February 2017

Project Fact Sheet

Want to Learn More?

Please call our Community Information Line at (800) 853-6621, visit our website at andersoninvolvementplan.com or view documents at Iva Library, 203 W. Cruette Street, Iva, SC.

You can contact Brian Holtzclaw with the United States Environmental Protection Agency (EPA), Region 4, at (404) 562-8684, or by email at holtzclaw.brian@epa.gov

You may also contact Stephanie Smith-Strack with the South Carolina Department of Health and Environmental Control (DHEC) at (864) 260-5569, or by email at smiths3@dhec.sc.gov

Focus of Current Activity

- In 2016, Owens Corning continued quarterly testing of 12 monitoring wells. The next round of monitoring in November includes sampling of both onsite and offsite wells and surface water.
- Owens Corning is currently working to install three additional monitoring wells. See back page for more information.
- ❖ In May 2016, Owens Corning continued semiannual sampling of private drinking water wells. The data confirmed that there are no impacts to drinking water in the eight wells sampled. Six additional wells were unable to be sampled due to inoperable pumps and one residential well has been permanently closed. Well sampling is scheduled again in November.
- ❖ The onsite pump and treat system, installed in 2011, continues to work as designed. Regular monitoring of the system includes sampling for VOC analysis (1,1-DCE and chloroform), quarterly water level measurements, and daily system flow rate measurements.

Owens Corning Anderson, SC

4837 Highway 81 South - Starr. South Carolina

This project fact sheet is part of Owens Corning's commitment to keep the public informed about an ongoing environmental investigation and remediation activities at the site of its facility in Starr, SC. Updates are issued semiannually or as the situation warrants.

Background

In 1951, Owens Corning, a leading manufacturer of building materials and glass fiber reinforcements, began its composite systems business operations in Starr, SC. Today, the plant manufactures reinforced fiberglass products used in the manufacture of other products. Historical manufacturing processes involved a variety of chemicals, including acids and solvents.

Under the federal Resources Conservation and Recovery Act (RCRA), Owens Corning has been working closely with EPA and the South Carolina Department of Health and Environmental Control (DHEC) to investigation and implement corrective measures associated with the Starr facility.

Owens Corning is committed to protecting the health and safety of Anderson County residents, and to addressing its environmental responsibilities. Since 1995, Owens Corning has conducted extensive investigation work to assess and address the groundwater, including installing a groundwater treatment system.

Work conducted to date includes, but is not limited to: installation of groundwater monitoring wells; monitoring of private wells; collection of soil, sediment, groundwater and surface water samples; and the study of the local geology and hydrogeology (study of the movement of groundwater) to assist in determining the speed and direction of groundwater. This work is ongoing.

Environmental Investigation and Remediation Overview

What are the contaminants of concern?

In accordance with its EPA Consent Order, Owens Corning analyzes all samples for 16 contaminants of concern. The primary focus of the current investigation and remediation is 1,1-dichloroethene (1,1-DCE), a volatile organic compound (VOC) resulting from the breakdown in the environment of an industrial chemical that was once used at the Owens Corning facility, called 1,1,1-trichloroethane (1,1,1-TCA).

In 2016, Owens Corning voluntarily agreed to an EPA request to include 1,4-dioxane as part of its analysis of some groundwater wells and private drinking water wells. See the back page for more information.

Where is 1,1-DCE present in soil and groundwater?

The presence of 1,1 DCE in soil is limited to the Owens Corning property. Work to complete the groundwater investigation is ongoing. 1,1-DCE has not been found in residential wells. The presence of 1,1-DCE in groundwater extends approximately one-half mile to the northeast of the Owens Corning property, primarily in the deep groundwater aquifer, in some cases as deep as 200-300 feet below ground surface.

Are private drinking water wells safe?

Regular semiannual sampling has confirmed there are no contaminants attributable to Owens Corning in the private drinking water. Owens Corning samples private water wells located northeast of the site based on the general direction of groundwater flow.

This ongoing private well sampling program began in 2010 with the sampling of 15 wells. In 2016, 14 wells remain in the program and are tested semiannually depending on operating status.

What environmental work has Owens Corning conducted so far?

Since 1989, Owens Corning has satisfied EPA requirements and closed out all but one area of concern originally identified. In November 2011, a pump and treat system was installed to treat groundwater and keep it from flowing off Owens Corning property.

The system's wells capture groundwater and treat it in an above ground system that removes the contaminants. It is working as designed and has measurably reduced 1,1-DCE concentrations beneath the site and in groundwater beyond the property boundary to the northeast.

Has Betsy Creek been tested?

Yes. Betsy Creek is a spring-fed stream that originates on the Owens Corning property and passes through the northeast corner of the property. It is not used for drinking ("potable") water. Testing of surface water and creek sediments has confirmed that the creek meets EPA's standards for non-potable uses.

Owens Corning discharges processed water into Betsy Creek under a DHEC permit. Monthly monitoring and reporting to DHEC confirms compliance with permit requirements.

Owens Corning Is Committed to the Community

Owens Corning is committed to the community of Starr and Anderson informed of our plans and activities.

In September 2010, Owens Corning held a community information session to outline its investigation and answer questions from the community.

Since that time, we have maintained andersoninvolvementplan.com, a dedicated website that includes sampling data and reports submitted to EPA.

Reports and plans also are available at an Information Repository established at Iva Library, located at 203 W. Cruette Street, Iva, SC.

Additionally, results of private wells are provided to the respective property owners following the semiannual residential well sampling and quarterly groundwater sampling.

Long-Term Groundwater Monitoring via Permanent Monitoring Wells

Since 1988, Owens Corning has pursued a program to fully analyze the groundwater in the study area. A total of 53 permanent monitoring wells have been installed onsite and offsite.

Twelve monitoring wells are part of the ongoing environmental study northeast of the site. Impacts to groundwater have been identified primarily in bedrock, at depths of approximately 200-300 feet.

Some of these wells are within the known area of affected groundwater and others are intentionally located slightly beyond the area. Monitoring well sampling is conducted quarterly in February, May, August and November.

Owens Corning is currently working to install three additional permanent monitoring wells to better define the concentration and location of any remaining contaminants in the groundwater.

Planning to Drill a New Drinking Water Well?

If you are in our study area and have plans to drill a new drinking water well on your property, please call us at: (800) 853-6621

Voluntary Testing of 1,4-Dioxane

In 1989, Owens Corning signed a Consent Order with the EPA to investigate and address environmental impacts from the site's historical operations, based on a comprehensive review and sampling program performed in cooperation with the EPA and DEHC.

1,4-dioxane was initially included in testing but discontinued because it was measured at low levels, or not detected at all, in groundwater and soil samples collected from onsite locations.

In December 2015, Owens Corning voluntarily agreed to an EPA request to include 1,4-dioxane as part of its analysis of some groundwater wells and private drinking water wells. EPA is working nationwide to examine 1,4-dioxane, which is used in many products, including paint strippers, dyes, greases, varnishes and waxes. It is also found in some consumer products, such as deodorants, shampoos and cosmetics.

Owens Corning began sampling for 1,4-dioxane in January 2016 in five permanent monitoring wells, and collected samples again from six monitoring wells in August 2016. Analysis will continue in the quarterly sampling of the six monitoring wells and starting November 2016 will be included in the twice a year sampling of private water wells.