Project Update

Spring 2018

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: 3.12.18

FORMER OWENS CORNING FACILITY SITE

160 Jackson Road - BERLIN, NEW JERSEY

This project update has been developed and produced by Owens Corning to keep the public informed about ongoing environmental investigations and remediation activities related to the site of the former Owens Corning facility in Berlin, NJ.

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 hightemperature 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 ATM (a heat transfer fluid).

Status of Remediation Activities

On-site ground water pump and treat system

- 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 will perform soil sampling to collect supplemental data necessary for the completion of the site's revised Remedial Action Work Plan (RAWP). The plan details a range of engineering, administrative and institutional controls planned to address impacts to onsite soils and ground water. It is currently under review by the site's LSRP and will be submitted to NJDEP following LSRP approval. Work to implement portions of the plan may begin in late summer. Additional information regarding those activities will be provided prior to the start of the work.

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.

Protecting drinking water through administrative controls –

On January 19, 2018, NJDEP approved four Classification Exception Areas (CEAs) proposed by Owens Corning. CEAs are administrative controls associated with the defined vertical and horizontal extent of impacts to ground water (see details on back).

In August 2016, two of the proposed CEAs – one with a well restriction area and one without – were updated as a result of ground water sampling data collected in 2015 and 2016. Property owners within the CEAs were notified when the CEAs were proposed or when updated CEAs included their property, as required.

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Annual monitoring of private wells -

In late summer 2017, Owens Corning performed its fourth 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 ATM constituents, 1,1-biphenyl and diphenyl ether.

All wells sampled met the GWQ standards for the two constituents of DOWTHERM ATM. Sampling of private wells will continue on an annual basis to provide residents with assurances of water quality.

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 February 2018, water from 10 private wells was 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 respective property owners.

Hydrology Study and Ongoing Mullica River Monitoring

In 2012-13, Owens Corning performed a hydrology study to understand the flow of ground water, and how and where surface water and ground water meet and interface. The study found no impacts to the Mullica River from the DOWTHERM A^{TM} constituents.

As part of the study, surface water and sediment samples were collected from the Mullica River at eight locations in the study area in Waterford and Evesham townships. The samples were analyzed for the two DOWTHERM A^{TM} constituents. No levels of either constituent were detected in any of the samples. No additional sampling is planned at this time.

Surface water levels of the Mullica River continue to be monitored. A staff gauge was added in June 2016 and all staff gauges are monitored on a quarterly basis.

Planning a New Well?

If you are planning to drill a new well, please call the community information line.

(888) 827-0983

What is a Classification Exception Area (CEA)?

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.

On January 19, 2018, NJDEP approved the four CEAs associated with the Owens Corning site remediation. Each CEA's details and supporting ground water monitoring data was submitted to the NJDEP in March 2017.

★ A CEA with a WRA: Owens Corning proposed in May 2014 and updated in 2016 a CEA for properties where impacts to ground water are above Class IIA GWQ standards for DOWTHERM A^{TM} constituents. Property owners within the CEA/WRA with well restrictions have been notified and are included in Owens Corning's annual monitoring program.

★ A CEA with no well restriction area: Owens Corning proposed in December 2014 and updated in 2016 a second tier of the CEA for DOWTHERM A^{TM} . This portion of the CEA defines impacts to ground water that exceed the Class I GWQ environmental standards of the New Jersey Pinelands. Property owners within the CEA were notified. The properties are not included in Owens Corning's annual monitoring program.

★ A CEA for dibenzofuran: Owens Corning proposed in December 2014 a CEA in a limited area east of the former facility's location. The CEA is related to dibenzofuran, which was not used or manufactured by the former plant's operations, but can be created when DOWTHERM ATM decomposes under high heat, such as the high temperatures used in the manufacturing process. Property owners within the CEA were notified. The properties are not included in Owens Corning's annual monitoring program.

★ A CEA with a WRA on Owens Corning's property: Owens Corning proposed in February 2015 a CEA and WRA for constituents found only onsite at the former facility site. There are no impacts from the constituents in this CEA/ WRA to surrounding 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.