

Revitalizing Auto Communities Environmental Response Trust

PFAS Investigation at Former Factory Complex

Buick City Site

Flint, Michigan

March 2019

For more information

If you need more information, have questions or would like to be added to the mailing list about the Buick City site, please contact one of these individuals:

Christopher Black

EPA Project Manager RCRA Corrective Action Section 2 312-886-1451

black.christopher@epa.gov

EPA toll-free: 800-621-8431

EPA Region 5 77 W. Jackson Blvd. Chicago, IL 60604-3590

Kevin Lund, PE

MDEQ Project Coordinator Redevelopment Support 517-513-1846

Lundk@michigan.gov

Jackson District Office 301 East Louis Glick Highway Jackson, MI 49201-1556

Grant Trigger

Cleanup Manager-MI RACER Trust 855-RACER-411 gtrigger@racertrust.org 500 Woodward Ave. Suite 2650 Detroit, MI 48226

Information repository and website:

A file containing official documents about the Buick City site is available for your review at the Flint Public Main Library, 1026 E. Kearsley St., or see

http://www.epa.gov/region5/cleanup/rcra/buickcity/index.html

Per- and poly fluoroalkyl substances (known as "PFAS") were discovered on the Site in April 2018. Although PFAS substances have been used since the 1940s regulatory attention has only recently focused on the need to search for and cleanup PFAS contamination. Furthermore, the knowledge, experience, and tools to do this work are still growing. For example, when the first samples were collected on the Site in April commercial testing labs did not have the equipment required to run one of the test methods US EPA requested. A testing lab in Lansing now has the needed equipment and has tested samples using that method (ASTM-D7979-17).

What are PFAS?

PFAS are a group of man-made chemicals that include Perfluorooctane Sulfonate (PFOS) and Perfluorooctanoic Acid (PFOA) and many other chemicals. PFAS have been manufactured and used in a variety of industries around the globe, including in the United States since the 1940s. PFOA and PFOS have been the most extensively produced and studied of these chemicals. Both chemicals are very persistent in the environment and in the human body – meaning they don't break down and they can accumulate over time. There is evidence that exposure to PFAS can lead to adverse human health effects.

PFAS can be found in:

- Food packaged in PFAS-containing materials, processed with equipment that used PFAS, or grown in PFAS-contaminated soil or water.
- Commercial household products, including stain- and waterrepellent fabrics, nonstick products (e.g., Teflon), polishes, waxes, paints, cleaning products, and fire-fighting foams (a major source of groundwater contamination at airports and military bases where firefighting training occurs).
- **Workplace**, including production facilities or (e.g., chrome plating, electronics manufacturing or oil recovery) that use PFAS.
- **Drinking water**, typically localized and associated with a specific facility (e.g., manufacturer, landfill, wastewater treatment plant, firefighter training facility).
- **Living organisms**, including fish, animals and humans, where PFAS have the ability to build up and persist over time.

How much testing for PFAS has been done?

Over the last 10 months more than 130 water samples have been collected at the Site from 68 monitoring wells, three storm sewers (003, 005, and 011) and the sanitary sewers next to the Site to look for PFAS (See Figure). Approximately 70 samples collected from the groundwater, storm sewers and sanitary sewers across the Site have detected PFOA/PFOS at concentrations above MDEQ water quality criteria.

Where is the PFAS located?

Most is in groundwater, but it has also been found in storm water pipes and sanitary sewer pipes. Samples collected from stormwater discharging to the Flint River contain PFAS at levels above MDEQ water quality criteria at Outfall 003 (120 ppt of PFOS) and Outfall 005 (50 ppt of PFOS). In addition, four monitoring wells located within 100 feet of the river (near Hamilton Ave) have detected PFOA/PFOS in groundwater at concentrations above criteria (500 to 1200 ppt).

Are Outfall 003, Outfall 005, or the four monitoring wells near the Flint Water Plant intake?

No. These locations are three-quarters of a mile or more downstream of the Flint Water Plant intake (See Figure).

Was PFAS from the Buick City Site getting to the intake of the Flint Water Plant when the Flint River was being used as a drinking water source?

There is no evidence that the Buick City Site is or was discharging PFAS upgradient of the water plant intake. Also, according to USEPA a sample was collected from the Flint Water Plant entry point to the distribution system on October 28, 2014 (while the Flint River was being used as the source of drinking water) and was analyzed for six PFAS compounds (including PFOA and PFOS) none of which were detected.

Next Steps

PFAS sampling activities will continue at the Buick City Site to better define where the PFAS is located (source areas) and whether and how it may be moving to the Flint River. Drilling equipment needed to collect more groundwater and soil samples is scheduled to be on site beginning the week of March 11 for several weeks. It is likely the results from this sampling will lead to more sampling given how large the site is and how difficult it is to identify and track PFAS.

Work has also begun on methods to stop PFAS from getting into the Flint River including rerouting a major storm water sewer to prevent PFAS from getting into that sewer. As that and other work progresses a more detailed update will be provided later this year.

