

# 2020 ROSSWOOD LANDFILL ANNUAL REPORT

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**Prepared for:**

British Columbia Ministry of  
Environment & Climate Change  
Strategy  
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## Site Overview

The Rosswood Landfill Facility is owned and operated by the Regional District of Kitimat-Stikine (Regional District). It is located approximately 10 km northwest of the community of Rosswood and approximately 50 km north of the City of Terrace on Highway 113, also known as the Nisga'a Highway.

The Rosswood Landfill is responsible for the management of municipal solid waste generated in the Rosswood area. The majority of the community is residential, with few small businesses. All users of the facility self-haul to the landfill; there is no curbside collection in the area.

Landfill operations are regulated by the Ministry of Environment and Climate Change Strategy (MOECCS) Operational Certificate MR-5511, originally issued in August 1979 and updated in June 2012. Operations are conducted in accordance with the Rosswood Landfill Operations and Closure Plan prepared by Sperling Hansen Associates in February 1999.

The footprint of the Rosswood Landfill Facility is one hectare. The Rosswood Facility consists of a landfill with a separate area for the diversion of metal, tires, and clean wood. Metal is collected by a metal recycler from Terrace and tires are collected annually by the Tire Stewardship of British Columbia. Clean wood is burned on site, as outlined in the Operation Certificate.

During 2020, 157.5 tonnes of solid waste was deposited into the landfill, 6.75 tonnes of metal was diverted, 0.8 tonnes of tires were diverted for collection by the BC Tire Stewardship Program and 1.6 tonnes of clean wood was diverted from landfill.

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## 1.0 Introduction

This annual report covers the period from January to December 2020 and has been prepared to fulfill the requirements of the Landfill's Operational Certificate MR-5511. This report meets the requirements in Section 11.5 of the Operational Certificate by providing the following information:

- Total volume or tonnage of waste discharged to the landfill during 2020;
- Total volume or tonnage of waste recycled and diverted from landfill during 2020;
- Occurrences or observations of wildlife attempting to access the facility; and
- Monitoring program results.

## 2.0 Waste Disposal

The Rosswood Landfill serves the unincorporated community of Rosswood. In 2020, the approximate population that utilized the landfill was 110 residents.

### 2.1 Solid Waste Disposal

The total tonnages collected at Rosswood landfill from January through to December 2020 of municipal solid waste, metal, tires, and clean wood are shown in Table 1. Details regarding these materials are described below.

Table 1: Waste Discharge Quantities for 2020

Material	2020 Quantity (Tonnes)	
Waste Discharge		
Garbage	157.5	
Diverted Wastes		
Metal		6.75
Tires		0.8
Clean Wood		1.6
<b>Totals</b>	<b>157.5*</b>	<b>2.4</b>

\*This value is based on pre-compaction volume (m<sup>3</sup>) data collected from January to December 2020. Volume data was converted to tonnage using the U.S. Environmental Protection Agency's *Volume to Weight Conversion Factors* (2016) value of 175 kg/m<sup>3</sup> for uncompacted mixed municipal solid waste.

#### 2.1.1 Garbage

Garbage is defined as discharged materials not including Restricted Waste (metal, organics, and recyclable materials) or Prohibited Waste (hazardous or radioactive waste, contaminated soil, smoldering or flammable material, explosive or highly combustible materials, or tires). Clean wood is segregated on site and burned as specified in the Operational Certificate.

In 2020, 157.5 tonnes of garbage were disposed of in the Rosswood landfill.

### **3.0 Diverted Materials**

At the Rosswood facility there are designated areas for the segregation of recyclable materials including scrap metal, large appliances, tires, and clean wood, which is burned on site.

#### **3.1 Metal**

In 2020, 6.75 tonnes of metal were diverted from landfill. However, as a result of service interruption due to Covid-19, there was no collection of scrap metal and large appliances from the Rosswood Facility in 2020.

#### **3.2 Tires**

In 2020, a total of 0.8 tonnes of tires were collected at the Rosswood Facility for diversion through the Tire Stewardship of British Columbia.

#### **3.3 Clean Wood**

Clean wood waste is considered any wood product that has not been treated or painted. Clean wood is segregated and burned as prescribed in the Operational Certificate.

In 2020, there were 1.6 tonnes of clean wood diverted from landfilling at the Rosswood Facility.

### **4.0 Wildlife Occurrences and Observations**

The Rosswood Landfill is located in an area with bears, wolves, coyotes, several species of birds of prey, and many other species of mammals that may attempt access to the facility. An electric fence surrounds the landfill area to prevent wildlife access; the fence is electrified from spring until late fall. Soil from site is used as daily and intermediate cover to prevent bird access, reduce odours and minimize wind-blown litter.

To effectively prevent vectors (i.e., birds / wildlife) from gaining access to the landfill active face, Revelstoke Iron Grizzly (RIG) plates are used as alternative daily cover. The RIG plates are positioned each day to cover waste in the active face. Soil from the on-site borrow pit is used as intermediate cover.

The facility Operator is required to inspect the fence line weekly, testing for proper voltage, proper tension on fence stands, overall condition of the fence, and signs of wildlife activity. The results of the inspections are recorded on the Daily Operation Inspection Form.

On November 22, 2020, the Operator of the Rosswood Landfill had heard from residents there was a grizzly bear spotted in the residential area north of facility. On November 23, the Operator went to the Landfill to reactivate the electric fence as a precaution. Upon arrival at site, the Operator observed evidence that a bear had been inside the landfill fence. There had been digging at the active face, and an old mattress that had been pulled outside of the fence line. The Operator repaired the breach in the fence and reactivated it to above 6000 V.

The Operator inspected the facility on November 24, and noted signs of digging under the fence line, where the bear had attempted to gain access, but was not successful because of the activated fence.

The Operator filled the fresh holes around the fence line. The Operator continued to conduct daily inspections of the site and did not observe new signs of attempted access to the facility after November 24.

It should be noted that, in late November 2020, there was no snow in the area and temperatures were abnormally warm, with daytime temperatures as high as 8°C. Reportedly, there were three or four grizzly bears residing in the area north of the Landfill in late 2020. It is uncommon for grizzly bears to be observed in the Rosswood area.

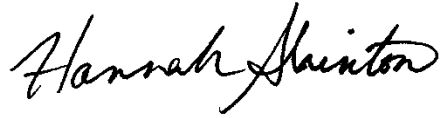
Following the bear occurrence in November, the fence was electrified until temperatures dropped to below freezing and there was snow on the ground.

In 2020, there was minimal activity within the Landfill by other vectors, including raptor species (i.e., bald eagles) and corvid species (i.e., crows and ravens).

## **5.0 Monitoring Program Results**

As Operational Certificate MR-5511 does not require environmental effects monitoring at the Rosswood Landfill Facility, no water quality monitoring was conducted during 2020.

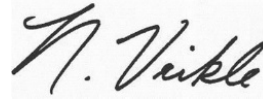
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