



RICK SNYDER
GOVERNOR

STATE OF MICHIGAN
DEPARTMENT OF ENVIRONMENTAL QUALITY
LANSING



C. HEIDI GREETHER
DIRECTOR

October 29, 2018

VIA E-MAIL

BATES TOWNSHIP
3070 US-2 EAST
IRON RIVER, MICHIGAN 49935

WSSN: 00440

Dear Water Supply Owner/Operator:

SUBJECT: BATES TOWNSHIP
Per- and Polyfluoroalkyl Substances (PFAS)


As you may be aware, the Michigan PFAS Action Response Team (MPART) has undertaken a proactive effort to investigate sources and locations of PFAS contamination in Michigan, to protect our drinking water, and to inform the public about PFAS. This involves the work of ten state departments, in coordination with local and federal officials.

One vital piece of this effort is the ongoing collaboration between the Michigan Department of Environmental Quality (MDEQ) and our water supply partners. It is through your generous participation that we are able to set and achieve our goal: to proactively test all community water supplies and schools that are classified as non-transient non-community water supplies for PFAS contamination. Once complete, this study will be an invaluable tool in determining the extent of PFAS in Michigan's drinking water, and empowering the MPART in the pursuit of their mission. We thank you for your continuing partnership, collaboration, and dedication to the residents of our great state.

This letter is intended to provide the results of PFAS analyses in samples collected from the BATES TOWNSHIP, WSSN # 00440 (water supply) on the date(s) indicated below.

The table below summarizes the sampling results. A copy of the laboratory report is enclosed for your review. The analyses of these samples reported less than 10 parts per trillion (ppt) for perfluorooctanesulfonic acid (PFOS) and perfluorooctanoic acid (PFOA). Your water supply may have returned results greater than non-detect (ND) for the total amount of PFAS analytes tested for. An ND result means the analyte was not detected. Neither the MDEQ nor the United States Environmental Protection Agency (USEPA) have any guidance values for these other analytes at this time. If additional guidance and/or comparison values are developed for these or other PFAS chemicals in the future, we may reevaluate this water supply.

Date Collected	Sampling Location	PFOS + PFOA (ppt)	LHA (ppt) PFOS + PFOA	Total Tested PFAS (ppt)
8/24/2018	WL003	ND	70	ND
8/24/2018	CH001	ND	70	ND

 ND – The parameter was not detected based on the laboratory's analytical report. See Official lab results for test method used.

Currently, there is no regulatory drinking water standard for any of the PFAS chemicals. However, in May 2016 the USEPA established a non-regulatory Lifetime Health Advisory (LHA) for two of these chemicals, PFOS and PFOA. The LHA for PFOS and PFOA is 70 ppt combined, or individually if only one of them is present. The USEPA recommends that this LHA applies to both short-term (i.e., weeks to months) scenarios during pregnancy and lactation, as well as to lifetime-exposure scenarios. The LHA is the level, or amount, below which no harm is expected from these chemicals. The Michigan Department of Health and Human Services (MDHHS), as well as the MDEQ, have used this LHA of 70 ppt to inform decisions on actions that should be taken or are recommended to reduce exposure and prevent increased risk to public health from these PFAS contaminants. The USEPA has not set health advisory levels for the other PFAS compounds because not enough is known about them.

Additional information on the health effects of PFAS can be found on the Agency for Toxic Substances and Disease Registry (ATSDR) website listed at the end of this correspondence.

The concentrations of PFOS and PFOA in these samples are well below the USEPA LHA of 70 ppt and are not expected to result in adverse health effects as long as the concentrations are shown to remain below the LHA over time.

Because of the detection of low levels found in the water supply, we have the following recommendations for your consideration. These recommendations are essentially the same actions we have advised public water systems to follow for the past 30-plus years when a new contaminant has been confirmed as present in their drinking water.

1. Inform the public of these sample results through posting on your website or other means. The MDEQ, in collaboration with the MDHHS, has developed a toolkit containing communication templates to help notify the consumers of your water supply on the presence of PFAS in the drinking water and the response measures that are being initiated. This is a resource available to you if you choose and can be modified to fit your needs. The toolkit is available at www.michigan.gov/pfasresponse and click on "visit news and education."
2. Please continue with your regularly scheduled monitoring. The MDEQ recommends you also continue monitoring for PFAS on an annual basis to demonstrate the concentrations are consistently and reliably below any existing LHA.

These recommendations are based on the best available and most current information and may change depending on additional information related to site conditions; the availability of new data; or other new information as it becomes available. We may recommend further action at that time.

BATES TOWNSHIP
Page 3
October 29, 2018

As part of the MDEQ's proactive statewide sampling initiative, the results of this sampling will be posted online on the MPART website within 48 hours of this notification. The results can be found online by going to the MPART website address listed below, and by clicking on "Michigan PFAS Sites," and scrolling down and selecting "Public Water Supply Information." We recommend you inform your consumers as soon as possible. If you need assistance, please contact me.

For information on PFOS, PFOA, and other PFAS, including possible health outcomes, you may visit these websites:

- **State of Michigan PFAS Action Response Team (MPART)** website serving as the main resource for public information on PFAS contamination in Michigan:
www.michigan.gov/pfasresponse
- **United States Environmental Protection Agency (USEPA)** website including basic information, USEPA actions, and links to informational resources:
www.epa.gov/pfas
- **Agency for Toxic Substances and Disease Registry (ATSDR)** website including health information, exposure, and links to additional resources:
www.atsdr.cdc.gov/pfas

Thank you once again for your continued collaboration with this investigation. The ongoing partnership between the MDEQ and Michigan's public water supplies plays an integral role in the state's continued efforts to ascertain and address the incidence of PFAS in drinking water for Michiganders.

If you have any questions concerning this sampling, please contact me at the telephone number below; by email at DEQ-PFAS-DrinkingWater@michigan.gov; or by mail at DEQ-DWMAD, P.O. Box 30817, Lansing, Michigan 48909-8311.

Sincerely,

Lois Elliott Graham

Lois Elliott Graham, R.S., M.S.A.
Drinking Water and Municipal Assistance Division
810-730-8674

Enclosure

cc: Mr. Daren Deyaert, Dickinson-Iron District Health Department
Mr. Steven Crider, Supervisor, Drinking Water Unit, MDHHS
Mr. Chuck Thomas, MDEQ

Sample ID: GWNT1808240800GSC

EPA Method 537

Client Data		Laboratory Data							
Name:	Merit Laboratories, Inc.	Lab Sample:	1802730-01	Column:	BEH C18				
Project:	MDEQ State Municipal Sampling	Date Collected:	24-Aug-18 08:00	Date Received:	28-Aug-18 09:30				
Location:	BATESTWFP00440CH001	Matrix:	Drinking Water						
Analyte	CAS Number	Conc. (ng/L)	RL	Qualifiers	Batch	Extracted	Samp Size	Analyzed	Dilution
PFBS	375-73-5	ND	2		B8H0235	30-Aug-18	0.25 L	16-Sep-18 21:39	1
PFHxA	307-24-4	ND	2		B8H0235	30-Aug-18	0.25 L	16-Sep-18 21:39	1
PFHpA	375-85-9	ND	2		B8H0235	30-Aug-18	0.25 L	16-Sep-18 21:39	1
PFHxS	355-46-4	ND	2		B8H0235	30-Aug-18	0.25 L	16-Sep-18 21:39	1
PFOA	335-67-1	ND	2		B8H0235	30-Aug-18	0.25 L	16-Sep-18 21:39	1
PFNA	375-95-1	ND	2		B8H0235	30-Aug-18	0.25 L	16-Sep-18 21:39	1
PFOS	1763-23-1	ND	2		B8H0235	30-Aug-18	0.25 L	16-Sep-18 21:39	1
PFDA	335-76-2	ND	2		B8H0235	30-Aug-18	0.25 L	16-Sep-18 21:39	1
MeFOSAA	2355-31-9	ND	4		B8H0235	30-Aug-18	0.25 L	16-Sep-18 21:39	1
EiFOSAA	2991-50-6	ND	4		B8H0235	30-Aug-18	0.25 L	16-Sep-18 21:39	1
PFUnA	2058-94-8	ND	4		B8H0235	30-Aug-18	0.25 L	16-Sep-18 21:39	1
PFDoA	307-55-1	ND	4		B8H0235	30-Aug-18	0.25 L	16-Sep-18 21:39	1
PFTrDA	72629-94-8	ND	4		B8H0235	30-Aug-18	0.25 L	16-Sep-18 21:39	1
PFTeDA	376-06-7	ND	4		B8H0235	30-Aug-18	0.25 L	16-Sep-18 21:39	1
Labeled Standards	Type	% Recovery	Limits	Qualifiers	Batch	Extracted	Samp Size	Analyzed	Dilution
13C2-PFHxA	SURR	96	70 - 130		B8H0235	30-Aug-18	0.25 L	16-Sep-18 21:39	1
13C2-PFDA	SURR	97	70 - 130		B8H0235	30-Aug-18	0.25 L	16-Sep-18 21:39	1
d5-EiFOSAA	SURR	86	70 - 130		B8H0235	30-Aug-18	0.25 L	16-Sep-18 21:39	1

Results reported to RL.
 Reporting convention specified by MI DEQ.
 When reported, PFHxS, PFOA, PFOS, MeFOSAA and EiFOSAA include both linear and branched isomers. Only the linear isomer is reported for all other analytes.

EPA Method 537

Sample ID: GWNT1808240830GSC

Client Data		Laboratory Data	
Name:	Merit Laboratories, Inc.	Lab Sample:	1802730-02
Project:	MDEQ State Municipal Sampling	Date Received:	28-Aug-18 09:30
Location:	BATESTWP00440WL003	Matrix:	Drinking Water
		Date Collected:	24-Aug-18 08:30
		Column:	BEH C18

Analyte	CAS Number	Conc. (ng/L)	RL	Qualifiers	Batch	Extracted	Samp Size	Analyzed	Dilution
PFBS	375-73-5	ND	2		B8H0235	30-Aug-18	0.24 L	16-Sep-18 21:52	1
PFHxA	307-24-4	ND	2		B8H0235	30-Aug-18	0.24 L	16-Sep-18 21:52	1
PFHpA	375-85-9	ND	2		B8H0235	30-Aug-18	0.24 L	16-Sep-18 21:52	1
PFHxS	355-46-4	ND	2		B8H0235	30-Aug-18	0.24 L	16-Sep-18 21:52	1
PFOA	335-67-1	ND	2		B8H0235	30-Aug-18	0.24 L	16-Sep-18 21:52	1
PFNA	375-95-1	ND	2		B8H0235	30-Aug-18	0.24 L	16-Sep-18 21:52	1
PFOS	1763-23-1	ND	2		B8H0235	30-Aug-18	0.24 L	16-Sep-18 21:52	1
PFDA	335-76-2	ND	2		B8H0235	30-Aug-18	0.24 L	16-Sep-18 21:52	1
MeFOSAA	2355-31-9	ND	4		B8H0235	30-Aug-18	0.24 L	16-Sep-18 21:52	1
EtFOSAA	2991-50-6	ND	4		B8H0235	30-Aug-18	0.24 L	16-Sep-18 21:52	1
PFUnA	2058-94-8	ND	4		B8H0235	30-Aug-18	0.24 L	16-Sep-18 21:52	1
PFDoA	307-55-1	ND	4		B8H0235	30-Aug-18	0.24 L	16-Sep-18 21:52	1
PFTtDA	72629-94-8	ND	4		B8H0235	30-Aug-18	0.24 L	16-Sep-18 21:52	1
PFTcDA	376-06-7	ND	4		B8H0235	30-Aug-18	0.24 L	16-Sep-18 21:52	1

Labeled Standards	Type	% Recovery	Limits	Qualifiers	Batch	Extracted	Samp Size	Analyzed	Dilution
13C2-PFHxA	SURR	112	70 - 130		B8H0235	30-Aug-18	0.24 L	16-Sep-18 21:52	1
13C2-PFDA	SURR	108	70 - 130		B8H0235	30-Aug-18	0.24 L	16-Sep-18 21:52	1
d5-EtFOSAA	SURR	75	70 - 130		B8H0235	30-Aug-18	0.24 L	16-Sep-18 21:52	1

RL - Reporting limit
 Results reported to RL.
 Reporting convention specified by MI DEQ.
 When reported, PFHxS, PFOA, PFOS, MeFOSAA and EtFOSAA include both linear and branched isomers. Only the linear isomer is reported for all other analytes.