

PO Box 6275 Rochester, MN 55903 507-273-4961 March 30, 2019 Laura Bishop, Chair and Members Minnesota Environmental Quality Board 520 Lafayette road, North

St. Paul, MN 55155

Re: Drinking Water Safety Plans for Karst Nitrate GEIS

The Minnesota Well Owners Organizations (MnWOO) mission is to advocate for safe drinking water from private wells in Minnesota. We are advocating for Drinking Water Safety Plans, a new approach to assessing our groundwater resources. We believe that this approach should be deployed for the proposed Karst Generic Environmental Impact Statement.

MnWOO has been participating in a Stakeholder Advisory Panel for the University of Minnesota Water Resource Center and the Humphrey School of Public Affairs who are currently working on a project that is funded by the Minnesota Department of Health that is titled "The Future of Minnesota Drinking Water" (Calow, P. et al, 2019). The research and report are intended to be an action plan addressing the threats to our drinking water.

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The draft interim report released two weeks ago, (Interim Report from the U of M) advises how Minnesotans' need to scan the horizon for drinking water risks, develop foresight and action plans that avoid surprises about our drinking water. The new report introduces Drinking Water Safety Plans (DSWP) as a useful tool for action designed to eliminate or reduce risk to drinking water (Baum et al, 2015, and Collivignarelli, 2015).

By focusing on water at the household tap, and by assessing the risks to water safety at every stage of a water supply chain, the DWSP's are more effective than the limited scope of Source Water Protection Plans. When assessing the entire water system from the distribution, treatment and storage systems, to the wells, aquifers and recharge areas at the source the DWSP's are useable action plans that can be deployed at any scale and for any risk. A well-designed DWSP process engages a multi-disciplinary team to address risks to drinking water quantity, quality, continuity, coverage and cost.

This action-oriented approach is used around the world. With a view that safe water at the source does not guarantee safe water at the tap all the risk factors that might otherwise surprise water consumers are evaluated and addressed. Every household with a private well, and every community seeking safe drinking water benefits from a shared goal that safe drinking water should be available and maintainable for all.

The DWSP concept makes an action plan appealing to water users by first assessing water quality at the tap, then developing a plan to keep the water safe; a concept that every water user understands. Water testing is the starting point for an assessment that follows the water back through the delivery system, the wells, the reservoirs or aquifers all the way back to the recharge areas for the source water.

The DWSP process overturns the traditional science and technology driven "Source Water Protection". By first engaging people with their own water, at their own kitchen sink, an action plan can rapidly evolve that assures safe water for the most people in the shortest period of time. Whether from a community system or a private well the focus is on the tap water instead of an initial focus on complex aquifer characteristics. :Public interest is lost when we dwell first on aquifers or on the source, transport and fate of contaminant risks. The DWSP's gain traction and

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are most successful when household water safety, as understood by the water user, is the primary focus.

By engaging water users and everyone affected by or managing water systems the focus is on delivering safe water no matter how simple, or how complex the water systems, wells and aquifers.

The Minnesota Well Owners Organization (MnWOO) believes Drinking Water Safety Plans should be the basis for proactively protecting our drinking water resources across Minnesota. To start,

MnWOO believes the Environmental Quality Board should initiate a Drinking Water Safety Plan for the Karst Groundwater Province of SE Minnesota instead of preparing a Generic Environmental Impact Statement for Nitrates in the Karst.

Sincerely

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## References

- Calow, P., et al, 2019, Interim Report on the Future of Minnesota Drinking Water: A Framework for Managing Risk, University of Minnesota Water Resources Center and Humphrey School of Public Affairs retrieved from: <>>. Google Link:
- Baum, R., Amjad, U., Luh, J., and Bartram, J, 2015, An Examination of th Potential Added Value of Water Safety Plans to the United States national Drinking Water Legislation. International Journal of hygiene and environmental Health, v 218, p 677-685. Google Link
- Collivignarelli, C., 2016, Water Safety: One of the Primary Objections of Our Time, Ambiente & Agua – An Interdisciplinary Journal of Applied Science, v 12, p 1-7. Google Inc.<Date>

