Dear School Administrator and Drinking Water Operator:

SUBJECT: EIGHT CAP IONIA CO. OUTREACH
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 EIGHT CAP IONIA CO. OUTREACH, WWSN # 2008634(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 or equal to 70 parts per trillion (ppt), but greater than or equal to 10 ppt for either perfluorooctanesulfonic acid (PFOS) and perfluorooctanoic acid (PFOA) and/or total tested PFAS.

<table>
<thead>
<tr>
<th>Date Collected</th>
<th>Sampling Location</th>
<th>PFOS + PFOA (ppt)</th>
<th>LHA (ppt) PFOS + PFOA</th>
<th>Total Tested PFAS (ppt)</th>
</tr>
</thead>
<tbody>
<tr>
<td>7/12/2018</td>
<td>Well 1</td>
<td>ND</td>
<td>70</td>
<td>182</td>
</tr>
</tbody>
</table>

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 United States Environmental Protection Agency (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 LHA 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.

Your water supply may have returned results greater than non-detect (ND) for the total amount of PFAS analytes tested. Neither the MDEQ nor the USEPA have any guidance values for these other analytes at this time. If additional guidance and/or comparison values are developed for PFOS, PFOA, or other PFAS chemicals in the future, we may reevaluate this water supply.

According to the Agency for Toxic Substances and Disease Registry (ATSDR), some, but not all, studies in humans with drinking water levels well above the LHA for extended periods of time have shown that certain PFAS may: affect the developing fetus and child including possible changes in growth, learning, and behavior; decrease fertility; interfere with the body’s natural hormones; increase cholesterol; affect the immune system; and increase cancer risk. For more information about PFAS-related health effects, visit [www.atsdr.cdc.gov/pfas](http://www.atsdr.cdc.gov/pfas).

The concentrations of PFOS and PFOA in these samples are below the USEPA LHA of 70 ppt. Should information become available which would indicate that they could potentially exceed the LHA, we provide the following recommendations:

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 school staff, students, and parents 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.”](http://www.michigan.gov/pfasresponse and click on “visit news and education.”)

2. Investigate potential sources of PFAS in your watershed and initiate steps to remove any identified source, if possible.

3. Evaluate options to modify operations to reduce PFAS in the water supply should levels approach the existing LHA. For example, this could be accomplished by minimizing use of wells with elevated PFAS levels, or through the installation of treatment technology capable of reducing PFAS prior to distribution.
4. The MDEQ will collect a confirmation sample for analysis within one month after the school is notified. Depending on the level of the initial results, the MDEQ may want to expedite the confirmation sample. The confirmation sample results will be reported to you and the Data Management Coordinator listed below.

5. Continue monitoring for PFAS on a quarterly basis to demonstrate the concentrations of PFAS are consistently and reliably below any existing LHA. Typically, four quarterly samples have been sufficient for making this determination, at which time the monitoring may become less frequent.

We look forward to working with the water supply to address this issue, inform your customers, and evaluate solutions to this challenge. 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.

As part of the MDEQ’s proactive statewide sampling initiative, the results of this sampling will be posted online on the MPART website within two weeks 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](http://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](http://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](http://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 \texttt{DEQ-PFAS-DrinkingWater@michigan.gov}; or by mail at DEQ-DWMAD, P.O. Box 30817, Lansing, Michigan 48909-8311.

Sincerely,

\textit{Lois Elliott Graham}

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

Enclosure
cc: Mr. Ken Bowen, Ionia County Health Department
    Mr. Steven Crider, Supervisor, Drinking Water Unit, MDHHS
    Mr. Dan Dettweiler, DEQ