The public is invited to comment on a proposed remedy being reviewed by the New York State Department of Environmental Conservation (NYSDEC) to address contamination related to the Ekonol Polyester Resins site (“site”) located at 6600 Walmore Road, Wheatfield, Niagara County. Please see the map for the site location. Documents related to the cleanup of this site can be found at the location(s) identified below under "Where to Find Information."

Additional site details, including environmental and health assessment summaries, are available on NYSDEC's website at:


Remedy Proposed for Voluntary Cleanup Site Contamination; Public Comment Period Announced

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How to Comment
NYSDEC is accepting written comments about the proposed plan for 30 days, from February 21, 2018 through March 22, 2018. The Remedial Alternatives Report (RAR) containing the proposed site remedy is available for public review at the location(s) identified below under "Where to Find Information." Please submit comments to the NYSDEC project manager listed under Project Related Questions in the "Who to Contact" area below.

No Further Action Remedy
During the course of the Remedial Investigation (RI) at the site certain actions, known as Interim Remedial Measures (IRMs), were completed. An IRM is conducted at a site when a source of contamination or exposure pathway can be effectively addressed before completion of the RI or Alternatives Analysis (AA). Based upon the implementation of the IRMs and the evaluation of remedial alternatives in the Remedial Alternatives Report, No Further Action is being proposed by the NYSDEC as the remedy for this site. The IRMs completed at this site include the following:

1. Installation of a sub-slab depressurization system (SSDS) in the office area of the adjacent St. Gobain building. The SSDS became operational in November 2010 and has operated continuously since that time. The installed SSDS is designed to depressurize the concrete slab of the office area to prevent sub-slab soil vapor from migrating into the office;

2. In-situ bioremediation of contaminated overburden groundwater through the use of a passive
bioreactor to enhance the degradation of the contaminants. The passive bioreactor consists of two parallel trenches filled with a mixture of gravel, sand and wood chip mulch emplaced below the water table, downgradient of the identified contaminant source area (former underground concrete tank). Installation of the bioreactor began in March 2011 and was completed in June 2011. Groundwater monitoring to evaluate the effectiveness of the passive bioreactor has been completed quarterly or semi-annually since 2011. These results document a drastic reduction in contaminant concentrations throughout the overburden groundwater plume; and

3. In-situ bioremediation of contaminated bedrock groundwater through the use of emulsified vegetable oil and other nutrients injected into the upper bedrock to enhance the degradation of the contaminants. The upper bedrock vegetable oil injections were accomplished through a series of 25-foot deep injection wells installed in the area of contamination. The first injection of vegetable oil was completed in June 2011, with additional injections taking place in November 2012. Groundwater monitoring to evaluate the effectiveness of the injections has been completed quarterly or semi-annually since 2011. These results document a drastic reduction in trichloroethene (TCE) and 1,1,1-trichloroethane (TCA) concentrations and, to a lesser extent the break down compounds [1,2-dichloroethene (DCE), 1,1-dichloroethane (DCA) and vinyl chloride]. The highest contaminant concentrations in post-IRM upper bedrock groundwater were detected in wells closest to the source area (the former underground concrete tank), with concentrations progressively decreasing to non-detect values in downgradient wells south of the source area.

In addition to the Interim Remedial Measures completed at the site, the No Further Action Remedy includes the following:

1. The continued operation and maintenance of the enhanced bioremediation systems and the sub-slab depressurization system;

2. Placement of a Deed Restriction on the site restricting it to commercial or industrial use. The Deed Restriction was filed with the Niagara County Clerk's Office on May 22, 2014;

3. Development of a Site Management plan that includes the following: (a) An Institutional and Engineering Control Plan that identifies all use restrictions and engineering controls for the site and details the steps and media-specific requirements necessary to ensure that the institutional and engineering controls remain in place and effective; (b) An Excavation Plan that details the provisions for management of future excavations in areas of remaining contamination; (c) An evaluation of the potential for soil vapor intrusion for any buildings developed on the site, including provision for implementing actions recommended to address exposures related to soil vapor intrusion; (d) A Monitoring Plan to assess the performance and effectiveness of the remedy that will include monitoring of soil vapor, indoor air and groundwater; and (e) An Operation and Maintenance (O&M) Plan to ensure continued operation, maintenance, optimization, monitoring, inspection, and reporting of any mechanical or physical components of the remedy.

The proposed remedy was developed by BP America/Atlantic Richfield ("volunteer(s)") after performing a detailed investigation of the site under New York's Voluntary Cleanup Program (VCP).

**Summary of the Investigation**

This site was the subject of a multi-phase Site Characterization Study completed under the VCP. The findings revealed that chlorinated volatile organic compounds (VOCs) related to former degreasing operations were found in subsurface soil in the vicinity of the former underground concrete tank adjacent to the Ekonol Polyester Resins facility. These contaminants were also found in sub-slab soil
vapor under the office area of the adjacent St. Gobain building. Impacts to overburden and upper bedrock groundwater quality from chlorinated VOCs were also documented, with concentrations highest near the former underground concrete tank and progressively decreasing to non-detect values in downgradient wells south of the source area.

**Next Steps**
NYSDEC will consider public comments received on the proposed remedy presented in the RAR and ultimately issue a final Decision Document. The New York State Department of Health (NYSDOH) must also concur with the remedy. The final Decision Document will be made available to the public. The NYSDEC will keep the public informed throughout the cleanup of the site.

**Background**

**Location:**
The Ekonol Polyester Resins Site is located on 15.2 acres of a 55.1-acre parcel at 6600 Walmore Road in the Town of Wheatfield, Niagara County, New York. The site is bordered by the Niagara Falls Air Reserve Station to the north, Walmore Road to the east, Bell Aerospace and Niagara Falls Boulevard (NYS Route 62) to the south, and the Niagara Falls International Airport to the west. The Niagara River is located approximately three miles south of the site.

**Site Features:**
The site consists of the Ekonol Polyester Resins facility that is located on the northern portion of the VCP site. The plant is still operating but is no longer owned by the volunteer. The investigation area, immediately south of the Ekonol building, is paved with asphalt and concrete, and was primarily used for parking and equipment storage. The southern portion of the VCP site is undeveloped and consists of open brush and grass, gravel roadways, concrete pavement, and asphalt pavement. The topography of the site is relatively flat.

**Current Zoning and Land Use:**
The site contains the active Ekonol Polyester Resins facility, which is located on a larger, active industrial property containing the Saint Gobain Performance Plastics facility. The site and adjacent properties are zoned for industrial use. Residential properties are located southeast of the site, while commercial properties are located on the east side of Walmore Road. The active Niagara Falls International Airport and the Niagara Falls Air Reserve Station are adjacent to the site to the west and north.

**Historical Uses:**
An underground concrete tank was utilized by the Ekonol Polyester Resins facility from the 1970s thru 1999 for the collection of wastewater rinsate from the floor drains inside the process area of the plant. This tank was constructed of reinforced concrete walls, approximately 9.5 inches thick, and was approximately 18 feet long, 6 feet wide, and 9 feet deep. The volume of the tank was approximately 7,800 gallons.

During removal of the tank in October 1999, trichloroethene in soil was detected at concentrations ranging from 1.2 to 200 parts per million (ppm), while cis 1,2 dichloroethene concentrations ranged from 2.9 to 100 ppm. Phenols were detected at concentrations ranging from 4.5 to 12.0 ppm.

Following removal of the tank, additional excavation was completed to remove contaminated soils surrounding the tank. Approximately 180 cubic yards of material were removed from an excavation that was approximately 29 feet long, 16 feet wide and 12.7 feet deep (top of the bedrock surface).
**Geology and Hydrogeology:**
Native soils at the site and surrounding area consist of brown to reddish brown silty clay with gray silty clay lenses. This deposit is found at the ground surface or immediately below asphalt paving or concrete sidewalks and building slabs. The thickness of overburden throughout the region generally ranges from 3 feet to 19 feet. At the Ekonol site, the overburden thickness ranged from 12.5 feet to 18.7 feet.

Depth to overburden groundwater at the site ranges from 1.37 feet to 11.59 feet below ground surface (bgs). Overburden groundwater flow is to the south southwest toward the Niagara River.

Bedrock at the Ekonol Site was encountered at depths ranging from 12.5 to 18.7 feet bgs, and consists of light to dark gray dolostone of the Lockport Group. This formation is consistent throughout its thickness and contains many weathered bedding planes. A fracture/rubble zone was encountered at depths ranging from 20.25 feet to 29.70 feet bgs.

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**Voluntary Cleanup Program:** New York's Voluntary Cleanup Program (VCP) was developed to encourage private sector volunteers to investigate and clean up contaminated properties and return these sites to productive use. Once cleaned up, the properties may be redeveloped for commercial, industrial, residential or public use.

For more information about the VCP, visit: [http://www.dec.ny.gov/chemical/8442.html](http://www.dec.ny.gov/chemical/8442.html)

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**FOR MORE INFORMATION**

**Where to Find Information**
Project documents are available at the following location to help the public stay informed.

- **NYSDEC Region 9**
  - Attn: Glenn M. May, P.G.
  - 270 Michigan Avenue
  - Buffalo, NY 14203
  - phone: (716) 861-7220
  - email: glenn.may@dec.ny.gov

Project documents are also available on the NYSDEC website at: [http://www.dec.ny.gov/chemical/69902.html](http://www.dec.ny.gov/chemical/69902.html)

**Who to Contact**
Comments and questions are always welcome and should be directed as follows:

- **Project Related Questions**
  - Glenn May
  - New York State Department of Environmental Conservation
  - 270 Michigan Ave
  - Buffalo, NY 14203-2915
  - 716-851-7220
  - glenn.may@dec.ny.gov

- **Site-Related Health Questions**
  - Stephen Lawrence
  - New York State Department of Health
  - Empire State Plaza Corning Tower, Room 1787
  - Albany, NY 12237
  - 518-402-7860
  - beei@health.ny.gov
We encourage you to share this fact sheet with neighbors and tenants, and/or post this fact sheet in a prominent area of your building for others to see.

**Receive Site Fact Sheets by Email**
Have site information such as this fact sheet sent right to your email inbox.

NYSDEC invites you to sign up with one or more contaminated sites county email listservs available at the following web page: [http://www.dec.ny.gov/chemical/61092.html](http://www.dec.ny.gov/chemical/61092.html). It’s quick, it’s free, and it will help keep you better informed.

As a listserv member, you will periodically receive site-related information/announcements for all contaminated sites in the county(ies) you select.

**Note:** Please disregard if you already have signed up and received this fact sheet electronically.

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**Site Location Map**