



The Regional
Municipality
of Durham

Clerk's Department

605 ROSSLAND RD. E.
PO BOX 623
WHITBY ON L1N 6A3
CANADA
905-668-7711
1-800-372-1102
Fax: 905-668-9963
E-mail: clerks@durham.ca
www.durham.ca

Pat M. Madill, A.M.C.T., CMM III
Regional Clerk

December 15, 2011



Mr. Denis Kelly,
Regional Clerk
The Regional Municipality of York
17250 Yonge Street
Newmarket, ON L3Y 6Z1

REGION OF YORK
CLERK'S OFFICE

FILE No. - *P42*

RE: EMERGENCY REPAIR OF HOT WATER HEATING LINE BETWEEN THE INCINERATION AND MAINTENANCE BUILDINGS AT THE DUFFIN CREEK WATER POLLUTION CONTROL PLANT, IN THE CITY OF PICKERING (2011-W-123) (Our File: 02-28)

Please be advised the Works Committee of Regional Council considered the above matter and at a meeting held on December 14, 2011 Council adopted the following recommendations of the Committee:

- "a) THAT Report No. 2011-W-123 of the Commissioner of Works be received for information; and
- b) THAT a copy of Report No. 2011-W-123 be forwarded to the Finance and Administration Committee and the Regional Municipality of York for information."

As directed, please find enclosed a copy of Report #2011-W-123 of the Commissioner of Works.

P.M. Madill, AMCT, CMM III
Regional Clerk

PMM/cb

c: C. Curtis, Commissioner of Works, Region of Durham





The Regional Municipality of Durham
To: The Works Committee
From: Commissioner of Works
Report: 2011-W-123
Date: November 30, 2011

SUBJECT:

Emergency Repair of Hot Water Heating Line Between the Incineration and Maintenance Buildings at the Duffin Creek Water Pollution Control Plant, in the City of Pickering

RECOMMENDATIONS:

THAT the Works Committee:

- a) Receives this report for information and forwards it to the Finance and Administration Committee and Regional Council for information; and
 - b) A copy of this report be forwarded to the Regional Municipality of York.
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REPORT:

1. PURPOSE

In accordance with the Regional Municipality of Durham's (Durham) Purchasing By-Law 68-2000, this report provides information regarding the emergency repair of a hot water heating loop between the Incineration and Maintenance buildings at the Duffin Creek Water Pollution Control Plant (WPCP) at a cost of \$153,671.85*.

* (before applicable taxes)

2. BACKGROUND

The Duffin Creek WPCP was initially constructed in 1980 and is co-owned by the Regional Municipalities of York (York) and Durham. The facility is heated using a centrally located hot water heating plant which feeds hot water to various buildings via buried heating pipes.

In September 2010, the heating loop that supplies hot water to the Maintenance Building was found to be leaking. The leak was observed to be in the middle of the road between the Incineration and Maintenance buildings. The primary piping material used for the original construction of the heating loop, which was over 30 years old, was asbestos cement pipe which is hard to repair due to the brittleness of the material as it ages. During excavation of the pipe and performing repairs to the leaking section, it was observed that new leaks developed in other areas due to the propensity to propagate breaks when earth settles around any repairs made. It was decided to replace the entire line after several attempts to fix breaks which had developed as a result of disturbing the line.

An emergency purchase order was issued to Mutual Mechanical based on their previous work on the heating and mechanical system, to complete the replacement of the line between these buildings in December 2010. The cost of the emergency repair was \$153,671.85.

Two separate reports (2011-W-108 and 2011-W-82) have been submitted to Works Committee and Regional Council detailing additional emergency repair work related to this initial repair. This is the final report which documents the entire emergency repair work on the plant heating loops at the Duffin Creek WPCP to Works Committee. The total cost to replace the heating lines is \$1,450,904. Based on the experience gained from performing this repair subsequent heating loop repair requirements have been performed by replacement of all heating pipes which have been in the ground since the plant was constructed.

3. FINANCIAL IMPLICATIONS

3.1 Purchasing By-Law 68-2000

Durham's Purchasing By-Law 68-2000, Section 11.0, states that when an emergency purchase exceeds \$25,000, a report by the designated official and the appropriate Department Head is to be submitted to the appropriate Standing Committee and Council, setting out the nature of the emergency and the necessity of the action taken.

3.2 Financing

Funding for the repair, in the amount of \$153,671.85* was financed from savings within the 2011 Duffin Creek WPCP Operating Budget. There was no additional budget requirement in order to complete this emergency repair.

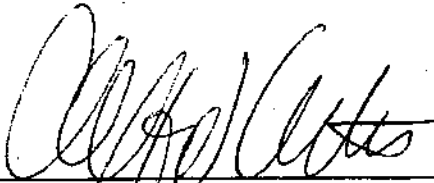
The repair cost of the heating loop is shared with York based on utilization of plant capacity which results in York being responsible for 81.8 per cent and Durham being responsible for 18.2 per cent of the cost (based on budget) or

approximately \$264,065 (18.2% of \$1,450,904).

4. CONCLUSION

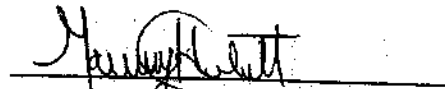
In accordance with the Regional Municipality of Durham's Purchasing By-law 68-2000, this report advises Works Committee and Regional Council of the nature of the emergency and the necessary action taken.

This report has been reviewed by the Finance Department.



Clifford Curtis, P.Eng., MBA,
Commissioner of Works

Recommended for Presentation to Committee



G. H. Cubitt, M.S.W.,
Chief Administrative Officer

PO3/em/tr/ms