



**REPORT TO CORE AREA LIQUID WASTE MANAGEMENT COMMITTEE  
MEETING OF WEDNESDAY 07 JANUARY 2009**

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**SUBJECT      CORE    AREA    AND    WEST    SHORE    WASTEWATER    TREATMENT  
CHARACTERIZATION OF WASTEWATER – 2009 PROGRAM**

**PURPOSE**

To obtain approval for a wastewater characterization program in 2009 that will provide sufficient information on the quality of the wastewater to enable the design of the required wastewater treatment works.

**BACKGROUND**

Monitoring of wastewater discharges, surface waters and the seafloor environment in the vicinity of the Capital Regional District's Macaulay and Clover Point outfalls has been conducted as part of the Wastewater and Marine Environment program on a regular basis since the late 1980s. In addition, special investigations have been undertaken to define more clearly the effects of the outfalls on the receiving environment.

Now, with the requirement to provide wastewater treatment for the core area and west shore municipalities, substantial and reliable additional information is needed on the quality of the wastewater during a variety of weather and seasonal conditions and during a variety of time periods and flow conditions, including maximum day flow, maximum week flow and maximum month flow. This information will enable engineers to appropriately design wastewater treatment components and systems and to ensure that the required quality of effluent, biosolids, air and receiving water is achieved during all operating conditions.

The characterization work entails sampling the wastewater at a number of locations at regular and frequent intervals and testing it for a variety of parameters, including total suspended solids, biochemical oxygen demand, ammonia, pH and fecal coliforms. The testing work will be done by a laboratory to be selected through a competitive process. A temporary part-time individual will need to be engaged to pick up the samples and deliver or courier them to the lab on a daily basis.

The estimated total cost of this work in 2009 is \$350,000.

**ALTERNATIVES**

1. That the committee approve proceeding with a program to sample and test core area and west shore wastewater to provide sufficient information to facilitate treatment plant design.
2. That the committee not approve this work at this time.

**FINANCIAL IMPLICATIONS**

The estimated \$350,000 cost of the wastewater characterization work will be shared between Bylaw No. 3461 and a new bylaw which is expected to be presented to the committee in March 2009.

**SUMMARY/CONCLUSIONS**

Detailed information is required on the characteristics of the core area and west shore wastewater for various time periods and under a variety of weather and seasonal conditions, to provide sufficient information to enable engineers to appropriately design wastewater treatment components and systems.

**RECOMMENDATIONS**

That the Core Area Liquid Waste Management Committee approve:

1. proceeding with a program, at an estimated 2009 cost of \$350,000, to sample and test core area and west shore wastewater to provide sufficient information to facilitate treatment plant design; and
2. a temporary part-time individual be engaged to pick up the required wastewater samples daily and deliver or courier them to a laboratory for analysis.

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Concurrence

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