Appendix 3-1. Per- and Poly-Fluoro Alkyl Substances (PFAS) Monitor Date for the Blue Lake Wastewater Treatment Plant (WWTP) Discharge
Perfluorobenzoic acid (PFBA)

- Chemical Formula C₆F₅CO₂H
- Currently used as a replacement for PFOS
- Well below MN Drinking water guidelines (7000 ng/L)
Perfluorohexanesulfonate (PFHxS)

- Chemical formula C₆H₁₃O₃S
- Phased out of US production but still manufactured outside of the US
- Well below MN drinking water guidelines of 47 ng/L

86 percent of samples below minimum detection level
93 percent of samples since 2013 below minimum detection level

* = Below Minimum Detection Level
Perfluorooctanoic acid (PFOA)

- Chemical formula $C_8H_{15}O_2$
- Decreasing trend in Blue Lake discharge
- Generally phased out of US by 2006 and globally by 2015
- Industry trend moving to compounds with less than 5 carbons
- Well below MN drinking water guidelines of 35 ng/L
Perfluorooctane sulfonic acid (PFOS)

- Chemical formula $\text{C}_8\text{H}_{17}\text{O}_3\text{S}$
- Key component of Scotchguard
- 3M stopped using PFOS/PFOA in 2000
- Still manufactured in China
- Below MN drinking water guidelines of 15 ng/L

57 percent of samples below minimum detection level
70 percent of samples since 2013 below minimum detection limit

* = Below minimum detection level