



June 19, 2008

REGION OF YORK
CLERK'S OFFICE

FILE No. - *PO6*

The Honourable John Gerretsen
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Municipality
of Durham

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Regional Clerk

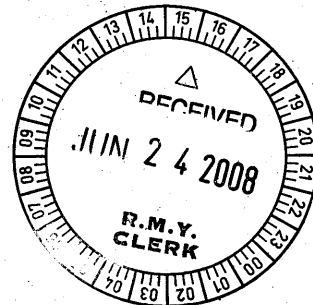
RE: ASSIGNMENT OF ENGINEERING SERVICES FOR A CLASS ENVIRONMENTAL ASSESSMENT TO ADDRESS THE CAPACITY LIMITATIONS OF THE EXISTING OUTFALL/DIFFUSER AT THE DUFFIN CREEK WATER POLLUTION CONTROL PLANT, IN THE CITY OF PICKERING (2008-W-85)
OUR FILE: 011

Please be advised the Works Committee of Regional Council considered the above matter and at a meeting held on June 18, 2008 Council adopted the following recommendations of the Committee:

- "a) THAT CH2M Hill Canada Limited be retained to provide engineering services for the initial stages of a Class Environmental Assessment to address the capacity limitations of the existing outfall/diffuser at the Duffin Creek Water Pollution Control Plant at an upset limit of \$495,000 (excluding disbursements and applicable taxes);
- b) THAT the Regional Chair and Clerk be authorized to execute the agreement; and
- c) THAT a copy of Report No. 2008-W-85 of the Commissioner of Works be forwarded to the Region of York and the Ministry of the Environment."

As directed, please find enclosed a copy of Report No. 2008-W-85 of the Commissioner of Works.

P.M. Madill, AMCT, CMM I
Regional Clerk
PMM/cb



Encl.

- c: D. Kelly, Regional Clerk, Regional Municipality of York
C. Curtis, Commissioner of Works, Region of Durham

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Regional Municipality of Durham
To: The Works Committee
From: Commissioner of Works
Report: 2008-W-85
Date: June 4, 2008

SUBJECT:

Assignment of Engineering Services for a Class Environmental Assessment to Address the Capacity Limitations of the Existing Outfall/Diffuser at the Duffin Creek Water Pollution Control Plant, in the City of Pickering

RECOMMENDATION:

THAT the Works Committee recommends to Regional Council that:

- a) CH2M Hill Canada Limited be retained to provide engineering services for the initial stages of a Class Environmental Assessment to Address the Capacity Limitations of the Existing Outfall/Diffuser at the Duffin Creek Water Pollution Control Plant at an upset limit of \$495,000 (excluding disbursements and applicable taxes);
 - b) The Regional Chair and Clerk be authorized to execute the agreement; and
 - c) A copy of this report be forwarded to the Region of York and the Ministry of the Environment.
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REPORT:

1. BACKGROUND

The Duffin Creek Water Pollution Control Plant (WPCP) provides sanitary sewage treatment for the urban areas of the City of Pickering, Town of Ajax and portions of the Region of York. The plant is co-owned by the Regions of Durham and York, and is operated by the Region of Durham. Administration of the Duffin Creek WPCP is facilitated through the York-Durham Sewage System (YDSS) Management Committee, consisting of senior management staff from both Regions, including representatives from the Works, Finance and Legal Departments.

In 2004, the Regions of Durham and York engaged the firm of CH2M Hill Canada Limited to undertake a Class Environmental Assessment (EA), to plan for additional process capacity at the Duffin Creek WPCP. The resulting plan for expanding the Duffin Creek WPCP from its current process capacity of 420 megalitres per day (MLpd) to a capacity of 630 megalitres per day (MLpd) was approved by the Ministry of the Environment (MOE) in March 2007. The WPCP is to continue to discharge to Lake Ontario through the existing one (1) kilometre long outfall, which has a diffuser system at the end to ensure rapid assimilation of the treated effluent in the lake. A hydraulic evaluation of the existing outfall/diffuser capacity by CH2M determined that it can effectively discharge 520 megalitres per day (MLpd) of effluent to Lake Ontario. Since the capacity of the existing outfall/diffuser is less than the approved process capacity of 630 megalitres per day (MLpd), the first Certificate of Approval (No. 0823-6Z9LF7) issued by the MOE on May 8, 2007 for the process capacity expansion included the following condition:

The Owner shall initiate the environmental assessment activity required to address the limitations in the existing outfall/diffuser within six (6) weeks of receiving the Certificate of Approval (Air) for the Digestion and Boiler Buildings, the complete application for which shall be submitted to the Ministry for approval before the end of August 2007.

As required by the above condition, the Regions submitted an application for a Certificate of Approval (Air) before the end of August 2007. This application is still being processed by the MOE, and the Regions have not yet received the Certificate of Approval (Air).

2. ASSIGNMENT TO PROCEED WITH A CLASS ENVIRONMENTAL ASSESSMENT (EA)

The above noted condition of approval also requires the Regions to initiate an environmental assessment to address the capacity limitations with the existing outfall/diffuser within six (6) weeks of receiving the Certificate of Approval (Air). Although the Regions have not yet received a Certificate of Approval (Air) from the MOE, the YDSS Management Committee has authorized staff of Durham and York Regions to proceed with a Schedule 'C' Class EA to address the capacity limitations of the existing outfall/diffuser at the Duffin Creek WPCP. This direction will allow enough time to plan and initiate the environmental assessment as mandated in the MOE's condition of approval.

A Schedule 'C' Class EA is a five (5) phase planning process that facilitates the sound environmental planning and design of municipal infrastructure projects. The requirements of a Schedule 'C' Class EA are based on the Municipal Engineers Association (MEA) document (issued in October 2000, as amended in 2007), and must include an effective public consultation program.

The Regions asked CH2M to prepare a work program for this Schedule 'C' Class EA since their previous evaluation of the existing outfall/diffuser allowed CH2M to become thoroughly familiar with its capacity limitations and hydraulic modelling requirements, and because CH2M demonstrated a high level of expertise on that previous assignment. CH2M subsequently advised the Regions that the scope of some tasks in the later phases of the Class EA could not be confirmed until the initial tasks had been completed, including the scope of the geotechnical investigations in Lake Ontario and the scope of any aquatic restoration/compensation plans. Consequently, CH2M submitted a detailed workplan for the initial Class EA tasks, including Phase 1 (Identify Problem or Opportunity) and the majority of Phase 2 (Identify and Evaluate Alternative Solutions), at an estimated cost of \$495,000 (excluding disbursements and applicable taxes). These initial stages of the Class EA include consultations with stakeholders, as well as the technical tasks necessary to satisfy the requirements of the Canadian Environmental Assessment Act (CEAA). A preliminary workplan to complete the later phases of the Class EA was also submitted by CH2M; however, the scope and preliminary cost estimate of \$1,700,000 for these tasks is subject to refinement. A detailed workplan and cost estimate for these later phases of the Class EA will be finalized once the initial tasks have been completed. Based on the information available at this time, the total estimated cost to complete the Class EA is approximately \$2,195,000.

3. **FINANCING**

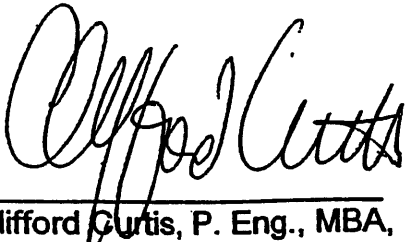
The cost of consulting services for the Class EA to address the capacity limitations of the existing outfall/diffuser at the Duffin Creek WPCP is to be shared equally between the Regions of Durham and York as follows:

Consultant: CH2M Hill (CH2M)	
Durham Region's Share (50%)	\$247,500
York Region's Share (50%)	<u>247,500</u>
Total	<u>\$495,000</u>

Funds for Durham Region's share are available from the 2008 Capital Sanitary Sewerage Budget Item 27 – "Durham Region's share of project to address the outfall limitations at the Duffin Creek WPCP, Pickering": \$250,000.

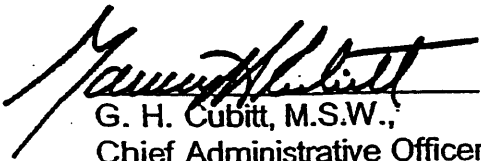
4. **CONCLUSION**

It is recommended that CH2M HILL Canada Limited (CH2M) be retained to provide engineering services for the initial stages of a Class Environmental Assessment (EA) to address the capacity limitations of the existing outfall/diffuser at the Duffin Creek Water Pollution Control Plant (WPCP) at an upset limit of \$495,000 (excluding disbursements and applicable taxes).



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

Recommended for Presentation to Committee



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

EPS3/rw