



**REPORT TO CORE AREA LIQUID WASTE MANAGEMENT COMMITTEE
MEETING OF WEDNESDAY 25 MARCH 2009**

**SUBJECT CORE AREA WASTEWATER TREATMENT PROJECT—CHARACTERIZATION OF
WASTEWATER SAMPLES ANALYSES—AWARD OF CONTRACT 09-1617**

PURPOSE

To award the contract to perform chemical analyses on wastewater samples collected as part of the core area wastewater treatment characterization project.

BACKGROUND

On February 11, 2009, the Core Area Liquid Waste Management Committee (CALWMC) approved a project to collect wastewater samples over a period of at least one year to provide more substantial and reliable information about the quality of wastewater during a variety of weather and seasonal conditions, through a range of time periods and flow conditions. The project is funded under Bylaw No. 3461, the *Liquid Waste Management Core Area and West Shore Service Loan Authorization Bylaw No. 1, 2007*.

Sampling will take place initially at Macaulay Point and Clover Point, with up to two additional sampling locations (e.g., Saanich East and West Shore) added as they are identified during the core area wastewater treatment site selection process. The information obtained from this sampling program will enable engineers to appropriately design wastewater treatment components and systems to ensure that the required quality of effluent, biosolids, air and receiving water is achieved during all operating conditions.

It is desirable that sample analyses for this project be carried out by a single local private analytical laboratory to ensure that the analyses are as consistent and accurate as possible from day to day, and that analyses are performed in a timely manner.

Potentially, sampling may be required beyond one year. To ensure that the cost per sample will be the same for the duration of the wastewater characterization project regardless of the number of samples and sampling sites, Capital Regional District (CRD) staff requested that laboratories provide price commitments based on a per sample basis for a term of up to two years.

Request for Proposals

A request for proposals (RFP) for laboratories to provide analytical services for wastewater samples was advertised in the Times Colonist and on the CRD website. RFP submissions had to include two separate components: a technical proposal and a sealed envelope fee proposal. Two laboratories submitted proposals. The submissions were evaluated by a team of three staff who evaluated the technical component following the procedures outlined in the RFP.

The technical scores of one laboratory were more than 15% lower than the highest rated proposal. Therefore, in accordance with CRD Board policy, only the fee proposal from the laboratory with the highest technical score was opened. The fee proposal from the laboratory with the lower technical score was returned unopened. The laboratory with the highest technical score is CANTEST Ltd. in Victoria.

Costs

Laboratories were requested to provide their costs on a cost per sample basis, for a term of up to two years. Table 1 outlines the final negotiated price per sample with CANTEST Ltd. Comparison of the cost per sample quoted by CANTEST Ltd. to known list prices of other laboratories showed that CANTEST costs are very competitive.

The annual cost of sampling is estimated to be \$132,820, assuming that the number of sampling sites increases from two to four during the summer of 2009. This cost is within the budget of \$155,000 allocated for this portion of the work. The actual total cost will depend on the number of sampling sites, the number of samples analysed and the overall duration of the characterization project.

Table 1 Wastewater Characterization Analytical Costs per Year of Sampling

	Daily Samples	Wet/Dry Weather Samples	15 th Day Samples	Storm Samples
Proposed Price per Sample¹	\$122	\$330	\$68	\$144
Number of Estimated Samples per Year	686	48	210	132
Estimated Total Cost² per Year	\$83,692	\$15,840	\$14,280	\$19,008

¹ Depends on the number of parameters analysed per sample.

² Depends on the number of samples analysed and the number of parameters analysed per sample.

ALTERNATIVES

1. That Contract 09-1617 for providing laboratory analytical services for wastewater samples be awarded to CANTEST Ltd. for a term of up to two years, at a cost of \$68 to \$330 per sample.
2. That Contract 09-1617 for providing laboratory analytical services for wastewater samples be retendered.

FINANCIAL IMPLICATIONS

The estimated annual cost for chemical analysis of wastewater is \$132,820, with a fixed per sample cost commitment for up to two years. This cost is included in the budget for the wastewater characterization project approved by the CALWMC on February 11, 2009. The project is funded under Bylaw No. 3461, the *Liquid Waste Management Core Area and West Shore Service Loan Authorization Bylaw No. 1, 2007*.

PROJECT IMPLICATIONS

The collection and analysis of wastewater characterization samples will ensure that treatment design engineers have enough information to adequately design future treatment facilities.

SUMMARY/CONCLUSIONS

The core area wastewater treatment project requires chemical analyses of wastewater samples to assist in future treatment plant design.

To fulfil the project objectives, it is necessary to collect and analyze samples over a variety of weather and seasonal conditions, and during a variety of time periods and flow conditions. To ensure that sample analyses are consistent, and to obtain a lower cost per sample, a 2-year contract term is used for this service. The selection of an analytical laboratory followed CRD Board policy and procedure for engaging consultants/laboratories. Through this competitive process, CANTEST Ltd. was rated highest. CANTEST Ltd. is a qualified company with extensive experience in conducting laboratory analyses for wastewater and other environmental samples.

RECOMMENDATION

That the Core Area Liquid Waste Management Committee recommend to the Board that Contract 09-1617 for providing laboratory analytical services for wastewater characterization samples for the core area wastewater treatment project, be awarded to CANTEST Ltd., for a term of up to two years, at a cost of \$68 to \$330 per sample.

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COMMENTS

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