

# NEWARK BAY STUDY UNDERWAY



## PROJECT UPDATE

*Newark Bay Study - Diamond Alkali Superfund Site*

Summer 2005

### Field Work Scheduled to Begin Fall 2005

In 2004, the U.S. Environmental Protection Agency (EPA) signed an agreement with Occidental Chemical Corporation to study Newark Bay under the authorities of the federal Superfund program. A multi-year remedial investigation/feasibility study is being conducted by Tierra Solutions, Inc. with EPA oversight. Tierra Solutions, Inc. is performing the work for Occidental Chemical Corporation. This study will assess the nature and extent of contamination in the Newark Bay area and develop cleanup plans to address those problems, as necessary. The Newark Bay study area includes Newark Bay and portions of the Hackensack River, the Arthur Kill and the Kill Van Kull.

Tierra Solutions, Inc. has submitted a work plan for the investigation to EPA for review. EPA is currently working with Tierra Solutions, Inc. and various other government agencies and interested parties to refine this work plan with the expectation of starting sediment sampling and other field work in fall 2005. Once finalized, this work plan will be made available at local information repositories.

Under EPA's agreement with Occidental Chemical Corporation the Newark Bay Study is being coordinated and conducted in a manner consistent with the work underway through the Lower Passaic River Restoration Project, currently being performed by a federal-state partnership comprised of EPA, the U.S. Army Corps of Engineers (the Corps), the New Jersey Department of Transportation (NJDOT), and the New Jersey Department of Environmental Protection (NJDEP). The goal of Lower Passaic River Restoration Project is to develop a plan to improve water quality, clean up the sediments and restore the ecological health of the Lower Passaic River, which is the 17-mile tidal stretch of the Passaic River from the Dundee Dam to its confluence with Newark Bay.

EPA has developed a draft community involvement plan for the Newark Bay Study & Lower Passaic River Restoration Project. It will help to ensure that stakeholders throughout the Newark Bay study area have access to information and opportunities to provide input throughout the study.



### Tackling the Problems

In the early 1980's, EPA found soil contaminated with dioxin at Diamond Alkali Company – a former pesticides manufacturing site located on the Lower Passaic River in Newark. EPA added the Diamond Alkali site to its Superfund National Priorities List in 1984, making it eligible for federal cleanup funds under the Superfund program. Dioxin, pesticides and other hazardous substances were found in sediment samples taken from the Passaic River. Investigations revealed that the contamination was predominantly located within the lower six miles of the river, as measured from Newark Bay. Therefore, EPA focused its investigation on that six-mile stretch of the river. Additional sampling, however, indicated that contaminated sediments and other potential sources of hazardous substances exist along the entire 17-mile tidal stretch of the Lower Passaic River. In October 2003, EPA, the Corps, NJDOT, and NJDEP announced the formation of a partnership to expand the study to include the extent of contamination in the lower 17 miles of the Passaic River. Because of river flow and the tidal nature of the Passaic River, EPA had reason to believe that the contaminants had migrated beyond the boundary created for the Lower Passaic River study, and signed an agreement with Occidental in February 2004 to study the Newark Bay watershed.

## Study Will be Phased & Closely Coordinated

The Newark Bay Study will be done in phases. The initial phase will focus on collecting information to achieve three primary investigation goals:

- Define the nature and extent of the contamination in the Newark Bay study area sediments,
- Establish the human and ecological routes of exposure and potential risks from contaminants; and
- Determine the significant, on-going sources of pollution to the Newark Bay study area.

Future phases will focus on filling in data gaps that may remain following the initial phase. EPA will provide modeling and risk assessment plans to Occidental to ensure that the goals of the Study are met. These plans will guide the collection of additional water samples and various species of fish, shellfish, and other biota, and are projected to be drafted in spring 2006. Once the plans are finalized, field work will be performed. Upon completion of the phased rounds of field work, a remedial investigation report will be prepared and provided to the public. EPA will host public forums to present the findings of the study, take public input and discuss next steps.

EPA is coordinating with the federal and state natural resource trustee agencies to provide the trustees with information potentially useful to them in their Natural Resource Damage Assessment. The natural resource trustee agencies for the Newark Bay Study are the National Oceanic and Atmospheric Administration (NOAA), the U.S. Fish and Wildlife Service, New York State Department of Environmental Conservation (NYSDEC), and NJDEP. The study will benefit from the close cooperation of all of the agencies during the data gathering and assessment. EPA is also coordinating with other federal agencies, such as the Corps, which is conducting on-going dredging in Newark Bay, regarding the logistics of doing a study in this busy port area.

## A Legacy of Urbanization & Industrialization

Newark Bay is part of the New York/New Jersey Harbor Estuary, which is in the center of one of the most urbanized and industrialized parts of the nation. Newark Bay itself is approximately six miles long and one mile wide and is located at the confluence of the Passaic and Hackensack Rivers. Newark Bay is linked to both the Upper and Lower New York Bay by the Kill Van Kull and the Arthur Kill, respectively. Port Newark, one of the nation's largest ports for containerized cargo, is located on the western shore of Newark Bay and is used to transfer goods from cargo vessels to rail and truck lines serving the area.

With the construction of several bridges and the development of a network of roads and rail lines in the area in the late 1700's/early 1800's, Newark became a focal point of the industrial revolution. Newark quickly gained a reputation as a manufacturing center all the while experiencing unprecedented industrial and population growth. Today, Newark is one of the nation's largest trade and transportation centers. To maintain Newark Bay's viability as a commercial port, the Corps has conducted numerous dredging operations since the 1930's to accommodate the expanding size of cargo vessels. The urbanization and industrialization of the Newark Bay area came, however, at a cost. Newark Bay and surrounding areas suffer from habitat loss, sediment contamination, degraded water quality, and are under fish and shellfish consumption bans and advisories.

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## Fish & Shellfish Advisories Are in Effect

There are fish and shellfish consumption advisories in place for the Newark Bay region. Most importantly, everyone should be aware that eating blue claw crabs from this area may cause cancer and harm brain development in unborn and young children. People found catching crabs in this area can be fined by the state of New Jersey. For additional information on the Newark Bay area advisories, please call toll free 1-866-DEP-KNOW, or visit [www.state.nj.us/dep/dsr/njmainfish.htm](http://www.state.nj.us/dep/dsr/njmainfish.htm).

## Who to Contact

If you would like a copy of the Community Involvement Plan, or have any questions regarding EPA's public outreach activities, please call David Kluesner, the Community Involvement Coordinator for the site, at 212-637-3653 or toll free at 1 800 346-5009. If you would like more information on the Newark Bay Study, please call Elizabeth Butler, EPA Project Manager, at 212-637-4396. Additional information can be found on the project Web site at [www.ournewarkbay.org](http://www.ournewarkbay.org) or visit the following information repositories for the Diamond Alkali site:

### U.S. EPA Records Center

290 Broadway, 18th Floor  
New York, N.Y. 10007  
Hours: Mon. - Fri.: 9AM - 4PM  
Phone: (212) 637-3000

### Newark Public Library

NJ Reference Section  
5 Washington Street  
Newark, N.J. 07101  
Hours: Mon., Fri., Sat.: 9AM - 5:30PM  
Tue., Wed., Thurs.: 9AM - 8:30 PM  
Phone: (201) 733-7775

### Elizabeth Public Library

11 South Broad Street  
Elizabeth, N.J. 07202  
Hours: Mon. - Fri.: 9AM - 9PM  
Sat.: 9AM - 5PM  
Phone: (908) 354-6060