

REPORT TO SAANICH PENINSULA WASTEWATER COMMISSION MEETING OF THURSDAY 22 SEPTEMBER 2011

SUBJECT SAANICH PENINSULA TREATMENT PLANT WASTEWATER AND MARINE ENVIRONMENT PROGRAM – 2010 ANNUAL REPORT

<u>ISSUE</u>

The Capital Regional District (CRD) discharges municipal wastewater from the Saanich Peninsula treatment plant (SPTP). Regulatory requirements include assessment of potential impacts of the outfall on the marine receiving environment by the Wastewater and Marine Environment Program (WMEP). This report presents the results of the 2010 WMEP.

BACKGROUND

The Saanich Peninsula Liquid Waste Management Plan contains a commitment to carry out a monitoring program for the SPTP and report on this program to the Ministry of Environment (MOE). The program was developed in collaboration with the Marine Monitoring Advisory Group (MMAG) and implemented in 2004. The 2010 WMEP consisted of the following components:

- frequent (daily, weekly and monthly) analysis of wastewater for regulatory compliance parameters, treatment plant performance and quarterly analysis for priority substances
- monthly analysis of biosolids for fecal coliforms, golden nematodes and metals
- monthly monitoring of receiving waters for fecal coliforms and nutrients

The executive summary of the report, Saanich Peninsula Treatment Plant Wastewater and Marine Environment Program - 2010 Annual Report, by the CRD Environmental Protection division, is attached as Appendix A. The complete report is available on request from the CRD Environmental Sustainability department and on the CRD website.

ENVIRONMENTAL IMPLICATIONS

The current WMEP has been reviewed and approved by the MMAG and has been deemed appropriate for monitoring the effects of the outfall on the marine receiving environment. As such, the same WMEP design will be used in 2011. However, staff have reviewed the adequacy of the WMEP design, from an environmental assessment perspective, for the CRD core area outfalls in conjunction with MOE staff. A similar review of the SPTP WMEP design is planned for 2012.

ECONOMIC IMPLICATIONS

The routine components of the WMEP are included in the annual budget. The seafloor monitoring component is required every four years and is funded by a single supplementary request. Seafloor monitoring will be required again in 2012 and a single supplementary has been included in the 2012 budget.

CONCLUSION

The 2010 SPTP effluent quality met operating certificate compliance requirements on all sampling dates. Effluent quality monitoring indicated low potential for negative effects from the SPTP discharge on the marine receiving environment. Biosolids were within Class A limit, a quality that can be beneficially

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applied to land. Surface water fecal coliform data indicated low potential for health effects from recreational activities or shellfish harvesting near the outfall. Nutrient concentrations showed no effect from the discharge and were within expected ranges.

RECOMMENDATIONS

That the Saanich Peninsula Wastewater Commission:

- 1. receive the Saanich Peninsula Treatment Plant Wastewater and Marine Environment Program 2010 Annual Report for information; and
- 2. forward a copy of this report to the Ministry of Environment.

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Environmental Sustainability

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