

STAFF REPORT: ENGINEERING AND PUBLIC WORKS DEPARTMENT

REPORT TO: Infrastructure and Recreation Committee
MEETING DATE: June 14, 2011
REPORT NO.: EPW.11.062
SUBJECT: Emergency Repair to Wastewater Channel Grinder
PREPARED BY: Rob Fleming, Wastewater Supervisor

A. Recommendation

THAT Council receives Report EPW.11.062 entitled "Emergency Repair to Wastewater Channel Grinder" for their information.

B. Background

Wastewater Staff initiated an emergency purchase for the purpose of a replacement rebuild of the Channel Grinder located at the main Craigleith Sewage Lift Station. The Channel Grinder was purchased in 2009 through Envirocan Wastewater Treatment Equipment Company Limited and installed and put into service by Belmont Group on August 19, 2009.

The Channel Grinder is a mechanical means for dealing with inorganic waste at the Craigleith Main Sewage Lift Station by grinding waste before it reaches the Wastewater Treatment Plant. The manual cleaning of bar screens presented a safety concern for Wastewater Operations Staff. With the installation of the Channel Grinder in 2009, an automatic method for cleaning bar screens was introduced, which enhanced Operator safety by eliminating the requirement to enter the wet wells to manually clean the bar screens. The bar screens are located in wet wells, approximately 40 feet in depth.

On June 3, 2011, the channel grinder tripped the electrical breaker. Upon further investigation by Wastewater Staff, it was discovered that the motor driving the unit was operating; however the cutting drum was not turning. After removing the unit from the wet well, it was found that the bottom bank of cutting teeth were worn out and the unit was no longer usable. Staff believe that most of the damage was caused by gravel that is contained within trucked in effluent the Town receives from outside sources.

Staff contacted Envirocan and upon describing the condition of the unit and viewing pictures, it was determined that the unit required extensive repairs to the bottom of the cutting drum. Envirocan indicated there is no warranty available for this type of damage. Currently this station is operating with manual bar screens that were installed by Wastewater Staff after the unit was found to be damaged. There is a requirement for Staff now to enter this confined space a minimum of twice a week to clean the bar screens and remove any gravel.

Envirocan presented two options for repair:

- 1) Partial replacement exchange unit at an upset cost of \$23,630 plus shipping and freight
- 2) Unit could be sent out to Envirocan's service centre for repairs, where only the parts that are worn and damaged would be replaced on a price not to exceed \$23,630 basis plus freight.

Staff have proceeded with Option # 2. Envirocan has developed a different cutter style for a coarser grind that will be more durable for gravel and grit and may last longer than the current drum. Envirocan will be picking up the unit next week and it is anticipated that repairs will take approximately 4 weeks.

Staff will be recommending that \$10,000 to \$15,000 is budgeted per year in the 2012 Capital Budget to ensure that monies are available for regular maintenance. This unit was purchased to enhance health & safety issues with the wet well and the effluent received from outside sources is a considerable source of income for the Town. Consideration will also be given to raise the tipping charge to cover the increased maintenance costs. Furthermore, Staff will investigate options to remove gravel and stones prior to the grinder.

Under the Purchasing of Goods and Services Policy POL.COR.07.05 Section G 14 Emergency Purchasing Procedures for emergency purchases that exceed \$10,000, department head(s) shall submit a written report to the next possible council meeting, with copies to the CAO, Treasurer and Manager of Purchasing.

C. The Blue Mountains' Strategic Plan

The acceptance of this Report by Council furthers the Town Strategic Plan Goal #2 "Addressing the Town's municipal infrastructure needs".

D. Environmental Impacts

Ensuring that the Craigeith Main Wastewater Pumping Station continues effective operation is a crucial element in preventing accidental spills of untreated wastewater. These types of spills pose a significant risk to the health of both the general public and the surrounding natural environment.

E. Budget Impact

Staff met with Financial Services to determine which account the monies for this repair will be taken from.

A quotation was received from Envirocan in the not-to-exceed rebuild price of \$23,630.00 plus freight each way.

The funding for this repair will be taken from The Blue Mountains' Wastewater Reserve Fund and is approved by the Director of Financial and Information Services.

E. Attached

None

Respectfully submitted

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