Trygve Steen, Ph.D.

Thank you for the opportunity to respond to this 3M draft water quality permit. Although I no longer live in Minnesota, I was raised there and have lived in Portland Oregon for the last 50 years (after receiving a Ph.D. in biology and an MPH in environmental toxicology). I have spent those years teaching relevant subjects at Portland State University. I am now retired from the Environmental Science and Management Department and continue my relationship as an "Affiliated Faculty Member".

Thank you also for your efforts to eliminate the release of PFAS chemicals into the environment. Specifically, I would urge a zero discharge target for ALL PFAS compounds, not just your limited list of six. This fundamentally important step is essential for reducing and ultimately eliminating exposures to this important class of toxic chemicals. While your focus is on preventing the discharge of these chemicals into the waterways of Minnesota and ultimately the entire Mississippi River system, I would also urge care in the regulation of safely handling all of the materials and systems used to control release of PFAS chemicals.

Effectively, therefore the production of PFAS chemicals needs to be eliminated, so their release will no longer be an issue.

I do not know what authority you have to influence decisions relating to the manufacture of PFAS chemicals, but hopefully your actions can ultimately eliminate the manufacture of these difficult materials.

Thank you also for your draft water quality permit's attention to the release of the other listed contaminants.

Sincerely yours, Trygve Steen, Ph.D. and MPH Retired Professor of Environmental Science