



**MINISTRY OF ENVIRONMENT AND  
CLIMATE CHANGE STRATEGY**

**OPERATIONAL CERTIFICATE**

107189

*Under the Provisions of the Environmental Management Act*

*In Accordance with the Environmental Assessment Certificate #WD09-02  
and the Approved Thompson-Nicola Regional District Solid Waste Management Plan*

**Belkorp Environmental Services Inc.  
Suite 900 - 1508 West Broadway  
Vancouver, BC V6J 1W8**

**and**

**Village of Cache Creek  
Box 7  
Cache Creek, BC V0K 1H0**

are authorized to manage municipal solid waste and recyclable material and discharge residual solid waste to ground at a landfill located in Cache Creek, British Columbia, subject to the conditions listed herein. The two named parties are jointly and separately responsible for compliance with all Operational Certificate conditions. Contravention of any of these conditions is a violation of the *Environmental Management Act* and may result in prosecution.

**1. AUTHORIZED DISCHARGES**

1.1 This section applies to the discharge of municipal solid waste and other refuse specifically authorized in writing by the Director to the Campbell Hill Landfill (formerly known as the Cache Creek Landfill Extension). The site reference number for the overall discharge to the site is E305678.

1.1.1 The maximum rate of discharge is 750,000 tonnes per year.

1.1.2 Municipal solid waste must originate from within the province of British Columbia.

1.1.3 The discharge to ground is authorized by the Thompson-Nicola Regional District's approved Solid Waste Management Plan and must satisfy the

requirements of the Thompson-Nicola Regional District Solid Waste Management Plan.

- 1.1.4 Waste discharged to this landfill must not contravene or circumvent disposal bans established in the Regional District from which the waste originated.
- 1.1.5 The characteristics of the discharge must be municipal solid waste as defined in the *Environmental Management Act* and other wastes as specifically authorized in writing by the Director.

Waste asbestos may be discharged in accordance with section 40 of Hazardous Waste Regulation.

Materials prohibited from discharge include hazardous waste (excluding asbestos), bulk liquids (excluding leachate re-circulation), semi-solid waste containing free liquid, biomedical waste, incinerator ash or other materials that have the ability to create an exothermic reaction when hydrated (unless placed in a specially designed mono-fill cell) and the following:

- Recyclable Materials including:
  - a. used white goods,
  - b. auto hulks and other large metallic waste,
  - c. used tires,
  - d. used lead acid batteries,
  - e. gypsum wallboard (post 1990), and
  - f. corrugated cardboard.
- Any other waste and/or recyclable material regulated under the Ministry's Recycling Regulation when alternate recycling options become available.
- Other materials which may be designated by the Director when alternatives to disposal become available.

- 1.1.6 Waste must not be discharged outside the landfill footprint identified in Section 1.1.9.
- 1.1.7 The authorized works common to this section are a landfill with a double composite liner system consisting of an upper high density polyethylene membrane of a minimum 1.5 mm thickness over a geosynthetic clay liner and a lower high density polyethylene membrane of a minimum 2.0 mm thickness over a geosynthetic clay liner, locking gate to control access by the public, weigh scale, berms, covering material, surface water diversionary works, leachate collection and treatment works, environmental monitoring systems and related appurtenances located

within the landfill footprint shown in Site Plan B.

1.1.8 All authorized works must be complete and in operation prior to commencement of discharging and remain fully operational at all times.

1.1.9 The legal description specific to the **footprint of the 31 ha engineered MSW landfill** is:

Portion of Block C, Section 13, Township 21, Range 25, West of the Sixth Meridian, Kamloops Division Yale District

And inclusive of the conditions set forth under Section 2.12 of this Operational Certificate for a legal survey that identifies the metes and bounds for the landfill footprint.

1.1.10 The legal description of the **51 ha property boundary of the landfill** is:

Block C, Section 13, Township 21, Range 25, West of the Sixth Meridian, Kamloops Division Yale District.

1.1.11 The Facility is located approximately 1.2 km west of the intersection of Highway 1 and Campbell Hill Drive West within the village limits of Cache Creek. The Facility is immediately west and adjacent to the existing Cache Creek Landfill / Annex authorized under operational certificate MR-07577 shown in Site Plan A.

## 2. **DESIGN AND PERFORMANCE REQUIREMENTS**

### 2.1 **Design, Operations and Closure Plan**

The Operational Certificate holder must operate the Facility in accordance with a Design, Operations and Closure Plan (DOCP).

The DOCP must address each of the subsections in the Landfill Criteria including performance, siting, design, operational, closure and post-closure criteria and the Guideline for Environmental Monitoring at Municipal Solid Waste Landfills. The DOCP must be Certified by a Qualified Professional.

The DOCP must include, but is not limited to, information regarding:

- A filling plan for the design capacity of the landfill showing planned development of the individual phases and the cover borrow area. The plan must incorporate the concept of progressive closure required by Sections 6.1 and 6.2 and take into consideration environmental protection measures and the proposed end use of the site;
- Anticipated schedule for progressive closure activities;

- Estimated final elevation contours;
- Cell size, compaction details, daily, intermediate and final cover including types of materials used;
- Actions taken to ensure slope stability;
- A Hydrogeology and Hydrology Characterization Report in accordance with Section 2.3;
- A Leachate Management Plan in accordance with Section 3.13;
- Measures to minimize hazards to public safety;
- Measures to control vectors, odours, dust, wind-blown litter and scavenging;
- Fire prevention measures;
- List of recyclable materials accepted and how they are managed at the site;
- Incoming waste inspection, removal of unauthorized waste and staff supervision on the active face;
- A groundwater monitoring program in accordance with the requirements of Section 4.1;
- Contingency plans to address potential effects of each type of Emergency Contingency on cover material, groundwater management, landfill gas management, leachate management, slope stability, surface water management, and vegetation;
- Recommended action plan to be undertaken as a result of the existing and subsequent leachate management assessments required in Section 3.13;
- Recommended actions as a result of the existing and subsequent geotechnical, hydrogeological, landfill gas and any other assessments;
- A landfill gas management plan required by Section 2.5;
- A contingency plan to close the landfill is to be developed should the landfill close for any other reason;
- The Financial Security Plan required by Section 5.1;
- The Progressive Closure Plan required by Section 6.1; and
- The Closure Plan required by Section 6.2,
- A contaminating lifespan assessment made in accordance with the Landfill Criteria, taking into account latest available relevant monitoring information, and assuming that the landfill is permanently closed at each of the following times:
  - (i) as planned at the end of the final operating phase of the Landfill,
  - (ii) at the end of the phase during which the plan is submitted,
  - (iii) at the end of the phase following the phase during which the plan is submitted, if that phase is scheduled to begin within five years;

The above information must at a minimum encompass the next 10 years of operation.

Each DOCP prior to permanent closure must also include

- (a) a budget for Planned Emergency Contingency Measures associated with each type of Emergency Contingency identified in the DOCP;
- (b) a budget for permanent closure in accordance with the Operational Certificate assuming that the landfill is permanently closed at each of the following times:

- (iv) as planned at the end of the final operating phase of the Landfill,
- (v) at the end of the phase during which the plan is submitted,
- (vi) at the end of the phase following the phase during which the plan is submitted, if that phase is scheduled to begin within five years;
- (c) a budget to implement all Post-closure Activities described in the Landfill Criteria, assuming that the landfill is permanently closed at the times referred to in paragraph (b), including a year-by-year projected schedule of Post-Closure Activities and associated expenditures; and
- (d) a budget for all Administrative Necessities through the entire Post-closure Period, including a year-by-year allowance for Administrative Necessities sufficient to ensure that the Operational Certificate holder will be able to comply with this Operational Certificate during the Post-closure Period.

Budgets must:

- be prepared in accordance with the Landfill Criteria,
- show all activities included in the cost estimate, and indicate how costs for those activities were estimated;
- include costs associated with engineering assessments, construction oversight, and administration (may be presented as Administrative Necessities allowance for the Post-closure Period), and a contingency factor for cost overruns determined in accordance with the Landfill Criteria;
- include allowances for GST and PST payable on goods or services to which they apply.

For further clarity budgets required by this Section are not intended to be binding on the Operational Certificate holder but are intended to be conservative estimates of amounts required for security.

Should there be any inconsistency between this Operational Certificate and the DOCP, this Operational Certificate will take precedence unless otherwise agreed upon in writing by the Director.

The Operational Certificate holder must, by August 1, 2020, review the existing DOCP and submit an updated DOCP to the Director. Thereafter, during the operating life of the landfill, the Operational Certificate holder must review the most recent DOCP and submit an updated DOCP to the Director no later than the earlier of one year prior to the start of each phase of the landfill or any design revision that can reasonably be expected to change amounts required for security under Section 5.0, or five years from submission of the last update. The Operational Certificate holder must review and submit an updated DOCP to the Director at least two years prior to the date the landfill is reasonably expected to permanently stop receiving waste, and thereafter every five years from submission of the last update.

The Director may review any DOCP and require further information or analysis or adjustments. The Director may require additional reviews of the DOCP

based on the compliance history and design performance of the Facility. The Director may also require the Operational Certificate holder to obtain an independent or third party review of some or all of the DOCP.

## 2.2 **Geotechnical and Seismic Assessment**

The Operational Certificate holder must submit a Geotechnical and Seismic Assessment for the landfill that meets the Landfill Criteria. The assessment must address, at a minimum, slope stability during construction, operation, and post-closure as required. The Geotechnical and Seismic Assessment must be reviewed and updated at the same time as the DOCP is submitted and actions recommended in the assessment incorporated into the DOCP.

## 2.3 **Hydrogeology and Hydrology Characterization Report**

The Operational Certificate holder must include in the DOCP a Hydrogeology and Hydrology Characterization Report (HHCR). The HHCR must characterize the geology, hydrogeology, and surface hydrology at and near the Facility and must meet the requirements specified in the Landfill Criteria.

## 2.4 **Construction Report**

The Operational Certificate holder must submit a Construction Report after the completion of stage 1 construction and then after any significant construction and/or modification of the Facility, including, construction of or significant modification to: landfill base, landfill base liner, leachate management facilities, landfill gas management works, surface water management works, final cover or other works of similar significance. The Construction Report must meet the Landfill Criteria. Each Construction Report must be submitted within six months following completion of any significant addition and/or modification to landfill facilities and its authorized works.

## 2.5 **Landfill Gas Management**

The Operational Certificate holder must manage landfill gas in accordance with the *Landfill Gas Management Regulation*, its guidance documents, this Operational Certificate, and the *Environmental Management Act*.

At any time, based on any assessment, report or any other information, the Director may require the installation and operation of further gas recovery and/or pollution prevention works.

## 2.6 **Use of Qualified Professional(s)**

The Operational Certificate holder must cause a Qualified Professional to:

- a) design and supervise the construction of the Facility, and
- b) certify documents related to the Facility including plans, specifications, drawings, construction reports, assessments, reviews, investigations, studies, surveys, programs, reports and as-built record drawings.

In this Operational Certificate, where a document is required to be Certified by a Qualified Professional, it must:

- c) be addressed to the Director and the Ministry responsible for the *Environmental Management Act*, without any statements indicating that it is not for reliance, not intended to be relied on or that reliance on the document is at the risk of the persons to whom it is addressed, provided that it may be subject to such reasonable and appropriate assumptions and qualifications as are applicable in the particular circumstances;
- d) be signed, and if applicable under the professional governance rules applying the Qualified Professional, sealed by the Qualified Professional;
- e) include a statement that:
  - (i) the document has been prepared in accordance with the professional standards governing the Qualified Professional;
  - (ii) any statements of fact included in the document are, to the best of the knowledge and belief of the Qualified Professional, true, based on appropriate review and investigation;
  - (iii) any opinions expressed in the document are, based on professional judgement and review of available information, fair and reasonable;
- f) include a statement that, based on appropriate review and investigation, the document has been prepared in accordance with this Operational Certificate and any guidance in the Landfill Criteria.

Where the matters covered by a document are within the expertise of different professions, the document may be divided into multiple sections, with each section including separate certifications.

## 2.7 **Intentionally Left Blank.**

## 2.8 **Public Health, Safety and Nuisance**

The landfill must be operated in a manner such that it will not create a public nuisance or become a significant threat to public health or safety with respect to landfill gas, unauthorized access, roads, traffic, airport activity, noise, dust, litter, vectors, or wildlife attraction.

## 2.9 **Ground and Surface Water Diversion**

Discharge of municipal solid waste and other waste materials into water is prohibited. The Operational Certificate holder must construct and maintain adequate surface water and groundwater diversion works to minimize surface water run-off and groundwater seepage from entering the landfill.

## 2.10 **Ground and Surface Water Quality Impairment**

The landfill must be operated in a manner such that ground or surface water quality conditions do not result in a risk of impairment of designated water uses at and beyond the property boundary or 150 metres from the landfill footprint, whichever is closer. Water quality assessments must utilize Approved and Working Water Quality Guidelines, background levels or other appropriate criteria as specified by the Director.

If exceedances to the specified water quality criteria occur as a result of landfill operations, the Director may require that control measures or works be undertaken in addition to those outlined in Section 3.13.

## 2.11 **Buffer Zones**

The Operational Certificate holder must maintain a buffer zone between the landfill footprint and the property boundary identified in Section 1.1.11 and Section 2.12 (excluding any existing or future right-of-ways).

The buffer zone must be a minimum distance of 10 metres between the landfill footprint and the property boundary of the existing Cache Creek Landfill / Annex authorized under operational certificate MR-07577 and a minimum distance of 50 metres between the landfill footprint and the remaining property boundaries to the north, west and south. The buffer zone will provide separation between the waste footprint and the property boundary but may allow for operational infrastructure such as containment berms, access roads, forest service roads, etc.

## 2.12 **Survey of the Landfill**

The Operational Certificate holder must conduct a legal survey which identifies the metes and bounds for both the limits of the landfill footprint and the boundaries of the landfill site. Copies of the land surveys must be kept on file for review if requested by the Director. The corners and breakpoints of landfill site boundaries must be established and maintained in the field.

The Operational Certificate holder must also conduct an annual survey of the height, contour, surface area and settlement of the landfill and submit the results as part of the Annual Report.



### 2.13 Authorization Requirements

Where this authorization provides that the Director may specify a matter or require an action to be carried out, the Operational Certificate holder must comply with the specification and carry out the action in accordance with the requirements of the Director.

### 2.14 Additional Requirements

The Director may require the Operational Certificate holder to:

- (a) Cause a Qualified Professional to certify and submit to the Director additional, amended or improved documents in respect of the Facility including plans, specifications, drawings, construction reports, assessments, reviews, investigations, studies, surveys, programs, reports and as-built record drawings;
- (b) Carry out actions in accordance with the additional, amended or improved documents submitted, and additional actions as specified;
- (c) Repair, alter, remove, improve or add to existing facilities and works, or construct new facilities and works, at the Facility.

## 3. OPERATIONAL REQUIREMENTS

### 3.1 Glossary

The following terms when capitalized in this authorization have the meanings ascribed below. Other terms used in this authorization have the same meaning as those defined in the *Environmental Management Act*, applicable regulations, and the Landfill Criteria, unless the context indicates a contrary intent.

“**Accumulated Deficit**” means the total, if it is negative, of any Deficit Amounts (expressed as a negative) and any Surplus Amounts (expressed as a positive);

“**Accumulated Surplus**” means the total, if it is a positive, of any Deficit Amounts (expressed as a negative) and any Surplus Amounts (expressed as a positive);

“**Administrative Necessities**” mean activities carried out during the Post-closure Period which are necessary and primarily needed for the purpose of ensuring that the Operational Certificate holder can implement Post-Closure Activities and Emergency Contingency Measures;

“**Annual Report**” means the Annual Operations and Monitoring Report

required under Section 4.7;

“**Budgeted Post-closure Activity**” means a Post-closure Activity for which a specific amount has been budgeted in the Post-closure Plan, or prior to the submission of a Post-closure Plan, the DOCP;

“**Certified**” means certified in accordance with Section 2.6;

“**Closure Plan**” means the plan required under Section 6.2;

“**Commercial Quality Soil**” means soil which does not contain any substance with a concentration exceeding the lowest applicable numerical soil standard for commercial land use as set forth in the Contaminated Sites Regulation;

“**Deficit Amount**” means in relation to a period, Total Budgeted Amount for that period minus all amounts paid out from the Reclamation Security Trust for expenditures in respect of that period, if the remainder is negative;

“**Facility**” means the Campbell Hill Landfill, including all facilities and works on the landfill site, located in Cache Creek, British Columbia. The Facility is distinct and separate from the existing Cache Creek Landfill / Annex authorized under operational certificate MR-07577;

“**Emergency Contingencies**” means reasonably foreseeable potential events, including earthquakes, accidental spills, extreme weather events, illegal dumping, overflows from subsurface fires, and wildfires, that cause damage to the Facility or otherwise require implementation of measures to protect the environment;

“**Emergency Contingency Measures**” means measures necessary to address potential or actual effects of Emergency Contingencies on cover material, groundwater management, landfill gas management, leachate management, slope stability, surface water management and vegetation at the Facility;

“**GST**” means the Goods and Services Tax payable under the *Excise Tax Act*, and any successor tax;

“**ILOC**” means an irrevocable letter of credit in favour of the Province;

“**Insolvency Event**” means any of the following:

- (a) any order is made, a resolution is passed or a petition is filed, for the Operational Certificate holder’s liquidation or winding up,
- (b) the Operational Certificate holder commits an act of bankruptcy, makes an assignment for the benefit of its creditors or otherwise acknowledges its insolvency,

- (c) a bankruptcy petition is filed against the Operational Certificate holder or a proposal under the *Bankruptcy and Insolvency Act* is made against the Operational Certificate holder,
- (d) a compromise or arrangement is proposed in respect of the Operational Certificate holder under the *Companies' Creditors Arrangement Act*,
- (e) a receiver or receiver-manager is appointed for any of the Operational Certificate holder's property;

**"Landfill Criteria"** means the *Landfill Criteria for Municipal Solid Waste*, Second Edition, June 2016, as it is amended or replaced from time to time, or other appropriate guidance or regulation in place at the time, as determined by the Director;

**"Planned Emergency Contingency Measures"** means, in relation to a specific Emergency Contingency, the measures set out in the DOCP for that Emergency Contingency;

**"Post-closure Activities"** means all activities required by this Operational Certificate or relevant regulations following permanent closure, including inspection, implementation of the post-closure monitoring program, operation of pollution abatement engineering works referred to in Section 6.2, maintenance, and reporting and correction of any deficiencies identified in the review and assessment report, but does not include Emergency Contingency Measures or any measures necessary to fully implement the Closure Plan;

**"Post-closure Emergency Contingency Security"** means security for implementation of Emergency Contingency Measures in the Post-closure Period which the Operational Certificate holder may post under Section 5.2.2 as an alternative to securing such measures through the Reclamation Security Trust;

**"Post-closure Period"** means the period following certification by a Qualified Professional that the Closure Plan has been Substantially Completed and ending at the end of the contaminating lifespan;

**"Post-closure Plan"** means the plan required under Section 6.3;

**"Province"** means Her Majesty the Queen in right of British Columbia;

**"PST"** means the tax payable under the *Provincial Sales Tax Act*, and any successor tax;

**"Qualified Professional"**, in relation to a duty or function referred to in this Operational Certificate, means an individual who:

- (a) is registered in British Columbia with a professional organization, is acting under that organization's code of ethics and is subject to disciplinary action by that organization, and

(b) through suitable education, experience, accreditation and knowledge, may reasonably be relied on to provide advice within his or her area of expertise, which area of expertise is applicable to the duty or function;

“**Reclamation Security Trust**” means the Reclamation Security Trust established under Section 5.3;

“**Regulatory Document**” means any document that the Operational Certificate holder is required to prepare or submit to the Director or the Province, pursuant to: (i) this Operational Certificate; (ii) any regulation made under the *Environmental Management Act* that regulates the Facility or the discharge of waste from the Facility; or (iii) any order issued under the *Environmental Management Act* directed against the Operational Certificate holder that is related to the Facility or the discharge of waste from the Facility;

“**Substantially Completed**” means, in relation to closure of the Facility, that the remaining costs of fully implementing the Closure Plan in accordance with this Operational Certificate are less than 10% of the total cost of implementing the Closure Plan after the Facility stops receiving waste;

“**Suitable Cover**” means soils utilized in accordance with Section 3.5 or other material acceptable to the Director;

“**Surety Bond**” means an irrevocable surety bond in favour of the Province;

“**Surplus Amount**” means Surplus Amount” means, in relation to a period, Total Budgeted Amount for that period minus all amounts paid out from the Reclamation Security Trust for expenditures in respect of that eriod, if the remainder is positive;

“**Total Budgeted Amount**” means in relation to a calendar quarter, the total of the amounts budgeted, or allowances made, in the Post-closure Plan for that calendar quarter for Budgeted Post-closure Activities and Administrative Necessities;

“**Trustee**” means the trustee of the Reclamation Security Trust at the relevant time;

“**Unbudgeted Post-closure Activity**” means a Post-closure Activity for which no specific amount has been budgeted in the Post-closure Plan or DOCP;

“**Worst Case Emergency Contingency**” means the Emergency Contingency for which the Planned Emergency Contingency Measures have the highest cost.

### 3.2 Bypasses

The discharge of effluent which has bypassed site control works as listed in Section 1.1.7 is prohibited unless the prior approval of the Director is obtained and confirmed in writing. In the event of an emergency, Section 3.3 must be followed.

### 3.3 **Emergency Procedures**

In the event of an emergency or condition beyond the control of the Operational Certificate holder including, but not limited to, unauthorized fires arising from spontaneous combustion or other causes, or detection of leachate impacting groundwater, the Operational Certificate holder must take appropriate remedial action and notify the Director promptly. The Director may reduce or suspend operations to protect the environment until the authorized works have been restored, and/or corrective steps taken to prevent unauthorized discharges.

### 3.4 **Inspections**

The Operational Certificate holder must inspect the authorized works regularly and maintain them in good working order. The Director must be immediately notified of any malfunction of these works.

The Operational Certificate holder must inspect the property boundaries regularly and notify the Director of any visual evidence of environmental impacts on adjacent properties.

### 3.5 **Soil Management**

Soil and rock excavated within the limits of the landfill property boundary as well as other soil meeting the commercial land use standard, as set forth in the Contaminated Sites Regulation, may be utilized for berm construction, daily, intermediate and final cover, top dressing and landscaping.

Soils utilized for liner, berm and road construction, daily, intermediate and final cover, top dressing and landscaping shall not be included in determining the rate of discharge specified in Section 1.1.1.

### 3.6 **Waste Compaction and Covering**

All waste must be placed in cells of a size determined by a Qualified Professional, and in accordance with the DOCP. The working face must be confined to the smallest practical area. The waste must be compacted and covered as per the DOCP.

Daily cover consisting of a minimum of 0.15 metres of Suitable Cover material or a functionally alternate cover material, as authorized by the Director, must be applied to the working face at the end of each operating day. If alternate cover

is utilized, then the working face must be covered with a minimum of 0.15 metres of Suitable Cover at least once every week or as approved by the Director. Intermediate cover, consisting of a minimum 0.30 metres of Suitable Cover material must be applied within 30 days to any area of the landfill which will not receive any further waste for 30 days. The Director may vary the frequency of covering when freezing conditions adversely affect normal operation.

### 3.7 **Completed Areas of the Landfill**

The Operational Certificate holder must apply final cover to any area of the landfill which will not receive any further waste. Final cover is to be applied within 365 days once the total area requiring final cover exceeds 1.5 hectares. Final cover must be applied in accordance with the DOCP and must consist of a minimum of 1.0 metre of low permeability ( $<1 \times 10^{-5}$  cm/s) compacted soil (or equivalent) cap plus a minimum of 0.15 metre of topsoil and suitable vegetative cover, or as approved by the Director.

With the written approval of the Director, the topsoil used for the final cover may be mixed with conditioning agents such as compost and the like to add organics and improve the moisture holding capacity and nutrient value of the soil (excluding biosolids). Soil must be utilized in accordance with Section 3.5. Final cover must be constructed and maintained with adequate drainage and erosion controls and seeded with suitable native grasses. Surface water runoff must be directed away from the landfill footprint, as per the DOCP.

### 3.8 **Wildlife and Vector Management**

Vectors (carriers capable of transmitting a pathogen from one organism to another including, but not limited to, flies and other insects, rodents, and birds) must be controlled by the application of cover material at the required frequency per Section 3.6 or by such additional methods as specified by the DOCP. The Facility must be operated so as to minimize the attraction of wildlife such as bears and birds by applying cover at required frequencies and instituting a good housekeeping program.

Additional works may be required or other operating instructions may be issued by the Director, should a wildlife nuisance or hazard arise.

### 3.9 **Electric Fencing**

The Operational Certificate holder must maintain an electrified bear fence, at a minimum, around the landfill footprint, or implement alternative bear-proofing measures, acceptable to the Director, that will deter bears from entering the landfill footprint. Any significant occurrences or observations of wildlife (medium and large carnivores) at the landfill must be immediately reported to

the Ministry's Conservation Officer Service.

### 3.10 **Litter Control**

Litter must be controlled by compacting the waste, minimizing the working face, applying cover at the required frequencies, providing litter control fences and instituting a regular litter pickup and general good housekeeping program, or as specified by the Director.

### 3.11 **Fire Prevention and Control**

The Operational Certificate holder must take all reasonable measures necessary to prevent fires from occurring at the Facility and is responsible for complying with all local fire safety requirements. The Operational Certificate holder must provide adequate fire breaks that are free of combustibles around the perimeter of the landfill footprint.

The Operational Certificate holder must maintain firefighting equipment and materials as required. In the event of a landfill fire, the Operational Certificate holder must immediately notify the local fire department, the Provincial Emergency Program and the Director.

### 3.12 **Posting of Signs**

The Operational Certificate holder must post signage at the entrance of the Facility with the following current information including:

- Site name;
- Owner and operator;
- Contact telephone number and address for the owner and operator;
- 24 hour telephone number in case of emergency;
- Hours of operation;
- Materials and wastes accepted for recycling and landfilling;
- Prohibited materials and wastes; and
- Tipping fees (if the site is open to the public).

### 3.13 **Leachate Management**

The Operational Certificate holder must take measures to minimize leachate generation, including but not limited to, providing effective covering and surface water management. Actions taken and their effectiveness must be detailed in the Annual Report.

The Operational Certificate holder must submit a Leachate Management Plan for the Facility to the Director as part of the DOCP. The plan must be in accordance with the Landfill Criteria and the Guidelines for Environmental

Monitoring at Municipal Solid Waste Landfills.

The Leachate Management Plan must review the adequacy of the works, including surface water diversion measures, in place to protect the receiving environment and identify any necessary upgrades and include a schedule for their implementation. Once implemented, the upgraded works shall form part of the authorized works identified in Section 1.1.7.

### 3.13.1 Leachate Re-Circulation

Re-circulation of landfill leachate on designated areas within the landfill footprint may be conducted subject to the following conditions:

- a) The maximum leachate application per re-circulation event and frequency of re-circulation (minimum days between irrigation events) must be determined on the advice of a Qualified Professional and must be reviewed and revised as applicable by a Qualified Professional every year.
- b) Re-circulation events should be managed (scheduled, timed and interrupted as necessary) to ensure that spray drift and surface runoff beyond the designated area is minimized.

The Operational Certificate holder must develop a Contingency Plan for leachate management that can be deployed in the event that the leachate re-circulation cannot be utilized for the management of leachate. The Contingency Plan must be part of the Leachate Management Plan.

## 4. MONITORING AND REPORTING REQUIREMENTS

### 4.1 Environmental Monitoring Plan

The Operational Certificate holder must submit to the Director an Environmental Monitoring Plan Certified by an appropriate Qualified Professional(s) by **December 31, 2016**. The Plan must meet the requirements set forth in the Landfill Criteria, the Guideline for Environmental Monitoring at Municipal Solid Waste Landfills and the Landfill Gas Management Facilities Design Guidelines (for aspects related to landfill gas management).

The Environmental Monitoring Plan must be kept up-to-date at all times and the Operational Certificate holder must maintain records of all monitoring program data and analyses available for inspection. Any changes to the Environmental Monitoring Plan require the Operational Certificate holder to resubmit the entire plan with the changes to the Director.

Based on the information submitted in the Annual Report, or any other information relevant to the Facility, the Director may vary the frequency,



location and analyses of environmental monitoring as warranted.

The Operational Certificate holder must create an appendix at the end of the Environmental Monitoring Plan that tracks all changes made to the plan over the years.

#### 4.1.1 **Slope Stability Monitoring**

The Operational Certificate holder shall regularly monitor for evidence of slope instability as part of regular operations for evidence of tension cracking, veneer instability or failure.

#### 4.2 **Sampling Procedures**

Sampling is to be carried out in accordance with the procedures described in the "British Columbia Field Sampling Manual for Continuous Monitoring and the Collection of Air, Air-Emission, Water, Wastewater, Soil, Sediment, and Biological Samples, 2013 Edition (Permittee)", or most recent edition, or by suitable alternative procedures as approved by the Director.

A copy of the above manual is available on the Ministry web page at <https://www2.gov.bc.ca/gov/content/environment/research-monitoring-reporting/monitoring/laboratory-standards-quality-assurance>.

#### 4.3 **Analytical Procedures**

Analyses are to be carried out in accordance with procedures described in the "British Columbia Laboratory Manual (2015 Permittee Edition)", or the most recent edition, or by suitable alternative procedures as approved by the Director.

A copy of the above manual is available on the Ministry web page at <https://www2.gov.bc.ca/gov/content/environment/research-monitoring-reporting/monitoring/laboratory-standards-quality-assurance>.

#### 4.4 **Waste and Recyclable Materials Recording**

The Operational Certificate holder must record the quantity, in tonnes, of waste, recycling, organics and soil received at the landfill. Also, the quantity of recyclable materials, organics and soil removed from the Facility must be recorded.

#### 4.5 **Records Management**

The Operational Certificate holder must maintain the following information and records, current and suitably tabulated, at the Facility office for inspection:

- A copy of Operational Certificate 107189 including any amendments

- hereto;
- Training procedures and personnel training records;
  - Contingency plans and notification procedures;
  - The current DOCP;
  - Inspection records from staff and regulatory agencies;
  - Most recent hydrogeological, hydrology, geotechnical and landfill gas management assessments;
  - Incoming waste records;
  - Environmental monitoring results and interpretations;
  - Records of Commercial Quality Soil used as cover material identified in Section 3.5 along with records of soil shipped offsite; and
  - Annual Reports for the previous 5 years.

#### 4.6 **Monitoring Committee**

A Monitoring Committee must be established with representatives from the community, including the Bonaparte and Ashcroft First Nation Bands. Details of site development, operations, closure, post-closure and on-going environmental monitoring and interpretation must be shared with the Monitoring Committee. The purpose of the Monitoring Committee is to promote environmentally sound operations and effective monitoring.

#### 4.7 **Reporting**

The Operational Certificate holder must prepare an Annual Operations and Monitoring Report (Annual Report) that meets the Landfill Criteria and must include, but is not limited to, the following:

- Summaries of waste and recyclable material records, with the amount of waste landfilled reported as a volume and tonnage;
- Updated estimates for the remaining capacity, closure date for the current phase and closure date for the current landfill footprint;
- An update on the financial security for the site including a statement of the current dollar value of the Reclamation Security Trust, Surety Bonds, and ILOCs required under Section 5.2 and the information referred to in Section 5.1.2(b) and (c);
- Results of the annual survey required under Section 2.12;
- An evaluation of leachate generation control measures, including the amount of leachate stored in each underground storage tank, how much leachate was re-circulated into the landfill and how much leachate was shipped offsite;
- Results of the landfill gas capture, destruction/utilization (when applicable) and monitoring;
- A review of the geology, hydrogeology, and surface water at and near the Facility. This review will inform and support applicable recommended changes to the DOCP and Environmental Monitoring Plan;

- Recommendations to update the DOCP and Environmental Monitoring Plan, as applicable;
- Revised Environmental Monitoring Plan;
- Identification of operating problems and corrective actions taken;
- A summary of environmental complaints received and their resolution;
- A summary of significant occurrences or observations of wildlife (medium and large carnivores) at the landfill;
- In the event of any non-compliance with the conditions of this Operational Certificate, an action plan and schedule to achieve compliance; and
- The results of all monitoring programs as specified in this Operational Certificate including data interpretation, trend analysis and comparison to the receiving environment water quality guidelines and performance criteria in the Landfill Criteria, the Guidelines for Environmental Monitoring at Municipal Solid Waste Landfills. Where applicable, data should be considered in conjunction with data/information related to the adjacent closed landfill, and any other applicable local activities and land uses.

For each Annual Report submitted in respect of a calendar year that covers or follows the first payment of funds from the Reclamation Security Trust, the report must include a division on expenditures from the Reclamation Security Trust that:

- (i) identifies all payments made by the Trustee from Reclamation Security Trust funds;
- (ii) identifies all expenses incurred and paid for from the Reclamation Security Trust funds, broken down by specific Post-closure Activities, as identified in the Post-Closure Plan, Administrative Necessities and, if applicable, Emergency Contingency Measures;
- (iii) identifies all GST or PST paid in relation to the above expenses, identifies any credits or refunds paid in relation to such taxes, and identifies how such credits or refunds were used;
- (iv) identifies any Accumulated Surplus or Accumulated Deficit at the beginning and end of the calendar year;
- (v) for each category of expenses referred to in paragraph (ii) compares the amount expended, with the amount budgeted or the allowance;
- (vi) in relation to any Unbudgeted Post-closure Activity, expresses an opinion as to whether the action was reasonably necessary to protect the environment or required to comply with this Operational Certificate, a regulation under the *Environmental Management Act* relating to the Facility, an order of the Director, or any other applicable law or regulation related to reclamation of the Facility;
- (vii) in relation to all Post-closure Activities and Emergency Contingency Measures, expresses an opinion as to whether the amounts expended have been expended in a prudent, commercially reasonable manner taking into consideration that the object of this requirement is to ensure that funds are available for necessary Post-

closure Activities through the entirety of the Post-closure Period and taking into consideration any exigencies, and expended in compliance with this Operational Certificate;

- (viii) expresses an opinion that no funds have been used for purposes other than Post-closure Activities, Administrative Necessities and, if the Operational Certificate holder has provided security for Emergency Contingency Measures through the Reclamation Security Trust as an alternative to posting a Post-Closure Emergency Contingency Security, Emergency Contingency Measures.

The Annual Report for the preceding calendar year must be Certified by a Qualified Professional and submitted electronically to the Director by **March 31** of each year.

The Annual Report is intended as an operational update and monitoring report and also a self-assessment and review of compliance with the conditions of this Operational Certificate. The content of the report should provide the Ministry sufficient details to confirm that monitoring activities for the site have been completed for the subject year and to make an informed assessment of the environmental performance of the site.

#### 4.8 **Submission of Routine Reporting**

The Operational Certificate holder must submit all routine Regulatory Documents required by this Operational Certificate by email to the Ministry's Routine Environmental Reporting Submission Mailbox at [EnvAuthorizationsReporting@gov.bc.ca](mailto:EnvAuthorizationsReporting@gov.bc.ca) or as otherwise instructed by the Director. For guidelines on how to properly name the files and email subject lines or for more information visit the Ministry website <https://www2.gov.bc.ca/gov/content/environment/waste-management/waste-discharge-authorization/data-and-report-submissions/routine-environmental-reporting-submission-mailbox>.

#### 4.9 **Notification of Post-closure Emergency Contingency Measures or Unbudgeted Post-closure Activities**

The Operational Certificate holder must submit notice under:

- (a) section 5.4(d)(i) and (ii)(A) [*Request for Emergency Contingency Measure Funds*] to [Authorizations.South@gov.bc.ca](mailto:Authorizations.South@gov.bc.ca) clearly marked with the subject "**OC 107189 Emergency Contingency Expenditures**" or as otherwise instructed by the Director;
- (b) section 5.5(c) [*Notice of Unbudgeted Post-Closure Activity Expenditure*] to [Authorizations.South@gov.bc.ca](mailto:Authorizations.South@gov.bc.ca) clearly marked with the subject "**OC 107189 Unbudgeted Post-closure Activity Expenditure**" or as otherwise instructed by the Director.

#### 4.10 **Non-compliance Notification**

The Operational Certificate holder must immediately notify the Director or designate by email at [EnvironmentalCompliance@gov.bc.ca](mailto:EnvironmentalCompliance@gov.bc.ca), or as otherwise instructed by the Director, of any non-compliance with the requirements of this authorization by the Operational Certificate holder and take remedial action to remedy any effects of such non-compliance.

The Operational Certificate holder must provide the Director with written confirmation of all such non-compliance events, including available test results within 24 hours of the original notification by email at [EnvironmentalCompliance@gov.bc.ca](mailto:EnvironmentalCompliance@gov.bc.ca), or as otherwise instructed by the Director.

#### 4.11 **Non-compliance Reporting**

If the Operational Certificate holder fails to comply with any of the requirements of this authorization, the Operational Certificate holder must, within 30 days of such non-compliance, submit to the Director a written report that is satisfactory to the Director and includes, but is not necessarily limited to, the following:

- a) all relevant test results obtained by the Operational Certificate holder related to the non-compliance,
- b) an explanation of the most probable cause(s) of the non-compliance, and
- c) a description of remedial action planned and/or taken by the Operational Certificate holder to prevent similar non-compliance(s) in the future.

The Operational Certificate holder must submit all non-compliance reporting to be submitted under this section by email to the Ministry's Compliance Reporting Submission Mailbox at [EnvironmentalCompliance@gov.bc.ca](mailto:EnvironmentalCompliance@gov.bc.ca) or as otherwise instructed by the Director. For guidelines on how to report a non-compliance or for more information visit the Ministry website <https://www2.gov.bc.ca/gov/content/environment/waste-management/waste-discharge-authorization/data-and-report-submissions/compliance-reporting-mailbox>.

#### 4.12 **Publication of Documents**

The Ministry publishes Regulatory Documents on its website for the purpose of research, public education and to provide transparency in the administration of environmental laws. The Operational Certificate holder acknowledges that the Province may publish any Regulatory Document excluding information that would be excepted from disclosure if the document was disclosed pursuant to a request under section 5 of the *Freedom of Information and Protection of*

*Privacy Act*, and the Operational Certificate holder consents to such publication by the Province.

## 5. **FINANCIAL SECURITY REQUIREMENTS**

### 5.1 **Financial Security Plan**

- 5.1.1 Each time the holder of this Operational Certificate submits an updated DOCP under Section 2.1, the Operational Certificate holder must review amounts held in security and submit to the Director an updated Financial Security Plan and post any additional security amounts required in accordance with Sections 5.2 and 5.3. The review should, if necessary, propose changes to the terms, conditions and investment strategies associated with the Reclamation Security Trust.
- 5.1.2 The Financial Security Plans must incorporate and be consistent with the requirements of Sections 5.2 and 5.3 of this Operational Certificate. Updated Financial Security Plans required under this Section 5.1 must:
- (a) be consistent with budgets and schedules of expenditures in the DOCP and the Post-closure Plan;
  - (b) provide a comparison between budgets required by the DOCP or Post-closure Plan for closure, Post-closure Activities, and Planned Emergency Contingency Measures associated with Worst Case Emergency Contingency, adjusted for inflation, with amounts secured for such purposes by ILOC or Surety Bond;
  - (c) in relation to the Reclamation Security Trust, compare the amount held in trust together with projected growth in trust funds less projected expenses against projected schedules of expenditures for Post-closure Activities, the allowance for Administrative Necessities, adjusted for inflation, and, unless the Operational Certificate holder has posted Post-closure Emergency Contingency Security, budgets for implementing Planned Emergency Contingency Measures associated with the Worst Case Emergency Contingency, and
  - (d) include an opinion that, based on calculations made in accordance with the Landfill Criteria, the amounts held as security can reasonably be anticipated to be sufficient to cover all Budgeted Post-closure Activities, including contingency factors for cost over-runs, Administrative Necessities, and the Planned Emergency Contingency Measures associated with the Worst Case Emergency Contingency, provided, however, that no discounts should be applied to amounts secured by ILOCs or Surety Bonds.

The Financial Security Plan must be Certified by a Qualified Professional.

The Director may review any Financial Security Plan submitted under this Section 5.1 and require further information or analysis or adjustments

consistent with Sections 5.2 and 5.3.

## 5.2 Security Required for the Design and Operational Period

5.2.1 **Requirement for ILOC or Surety Bond.** The Operational Certificate holder must post security in the form of one or more ILOCs or Surety Bonds prior to commencement of discharge to the landfill. Such security must be in a form acceptable to the Director and must remain in place until:

- (a) such time as the landfill has permanently ceased receiving waste;
- (b) the Post-closure Plan has been approved by the Director;
- (c) the landfill has been closed in accordance with the then current Closure Plan; and
- (d) the Director has confirmed in writing that the amounts held in the then current Reclamation Security Trust are sufficient to cover Post-closure Activities, Administrative Necessities and Emergency Contingencies during the Post-closure Period.

Notwithstanding paragraph (d), the Director may, on the request of the Operational Certificate holder, agree to the Operational Certificate holder posting an ILOC or Surety Bond as security for Emergency Contingencies during the Post-closure Period (the “**Post-Closure Emergency Contingency Security**”), rather than including an equivalent amount for such purpose in the Reclamation Security Trust.

5.2.2 **Amounts Secured by ILOC or Surety Bond.** Subject to this Section 5.2.2, during each phase of the landfill until the landfill has permanently ceased receiving waste, the amounts secured by Surety Bonds or ILOCs must be sufficient to cover liabilities throughout the operating life of the Facility, including costs of early or planned closure, implementation of Planned Emergency Contingency Measures associated with the Worst Case Emergency Contingency, and Post-closure Activities if closure were to occur at the end of that phase. Provided that if the Operational Certificate holder provides security in the form of one or more ILOCs or Surety Bonds in an aggregate amount that secures liabilities associated with closure and Emergency Contingencies prior to and during closure (the “**Closure/Contingency Security**”) and one or more separate ILOCs or Surety Bonds in an aggregate amount that secures liabilities associated with post-closure activities, including Emergency Contingencies during post-closure (the “**Early Post-Closure Security**”):

- (a) the amount secured by the Closure/Contingency Security during each phase of the landfill must be sufficient to cover closure activities and implementation of Planned Emergency Contingency Measures associated with the Worst Case Emergency Contingency assuming

no more waste is received after the end of that phase;

- (b) the Director may adjust the amount secured by the Early Post-Closure Security so that the aggregate of the amount of the Early Post-Closure Security and the amount contained in the Reclamation Security Trust equals the amount required for Post-closure Activities and Emergency Contingency Measures associated with the Worst-Case Emergency Contingency during post-closure assuming closure at the end of or during the relevant phase. Adjustments in this paragraph (b) will not affect the amount required to be secured by the Closure/Contingency Security.

5.2.3 **Calculation of Costs.** Amounts held in security will be based on the cost of activities identified in the most recent Post-closure Plan, or prior to submission of the Post-closure Plan, the DOCP, provided that in all cases the amounts required must be calculated using methods identified in the Landfill Criteria, including the addition of a contingency factor.

5.2.4 **Liabilities Secured.** Notwithstanding the specific liabilities for which the Closure/Contingency Security and the Early Post-Closure Security was created as reflected in Section 5.2.2, each ILOC or Surety Bond provided to satisfy this Section 5.2 must, while in effect in accordance with this Operational Certificate, secure all obligations under this Operational Certificate, including all reclamation obligations for closure, Emergency Contingencies (including emergency contingencies during the Post-closure Period), and Post-closure Activities. For greater certainty:

- (a) the Director may use all or part of the security to study, assess and/or correct a potential impact to the environment and/or inadequacy of the works as it relates to the construction, operation, maintenance, closure and/or post-closure, when the Operational Certificate holder does not take necessary environmental protection measures in a timely and sufficient manner as determined by the Director. The Operational Certificate holder must replenish all dispensed security within 60 days;
- (b) if the Operational Certificate holder fails to provide additional security in the form of ILOCs or Surety Bonds in accordance with this Operational Certificate, the Director may realize all or part of the security to, at the option of the Director, hold in a form determined by the Director for the purposes of securing obligations under this Operational Certificate or to forfeit to the Province, provided that the funds may not be forfeited to the Province unless the Operational Certificate holder fails to provide additional security as required by this Operational Certificate within 30 days of written notice from the Province or the Director to the Operational Certificate holder that the holder is out of compliance with its obligation to provide additional security and further provided that the Operational Certificate holder's



liability hereunder, and the amount required by the Operational Certificate holder to be secured, will be reduced by the amount of the forfeited funds.

### 5.3 **Security Required for the Post-closure Period**

Prior to the commencement of discharge to the landfill, the Operational Certificate holder must establish a dedicated Reclamation Security Trust in conformance with the requirements of a Qualifying Environmental Trust (QET) within the meaning of the *Income Tax Act* (Canada) for the sole purpose of funding reclamation obligations related to the landfill, including Post-closure Activities, and emergency contingencies related to the reclamation.

The Reclamation Security Trust must be established pursuant to a trust indenture in form and substance satisfactory to the Director.

### 5.4 **Requests for Payment from Trust**

The Operational Certificate holder may only request payment by the Trustee of an amount from the Reclamation Security Trust in accordance with the following conditions:

- (a) Except as specifically allowed by the Director in writing, the Operational Certificate holder may only request a payment in respect of the Post-closure Period;
- (b) Except as specifically allowed by the Director in writing, the Operational Certificate holder may, in relation to each calendar quarter, request, either in advance of or during that calendar quarter, payments from the Trustee of 25% of the amount that the holder reasonably anticipates is necessary to implement all of the following in that calendar year:
  - (i) Post-closure Activities,
  - (ii) unless the Operational Certificate Holder has posted a Post-Closure Emergency Contingency Security rather than posting an equivalent amount in the Reclamation Security Trust, Emergency Contingency Measures in the Post-closure Period,
  - (iii) Administrative Necessities, provided the cost of such activities must not without the Director's prior approval exceed the allowance for Administrative Necessities in the Post-closure Plan, less any amounts paid to the Operational Certificate holder in respect of a prior period that have not been expended, or committed for expenditure, by the Operational Certificate holder in accordance with this Operational Certificate, and less any credits or refunds related to GST or PST on expenses paid for from the Reclamation Security Trust that have not been credited to the Reclamation Security Trust;
- (c) Except as specifically allowed by the Director in writing, if the amount requested from the Trustee in respect of a particular calendar year exceeds the Total Budgeted Amount for that calendar year plus the Accumulated

Surplus, the Operational Certificate Holder must:

- (i) by December 31 of that calendar year, submit to the Director, in writing, a determination of the Accumulated Deficit, together with an explanation of the causes of the Accumulated Deficit,
- (ii) by January 31 of the subsequent calendar year:
  - (A) submit to the Director recommendations for future actions that will ensure sufficient funds for the remainder of the contaminating lifespan of the Facility,
  - (B) submit to the Director a revised Post-closure Plan Certified by a Qualified Professional with a revised budget, and the comparison and opinion referred to in Section 5.1.2 for that budget, and
  - (C) make any contributions to the Reclamation Security Trust necessary for the Certified opinion required under Section 5.4(c)(ii)(B), and provide proof of such contributions to the Director;
- (d) The Operational Certificate holder may not, without the prior written approval of the Director, request funds from the Reclamation Security Trust for Emergency Contingency Measures if the holder has posted a Post Closure Emergency Contingency Security under Section 5.2.1, in lieu of including funding for that purpose in the Reclamation Security Trust.
- (e) If the Operational Certificate Holder requests funds from the Reclamation Security Trust for Emergency Contingency Measures, the Operational Certificate Holder must:
  - (i) either before, or as soon as reasonably possible after, making a request to the Trustee for funds for Emergency Contingency Measures, notify the Director of the request, providing an explanation of the Environmental Contingency, identifying measures to be taken and providing an estimate of the amounts required and when they will be required; and
  - (ii) if the amount requested would cause an Accumulated Deficit, within 60 days of receiving such funds:
    - (A) submit to the Director the Certified opinion referred to in Section 5.1.2(d) taking into consideration the expenditure of funds for Emergency Contingencies, and
    - (B) make any contributions to the Reclamation Security Trust necessary for the opinion required under Section 5.4(e)(ii)(A), and provide proof of such contributions to the Director.

For greater certainty, the Operational Certificate holder may include in a request made under this Section 5.4 amounts for PST and GST on all eligible expenses to which GST or PST properly apply.

### **5.5 Use of Reclamation Security Trust Funds**

The Operational Certificate holder may only use funds paid by the Trustee in accordance with the following conditions:

- (a) The Operational Certificate holder may only use funds paid to it from the Reclamation Security Trust for the purposes set out in paragraph 5.4(b);
- (b) The Operational Certificate holder will only use funds from the Reclamation Security Trust to pay for goods, services or equipment in advance where it is commercially reasonable to do so;
- (c) Except as approved by the Director in writing, the Operational Certificate holder may only expend funds on an Unbudgeted Post-closure Activity if the Operational Certificate holder provides to the Director, 30 days in advance of the proposed expenditure, written notice of the intended Unbudgeted Post-closure Activity including an estimate of costs, and if the Operational Certificate holder can demonstrate that the activity is a prudent expenditure reasonably necessary to protect the environment from any effect of the Facility or ensure compliance with this Operational Certificate or any other requirements for reclamation of the Facility under the *Environmental Management Act* or any other law or regulation;
- (d) Except as approved by the Director in writing, the Operational Certificate holder must use all commercially reasonable efforts to ensure that payments for goods, services and equipment relating to Post-closure Activities reflect the fair market value of such goods, services or equipment, including but not limited to,
  - (i) except in exigent circumstances or other circumstances approved by the Director, if goods, services or equipment are procured to implement Post-closure Activities by contract (other than employment contract), any such contracts are, where reasonable and practicable in the circumstances, procured in an open, fair and competitive process involving at least two arm's length bidders having appropriate skills and experience;
  - (ii) if employees of the Operational Certificate holder are used to implement the Post-closure Activities the employees have suitable training and experience to implement the activities efficiently;
  - (iii) compensation and benefits paid to such employees does not exceed industry norms for employees with like training and experience in like circumstances;
- (e) The Operational Certificate holder must not expend any amount paid from the Reclamation Security Trust on:
  - (i) land;
  - (ii) equipment used for construction or installation of works unless it can be demonstrated that such purchases are more cost effective than rentals;
  - (iii) interest and financing charges;
- (f) The Operational Certificate holder may not, without the prior written approval of the Director, expend any amount paid from the Reclamation Security Trust on implementation of the Closure Plan;
- (g) The Operational Certificate holder may not, without the prior written approval of the Director, expend any amount paid from the Reclamation Security Trust on Emergency Contingency Measures if the holder has

- posted a Post Closure Emergency Contingency Security in lieu of including funding for that purpose in the Reclamation Security Trust;
- (h) Without limiting the ability of the Operational Certificate holder to expend funds on Emergency Contingency Measures or Unbudgeted Post-closure Activities in the absence of direction from the Director, the Operational Certificate holder may only expend money provided in respect of Emergency Contingency Measures and Unbudgeted Post-closure Activities in accordance with any directions of the Director that are then in existence;
  - (i) Except as approved by the Director in writing, the amounts the Operational Certificate holder expends on administrative matters, including accounting, legal fees, and administration of procurement that are funded from the Reclamation Security Trust must not exceed the allowance for Administrative Necessities;
  - (j) The Operational Certificate holder must maintain records which clearly evidence compliance with Section 5.4 and this Section 5.5 including without limitation:
    - (i) Records that, for every expense funded from the Reclamation Security Trust, relate the expense to a specific Post-closure Activity, specific Administrative Necessity or specific Emergency Contingency Measures, with sufficient detail to determine the need for and reasonableness of the expense;
    - (ii) Records evidencing that procurement processes followed were in compliance with this Section 5.5;
    - (iii) Where the expense incurred by the Operational Certificate holder is based on time spent on activities by employees of the Operational Certificate holder, or contractors or subcontractors, time sheets for those employees, contractors, or subcontractors that clearly indicate the specific work done, sufficient to relate the amount billed to a specific Post-closure Activity, Administrative Necessity or Emergency Contingency Measure and sufficient to allow assessment of the reasonableness of the expense;
    - (iv) invoices and proofs of payment;
  - (k) The Operational Certificate Holder must apply for and use reasonable efforts to obtain, any available refund, exemption, credit, rebate or remission of federal or provincial tax or duty imposed on the Operational Certificate holder if such tax or duty has been paid for from the Reclamation Security Trust, and, if a refund, credit, rebate or other amount is paid to the Operational Certificate holder must credit such amount to the Reclamation Security Trust or use it to offset expenses otherwise paid from the trust.

#### **5.6 Approval of Payments from Trust**

Unless the Director otherwise notifies the Operational Certificate holder and the Trustee in writing, the Director will approve, no later than 15 days prior to the beginning of each calendar year, the Trustee paying

- (a) amounts that the Operational Certificate holder requests from the Trustee for each quarter of that calendar year that do not exceed one quarter of the Total Budgeted Amount for that year,
- (b) any additional amounts that the Operational Certificate holder requests from the Trustee from time to time that in total do not exceed the Accumulated Surplus, as determined in accordance with this Section 5.6.

The approval provided by the Director above shall indicate the year end Accumulated Surplus (or Accumulated Deficit, expressed as a negative) as reported in the most recent Annual Report and the Total Budgeted Amount for any year(s) subsequent to the year to which the Annual Report relates but prior to the year to which the Director's approval relates ("Intervening Year(s)"), and shall approve the payment by the Trustee of an amount equal to the reported year end Accumulated Surplus (or Accumulated Deficit, expressed as a negative) plus the Total Budgeted Amount for the Intervening Year(s), plus any additional amounts contributed to the Reclamation Security Trust under Sections 5.4(c)(iii)(C) or 5.4(e)(ii)(B) minus any amounts paid by the Trustee in respect of the Intervening Year(s).

Unless the Director has determined, and confirmed in writing to the Operational Certificate holder, that the amounts held in the Reclamation Security Trust are not sufficient to cover Post-closure Activities, Emergency Contingency Measures and Administrative Necessities in the Post-closure Period, if the Operational Certificate holder has declared that funds are immediately required to deal with an Emergency Contingency, the Director will notify the Trustee in writing, in accordance with the terms of the Reclamation Security Trust, to pay, to the Operational Certificate holder the amount specified by the Director in writing to the Trustee for such purpose, taking into consideration the potential need of the Operational Certificate holder to have immediate access to funds for implementation of exigent Emergency Contingency Measures.

The Director may from time to time approve other expenditures from the Reclamation Security Trust and, where the Director does so the Director will, on the request of the Operational Certificate holder, promptly confirm such approval in writing to the Trustee in accordance with the terms of the Reclamation Security Trust in order to allow the Trustee to pay the relevant funds to the Operational Certificate holder.

### **5.7 Insolvency Event**

The Operational Certificate holder must notify the Director immediately in the event of an Insolvency Event, and despite anything in this Section 5.0 the Director is not required to approve the Trustee paying amounts from the Reclamation Security Trust in the event of an Insolvency Event and may revoke

past approvals.

### **5.8 Resolution of Funding Disputes**

If any dispute between the Operational Certificate holder and the Province arises out of or in connection with this Section 5 with respect to funding which the Operational Certificate holder and the Province cannot resolve within 30 business days of the dispute arising through collaborative negotiation, and the dispute relates to a matter over which the Environmental Appeal Board lacks jurisdiction or does not take jurisdiction notwithstanding the filing of a notice of appeal, the Operational Certificate holder may request mediation of the dispute in accordance with rules of the Mediate BC Society.

## **6. CLOSURE AND POST-CLOSURE REQUIREMENTS**

### **6.1 Progressive Closure Plan**

The Operational Certificate holder must submit to the Director a progressive closure plan for the Facility as part of the DOCP. The plan must be prepared by a Qualified Professional and include information that meets the Landfill Criteria including:

- Phasing Plan showing areas to be progressively closed;
- Plan area of each progressive closure;
- Schedule for each progressive closure;
- Proposed cover system profile, defining materials and material properties for each cover system layer. Specifications for the re-vegetation strategy should also be included;
- Stability analysis demonstrating cover system will be stable under design storm conditions;
- Analysis of landfill gas production and the need for venting of landfill gas from beneath the cover system; and
- A materials management plan indicating the quantity of each material required for closure, where it will be sourced, and where it will be stored on-site during closure construction.

### **6.2 Landfill Closure Plan**

The Operational Certificate holder must submit to the Director a Closure Plan as part of the DOCP for the Facility. The Closure Plan must be reviewed and updated when the DOCP is submitted or until the site is decommissioned and a Post-closure Plan is approved.

The Closure Plan must include information that meets the Landfill Criteria including:

- Estimated total waste volumes and tonnage and the closure date;

- A topographical plan showing the final elevation contours of the landfill and surface water diversion and drainage controls;
- Design of the final cover including the thickness and permeability of barrier layers and drainage layers and information on topsoil, vegetative cover and erosion prevention controls;
- Rodent and nuisance wildlife control procedures;
- Proposed end use of the property after closure;
- A contaminating lifespan assessment as required by Section 2.1;
- A post-closure monitoring program for groundwater, surface water, landfill gas, erosion and settlement based on the contaminating lifespan assessment;
- Post-closure operation of pollution abatement engineering works such as leachate and landfill gas collection/treatment systems based on the contaminating lifespan assessment; and
- Contingencies to address environmental impact concerns which may arise during the post-closure period based on the contaminating lifespan assessment.

### 6.3 **Post-Closure Plan**

At the same time as the holder of the Operational Certificate submits the updated DOCP two years prior to the date the landfill is expected to permanently stop receiving waste, and subsequently every time the holder is required to submit an updated DOCP, the holder must submit to the Director a Post-closure Plan.

The Post-closure Plan and subsequent updates must be Certified by an independent Qualified Professional or by a Qualified Professional that has obtained independent review by a qualified third party to evaluate the Post-closure Plan in relation to the Landfill Criteria. In the latter case, the Qualified Professional must take into consideration the results of the independent review prior to Certifying the Plan.

The Post-closure Plan and subsequent updates must be submitted to the Director for approval and include, at a minimum, the following:

- (a) Incorporation of the closure plan(s) required in Sections 6.1 and 6.2;
- (b) A complete review and assessment report of the overall integrity of the landfill;
- (c) Procedures for notifying the public about the closure and alternative waste disposal facilities;
- (d) A budget for all Post-closure Activities through the entire Post-closure Period, including a year-by-year schedule of expenditures to complete those activities;
- (e) The budgets referred to in Section 2.1(a) and (d);
- (f) For the 10 year period following closure and subsequently for each 10 year

period following submission of a Post-closure Plan:

- (i) A detailed quarter-by-quarter schedule for all Post-closure Activities that will be implemented during each calendar quarter consistent with the DOCP and Post-closure Plan,
- (ii) A quarter-by-quarter budget for each Post-closure Activity referred to in paragraph (i), sufficient to cover the estimated cost of implementing the activity together with a contingency factor for cost overruns determined in accordance with the Landfill Criteria,
- (iii) A quarter-by-quarter allowance for expenditures for Administrative Necessities.

Budgets must:

- be prepared in accordance with the Landfill Criteria,
- show all activities included in the cost estimate, and indicate how costs for those activities were estimated;
- include costs associated with engineering assessments, construction oversight, and administration (may be presented as Administrative Necessities allowance for the Post-closure Period), and a contingency factor for cost overruns determined in accordance with the Landfill Criteria;
- include allowances for GST and PST payable on goods or services to which they apply.

For further clarity budgets required by this Section are not intended to be binding on the Operational Certificate holder but are intended to be conservative estimates of amounts required for security.

#### 6.4 **Declaration of Landfill**

Landfills sited on titled land must register against the title to the property a covenant under Section 219 (1) of the *Land Title Act*, in a form acceptable to the Director, declaring that the property was used for the purpose of waste disposal and requiring that successors in title uphold the continued implementation of the approved Closure Plan and Post-closure Plan.

Landfills located on crown land must have a “notation on file” registered that the property was used for the purpose of waste disposal as well as a requirement that binds successors in title to uphold the continued implementation of the approved Closure Plan and Post-closure Plan. The Operational Certificate holder cannot cancel its lease with the Province on the land in question until such time that the Ministry responsible for the *Environmental Management Act* agrees to the cancellation. The registration of the charge or legal notification must be submitted to the Director.

#### 6.5 **Site Decommissioning**



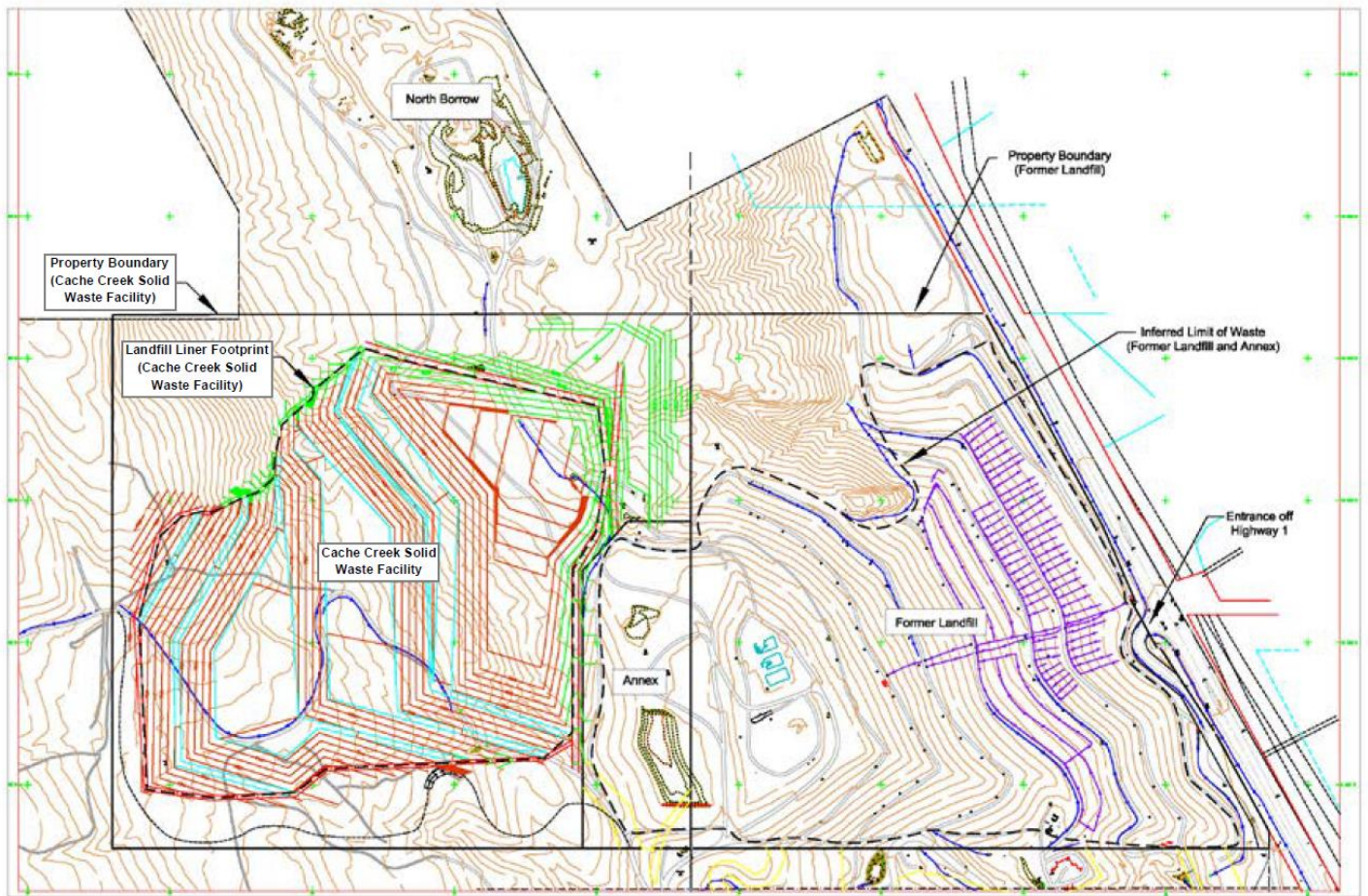
In accordance with Section 40 of the *Environmental Management Act* and Part 2 of the Contaminated Sites Regulation, the Operational Certificate holder must submit a site profile to the Director not less than 10 days prior to decommissioning the Facility.

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SITE PLAN A



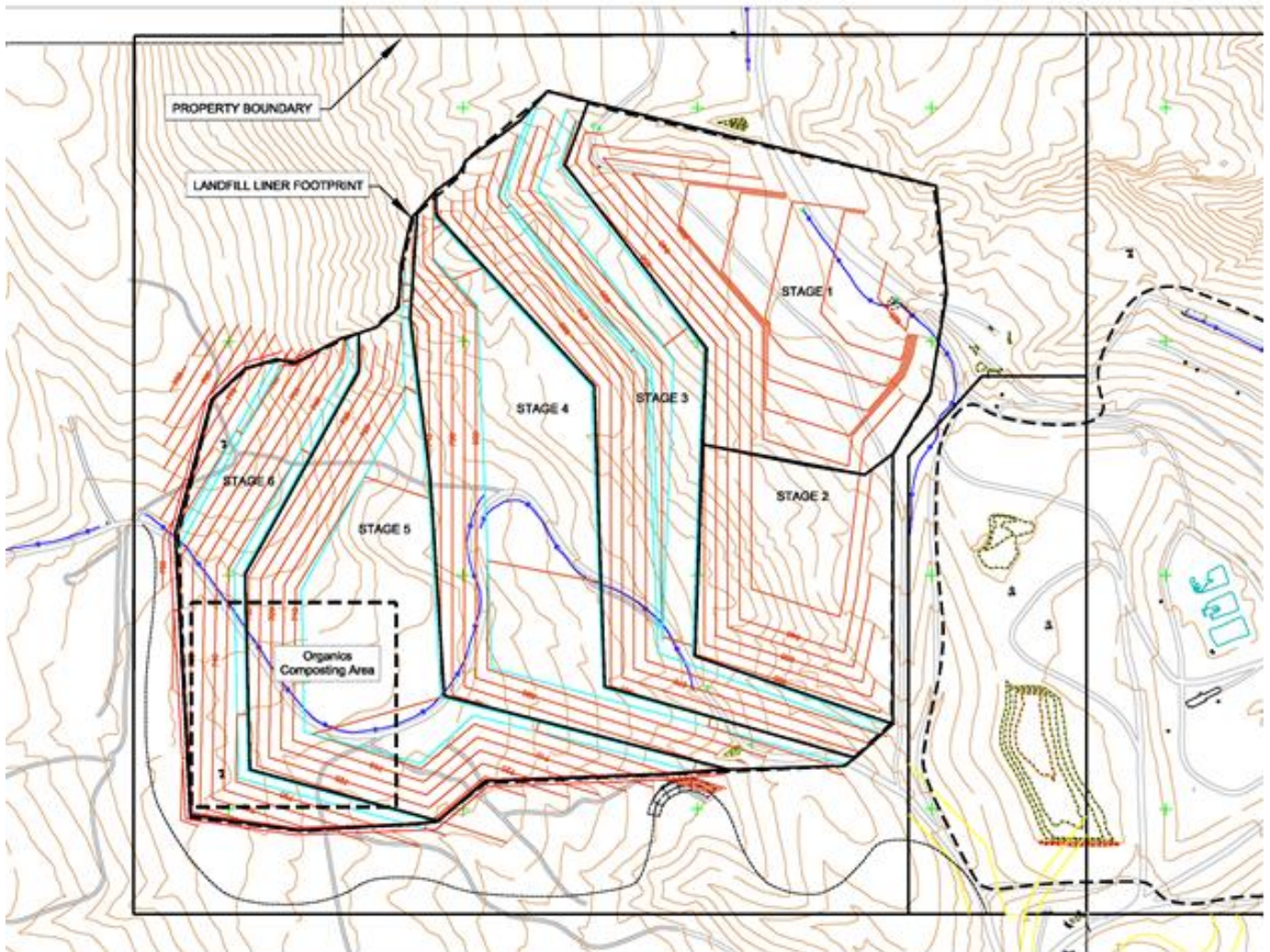
N



SITE PLAN B



N



### LOCATION MAP



N

