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Fleming College

June 13th, 2016

RE: STARS INNOVATION CREDIT – On-Site Denitrification: Centre for Alternative Wastewater Treatment.

To Whom It May Concern:

I am writing to affirm the details of the Fleming's Centre for Alternative Wastewater Treatment (CAWT) as it relates to the STARS Innovation Credit.

Created in 2002 through a grant from the Canadian Foundation for Innovation, the CAWT at Fleming College promotes innovative forms of water and wastewater treatment technologies through applied research, third party validation and knowledge translation.

In collaboration with a Canadian company, the CAWT has been researching and validating an innovative treatment technology for the on-site treatment of domestic wastewater. Most on-site treatment of domestic wastewater is accomplished by old technology similar to the standard septic tank and leach field. Old treatment technology converts ammonia to nitrate and does not proceed with further treatment (e.g., denitrification) to the production of nitrogen gas. Because of this, nitrate percolates into the soil and has the potential to contaminate surrounding groundwater resources being used for drinking water. High nitrate levels in well water have been linked to health effects including blue baby syndrome. The CAWT is working with the company to develop an innovative treatment design that will convert ammonia in the raw wastewater to harmless nitrogen gas. This technology has the potential to significantly enhance the treatment of domestic on-site wastewaters and protect source waters for drinking.

Sincerely,

Brent Wootton, Ph.D.
Associate Vice-President
Business Development, Applied Research,
Government and Partner Relations