

Want to Learn More?

Visit the project website at berlincommunitysite.com, call the Community Information Line (888) 827-0983, or email us at 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).

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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: 8.6.18

FORMER OWENS CORNING FACILITY SITE

160 Jackson Road • BERLIN, NEW JERSEY

This project update has been developed by Owens Corning in accordance with the New Jersey Department of Environmental Protection (NJDEP) regulations for Notification and Public Outreach to keep the public informed about ongoing environmental investigations and remediation activities at the site of a former Owens Corning facility.

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

Status of Remediation Activities

On-Site Ground Water Pump and Treat -
The ground water pump and treatment system installed at the Owens Corning property in early 2014 continues to work as designed and is helping to improve overall ground water quality, both on- and off-site.

Remedial Action Work Plan - In April 2018, Owens Corning submitted a Remedial Action Work Plan (RAWP) to NJDEP to address onsite environmental conditions. The RAWP was approved by the site's LSRP prior to its submission.

The RAWP details the engineering, administrative and institutional controls planned to address impacts to onsite soils and ground water.

In April and June, soil borings were collected to support the engineering design for a portion of the recommended remedy, as outlined in the RAWP. Planning to implement the RAWP is now underway.

On-Site Work Planned - In the fall, equipment will mobilize to the site to perform remedial work within three former manufacturing areas. Using In-Situ Soil Stabilization (ISS), Owens Corning will treat about 60,000 cubic yards of impacted soils in place with stabilizing agents such as Portland cement and slag. Additionally, excavation of soils from a fourth area will occur.

Annual Monitoring of Private Wells - In summer 2018, Owens Corning will perform its fifth annual sampling of private water wells on properties within the CEA where impacts to ground water are above Class IIA Ground Water Quality (GWQ) standards for the DOWTHERM A™ 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.

Continued on back

Continued from front

As of February 2018, water from 10 private wells was found to contain levels of one or both of the DOWTHERM A™ constituents above the GWQ standards. Long-term solutions were established with the agreement of the property owners.

Quarterly Monitoring of Permanent Wells - Owens Corning continues quarterly monitoring of the horizontal and vertical extents of the DOWTHERM A™ 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.

ISS Treatment of Soil – ISS was selected as a remedy for this area to treat impacts down to 60 feet below ground surface. ISS is protective of human health and the environment, and, because most soils are treated onsite, minimizes community impacts by reducing potential truck traffic.

Before the ISS process can begin, clearing and grubbing of vegetation, excavation and removal of surface asphalt and concrete, excavation of subsurface obstructions and removal of inactive subsurface utilities (related to the former plant) will occur.

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 meets periodically and upon request with officials from Berlin Borough, Berlin Township, Waterford Township and Evesham Township.

Results of Ground Water Sampling

Ground water containing DOWTHERM A™ constituents below reflect the highest concentrations onsite. The concentration range (**in parts per billion**) of the identified constituents is provided below in comparison to applicable Ground Water Quality Standards (GWQ) in New Jersey.

Constituents	Class 1 GWQ	Class 2 GWQ	Range of Concentrations In parts per billion	
			Minimum	Maximum
1, 1'-Biphenyl	10*	400	ND	7,000**
Diphenyl ether	10*	100	ND	25,000**

ND = Non detected

*Practical quantification limits

Protecting Drinking Water Through CEAs

A Classification Exception Area (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.

On January 19, 2018, NJDEP approved the four CEAs associated with the Owens Corning site remediation. Property owners in each CEA were notified in accordance with state requirements, both when it was proposed and if it was amended.

❖ **A CEA with a WRA:** For properties where impacts to ground water are above Class IIA GWQ standards for DOWTHERM A™ constituents. Properties with potable water wells within the CEA/WRA are included in Owens Corning's annual monitoring program.

❖ **A CEA with no well restriction area:** This CEA defines impacts to ground water that exceed the Class I GWQ environmental standards of the New Jersey Pinelands.

❖ **A CEA for dibenzofuran:** The CEA is related to dibenzofuran, which was not used or manufactured by the former plant's operations, but can be created when DOWTHERM A™ decomposes under high heat.

❖ **A CEA with a WRA on Owens Corning's property:** For constituents found only onsite at the former site, there are no impacts in this CEA/WRA to off-site 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.

Hydrology Study and Mullica River Monitoring

A 2012-13 study found no impacts to the Mullica River from the DOWTHERM A™ constituents. Surface water levels of the Mullica River continue to be monitored.