



**DRAFT OPERATIONAL CERTIFICATE**  
ME-00270

*Under the Provisions of the Waste Management Act*

**Capital Regional District**  
**524 Yates Street**  
**P.O. Box 1000**  
**Victoria, British Columbia**  
**V8W 2S6**

is authorised to discharge effluent to Juan de Fuca Strait from a municipal wastewater collection and treatment system located in the Capital Regional District, British Columbia, subject to the conditions listed below. Contravention of any of these conditions is a violation of the Waste Management Act and may result in prosecution.

This operational certificate supersedes all previous versions of Permit PE-00270, issued under Part 2 Section 10 of the Waste Management Act.

**1. AUTHORISED DISCHARGES**

**1.1 Macaulay Point Outfall**

This subsection applies to the discharge of effluent from a **MUNICIPAL SEWERAGE SYSTEM AND LEACHATE FROM THE HARTLAND AVENUE LANDFILL SITE**. The site reference number for this discharge is -----.

**1.1.1** The maximum authorised rate of discharge is 200,000 m<sup>3</sup>/d.

**1.1.2** The average daily rate of discharge based on an annual averaging period is as follows:

|      |      |      |      |      |      |      |
|------|------|------|------|------|------|------|
| Year | 2000 | 2005 | 2010 | 2015 | 2020 | 2025 |
|------|------|------|------|------|------|------|

|                         |        |        |        |        |        |        |
|-------------------------|--------|--------|--------|--------|--------|--------|
| Flow, m <sup>3</sup> /d | 50,000 | 56,000 | 62,000 | 68,000 | 74,000 | 80,000 |
|-------------------------|--------|--------|--------|--------|--------|--------|

**1.1.3** The characteristics of the discharge shall not exceed:

Prior to the provision of additional treatment as provided in the Core Area Liquid Waste Management Plan:

Equivalent to or better than screened municipal sewage containing approximately 3% landfill leachate.

Subsequent to the provision of additional treatment as provided in the Core Area Liquid Waste Management Plan:

Equivalent to or better than 50% removal of total suspended solids average in any calendar month for flow through the treatment facility. Up to 1% of total annual flow may bypass the treatment facility and discharge through the bypass outfall and shall be equivalent to or better than screened municipal sewage containing approximately 3% landfill leachate.

**1.1.4** Prior to 31 December 2005, the authorised works are 6mm travelling screens, screenings handling facilities, odour control facilities, overflow facilities, pumping facilities, an outfall and diffuser extending approximately 1830 m from mean low water to a depth of 60 m below mean low water and related appurtenances approximately located as shown on attached Site Plan A.

Subsequent to 31 December 2005, the authorised works shall include 6mm screens on the bypass outfall and standby power.

Subsequent to the provision of additional treatment as provided in the Core Area Liquid Waste Management Plan, the authorized works shall include treatment facilities designed to remove 50% of total suspended solids on average, sludge handling facilities at Macaulay Point and a remote sludge processing facility.

Subsequent to 31 December 2020, the authorised works shall include an additional outfall or a replacement outfall to provide adequate capacity for anticipated flows.

**1.1.5** The authorised works must be complete and in operation as follows:

- 6mm travelling screens, screenings handling facilities, odour control facilities, overflow facilities, pumping facilities, an outfall and diffuser extending approximately 1830 m from mean low water to a depth of 60 m below mean low water, and related appurtenances on and from the date of this operational certificate;
- bypass outfall screens and standby power on or before 31 December 2005;
- additional treatment and sludge processing facilities as provided in the Core Area Liquid Waste Management Plan;
- additional outfall capacity on or before 31 December 2020.

**1.1.6** The location of the facilities from which the discharge originates is a portion of the Capital Regional District including the Hartland Road landfill.

**1.1.7** The location of the point of discharge is Juan de Fuca Strait near Macaulay Point.

## **2. GENERAL REQUIREMENTS**

### **2.1 Maintenance of Works and Emergency Procedures**

The Capital Regional District shall inspect the authorised works regularly and maintain them in good working order. In the event of an emergency or condition beyond the control of the Capital Regional District which prevents effective operation of the approved method of pollution control, the Capital Regional District shall notify the Regional Waste Manager immediately and take appropriate remedial action.

### **2.2 Bypasses**

Except as provided for in the Capital Regional District Core Area Liquid Waste Management Plan Chapter 13 Management of Wastewater Overflows, the Capital Regional District shall ensure that no waste is discharged without being processed through the authorised works unless prior written approval is received from the Regional Waste Manager.

### **2.3 Plans - New Works**

Plans and specifications of the new works authorised in Subsection 1.1.4 shall be certified by a qualified professional licensed to practice in the Province of British Columbia, and submitted to the Regional Waste Manager for review before construction. A qualified professional licensed to practice in the Province of British Columbia must certify that the works have been constructed in accordance with the

submitted plans.

#### **2.4 Posting of Outfall**

The Capital Regional District shall maintain the existing sign along the alignment of the outfall above high water mark. Any modifications to the wording and size of the sign requires the approval of the Regional Waste Manager.

#### **2.5 Outfall Inspection**

The Capital Regional District shall conduct a dye test on the outfall line (or inspect by another method approved by the Regional Waste Manager) every five years, or as may otherwise be required by the Regional Waste Manager.

#### **2.6 Standby Power**

The Capital Regional District shall provide auxiliary power facilities to insure that during power outages, the discharge from the authorised works continue to meet the effluent criteria specified in this operational certificate. These facilities shall be provided according to the schedule contained in the Capital Regional District Core Area Liquid Waste Management Plan.

#### **2.7 Odour Control**

Should objectionable odours, attributable to the operation of the sewage treatment works, occur beyond the property boundary, as determined by the Regional Waste Manager, measures or additional works will be required to reduce odour to acceptable levels.

#### **2.8 Sludge Wasting and Disposal**

Screenings and sludge wasted from the treatment works shall be disposed of to a site and in a manner authorised by the Regional Waste Manager and in accordance with the sludge management strategies developed in the Capital Regional District Core Area Liquid Waste Management Plan.

#### **2.9 Facility Classification and Operator Certification**

The Capital Regional District shall have the new sewage treatment works authorised by this operational certificate classified (and the classification shall be maintained) by the Environmental Operators Certification Program Society (Society). The works shall be operated and maintained by persons certified within and according to the program provided by the Society. Certification must be completed to the satisfaction of the Regional Waste Manager. In addition, the Regional Waste Manager shall be notified of the classification level of the facility and certification level of the operators,

and changes of operators and/or operator certification levels within 30 days of any change.

Alternatively, the works authorised by this operational certificate shall be operated and maintained by persons who the Capital Regional District can demonstrate to the satisfaction of the Regional Waste Manager, are qualified in the safe and proper operation of the facility for the protection of the environment.

## **2.10 Effluent Upgrading**

Based on receiving environment monitoring data and/or other information obtained in connection with this discharge, the Capital Regional District may be required to provide additional treatment facilities.

### 3. MONITORING AND REPORTING REQUIREMENTS

#### 3.1 Discharge Monitoring

##### 3.1.1 Sampling And Analyses

The Capital Regional District shall install a suitable sampling facility and obtain a sample of the discharge authorised in Subsection 1.1 in accordance with the following schedule:

| <u>Parameter</u>                          | <u>Frequency</u>   | <u>Type</u>     |
|---|--------------------|-----------------|
| 5-day Biochemical Oxygen Demand composite | once per month     | 24-hr           |
| Total Suspended Solids composite          | once per month     | 24-hr           |
| Ammonia Nitrogen composite                | once per month     | 24-hr           |
| pH  | once per month     | grab            |
| Faecal Coliform                           | once per month     | grab            |
| Priority Pollutants (as per LWMP)         | once every quarter | 24-hr composite |

Subsequent to the provision of additional treatment as provided in the Core Area Liquid Waste Management Plan, treatment plant influent and effluent shall be sampled and analysed for total suspended solids at a frequency of five times per week.

The composite sample is to consist of samples taken over a 24-hour period in proportion to flow and mixed to form a single sample. Proper care should be taken in sampling, storing and transporting the samples to adequately control temperature and avoid contamination, breakage, etc.

##### 3.1.2 Flow Measurement

Provide and maintain suitable flow measuring devices and record once per day the effluent volume discharged over a 24-hour period.

### 3.2 Receiving Environment Monitoring

A receiving environment monitoring program shall be carried out by the Capital Regional District in accordance with the Wastewater and Marine Assessment Program developed for the Capital Regional District Core Area Liquid Waste Management Plan.

### 3.3 Monitoring Procedures

#### 3.3.1 Sampling and Analytical Procedures

Flow Measurement shall be carried out in accordance with the procedures described in "Field Criteria for Sampling Effluents and Receiving Waters", April 1989, or by suitable alternative procedures as authorised by the Regional Waste Manager.

Copies of the above manual may be obtained from the Pollution Prevention Division, Ministry of Environment, Lands and Parks, P.O. Box 9342, Stn. Prov. Govt. Victoria, British Columbia V8W 9M1. The manual is also available for review at all Pollution Prevention Offices.

Sampling shall be carried out in accordance with the procedures described in the "British Columbia Field Sampling Manual for Continuous Monitoring Plus the Collection of Air, Air-Emission, Water, Wastewater, Soil, Sediment, and Biological Samples. 1996 Edition (Permittee)", or by suitable alternative procedures as authorised by the Regional Waste Manager.

Analyses are to be carried out in accordance with procedures described in the "British Columbia Environmental Laboratory Manual for the Analysis of Water, Wastewater, Sediment and Biological Materials (March 1994 Permittee Edition)", or by suitable alternative procedures as authorised by the Regional Waste Manager.

Copies of the above manuals may be purchased from the Queen's Printer Publications Centre, P. O. Box 9452, Stn. Prov. Gov't. Victoria, British Columbia, V8W 9V7 (1-800-663-6105 or (250) 387-6409), and are also available for inspection at all Pollution Prevention offices.

### 3.4 Reporting

Maintain data of analyses and flow measurements for inspection and every quarter submit the discharge data, suitably tabulated, to the Regional Waste Manager for the previous quarter. All reports shall be submitted within 30 days of the end of the quarter.

Receiving environment monitoring results and reports shall be submitted to the Regional Waste Manager in accordance with the schedule provided in the Capital Regional District Core Area Liquid Waste Management Plan.

### 3.5