#### U.S. ENVIRONMENTAL PROTECTION AGENCY, REGION 3 DELAWARE, MARYLAND, PENNSYLVANIA, VIRGINIA, WEST VIRGINIA, AND THE DISTRICT OF COLUMBIA

# DELAWARE SAND & GRAVEL LANDFILL SUPERFUND SITE



Delaware Sand & Gravel Landfill Superfund Site, New Castle, New Castle County, Delaware September 2016

### Proposed Remedial Action Plan Released

The United States Environmental Protection Agency (EPA) has released its Proposed Remedial Action Plan (Proposed Plan) for the **Delaware Sand & Gravel Superfund Site**. The Proposed Plan would modify the remedies selected in the April 22, 1988 Record of Decision (ROD), the September 30, 1993 Amendment to the ROD (ROD Amendment) and the July 2003 Explanation of Significant Differences (ESD), to address contamination remaining at the **Drum Disposal Area** (DDA) and within the Upper Potomac Aquifer and to prevent potential future exposure to Site contaminants capable of migrating into indoor air.

EPA is proposing to modify the previously selected remedies to correct response actions that have not performed effectively. The preferred alternative is summarized below. A full description of the preferred alternative, as well as the other alternatives evaluated by EPA, is available at:

http://go.usa.gov/xWFuh

## The Proposed Remedy

The preferred alternative proposed for the Site includes additional response actions to contain the source at the DDA, restore groundwater quality in the Upper Potomac Aquifer and prevent potential exposure to Site contaminants in groundwater, soil and indoor air. The proposed actions include:

 Maintaining the existing slurry-wall system (a belowgrade wall that restricts groundwater flow) surrounding the DDA in the Columbia Aquifer;

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### **Public Meeting**

You're invited to submit comments on EPA's proposed cleanup plan at the upcoming public meeting on:

September 21, 2016 William Penn High School Cafeteria 713 E. Basin Road New Castle, DE 7 pm to 8:30 pm

# Public Comment Period

Comments may also be submitted anytime during the public comment period which runs from

> September 7, 2016 to October 7, 2016

To review the proposed plan please go to:

http://go.usa.gov/xWFuh

Or visit:

### **EPA Information Repository**

U.S. EPA, Region III 1650 Arch St., Philadelphia, PA 19103 Phone: 215-814-3157. Please call for an appointment.

See instructions for sending comments on last page of this fact sheet.

# The Proposed Remedy cont'd

- Improving the containment of contaminated groundwater in the Columbia Aquifer by increasing groundwater extraction within the slurry wall and performing real-time monitoring;
- Installing a composite barrier cap to minimize the amount of rain that flows through the contaminated soil inside the slurry wall;
- Installing new groundwater extraction wells in the Upper Potomac Aquifer to more effectively remove contamination so that groundwater quality can be restored within a reasonable time frame;
- Discharging extracted groundwater to the Wilmington wastewater treatment plant;
- Continuing operations of protective systems at Artesian Water Company's Llangollen well field to remove bis(2-chloroethyl)ether (BCEE) and 1,4-dioxane and installing additional treatment systems targeting other contaminants of concern if necessary; and
- Establishing institutional controls (ICs) to prevent potential future exposure to Site contaminants in indoor air for any new construction adjacent to the landfills. ICs are similar to deed restrictions and detail how the land may be used in the future.

### **Past Cleanup Actions**

Previous removal and remedial actions were implemented across the Site to eliminate or contain waste materials and contaminated soils, including:

- Excavating drums and contaminated soil and disposing of them off-site;
- Installing an underground slurry wall around the DDA;
- Constructing and operating a bio-venting system which supplies oxygen to microorganisms (living, single-celled organisms such as bacteria) in the soil, enabling them to break down hazardous substances;
- Installing multi-layer landfill caps at two separate sections of the Site, which are designated as the Inert Area and the Grantham South Area;
- Extracting contaminated groundwater from the Upper Potomac Aquifer, treating it onsite and discharging it to surface water and to the Wilmington wastewater treatment plant (extraction and discharge to the treatment plant is ongoing); and
- Since 2000, the Artesian Water Company, which supplies water to the community, has been treating water from its Llangollen well field with carbon to remove contaminants. In 2014, Artesian installed an ultra-violet/ hydrogen peroxide treatment system at the Llangollen well field to further treat contamination from the Site.

#### EPA's Nine Criteria Analysis

Before EPA can select a cleanup remedy, each potential cleanup alternative is evaluated using the following nine criteria:

<u>1. Overall Protectiveness of Human</u> <u>Health and the Environment</u>

2. Compliance with Applicable or Relevant and Appropriate Requirements

3. Long-term Effectiveness

<u>4. Reduction of Toxicity, Mobility, or</u> <u>Volume through Treatment</u>

5. Short-Term Effectiveness

6. Implementability

<u>7. Cost</u>

8. State Acceptance

#### 9. Community Acceptance

These nine criteria are used to evaluate the different remedial alternatives individually and against each other in order to select a remedy. At this point, EPA has fully evaluated the first seven of the nine criteria as summarized in Section VIII of the Proposed Plan.

Only after considering input from **state officials** and the **community** regarding the preferred alternative, will EPA make a final decision.

For more information on how the nine criteria are evaluated, please go to http://go.usa.gov/xWKFW

Please submit your comments about EPA's Proposed Plan, by October 7, 2016.

### Site Background

The 27-acre Delaware Sand & Gravel Landfill Site is located in New Castle, Delaware. Between 1968 and 1976, the landfill accepted municipal and industrial wastes, including drums containing organic and inorganic chemicals. Waste and leachate from the landfill contaminated soil and groundwater with hazardous chemicals.

Several cleanup actions were performed and operation and maintenance activities are ongoing. More Site history may be viewed in the online Proposed Plan.

Figure 1—Site Location



# Your Role In The Process

The public is encouraged to review the Proposed Plan and submit comments or concerns to the EPA. To review the Proposed Plan online, please visit: http://go.usa.gov/xWFuh

**Comments on the EPA's Proposed Plan for the site may be submitted** by postal mail, e-mail, or in person at the upcoming public meeting. (See meeting details on page 1). Mail comments postmarked no later than **October 7, 2016,** to:

> U.S. Environmental Protection Agency Region 3 Office 1650 Arch Street (Mailcode 3HS23) Philadelphia, PA 19103 Attn: Debra Rossi, RPM Or, send comments by e-mail to: <u>rossi.debra@epa.gov</u> or johnson.larry-c@epa.gov

# **Contact Us**

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### Resources

For more information about the Delaware Sand & Gravel Landfill Superfund Site, please visit: <a href="http://www.epa.gov/superfund/delawaresandgravel">www.epa.gov/superfund/delawaresandgravel</a>

For more information about EPA's Superfund Program: http://www.epa.gov/superfund

This Is Superfund: A Community Guide to EPA's Superfund Program http://semspub.epa.gov/work/11/175197.pdf

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