

DATE: June 7, 2010

REPORT TITLE: **PRE-PURCHASE OF OZONE EQUIPMENT FOR THE LAKEVIEW WATER TREATMENT FACILITY
CAPITAL PROJECT 07-1936
DOCUMENT 2010-024P
CITY OF MISSISSAUGA, WARD 1**

FROM: Dan Labrecque, Commissioner of Public Works

RECOMMENDATION

That the contract (Document 2010-024P) for the pre-purchase of ozone equipment for the Lakeview Water Treatment Facility be awarded to Fuji Electric at an estimated cost of \$3,800,000 (excluding applicable taxes), under Capital Project 07-1936, in accordance with Purchasing By-law 63-2008.

REPORT HIGHLIGHTS

- As part of the preliminary design of the Lakeview Water Treatment Facility expansion project, the preferred pretreatment method was determined to be ozone and biologically active carbon contactors. This system will be installed as part of a multi-barrier treatment approach and will be in service by mid-2013.
- The Region of Peel issued Request for Proposal 2010-024P to obtain ozone equipment for the Lakeview Water Treatment Facility. Staff have reviewed the proposals based on technical merit and life-cycle costing.
- The proposal was competitively bid and Fuji Electric is recommended for award.
- From the total award amount of \$3,800,000 (excluding applicable taxes), \$2,580,200 will be recovered from York Region based on the 67.9 per cent agreed cost split on this project, between the two municipalities.

DISCUSSION

1. Background

Phase 2 of the Lakeview Water Treatment Facility (WTF) is to satisfy growth, in accordance with the Water and Wastewater Master Servicing Plan. The Lakeview WTF is unique in Canada and was the first to adopt advanced water treatment at such a large scale. Phase 1 of the expansion has been in operation since 2007.

As part of Phase 1 of the expansion, the Region installed ozone as a pretreatment process prior to the membrane ultrafiltration system. By pre-treating the water with ozone and

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biologically active carbon contactors (BACC), the membrane system sizing was reduced by 15%.

In Phase 1, ozone was also used for disinfection. For Phase 2 it is being used for pretreatment only. UV disinfection system is being installed in lieu of ozone for disinfection. This selection was discussed in further detail in a report to General Committee on May 27, 2010 resolution number 2010-577.

2. Selection Process

The Region of Peel issued Request for Proposal Document 2010-024P to four firms who have experience in supplying and maintaining ozone systems of this size and complexity.

Three vendors submitted their proposals on time and the documents were found to be in order. The proposals were reviewed and evaluated by an evaluation committee made up of Region of Peel staff from Public Works, OCWA, and our consultant, CH2M Hill Canada. The evaluation included the vendor's experience, equipment reliability, operations and maintenance requirements, and after-sales service, as well as life cycle costs over a 20 year period. As the installation, operating and maintenance costs vary from vendor to vendor, it is important to evaluate each vendor over the life of the equipment rather than just the initial cost.

The results of the evaluation are listed below.

Vendor	Location	Overall Ranking	Technical (80 per cent)	Financial (20 per cent)
Fuji Electric	Saddlebrook, NJ	1	1	2
Mitsubishi Electric Power Products	Warrendale, PA	2	2	3
Ozonia North America	Leonia, NJ	3	3	1

The submission by Fuji Electric received the highest overall score when assessing the combination of technical proficiency and price. Fuji Electric provided the highest technical score, lowest initial capital cost and second lowest cost over 20 years. Based on the ranking above, Fuji Electric provided the best value system for the Region.

FINANCIAL IMPLICATIONS

There is sufficient funding available under Capital Project 07-1936 to award this project. From the total award amount of \$3,800,000 (excluding applicable taxes), \$2,580,200 will be recovered from York Region based on the 67.9 per cent agreed cost split on this project between the two municipalities.

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Dan Labrecque
Commissioner of Public Works

Approved for Submission:



D. Szwarc, Chief Administrative Officer

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