August 30, 2024

VIA ONLNE PORTAL: https://commentinput.com/?id=UTJhY6ApE

Emily Schnick
Environmental Consultant
Minnesota Pollution Control Agency
520 Lafayette Road North
St. Paul, MN 55155-4194

Re: MPCA Draft Wastewater Permit for 3M Chemical Operations – Cottage Grove

Dear Ms. Schnick:

Thank you for the opportunity to comment on MPCA's draft wastewater permit for the 3M Chemical Operations Facility in Cottage Grove.

The City of Hastings (population 23,000) is located in the East Metro immediately downstream of 3M – Cottage Grove (3M-CG). The 3M Company has discharged PFAS chemicals into the Mississippi River at this location since the 1940's. Hastings has been harmed by PFOA and PFOS contaminants in its drinking water[1] and in the environment.[2, 3]

The City requests MPCA to require the 3M Company to pay the full costs of drinking water treatment for Hastings and restoration of environmental damage already caused by its actions.

Hastings has PFAS contamination in all six of our municipal wells (specifically PFOA in all six wells and PFOS in two wells).[4] Five of the wells exceed the EPA's Final PFAS National Primary Drinking Water Regulation MCL for PFOA, and two of the wells exceed the EPA MCL for PFOS.[5] All are at

[1] City of Hastings 2023 Drinking Water Report (Consumer Confidence Report), June 2024.
[2] MDH Fish Consumption Advisory, Mississippi River Pool 2, Fish Consumption: Waterbody-Specific Guidance - MN Dept. of Health (state.mn.us)
[3] Instream PFAS Characterization Study Interim Report Mississippi River Cottage Grove, Minnesota 2023
[4] City of Hastings 2023 Drinking Water Report (Consumer Confidence Report), June 2024.
[5] Per- and Polyfluoroalkyl Substances (PFAS) | US EPA

levels exceeding MDH proposed guidance values for PFOA[6] and PFOS.[7] We have also now found PFOA levels at 16 ppt, which is also over the EPA's MCL, in the future Well No. 9 site.[8] PFAS have been found in Hastings drinking water since at least 2004.[9]

Composition of PFAS elements in all Hastings' municipal wells and the confirmation of branched chemistry of PFOA confirms contamination in Hastings was produced by 3M.[10, 11] Further findings of TFSI (HQ-115) in Hastings wells (specifically Well No. 5 and future Well No. 9 to date) fingerprint 3M-CG wastewater to Hastings' groundwater.[12, 13, 14] These findings are geologically sound given the mapped fault lines directly adjacent to municipal wells and Hastings' proximity to the 3M-CG "hot spot".[15] Furthermore, the complex fractures, springs, seeps, and direct flow under pumping conditions provide pathways and interconnectivity between wells to spread the contamination.

Current cost estimates to construct three water treatment plants to remove PFAS and nitrate pollution are estimated at $68.9M[16] and trending higher.[17] Construction costs specifically allocable to PFAS treatment of Well #5 are estimated at $14.5M.[18] Without outside funding, Hastings water rates would double in two years, triple in four years, and continue increasing. Operation and maintenance costs associated with the PFAS treatment is estimated at $888K to $1M annually.[19] These construction and O&M expenses are counter to the MERLA standard that a responsible party is legally responsible for cleanup of a contaminated site.[20, 21]

In August 2024, MPCA identified 3M as the Potentially Responsible Party under MERLA for PFAS contamination in Well No. 5 and invited 3M to be a Cooperative Responsible Party.[22] Full funding of treatment for removal of PFAS below EPA MCLs for all Hastings' wells should be incorporated in the permit requirements. Delaying action and funding for Hastings cannot continue and should be a prerequisite of permit approval.

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[6] MDH Perfluorooctanoic Acid (PFOA) and Water, January 2024
[7] MDH Perfluorooctane Sulfonic Acid (PFOS) and Water, January 2024
[8] May 2024
[9] MDH Public Health Assessment Perfluorochemical Contamination in Southern Washington County, Northern Dakota County, and Southeastern Ramsey County, Minnesota, January 2012
[10] Integral Hastings Desktop Assessment presentation at request of 3M, March 2024
[11] 3M letter to MPCA re: Preliminary and Branched PFOA Isomer Results, May 2024
[12] MPCA presentation Hastings Status Update, August 2023
[13] Integral Hastings Desktop Assessment presentation at request of 3M, March 2024
[14] Eurofins Analytical Report PFAS – TFSI Only, July 2024
[15] C-57 Geologic Atlas of Dakota County, Minnesota, 2023
[16] City of Hastings Feasibility Report, Water Supply and Treatment Options for PFAS and Nitrate Removal, August 2023
[17] City of Hastings Water Treatment Plants 2 and 3 Siting Study, August 2024
[18] City of Hastings correspondence with MPCA, July 2024
[19] City of Hastings Feasibility Report, Water Supply and Treatment Options for PFAS and Nitrate Removal, August 2023
[20] Minnesota Statutes Sections 115B.01 through 115B.20
[21] Dr. Katherine Reed, Vice President of 3M Environmental, Health & Safety Operations comments to Minnesota House Environment and Natural Resources Finance Division, March 2007
[22] MPCA letter to 3M Environment, Health, Safety and Product Stewardship re: Hastings Municipal Well 5 Cooperative Responsible Party Invitation MPCA Site IDs: SR0000033, SA0010066, August 2024

The City requests the 3M-CG Wastewater Permit to include WQBELs for Class 1 Waters of the State for Domestic Consumption.

As noted above, there is an evident physical connection between the surface waters (including its alluvial sediments) of Mississippi River Pool 2 with Hastings drinking water supply. This has been detailed in an August 2024 letter from MPCA to the 3M Company.[23]

Despite Pool 2's current legal designation as Class 2Bg Waters of the State, Aquatic Life and Recreation, the fact that these waters have been found to have a connection with the drinking water supply for 23,000 people warrants all monitoring and all WQBELs as if the discharge were to a Class 1 Water of the State for Domestic Consumption.[24]

The City requests the 3M-CG Wastewater Permit to include stricter monitoring and regulation of discharge, particularly for PFAS.

The draft Wastewater Permit includes monitoring of six species of PFAS: PFBA, PFBS, PFHxA, PFHxS/PFH1S/PFHS, PFOA, and PFOS. This omits other PFAS chemicals which should also be monitored and held to strict limits.

First, PFNA and HFPO-DA/GenX have been limited by the National Primary Drinking Water Regulation.[25] These nine species of PFAS have been proposed by the EPA for inclusion in the Resource Conservation and Recovery Act due to toxic, carcinogenic, mutagenic, or teragenic effect on humans or other life forms.[26] The permit should explicitly require monitoring and limitation of all nine of these PFAS pollutants, including their acids, salts, structural isomers, and related compounds.

Second, the permit assumes that "from an engineering perspective, the low-level limits for PFOS, PFOA and PFHxS will also force PFBA, PFBS, and PFHxA to be treated to low levels".[27] There are structural differences between long-chain PFAS chemicals such as PFOA and PFOS from short-chain PFAS such as PFBA and HFPO-DA/GenX. They have differing break-through points. The permit should require compliance with the stricter of either the TBEL or WQBEL for each species of PFAS pollutant, consistent with EPA guidance that TBELs "represent the minimum level of control that must be imposed in NPDES permits".[28]

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[23] MPCA letter to 3M Environment, Health, Safety and Product Stewardship re: Hastings Municipal Well 5 Cooperative Responsible Party Invitation MPCA Site IDs: SR0000033, SA0010066, August 2024

[24] Standards for sources of drinking water | Minnesota Pollution Control Agency (state.mn.us)

[25] Per- and Polyfluoroalkyl Substances (PFAS) | US EPA

[26] Proposal to List Nine Per- and Polyfluoroalkyl Compounds as Resource Conservation and Recovery Act Hazardous Constituents | US EPA

[27] MPCA National Pollutant Discharge Elimination System (NPDES)/State Disposal System (SDS) Permit Program Fact Sheet

[28] EPA Memorandum Addressing PFAS Discharges in NPDES Permits and Through the Pretreatment Program and Monitoring Programs, December 2022

Third, the permit notes that the 3M-CG facility often undertakes pilot projects where specific products may be developed and that there is a high variability of PFAS concentrations in the discharge.[29] With such intermittent generation of additional pollutants, the permit should more broadly include all potential PFAS rather than excluding some that may happen to not be in the facility's discharge today. Similarly, the permit should not allow a reduction in frequency of monitoring for PFAS simply because they might not have been present within a given year. This would be consistent with EPA guidance that "monitoring include each of the 40 PFAS parameters detectable by the draft method 1633 and be conducted at least quarterly to ensure that there are adequate data to assess the presence and concentration of PFAS in discharges".[30]

The City requests the 3M-CG Wastewater Permit to include greater transparency in Annual Community Meetings.

The permit requires an "annual meeting to disclose factual information to the community regarding facility operations, changes made or planned to reduce pollutants in discharges, management of hazardous materials and compliance with environmental permits and regulations".[31] It is in the public interest that information be presented in easily understandable language and format, including historical trends of all monitored PFAS compounds, heavy metals, semi-volatile or volatile organics, aggregate toxicity to aquatic organisms, ammonia, phosphorus, and total suspended solids at all monitoring locations. Such data should be explicitly required in the permit.

In summary, the City of Hastings requests:

1. MPCA to require the 3M Company to pay the full costs of drinking water treatment for Hastings and restoration of environmental damage already caused by its actions.
2. The 3M-CG Wastewater Permit to include WQBELs for Class 1 Waters of the State for Domestic Consumption.
3. The 3M-CG Wastewater Permit to include stricter monitoring and regulation of discharge, particularly for PFAS.
    a. The permit should explicitly require monitoring and limitation of all nine of these PFAS pollutants, including their acids, salts, structural isomers, and related compounds.
    b. The permit should require compliance with the stricter of either the TBEL or WQBEL for each species of PFAS pollutant.
    c. The permit should more broadly include all potential PFAS rather than excluding some that may happen to not be in the facility's discharge today. Similarly, the permit should not allow a reduction in frequency of monitoring for PFAS simply because they might not have been present within a given year.

[29] MPCA National Pollutant Discharge Elimination System (NPDES)/State Disposal System (SDS) Permit Program Fact Sheet

[30] EPA Memorandum Addressing PFAS Discharges in NPDES Permits and Through the Pretreatment Program and Monitoring Programs, December 2022

[31] MPCA National Pollutant Discharge Elimination System (NPDES)/State Disposal System (SDS) Permit Program Fact Sheet

4. The 3M-CG Wastewater Permit to include greater transparency in Annual Community Meetings.

Sincerely,

Dan Wietecha
City Administrator

Ryan Stempski, P.E.
Public Works Director

CC: Hastings Mayor Mary Fasbender and City Council