



PROJECT UPDATE

RACER Trust is issuing this Project Update to provide a summary of work completed to further evaluate PFAS identified in groundwater at RACER Plant 6. PFAS (per- and polyfluoroalkyl substances) are known as “emerging contaminants” that were only a few years ago identified as a potential concern at some contaminated sites. PFAS are most commonly associated with fire suppressant foams, but are also found in weather proofing materials, non-stick surface coatings and many household products. At Plant 6, PFAS is thought to be associated with former coating operations (e.g., painting and rust protection). Sampling at Plant 6 has identified several residual PFAS in soil and groundwater. Perfluorooctanoic acid (PFOA) is the specific PFAS of interest in groundwater at and beyond the Plant 6 property boundary.

In March 2021, RACER installed six monitoring wells at the perimeter of Plant 6 and within the Michigan Avenue right-of-way. The monitoring wells were installed to verify concentrations of PFAS and facilitate monitoring of PFAS impacts. Initial sampling of the new monitoring wells was completed on March 19th and March 22nd. Analytical results from the new wells confirmed the presence of PFOA above the current Michigan Department of Environment, Great Lakes and Energy (EGLE) Drinking Water Criteria of 8 parts per trillion (ppt) along the southeastern perimeter, with concentrations ranging from 38 to 63 ppt. Wells installed along W. Michigan Ave show that PFOA has not migrated to the south at concentrations above the Drinking Water Criteria.



PFOA detected in samples from the newly installed monitoring wells along the southeastern perimeter and previously detected in shallow groundwater east and north of Plant 6 is not expected to impact residents. The detected concentrations are low, and the shallow groundwater is not used as a source of drinking water. Water is supplied to the businesses and residences in the area by the Lansing Board of Water and Light. In addition, there are no inhalation hazards, nor risk associated with direct contact with soil or groundwater impacted with PFOA.

Additional borings to allow for collection of groundwater samples are planned east and north of Plant 6 to confirm the off-site extent of PFOA in shallow groundwater. Field work is tentatively scheduled for August 2021, pending EGLE approval.

Once the investigation is complete, RACER will complete a thorough evaluation of the data including potential risk associated with any PFAS detected in groundwater, provide that evaluation to EGLE, and post a summary on the site-specific webpage (see below link). Based on the results of the groundwater samples, additional monitoring wells will likely be installed to confirm extent and provide locations for future monitoring.

Example: Small Drilling Rig in Street



If you have any questions, please contact either

Christine Matlock with EGLE at 517.290.4612 or MatlockC2@michigan.gov, or

Dave Favero with RACER Trust at 217.741.6235 or dfavero@racertrust.org

More information is provided on RACER's website – <https://www.racertrust.org/lansing18>, or in project reports that are available at the reference desk at the Capital Area Public Library.

Table

Table 1
Summary of Groundwater Analytical Results
Plant 6 Monitoring Well Summary and VAP Work Plan
RACER Trust Plants 2, 3, and 6 - Lansing, Michigan



Location ID: Date Collected: Sample Name:	P201 Residential Drinking Water (EGLE 2020)	P201 Groundwater Surface Water Interface (EGLE 2018)	Units	MW-12-15 03/05/21 MW-12-15_030521	MW-12-16 03/05/21 MW-12-16_030521	MW-21-133 03/22/21 MW-21-133_032221	MW-21-134 03/19/21 MW-21-134_031921	MW-21-135 03/19/21 MW-21-135_031921	MW-21-136 03/19/21 MW-21-136_031921	MW-21-137 03/19/21 MW-21-137_031921	MW-21-138 03/19/21 MW-21-138_031921
Per- and Polyfluoroalkyl Substances (PFAS) (via EPA Method 537 Modified)											
11CI-PF3OUdS (F-53B Minor)	--	--	ng/L	<36	<7.1	<7.1	<7.1	<7.1	<7.1	<7.1	<7.1
4:2 FTS	--	--	ng/L	<7.1	<7.1	<7.1	<7.1	<7.1	<7.1	<7.1	<7.1
6:2 FTS	--	--	ng/L	<7.1	<7.1	<7.1	<7.1	<7.1	<7.1	<7.1	<7.1
8:2 FTS	--	--	ng/L	<7.1	<7.1	<7.1	<7.1	<7.1	<7.1	<7.1	<7.1
9CI-PF3ONS (F-53B Major)	--	--	ng/L	<7.1	<7.1	<7.1	<7.1	<7.1	<7.1	<7.1	<7.1
ADONA	--	--	ng/L	<7.1	<7.1	<7.1	<7.1	<7.1	<7.1	<7.1	<7.1
Hexafluoropropylene oxide dimer acid (HFPO-DA) (GenX)	370	--	ng/L	<3.6	<18	<3.6	<3.6	<3.6	<3.6	<3.6	<3.6
N-ethyl perfluorooctane sulfonamidoacetic acid (NEtFOSAA)	--	--	ng/L	<3.6	<3.6	<3.6	<3.6	<3.6	<3.6	<3.6	<3.6
N-methyl perfluorooctane sulfonamidoacetic acid (NMeFOSAA)	--	--	ng/L	<3.6	<3.6	<3.6	<3.6	<3.6	<3.6	<3.6	<3.6
Perfluorobutanesulfonic acid (PFBS)	420	--	ng/L	<1.8	<1.8	2.4	2.2	2	<1.8	<1.8	<1.8
Perfluorobutanoic acid (PFBA)	--	--	ng/L	5.9	5.5	20.2	15.6	21.1	3.1 J	<3.6	4.3
Perfluorodecanesulfonic acid (PFDS)	--	--	ng/L	<1.8	<1.8	<1.8	<1.8	<1.8	<1.8	<1.8	<1.8
Perfluorodecanoic acid (PFDA)	--	--	ng/L	<1.8	<1.8	<1.8	<1.8	<1.8	<1.8	<1.8	<1.8
Perfluorododecanoic acid (PFDoA)	--	--	ng/L	<8.9	<1.8	<1.8	<1.8	<1.8	<1.8	<1.8	<1.8
Perfluoroheptanesulfonic Acid (PFHpS)	--	--	ng/L	<1.8	<1.8	<1.8	<1.8	<1.8	<1.8	<1.8	<1.8
Perfluoroheptanoic acid (PFHpA)	--	--	ng/L	1.2 J	1.8	24.5	17.5	31.7	<1.8	<1.8	<1.8
Perfluorohexanesulfonic acid (PFHxS)	51	--	ng/L	<1.8	<1.8	2.9	3.1	2.4	<1.8	<1.8	<1.8
Perfluorohexanoic acid (PFHxA)	400,000	--	ng/L	2.5	5.1	31.3	21.1	40.4	1.4 J	<1.8	1.9
Perfluorononanesulfonic acid (PFNS)	--	--	ng/L	<1.8	<1.8	<1.8	<1.8	<1.8	<1.8	<1.8	<1.8
Perfluorononanoic acid (PFNA)	6	--	ng/L	<1.8	<1.8	1.2 J	<1.8	2.7	<1.8	<1.8	<1.8
Perfluorooctane Sulfonamide (PFOSA)	--	--	ng/L	<18	<3.6	<3.6	<3.6	<3.6	<3.6	<3.6	<3.6
Perfluorooctane sulfonic acid (PFOS)	16	12	ng/L	<1.8	0.92 J	8.7	6.7	4.1	1.8	<1.8	<1.8
Perfluorooctanoic acid (PFOA)	8	12,000	ng/L	1.5 J	3	62.9	37.6	48.3	1.2 J	<1.8	1.7 J
Perfluoropentanesulfonic acid (PFPeS)	--	--	ng/L	<1.8	<1.8	1.4 J	1.1 J	<1.8	<1.8	<1.8	<1.8
Perfluoropentanoic acid (PFPeA)	--	--	ng/L	2.6	5.1 J	23.7	19.8	39.4	1.1 J	<1.8	<1.8
Perfluorotetradecanoic acid (PFTeA)	--	--	ng/L	<8.9	<8.9	<1.8	<1.8	<8.9	<1.8	<1.8	<1.8
Perfluorotridecanoic Acid (PFTriA)	--	--	ng/L	<8.9	<1.8	<1.8	<1.8	<1.8	<1.8	<1.8	<1.8
Perfluoroundecanoic acid (PFUnA)	--	--	ng/L	<1.8	<1.8	<1.8	<1.8	<1.8	<1.8	<1.8	<1.8

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Data Flagging:

Bold font represents data where detections were noted above the laboratory method detection limit.

Gray shading represents result exceeding either or both the EGLE Part 201 Generic Cleanup Criteria and Screening Levels (dated January 10, 2018) or the EGLE GSI Criteria (Updated June 25, 2018)

Notes:

1. EGLE Part 201 Residential Drinking Water Criteria and Groundwater Surface Water Interface Criteria from the Generic Cleanup Criteria and Screening Levels (dated January 10, 2018) are used for comparison with all VOC and Inorganic data and revised criteria values (dated December 21, 2020) are used for comparison with all PFAS data.

Abbreviations:

- - = Not listed in the EGLE Criteria Tables.

* = Analyzed for low-level 1,4-Dioxane via EPA Method 522

EGLE = Michigan Department of Environment, Great Lakes, and Energy

NA = Not Analyzed

NR = Not Recorded

Lab and Validation Data Qualifiers:

J = The compound was positively identified, however, the associated numerical value is an estimated concentration only.

U = The compound was analyzed for but not detected. The associated value is the compound quantitation limit.

Figures

CITY: Novi DIV: ENV DB: TRY PIC: JBarrett PM: R.Christensen TM: A.Villhauer TR: PROJECT NUMBER: COORDINATE SYSTEM: NAD 1983 StatePlane Michigan South FIPS 2113 Feet Intl
T:_ENV\RACER\Buffalo\MXDs\2021_PFOA\Figure 1 - Proposed VAP Boring Locations rev_041321.mxd PLOTTED: 5/18/2021 12:29:28 PM BY: MJoye

