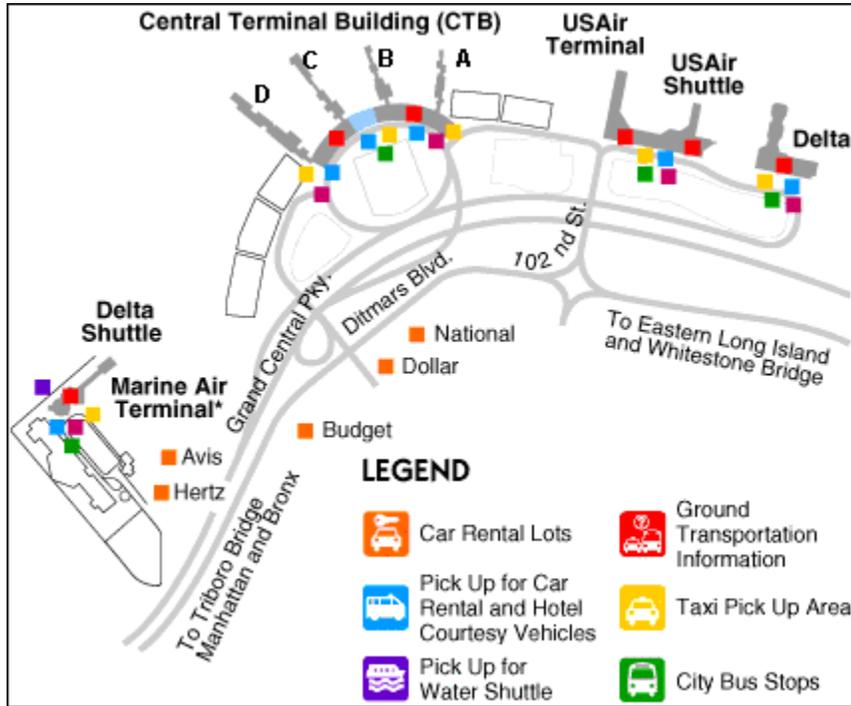
OPERATORS OF HOTELS, ETC., SHOULD NOT ACCEPT THIS CERTIFICATE UNLESS THE OFFICER OR EMPLOYEE PRESENTING IT SHOWS SATISFACTORY CREDENTIALS.

NOTE:

- ◆ A separate exemption certificate is required for each occupancy and for each representative
- ◆ This exemption certificate must be presented at time of registration
- ◆ This form may be reproduced as needed

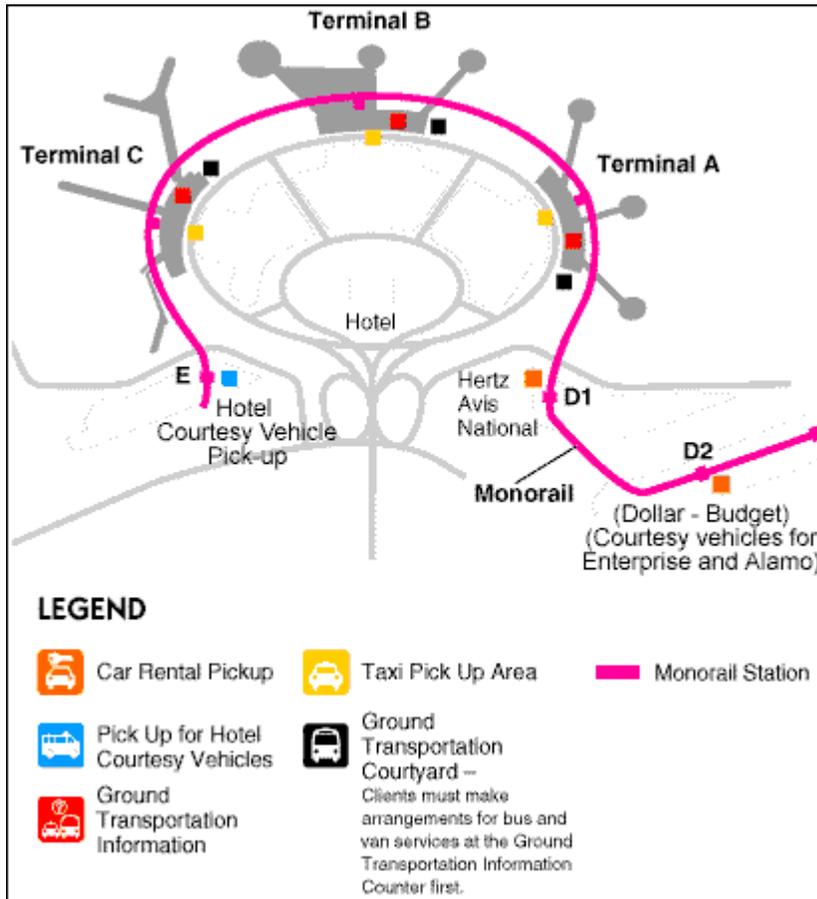


LAGUARDIA AIRPORT



- Taxi** - A taxi is probably the easiest way to 290 Broadway. The fare is approximately \$40.00 plus tolls and tip. Be safe not sorry, take a taxi from a taxi stand! The lines may be long and the wait may sometimes be longer, but *don't* accept rides from strangers soliciting you while you stand in line!

NEWARK AIRPORT



Olympia Trails Bus Company
(212) 964-6233 / (908) 354-3330
[\(Schedule and cost information\)](#)

The Olympia Trails Bus Company offers shuttle bus service between the Newark International Airport and the Port Authority Bus Terminal.

Port Authority - The Port Authority Bus Terminal is located in Times Square at 42nd Street & 8th Avenue. Once at Port Authority, take a taxi to 290 Broadway. Taxis should run about \$12.00 and take about twenty minutes, depending on traffic conditions. Or, the adventurous traveler can take the subway. The subway safari starts in the lower level of the Port Authority (follow the signs). Take the downtown **A** or **C** train to the Chambers Street Station. Be prepared when you arrive! You can buy a **Metrocard** when you get into a subway station.

Taxi - A taxi is probably the easiest way to 290 Broadway. The fare is roughly \$40.00 plus tolls and tip. Be safe not sorry! Take a taxi from a taxi stand! The lines may be long and the wait may sometimes be longer, but **don't** accept rides from strangers soliciting you while you stand in line!

**SAB Science Integration for Decision Making Fact-Finding Interview
With Division Directors and Managers, EPA Region 2
290 Broadway, New York, New York
Room 27D**

**Call-in Number: 866-299-3188, access code 343-9981 and press the # sign
December 17, 2009, 10:15 a.m. - 11:45 a.m.**

Draft Agenda

Purpose of Interview: to help SAB Committee members learn about Region 2's current and recent experience with science integration supporting EPA decision making so that the SAB can develop advice to support and/or strengthen Agency science integration efforts.

1. Introductions facilitated by the SAB Staff Office
 - Practices for integrating science to support decision making
 - Consideration of public, stakeholder, external scientific, and other input in science assessment
 - Drivers and impediments to implementing past recommendations for science integration
 - Ways program receives feedback on how science is used in decision-making
 - Workforce to support science integration for decision making
2. Discussion facilitated by SAB Members
3. Identification of any follow-up actions

Planned participants

EPA Region 2

Division of Environmental Planning and Protection

Barbara Finazzo – Director

Doug Pabst – Leader of the Dredging Sediments and Ocean Team

Jeff Gratz – Chief of the Clean Water Regulatory Branch

Phil Sweeney – Chief of the New York City Water Supply Protection Team

Emergency and Remedial Response Division

Walter Mugdan – Director

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Ray Basso – Strategic Integration Manager, Chief of the Passaic River Study

Vince Pitruzzello – Chief of the Program Support Branch

SAB Committee on Science Integration Committee Members

Dr. Jill Lipoti, New Jersey Department of Environmental Protection

Dr. Wayne Landis, Western Washington University

Dr. John Giesy, University of Saskatchewan (by telephone)

Dr. Terry Daniel, University of Arizona (by telephone)

Dr. Deborah Cory-Slechta, University of Rochester (by telephone)

SAB Staff Office

Dr. Vanessa Vu, Director

Dr. Angela Nugent, Designated Federal Officer

**SAB Science Integration for Decision Making Fact-Finding Interview
With Division Directors and Managers, EPA Region 2
290 Broadway, New York, New York
Room 27D**

**Call-in Number: 866-299-3188, access code 343-9981 and press the # sign
December 17, 2009, 1:00 - 1:45 p.m.
Draft Agenda**

Purpose of Interview: to help SAB Committee members learn about Region 2's current and recent experience with science integration supporting EPA decision making so that the SAB can develop advice to support and/or strengthen Agency science integration efforts.

1. Introductions facilitated by the SAB Staff Office
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Mr. George Pavlou – Deputy Regional Administrator

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SAB Staff Office

Dr. Vanessa Vu, Director

Dr. Angela Nugent, Designated Federal Officer

**SAB Science Integration for Decision Making Fact-Finding Interview
With Scientific Staff, EPA Region 2
Region 2 – 290 Broadway, New York, New York
Room 27D**

**Call-in Number: 866-299-3188, access code 343-9981 and press the # sign
December 8, 2009, 2:00 - 3:30 p.m.**

Draft Agenda

Purpose of Interview: to help SAB Committee members learn about Region 2's current and recent experience with science integration supporting EPA decision making so that the SAB can develop advice to support and/or strengthen Agency science integration efforts.

1. Introductions facilitated by the SAB Staff Office
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Marian Olsen – Program Support Branch

Division of Environmental Science and Assessment

Marie O'Shea – Regional Science Liaison

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Dr. Terry Daniel, University of Arizona (by telephone)

SAB Staff Office

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About EPA Region 2

GEOGRAPHICAL COVERAGE OF EPA REGION 2

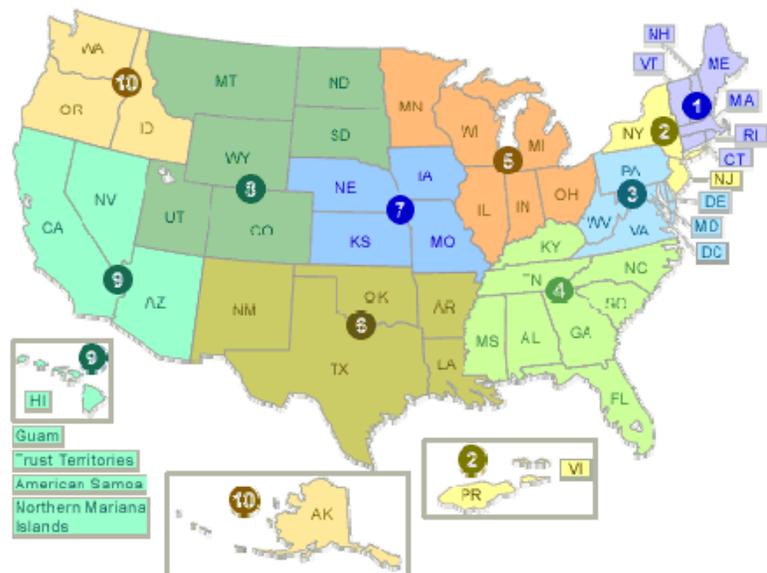
EPA Region 2's geographical coverage includes the states of New York and New Jersey and the Commonwealth of Puerto Rico and the U.S. Virgin Islands and seven federally-recognized Indian Nations (Cayuga Nation, Oneida Indian Nation, Onondaga Nation, St. Regis Mohawk Tribe, Seneca Nation of Indians, Tonawanda Band of Seneca's, and Tuscarora Nation).

EPA Region 2 works closely with the environmental and public health agencies of the states on implementation of their air, water, waste, and enforcement programs. The region's more than 31 million residents are primarily concentrated in urban areas.

Nearly 85 percent live in New York State, containing the largest and most densely populated city in the country and New Jersey, the most densely populated state. In Puerto Rico, approximately one-third of the more than 3.5 million residents live in and around the city of San Juan.

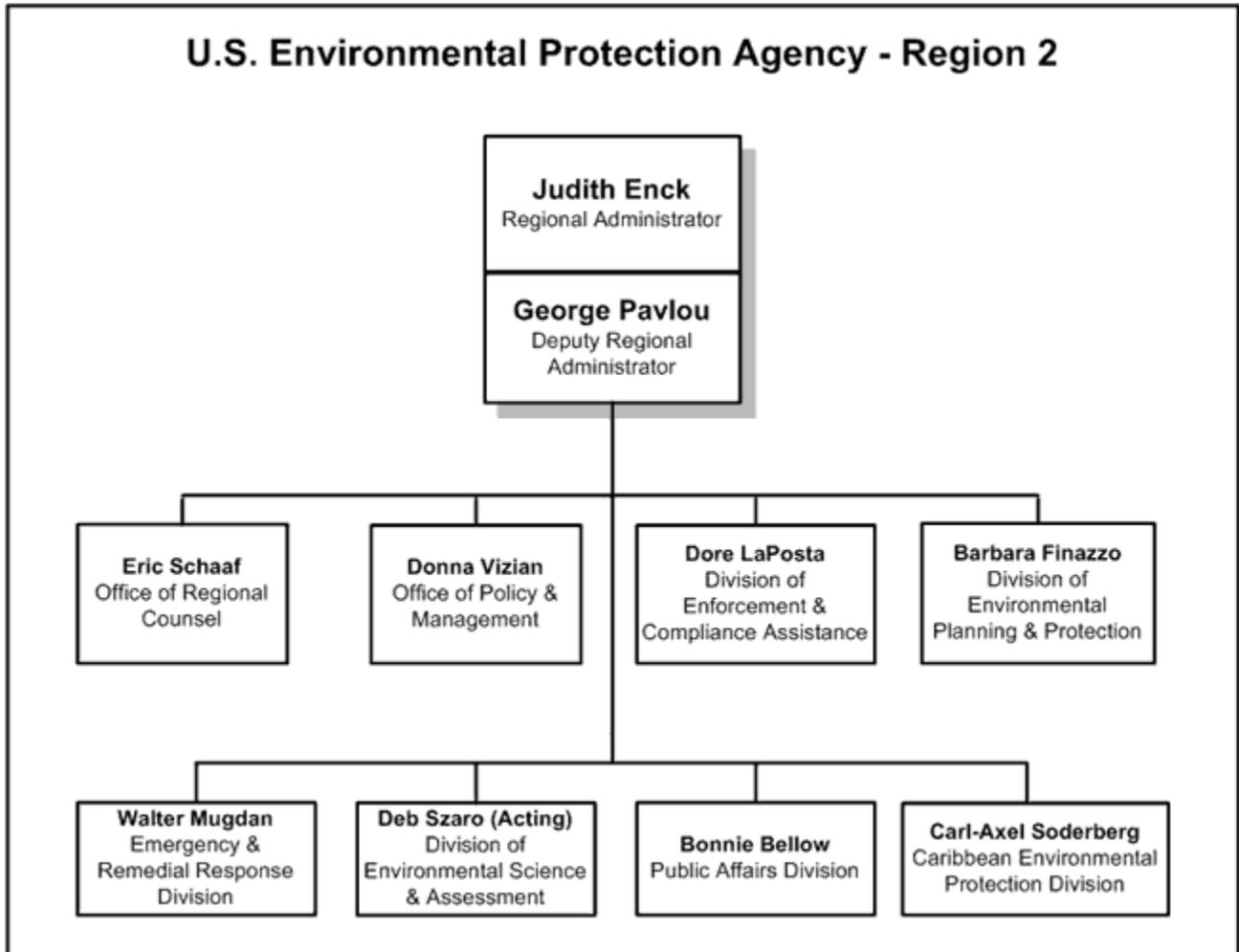
The region is home to unique and largely intact ecosystems such as the New Jersey Pine Barrens, the Adirondack State Park (the largest publicly protected area in the mainland US), the Hudson River, Niagara Falls, the Caribbean National Forest and the Virgin Islands National Park.

These ecosystems present diverse environmental management challenges. EPA works hard in the region to ensure clean air, pure water and better-protected land. Our efforts help provide for healthy communities and ecosystems, compliance with environmental regulations and environmental stewardship.



EPA REGION 2 ORGANIZATION

Following is a Region 2 Organizational Chart.



DESCRIPTION OF OFFICES/DIVISIONS IN REGION 2

Office of the Regional Administrator (ORA). The Regional Administrator (RA) has primary responsibility to the Administrator for the planning, programming, implementation, control and direction of the technical, legal and administrative aspects of the Region 2 activities of the U.S. Environmental Protection Agency. The RA serves as the Administrator's principal representative in the region with federal, state, interstate and local, industry, academic institutions and other public and private groups. The RA is responsible for accomplishing national program objectives in the Region as established by the Administrator, Deputy Administrator, Assistant and Associate Administrators. Within the administrative and technical framework set up by these officials, develops, proposes and implements a regional program for comprehensive and integrated environmental protection activities. Responsible for total resource management in the region within guidelines provided by Headquarters. The RA is responsible for translating technical program direction and evaluation provided by various Assistant and Associate Administrators into effective operating programs at the regional level and assuring that such programs are executed efficiently. The RA exercises approval authority for proposed State standards and implementation plans and provides for overall and specific evaluations of regional programs, both internal Agency and State activities. The Deputy Regional Administrator assists the Regional Administrator in the discharge of duties and responsibilities and serves as Acting Regional Administrator in the absence of the Regional Administrator and serves as Deputy Ethics Official.

Office of Regional Counsel (ORC). ORC is responsible for the development, implementation and coordination of all regional legal activities including: coordination and conduct of enforcement and defensive litigation; legal aspects of the Region's financial assistance activities including grant appeals and bid protests; review for legal sufficiency of many regional actions such as state delegations, permit actions, Federal Register notices, etc., and various other regional actions; and activities which raise legal questions, interpretation of agency guidance, regulations and statutes, and coordination of legal and enforcement activities with state and local governments. The Regional Counsel manages and supervises the ORC legal and clerical staff.

Office of Policy and Management (OPM). OPM provides policy coordination and analytical support across regional programs ensuring that the management, organization and decision-making processes of the region function efficiently. This office works to assure the most efficient and effective management of resources in order to accomplish regional objectives. It is also responsible for state and program grants, grants administration, contracts and human resources management and equal employment opportunity.

OPM responsibilities also include: integrated planning and budgeting with linkages to agency-level policy issues involving states and program grants; audit management; financial management; information systems; total quality and customer service coordination; health and safety; and facilities management.

Division of Enforcement and Compliance Assistance (DECA). DECA plans and implements a comprehensive, multi-media enforcement and compliance program for the region. The division ensures compliance with the full range of environmental statutes and regulations for the air, surface water, drinking water, ground water, solid and hazardous waste, UST/LUST, and pesticides and toxic substances programs. Integrated enforcement planning with coordination of other divisions allows the region to respond comprehensively to facilities that are in violation of

more than one federal statute. DECA also provides an enhanced focus on compliance assistance, supporting this Administration's efforts in the area of regulatory reform.

Division of Environmental Planning and Protection (DEPP). DEPP consolidates all of the major media programs, including: air; surface, ground and drinking water; wetlands, oceans and estuaries; municipal sewage treatment; solid waste; hazardous waste and radiation. This division integrates strategic planning across all media programs, with a focus on pollution prevention, risk assessment and ecosystem protection. Additionally, DEPP is responsible for permitting and permit reform and implementing place-based environmental protection plans that achieve environmental goals and objectives that are driven by the conditions and priorities of individual communities

Emergency and Remedial Response Division (ERRD). ERRD develops, implements and coordinates regional activities under the Comprehensive Environmental Response, Compensation and Liability Act (CERCLA) and the Superfund Amendments and Reauthorization Act (SARA). The division manages a comprehensive program for site evaluation, expedited response actions, immediate removals and long-term remedial actions, including cost recovery activities. ERRD is also responsible for emergency response and emergency contingency planning and oil spill control and monitoring.

Division of Environmental Science and Assessment (DESA). DESA supports the Agency's regional and national compliance monitoring and ambient monitoring programs. The division sets priorities and identifies the resources needed to collect and evaluate environmental samples and analyze the resulting data. It directs special studies, investigations and surveys to support regional enforcement actions or define environmental quality problems in our region. The Senior Science Officer enhances the region's focus on strong science and its connections with academia.

Public Affairs Division (PAD). PAD develops, implements and coordinates communications for the region and plans and oversees community relations, public outreach and intergovernmental activities. This division serves as a focal point for relations with the print and broadcast media, Congressional, state and local elected officials, public interest groups and concerned community members, and works to ensure that the public is informed about the Agency's policies and programs. It operates a regional speakers bureau, produces public information materials and events, and is responsible for managing the region's environmental education program, Superfund community relations, the Region 2 Web site and the Freedom of Information Act control office.

Caribbean Environmental Protection Division (CEPD). CEPD serves as the primary liaison on environmental issues and problems with the Commonwealth of Puerto Rico and Territory of the Virgin Islands governments, as well as with the press, community groups, and regulated industries and authorities. This division conducts inspections, identifies violations, recommends enforcement actions, and plans and coordinates activities necessary to implement regional programs in Puerto Rico and the Virgin Islands. CEPD coordinates preventive and corrective measures to be taken by EPA and supports emergency response actions.

Region 2 Activities

Water. Two pieces of legislation in the early 1970's - the Clean Water Act and the Safe Drinking Water Act - have contributed mightily to the quality of the water we drink, fish and

swim in today. Prior to enactment of these landmark laws, as much as two-thirds of the surface water in the United States was considered polluted. Our waters are noticeably cleaner and less polluted. Today, we can fish and swim in virtually all our streams, rivers, lakes and oceans.

Water resources are central to the region's aesthetics, economics and health. There are some 60,000 miles of rivers and streams in Region 2, including waterways of major importance such as the [Hudson](#) and [Passaic](#) Rivers, the ports of San Juan and New York/New Jersey Harbor, Lake Ontario, Niagara Falls and the St. Lawrence Seaway. New York, New Jersey, Puerto Rico and the U.S. Virgin Islands have a combined 685 miles of ocean coastline as well. Clean and safe water is essential to the health and livelihood of the region's 31 million residents.

Wastewater Treatment: Includes issues relating to [stormwater](#), [pretreatment of industrial wastewater](#), animal feeding operations (AFOs), and combined sewer overflows (CSOs).

Watershed Protection: We all live in a watershed - the area that drains to a common waterway. Many water quality and ecosystem problems are best solved at the watershed level rather than at the individual water body or discharger level. Due to our geographic diversity, Region 2 has a wide variety of [waterbodies](#) and a number of programs to protect its [estuaries](#), [lakes, rivers and streams](#), [wetlands](#) and [oceans](#) more efficiently and effectively.

Beaches In Region 2, there are over 685 miles of ocean coastline, plus another 408 miles of Great Lakes coastline in New York. Our region's beaches are uniquely diverse. We have New York's rocky beaches along Lake Ontario, its sandy beaches of Long Island Sound, and the Atlantic Ocean beaches stretching from New York City to Montauk. We have the famous Jersey Shore, the tropical beaches of Puerto Rico and the US Virgin Islands. .

Our beaches face environmental threats that can pose dangers to beachgoers. Threats include beach erosion, algae blooms caused by runoff of excess fertilizers, bacteria from untreated sewage, and the buildup of harmful pollutants. Litter dropped on a street and washed into a storm drain can eventually end up on the shore.

To help protect our beaches, we monitor the waters with our "Coastal Crusader" helicopter and work with our federal, state and municipal partners to make sure the public is informed of the latest beach conditions, advisories and closures.

Air pollution can directly impact people's health and air quality is continually improving in the U.S. By virtually any measure, the air we breathe is cleaner today than just a few short decades ago. This is thanks in large part to the federal Clean Air Act, which was passed about 30 years ago and has subsequently been strengthened and improved. Emissions of many harmful pollutants have been cut in half since the law was passed.

Cars, trucks, buses, equipment, factories, power plants, and businesses all contribute to air pollution. The Clean Air Act allows EPA, working with its state and local partners, to place limits on pollution from these and other sources of pollution.

- [Current Air Quality](#) - EPA works with state and local agencies to monitor the current quality of the air and forecast the future air trends. All monitoring data is made available to the public.

- [Planning for Clean Air](#) - EPA identifies areas with poor air quality and requires states to develop plans to clean up those areas.
- [Air Quality Regulations](#) - EPA develops national regulations which must be met by industries in order to ensure clean air for the general public. In addition states have the authority to develop their own as long as the regulations are at least as stringent as federal regulations.
- [Motor Vehicles and Diesel-Powered Equipment](#) - Motor vehicles and other equipment are a significant source of air pollution. EPA regulates emission control systems on vehicles and advocates for innovative voluntary emission reduction programs.

Land. Preserving and restoring land is one of EPA's most important goals. Unchecked waste, hazardous or otherwise, can contaminate ground and surface water, as well as the air. Region 2's efforts in preserving and restoring land are focused primarily on reducing waste generation, promoting recycling, preventing spills, and releases of toxic materials, and cleaning up contaminated land and facilities. We are working on a portfolio of projects addressing a number of specific waste products including lead, electronics, hospital wastes, mercury, and construction and demolition debris.

There is a variety of EPA programs and laws that address land including [Brownfields](#), [Comprehensive Environmental Response, Compensation, and Liability Act](#) (otherwise known as Superfund), the [Resource Conservation and Recovery Act](#) (otherwise known as RCRA) and the [Underground Storage Tank](#) program. While the laws differ depending on the status of a specific site, the intent is the same: to restore land for current and future generations. This may involve the removal of a specific source of contamination or a large scale remediation of a contaminated building or public space.

To learn more about EPA's various programs to restore the land, and to find sites where those restorations are planned, ongoing or complete, visit our [cleanup page](#).

Superfund (Comprehensive Environmental Response, Compensation and Liability Act)

The 1978 discovery of toxic chemicals beneath the suburban infrastructure of Love Canal, in Niagara Falls, New York first illuminated the consequences of environmental neglect. For decades, many American businesses had disposed of hazardous waste improperly, contaminating tens of thousands of sites nationally, including nearly 250 within Region 2 alone. Accidents, spills, and leaks of hazardous materials resulted in land, water, and air that pose immediate and potential threats to public and environmental health.

Congress established the Superfund Program in 1980, an initiative designed to locate, investigate, and clean up the most hazardous sites nationwide. Superfund is officially called CERCLA, or the Comprehensive Environmental Response, Compensation, and Liability Act. The EPA administers the Superfund Program in cooperation with individual states and tribal governments.

Chemical Spill Response. EPA provides technical assistance (including air monitoring) and logistical support to local emergency response organizations responsible for responding to chemical spills and air releases. EPA can fund a spill cleanup in the absence of appropriate

actions by the responsible party. In addition, improper storage or segregation of chemicals in a warehouse may pose the threat of an accidental release, which EPA can take action to correct. EPA also responds to investigate reports of illegal dumping of chemicals and/or hazardous waste.

Oil Spill Response. EPA responds to oil spills to ensure proper cleanup, and investigates reports of discharges of oil from facilities and reports of improperly stored oil. EPA inspects commercial, industrial and government facilities for compliance with federal oil storage and emergency response regulations. Underground petroleum storage tank programs are administered by each state (NY or NJ) environmental agency.

Abandoned Chemicals. EPA responds promptly to investigate reports of chemicals (drums, pails, bottles, or other containers) in abandoned commercial or industrial buildings. If EPA determines that a site containing abandoned chemicals presents an immediate and substantial threat to public health and safety, EPA can take corrective action by directing the responsible party to clean up and remove the materials or by initiating a Removal Action under Superfund authorization. These cleanups, which are generally completed within one year, are conducted when hazardous substances pose an imminent threat to the public or the environment.

Disaster Response. The EPA Region 2 disaster team responds to emergencies like floods and chemical spills in New Jersey, New York, Puerto Rico and the U.S. Virgin Islands. The EPA lab and response vehicle fleet in Edison, N.J., features state of the art sampling and analysis tools. The team works with other federal agencies, state and local governments and the public to prepare for and respond to disasters

Touchstone technologies are required unless a site-specific evaluation demonstrates impracticability or favors an alternative green approach.

Brownfields are real property, the expansion, redevelopment, or reuse of which may be complicated by the presence or potential presence of a hazardous substance, pollutant, or contaminant. Cleaning up and reinvesting in these properties protects the environment, reduces blight, and takes development pressures off greenspaces and working lands. On this site, you can find information about US EPA's Brownfields Program including the [Brownfields Law](#), [Brownfields Grants](#), [Land Revitalization Information](#), and additional information is available at: http://www.epa.gov/brownfields/basic_info.htm.

Underground Storage Tanks. Underground Storage Tanks (UST) program strives to prevent leaks from USTs and clean up petroleum contaminated sites (LUSTs). Over the last two decades, EPA and its partners have:

- Closed over 1.5 million substandard tanks that were corroding and leaking petroleum into the nation's groundwater
- Cleaned up more than 300,000 petroleum leaks
- Reduced the number of new releases from a high of over 66,000 in 1990 to roughly 7,000 in 2008

Green remediation is the practice of considering environmental impacts of remediation activities at every stage of the remedial process in order to maximize the net environmental benefit of a

cleanup. Considerations include selection of a remedy, energy requirements, efficiency of on-site activities, and reduction of impacts on surrounding areas.

["Clean & Green" is a policy](#) established by EPA Region 2 to enhance the environmental benefits of Superfund cleanups by promoting technologies and practices that are sustainable. The policy applies to all Superfund cleanups. Under this policy, certain green remediation technologies will serve as touchstones for Region 2 response actions.

Region 2 Touchstone Technologies:

- [Use of 100% of electricity from renewable sources](#)
- [Concrete made with Coal Combustion Products \(CCP\) replacing a portion of traditional cement](#)
- [Clean diesel fuels and technologies](#)
- [Methane capture at landfill sites](#)

Resource Conservation and Recovery Act (RCRA). EPA's RCRA program inspects operating facilities and investigates reports of improper storage or disposal of hazardous waste. EPA can take necessary corrective actions, including inspections or enforcement actions, against the facilities, to ensure compliance with hazardous waste storage and disposal regulations.

Enforcement and Compliance. EPA Region 2 is responsible for ensuring that facilities in New Jersey, New York, Puerto Rico, and the U.S. Virgin Islands, whether public or private, are complying with environmental requirements at a minimum and for encouraging facilities to strive for environmental leadership in the world as the ideal. This is accomplished by successfully combining all of the tools at our disposal from environmental assistance through criminal enforcement. It is also not accomplished alone but through partnerships with other federal agencies, state agencies, environmental and community organizations, the regulated community, and the public. Our [2008 compliance and enforcement accomplishments](#) are now available on-line.

Pesticides. The Region 2 pesticides program works with EPA Headquarters and state and local governments to promote and ensure the proper use, regulation and enforcement of pesticides in New York, New Jersey, Puerto Rico and the U.S. Virgin Islands. More specifically, the program seeks to educate the public about illegal and unregistered pesticides, develop strategies for the reduction of pesticide pollution by agricultural users and provide information about mosquito control. The program also provides pesticide information and presentations to public interest groups, academia, the regulated community, and the general public.

Environmental Justice [HTML](#) | [PDF](#) [PDF 511K, 56 pp] (December 2000): Region 2's Interim Environmental Justice Policy addresses the requirements of President Clinton's [Executive Order #12898](#) [PDF 122K, 6 pp] and method Region 2 staff are expected to use when evaluating and assessing environmental justice concerns in the region's communities.

NYC Environmental Justice Listening Session Report [PDF](#) [PDF 411K, 39 pp] (September 2009): This report summarizes the questions, comments and concerns expressed by participants representing communities from all five New York City boroughs and provides answers to many

of the questions raised at the session. The responses are mainly organized by subject area, since many of the concerns were similar or overlapped, despite coming from representatives of different neighborhoods.

Some, which were neighborhood or issue-specific, have been addressed in separate segments. Issues specific to NYC and New York State regulations or authorities were addressed directly by the respective agencies.

Children's Health. Protecting our youngest and most sensitive citizens is a top priority. Today there are nearly 9 million children in EPA Region 2, and the numbers are increasing. [Children are at greater risk](#) than their parents to [toxic environmental pollutants](#). They face numerous [environmental threats](#) to their health and development. Proportionately they breathe more air, drink more water, and eat more food, pound for pound. They also have behavior patterns and natural curiosity that can put them in harms way, which can increase their exposure to pollutants. Additionally, their bodily systems are still developing, and they are less able to metabolize, detoxify and excrete these pollutants than adults.

Further information is available at: <http://www.epa.gov/region02/>.

Description of Branch, Section and Team Activities

Division of Environmental Planning and Protection

Clean Water Regulatory Branch

Develops and implements selected surface water programs under the Clean Water Act, Marine Protection Research and Sanctuaries Act, and related statutes. Provides technical support in evaluating the fate and effect of pollutants in water, sediments, and biota. The branch has one section and two teams that develop and implement the point source control program, the TMDLs/standards program, and the dredged material and contaminated sediments programs.

Dredging Sediments and Oceans Team

The Dredging, Sediments, and Oceans Team administers programs for the management of dredged material, sediments (including regional sediment management), sediment decontamination technologies (including the beneficial uses and long-term management of dredged material), and EPAs ocean initiatives (including implementation of MPRSA and the Ocean Action Plan). Reviews USACE dredging and disposal permits and is responsible for all compliance and enforcement actions under MPRSA and CWA Section 404 for dredged material. Responsible for regional management of the Ocean Survey Vessel BOLD and the KENNETH BIGLANE, which are used for ocean/estuarine monitoring and supporting other programs data collection needs. Represents the region on the U.S. Coral Reef Task Force, and is responsible for regional coral efforts including monitoring; supporting HQ, ORD, and our states; and assisting in the development of national coral biocriteria.

TMDL/Standards Team

Test; The TMDL/Standards Team provides technical support to the Division, the Region, the states, and other involved parties. Identifies pollutant sources and the fate and effects of pollutants in the aquatic environment. Manages the development of complex mathematical (hydrodynamic and water quality) models which relate pollutant loads to concentrations of pollutants in the water column, sediment, and biota. Assesses alternative pollutant reduction strategies and assists in the selection and implementation of cost effective pollution reduction strategies that meet all environmental goals and objectives. Reviews, for EPA approval, total maximum daily loads/waste load allocations/load allocations developed by the states for strategically identified water bodies. Assists the states in the development and implementation of water, sediment, wetland, and biological criteria.

Watershed Management Branch

Manages and implements selected water programs under the Clean Water Act. As discussed below, this branch has two sections, two program offices, and one team that develop and implement locality-specific plans to address identified environmental problems, with particular emphasis on the multimedia nature of environmental problems. The branch is responsible for implementation of the wetlands program, the National Estuary Program, the Great Lakes Program, the non-point source program, Coastal America, and similar watershed initiatives. Responsible for the 305(b)/303(d) program, but coordinates with CEPD on Puerto Rico and Virgin Islands submittals

Long Island Sound Office

Jointly administered by Regions 1 and 2, the Long Island Sound Office (LISO) is responsible for the development and implementation of a comprehensive plan to restore and protect the Long Island Sound, as authorized under Section 320 of the Clean Water Act. In particular, the Office is responsible for coordinating the involvement of EPA Regions 1 and 2 and Management Conference partners in implementation actions, research, monitoring, education, and outreach, and serves as the primary point of contact on all Long Island Sound Study related matters between EPA and those outside EPA. LISO is located in Stamford, Connecticut.

New York Watershed Management Section

Manages the development and implementation of geographically-targeted watershed protection plans in New York State including the Great Lakes and connecting channels (Lake Erie, Lake Ontario, the Niagara River, and the St. Lawrence River), Lake Champlain, Onondaga Lake, and the Peconic Estuary. Serves as lead for all activities relating to the Great Lakes and watershed planning. Directs the preparation of reports, pursuant to the Clean Water Act (CWA) and the Great Lakes Water Quality Agreement, that assess trends in water quality, natural resources, and ecosystems in New York. Directs the development of Habitat Action Plans that address the ecologically sensitive areas within geographic areas. Assists the development and implementation of state geographic initiatives with grants and technical expertise. Administers the non-point source (NPS) control program in New York under CWA Section 319, including the approval and oversight of grants and the review and approval of NPS Best Management Practices. Responsible for 303(d) reviews of New York waters to determine impaired water bodies

Drinking Water and Municipal Infrastructure Branch

Develops and implements selected potable/source water programs under the Clean Water Act, Safe Drinking Water Act, and related statutes. Coordinates the negotiation and approval of state, interstate, tribal, and local program grant workplans. Recommends the award of individual program grants. The Branch has two sections and two teams that develop and implement the Regions drinking water, source water, and groundwater program; special projects; the states revolving fund program; and the New York City water supply protection program.

NYC Water Supply Protection Team

The New York City Water Supply Protection Team implements EPA's Filtration Avoidance Determination for New York City's Catskill and Delaware Water Supplies. Assesses whether New York State and New York City have met critical Determination Milestones, responding as appropriate. Develops and implements long range plans for maximizing the quality of water in the watershed. Communicates progress in ensuring the continued safe delivery of potable water to the citizens of New York City and neighboring communities.

Emergency and Remedial Response Division

Program Support Branch

Responsible for the management of the contracts management activities, the resource management/cost recovery activities and the remedial technical support activities through a branch consisting of three sections and one team, a Technical Support Team. The Technical Support Team provides technical support, guidance, and assistance to the Region's technical staff, as well as Superfund managers, in areas such as risk assessment, human health assessment, ecological assessment, geology, hydrology, hydrogeology, and engineering.

New York Remediation Branch

Responsible for the management of remedial, enforcement and community relations activities at National Priorities List (NPL) sites in New York through a branch consisting of three sections. Identifies the sources of hazardous waste, moves to immediately stabilize and contain the problem, studies the problem to determine the most cost-effective and environmentally sound cleanup, then designs and implements the cleanup. Also searches for and negotiates with potentially responsible parties (PRPs) and oversees both federal and state PRP contractors to accomplish the planning, design and construction work of the Superfund program. Extensive community involvement efforts, including public meetings, open house or informational meetings, fact sheet development and various written responses, are managed from the time a site is listed until it is deleted.

Division of Environmental Science and Assessment

Region 2 Science Advisor

Provides advice to the Regional Administrator, Deputy Administrator and Divisions Directors on matters concerning the Agency's scientific programs, problems or other issues. Coordinates with the major Program Offices in Headquarters on matters concerning the Agency's scientific programs, problems including peer review. Serves as a liaison with the scientific community in academia and other Federal Agencies with respect to research and other science issues.

Regional Science Liaison

Serves as a liaison between the Region and the Office of Research and Development (ORD). Provides on-site scientific input to regional policies and actions; builds a cadre of ORD scientists and engineers who have developed an understanding of regional scientific needs; and fosters joint research between the ORD laboratories and the Region. Provides advice to the Regional Senior Management Team.

Science Integration Example: Superfund and the Decision Making Process

Further information is available at: <http://www.epa.gov/superfund/about.htm>

Legislation:

The Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA), commonly known as Superfund, was enacted by Congress on December 11, 1980. This law created a tax on the chemical and petroleum industries and provided broad Federal authority to respond directly to releases or threatened releases of hazardous substances that may endanger public health or the environment.

- established prohibitions and requirements concerning closed and abandoned hazardous waste sites;
- provided for liability of persons responsible for releases of hazardous waste at these sites; and
- established a trust fund to provide for cleanup when no responsible party could be identified.

The law authorizes two kinds of response actions:

- Short-term removals, where actions may be taken to address releases or threatened releases requiring prompt response.
- Long-term remedial response actions, that permanently and significantly reduce the dangers associated with releases or threats of releases of hazardous substances that are serious, but not immediately life threatening. These actions can be conducted only at sites listed on EPA's [National Priorities List](#) (NPL).\

CERCLA also enabled the revision of the National Contingency Plan (NCP). The NCP provided the guidelines and procedures needed to respond to releases and threatened releases of hazardous substances, pollutants, or contaminants. The NCP also established the NPL

Community Involvement:

The goal of Superfund community involvement is to advocate and strengthen early and meaningful community participation during Superfund cleanups. Superfund community involvement staffs at Headquarters and in the Regions strive to:

- Encourage and enable community members to get involved.
- Listen carefully to what the community is saying.
- Take the time needed to deal with community concerns.
- Change planned actions where community comments or concerns have merit.
- Keep the community well informed of ongoing and planned activities.

- Explain to the community what EPA has done and why.

Superfund Process:



PA/SI. The preliminary assessment (PA) involves gathering historical and other available information about site conditions to evaluate whether the site poses a threat to human health and the environment and/or whether further investigation is needed. The preliminary assessment also helps identify sites that may need immediate or short-term response actions. The site investigation (SI) tests air, water, and soil at the site to determine what hazardous substances are present and whether they are being released to the environment and are a threat to human health.

Information about the site that is collected in the PA/SI phase helps EPA to evaluate the risks posed by the site using its Hazard Ranking System (HRS). Sites that score at or above an established level qualify for cleanup under the Superfund and are proposed for listing on the National Priorities List (NPL), a list of the most serious sites identified for long-term cleanup.

NPL Listing Process. The NPL is a list of the most serious sites identified for long-term cleanup. When EPA proposes to add a site to the NPL, the Agency publishes a public notice about its intention in the Federal Register and issues a public notice through the local media to notify the community, so interested members of the community can comment on the proposal. EPA then responds to comments received. If, after the formal comment period, the site still qualifies for cleanup under Superfund, it is formally listed on the NPL. Once it is listed, the Agency will publish a notice in the Federal Register and respond formally to comments received. In addition, EPA may issue a fact sheet or flyer to notify the community impacted by the site.

Remedial Investigation/Feasibility Study (RI/FS) Process. The RI/FS phase of the process determines the nature and extent of contamination at the site, tests whether certain technologies are capable of treating the contamination, and evaluates the cost and performance of technologies that could be used to clean up the site.

Prior to the beginning of the RI/FS phase, EPA will begin its outreach and community involvement efforts at the site. The Agency will appoint a Community Involvement Coordinator (CIC) for the site who will work with community members throughout the cleanup process. EPA staff will interview community members, local officials, and others to gather information about the site and the community and to learn how community members want to be involved in the cleanup process. The Agency then will prepare a Community Involvement Plan that specifies the outreach activities they will use to address the concerns and expectations community members raised in the interviews. The Community Involvement Plan is readily available to the community.

EPA will establish an Administrative Record for the site as part of the Information Repository when the RI/FS begins. The Agency will issue a public notice through the local media to notify the community about the Administrative Record. As the cleanup process moves forward, EPA will add to the Administrative Record all the relevant documents used in making the eventual cleanup decision, as well as relevant documents on technologies that were considered but ultimately rejected

To keep the community informed during this phase of the cleanup, EPA will issue public notices through the local media and conduct public meetings.

Proposed Plan. Based on results of the feasibility study portion of this phase, EPA will develop a Proposed Plan for cleaning up the site. The Agency will issue a public notice through the local media to notify the community, so interested members of the community can comment on the Proposed Plan. In addition, the Agency may hold a public meeting to discuss the Proposed Plan. EPA then will develop a Responsiveness Summary to formally respond to public comments received. If, based on public comments, the Proposed Plan is changed substantially, EPA will issue an explanation of the changes made and invite public comment on the changes.

Throughout this phase of the cleanup, EPA Community Involvement staff will be working to keep the community informed of progress by conducting public meetings, issuing regular fact sheets about progress at the site, conducting workshops for community groups, and making

presentations to civic groups, schools, and local officials to help everyone better understand the cleanup process.

The Nine Evaluation Criteria used in the decision making process are listed below.

NINE EVALUATION CRITERIA FOR SUPERFUND REMEDIAL ALTERNATIVES
Overall Protection of Human Health and the Environment determines whether an alternative eliminates, reduces, or controls threats to public health and the environment through institutional controls, engineering controls, or treatment.
Compliance with ARARs evaluates whether the alternative meets Federal and State environmental statutes, regulations, and other requirements that pertain to the site, or whether a waiver is justified.
Long-term Effectiveness and Permanence considers the ability of an alternative to maintain protection of human health and the environment over time.
Reduction of Toxicity, Mobility, or Volume of Contaminants through Treatment evaluates an alternative's use of treatment to reduce the harmful effects of principal contaminants, their ability to move in the environment, and the amount of contamination present.
Short-term Effectiveness considers the length of time needed to implement an alternative and the risks the alternative poses to workers, residents, and the environment during implementation.
Implementability considers the technical and administrative feasibility of implementing the alternative, including factors such as the relative availability of goods and services.
Cost includes estimated capital and annual operation and maintenance costs, as well as present worth cost. Present worth cost is the total cost of an alternative over time in terms of today's dollar value. Cost estimates are expected to be accurate within a range of +50 to -30 percent.
State Acceptance considers whether the State agrees with the EPA's analyses and recommendations, as described in the RI/FS and Proposed Plan.
Community Acceptance considers whether the local community agrees with EPA's analyses and preferred alternative. Comments received on the Proposed Plan are an important indicator of community acceptance.

Record of Decision (ROD). The ROD explains which cleanup alternatives will be used at NPL sites. It contains information on site history, site description, site characteristics, community participation, enforcement activities, past and present activities, contaminated media, the contaminants present, description of the response actions to be taken, and the remedy selected for cleanup. The development of the ROD also includes consideration of how the site could be used in the future.

EPA will issue a public notice through the local media to notify the community that the ROD is available for inspection. If changing the ROD is necessary, EPA will develop a proposed ROD amendment, issue a public notice through the local media to notify the community, and hold a public meeting to discuss the proposed changes and to take comments. EPA then develops a Responsiveness Summary to formally respond to public comments received.

Remedial Design/Remedial Action (RD/RA). This phase of the process includes preparing for and doing the bulk of the cleanup at the site. EPA develops the final design for the cleanup. Throughout this phase, EPA community involvement staff will keep community members advised about the progress of the cleanup through periodic public events, newsletters, fact sheets, and presentations to civic groups, schools, and local leaders.

Construction. This is the point in the process when any necessary physical construction needed for the cleanup has been completed (even though final cleanup levels may not have been reached), or when EPA has determined that the site qualifies for deletion from the NPL.

NPL Deletion. When all site cleanup has been completed and all cleanup goals have been achieved, EPA publishes a notice of its intention to delete the site from the NPL in the Federal Register and notifies the community of its availability for comment. EPA then accepts comments from the public on the information presented in the notice and issues a Responsiveness Summary to formally respond to public comments received. If, after the formal comment period, the site still qualifies for deletion, EPA published a formal deletion notice in the Federal Register and places a final deletion report in the Information Repository for the site.

Reuse. Once sites have been cleaned up, EPA works with communities through an array of tools, partnerships, and activities to help to return these sites to productive uses. These uses can be industrial or commercial, such as factories and shopping malls. Some sites can be used for housing, public works facilities, transportation, and other community infrastructure. Some sites can be for recreational facilities, such as golf courses, parks and ball fields; or for ecological resources, such as wildlife preserves and wetlands. No matter what use is appropriate for a site, the community benefits from restoring the site to productivity, because the property can once again add to the economic, social, and ecological value of the community.

Example Superfund Site = Diamond Alkali Superfund Site (further information available at: www.ourpassaic.org).

The Lower Passaic River is a 17-mile tidal stretch from Dundee Dam to the river mouth at Newark Bay. The river has a long history of industrialization, which has resulted in degraded water quality, sediment contamination, loss of wetlands and abandoned or underutilized properties along the shore.

The U.S. Environmental Protection Agency, U.S. Army Corps of Engineers and New Jersey Department of Transportation have formed a partnership with the National Oceanic and Atmospheric Administration, U.S. Fish and Wildlife Service and New Jersey Department of Environmental Protection to carry out the Lower Passaic River Restoration Project. The agencies are bringing together the authorities of the Superfund Program, the Water Resources Development Act, the Clean Water Act and other laws to improve the health of the river.

The Lower Passaic River Restoration Project begins with a study of the environmental conditions of the river. The study will produce a plan of action to achieve the goals of the Project.

Goals of the Lower Passaic River Restoration Project:

- Remediate Contaminated Sediments
- Improve Water Quality
- Restore Degraded Shorelines
- Restore and Create New Habitats
- Enhance Human Use

Objectives of the Study:

- Characterize the nature and extent of contamination in the Lower Passaic River.
- Characterize the mechanisms governing long-term fate and transport of site contaminants.
- Assess the risks to human and ecological health posed by the contamination in the river.
- Characterize the function and structure of candidate restoration sites in the Lower Passaic River watershed.
- Evaluate remedial alternatives that meet both CERCLA and WRDA selection criteria to address unacceptable human health and ecological risks and provide for restoration within the Lower Passaic River watershed.
- Evaluate options for reducing costs associated with dredging NY/NJ Harbor sediments contaminated by pollutants originating from the Passaic River.
- Support development of a Natural Resource Damages assessment.

Fundamental Questions:

- If we take no action on the Lower Passaic River, when will contaminants of concern recover to acceptable concentrations?
- What actions can we take on the River to significantly shorten the time required to achieve acceptable concentrations for human and ecological health?

- Are there contaminated sediments now buried that are likely to become exposed following a major flood, possibly resulting in an increase in contaminants in the biota of the River?
- What actions can we take on the River to significantly improve the functionality of the Lower Passaic River watershed?
- If the risk assessments for Newark Bay demonstrate unacceptable risks due to contaminant export from the Passaic River, will the plan proposed for the Passaic River significantly shorten the time required to achieve acceptable concentrations in Newark Bay, or will additional actions be required on the Passaic River?
- What actions can we take on the River to significantly reduce the cost of dredged material management for the navigational dredging program?
- What actions can we take to restore injured resources and compensate the public for their lost use?

Science Integration Example: Management of Dredged Material in NY-NJ Harbor

Sediments from waterways in and around cities and industrial areas are often contaminated with a variety of pollutants. These pollutants are introduced to the waterway from point sources such as spills, combined sewer overflows, and municipal and industrial discharges or may be introduced from non-point sources such as surface runoff and atmospheric deposition. Management of dredged material requires careful planning of dredging needs and disposal alternatives (see [Dredged Material Management Plan](#)), comprehensive evaluation of environmental consequences of specific proposed dredging and disposal actions through [testing](#), and short and long term monitoring of dredged material disposal sites utilizing [Site Management and Monitoring Plans \(SMMP\)](#).

The Port of New York and New Jersey is an extremely challenging system in which to manage dredged material. The lower estuary region is densely populated and certain areas of the harbor complex are heavily industrialized. The system receives inputs of contaminants from a variety of sources including municipal sewage treatment plants, industrial discharges, combined sewer outfalls, storm runoff and landfill leachates. Two Superfund sites (the [Diamond Alkali \[Passaic River\] site](#) and the [Hudson River PCB site](#)) are also suspected of being significant contributors to sediment contamination in the NY/NJ Harbor system. These inputs combine to cause significant contamination of harbor sediments. A description of system wide toxins contamination can be found in the Toxics Chapter of the [NY/NJ Harbor Estuary Comprehensive Conservation and Management Plan](#). Adding to the complexity of dredged material management in the system is the multitude of state and local jurisdictions and stakeholders that are affected by dredged material management decisions in the port.

Historically, open water disposal at an ocean site has been the primary method of disposing of sediments dredged from the NY-NJ Harbor Estuary. The New York Bight Dredged Material Disposal Site (Mud Dump Site) was designated in 1984 for disposal of up to 100 million cubic yards of dredged material from the Port and nearby harbors. The Mud Dump Site, and its environs, located 5.3 nautical miles east of Highlands, New Jersey and 9.6 nautical miles south of Rockaway, New York has historically been the major option for dredged material disposal since 1914. An average of 4-5 million cubic yards of dredged material from NY/ NJ Harbor had been disposed in the ocean each year. For more historical information on "Disposal of Wastes and Dredged Sediments in the New York Bight" (Massa, A., Del Vicario, M., Pabst, D., Pechko, P., Lechich, A., Stern, E., Dieterich, R., and May, B.) please refer to the journal of [Northeastern Geology and Environmental Sciences](#), vol. 18, no. 4, 1996.

The Administrator of the EPA and the Secretaries of the Army and of Transportation agreed to close the Mud Dump Site for disposal of dredged material in their 1996 [Three Party Letter](#). This was in response to surveys that had shown that contaminants in the dredged material caused sediment toxicity and bioaccumulation effects in estuarine organisms. For example, worm tissue at the

disposal site was found to accumulate dioxins, and both dioxin and polychlorinated biphenyl (PCB) contamination was found in lobsters. Individual elements of the aforementioned data do not prove that sediments within the HARS are imminent hazards to the New York Bight Apex ecosystem, living resources or human health. However, the collective evidence presents cause for concern, and justifies the finding that a need for remediation exists, that the site is Impact Category I (see, [40 CFR 228.10](#)) and that the site should be managed to reduce impacts to acceptable levels.

In a final rule that became effective September 29, 1997, EPA de-designated and terminated the use of the Mud Dump Site. Simultaneous with the closure of the Mud Dump Site, the site and surrounding areas that have been used historically as disposal sites for dredged materials were redesignated as the Historic Area Remediation Site ([HARS](#)). See [40 CFR 228.15\(a\)\(d\)\(6\)](#) for the Code of Federal Regulations' Criteria for the Management of Disposal Sites for Ocean Dumping.

Pursuant to the rule, the HARS is restricted to receive only dredged material suitable for use as Material for Remediation (also referred to as Remediation Material). Material for Remediation is defined in the HARS final rule preamble as "uncontaminated dredged material (i.e., dredged material that meets current Category I¹ standards and will not cause significant undesirable effects including through bioaccumulation)." The need for remediating the HARS is described in detail in the HARS' Supplemental Environmental Impact Statement (SEIS).

¹Categories I, II, III were defined for the former MDS. The Category I definition is used as part of the definition of Remediation Material at the HARS.

The HARS is an approximately 15.7 square nautical mile area, which includes the 2.2 square nautical mile area of the Mud Dump Site. It is located 3.5 nautical miles east of Highlands, New Jersey and 7.7 nautical miles south of Rockaway, N.Y. The HARS is comprised of three key areas: the Priority Remediation Area, the Buffer Zone, and the No Discharge Zone. See the [U.S. Army Corps of Engineers](#)' HARS website for more historical MDS/HARS information.

Task	Description	Status	Product	Reference
1	Develop probabilistic model framework to assess risks	Beta version of model exists	Beta version of HARS decision support tool	Beta version of HARS decision support tool
2	Conceptual model and food web model	Completed model	Modeling is complete	Wickwire, W.T., Cura, J., and T. Bridges. 2003. Draft Discussion Paper: Conceptual Model for the TEF for the HARS. "Conceptual Model HARS.pdf" November 20, 2003.
3	Develop ecological guideline values using probabilistic methods	Ongoing for metals and pesticides	Manuscript publication for dioxin White paper completed for target lipid model Draft manuscript describing approach for PAH	Steevens, J.A., Reiss, M., and A.V. Pawlisz. 2005. A methodology for deriving tissue residue benchmarks for fish exposed to 2,3,7,8-tetrachlorodibenzo-p-dioxin. Integrated Environmental Assessment and Management. 1(2):142-151. Steevens, J.A. 2001. Consideration of the target lipid model for use in the derivation of HARS specific screening value for non-polar organics. White paper presented to the HARS-TEF RMW, January 2001. Kane-Driscoll, S., McArdle, M., Burmistrov, D., Reiss, M., and J. Steevens. 2007. A Methodology for Deriving a Dietary Dose of PAHs that is Protective of Fish. Integrated Environmental Assessment and Management. Accepted.
4	Fish consumption	Completed	Draft report	D. Vorhees, D., Butler, C., Cura, J., Cusack, C., and A. DiLernia. 2004. Draft Report to U.S. Army Corps of Engineers, Waterways Experiment Station: Creel Survey of Recreational Anglers Fishing Near the Historic Area Remediation Site (HARS). Prepared by Menzie-Cura & Associates, Inc. One Courthouse Lane, Suite Two Chelmsford, MA 01824 and Kingsborough Community College, The City University of

				New York.
4	Fish consumption	Completed	Draft manuscript for peer-reviewed journal	Vorhees, D.J., Butler, C.L., Burmistrov, D., Cura, J.J., DiLernia, A., and T.S. Bridges. Recreational Angler Fish Consumption Survey to Support Dredged Material Management Decisions. (To be submitted to Environmental Health Perspectives, July 2007).
5	Whole body-fillet ratio for fish	Completed	Incorporated into modeling	No citation or reference; part of model documentation
6	Site Use Factor	Completed	Report completed	Fabrizio, M.C., Pessutti, J.P., Manderson, J.P., Drohan, A.F., and B.A. Phelan. December 2004. Use of the Historic Area Remediation Site by Black Sea Bass and Summer Flounder. Report to US Army Corps of Engineers, US Engineer Research and Development Center. NOAA-Fisheries, Northeast Fisheries Science Center, 74 Magruder Road, Highlands NJ 07732.
7	Key species at site	Completed	Incorporated into modeling	See Task 2
8	Need for New York Harbor-specific multipliers for steady state	Study completed	Draft report in ERDC review	Kennedy, A., Lotufo, G., Steevens, J. 2007 (Draft) Determination of Steady State Tissue Concentrations for Invertebrates in Contaminated Sediment. ERDC Technical Report.
9	Steady state modifier for metals	Study completed (Hg)	Draft report in ERDC review	See Task 8
10	Trophic transfer of metals	Completed	Draft white paper	Menzie-Cura and Associates, Inc. September 30, 2003. Interim Status Report DRAFT: Trophic Transfer of Metals. Report submitted to Environmental Laboratory, U.S. Army Engineer Research and Development Center. Menzie-Cura and Associates, Inc. One Courthouse Lane, Suite Two. Chelmsford, Massachusetts 01824.

11	Statistical evaluation of functional groupings	No longer required	NA	NA
12	Alkylated PAHs	Completed harbor survey	Agree to need for application factor, white paper, and memo	Yaremko, O., Greges, M., Bridges, T., and J. Steevens. 2004. New York Harbor Survey. Internal Report from CENAN to EPA Region 2. Menzie-Cura and Associates, Inc. September 30, 2003. Interim Status Report DRAFT Literature Review Supporting the Approach for Conducting Risk Assessments of Alkylated PAHs at the HARS. Report submitted to Environmental Laboratory, U.S. Army Engineer Research and Development Center. Menzie-Cura and Associates, Inc. One Courthouse Lane, Suite Two. Chelmsford, Massachusetts 01824.
13	Organotins	Completed harbor survey	Agree to need for improved analytical methods and approach to interpret residues	Yaremko, O., Greges, M., Bridges, T., and J. Steevens. 2004. New York Harbor Survey. Internal Report from CENAN to EPA Region 2. Menzie-Cura and Associates, Inc. September 30, 2003. Interim Status Report DRAFT Literature Review Supporting the Approach for Conducting Risk Assessments of Butyltins at the HARS. Report submitted to Environmental Laboratory, U.S. Army Engineer Research and Development Center. Menzie-Cura and Associates, Inc. One Courthouse Lane, Suite Two. Chelmsford, Massachusetts 01824.
14	Non-detects	Follow guidance	Follow guidance	Use existing guidance per recommendations by the U.S. EPA.
15	Combined effects of non-cancer effects of chemicals	Completed	Draft white paper	Menzie-Cura and Associates, Inc. September 30, 2003. Interim Status Report DRAFT Combined Effects of Non-Cancer Chemicals. Report submitted to Environmental

Laboratory, U.S. Army Engineer Research and Development Center. Menzie-Cura and Associates, Inc. One Courthouse Lane, Suite Two. Chelmsford, Massachusetts 01824.

16	Reference use for bioaccumulation interpretation	Proposed	Ongoing
17	Request clarification from peer review	Completed	incorporated into deliverables

REFERENCES:

Task 2: Conceptual model and food web model

Wickwire, W.T., Cura, J., and T. Bridges. 2003. Draft Discussion Paper: Conceptual Model for the TEF for the HARS. "Conceptual Model HARS.pdf" November 20, 2003.

Task 3: Develop ecological guideline values using probabilistic methods

Steevens, J.A., Reiss, M., and A.V. Pawlisz. 2005. A methodology for deriving tissue residue benchmarks for fish exposed to 2,3,7,8-tetrachlorodienzo-p-dioxin. *Integrated Environmental Assessment and Management*. 1(2):142-151.

Steevens, J.A. 2001. Consideration of the target lipid model for use in the derivation of HARS specific screening value for non-polar organics. White paper presented to the HARS-TEF RMW, January 2001.

Kane-Driscoll, S., McArdle, M., Burmistrov, D., Reiss, M., and J. Steevens. 2007. A Methodology for Deriving a Dietary Dose of PAHs that is Protective of Fish. *Integrated Environmental Assessment and Management*. Accepted. Available following publication.

Task 4: Fish consumption

D. Vorhees, D., Butler, C., Cura, J., Cusack, C., and A. DiLernia. 2004. Draft Report to U.S. Army Corps of Engineers, Waterways Experiment Station: Creel Survey of Recreational Anglers Fishing Near the Historic Area Remediation Site (HARS). Prepared by Menzie-Cura & Associates, Inc. One Courthouse Lane, Suite Two Chelmsford, MA 01824 and Kingsborough Community College, The City University of New York.

Task 6: Site Use Factor

Fabrizio, M.C., Pessutti, J.P., Manderson, J.P., Drohan, A.F., and B.A. Phelan. December 2004. Use of the Historic Area Remediation Site by Black Sea Bass and Summer Flounder. Report to US Army Corps of Engineers, US Engineer Research and Development Center. NOAA-Fisheries, Northeast Fisheries Science Center, 74 Magruder Road, Highlands NJ 07732.

Task 10: Trophic transfer of metals

Menzie-Cura and Associates, Inc. September 30, 2003. Interim Status Report DRAFT: Trophic Transfer of Metals. Report submitted to Environmental Laboratory, U.S. Army Engineer Research and Development Center. Menzie-Cura and Associates, Inc. One Courthouse Lane, Suite Two. Chelmsford, Massachusetts 01824.

Task 12: Alkylated PAHs as a target analyte

Yaremko, O., Greges, M., Bridges, T., and J. Steevens. 2004. New York Harbor Survey. Internal Report from CENAN to EPA Region 2.

Menzie-Cura and Associates, Inc. September 30, 2003. Interim Status Report DRAFT Literature Review Supporting the Approach for Conducting Risk Assessments of Alkylated PAHs at the HARS. Report submitted to Environmental Laboratory, U.S. Army Engineer Research and Development Center. Menzie-Cura and Associates, Inc. One Courthouse Lane, Suite Two. Chelmsford, Massachusetts 01824.

Task 13: Organotins as a target analyte

Yaremko, O., Greges, M., Bridges, T., and J. Steevens. 2004. New York Harbor Survey. Internal Report from CENAN to EPA Region 2. See Task 12 for file.

Menzie-Cura and Associates, Inc. September 30, 2003. Interim Status Report DRAFT Literature Review Supporting the Approach for Conducting Risk Assessments of Butyltins at the HARS. Report submitted to Environmental Laboratory, U.S. Army Engineer Research and Development Center. Menzie-Cura and Associates, Inc. One Courthouse Lane, Suite Two. Chelmsford, Massachusetts 01824.

Task 15: Combined effects of non-cancer effects of chemicals

Menzie-Cura and Associates, Inc. September 30, 2003. Interim Status Report DRAFT Combined Effects of Non-Cancer Chemicals. Report submitted to Environmental Laboratory, U.S. Army Engineer Research and Development Center. Menzie-Cura and Associates, Inc. One Courthouse Lane, Suite Two. Chelmsford, Massachusetts 01824.

Senior Managers' Biosketches

George Pavlou

Deputy Regional Administrator

On January 20, 2009, George Pavlou was appointed Acting Regional Administrator of Region 2 of the U.S. Environmental Protection Agency (EPA). Previously, he was appointed Deputy Regional Administrator in May, 2008. As Acting Regional Administrator, George's responsibilities are wide-ranging. In cooperation with state and regional authorities in New Jersey, New York, Puerto Rico, the U.S. Virgin Islands and seven federally recognized Indian Nations, Region 2 administers federal programs governing air and water pollution, industrial discharges, toxic substances, pesticides, protection of streams, lakes and the ocean, solid and hazardous wastes, the cleanup of chemical spills and abandoned hazardous waste sites, and much more.

George is responsible for managing a staff of about 900 from a variety of professions – including engineering, hydrogeology, law, chemistry, biology, public affairs – and overseeing an annual budget of approximately \$750 million.

Prior to that, George served as the Director of the Region 2 Emergency and Remedial Response Division. In that capacity, he was responsible for the development, implementation and coordination of regional activities under the Comprehensive Environmental Response, Compensation and Liability Act and the Superfund Amendments and Reauthorization Act. He managed a comprehensive program for site evaluation, expedited response actions, immediate removals and long-term remedial actions, including cost recovery activities and the Brownfields program. ERRD serves as the focal point for all emergency response and emergency contingency planning activities, with responsibilities for spill control and monitoring programs under Section 311 of the Clean Water Act as amended by the Oil Pollution Act.

Previously, George was the Director of the Division of Enforcement and Compliance Assistance. As Director he led a staff of about 150 professional and administrative people and was responsible for compliance management of a full range of laws and regulations governing Air, Surface and Ground Water, Drinking Water, Solid and Hazardous Waste, Underground Storage Tanks, Pesticides and Toxic Substances.

Division of Environmental Planning and Protection (DEPP)

Barbara A. Finazzo

Director

As Director of the Division of Environmental Planning and Protection, Barbara A. Finazzo heads a staff of some 180 scientists, engineers and planners managing major regional programs that include air; surface, ground and drinking water; wetlands, oceans and estuaries; solid and hazardous waste; indoor air and radiation; and pollution prevention. Barbara previously served as Director of the Region's Environmental Science and Assessment Division, responsible for directing and managing a diverse staff of scientists, engineers and technicians engaged in ambient and source monitoring for all environmental media, the generation of data used in enforcement actions, development and implementation of data quality assurance policies and protocols, and the operation of the regional analytical testing laboratory. Barbara was selected for this position in 1996 when she became a member of the Senior Executive Service (SES). Barbara started her career with EPA in 1977, upon completion of her undergraduate studies, working in the microbiology section of the regional laboratory testing water samples collected from the coastal beaches in the Region for bacteriological parameters.

She also served as a regional Quality Assurance Officer, a Special Assistant to the Regional Administrator and as the Regional Program Manager for the Delaware Estuary Program. She became a Branch Chief responsible for the Region's laboratory in 1991 managing a staff of analysts engaged in the analysis of air, water, soil and hazardous waste samples. Barbara is a recipient of the EPA's Award for Managerial Excellence, the National Quality Assurance Manager of the Year and the 2002 SES Presidential Meritorious Rank Award. She received a Bachelor of Science degree from Wagner College in Staten Island, New York in Bacteriology and Public Health, and a Master of Science degree in Environmental Science from Rutgers, the State University of New Jersey.

Emergency and Remedial Response Division (ERRD)

Walter Mugdan

Director

As Director of the Emergency and Remedial Response Division (ERRD) since 2008, Walter Mugdan heads a staff of some 200 employees responsible for the Region's Superfund toxic waste cleanup and emergency response programs. From 2002 to 2008 Walter served as Director of the Division of Environmental Planning & Protection, where his staff of about 190 scientists, engineers and planners managed the Region's air, water, hazardous waste and environmental review programs. From 1995 to 2002 Walter served as Regional Counsel, where he headed a staff of 80 attorneys in the Office of Regional Counsel. For the prior ten years, Walter served as Deputy Regional Counsel. He joined EPA in 1975 as a staff attorney, and subsequently served in various supervisory positions in the Office of Regional Counsel, including Chief of units responsible for Superfund, the Resource Conservation and Recovery Act, the Toxic Substances Control Act and the Clean Air Act. In 1998, Walter spent eight months on a temporary detail as Acting Director of Region 2's Division of Enforcement and Compliance Assistance, where he managed a staff of 120 engineers, scientists and field inspectors.

Walter has authored numerous publications on environmental law topics, particularly on hazardous waste regulation and remediation. He is a frequent speaker and lecturer on these subjects. From 1991 to 1997, he was an Adjunct Professor at Pace University Law School, where he taught a course on Superfund law. Since 1992 Walter has been the Director of EPA's annual Trial Advocacy Institute. From 2002-2007 Walter served as an officer of the Environmental Law Section of the New York State Bar Association, including a one-year term as Section Chair. He has been a member of the Section's Executive Committee since 1985 and, for 17 years, served as Co-Chair of that Section's Hazardous Site Remediation Committee.

He earned his Juris Doctor and Bachelor of Arts degrees from the University of Michigan in Ann Arbor.