# 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 accordance with its EPA Consent Order, Owens Corning analyzes all samples (monitoring wells, private wells and surface water) 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.

In 2017, monitoring wells continue to be analyzed for VOCs and 1,4-dioxane. However, private residential wells and surface water samples are only analyzed for VOCs. See back page for more information.

## **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 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 the United States Environmental Protection Agency (EPA) and the South Carolina Department of Health and Environmental Control (DHEC) to investigate 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 water supply 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 Activities

**Monitoring of permanent wells** - In 2017, Owens Corning continued quarterly testing of 12 monitoring wells. In May 2017, three additional bedrock monitoring wells were installed to help complete the assessment of groundwater.

The next round of monitoring in November 2017 includes sampling of both onsite and offsite wells and surface water.

Semi-annual monitoring of private wells - In May 2017, Owens Corning continued semiannual sampling of nine drinking water wells and analyzed the samples for 16 different compounds that are the focus of Owens Corning's groundwater monitoring program.

Results from one private well indicated the presence of 1,1-DCE slightly above its groundwater quality criterion. In conjunction with the EPA, Owens Corning sampled the well on four successive weeks. An additional shared sample was taken by the EPA. All follow up samples showed each of the 16 compounds, including 1,1,-DCE, were below their respective method detection limits, and

thus below the applicable groundwater quality criteria for each.

All other private wells sampled were below the groundwater quality criteria. The data confirmed that there are no impacts to drinking water in the nine wells sampled. The next residential well sampling will be conducted in November 2017.

Onsite groundwater pump and treat system - 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.

Voluntary Testing of 1,4-Dioxane - 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.

All monitoring well samples are analyzed for VOCs and 1,4-dioxane. Residential wells and surface water are no longer sampled for 1,4-dioxane. See back page for more information.

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#### **Frequently Asked Questions**

#### Are private drinking water wells safe?

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

This ongoing private well sampling program began in 2010 with the sampling of 15 wells. In 2017, 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 of the site.

### 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.

Owens Corning installed three additional permanent monitoring wells in 2017 to better define the concentration and location of any remaining contaminants in the groundwater. Fifteen monitoring wells are now part of the ongoing environmental study northeast of the site. Impacts to groundwater have been identified primarily in bedrock, at depths of approximately 200-400 feet.

Some of these wells are within the known area of affected groundwater and others are intentionally located slightly beyond the area and serve to show that contaminants are no longer migrating beyond the previously defined impact area. Monitoring well sampling is conducted quarterly in February, May, August and November.

#### 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

### Owens Corning Is Committed to the Community

Owens Corning is committed to keeping the communities 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.

Owens Corning maintains andersoninvolvementplan.com, a dedicated website with sampling data and reports submitted to EPA. A project update is mailed semi-annually to property owners and residents.

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

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

#### 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 DHEC.

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. In November 2016, sampling for 1,4-dioxane was included in the sampling of private water wells.

1,4-Dioxane has not been found in any samples taken from private water wells. In 2017, 1,4-dioxane sampling only continues in monitoring wells and is no longer sampled from residential wells and surface water.