Project Update

February 2017

Want to Learn More?

Please call our Community Information Line at (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 your call.

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., 35 Columbia Road, Branchburg, NJ 08876 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: 2.15.17

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 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 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 December 2016, Owens Corning submitted its Remedial Action Work Plan (RAWP) to the NJDEP, following its review and approval by the

site's Licensed Site Remediation Professional. The RAWP provides details for engineering, administrative and institutional controls planned for addressing impacts to onsite soils and ground water.

Quarterly monitoring of permanent wells -

Owens Corning continues quarterly monitoring of the horizontal and vertical extents of the DOWTHERM ATM constituents in ground water via the 14 permanent monitoring wells installed in and around the perimeter of our study area in addition to monitoring wells on site. A 15th monitoring well is scheduled to be installed within the area of known impacts in 2017.

Protecting drinking water through administrative controls –

Between May 2014 and February 2015, Owens Corning proposed four Classification Exception Areas (CEAs) to NJDEP, as administrative controls associated with the defined vertical and horizontal extent of impacts to ground water (see details on back page).

Property owners within the CEAs were notified at the time, as required. In August 2016, two of the proposed CEAs – one with a well restriction area and one without – were updated as a result of new ground water sampling data collected in 2015 and the first half of 2016. Owners of the properties newly included in either or both designations as a result of these updates were notified, as required.

Annual monitoring of private wells -

In late summer, Owens Corning performed its third 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 but one well sampled met the GWQ standards for the two constituents of DOWTHERM ATM. For the well that did not meet the standards, Owens Corning has contacted the property owner about establishing a long-term solution.

Sampling of private wells will continue on an annual basis to provide residents with assurances of water quality.

Continued from front

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 2016, water from nine private wells 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 respective 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 and is available to meet with officials from Berlin Borough, Berlin Township, Waterford Township and Evesham Township, upon request. In spring 2016, Owens Corning met separately with the Evesham Township Environmental Commission and representatives of Waterford Township.

Ongoing Site Maintenance – As part of its commitment to the community, Owens Corning continues to maintain perimeter fencing for ensuring site safety.

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.

Surface water levels of the Mullica River continue to be monitored. A staff gauge was added in June and all staff gauges are monitoring on a quarterly basis. No additional sampling is planned at this time.

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.

Owens Corning first proposed CEAs in 2014 and updated two CEA proposals in 2016.

- ❖ A CEA with a WRA: First proposed in May 2014 and updated in 2016, Owens Corning notified property owners of a CEA for properties where impacts to ground water are above Class IIA GWQ standards for DOWTHERM A[™] constituents. Property owners within the proposed 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: First proposed in December 2014 and updated in 2016, Owens Corning notified property owners of a second tier of the CEA. This portion of the CEA defines impacts to ground water that exceed the Class I GWQ environmental standards of the New Jersey Pinelands. These properties are not included in the annual well monitoring.
- ❖ A CEA for dibenzofuran: In December 2014, Owens Corning notified property owners of a CEA in a limited area east of its former 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.
- ❖ A CEA with a WRA on Owens Corning's property: In February 2015, Owens Corning notified local officials of a CEA and WRA for constituents found only on-site at the former facility. There are no impacts from the constituents in this CEA and WRA to surrounding 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.

For more information, visit our website at berlincommunitysite.com.