## Peter Lund, P.Geo (Retired)

April 13, 2025

Legislative Assistant Municipal Clerk's Office Legal & Legislative Services City Hall, Halifax, NS B3J 3A5

Attention: Dorothy Maponga

Re: Request to Present to the Environment & Sustainability Committee on "Silty Groundwater Discharges to Watercourses and Wetlands During Early Stages of Land Development"

I have witnessed over the years when land is cleared and overburden is disturbed/removed during the early stages of property development in surburban/rural areas of HRM, rainfall penetrates the ground where it picks up silt in the overburden (sand silt till) and transports the silt via shallow groundwater beneath the silt fences to nearby watercourses and wetlands as far downslope as 100m from the subject property. This situation only occurs where the overburden contains a mixture of silt and sand, which is common in areas throughout HRM.

There currently is no requirement in HRM By-Laws to implement preventive measures to ensure this situation won't occur. It is left up to the Provincial Department of Environment Inspectors to be called out to a site to view the silty groundwater discharge to streams and wetlands. By that time, it is extremely difficult to stop, considering it takes weeks, likely months for the situation to rectify itself once the development is completed with structures and roadways placed.

The only requirement in the By-Laws is to address surface water through the use of silt fences along the development boundary during land clearing/grubbing and the implementation of a Surface Water Management Plan in the long term.

I would like to make a power point presentation to the ESSC to show photos of occurences I have witnessed, cross-sections illustrating how this situation happens under certain types of overburden, as well as describe the HRM regulatory framework where this situation can be addressed. My desired outcome is to have the ESSC take it to the next level whereby the Ctte recommends to/requests HRM Planning Department to prepare a report on this issue with recommendations for By-Law amendments that ultimately is presented to Regional Council.

Respectfully,

Peter Lund, P.Geo (Retired) Hydrogeologist