

Thames - Sydenham and Region  
c/o Upper Thames River Conservation Authority  
1424 Clarke Road, London, ON, N5V 5B9

March 30, 2023

To whom it may concern,

On behalf of the Thames-Sydenham Source Protection Committee, we would like to provide comments on **ERO case number 019-6708**. It is our understanding that this proposal is for a new Environmental Compliance Approval for Dwayne Andrew Wilson operating as The Stool Bus for hauled sewage disposal site in Melbourne, Strathroy-Caradoc, Ontario. This was brought to the attention of our committee by a concerned resident who laid out their concerns for this proposal if it gets approved. Our committee has reviewed the details within the Environmental Registry through the lens of drinking water source protection and we have some concerns.

The proposed property where The Stool Bus is planning to dispose untreated hauled sewage (portable toilets, sewage holding tanks, septic systems) is located within a Significant Groundwater Recharge Area (SGRA) and Highly Vulnerable Aquifer (HVA). Both are types of vulnerable areas identified in the **Ontario Clean Water Act, 2006 (CWA)**.

Under the CWA, Technical Rules have defined SGRA under Rule 44 as the following:

- the area annually recharges water to the underlying aquifer at a rate that is greater than the rate of recharge across the whole of the related groundwater recharge area by a factor of 1.15 or more; or
- the area annually recharges a volume of water to the underlying aquifer that is 55% or more of the volume determined by subtracting the annual evapotranspiration for the whole of the related groundwater recharge area from the annual precipitation for the whole of the related groundwater recharge area.

In essence, the area has a hydrological connection to a surface water body or aquifer that is a source of drinking water for a private drinking water system.

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Also under the Technical Rules Rule 43, HVAs are defined as the following:

- Aquifers are areas of soil or rock under the ground where cracks and spaces allow water to pool. They are considered highly vulnerable based on factors such as how deep it is underground, what sort of soil or rock is covering it, and the characteristics of the soil or rock surrounding it.

Policies within the Thames-Sydenham Source Protection Plan that apply to SGRA and HVA rely on education and outreach and are only recommendations as they do not have legal effect that requires property owners to comply. However, municipalities, implementing bodies, and local people should have regard for these policies since there are no significant threat policies that apply.

Understanding the science on the interaction between what happens on the land and its relationship to the groundwater is important.

Our concerns are with the spread of raw, untreated sewage on land that could have a negative impact on the groundwater which could affect private drinking wells and surrounding communities. Untreated sewage could contain chemicals and pathogens that may become a drinking water threat.

Once the groundwater is affected, potential for contaminant migration exists and could present concerns to downstream drinking sources in communities relying on groundwater or surface water. Furthermore, this concern was raised in a recent meeting by one of the Source Water Protection Committee members who represents Chippewa of the Thames First Nation. This community is approximately 7 km south of the proposed sewage disposal site. The Chippewa's groundwater consists of a horizontal infiltration gallery located within 50-100 m of the Thames River, is identified as a Groundwater Under Direct Influence (GUDI) system. Rule 48(3) indicates that a GUDI is defined when the interaction between surface water and groundwater causes a decrease in travel time of water to the well or infiltration trench and therefore is more vulnerable to drinking water threats. This system does not fall under the jurisdiction of the Clean Water Act, 2006.

Based on the above concerns, our committee feels this proposal should not be approved through the Environmental Compliance Approval process.

If you have any questions, please feel free to reach out to discuss further.

Sincerely,



Dean Edwardson  
Chair, Thames-Sydenham Source Protection Committee

Julie Welker  
Thames-Sydenham Source Protection Coordinator