Project Update

September 2021

Want to Learn More?

Visit - berlincommunitysite.com Call - (888) 827-0983, or Email - OCBerlin@owenscorning.com

Kelly Henry, the Community Liaison on behalf of Owens Corning, will be the first to respond.

To learn more about DOWTHERM A™ visit: http://www.dow.com/heattrans/ products/synthetic/dowtherm.htm

Mr. David Thompson is the Licensed Site Remediation Professional (LSRP).

David Thompson Arcadis U.S., Inc., 1 Harvard Way, Suite 5 Hillsborough, NJ 08844 908-526-1000 david.thompson@arcadis.com

FAST FACTS

Site Name: Owens Corning

Site Location:

160 Jackson Road, Berlin Borough, Camden County, New Jersey -- just west of the intersection of Jackson Road with Route 73

Block & Lot Numbers: Block 1502, Lot 4; Block 1600, Lots 4, 5, and 6

NJDEP Site Preferred ID #: 013542

Owens Corning is responsible for conducting the remediation; the Project Manager for Owens Corning is Alan Lake. He can be reached via our Community Information Line at 1-888-827-0983.

About DOWTHERM A™

DOWTHERM A[™] was used at the former Owens Corning facility in the insulation manufacturing process and is a mixture of two chemicals:

1,1'- biphenyl and diphenyl ether.

Publication Date: 9.24.21

FORMER OWENS CORNING FACILITY SITE

160 Jackson Road - BERLIN, NEW JERSEY

Site History

Historically, the facility operated as a sand and brick manufacturing plant from 1927 to 1941. In 1941, the facility was purchased by the Owens-Illinois Glass Company, which continued brick manufacturing until 1947.

In 1947, Owens-Illinois converted the manufacturing operations to the production of high-temperature insulating materials under the brand name Kaylo[®]. Owens Corning purchased the facility in 1958 and continued the production of high-temperature insulation until manufacturing operations ceased in October 1993.

The site is vacant and occupies approximately 45 acres, roughly 25 percent of which is covered by paving, building pads, and other improvements related to the former manufacturing operations. All of the buildings at the facility have been removed.

Environmental Investigations & Remediation Activities

The site was entered into the Industrial Site Recovery Act (ISRA) program by Owens Corning when manufacturing operations ceased in October 1993.

Site investigation activities, conducted in cooperation with and under the direction of the Licensed Site Remediation Professional (LSRP) in accordance with the regulations of the New Jersey Department of Environmental Protection (NJDEP), identified soil and ground water impacts related to the former manufacturing operations.

Impacts to ground water extend offsite and are related to the historic use of DOWTHERM ATM (a heat transfer fluid). Impacts to soil are delineated and limited to the site.

Status of Remediation Activities

Remedial Action Permits – After submitting a Remedial Action Report in January 2021 to NJDEP documenting work completed to remediate soil and ground water at the Site, Owens Corning on March 26, 2021 submitted soil and ground water Remedial Action Permits.

Soil Remedial Action Permits are common for a site with an engineering control and are required whenever soil contamination remains in place above the unrestricted use Soil Remediation Standards. Ground water Remedial Action Permits are required for sites with a long-term remediation strategy to address ground water impacts. *Completed Onsite Soil Remediation* – In Situ Stabilization (ISS) has been used to remediate some areas of the project site. In 2019 and again in 2020, ISS was used to successfully remediate in place a total of approximately 70,600 cubic yards of soil between 19 and 60 below ground surface. ISS, which complies with all NJDEP requirements for soil remediation, immobilizes contaminants by mixing them in place with stabilizing agents.

Soil in one area impacted by polychlorinated biphenyl (PCB) was successfully excavated in 2018 to a depth of eight feet below ground surface. Post-excavation samples confirmed that this area no longer exceeds NJDEP or USEPA standards for PCBs in soil. The area was backfilled with clean soil and restored to match the surrounding grade.

Ongoing Remediation Projects - Since 2020, a biovent system of wells and pipes in three acres of the former manufacturing area has been working as designed to speed the natural process of bio-degradation by introducing oxygen, which promotes microorganisms to break down the constituents of concern.

A ground water pump and treatment system has been working as designed since 2014 to improve onsite and offsite ground water quality.

Vegetation Management – Vegetation management above an onsite, capped landfill is ensuring its proper maintenance. The area, approximately one acre in size, is along the eastern edge of the property.

Continued on back

Continued from front

Onsite Ground Water Remediation – A ground water pump and treatment system has been working as designed since 2014 to improve onsite and offsite ground water quality.

Quarterly Monitoring of Permanent Wells - Owens Corning continues quarterly monitoring of the horizontal and vertical extents of the DOWTHERM A^{TM} constituents in ground water via the 15 permanent monitoring wells installed in and around the perimeter of our study area, in addition to monitoring wells on site.

Annual Monitoring of Private Wells – In Summer 2021, Owens Corning performed its nineth annual sampling of private water wells on properties within the Classification Exception Area (CEA)/Well Restriction Area (WRA) where impacts to ground water are above Class I and Class IIA Ground Water Quality (GWQ) standards for the DOWTHERM ATM constituents, 1,1-biphenyl and diphenyl ether.

Summary of Private Well Sampling - A total of 68 private wells at residential and commercial properties have been sampled since February 2012 - some more than once.

As of September 2021, water from 10 private wells in the CEA/WRA were found to contain levels of one or both of the DOWTHERM ATM constituents above the GWQ standards. Long-term solutions were established with the agreement of the property owners.

Ongoing Community Outreach – Owens Corning voluntarily provides this update by mail semi-annually to all residents, businesses and property owners ever contacted about the investigation. The company also provides it to officials from Berlin Borough, Berlin Township, Waterford Township and Evesham Township, and meets with them upon request.

Hydrology Study and Ongoing Mullica River Monitoring

In 2012-13, an Owens Corning hydrology study found no impacts to the Mullica River from the DOWTHERM ATM constituents. No additional sampling is planned at this time. Surface water levels of the Mullica River continue to be monitored on a quarterly basis.

Classification Exception Areas (CEAs)

A CEA is an administrative control that identifies for state and county officials the horizontal and vertical extents of ground water impacts.

For the purposes of protecting public health and safety, a CEA is sometimes coupled with a Well Restriction Area (WRA), which does not prohibit wells, but provides guidelines for well construction.

NJDEP has approved four CEAs with the Owens Corning site remediation.

★ A CEA with a WRA: For properties where impacts to ground water are above Class IIA GWQ standards for DOWTHERM A^{TM} constituents. Property owners in this CEA/WRA are included in Owens Corning's annual monitoring program.

★ A CEA with no well restriction area: Defines impacts to ground water that exceed the Class I GWQ environmental standards of the New Jersey Pinelands. The properties are not included in Owens Corning's annual monitoring program.

♦ A CEA for dibenzofuran: Limited to an area east of the former facility's location, dibenzofuran was not used or manufactured by the former plant's operations, but can be created when DOWTHERM A^{TM} decomposes under high heat.

★ A CEA with a WRA on Owens Corning's property: For constituents found only onsite at the former facility site. There are no impacts to offsite properties.

Class I refers to ground water of Special Ecological Significance, such as the Pinelands area. **Class IIA** refers to ground water for the Potable Water Supply.

Planning a New Well? If you are planning to drill a new well, please call the community information line. (888) 827-0983