



# The Lower Passaic River Restoration Project

Part of the Diamond Alkali Superfund Site

June 2008

## EPA Signs Agreement with Companies to Remove Major Source of Passaic River Contamination

The U.S. Environmental Protection Agency (EPA) has secured an agreement with Occidental Chemical Corporation (Occidental) and Tierra Solutions, Inc. (Tierra) to remove a major source of dioxin contamination from the lower Passaic River, eliminating the potential future threat that these harmful contaminants could pose to people's health and the environment. The agreement calls for 200,000 cubic yards of dioxin-laden sediment to be taken out of the river in the direct vicinity of the Diamond Alkali Superfund site in downtown Newark. This sediment is known to have the highest levels of dioxin in the lower Passaic. EPA estimates that nearly half of the dioxins will be removed from the sediment in the lower six-mile stretch of the Passaic River.

The action to remove the material will be taken under EPA's cleanup authorities under the Superfund law. It will be conducted in concert with a comprehensive study assessing a broad 17-mile stretch of the Passaic River and the evaluation of an early action to further address contamination in the lower eight-mile stretch of the river. Occidental, one of a number of parties identified as potentially responsible for contamination of the lower Passaic River will perform the work under EPA oversight and according to the agreement signed in June 2008.

The 200,000 cubic yards of the most highly-contaminated dioxin sediment to be removed are approximately three and a half miles from the mouth of the Passaic. The work will cost an estimated \$80 million dollars. EPA will review and approve all work plans, which will contain specific details of the work and will oversee the entire operation. EPA negotiated this agreement in close cooperation with the New Jersey Department of Environmental Protection.

### Work Will be Performed in Two Phases

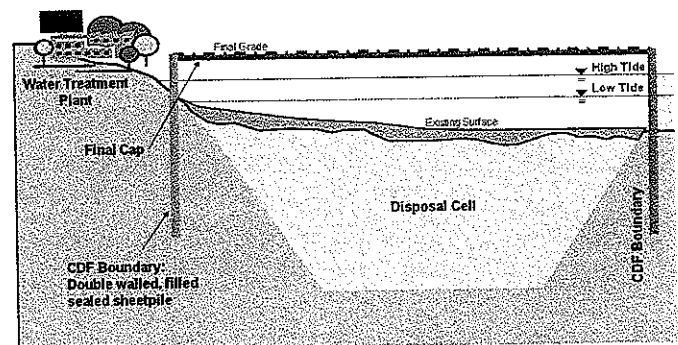
In both phases, sediment will be removed from the river "in a semi-dry state" which entails using sheet piling to segregate sediment before removing it from the river using conventional earth-moving equipment. This method will ensure that sediment is not stirred up and dispersed into the river. Clean fill will be placed over excavated areas. All aspects of the work,

including monitoring requirements, engineering controls, and oversight will be spelled out in the work plans to ensure the work is done safely, effectively and with minimal impacts to surrounding communities. EPA will work closely with stakeholders throughout the design and construction of the project.

Phase 1 is scheduled to be completed in approximately two and a half years. In the first phase, approximately 40,000 cubic yards of the most highly-contaminated sediments will be removed from an area of the river directly in front of the Diamond Alkali site. Material excavated here will be taken off-site, treated and then disposed of in one of a handful of facilities permitted to accept such waste.

In the second phase, approximately 160,000 cubic yards of sediment from areas adjacent to the Diamond Alkali site will be similarly removed. These materials, which have lower concentrations of dioxin, will be placed in a confined disposal facility (CDF). A CDF is an engineered structure designed to safely contain material dredged from waterways. They are one of the most widely used technologies for managing contaminated sediment. The size and design of each CDF is site-specific, depending on the location, the nature and potential amount of sediment and how it will be used after it is closed. The CDF structure would be designed to hold sediment indefinitely and could include liners, surface covers, and low permeability dike materials or cutoff walls to ensure its safety and longevity.

### Nearshore Confined Disposal Facility

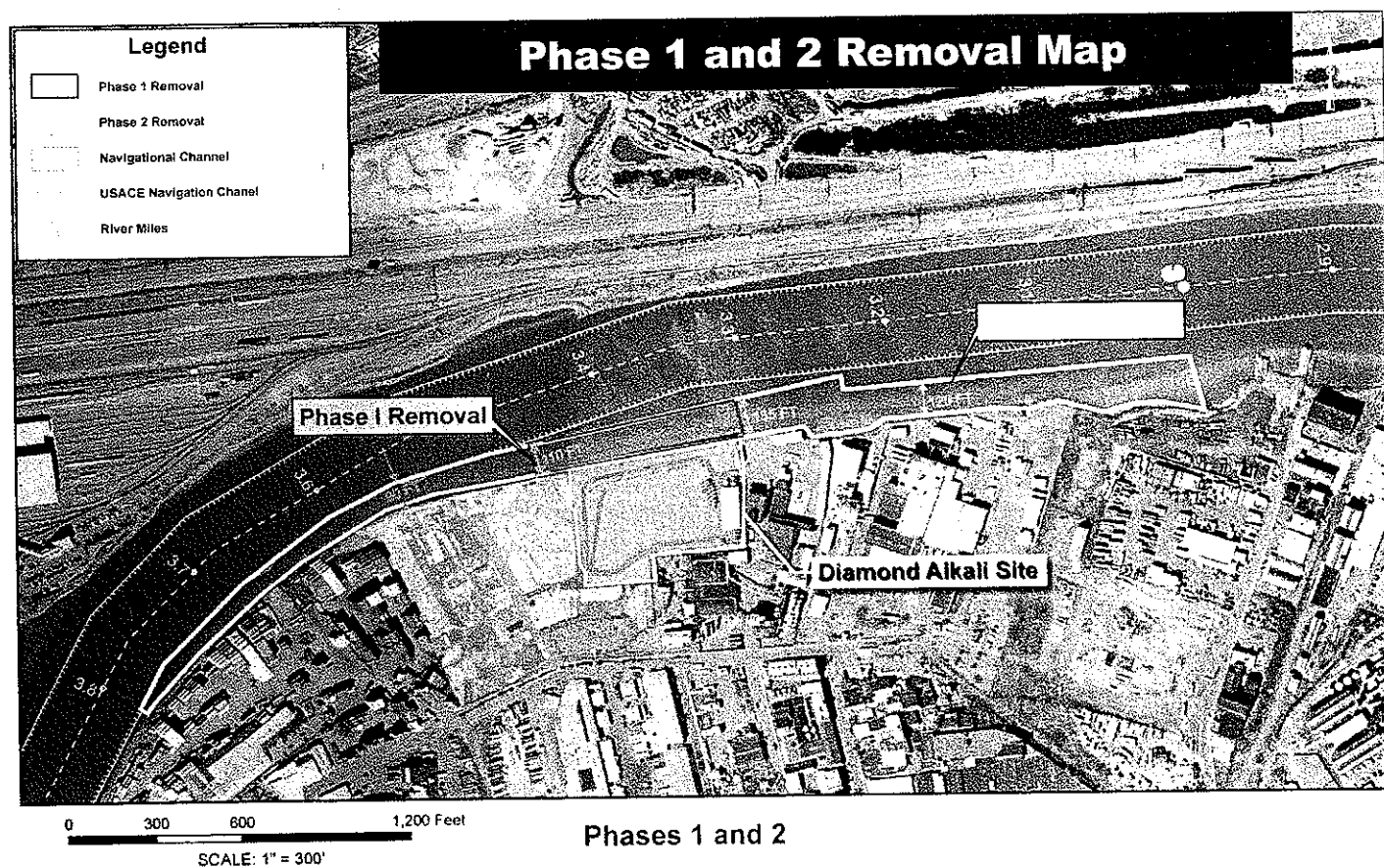


## Development of Early Action Alternatives Continues

EPA will continue its work on developing an "early action alternative," which is EPA's accelerated plan for addressing the sediments of the lower eight miles of the Passaic River. Development of early action alternatives will continue through a focused study, called the Focused Feasibility Study (FFS), concurrent with the removal of materials under this new agreement with Occidental and Tierra. The study examines various options for sediment cleanup including dredging and capping or combinations thereof in the lower eight miles. EPA anticipates completing the Focused Feasibility Study and proposing a preferred cleanup alternative in fall 2008.

## Comprehensive Study of 17 Miles of Passaic River and Newark Bay Ongoing

A group of 73 parties potentially responsible for Passaic River contamination, known as the Cooperating Parties Group, is performing a broader, comprehensive study of the lower 17 miles of the Passaic River. That work continues uninterrupted by the work described in EPA's agreement with Occidental and Tierra. Under a separate settlement agreement with EPA, Occidental's study of Newark Bay contamination also continues without interruption.



### For More Information:

Visit the Project Web Sites:

[www.ourpassaic.org](http://www.ourpassaic.org) or  
[www.epa.gov/region2/superfund/npl/diamondalkali/](http://www.epa.gov/region2/superfund/npl/diamondalkali/)

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