



**REPORT TO CORE AREA LIQUID WASTE MANAGEMENT COMMITTEE
MEETING OF WEDNESDAY 24 JUNE 2009**

**SUBJECT RESPONSE TO LETTER FROM THE CITY OF COLWOOD REGARDING
INNOVATION OPPORTUNITY**

PURPOSE

To consider the City of Colwood's (the city) request for the Capital Regional District (CRD) to join in hosting the Boydel Wastewater Technologies Inc. (Boydel) electro-coagulation pilot test.

BACKGROUND

Mayor Dave Saunders wrote a letter to CRD Board Chair Geoff Young on 12 May 2009 requesting the CRD to join with the city in hosting the pilot test of the electro-coagulation treatment process by Boydel. The city has offered to host the pilot test to determine if the process can be validated for use as a secondary treatment process so Boydel may compete in the procurement process for the implementation of wastewater treatment for the Core Area Wastewater Management Program (CAWMP). The letter outlines an estimate of \$700,000 to complete the pilot test. The letter indicates that effluent from the pilot plant would be returned to the sewer system with the sludge disposed at the Hartland landfill.

The letter requests the CRD join in hosting the pilot test of the electro-coagulation process at one of three levels:

1. "CRD staff attending the test and observing the procedures and the testing firms monitoring the effluent quality, energy inputs, hydrogen production etc so as to be able to assess the usefulness of the technology."
2. "The above plus permission for the test to be carried out using sewage from the CRD sewer trunk within Colwood, subject to confirmation of safe and appropriate procedures to protect the environment and the public."
3. "Taking an active part in the test (Colwood has a budget of \$40,000 for this currently)."

This request for the CRD to participate in the electro-coagulation pilot test is one of many requests that the CRD has received from various vendors to consider pilot/trial tests or purchase of equipment for the CAWMP. As indicated in CRD's letter of 07 October 2008 to Boydel, the selection of all major equipment will be subject to a competitive process and a comprehensive technical evaluation.

Ledcor CMI is a major construction company and will be taking an active role in the pilot test with Boydel. CRD staff met with Boydel, the city and Ledcor CMI on 09 June 2009. The meeting took place to discuss permitting requirements, testing protocols, the pilot plant schematic, contacts and the role of the CRD.

CRD staff acknowledged they would remain at arm's-length and facilitate where possible. CRD staff offered to provide a testing protocol that could be used by an independent engineer to evaluate the results. CRD staff provided the Source Control Bylaw permitting requirements and recommended that Boydel contact the Ministry of Environment to determine their requirements. CRD staff also committed to visit the pilot plant on occasion while it is in operation.

Boydel indicated the pilot test will obtain sewage for the pilot plant at a manhole owned by the city on Wishart Road approximately 100 metres north of Brough Place. Therefore, approval from the CRD is not required to allow access and use of the sewage since the sewage will be drawn from the City owned system and the effluent from the pilot plant will be returned to the sewer system.

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CRD staff also indicated the CRD does not fund private research and development of treatment technologies and approval of the Core Area Liquid Waste Management Committee (CALWMC) and the CRD Board would be required for any active financial role in the pilot test.

FINANCIAL IMPLICATIONS

Additional funds would be required if the CALWMC wishes to recommend that the CRD take an active financial role in the pilot test.

SUMMARY

The City of Colwood requested the CRD to join in hosting a pilot test of Boydel's electro-coagulation treatment process. The CRD has limited resources to make staff available for the design, implementation and operation of the pilot plant. However, staff will be available to facilitate where possible and to make occasional site visits to observe the operation.

The CRD receives numerous requests to consider equipment or participate in pilot testing that may be applicable to the CAWMP and relies on the private sector, through appropriate research and development to demonstrate the effectiveness of specific treatment technologies.

RECOMMENDATIONS

That the Core Area Liquid Waste Management Committee recommend to the Board that:

- 1) staff be authorized to continue to facilitate the pilot test where possible and make occasional site visits to observe the plant operation; and
- 2) the Capital Regional District not take an active financial role in the pilot test.

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Concurrence

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