Lansing, MI
RACER Sites 13001, 13002, 13003

Site Description

RACER Trust Lansing Plants 2, 3 and 6 Industrial Land are vacant properties encompassing approximately 72.5, 105.3, and 57.3 acres, respectively. Plant 3 is located north of Plants 2 and 6. Plants 2 and 3 are located within Lansing Township and Plant 6 is located within the City of Lansing. The properties are bisected by railroad tracks, and nearby Interstates 69 and 496 offer easy highway access. Portions of all three properties are located within the Lansing Township or City of Lansing Wellhead Protection Areas.

Plant 2
The first building at Lansing Plant 2 was built in approximately 1910 and produced rear axles between 1945 and 1985. A small foundry, which ceased operations sometime between 1978 and 1980, was operated in former Building 242 located in the northeast portion of the Site.

Major renovations took place between 1985 and 1987 and Plant 2 was converted to build the Buick Reatta from 1987 until 1990. After 1990 the plant produced the convertible Pontiac Sunfire, convertible Chevrolet Cavalier, and the EV-1 (electric car). The plant then produced the Cadillac Eldorado for a short period of time. Most recently, the plant produced the Chevrolet SSR. The Plant 2 facility was taken out of operation during March 2006 and the buildings were demolished in 2008-2010.

Plant 3
The buildings that comprised Lansing Plant 3 were originally constructed in the 1930s. Early Plant 3 operations involved multiple aspects of automobile manufacturing. Major production operations consisted of stamping and electroplating bumpers, general machining of crankshafts and connecting rods, and machining, welding, and...
Environmental History and Investigation

Historic testing found concentrations of volatile organic compounds (VOCs) and semi-volatile organic compounds (SVOCs) above regulatory criteria. To investigate historic exceedances and other potential releases, a Resource Conservation and Recovery Act (RCRA) Facility Investigation (RFI) Work Plan was prepared and approved by EGLE in the summer of 2011. Environmental investigations at the plant began in the spring of 2011 and were substantially complete by December 2014. An RFI Phase 1 Report was submitted to EGLE in January 2012 and the RFI Phase 2 Supplemental Activities Summary Report was submitted to EGLE in February 2014. Due to the presence of emerging contaminants such as 1,4-dioxane and per- and polyfluorinated alkyl substances (PFAS), as well as changing regulations and guidance (e.g., vapor intrusion), additional investigation and monitoring was required and has continued in phases through 2022. During the RFI activities, more than 970 soil borings were completed with a total of 214 monitoring wells installed across the three plants to supplement the pre-existing wells (310 total). In total, more than 3,500 soil samples have been collected across the three properties, along with more than 3,200 groundwater samples.

An RFI Summary Report that summarizes the results of all the RFI activities was provided to EGLE in January.
2022. Based on the data collected, there are concentrations of VOCs, SVOCs, polychlorinated biphenyls (PCBs), metals, 1,4-dioxane, and PFAS that exceed applicable screening levels.

The following provides a brief summary of the RFI findings:

- **Shallow 1,4-Dioxane:** There is an area of 1,4-dioxane impacts in shallow groundwater extending west to east across the center of Plant 2 onto Plant 6.

- **Lower 1,4-Dioxane:** 1,4-dioxane is present within a deeper weathered bedrock zone in an area extending from the southwest portion of Plant 3 to the southern portion of Plant 2. This lower 1,4-dioxane is currently being remediated by a biosparge system.

- **Plant 2 light non-aqueous phase liquid (LNAPL):** An area of LNAPL consisting chiefly of weathered cutting and hydraulic oils is present in shallow sediments within the central portion of Plant 2 and is associated with 1,4-dioxane, VOC, SVOC, PFAS, and PCB soil and groundwater impacts.

- **Plant 3 LNAPL:** An area of LNAPL is present in shallow sediments within the north central portion of Plant 3 consisting of weathered gasoline.

- **PFAS:** PFAS are present at all three Plants related to different source areas, including storage tanks in the southeast portion of Plant 2, a metal plating area in the north-central portion of Plant 3, and activities associated with painting and coating at Plant 6. PFAS above drinking water criteria extends off-site to the east of Plants 3 and 6.

- **Metals:** Dissolved metals above drinking water criteria are present in shallow groundwater at all three Plants and are related to the property’s geochemical conditions.

- **Storm Sewers:** Groundwater containing PFAS has infiltrated into storm sewers, so storm sewers have been bulkheaded at strategic locations at all three Plants to prevent off-site discharge of stormwater impacted with PFAS.

- **Soil Direct Contact:** There are several areas across the three plants that have SVOCs or metals above direct contact criteria in near surface soils and require a cover to mitigate possible risks from exposure. These include two areas on Plant 2, three areas on Plant 3 and one area on Plant 6.

A draft Corrective Measures Study (CMS) was submitted to EGLE in January 2022 and incorporated current interim remedies, such as the lower 1,4-dioxane biosparge system, with additional proposed remedial options for various conditions at Plants 2, 3 & 6. These generally include:

- **Site-wide Corrective Measures**
  - Land/Activity Use Restrictions
  - Groundwater Use Restrictions
  - Groundwater and LNAPL Monitoring to Verify Stability

*Continued*
• Soil
  - Site-wide Corrective Measures
  - Area-specific Exposure Barriers
  - Targeted Excavations

• Groundwater (not related to PFAS or the lower 1,4-dioxane plume)
  - Site-wide Corrective Measures

• LNAPL
  - Site-wide Corrective Measures
  - Natural Source Zone Depletion (i.e., Natural Degradation)

• PFAS
  - Site-wide Corrective Measures
  - Groundwater use restriction ordinance to address off-site impacts
  - Sewer Modifications

• Lower 1,4-Dioxane Plume
  - Site-wide Corrective Measures
  - Biosparge

Next Steps

Monitoring at the properties is completed quarterly and includes groundwater monitoring, performance monitoring associated with the lower 1,4-dioxane remedy, and storm sewer sampling. Monitoring is expected to continue for many years. Operation and maintenance of remedial systems will continue as needed until the remedial objectives are met. EGLE is expected to review and provide comments on the RFI Summary Report and the CMS. Response to comments and final reports will be developed after receipt of comments. After EGLE approval of the RFI Summary Report and CMS, EGLE will begin a formal final corrective measures approval process. Part of EGLE’s process to approve the final corrective measures includes providing for a public comment period.

More detailed information on the site can be viewed at the RACER website at www.racertrust.org.