Committee of the Whole Excerpts
September 9, 2025

EMERGENCY SLUDGE PUMPING AND REPAIRS EXCERPT

Emergency repairs were required for a critical system in the primary digester. To complete the repairs, approximately 700,000 liters of sludge must be removed, which was not able to be managed with on-site resources. This work will also allow long-overdue maintenance of 36 coarse bubble diffusers. Loomer's Pumping Service Ltd is currently the only contractor able to remove and treat the sludge, with a quote of $63,000 plus HST.

The recommended motion was that Committee of the Whole recommend that …

COUNCIL APPROVES THE EMERGENCY PUMPING AND TRANSPORTATION OF APPROXIMATELY 700,000L OF SLUDGE FROM THE FALMOUTH WASTEWATER TREATMENT PLANT DIGESTERS TO ALLOW CRITICAL EMERGENCY REPAIRS TO THE AERATION SYSTEM FOR THE QUOTED PRICE $63,000.00 PLUS APPLICABLE TAXES, TO BE FUNDED THROUGH THE SEWER RESERVES.

WEST HANTS REGIONAL MUNICIPALITY REPORT

Information ☐	Recommendation ☑	Decision Request ☐	Councillor Activity ☐

To: West Hants Regional Council

Submitted by: J. Richard

Todd Richard, Director of Public Works

Date: September 9, 2025

Subject: Emergency sludge pumping, and aerator repairs

LEGISLATIVE AUTHORITY

Nova Scotia Municipal Government Act, Section 65 authorizes Council to expend funds for municipal purposes.

Region of Windsor and West Hants Municipality Procurement and Tendering, Section 7.e.1.

RECOMMENDATION or DECISION REQUEST

It is recommended that:

Council approves the emergency pumping and transportation of approximately 700,000L of sludge from the Falmouth Wastewater Treatment Plant digesters to allow critical emergency repairs to the aeration system for the quoted price $63,000.00 plus applicable taxes, to be funded through the Sewer Reserves.

BACKGROUND

Property	Public Opinion	Environment	Social	Economic	Councillor Activity
☑	☐	☑	☐	☑	☐

Below are images showing the primary sludge digester at the Falmouth Wastewater Treatment Plant. As the wastewater is treated, sludge is removed from the clarifier and sent to a sludge digester where it is aerated to promote further breakdown of the solids. This results in a clear product (supernatant) which is returned to the front of the treatment process while sludge

remains in the digester. Over time when supernatant is no longer produced the sludge is then pumped to onsite geotextile bags where the sludge naturally dewaters over time and is then ultimately disposed of.

The curved red line on the left highlights the first row of aeration diffusers. These should be in a straight line therefore there is indication that the anchors which fasten the system to the floor are beginning to fail. Should these completely detach it could result it catastrophic failure to this process as the introduction of oxygen is critical in maintaining the biological process. The red boxed in area on the right depicts a failure to part of the second row of aeration diffusers, as the entire length of the tank should be aerated. We are currently unable to run the blowers at the required SCFMs (standard cubic feet per minute). We are currently at 10 SCFM however 30-40 SCFM is required to agitate and aerate the sludge effectively.

DISCUSSION

In order to access the floor mount hardware that holds the 4-inch stainless steel header pipes that appear to be broken/rusted off, the sludge that is currently in the primary digester

(approximately 700000 liters) needs to be removed. There is nor the resources or capacity on site to store or treat this volume of sludge. Once the digester is emptied, the necessary repairs to the supports that hold the header pipes can be repaired, and the broken stainless-steel flexible and rigid couplings holding the header pipes together can be replaced. This will also provide an opportunity to service the 36 coarse bubble diffusers that are attached to the two header pipes. These diffusers haven't been serviced since the plant was commissioned.

It is believed that pumping the digester with the aid of a pumping service is the best approach to effectively and economically remove the sludge in a timely manner. We have consulted with local pumping service contractors, with Loomer's Pumping Service Ltd appearing to be the only contractor equipped to both remove and store/treat the sludge. Their quoted cost for this project is $63,000 plus HST, however we continue to wait for other proposals.

NEXT STEPS

If approval is granted by council, then staff will proceed with the sludge removal and repairs made ASAP.

FINANCIAL IMPLICATIONS

This critical system is in need of emergency repairs. To do this the sludge needs to be removed. This was not in the 2025-26 Capital budget, and the repairs are anticipated to significantly extend the life expectancy, therefore it will be capitalized. The total cost of the repair is $65,431.80 after applicable taxes and is to be funded through the West Hants Sewer Capital Reserve. This reserve is estimated to have a balance of $376,999 on March 31, 2026.

ALTERNATIVES

Not proceed with sludge removal and necessary repairs, this is not being recommended due to the risk of catastrophic failure and major process upset to the wastewater treatment process.

ATTACHMENTS

N/A

CHIEF ADMINISTRATIVE OFFICER REVIEW

The rationale for the repairs / upgrades is noted in the report. This is an important repair to ensure proper sewer treatment is carried out within the system.

I support the recommendation.

Report Prepared by: _____

(Name and Title)

Report Reviewed by: _____

Carlee Rochon, Director, Financial Services

Report Approved by: _____

Mark Phillips, Chief Administrative Officer