



# Community Update for American Cyanamid Superfund Site

Quarterly Update

Volume V, Winter 2013-2014

## **Introduction**

The U.S. Environmental Protection Agency (EPA) is issuing this quarterly update to inform the community and local officials about the status of the American Cyanamid Superfund Site (site) in Bridgewater Township, New Jersey. This update will focus on major tasks completed at the site over the previous three (3) months, as well as provide important notice(s) to anticipated future events. EPA, CRISIS (the recipient of an EPA technical assistance grant) and the site owner (Wyeth Holdings LLC, a wholly-owned subsidiary of Pfizer, Inc.) provide updated information on the site at the following web sites:

- [http://www.epa.gov/region02/superfund/npl/american\\_cyanamid/](http://www.epa.gov/region02/superfund/npl/american_cyanamid/)
- <http://www.crisistoxicwatch.org>
- <http://www.amcyrestoration.com>
- <http://health.bridgewaternj.gov/>

## **Site-wide Remedy Status**

EPA issued a Record of Decision (ROD) in September 2012 to address contaminated soils, groundwater and impoundments that have not been previously addressed, with the exception of impoundments 1 and 2. This remedy, referred to as the site-wide remedy, called for the treatment via in-situ solidification/stabilization and/or the installation of engineered capping systems to address three highly contaminated impoundments and all site soils, as well as the collection and treatment of site-related contaminated groundwater. The remedy also called for the completion of an ecological risk assessment to determine whether three additional impoundments would require excavation and relocation. The remedial design of the site-wide remedy is currently underway and is generally being addressed in two components: (1) impoundments and site-wide soils, and (2) groundwater. The investigation of impoundments 13, 17 and 24 was completed in November 2013 and the results of the soil sampling will be used to complete an ecological risk assessment for the three impoundments. Additional treatability studies are currently being performed in support of the design of the site-wide groundwater treatment facility to further evaluate technologies to achieve compliance with discharge limitations. It is currently anticipated that the detailed design of these two remedial components will be completed by 2016.

## **Focused Feasibility Study for Impoundments 1 and 2**

Due to the unique and highly complex nature of the contaminants within impoundments 1 and 2 and their proximity to the Raritan River, these two impoundments were not included in the site-wide remedy and are being addressed separately through a focused feasibility study (FFS). As part of the FFS, a pilot study is being conducted on impoundments 1 and 2 to evaluate whether solidification/stabilization, thermal treatment, or a combination of the two technologies can effectively treat the impoundment material. An information session was held at the Bridgewater Township Municipal Complex in October 2013 to inform the community of the details of the study and address community concerns. The operation of the pilot study is expected to begin in February 2014 with the thermal treatment component and will be followed by the solidification/stabilization component of the study. Continuous real-time air monitoring will be conducted throughout the 3-4 month duration of the pilot study.

## **Impoundments 1 and 2 Area Groundwater Removal Action**

In May 2012, a groundwater collection and treatment system was completed under the oversight of EPA's Removal Program to address groundwater discharges (i.e. seeps) into the Raritan River. This system includes a collection trench to intercept and capture impacted groundwater, a containment wall to further prevent the migration of impacted groundwater to surface water and an interim treatment plant to treat collected groundwater prior to its discharge. Since the completion of the system, benzene concentrations in the Raritan River have significantly decreased and have remained below the New Jersey surface water quality standard in recent events, suggesting that the system is operating effectively. The interim treatment system, as well as new groundwater inputs and bedrock groundwater currently conveyed to the local sewerage authority, will eventually be incorporated into the site-wide remedy.

## **Ambient Air Monitoring**

The site owner continues to implement a quarterly monitoring program for ambient air to use as a baseline during the implementation of the site-wide remedy. The monitoring program includes eight locations along the perimeter of the site and another four locations in the vicinity of impoundments 1 and 2. The results of the recent quarterly monitoring events continued to exhibit concentrations consistent with urban background monitoring stations measured by the New Jersey Department of Environmental Protection.

## **Surface Water and Sediment Monitoring**

The site owner continues to implement a quarterly surface water and sediment monitoring program, which includes an expansive analyte list with over 20 surface water and sediment monitoring stations located throughout the Raritan River, Cuckel's Brook, the Millstone River, and Middle Brook. Benzene concentrations in the Raritan River have continued to exhibit decreasing trends since the completion of a groundwater collection and treatment system in May 2012. In the three most recent events, benzene has not been detected above the New Jersey surface water quality standard in the Raritan River. Following the discovery of two seeps in Cuckel's Brook containing elevated levels of volatile organic compounds, carbon bags were installed at the discharge points to mitigate impacts to the brook. This interim measure was completed in August 2013 and will remain in-place until the implementation of the groundwater component of the site-wide remedy. Surface water and sediment monitoring will continue to be conducted on a quarterly basis.

## **Groundwater Monitoring**

The site owner continues to implement a semi-annual groundwater monitoring program, which includes monitoring of groundwater quality and the extraction of bedrock groundwater at a minimum rate of 650,000 gallons per day. The results of recent monitoring events are currently under EPA review and it is anticipated that the results will be available in the next quarter.

## **Community Assessment**

In November and December 2013, a site-wide community assessment was conducted by SKEO solutions, an EPA contractor. The summary of this assessment can be found on EPA web site:

- [http://www.epa.gov/region02/superfund/npl/american\\_cyanamid/](http://www.epa.gov/region02/superfund/npl/american_cyanamid/)

**If you have any questions about the information in this quarterly update, please contact the EPA community involvement coordinator, Melissa Dimas at [dimas.melissa@epa.gov](mailto:dimas.melissa@epa.gov) or 212-637-3677.**

[http://www.epa.gov/region02/superfund/npl/american\\_cyanamid/](http://www.epa.gov/region02/superfund/npl/american_cyanamid/)