June 21, 2019

Roxanne Chronert
Wisconsin Department of Natural Resources
NR Region Program Manager

Dear Ms. Chronert,

The Wisconsin Department of Health Services (DHS) received a request from the Wisconsin Department of Natural Resources (DNR) to assess the health risks of perfluoroalkyl and polyfluoroalkyl substances (PFAS) in surface waters and foam. This request is part of the ongoing investigation into groundwater contamination in the Town of Peshtigo and the City of Marinette from the Tyco Fire Training Facility. We were specifically asked for assistance with messaging to put on signs in the area.

During recreational activities in streams and ponds, people can be exposed to PFAS by swallowing and touching the water. Accidental swallowing (ingestion) is the main source of PFAS exposure from surface water; this is especially true for children as they swallow more water than adults during recreational activities. However, touching (dermal) is a minor source of PFAS exposure. Available information suggests that as a class of chemicals PFAS do not easily enter through the skin, although the extent to which they do cross the skin depends on the chemical’s characteristics and some PFAS are more readily absorbed than others. This means that people are not likely to absorb PFAS through the skin while swimming, splashing, or wading in the waters.

Sometimes foam can form on surface water due to various causes. Areas impacted by PFAS contamination can have foam on surface waters with much higher amounts of PFAS than the water. In general, DHS recommends people avoid swallowing foam on the water, whether it has PFAS in it or not. We also recommend people wash their hands after touching the foam. Touching the foam (dermal exposure) is not a health concern. DHS will continue to evaluate surface water and foam data and provide further recommendations as needed.

Conclusion:
There is a small chance to swallow (ingestion exposure) PFAS in surface water and foam during recreational activities. Accidentally swallowing water or foam is unlikely to cause someone to become sick. However, we recommend avoiding unnecessary exposure to PFAS to prevent any potential long-term health effects.

Touching (dermal exposure) is not a major source of exposure from surface water. Touching the water or foam should not lead to health effects. However, we recommend people wash their hands after touching foam to avoid accidentally swallowing PFAS.
Recommendation:
To best protect people from potential PFAS exposure from surface water, DHS recommends people avoid drinking or accidentally swallowing the water or foam and wash their hands after wading or playing in the water.

DHS also recommends this information be shared broadly with the community, either through the posting of signs or other communication methods, such as websites. These recommendations (i.e., avoid swallowing water or foam, touching the water or foam is fine) are the same for inland surface waters in the area, such as ponds.

The attached appendix has sample sign language to include on the signs.

Please let me know if we can be of further assistance.

Sincerely,

[Signature]
Disa Patel
Site Evaluation Program Manager
Division of Public Health

cc: Dave Neste, DNR Project Manager
Appendix: Sample Sign Language

The Wisconsin Department of Health Services recommends people avoid drinking or accidentally swallowing the water or foam. To best protect you and your family from potential PFAS exposure from this water:

- Avoid drinking or accidentally swallowing the water or foam.
- Wash your hands after wading or playing in the water or foam.

Touching the water is not a health concern. For more health information, visit:

- WI DHS website: www.dhs.wisconsin.gov/chemical/pfas.htm
- WI DNR Fish Advisories: dnr.wi.gov/topic/fishing/consumption