

DEPARTMENT: POLLUTION CONTROL AGENCY

STATE OF MINNESOTA
Office Memorandum

DATE: January 15, 2020

TO: East Metro Community Representatives
3M – Government Working Group

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SUBJECT: 2019 Residential Well Sampling for PFAS Compounds

As specified in Minn. Stat. 115B.171, the Minnesota Pollution Control Agency (MPCA) is providing the following information to the communities in the East Metropolitan area impacted by Perfluoroalkyl Substances (PFAS) groundwater contamination.

Since 2003, the MPCA and Minnesota Department of Health (MDH) have coordinated efforts to sample and monitor private residential water supply wells in South Washington County to monitor PFAS impacts and identify wells that exceed MDH drinking water guidance. Should MDH determine a drinking water advisory be issued to a homeowner, the MPCA will offer to provide an alternate source of drinking water (bottled water) until a whole-house treatment system can be installed or city water can be connected to that residence. The MPCA will also maintain treatment filters installed so long as the drinking water advisory remains in effect.

As shown in the enclosed information broken down by community, 677 residential wells were sampled in 2019 and, of those, 182 well advisories issued. These 2019 numbers account for approximately 20% of all residential wells sampled and advisories issued since PFAS sampling began in 2003. A similar number of residential wells sampled in 2019 are planned for sampling in 2020.

MDH also samples both public drinking water supply wells, along with non-community water supply wells (i.e. schools, churches, greenhouses) to monitor PFAS impacts to public water supplies. All PFAS samples collected, both from public and private drinking water wells, are analyzed by the MDH Environmental Lab.

A majority of the private wells sampled in 2019 were sampled for the initial time. In particular, over half of the residential wells sampled in 2019 were located in West Lakeland Township, Afton, Lakeland, and Lakeland Shores. Other areas of increased sampling, based on results from 2018, included the south tip of Maplewood and adjoining areas in St. Paul, and the Pine Coulee neighborhood in southeast Cottage Grove and nearby areas in south Denmark Township. The significant increase in sample numbers over the past 2 to 3 years has been primarily due to the continued response to the lowering of drinking water criteria for several PFAS compounds by MDH in May 2017 and for a further reduction in the criteria for perfluorooctane sulfonate (PFOS) in April 2019. The lower drinking water criteria for PFAS established by MDH not only increased the number of wells to be sampled, but greatly expanded the groundwater area of concern.

Given that a significant area of impact was sampled for the initial time in 2018 to 2019, evaluating trends in PFAS contaminant levels in these areas would not be possible at this time. Some wells along the eastern edge of West Lakeland Township were first sampled between 2014 and 2017 and



have been sampled several times since. While this still is not long enough to provide reliable long-term trend information, these results appear to indicate that PFAS concentrations in this area may be stable.

In areas of more historic monitoring, such as in Cottage Grove, Lake Elmo, Woodbury, Maplewood, and Denmark Township, overall concentrations of PFAS compounds detected appear to be stable or declining. However, given the very complex hydrologic conditions in the East Metro, there are some areas in which trends in PFAS levels appear to be slightly increasing.

Levels of PFOS appear to be either stable or trending up in wells located in the River Acres/Langdon area of Cottage Grove. Perfluorooctanoic acid (PFOA) detected in this same area is increasing in some wells, while decreasing in others. In areas around Goodview and Granada Avenues and the central part of the Pine Coulee neighborhood, levels of PFOA appear to be increasing in some wells.

In Lake Elmo, levels of PFOS and PFOA found in the Stonegate development have indicated a slight increase in some wells, but most are stable or decreasing. In other developments such as Torre Pines, Parkview, and Cardinal Ridge, there has been a significant decrease in levels of PFOA and PFOS.

Overall, levels of PFAS in Woodbury residential wells are generally stable, with PFOA found at trace levels.

In all of these areas mentioned above, and in areas of the county sampled for the first time in 2018, the MPCA and MDH will continue to monitor levels of PFAS compounds in groundwater and evaluate trends in concentrations.

It should be noted that some of the neighborhoods mentioned earlier, Stonegate, River Acres, and Granada, are scheduled for expansion of municipal water supplies. As part of those expansion projects, private wells will be properly sealed, thus eliminated as sampling points. However, MPCA's environmental consultant, Wood, has developed a groundwater model as part of the preparation of a conceptual drinking water supply plan for the east metro area which will assist in evaluating groundwater conditions in the region.

In response to numerous requests from east metro residents in 2018, MDH developed an on-line sample request form for residents to request their residential well be sampled for PFAS compounds. In 2019, MDH received 207 request forms from Washington County residents through the on-line system. MDH and MPCA also received nearly 200 requests for well sampling by other means such as phone calls, e-mails, or in-person requests at various public meetings held in the east metro communities. MDH staff prioritized these requests to ensure those in areas of highest priority would be sampled first. A significant majority of requests received were for private wells already planned for sampling in 2019. There are approximately 25 lower priority requests still to schedule for PFAS sampling. These are in areas where neither PFOS nor PFOA have been identified, and they will be incorporated into 2020 sampling activities. Utilizing the sampling results, the MPCA maintains an on-line interactive map which indicates locations of wells sampled, well advisories issued, and planned sampling areas, and provides a link to the on-line sampling request form.

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EAST METRO PFAS RESIDENTIAL WELL SAMPLING -- 2019

Private Wells*

Community	No. Wells Sampled in 2019	Advisories Issued in 2019	No. Wells Sampled Since 2003	Advisories Issued Since 2003	Total Samples since 2003
Afton	60	11	186	41	235
Coates	0	0	3	0	3
Cottage Grove	96	17	671	208	2555
Denmark Township	23	1	114	1	176
Grey Cloud Island Township	8	3	109	68	364
Hastings (Ninenger Twp)	0	0	10	2	13
Inver Grove Heights	0	0	1	0	1
Lake Elmo	124	13	726	312	2603
Lake St. Croix Beach	5	0	5	0	6
Lakeland	55	22	108	36	118
Lakeland Shores	10	6	15	9	15
Maplewood	8	0	55	6	87
Newport	2	1	25	2	55
Oakdale	0	0	13	1	19
St. Mary's Point	3	0	4	0	4
St. Paul	4	0	19	0	20
St. Paul Park	2	2	20	11	34
Stillwater	0	0	4	0	4
West Lakeland Twp	251	105	873	576	998
Woodbury	26	1	208	2	464
Totals	677	182	3169	1275	7774

*source - Minnesota Department of Health