

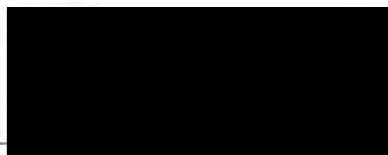


**REGIONAL DISTRICT  
of Fraser-Fort George**

**FOOTHILLS BOULEVARD REGIONAL LANDFILL  
2022 ANNUAL REPORT  
PRINCE GEORGE, BRITISH COLUMBIA**

Prepared by:

**THE REGIONAL DISTRICT OF FRASER-FORT GEORGE**  
155 George Street  
Prince George, British Columbia  
V2L 1P8



---

Laura Zapotichny  
General Manager of Environmental Services



December 4, 2023

**Attention:** British Columbia Ministry of Environment and Climate Change Strategy

**Subject:** Qualified Professional Annual Report Review  
Foothills Boulevard Regional Landfill 2022 Annual Report

The Regional District of Fraser-Fort George has retained Tetra Tech Canada Inc. (Tetra Tech) as a Qualified Professional (QP) to review the Foothills Boulevard Regional Landfill (the Site) 2022 Annual Report (Annual Report).

Relevant 3<sup>rd</sup> party information, which has been relied upon, has been used in and/or appended to this report. Tetra Tech has reviewed the Annual Report and based on the information provided and knowledge of the Site, Tetra Tech is in general agreement with the information provided. Tetra Tech has reviewed the information presented in the Annual Report and is not responsible for any information that has been omitted.

Respectfully submitted,  
Tetra Tech Canada Inc.



---

Rana Mandour, P.Eng.  
Project Engineer  
Solid Waste Management Practice  
Direct Line: 587.460.3481  
Rana.Mandour@tetrattech.com

## EXECUTIVE SUMMARY

This 2022 Annual Operations Report has been prepared for the Foothills Boulevard Regional Landfill (Site) located in the northwest portion of the City of Prince George, British Columbia at 6595 Foothills Boulevard, northwest of the intersection with West Austin Road. The landfill site has a total permitted area of approximately 86.7 hectares.

The objective of the 2022 Annual Operations Report is to summarize the development of the Site for the period of January 1, 2022 to December 31, 2022. The results of the Environmental Monitoring Program were submitted to the British Columbia Ministry of Environment and Climate Change Strategy (BC MOECCS) in the report entitled, “2022 Annual Groundwater Monitoring Report Foothills Boulevard Regional Landfill” generated by SNC-Lavalin Inc.

The landfill operated by the City of Prince George commenced at the Site in 1976 and was operated until 1994, when the RDIFFG took over management of the Site. It currently operates under Operational Certificate MR-01697, issued October 31, 2005 by the BC MOECCS under the provisions of the *Environmental Management Act* and in accordance with the Regional District of Fraser-Fort George Solid Waste Management Plan.

An inspection by MOECCS on July 15, 2021, at the site resulted in a compliance issue on the procedure of handling asbestos for disposal. A Permit amendment, (6.2) was issued on July 14, 2021, requiring the Regional District to develop an updated procedure for handling waste asbestos and required submittal of monthly reports to the MOECCS verifying compliance with the Hazardous Waste Regulation between November 2021 and April 2022.

All conditions of this compliance issue were and continue to be met.

The quantity of materials received which were recycled, used as landfill cover, or composted at the Site during the reporting period was approximately 40,023 tonnes. According to the RDIFFG records, there were five composting cycles in 2022 which included yard and garden waste, grass, and manure. The total amount of composted material sold in 2022 was 6,034 cubic metres.

According to the weigh scale records, approximately 74,417 tonnes of waste was landfilled at the Site during the 2022 reporting period. The conservative waste projection for 2022 presented in the draft “Integrated Landfill Management Plan,” prepared by XCG (March 2010) projected the lifespan for the Site to approximately 2032. Based on the information currently available, the lifespan of Cell 1 (current fill area) will not likely extend beyond late 2027.

The remaining operations airspace for Cell 1, as of August 2009, was reported as an estimated value of 2 million cubic metres (excluding final cover).

Based on a comparison of the May 21, 2022, and May 11, 2023, topographical contours, approximately 134,910 cubic metres of airspace was consumed at the Site for the period in which the survey took place. Of which 71,700 cubic meters were filled within the Phase 1, Stage 2 area located in the eastern section of Cell One and an additional 63,200 cubic meters of airspace was consumed in the southern area of the landfill. It is estimated that the remaining airspace for Cell 1 is approximately 466,001 cubic metres as of May 11, 2023.

**TABLE OF CONTENTS**

<b>1.</b>	<b>INTRODUCTION .....</b>	<b>1-1</b>
<b>2.</b>	<b>SITE AND REGULATORY SETTING .....</b>	<b>2-1</b>
2.1	Site Description.....	2-1
2.2	Background.....	2-1
2.3	Regulatory Setting .....	2-2
2.3.1	<i>Provincial Regulations</i> .....	2-2
2.3.2	<i>Landfill Operational Permit</i> .....	2-2
2.3.3	<i>Permit Amendment</i> .....	2-3
<b>3.</b>	<b>LANDFILL OPERATION AND MANAGEMENT .....</b>	<b>3-1</b>
3.1	Site Operations.....	3-1
3.2	Site Facilities.....	3-1
3.3	Wildlife Observations .....	3-2
3.4	Volume Reduction Statement .....	3-2
3.5	Waste Disposal.....	3-2
3.6	Diverted Materials .....	3-2
3.7	Composted Materials .....	3-3
3.8	Per Capita Waste Disposal Rates.....	3-3
3.9	Landfill Volume Consumed.....	3-3
3.10	Remaining Capacity and Site Life .....	3-3
3.11	2022 Operation Plan .....	3-4
<b>4.</b>	<b>SUMMARY AND CLOSURE .....</b>	<b>4-4</b>
<b>5.</b>	<b>REFERENCES .....</b>	<b>5-1</b>

**FIGURES**

Figure 1	Site Location Map
Figure 2	Site Plan
Figure 3	Aerial Survey

**TABLES**

Table 1	Solid Waste Disposal Summary
Table 2	Recycled and Non-Landfilled Materials
Table 3	Composted Materials

**APPENDICES**

Appendix A	Operational Certificate MR-01697
Appendix B	Permit Amendment
Appendix C	MOECCS Inspection Report
Appendix D	Controlled Waste Application
Appendix E	Site Brochure
Appendix F	2023 Volume and Site Life Assessment

**1. INTRODUCTION**

The objective of the Annual Operations Report is to summarize the development and operations of the Site for the period of January 1, 2022 to December 31, 2022 (Reporting Period). The results of the Environmental Monitoring Plan are submitted to the British Columbia Ministry of Environment and Climate Change Strategy (BC MOECCS) under separate cover.

This report fulfills the annual reporting requirements outlined in Section 8.2 of the Operational Certificate (OC) MR-01697, issued by the BC MOECCS on October 31, 2005.

## **2. SITE AND REGULATORY SETTING**

### **2.1 Site Description**

The Site is located in the northwest portion of the City of Prince George, British Columbia at 6595 Foothills Boulevard, northwest of the intersection with West Austin Road. The legal description of the Site is Block A of the northwest ¼ of District Lot 4053 and Block A of the northwest ¼ of District Lot 4048, Cariboo District. The location of the Site is shown on Figure 1.

The Site property (Figure 2) is bounded to the east by Foothills Boulevard and to the south by a gravel pit maintained and operated by the BC Ministry of Transportation. The Site is bounded to the north and west by naturalized northern coniferous forest. A residential area, referred to as the Hart Highlands area of Prince George, is located approximately 500 metres east of the Site, and a sport and recreation facility is located approximately 250 metres east of the Site entrance. The Site is located approximately 2.5 kilometres north of the Nechako River.

The Site serves a population of approximately 96,900 people (as per Statistics Canada 2021 Census) and receives approximately 98 percent of the regional solid waste stream (Gartner Lee Ltd., 2008). The Site accepts waste from the Prince George municipal and commercial collection services, the general public, local institutions, businesses, numerous regional transfer stations and the District of Mackenzie.

The property boundary for the Site encompasses an area of approximately 87.3 hectares. The landfill, composting, and recycling activities conducted at the Site encompass an area of approximately 25 hectares within the permitted landfill property.

### **2.2 Background**

The presence of the gravel pit located immediately south of the Site is believed to be evidence that the original use of the Site was for gravel extraction. A landfill operated by the City of Prince George commenced at the Site in 1976 and was operated until 1994, when the RDIFFG took over management of the Site. Since that time, a number of changes have been made to the Site, including the following (AMEC, 2006):

- Installation or upgrade of site utilities including municipal water supply and a three-phase hydro service;
- Construction of a scale house/operating building and installation of two 80-tonne weigh scales commissioned in January 1995;
- Development of a composting site for green waste, and animal bedding;
- Installation of groundwater monitoring wells and continuation of the Site monitoring program;
- In 2002, final cover, landfill gas collection and flare infrastructure, and a condensate and leachate recirculation system were designed and constructed for the eastern portion of the landfill;
- The Site is 100% fenced by a chain link fence as of September 2013;

- Leachate force main was constructed in 2015 to allow for leachate discharge into the wastewater collection system of City of Prince George;
- Between 2017 and 2020 the LFG main header perimeter pipe and main perimeter road were completed;
- In May 2020 the Landfill commenced offsite discharge of leachate to the City of Prince George wastewater collection system and treatment facility;
- 2021 the South Slope LFG Gas wellfield expansion consisting of 16 vertical LFG collection wells was completed; and
- The remediation of 5.2 hectares of final closed area of Cell 1 commenced in 2020, addressing infrastructure failure and providing additional air space. The project was completed in July of 2022 with the completion of the removal of final cover.

### **2.3 Regulatory Setting**

The Site currently operates under OC MR-01697 issued October 31, 2005 by the BC MOECCS under the provisions of the *Environmental Management Act*. The following section provides an overview of the regulatory environment which governs landfill design, operations, and closure of the Site.

#### **2.3.1 Provincial Regulations**

There are currently four documents published by the BC MOECCS, which regulate landfill design, operations, and monitoring:

- Landfill Criteria for Municipal Solid Waste, Second Edition (June 2016);
- Guidelines for Environmental Monitoring at Municipal Solid Waste Landfills (January 1996);
- Environmental Management Act (October 2003); and
- Landfill Gas Management Regulation (March 2020).

Key elements of these documents, addressed in the Plan, are as follows.

##### **2.3.1.1 Landfill Operational Certificate**

The landfill is currently approved to operate under Operational Certificate No. MR-01697 issued by the BC MOECCS on October 31, 2005. Key elements of this approval with respect to design, operation, and closure include the following:

- The Regional District is required to monitor wildlife (medium and large carnivores) activity at the facility and keep records of occurrences and observations of wildlife (medium and large carnivores);
- Composting facilities shall be operated and maintained in accordance with the *Organic Matter Recycling Regulation*;
- The management of landfill gas shall be managed in accordance with Sections 4.2 and 9.3 of the *Landfill Criteria for Municipal Solid Waste*;

- Waste asbestos is authorized for disposal subject to compliance with the requirements of Section 40 of the *Hazardous Waste Regulation* and the following conditions:
  - The asbestos waste may not be mixed with any other hazardous waste.
  - The Regional District must approve the disposal before disposal takes place.
  - All other applicable requirements of the *Hazardous Waste Regulation*, including but not limited to manifesting and waste record keeping, must also be complied with.
- The *Environmental Management Act*, the *Contaminated Sites Regulation* and the *Hazardous Waste Regulation* are applicable for the disposal of impacted (contaminated) soil at the facility;
- Hazardous wastes resulting from accidental spills or abandonment of dangerous goods may be accepted at the facility only under the authority of Section 52(1) of the *Hazardous Waste Regulation*;
- A monitoring program shall be developed by a qualified professional to identify potential impacts to the environment and public health from the facility; and
- The monitoring program must address, but not be limited to, subsections 4.1 and 9.2 of the *Landfill Criteria for Municipal Solid Waste* and the *Guidelines for Environmental Monitoring at Municipal Solid Waste Landfills*.

A copy of the Operational Certificate is included as Appendix A.

### **2.3.2 Permit Amendment**

In October of 2021 a certificate amendment (See Appendix B) was issued by the MOECCS to ensure the continued proper handling and disposal of waste asbestos was carried out at the Foothills Blvd Regional Landfill facility in accordance with Hazardous Waste Regulation.

To ensure compliance with this amendment staff carry out an inspection and reporting program regarding all asbestos received at the facility.

### **3. LANDFILL OPERATION AND MANAGEMENT**

#### **3.1 Site Operations**

The Foothills Boulevard Regional Landfill is currently operated under Operational Certificate MR-01697 issued by the BC MOECCS, Lands and Parks, on October 31, 2005. The Site accepts municipal solid waste from the approved service area. In addition, the Site collects recyclable materials as part of the RDFFG’s waste diversion initiative.

Under the Operational Certificate, waste asbestos is accepted through application process with prior approval and is restricted in delivery to specific times and days of the week.

#### **3.2 Site Facilities**

100% of the perimeter of the landfill is secured with a fence. Access to the Site is provided via Foothills Boulevard, northwest of the intersection with West Austin Road. Access gates control entrance and/or exit from the Site at this location. The gate is locked outside of normal operating hours to prohibit vehicle entrance and uncontrolled disposal when the Site is closed.

Existing facilities located at the Site include the following (Figure 3):

- Scale house;
- Public tipping area;
- Asphalt compost area; and
- Landfill gas utilization facility.

Signage is provided at the site entrance and throughout the Site as follows:

- Site owner;
- Traffic control and directions;
- Hours of operation; and
- Tipping fees.

Normal operating hours for the site are as follows:

Monday to Friday	7:00 AM to 5:00 PM
Saturday	9:00 AM to 5:00 PM
Sunday	9:00 AM to 5:00 PM

The facility operates on Easter Monday, Victoria Day, Labour Day and Thanksgiving Day from 9:00 a.m. to 5:00 p.m.

The facility is closed on New Year’s Day, Family Day, Good Friday, Canada Day, BC Day, National Day of Truth and Reconciliation, Remembrance Day, Christmas Day and Boxing Day.

### **3.3 Wildlife Observations**

Wildlife tracks of medium or large carnivores were observed on Site during the reported period.

Medium carnivore tracks were found 12 times over the Reporting Period, while actual sightings occurred 23 times and were restricted to one month. Large carnivore scat was observed 3 times over the Reporting Period with 11 actual sightings occurring within four separate months.

### **3.4 Volume Reduction Statement**

The RDFFG encourages the reduction of solid waste generated and subsequently landfilled by the following means:

- The transfer station provides recycling opportunities for the following materials as summarized in Table 2:
  - Scrap metal;
  - White goods including ODS containing appliances;
  - Automotive batteries;
  - Single use batteries and cell phones;
  - Yard and garden waste;
  - Corrugated cardboard and mixed paper;
  - Plastic cartons and containers, metal food cans;
  - Used motor oil, oil filters and containers;
  - Used antifreeze and containers; and
  - DLC (See Section 3.6 Diverted Materials).

### **3.5 Waste Disposal**

The quantity of waste received at the Site is weighed and recorded. A summary of the mass of waste disposed at the Site is provided in Table 1. According to RDFFG records, the total mass of waste landfilled at the Site during the reporting period was approximately 74,417 tonnes.

### **3.6 Diverted Materials**

The quantity of on-site diverted materials which are either recycled, used as landfill cover, or composted at the Site is weighed and recorded. A summary of these materials is provided in Tables 2 and 3. According to RDFFG records, the total mass of diverted materials (sum mass of reported materials in Tables 2 and 3) at the Site during the reporting period was approximately 40,023 tonnes.

A new waste diversion initiative for demolition, land clearing and construction waste was implemented at the Site starting on July 2, 2021. This program includes differential tipping fees for various DLC materials. Customers are encouraged to

divert DLC waste to a local private recycling facility in Prince George rather than for disposal at the landfill.

### **3.7 Composted Materials**

According to the RDFFG records, there were five composting cycles in 2022 which included yard and garden waste, grass, and manure. The total amount of compostable materials received at the Site was 6,328.7 tonnes (Table 3). The total volume of composted material sold in 2022 was 6,034 cubic metres.

### **3.8 Per Capita Waste Disposal Rates**

Based on an estimated population of 96,900 (Statistics Canada 2021 Census) in the Site service area, the average daily mass of waste landfilled per capita (not using the Ministry of Environment and Climate Change Waste Diversion Calculator) was approximately 2.3 kilograms during the reporting period.

### **3.9 Landfill Volume Consumed**

As indicated in Section 3.5, the total amount of waste compacted and buried was approximately 74,417 tonnes during the Reporting Period (January 1, 2022 to December 31, 2022).

The apparent waste density was estimated from the calculated landfill airspace consumption and annual tonnage landfilled. The apparent waste density is not a true density but is a relationship that represents the mass of waste disposed in each cubic metre of landfill air space. Based on a comparison of the May 21, 2022, and May 11, 2023, topographical contours, approximately 134,910 cubic metres (Dillon Consulting Ltd) of airspace has been filled at the Site for the period in which the survey took place. Based upon approximately 70,143 tonnes of waste landfilled at the Site during this time period, the apparent density for the landfill was calculated to be approximately 0.52 tonnes per cubic metre. This apparent density is significantly lower than the previous year of 0.8 tonnes per cubic metre.

The Remediation project that has been in progress since 2020 in the eastern portion of cell one, was completed in July of 2022. This additional air space is now being utilized to develop Cell One to final grade. As of May 11, 2023, a further 71,700 cubic meters of this air space within the original project area has been utilized with an additional 63,200 cubic metres being filled in the southern area of the landfill (Figure 3).

### **3.10 Remaining Capacity and Site Life**

The remaining operations airspace for Cell 1, as of August 2009, was reported as an estimated value of 2 million cubic metres (excluding final cover) (XCG, 2010). According to the letter “Volume Assessment, Foothills Boulevard Regional Landfill,” (Dillon Consulting) presented to the RDFFG on August 14, 2023, approximately 134,910 cubic metres of airspace was consumed at the Site from May 21, 2022 to May 11, 2023, based on a comparison of the May 21, 2022 and May 11, 2023, topographical contours. It is estimated that the remaining airspace for Cell 1 is approximately 466,001 cubic metres, as of May 11, 2023, (Dillon Consulting Ltd). Based on the

information currently available, the lifespan of Cell 1 (current fill area) will likely extend beyond 2027.

### **3.11 2023 Operation Plan**

Site operations during the 2023 reporting period are anticipated to remain unchanged from those outlined in Section 3.1. Additional waste diversion programs will be implemented in accordance with the 2015 Regional Solid Waste Management Plan.

The Regional District Capital Projects for 2022 are as follows:

Cell Two Development:

Phase 1: Secure engineering services to develop Cell Two lateral expansion of the Foothills Boulevard Regional Landfill.

Intermediate cover:

Intermediate cover application to Eastern and North – Eastern slopes of Cell 1 to meet regulatory requirements.

Landfill Gas System Instrumentation and Process Upgrade:

In preparation of 2024 beneficial use project, upgrades to the process and instrumentation sides are now required to increase the LFG systems compatibility with current technologies and seamless integration, (with both internal and external applications).

## **4. SUMMARY AND CLOSURE**

The 2022 Annual Report was prepared to summarize the development and operations of the Foothills Boulevard Regional Landfill, for the period of January 1, 2022, to December 31, 2022.

According to the weigh scale records, approximately 74,417 tonnes of waste and 40,023 tonnes of recyclable materials were received at the Site during the 2022 reporting period. Based on the information currently available, the lifespan of Cell 1 (current fill area) will likely extend beyond 2027. It is estimated that the remaining airspace for Cell 1 is approximately 466,001 cubic metres, as of May 11, 2022.

**5. REFERENCES**

1. British Columbia Ministry of Environment, 1996. “Guidelines for Environmental Monitoring at Municipal Solid Waste Landfills.”
2. AMEC Earth and Environmental Ltd., December 2006. “Design and Operations Plan.”
3. British Columbia Ministry of Environment, 2006. “Guidelines for Environmental Monitoring at Municipal Solid Waste Landfills.”
4. XCG Consultants Ltd., March 2010. “Draft – Integrated Landfill Management Plan, Foothills Boulevard Regional Landfill.”
5. Maura Walker and Associates Environmental Consultants Ltd. in association with XCG Consultants Ltd., March 2016. “2015 Regional Solid Waste Management Plan.”
6. British Columbia Ministry of Environment, Second Edition (June 2016). “Landfill Criteria for Municipal Solid Waste.”
7. British Columbia Ministry of Environment, 2020. “Environmental Management Act.”
8. British Columbia Ministry of Environment, 2020. “Landfill Gas Management Regulation.”
9. Tetra Tech Inc., 2020/2021. “Volume Assessment.”
10. Dillion Consulting Ltd 2021/2022. Volume Assessment
11. Aero Geometrics Ltd., 2022. “Air Survey.”

**FIGURES**

**FIGURE 1**  
**SITE LOCATION MAP**

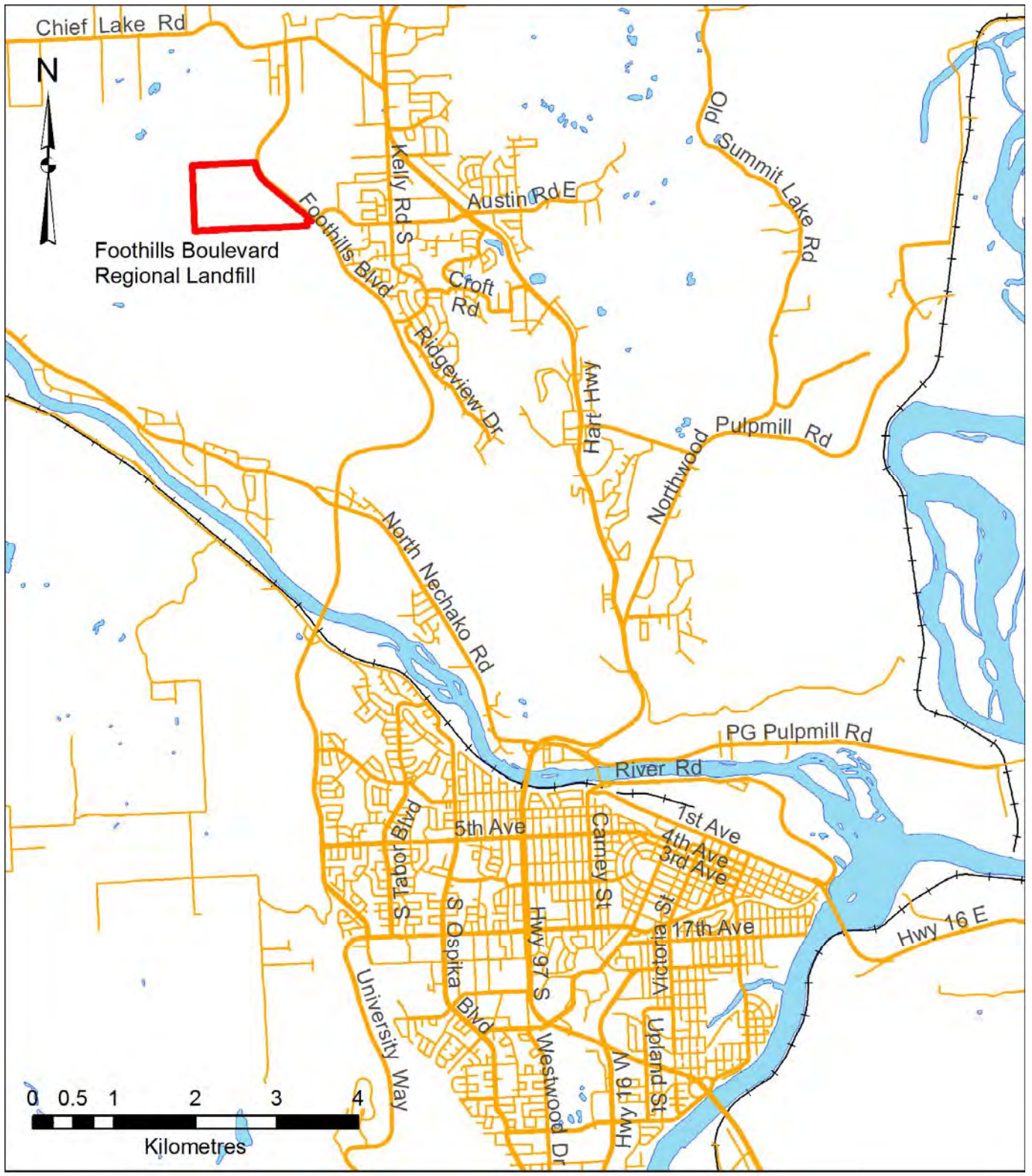


Figure 1  
**Foothills Boulevard Regional Landfill  
 Site Location Map**

**FIGURE 2**  
**SITE PLAN**

# FOOTHILLS BOULEVARD REGIONAL LANDFILL SITE TOPOGRAPHY

**LEGEND**

















-  PROPERTY BOUNDARY
-  MW03-00 MONITORING WELL
-  WASTE FILL AREA

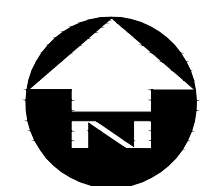
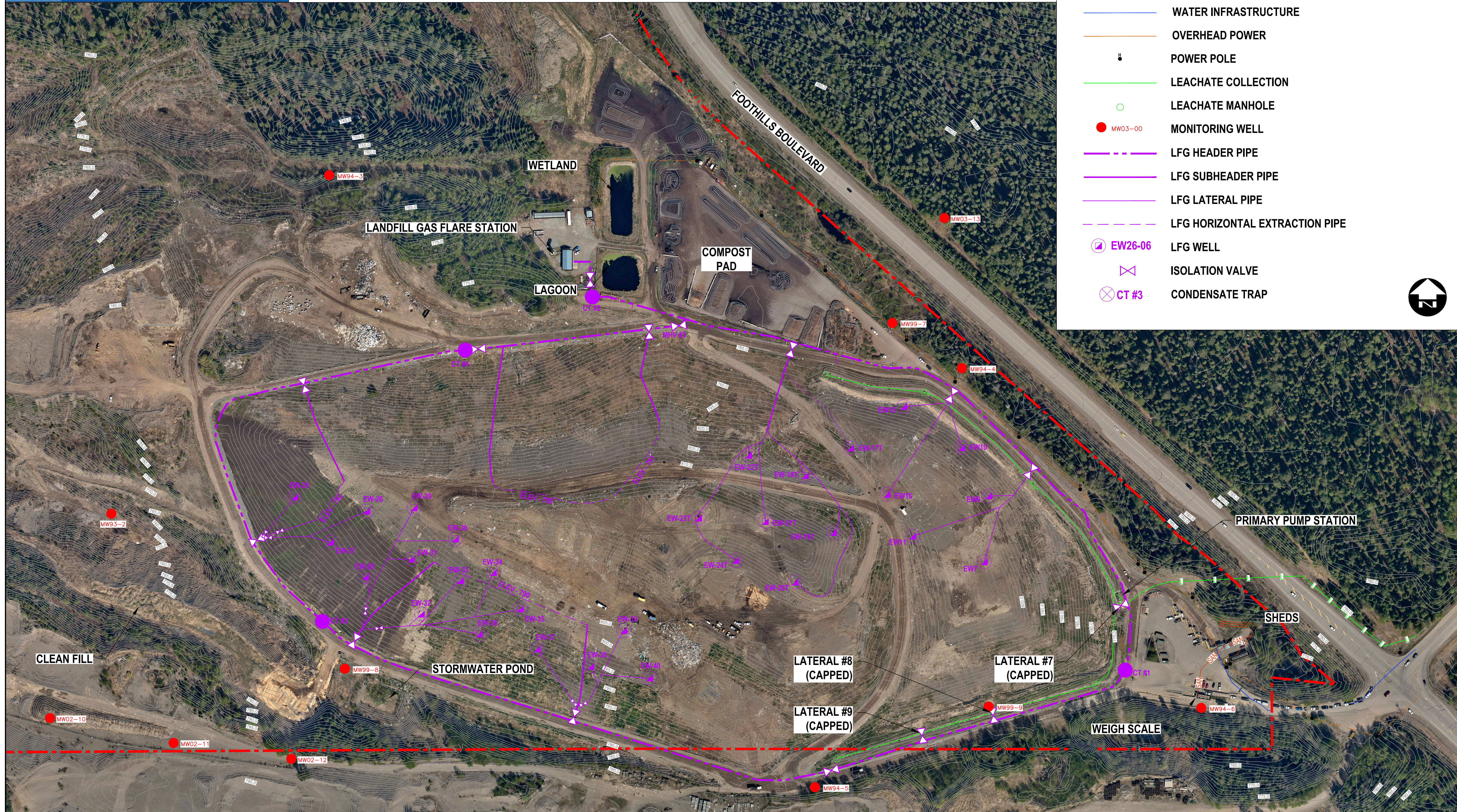


NOTE: EXISTING CONDITIONS AS OF MAY 2023

**FIGURE 3**  
**AERIAL SURVEY**

# POLLUTION CONTROL INFRASTRUCTURE FOOTHILLS BOULEVARD REGIONAL LANDFILL

LEGEND	
	PROPERTY BOUNDARY
	LEACHATE FORCEMAIN
	SANITARY INFRASTRUCTURE
	WATER INFRASTRUCTURE
	OVERHEAD POWER
	POWER POLE
	LEACHATE COLLECTION
	LEACHATE MANHOLE
	MONITORING WELL
	LFG HEADER PIPE
	LFG SUBHEADER PIPE
	LFG LATERAL PIPE
	LFG HORIZONTAL EXTRACTION PIPE
	LFG WELL
	ISOLATION VALVE
	CONDENSATE TRAP



NOTE: EXISTING CONDITIONS AS OF MAY 2023

SCALE 1:1,500 METRES

**TABLES**

**Table 1 Solid Waste Disposal Summary 2022**

Solid Waste Disposal Summary						
Date	Residential (tonnes)	Industrial and Commercial (tonnes)	Construction and Demolition (tonnes)	Asbestos (tonnes)	TS Correction (-) (tonnes)	Total Landfilled (tonnes)
Jan-22	2,654.7	2,029.8	683.3	28.6	377.7	5,018.7
Feb-22	2,199.6	1,933.2	1,862.0	15.2	298.0	5,712.1
Mar-22	2,893.2	2,655.8	1,038.3	22.7	447.7	6,162.3
Apr-22	3,155.3	2,075.5	1,324.4	-	576.5	5,978.7
May-22	3,701.1	2,373.9	1,376.8	-	702.0	6,749.8
Jun-22	3,714.1	2,331.4	2,590.0	41.2	695.8	7,980.8
Jul-22	3,578.1	2,102.7	2,038.6	43.2	754.6	7,008.1
Aug-22	3,478.1	2,245.5	1,630.8	19.9	694.3	6,679.9
Sep-22	3,355.9	2,051.7	1,665.4	26.0	668.3	6,429.8
Oct-22	3,456.9	2,487.1	1,637.9	35.5	719.2	6,898.2
Nov-22	2,600.3	2,099.5	1,082.6	40.7	372.2	5,451.0
Dec-22	2,164.4	1,852.5	658.8	20.3	348.5	4,347.4
<b>Total</b>	<b>36,951.8</b>	<b>26,238.5</b>	<b>17,588.9</b>	<b>293.2</b>	<b>6,654.8</b>	<b>74,416.7</b>
Notes:						
1. Data provided by the RDFFG.						
2. TS Correction adjustment for double weighted materials originating from on-site transfer station.						

**Table 2 Recycled and Non-Landfilled Materials 2022**

Recycled and Non-Landfilled Materials						
Date	Tires	Appliances	Scrap Metal	Cover and Soils	Transfer Station	Total
Jan-22	0.5	4.2	35.8	42.7	0.5	83.7
Feb-22	0.8	4.1	35.0	1,567.9	0.4	1,608.2
Mar-22	1.6	6.6	55.6	1,600.2	3.6	1,667.6
Apr-22	-	6.8	84.6	1,984.8	1.1	2,077.3
May-22	-	8.0	106.2	3,257.6	0.9	3,372.7
Jun-22	-	9.1	97.9	7,073.1	1.4	7,181.5
Jul-22	-	12.4	92.5	9,230.7	0.9	9,336.5
Aug-22	-	13.7	90.6	4,078.0	1.2	4,183.5
Sep-22	-	13.6	138.8	2,268.4	1.3	2,422.1
Oct-22	-	11.0	112.9	1,083.1	1.8	1,208.8
Nov-22	-	5.9	50.5	385.6	0.7	442.6
Dec-22	-	2.9	28.2	77.7	0.3	109.1
<b>Total</b>	<b>3.0</b>	<b>98.3</b>	<b>928.7</b>	<b>32,649.7</b>	<b>13.9</b>	<b>33,693.5</b>
Notes:						
1. Data provided by the RDFFG.						

**Table 3 Composted Materials Insert 2022**

Composted Materials									
Date	Manure		Grass		Chipped Yard and Garden		Yard and Garden		Total (tonnes)
	Industrial and Commercial (tonnes)	Residential (tonnes)	Industrial and Commercial (tonnes)	Residential (tonnes)	Industrial and Commercial (tonnes)	Residential (tonnes)	Industrial and Commercial (tonnes)	Residential (tonnes)	
Jan-22	116.6	1.1	-	0.0	10.6	-	5.9	24.7	158.8
Feb-22	108.7	1.9	-	0.1	48.9	-	3.9	20.9	184.3
Mar-22	111.6	1.3	-	0.4	80.1	-	13.5	108.5	315.4
Apr-22	97.1	2.1	1.6	13.8	72.3	-	68.3	393.7	648.9
May-22	114.8	2.1	5.8	37.4	52.9	-	63.8	684.9	961.7
Jun-22	95.1	1.5	7.8	52.5	62.4	-	84.5	711.5	1,015.2
Jul-22	64.1	1.1	3.3	38.6	32.6	-	67.7	529.8	737.0
Aug-22	77.6	0.9	4.3	21.8	29.7	-	48.2	371.7	554.1
Sep-22	79.3	9.2	5.4	24.4	52.3	-	62.2	370.4	603.1
Oct-22	76.1	1.4	1.0	32.6	49.7	-	44.1	565.0	769.9
Nov-22	91.1	1.1	1.0	5.2	36.6	-	27.9	86.8	249.8
Dec-22	87.0	0.2	-	0.1	18.8	-	9.7	14.7	130.4
<b>Total</b>	<b>1,118.9</b>	<b>23.9</b>	<b>30.1</b>	<b>226.9</b>	<b>546.8</b>	<b>-</b>	<b>499.6</b>	<b>3,882.6</b>	<b>6,328.7</b>

Notes:  
1. Data provided by the RDIFFG.

**APPENDIX A**  
**OPERATIONAL CERTIFICATE MR-01697**

MINISTRY OF ENVIRONMENT

**OPERATIONAL CERTIFICATE**

MR-01697

*Under the Provisions of the Environmental Management Act  
and in accordance with the  
Regional District of Fraser-Fort George  
Solid Waste Management Plan*

**Regional District of Fraser-Fort George**

**155 George Street**

**Prince George, British Columbia**

**V2L 1P8**

is authorised to manage recyclable material and municipal solid waste at a sanitary landfill located at **6595 Foothills Boulevard**, Prince George, British Columbia, subject to the conditions listed below. Contravention of any of these conditions is a violation of the *Environmental Management Act* and may result in prosecution.

**1. LOCATION OF AUTHORISED FACILITY**

The location of the facility for the management of recyclable material and municipal solid wastes to which this Operational Certificate is applicable is the Foothills Landfill, Block A of the Northeast  $\frac{1}{4}$  of District Lot 4053 and Block A of the Northwest  $\frac{1}{4}$  of District Lot 4048, Cariboo District as shown in the attached plan and containing 87 hectares more or less.

**2. ENTRANCE FACILITIES**

The authorised facility includes recyclable material and municipal solid waste drop-off facilities, weigh scales and related appurtenances approximately as shown on the attached Site Plan.


**3. MANAGEMENT OF MUNICIPAL SOLID WASTE**

**3.1. Sanitary Landfill**

3.1.1. The authorised facilities are a sanitary landfill area, composting area, landfill gas management, recyclable material storage areas and related appurtenances approximately as shown on the attached Site Plan. The site reference number for the discharge is E211018.

Date Issued:

**OCT 31 2005**

  
for Director, Environmental Management Act

- 3.1.2. The characteristics of the discharge must be municipal solid waste as defined under the *Environmental Management Act* and other wastes as approved in writing by the Director.
- 3.1.3. Waste may be discharged to the areas specified in the Regional District's Design and Operation Plan, approximately located as shown on the attached Site Plan.

#### 4. GENERAL REQUIREMENTS

##### 4.1. Qualified Professionals

All facilities and information, including works, plans, assessments, investigations, surveys, programs and reports, must be certified by qualified professionals.

##### 4.2. Plans

4.2.1. The Regional District shall prepare a Design and Operation Plan that will include considerations for site operation and development, leachate and landfill gas management, composting operations, monitoring programs and environmental impact mitigation management.

The Design and Operation Plan must be submitted to the Director by November 30, 2005.

4.2.2. The Design and Operation Plan must address, but not be limited to, each of the subsections in the *Landfill Criteria for Municipal Solid Waste* including performance, siting, design, operational and closure and post-closure criteria.

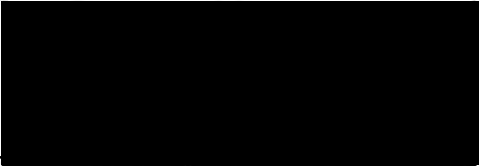
4.2.3. The facilities must be developed and operated in accordance with the Design and Operation Plan.

4.2.4. Any updates to the plan shall be immediately submitted to the Director.

##### 4.3. Additional Facilities or Works

The Director may require investigations, surveys, and the construction of additional facilities or works. The Director may also amend information requirements of this Operational Certificate including plans, programs, assessments and reports.

Date Issued: **OCT 31 2005**

  
Del Reinheimer, P.Eng.  
for Director, Environmental Management Act

5. **OPERATIONAL REQUIREMENTS**

5.1. **Operator Training and Development**

At a minimum, the Regional District will ensure that operating personnel are trained to industry standards and at least one member of the on-site personnel are trained and current in a SWANA recognized landfill operator course or equivalent.

5.2. **Wildlife Management and Control**

At the time of issuance of this certificate the Regional District is not required to install electric fencing for the purpose of preventing access to the site by bears.

The Regional District is required to monitor wildlife (medium and large carnivores) activity at the facility and keep records of occurrences and observations of wildlife (medium and large carnivores).

The Director may request the Regional District to develop a Wildlife Management Plan that presents solutions for preventing wildlife access to the facility.

5.3. **Compost**

Composting facilities shall be operated and maintained in accordance with the *Organic Matter Recycling Regulation*.

5.3. **Management of Landfill Gas**

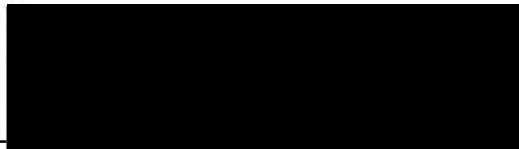
The management of landfill gas shall be managed in accordance with sections 4.2 and 6.4 of the *Landfill Criteria for Municipal Solid Waste*. In addition, the Regional District will have a qualified professional prepare an Operations and Maintenance Manual for the landfill gas management system.

6. **HAZARDOUS WASTE MANAGEMENT**

6.1. **Hazardous Waste**

“Hazardous Wastes” as defined by the *Hazardous Waste Regulation* pursuant to the *Environmental Management Act* are prohibited from disposal unless expressly authorised by the *Hazardous Waste Regulation*, approved by the Director or as specified in the Operational Certificate.

Date Issued: **OCT 31 2005**

  
Del Reinheimer, P.Eng.  
for Director, Environmental Management Act

6.2. Waste Asbestos

Waste asbestos is authorized for disposal subject to compliance with the requirements of section 40 of the *Hazardous Waste Regulation* **and** the following conditions:

- 6.2.1. The asbestos waste may not be mixed with any other hazardous waste.
- 6.2.2. The Regional District must approve the disposal before disposal takes place.
- 6.2.3. All other applicable requirements of the *Hazardous Waste Regulation*, including but limited to manifesting and waste record keeping, must also be complied with.

6.3. Handling of Impacted Soil

The *Environmental Management Act*, the *Contaminated Sites Regulation* and the *Hazardous Waste Regulation* are applicable for the disposal of impacted (contaminated) soil at the facility.

6.4. Hazardous Wastes from Accidental Spills or Abandonment

Hazardous wastes resulting from accidental spills or abandonment of dangerous goods may be accepted at the facility only under the authority of Section 52(1) of the *Hazardous Waste Regulation*.

7. **MONITORING**

7.1. Monitoring Program

- 7.1.1. A monitoring program shall be developed by a qualified professional to identify potential impacts to the environment and public health from the facility.
- 7.1.2. The monitoring program shall be submitted as part of the Design and Operation Plan.
- 7.1.3. The monitoring program must address, but not be limited to, subsections 4.1, 4.2 and 7.15 of the *Landfill Criteria for Municipal Solid Waste* and the *Guidelines for Environmental Monitoring at Municipal Solid Waste Landfills*.
- 7.1.4. Monitoring must be conducted in accordance with the monitoring program.

8. REPORTING

All reports and drawings shall be submitted in electronic format unless otherwise requested by the Director.

8.1. Drawings

All drawings shall be certified correct and sealed by a qualified professional. Drawings shall be submitted to the Director within 30 days of completion or as otherwise specified by the Director.

8.2. Annual Report

The Regional District shall submit an Annual Report to the Director on or before June 30 each year for the previous calendar year. The report shall contain, but not be limited to the following information:

- i.) an executive summary;
- ii.) the type and tonnage of waste received, recycled and landfilled for the year;
- iii.) a current topographic map detailing airspace consumption, on-site borrow pit changes and future developments;
- iv.) updated estimates for the remaining capacity, closure date for the current phase and closure date for the current landfill footprint;
- v.) any new information or proposed changes relating to the facilities and Design and Operation Plan;
- vi.) composting operation activity including amount of material received for composting, material composted, material sold and number of composting cycles;
- vii.) occurrences or observations of wildlife (medium and large carnivores) at the facility;
- viii.) a statement regarding the facility's progress in reducing the regional solid waste stream, in accordance with the hierarchy of reduce, reuse and recycle principles; and,
- ix.) the results of all monitoring programs as specified in this Operational Certificate. Data interpretation and comparison to the performance criteria in the *Landfill Criteria for Municipal Solid Waste* and the *Guidelines for Environmental Monitoring and Municipal Solid Waste*

*Landfills.* Trend analysis, as well as an evaluation of the impacts of the discharges on the receiving environment in the previous year shall be carried out by a qualified professional.

**9. CLOSURE PLAN**

At least one year in advance of decommissioning the landfill, or as otherwise specified by the Director, a Closure Plan shall be submitted which includes at least the following information:

- i) a topographic plan showing the final elevations contours of the landfill and surface water diversion and drainage controls;
- ii) specifications for the final cap and proposed end use of the site; and,
- iii) provisions for a minimum 25 year post-closure care period at the facility which, at a minimum, considers the following: groundwater monitoring, surface water monitoring, landfill gas management, erosion and settlement monitoring and management.

**10. CLOSURE AND POST-CLOSURE FUND**

The Regional District will conform to the Public Sector Accounting and Auditing Board's requirements (PS 3270) to recognize solid waste landfill closure and post-closure liability. The Regional District will develop a plan to ensure that sufficient funds are available for closure and post-closure care work.

# SITE PLAN



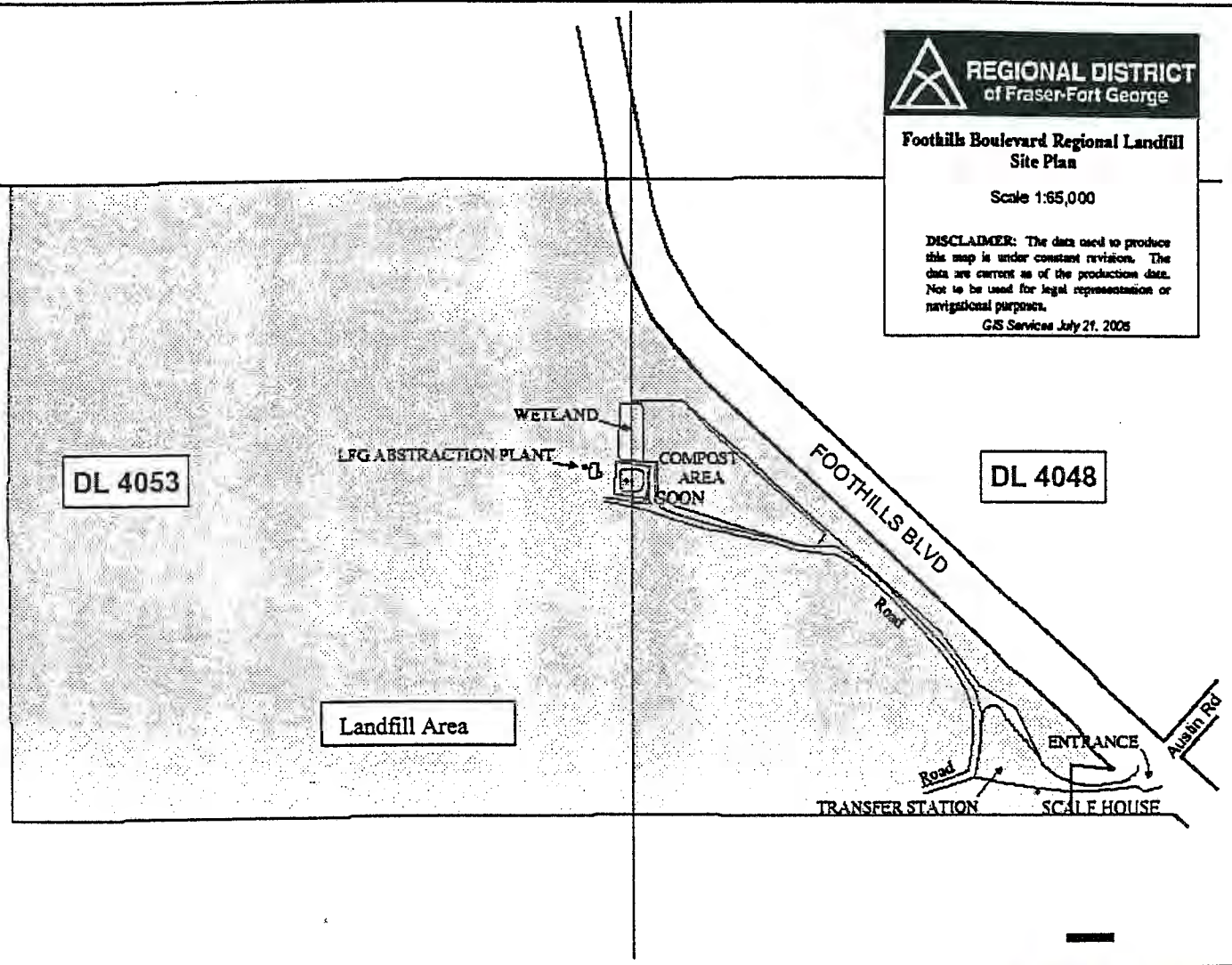
**REGIONAL DISTRICT**  
of Fraser-Fort George

**Foothills Boulevard Regional Landfill**  
Site Plan

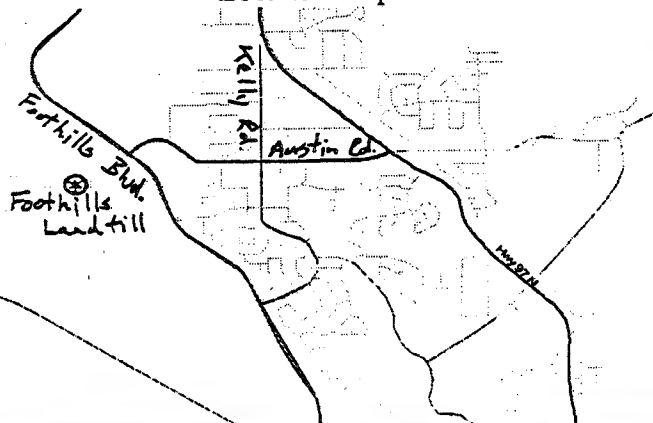
Scale 1:65,000

**DISCLAIMER:** The data used to produce this map is under constant revision. The data are current as of the production date. Not to be used for legal representation or navigational purposes.

GIS Services July 21, 2005



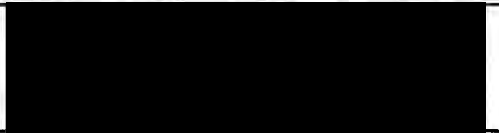
Location Map



Scale: Not to Scale

**OCT 31 2005**

Operational Certificate No. MR-01697

  
Del Reinheimer, P.Eng.  
for Director, Environmental Management Act  
Omineca and Peace Regions

**APPENDIX B**  
**PERMIT AMENDMENT**



July 14, 2021

File: 1697

Regional District of  
Fraser-Fort George  
155 George St.  
Prince George, BC V2L 1P8  
[pwildauer@rdffg.bc.ca](mailto:pwildauer@rdffg.bc.ca)

Dear Petra Wildauer,

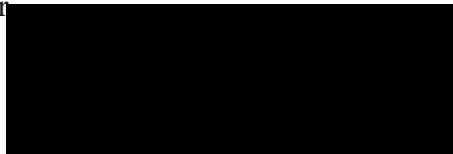
This letter is to follow up from the Ministry of Environment site visit on July 14, 2021 at the Foothills Landfill where asbestos material was seen exposed from broken bags therefore, posing a potential risk to human health and the environment and in non-compliance with section 6.2 of the Operational Certificate and the *Hazardous Waste Regulation*.

It is my intent as Director to amend the language in Section 6.2 of Operational Certificate 1697 to provide clarity around the requirements regarding disposal of asbestos waste and asbestos-containing material and to remove the blanket authorization for accept of this waste given the insufficient handling, at this time. This means that you must request written authorizations from the Director for accepting asbestos materials for each occurrence and report. I also intend to restrict public access to the open face of the landfill until such time that an assessment of asbestos exposure risk has been completed.

This letter serves as notification under the Public Notification Regulation Section 4.6. Please refer to the attached draft Amendment for details. It is my intent to decide at 14 business days from the date of this letter.

If you have any questions or concerns, please contact Leonard Cook, Environmental Protection Officer at 250-645-9403 or the undersigned.

Yours truly



Karen Moores, P. Ag.  
Section Head – North Authorizations, Environmental Protection Division  
Ministry of Environment & Climate Change Strategy

**APPENDIX C**  
**MOECCS INSPECTION REPORT**



Report Date: December 03, 2021

File: 1697

Report Number: 178487

Regional District of Fraser-Fort George  
155 George Street  
Prince George BC, V2L 1P8

Dear Regional District of Fraser-Fort George,

**Re: Non-compliance Advisory Letter, Operational Certificate 1697, 6595 Foothills Boulevard, Prince George BC Regional Landfill, Refuse**

---

On October 27, 2021 Ministry of Environment and Climate Change Strategy (Ministry) Environmental Protection Officers Julia Coleman (Officer Coleman) and Prashanth Subburam (Officer Subburam) conducted an on-site inspection of the Regional District of Fraser-Fort George (RDFFG) municipal solid waste landfill located at 6596 Foothills Boulevard, in Prince George, BC (Facility). The purpose of the inspection was to verify compliance with operational certificate number 1697 (OC). The OC authorizes RDFFG to manage recyclable material and municipal solid waste at the Facility. The OC was first issued on October 31, 2005 and was last amended October 13, 2021. The October 13, 2021 amendment made changes Section 6.2 – Waste Asbestos, which included adding sections 6.2.4, 6.2.4 and 6.2.5. The new sections were assessed following the amendment date to the date of the on-site inspection (October 13, 2021 to October 27, 2021). Information for this inspection includes observations made by Environmental Protection Officer Leonard Cook (Officer Cook) during an on-site inspection on July 14, 2021.

Present during the inspection was Petra Wildauer (General Manager of Environmental Services, RDFFG) and Aaron Moberg (Superintendent Solid Waste Operations, RDFFG). Information was also provided by Rachael Ryder (Waste Diversion Program Leader, RDFFG) upon the request of Officer Coleman.

This Advisory, the alleged violations and the circumstances to which it refers will form part of the compliance history of Regional District of Fraser-Fort George, and will be taken into account in the event of future non-compliance.

Please note that this authorization is considered to be out of compliance until such a time as it can be confirmed to meet the authorization requirements.

**Inspection Details:**

The inspection assessed compliance for the period from October 27, 2019 to October 27, 2021 (Inspection Period) and included a review of the following documents:

- Integrated Landfill Management Plan, Foothills Boulevard Regional Landfill, Prince George, British Columbia (Draft), dated March 25, 2010, prepared by XGC Consultants Ltd. (2010 Landfill Management Plan);
- Re: Integrated Landfill Management Plan for Foothills Boulevard Regional Landfill, dated July 11, 2021, prepared by the Ministry, (2021 Letter);
- Yard & Garden Waste Compost Manual, no date, prepared by RDFFG (Compost Plan);
- Employee Training Certificates, provided by RDFFG via email on October 14, 2021 (Employee Training Certificates);
- 2019 - 2021 Wildlife Monitoring Records, prepared by RDFFG (Wildlife Monitoring Records);
- 2019 Annual Greenhouse Gas Emission Report, Foothills Boulevard Regional Landfill and compost Facility, Prince George, British Columbia January 1, 2019 - December 31, 2019, dated April 2020, prepared by RDFFG (2019 Annual Landfill Gas Report);

---

**Ministry of Environment  
and Climate Change  
Strategy**

Compliance  
Environmental  
Protection Division

Mailing Address:  
3rd Fl  
1011-4th Ave

Prince George BC V2L 3H9

Telephone: 250 565 6135

Facsimile: 250 565 6629

Website: [www.gov.bc.ca/env](http://www.gov.bc.ca/env)

- 2019 Annual Groundwater Monitoring Report, Foothills Boulevard Regional Landfill, Prince George BC, dated March 30, 2020, prepared by SNC-Lavalin Inc., (2019 Annual Groundwater Monitoring Report);
- Foothills Boulevard Regional Landfill, 2019 Annual Report, Prince George, BC, no date, prepared by the RDFFG (2019 Annual Report);
- 2020 Annual Greenhouse Gas Emission Report, Foothills Boulevard Regional Landfill and Compost Facility, Prince George, British Columbia January 1, 2020 - December 31, 2020, dated March 2020, prepared by RDFFG (2020 Annual Landfill Gas Report);
- Landfill Gas Management Facilities Design Plan, Foothills Boulevard Regional Landfill, Prince George, British Columbia, dated January 18, 2012, prepared by XCG Consultants Ltd. (Landfill Gas Plan);
- 2020 Annual Groundwater Monitoring Report, Foothills Boulevard Regional Landfill, Prince George, BC, dated April 9, 2021, prepared by SNC-Lavalin Inc. (2020 Annual Groundwater Monitoring Report);
- Foothills Boulevard Regional Landfill, 2020 Annual Report, Prince George, BC, no date, prepared by the RDFFG (2020 Annual Report); and
- 2019 and 2020 Compost Sample Results, no date, prepared by RDFFG (2019 and 2020 Compost Sample Results).

Below are the authorization clauses that were assessed for compliance during this inspection, as well as the associated details/findings and any actions required.

Requirement Description:	<p><b>1. LOCATION OF AUTHORISED FACILITY</b></p> <p>1: The location of the facility for the management of recyclable material and municipal solid wastes to which this Operational Certificate is applicable is the Foothills Landfill, Block A of the Northeast one quarter of District Lot 4053 and Block A of the Northwest one quarter of District Lot 4048, Cariboo District as shown in the attached plan and containing 87 hectares more or less.</p>
Details/Findings:	On October 13, 2021 Officer Coleman conducted a search of the Provincial iMapBC geographical information system (GIS) and confirmed the location of the Facility is Block A Northeast 1/4 District Lot 4053 Cariboo District and Block A Northwest 1/4 District Lot 4048 Cariboo District.
Compliance:	In
Requirement Description:	<p><b>2. ENTRANCE FACILITIES</b></p> <p>2: The authorised facility includes recyclable material and municipal solid waste) drop-off facilities, weigh scales and related appurtenances approximately as shown on the attached Site Plan.</p>
Details/Findings:	During the on-site inspection, Officer Coleman observed the location of the recycling and municipal solid waste drop-off area and the weigh scales as identified on the Site Plan.
Compliance:	In

Requirement Description:	<b>3. MANAGEMENT OF MUNICIPAL SOLID WASTE, 3.1 Sanitary Landfill</b> 3.1.1: The authorised facilities are a sanitary landfill area, composting area, landfill gas management, recyclable material storage areas and related appurtenances approximately as shown on the attached Site Plan. The site reference number for the discharge is E211018.
Details/Findings:	During the on-site inspection, Officer Coleman observed each area of the Facility identified in this requirement and confirmed each area was located approximately as shown on the Site Plan.
Compliance:	In
Requirement Description:	<b>3. MANAGEMENT OF MUNICIPAL SOLID WASTE, 3.1 Sanitary Landfill</b> 3.1.2: The characteristics of the discharge must be municipal solid waste as defined under the Environmental Management Act and other wastes as approved in writing by the Director.
Details/Findings:	The <i>Environmental Management Act</i> (Act) defines municipal solid waste as: (a) refuse that originates from residential, commercial, institutional, demolition, land clearing or construction sources, or (b) refuse specified by a director to be included in a waste management plan.  During the on-site inspection, RDFFG staff informed Officer Coleman that the waste disposed of at the Facility originates from residential, commercial, demolition and construction wastes.
Compliance:	In
Requirement Description:	<b>3. MANAGEMENT OF MUNICIPAL SOLID WASTE, 3.1 Sanitary Landfill</b> 3.1.3: Waste may be discharged: to the areas specified in the Regional District's Design and Operation Plan, approximately located as shown on the attached Site Plan.
Details/Findings:	During the on-site inspection, Officer Coleman observed waste being discharged to the area identified in the 2010 Landfill Management Plan, and identified as the Landfill Area on the Site Plan.

Compliance:	In
Requirement Description:	<b>4. GENERAL REQUIREMENTS, 4.1 Qualified Professionals</b> 4.1 : All facilities and information, including works, plans, assessments, investigations, surveys, programs and reports, must be certified by qualified professionals.
Details/Findings:	Documents required by this section were reviewed and confirmed to be certified by qualified professionals.
Compliance:	In
Requirement Description:	<b>4. GENERAL REQUIREMENTS, 4.2 Plans, 4.2.1</b> 4.2.1: The Regional District shall prepare a Design and Operation Plan that will include considerations for site operation and development, leachate and landfill gas management, composting operations, monitoring programs and environmental impact mitigation management. The Design. and Operation Plan must be submitted to the Director by November 30, 2005.
Details/Findings:	<p>A review of the 2010 Landfill Management Plan confirmed it included considerations for site operation and development (Section 5 - Site Development, Section 11 - Site Operations), leachate (Section 8 - Leachate Management), landfill gas management (Section 9 - Landfill Gas Management), and monitoring programs (Section 12 - Monitoring, Inspection, and Reporting).</p> <p>Sections 7 - Surface Water Management, 8 - Leachate Management, 9 - Landfill Gas Management, and 11 - Site Operations, of the 2010 Landfill Management Plan included objectives for reducing environmental impact through mitigation and management.</p> <p>Considerations for the composting operations were not in the 2010 Landfill Management Plan; however, they were provided to Officer Coleman upon request, under a separate title, Yard and Garden Waste Compost Manual.</p> <p>A Design and Operation Plan submitted by the RDFFG prior to November 30, 2005, was not located in the physical or electronic files reviewed during this inspection; therefore, compliance with this requirement was not determined.</p>
Compliance:	Not Determined

Requirement Description:	<b>4. GENERAL REQUIREMENTS, 4.2 Plans, 4.2.2</b> 4.2.2: The Design and Operation Plan must address, but not be limited to, each of the subsections in the Landfill Criteria for Municipal Solid Waste including performance, siting, design, operational and closure and post-closure criteria.
Details/Findings:	Considerations for the Landfill Criteria for Municipal Solid Waste are referenced in Section 2 of the 2010 Landfill Management Plan – Regulatory Environment. The 2010 Landfill Management Plan included sections, which considered performance (Section 5), site setting (Section 3), operations, (Section 11) and closure and post-closure (Section 13).
Compliance:	Not Determined
Requirement Description:	<b>4. GENERAL REQUIREMENTS, 4.2 Plans, 4.2.3</b> 4.2.3: The facilities must be developed and operated in accordance with the Design and Operation Plan.
Details/Findings:	During the on-site inspection, Officer Coleman did not observe the Facility to be operated in contrary to the 2010 Landfill Management Plan. However, not all aspects of the 2010 Landfill Management Plan were observed during the on-site inspection. Therefore, compliance with this requirement was not determined during the inspection period.
Compliance:	Not Determined
Requirement Description:	<b>4. GENERAL REQUIREMENTS, 4.2 Plans, 4.2.4</b> 4.2.4: Any updates to the plan shall be immediately submitted to the Director.
Details/Findings:	In an email dated October 21, 2021, RDEFG staff confirmed that there have been no changes to the 2010 Landfill Management Plan during the Inspection Period. Therefore, compliance with this requirement was not applicable during the Inspection Period.
Compliance:	Not Applicable

Requirement Description:	<b>5. OPERATIONAL REQUIREMENTS, 5.1 Operator Training and Development</b> 5.1 : At a minimum, the Regional District will ensure that operating personnel are trained to industry standards and at least one member of the on-site personnel are trained and current in a SW ANA recognized landfill operator course or equivalent.
Details/Findings:	In an email dated October 21, 2021, RDFFG staff provided Employee Training Certificates for landfill staff, which confirmed they have received SWANA certified training.
Compliance:	In
Requirement Description:	<b>5. OPERATIONAL REQUIREMENTS, 5.2 Wildlife Management and Control</b> 5.2: At the time of issuance of this certificate the Regional District is not required to install electric fencing for the purpose of preventing access to the site by bears. The Regional District is required to monitor wildlife (medium and large carnivores) activity at the facility and keep records of occurrences and observations of wildlife (medium and large carnivores). The Director may request the Regional District to develop a Wildlife Management Plan that presents solutions for preventing wildlife access to the facility.
Details/Findings:	In an email dated October 26, 2021, RDFFG staff provided Wildlife Monitoring Records for the Inspection Period. The Wildlife Monitoring Records included occurrences and observations of medium and large carnivores (bears and coyotes) at the Facility.  A request of the Director under the provisions of this section was not located in the Ministry's physical or electronic files reviewed during this inspection. Therefore, this requirement was not applicable for the Inspection Period.
Compliance:	In
Requirement Description:	<b>5. OPERATIONAL REQUIREMENTS, 5.3 Compost</b> 5.3: Composting facilities shall be operated and 'maintained in accordance with the Organic Matter Recycling Regulation.

Details/Findings:	<p>During the on-site inspection, RDFFG staff informed Officer Coleman that the compost facility produces and sells Class A compost. The compost facility has been in operation since 1995.</p> <p>Both RDFFG staff and the Compost Plan confirmed the compost facility only accepts yard and garden waste from commercial and residential sources. Food waste and biosolids are not accepted and were not observed during the on-site inspection.</p> <p>The 2019 and 2020 Annual Reports confirmed the compost facility received 7,040 tonnes of yard and garden waste in 2019, and 7,478 tonnes of yard and garden waste in 2020.</p> <p>RDFFG staff confirmed during the on-site inspection that there have been no modifications to the composting facility resulting in an increased production during the Inspection Period.</p> <p>Class A compost defined in the Organic Matter Recycling Regulation (OMRR) means compost that meets the requirements of section 12.</p> <p>Section 12(2) in the OMRR requires that compost which is produced solely from yard waste and untreated wood residuals meet Schedule 1: Pathogen Reduction Process, Schedule 2: Vector Attraction Reduction, and Column 1 of Schedule 4: Quality Criteria.</p> <p>A review of the 2019 and 2020 Compost Sample Results provided by the RDFFG confirmed the compost failed to meet Schedule 2: Vector Attraction Reduction. Schedule 2 requires the compost have a carbon to nitrogen ratio greater than or equal to 15:1 and less than or equal to 35:1.</p> <p>Three samples collected on April 10, 2019 had carbon to nitrogen results of 9:1, 14:1 and 14:1, which was less than the required 15:1.</p> <p>In a phone conversation on December 12, 2021, RDFFG staff confirmed the batch of compost with a carbon to nitrogen ratio of 9:1 was spread on the landfill site. However, the other two batches of compost were sold and therefore, introduced into the environment.</p>
Compliance:	Out
Actions to be taken:	Ensure that compost which fails to meet the requirements of Class A compost is not sold and introduced into the environment.
Requirement Description:	<p><b>5. OPERATIONAL REQUIREMENTS, 5.3 Management of Landfill Gas</b></p> <p>5.3: The management of landfill gas shall be managed in accordance with sections 4.2 and 6.4 of the Landfill Criteria for Municipal Solid Waste. In addition, the Regional District will have a qualified professional prepare an Operations and Maintenance Manual for the landfill gas management system.</p>

Details/Findings:	<p>Landfill Criteria for Municipal Solid Waste Section 4.2 - Landfill Gas Management, requires a landfill receiving more than 10,000 tonnes of waste per year submit a Landfill Gas Generation Assessment Report.</p> <ul style="list-style-type: none"> <li>- Section 3.5 of the 2019 and 2020 Annual Reports states the Facility received, 73,529 tonnes, and 73,785 tonnes of waste respectively. A review of the Ministry physical and electronic files and confirmed the Annual Landfill Gas Generation Assessment Reports (2019 and 2020 Annual Landfill Gas Reports) were on file.</li> </ul> <p>A landfill producing more than 1,000 tonnes of methane per year are required to submit a Landfill Gas Management Facilities Design Plan.</p> <ul style="list-style-type: none"> <li>- Section 5.2 of the 2019 and 2020 Annual Landfill Gas Reports states the Facility produced 1,148 tonnes and 1,196 tonnes of methane respectively; therefore, a plan is required. A review of the Ministry physical and electronic files confirmed a Landfill Gas Plan is on file and was prepared by Michel Lefebvre M.Sc., P.Eng. (Senior Project Manager). A search of the Engineers and Geoscientists of British Columbia registrant directory on November 24, 2021 and confirmed Michel Lefebvre is a professional engineer in BC, in good standing, member number 26071.</li> </ul> <p>Landfill Criteria for Municipal Solid Waste Section 6.4 - Nuisance Controls, requires landfill to be designed and operated to prevent impacts from nuisance factors (dust, noise, litter, odour) and comply with a local nuisance bylaws.</p> <ul style="list-style-type: none"> <li>- A review of the 2010 Landfill Management Plan confirmed that nuisance factors are considered in the management of the Facility.</li> </ul> <p>During the on-site inspection Ministry staff observed, barriers around the active face, litter pickers and the active face is covered at night with belting to mitigate the migration of litter. Dust, excessive noise and objectionable odours attributable to the Facility operations were not identified at the time of the on-site inspection.</p>
Compliance:	In
Requirement Description:	<p><b>6. HAZARDOUS WASTE MANAGEMENT, 6.1 Hazardous Waste</b></p> <p>6.1 : "Hazardous Wastes" as defined by the Hazardous Waste Regulation pursuant to the Environmental Management Act are prohibited from disposal unless expressly authorised by the Hazardous Waste Regulation, approved by the Director or as specified in the Operational Certificate.</p>
Details/Findings:	<p>During the on-site inspection, Officer Coleman was informed by RDFFG staff that hazardous wastes, excluding asbestos, which is authorized by section 6.2 below, were not disposed of in the Facility during the Inspection Period.</p>
Compliance:	In

Requirement Description:	<p><b>6. HAZARDOUS WASTE MANAGEMENT, 6.2 Waste Asbestos, 6.2.1</b></p> <p>6.2.1: 6.2 Waste asbestos is authorized for disposal subject to compliance with the requirements of section 40 of the Hazardous Waste Regulation and the following conditions: 6.2.1 The asbestos waste may not be mixed with any other hazardous waste.</p>
Details/Findings:	<p>Section 40(2) of the HWR regulation states "A person must not deposit waste asbestos in a landfill other than a secure landfill unless (a) the was asbestos is disposed of at the landfill by being immediately buried with a minimum of 0.5 m of cover material."</p> <p>During the Inspection Period the Ministry was notified asbestos was not being disposed of in accordance with Section 40(2) of the HWR on May 3, 2020 and July 12, 2021.</p> <p>During an on-site visit on July 15, 2021 Officer Cook observed waste asbestos was not adequately covered with a minimum of 0.5 m of cover material (Photo 1).</p> <p>During the on-site inspection on October 27, 2021, the asbestos disposal area was observed, no exposed asbestos disposal bags were identified.</p> <p>No other hazardous waste was mixed with the asbestos and disposed of at the Facility during the Inspection Period.</p> <p>Because asbestos was not disposed of in accordance with section 40 of the HWR, the RDIFFG is found to be out of compliance with this requirement.</p>
Compliance:	Out
Actions to be taken:	Immediately cover asbestos waste with a minimum of 0.5 m of cover material.
Requirement Description:	<p><b>6. HAZARDOUS WASTE MANAGEMENT, 6.2 Waste Asbestos, 6.2.2</b></p> <p>6.2.2: 6.2 Waste asbestos is authorized for disposal subject to compliance with the requirements of section 40 of the Hazardous Waste Regulation and the following conditions: 6.2.2 The Regional District must approve the disposal before disposal takes place.</p>
Details/Findings:	During the on-site inspection, RDIFFG staff informed Officer Coleman that the disposal of asbestos is approved prior to disposal, and provided the asbestos disposal tracking sheet.

Compliance:	In
Requirement Description:	<p><b>6. HAZARDOUS WASTE MANAGEMENT, 6.2 Waste Asbestos, 6.2.3</b></p> <p>6.2.3: 6.2 Waste asbestos is authorized for disposal subject to compliance with the requirements of section 40 of the Hazardous Waste Regulation and the following conditions: 6.2.3 All other applicable requirements of the Hazardous Waste Regulation, including but limited to manifesting and waste record keeping, must also be complied with.</p>
Details/Findings:	<p>RDFFG staff informed Officer Coleman that the collection and disposal of waste oil, oil filters and waste antifreeze is managed by the BC Used Oil Management Association (BCUOMA), and was unable to provide waste manifests.</p> <p>The consignor, as defined in the HWR, is a person to whom section 10(1) of the Act applies because the</p> <p>(a) person produces or stores hazardous waste, and</p> <p>(b) causes or allows more than the quantity of hazardous waste prescribed in section 46(1) of the HWR to be transported from the property where it is produced or stored.</p> <p>Therefore, subject to section 46 of the HWR of the consignor is the RDFFG and is required retain a copy of the waste manifest.</p> <p>However, without shipping documents, it could not be determined if hazardous waste greater than the quantities prescribed in section 46(1) of the HWR were removed from the site during the Inspection Period, and compliance with this requirement was not determined.</p>
Compliance:	Not Determined
Actions to be taken:	As the consignor, the RDFFG must retain the applicable copy of the waste manifest.
Requirement Description:	<p><b>6. HAZARDOUS WASTE MANAGEMENT, 6.3 Handling of Impacted Soil</b></p> <p>6.3: The Environmental Management Act, the Contaminated Sites Regulation and the Hazardous Waste Regulation are applicable for the disposal of impacted (contaminated) soil at the facility.</p>

Details/Findings:	<p>RDFFG Staff provided an Application for Acceptance of Controlled Wastes form for inspection, which demonstrated considerations for the Environmental Management Act (EMA), Contaminated Sites Regulation (CSR) and HWR. RDFFG staff confirmed that impacted soil is accepted on a case-to-case bases and approved by designated RDFFG staff.</p> <p>However, not all aspects of the operations were observed during the on-site inspection. Therefore, compliance could not be determined.</p>
Compliance:	Not Determined
Requirement Description:	<p><b>6.2 HAZARDOUS WASTE MANAGEMENT, Waste Asbestos, 6.2.4</b></p> <p>6.2.4: 6.2 Waste asbestos is authorized for disposal subject to compliance with the requirements of section 40 of the Hazardous Waste Regulation and the following conditions: OCTOBER 13, 2021 AMENDMENT. 6.2.4 The waste asbestos must be disposed of at the landfill by being immediately buried with a minimum of 0.5m of cover material as required under the Hazardous Waste Regulation.</p>
Details/Findings:	<p>RDFFG staff informed Officer Coleman during the on-site inspection that asbestos was not accepted at the Faculty during the time period following the October 13, 2021 amendment; therefore, this requirement is not applicable.</p>
Compliance:	Not Applicable
Requirement Description:	<p><b>6.2 HAZARDOUS WASTE MANAGEMENT, Waste Asbestos, 6.2.5</b></p> <p>6.2.5: 6.2 Waste asbestos is authorized for disposal subject to compliance with the requirements of section 40 of the Hazardous Waste Regulation and the following conditions: OCTOBER 13, 2021 AMENDMENT. 6.2.5 The Regional District must develop a procedure for disposing of waste asbestos at the landfill and submit an updated DOCP to include this procedure by November 30, 2021.</p>
Details/Findings:	<p>Because the deadline for this requirement (November 30, 2021) was outside the Inspection Period, compliance with this requirement was not applicable for the Inspection Period.</p>
Compliance:	Not Applicable

Requirement Description:	<b>6.2 HAZARDOUS WASTE MANAGEMENT, Waste Asbestos, 6.2.6</b> 6.2.6: 6.2 Waste asbestos is authorized for disposal subject to compliance with the requirements of section 40 of the Hazardous Waste Regulation and the following conditions: OCTOBER 13, 2021 AMENDMENT. 6.2.6 A monthly written report must be submitted to the director recording and confirming that asbestos waste was disposed of in accordance with the procedures of section 6.2.5 and will include photos to show before and after photos of cover to the envauthorizationsreporting@gov.bc.ca for the months of November 2021 to April 2022.
Details/Findings:	Because the reporting period for this requirement (November 2021 - April 2022) was outside the Inspection Period, compliance with this requirement was not applicable for the Inspection Period.
Compliance:	Not Applicable
Requirement Description:	<b>6. HAZARDOUS WASTE MANAGEMENT, 6.4 Hazardous Wastes from Accidental Spills or Abandonment</b> 6.4: Hazardous wastes resulting from accidental spills or abandonment of dangerous goods may be accepted at the facility only under the authority of Section 52(1) of the Hazardous Waste Regulation.
Details/Findings:	Section 52(1) of the HWR states "A person is exempt from the requirements of this regulation for the purpose of managing hazardous waste that originates from an accidental spill, or the abandonment, of dangerous goods if the person satisfies a director that (a) the person will manage the hazardous waste in a manner that will not pose a threat to human health or the environment, and (b) the exemption is in the public interest."  During the on-site inspection, RDFFG staff informed Officer Coleman that hazardous waste as defined by section 52(1) of the HWR, had not been disposed of at the Facility during the Inspection Period. Therefore, compliance with this requirement was not applicable for the Inspection Period.
Compliance:	Not Applicable
Requirement Description:	<b>7. MONITORING, 7.1 Monitoring Program, 7.1.1</b> 7.1.1: A monitoring program shall be developed by a qualified professional to identify potential impacts to the environment and public health from the facility.

Details/Findings:	A review of the 2019 and 2020 Groundwater Monitoring Reports, confirmed the RDFFG had retained SNC-Lavalin Inc. to design and execute a monitoring program to identify potential impacts to the environment and public health from the Facility. The 2019 and 2020 Groundwater Reports were signed by John DeCesare PhD, Eng.L (Senior Environmental Specialist). Officer Coleman conducted a search of the Engineers and Geoscientists of BC registrant database on November 25, 2021 and confirmed John DeCesare is a Professional Licensee Engineer, since March 6, 2000, in good standing.
Compliance:	In
Requirement Description:	<b>7. MONITORING, 7.1 Monitoring Program, 7.1.2</b> 7.1.2: The monitoring program shall be submitted as part of the Design and Operation Plan.
Details/Findings:	Section 12 of the 2010 Landfill Management Plan confirmed the RDFFG has an environmental monitoring program with considerations for groundwater, leachate, soil gas, and surface water.
Compliance:	In
Requirement Description:	<b>7. MONITORING, 7.1 Monitoring Program, 7.1.3</b> 7.1.3: The monitoring program must address, but not be limited to, subsections 4.1, 4.2 and 7.15 of the Landfill Criteria for Municipal Solid Waste and the Guidelines for Environmental Monitoring at Municipal Solid Waste Landfills.
Details/Findings:	The Landfill Criteria for Municipal Solid Waste ensures considerations for groundwater and surface water quality within 1 Km of the Facility are made in the monitoring program. A review of 2010 Landfill Management Plan and the 2019 and 2020 Groundwater Monitoring Reports confirmed that the closest surface water body is the Nechako River, which is located 3 Km southwest of the Facility.  The 2019 and 2020 Groundwater Monitoring Reports confirm water quality criteria considered for the monitoring program include the CSR as defined in Protocol 21 "Water Use Determination" and the applicable groundwater standards for the Facility are the CSR Drinking Water (DW) and Aquatic Life (AW) standards for groundwater discharging to surface water used by freshwater aquatic life.

Compliance:	In
Requirement Description:	<b>7. MONITORING, 7.1 Monitoring Program, 7.1.4</b> 7.1.4: Monitoring must be conducted in accordance with the monitoring program.
Details/Findings:	Monitoring carried out during the inspection period was presented in the 2019 and 2020 Annual Landfill Gas Report, Annual Groundwater Monitoring Reports and Annual Reports; however, the landfill monitoring programs were not observed as part of this inspection; therefore, compliance with this requirement could not be determined.
Compliance:	Not Determined
Requirement Description:	<b>8. REPORTING, 8.2 Annual Report</b> 8.2: The Regional District shall submit an Annual Report to the Director on or before June 30 each year for the previous calendar year. The report shall contain, but not be limited to the following information: (i) an executive summary; (ii) the type and tonnage of waste received, recycled and landfilled for the year; (iii) a current topographic map detailing airspace consumption, on-site borrow pit changes and future developments; (iv) updated estimates for the remaining capacity, closure date for the current phase and closure date for the current landfill footprint; (v) any new information or proposed changes relating to the facilities and Design and Operation Plan; (vi) composting operation activity including amount of material received for composting, material composted, material sold and number of composting cycles; (vii) occurrences or observations of wildlife (medium and large carnivores), at the facility; (viii) a statement regarding the facility's progress in reducing the regional solid waste stream, in accordance with the hierarchy of reduce, reuse and recycle principles; and, (ix) the results of all monitoring programs as specified in this Operational Certificate. Data interpretation and comparison to the performance criteria in the Landfill Criteria for Municipal Solid Waste and the Guidelines for Environmental Monitoring and Municipal Solid Waste Landfills. Trend analysis, as well as an evaluation of the impacts of the discharges on the receiving environment in the previous year shall be carried out by a qualified professional.

<p>Details/Findings:</p>	<p>Officer Coleman reviewed the 2019 and 2020 Annual Reports and found:</p> <p>Both reports were submitted before June 30 of each year.</p> <p>(i) An executive summary was included in the 2019 and 2020 Annual Reports,</p> <p>(ii) The type and tonnage of waste received, recycled and land filled for the year, was included in the 2019 and 2020 Annual Reports.</p> <ul style="list-style-type: none"> <li>- Table 1 of the 2019 Annual Report confirmed the landfill received 34,226 tonnes of residential waste, 27,2889 tonnes of commercial and industrial waste, 19,818 tonnes of construction and demolition waste and 615 tonnes of asbestos. Table 2 in the 2019 Annual Report confirmed that the Facility recycled tires, appliances, scrap metal, and other recycling materials for a total of 42,458 tonnes.</li> <li>- Table 1 of the 2020 Annual Report confirmed the landfill received 39,463 tonnes of residential waste, 24,230 tonnes of industrial and commercial waste, 17,991 tonnes of construction and demolition waste, and 334 tonnes of asbestos. Table 2 in the 2020 Annual Report confirmed that the Facility recycled tires, appliances, scrap metal and other recycling materials for a total of 40,593 tonnes.</li> </ul> <p>(iii) A current topographic map detailing airspace consumption was not included in the 2019 and 2020 Annual Reports. Section 3.9 of the reports confirmed the landfill consumed 97,591 cubic meters in 2019 and 128,957 in 2020. There were no on-site borrow pit changes noted in the 2019 and 2020 Annual Reports; therefore, this requirement was not applicable. Future developments were included in the 2020 Annual Report, as applicable. The RDFFG is found to be out of compliance for failing to provide a current topographic map detailing airspace consumption in the Annual Reports.</p> <p>(iv) Updated estimates for the remaining capacity, closure date for the current phase and closure date for the current landfill footprint.</p> <ul style="list-style-type: none"> <li>- The remaining airspace for Cell 1 in the 2019 Annual Report was reported to be 695,697 cubic meters. The lifespan of Cell 1 was estimated to extend beyond 2027; however, no closure date was provided.</li> <li>- The remaining airspace for Cell 1 in the 2020 Annual Report was reported to be 816,901 cubic meters. The lifespan of Cell 1 was estimated to extend beyond 2027; however, no closure date was provided.</li> </ul> <p>The RDFFG has be found to be out of compliance for failing to provide a closure date for the current phase and current landfill footprint.</p> <p>(v) New information or proposed changes relating to the Facility's Design and Operation Plan, were included in Section 2.2 of the 2019 and 2020 Annual Report. Proposed changes to the site operations were included in Section 3.11 of the 2019 and 2020 Annual Reports.</p> <p>(vi) Composting operation activities were included in Table 3 and Section 3.7 of the 2019 and 2020 Annual Reports. Table 3 included:</p> <ul style="list-style-type: none"> <li>- The amount of material received for composting, 7,040 tonnes in 2019 and 7,478 tonnes in 2020</li> <li>- The type material composted, manure, grass, chipped yard and garden, and yard and garden and,</li> <li>- The amount of compost sold in 2019 was 5,242 cubic meters, and 7,363 cubic meters in 2020. and number of composting cycles Table 3 of the 2019 and 2020 Annual Reports. Section 3.7 confirmed there were five composting cycles in both 2019 and 2020.</li> </ul> <p>(vii) Occurrences or observations of wildlife (medium and large carnivores), at the Facility were included in section 3.3 of the 2019 and 2020 Annual Reports.</p> <p>(viii) A statement regarding the facility's progress in reducing the regional solid waste stream, were included in Section 3.4 of the 2019 and 2020 Annual Reports; however, it did not include the hierarchy of reduce, reuse and recycle principles, and the RDFFG is out of compliance with this requirement.</p>
--------------------------	---

The 2019 and 2020 Groundwater Monitoring Reports and the 2019 and 2020 Landfill Gas Reports presented the results of the monitoring programs, as specified in the OC.

The reports included data interpretation and comparison to the performance criteria in the Landfill Criteria for Municipal Solid Waste and the Guidelines for Environmental Monitoring and Municipal Solid Waste Landfills. The Reports included trend analysis, as well as an evaluation of the impacts of the discharges on the receiving environment from the previous year. The reports were carried out by a qualified professional.

Compliance:	Out
Actions to be taken:	Ensure the annual report contains the following, <ul style="list-style-type: none"> <li>- A current topographic map detailing airspace consumption;</li> <li>- A provide a closure date for the current phase and current landfill footprint; and</li> <li>- A statement regarding the facility's progress in reducing the regional solid waste stream, in accordance with the hierarchy of reduce, reuse, and recycle principles.</li> </ul>
Requirement Description:	<p><b>9. CLOSURE PLAN</b></p> <p>9: At least one year in advance of decommissioning the landfill, or as otherwise specified by the Director, a Closure Plan shall be submitted which includes at least the following information: i) a topographic plan showing the final elevations contours of the landfill and surface water diversion and drainage controls; ii) specifications for the final cap and proposed end use of the site; and, iii) provisions for a minimum 25 year post-closure care period at the facility which, at a minimum, considers the following: groundwater monitoring, surface water monitoring, landfill gas management, erosion and settlement monitoring and management.</p>
Details/Findings:	During the on-site inspection, RDFFG staff informed Officer Coleman that there are no plans to decommission the Facility. Therefore, compliance with this requirement was not applicable for the Inspection Period.
Compliance:	Not Applicable
Requirement Description:	<p><b>10. CLOSURE AND POST-CLOSURE FUND</b></p> <p>10: The Regional District will conform to the Public Sector Accounting and Auditing Board's requirements (PS 3270) to recognize solid waste landfill closure and post-closure liability. The Regional District will develop a plan to ensure that sufficient funds are available for closure and post-closure care work.</p>

Details/Findings:	During the on-site inspection, RDFFG staff informed Officer Coleman that there are no plans to decommission the Facility. Therefore, compliance with this requirement was not applicable for the Inspection Period.
Compliance:	Not Applicable

Compliance History:  
This is the first electronic compliance record for this authorization since January 1, 2012.

The Ministry of Environment Compliance and Enforcement Policy and Procedure (C&E Policy) prescribes common requirements and procedures for all Ministry staff to ensure consistent and risk-based assessment and response to non-compliance. Using the Non-Compliance Decision Matrix, the compliance determination for this inspection has been assessed as **Level 1, Category A, Advisory**.

More information about Environmental Compliance, the Non-Compliance Decision Matrix, and reporting and data submission requirements can be found at the links below:  
General compliance information:  
[www.gov.bc.ca/environmentalcompliance](http://www.gov.bc.ca/environmentalcompliance)  
Non-Compliance Decision Matrix information:  
[www.gov.bc.ca/environment/how-compliance-is-assessed](http://www.gov.bc.ca/environment/how-compliance-is-assessed)  
Reporting and data submission requirements (to be sent to [EnvAuthorizationsReporting@gov.bc.ca](mailto:EnvAuthorizationsReporting@gov.bc.ca)):  
<https://www2.gov.bc.ca/gov/content/environment/waste-management/waste-discharge-authorization/comply>

Please be advised that this inspection report may be published on the provincial government website within 7 days.

If you have any questions about this letter, please contact the undersigned.

Yours truly,

Julia Coleman  
Environmental Protection Officer

cc: Petra Wildauer - [pwildauer@rdffg.bc.ca](mailto:pwildauer@rdffg.bc.ca); Leonard Cook - [leonard.cook@gov.bc.ca](mailto:leonard.cook@gov.bc.ca)

**Attachments:** Photo Log

**Deliver via:**

Email:  Fax:  Mail:   
Registered Mail:  Hand Delivery:

---

**Ministry of Environment  
and Climate Change  
Strategy**

Compliance  
Environmental  
Protection Division

Mailing Address:  
3rd Fl  
1011-4th Ave  
Prince George BC V2L 3H9

Telephone: 250 565 6135  
Facsimile: 250 565 6629  
Website: [www.gov.bc.ca/env](http://www.gov.bc.ca/env)

**DISCLAIMER:**

Please note that sections of the permit, regulation or code of practice referenced in this inspection record are for guidance and are not the official version. Please refer to the original permit, regulation or code of practice.

To see the most up to date version of the regulations and codes of practices please visit  
<http://www.bclaws.ca>

If you require a copy of the original permit, please contact the inspector noted on this inspection record.

It is also important to note that this inspection record does not necessarily reflect each requirement or condition of the authorization therefore compliance is noted only for the requirements or conditions listed in the inspection record.

Photo Record IR#: 178487

Authorization: 1697	Client Name: Regional District of Fraser-Fort George
NRIS IR #: 178487	Site Inspection Photos: July 14, 2021

Photo 2 - Asbestos not being disposed of in accordance with Section 40(2) of the HWR. The waste asbestos was not adequately covered with a minimum of 0.5 m of cover material. (Photo provided by Officer Cook, taken July 14, 2021).



**APPENDIX D**  
**CONTROLLED WASTE APPLICATION**

## INSTRUCTIONS TO APPLICANTS - Processing of Controlled Wastes

1. Please complete Sections A, B & C of Part I. Submit complete application form to Environmental Services of the Regional District of Fraser-Fort George with supporting documentation. Incomplete applications will be returned to the applicant for completion prior to processing.
2. Following consideration of the application, Regional District staff will contact the applicant's contact person to discuss the results.
3. Charges applicable to the Controlled Waste to be disposed at the landfill will be determined by weight on the scales at the landfill facility. Where scales are not available, Regional District staff will determine charges on a volume to weight standard.
4. Minimum notice of 48 hours will be required prior to delivery. Regional District staff will confirm delivery arrangement with the applicant.
5. If controlled waste material requires manifestation from provincial or federal authorities, the manifest must accompany the load and applicable copies of completed manifests must be provided to landfill staff.

**\*\*\*Effective November 16, 2021\*\*\***

**Asbestos disposals will be limited to Tuesday, Wednesday, and Thursday. Disposals will be accepted no later than 1pm. Weather conditions may result in cancellation of scheduled deliveries and rescheduling will be required.**

**\*\*\*\*\*BLADDER BAG BIN LINERS ARE NO LONGER ACCEPTED\*\*\*\*\***

**\*\*\*\*\*BIN CAPACITY MUST NOT EXCEED 20 YARDS\*\*\*\*\***

**Applicants will ensure that bagged asbestos will be hand unloaded by workers wearing the PPE required as per WorkSafeBC regulations. Employees and contractors of the Regional District of Fraser-Fort George are not responsible for any part of the unloading process and will escort and inspect all loads to ensure compliance.**

**Asbestos Disposal:** fax completed applications to 250-962-8920

**Controlled Waste Disposal (other than asbestos):** fax completed applications to 250-562-8676

Regional District of Fraser-Fort George  
Environmental Services

OFFICE LOCATION

155 George Street  
Prince George, BC V2L 1P8  
Phone: 250-960-4400 Fax: 250-562-8676

8:00 am - 5:00 pm  
Monday to Friday excluding statutory holidays

MAILING ADDRESS

155 George Street  
Prince George, BC  
V2L 1P8

**REGIONAL DISTRICT OF FRASER-FORT GEORGE**  
**Application for Acceptance of Controlled Wastes**

---

**Part I**

*(to be completed by Applicant wishing to dispose of a Controlled Waste at a Regional Landfill)*

**A. SOURCE SITE INFORMATION**

**1. Source Site Address**

Street Address: \_\_\_\_\_

City: \_\_\_\_\_ Postal Code: \_\_\_\_\_

Legal Description: \_\_\_\_\_ PID: \_\_\_\_\_

**2. Site Owner Name**

Last: \_\_\_\_\_ First: \_\_\_\_\_ Middle Initial(s): \_\_\_\_\_ *(and/or, if applicable)*

Company: \_\_\_\_\_

Mailing Address: \_\_\_\_\_

City: \_\_\_\_\_ Province: \_\_\_\_\_ Postal Code: \_\_\_\_\_

Telephone: ( \_\_\_\_\_ ) \_\_\_\_\_ Fax: ( \_\_\_\_\_ ) \_\_\_\_\_

**3. Source Site Contact Person**

Last: \_\_\_\_\_ First: \_\_\_\_\_ Middle Initial(s): \_\_\_\_\_ *(and/or, if applicable)*

Company: \_\_\_\_\_

Mailing Address: \_\_\_\_\_

City: \_\_\_\_\_ Province: \_\_\_\_\_ Postal Code: \_\_\_\_\_

Telephone: ( \_\_\_\_\_ ) \_\_\_\_\_ Fax: ( \_\_\_\_\_ ) \_\_\_\_\_



**REGIONAL DISTRICT OF FRASER-FORT GEORGE**  
**Application for Acceptance of Controlled Wastes**

---

**Part II**  
*(To be completed by Regional District)*

**Reviewed By:** \_\_\_\_\_

**Date:** \_\_\_\_\_

**Applicant:** \_\_\_\_\_

**Application No.** \_\_\_\_\_

Analytical Assessment:

Laboratory Analysis Required	YES	NO
Laboratory Analysis Received	YES	NO
Further Testing Required	YES	NO
MSDS Information Received	YES	NO

**Waste Material Type:** \_\_\_\_\_

**Waste Source:** \_\_\_\_\_

**Disposal Authorization:** \_\_\_\_\_

**Project Period:** \_\_\_\_\_

**Disposal Directions:** \_\_\_\_\_

\_\_\_\_\_  
\_\_\_\_\_

**Comments:** \_\_\_\_\_

\_\_\_\_\_

**Receiving Facility:** \_\_\_\_\_

Reviewer's Signature: \_\_\_\_\_ Date: \_\_\_\_\_

Approved: \_\_\_\_\_

Not Approved: \_\_\_\_\_

**APPENDIX E**  
**SITE BROCHURE**

## CENTRALIZED COMPOSTING

Large quantities of source separated yard and garden waste can be dropped off at the Foothills Boulevard Regional Landfill at no charge for inclusion into the centralized compost operation. NorGrow compost is sold at the Foothills Boulevard Regional Landfill. Please call for pricing and loading times.

## RECYCLING BINS

Foothills Boulevard Regional Landfill provides recycling bins for corrugated cardboard and multi-material recycling. Multi-material recycling bins are divided into two compartments:

- **Containers and Cartons**  
*Plastic containers, steel packaging, aluminum containers and paper packaging containing liquids when sold. Empty and rinse containers - labels are okay, remove caps, pumps & lids, place loose in the bin. Put metal lids inside cans and flatten.*
- **Mixed Paper**  
*Flattened cardboard, catalogues, glossy flyers, cereal boxes, office paper, kraft grocery bags, envelopes, magazines, newspaper and cardboard egg cartons. **NO paper that has any plastic, foil, wax or food residue attached to it.***

For a detailed list of accepted materials, please refer to the Regional District Recycling Brochure or visit our website.

## APPLIANCES CONTAINING REFRIGERANT

Fridges, freezers, air conditioners, and dehumidifiers under the Major Appliance Recycling Roundtable (MARR) Stewardship program are accepted **free of charge** for recycling. (<https://www.marrbc.ca>)

## USED OIL AND ANTIFREEZE

Used oil, oil filters and containers, and used antifreeze and containers under the BC Used Oil Management Association (BCUOMA) Stewardship program are accepted **free of charge** for recycling. (<https://www.bcusedoil.com>)

## SCRAP METAL RECYCLING

Metal materials accepted at the Foothills Boulevard Regional Landfill for recycling include:

- Appliances and parts such as stoves, dishwashers, hot water tanks, washers, dryers and any other **non-refrigeration** type appliance, many of which are part of MARR;
- Bicycle frames and barbecue hulks;
- Metal roofing and siding;
- Lawnmower bodies, snowmobile and motor bike frames (fuel, lubricants and tires must be removed);
- Steel containers (drums and tanks) must be crushed or perforated to ensure that they contain no liquid or hazardous material. Pressurized containers cannot be recycled.

## TIRES

As of March 31, 2022, tires are no longer accepted at Regional District transfer stations or landfills.

When buying new tires, leave your old ones with the tire retailer and they will ensure that they are recycled. Otherwise, please visit Tire Stewardship BC (TSBC) ([www.tsbc.ca](http://www.tsbc.ca)) or call Toll-free 1-866-759-0488 to find your nearest drop-off location.

## BATTERIES

Automotive lead acid batteries over 5 kg and household batteries accepted for recycling under the Call2Recycle Stewardship program are accepted free of charge for recycling. (<https://www.call2recycle.ca>)

## PROPANE TANKS

One empty propane tank 20 lbs and under is accepted free of charge per visit.

## FURTHER INFORMATION

For recycling and disposal information on materials not accepted at the Foothills Boulevard Regional Landfill, please ask the on-site attendant. For information concerning Regional District waste management facilities and programs, contact the Regional District Service Centre at 250-960-4400 or visit the Regional District website at [www.rdffg.bc.ca](http://www.rdffg.bc.ca).

## HOURS OF OPERATION

Foothills Boulevard Regional Landfill Hours of Operation	
<b>Operating Hours:</b>	
Monday to Friday	7 am – 5 pm
Saturday & Sunday	9 am – 5 pm
<b>Holiday Operating Hours</b> are from 9 am to 5 pm. (Easter Monday, Victoria Day, Labour Day and Thanksgiving Day ONLY).	
This facility is <b>CLOSED</b> on all other Holidays:	
New Years' Day	National Day of Truth and Reconciliation
Family Day	Remembrance Day
Good Friday	Christmas Day
Canada Day	Boxing Day
BC Day	

## PAYMENT

Payment may be made by cash, cheque, Mastercard, VISA, AMEX, Discovery, or debit card. Commercial customers may apply to the Regional District for credit accounts. Application forms are available from the Foothills Boulevard Regional Landfill during operating hours or Financial Services at 155 George Street, Prince George, BC, between 8:45 am – 12:00 pm and 1:00 pm – 5:00 pm, Monday to Friday (excluding holidays).

**When delivering waste to Regional District facilities, ensure that loads are covered and secured so that material does not blow out onto the roads. Any unsecured loads will be subject to a double charge.**



**REGIONAL DISTRICT  
of Fraser-Fort George**

155 George Street, Prince George, BC V2L 1P8  
Tel: 250-960-4400 • Toll Free: 1-800-667-1959  
Fax: 250-563-7520 • Email: [environment@rdffg.bc.ca](mailto:environment@rdffg.bc.ca)

**[www.rdffg.bc.ca](http://www.rdffg.bc.ca)**



## LANDFILL SERVICES

The site provides opportunities for recycling, centralized composting of yard and garden trimmings, residential waste disposal by way of an on-site transfer station and commercial waste disposal.

## SITE OPERATION

The Foothills Boulevard Regional Landfill is operated by the Regional District of Fraser-Fort George. As the largest landfill in the Regional District, the Foothills Boulevard Regional Landfill plays a central role in the Regional Solid Waste Management Program.

## LOCATION MAP



## TIPPING FEES AND SITE REGULATIONS

A tipping fee is a charge levied for disposal of waste and is based on weight and type of material. Tipping fees apply to all municipal solid waste, including “controlled waste”, refuse and demolition, land clearing and construction waste (DLC). Tipping Fees and Site Regulations are established as per Regional District of Fraser-Fort George Bylaw No. 3166, 2020, Amendment Bylaw No. 3245, 2021.

## FEES – WASTE DISPOSAL

The fee to dispose of refuse in other than a ‘small load’ is \$94 per tonne (subject to change) or a \$6 minimum charge per load. Load weights are measured on scales provided at the landfill.

## SALVAGING

Salvaging of materials deposited into the disposal bins, recycling bins or from the Marshalling Area is not permitted.

## PROHIBITED MATERIALS

The following materials are not accepted for disposal at the Foothills Boulevard Regional Landfill. For disposal options, please consult with the attendant.

- Automotive Batteries (recycling only)
- Cattle Carcasses
- Explosives
- Fencing Wire (scrap metal recycling only)
- Fuels
- Hazardous Waste
- Household Batteries (recycling only)
- Ignitable Waste
- Industrial Chemical Waste
- Lithium Ion Batteries (over 5 kg)
- Liquids
- Lubricants
- Paints/Solvents
- Radioactive Waste
- Reactive Waste
- Refuse (on fire or smoldering)
- Restaurant grease
- Slurry/Sewage Sludge
- Steel/Plastic Drums (if not cut, crushed, or perforated)
- Tires on Rims

## DLC WASTE

Demolition, land clearing and construction waste can have value when source separated and removed from the waste stream for recycling. Below are the accepted DLC waste tipping fees for source separated versus mixed loads.

DEMOLITION, LAND CLEARING AND CONSTRUCTION WASTE	SEPARATED MATERIAL		MIXED WITH OTHER MATERIALS	
	RATE PER TONNE OF WEIGHT	MINIMUM CHARGE	RATE PER TONNE OF WEIGHT	MINIMUM CHARGE
Asphalt	\$188.00	\$12.00	\$188.00	\$12.00
Asphalt Shingles	\$94.00	\$6.00	\$188.00	\$12.00
Clean Soil	\$0	\$0	\$188.00	\$12.00
Clean Wood	\$47.00	\$3.00	\$188.00	\$12.00
Concrete	\$223.00	\$12.00	\$223.00	\$12.00
Gypsum Board or Wallboard	\$94.00	\$6.00	\$188.00	\$12.00
Masonry or Rubble	\$188.00	\$12.00	\$188.00	\$12.00
Painted or Treated Wood	\$47.00	\$3.00	\$188.00	\$12.00
Scrap Metal	\$47.00	\$3.00	\$188.00	\$12.00
Stumps or Large Branches	\$47.00	\$3.00	\$188.00	\$12.00

## SMALL LOAD

A small load user fee of \$6.00 per visit, for loads up to 100 kg, will apply to all loads of household waste delivered to the Foothills Boulevard Regional Landfill.

Loads weighing more than 100 kg will be charged based on the current tipping fee rate (\$94 per tonne as of January 1, 2022).

If your load contains recycling or yard and garden waste only, no fee will apply.

If you have both waste and recyclables, you are encouraged to separate your load so that the recycling and waste portions can be weighed separately. If your load is mixed and not separated, you will be charged based on the entire weight of the load.

## PERMITS FOR DISPOSAL OF CONTROLLED WASTE

A permit issued by the Regional District is required to deposit a controlled waste at the Foothills Boulevard Regional Landfill. Permit application forms are available from the Foothills Boulevard Regional Landfill during regular operating hours, or on the Regional District website.

## SEPARATED MATERIAL

When sorted separately, DLC waste can be recycled locally for cheaper than landfill tipping fees. For more information visit [www.SortSmart.ca](http://www.SortSmart.ca)

## CONTROLLED WASTE

Controlled wastes are materials that require special handling and disposal techniques to avoid creating health hazards, nuisances or environmental pollution. Controlled wastes require pre-approval and a Regional District permit prior to delivery. Check with landfill staff concerning permits and delivery times.

CONTROLLED WASTE	RATE PER TONNE OF WEIGHT	MINIMUM CHARGE
Appliances containing ozone depleting substances		\$0
Asbestos	\$343.50	\$6.00
Bulky Waste	\$111.50	\$6.00
Camp Waste	\$94.00	\$6.00
Concrete	See DLC Waste fees	
Condemned Foods	\$171.50	\$6.00
Contaminated Soil	\$111.50	\$6.00
Creosote treated wood	\$171.50	\$6.00
Dead Animals	\$171.50	\$6.00
Food Processing Waste	\$94.00	\$6.00
Gypsum Board or Wallboard	See DLC Waste fees	
International Waste	\$343.50	\$6.00
Pumpings from commercial laundry lint traps	\$94.00	\$6.00
Pumpings from parking lot drainage sumps	\$94.00	\$6.00
Pumpings from sumps which collect run-off from vehicle washing facilities	\$94.00	\$6.00
Screening from municipal sewage treatment plants and pumping stations	\$94.00	\$6.00
Sterilized Biomedical Waste received from certified sterilization facilities	\$94.00	\$6.00
Sterilized Sharps received from certified sterilization facilities	\$171.50	\$6.00
Tires - Medium Truck (inside diameter >16.5 inches and < 25.5 inches) off rims	As of March 31, 2022 tires are no longer accepted	
Tires - Off Road		
Vehicle Hulks	\$171.50 per unit	
Waste sludge from municipal sewage treatment plants and screening stations	\$0	\$0
Wood ash from industrial operations	\$94.00	\$6.00

\*In all cases, Bylaw No. 3166, 2020, Amendment Bylaw No. 3245, 2021 should be consulted for conditions and definitions of terms.

**APPENDIX F**  
**2023 Foothills Volume Assessment**



August 14, 2023

Regional District of Fraser-Fort George  
155 George Street  
Prince George, British Columbia  
V2L 1P8

Attention: Mr. Darwin Paton  
Environmental Services Technician

***2023 Volume and Site Life Assessment – Foothills Boulevard Regional Landfill***

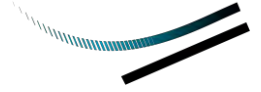
Dillon Consulting Limited (Dillon) is pleased to provide the 2023 volume and site life assessment for the Foothills Boulevard Regional Landfill (Site) located in the Regional District of Fraser-Fort George (RDFFG).

Aerial photographic mapping was completed over the Site on May 11, 2023 by Aero Geometrics Ltd. Information obtained from the aerial photographic mapping was used to generate the 2023 elevation contours which were then compared against the May 21, 2022 elevation contours to determine the approximate airspace consumed at the Site between the two time periods. Based on a comparison of the May 2022 and May 2023 elevation contours, approximately 134,910 cubic metres of airspace was consumed (63,200 cubic metres in the top deck area and 71,700 cubic metres in the Phase 1 / Stage 2 area). **Figure 1**, attached, presents the May 11, 2023 contours and areas which were infilled.

Weigh scale records indicate that 70,143 tonnes of waste were landfilled at the Site between May 2022 and May 2023, as provided by the RDFFG. Using the total tonnage of waste landfill at the Site and the calculated airspace consumed, the apparent density for the landfill was calculated to be approximately 0.52 tonnes per cubic metre (70,143 tonnes / 134,910 cubic metres). The apparent density is not a true density but is a relationship that represents the mass of waste disposed in each cubic metre of landfill airspace, excluding soils used as cover. This apparent density is significantly lower than previous year of 0.8.

As per the 2022 Landfill Airspace Volume Assessment (Dillon, 2022), the remaining airspace at the Site as of May 21, 2022 was 600,911 cubic metres. The remaining airspace as of May 11, 2023 is therefore estimated to be approximately 466,001 cubic metres (600,911 cubic metres minus 134,910 cubic metres) based on the current landfill footprint. Based on a historic average density of about 0.75 and 70,000 tonnes per year of waste, the remaining life of Cell 1 is approximately 5 years (May 2028). However, if the apparent density remains at the current level, the remaining life of Cell 1 would decrease to approximately 3.5 years (November 2026).

3820 Cessna Drive  
Suite 510  
Richmond  
British Columbia  
Canada  
V7B 0A2  
Telephone  
604.278.7847  
Fax  
604.278.7894

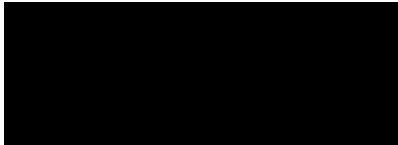


Given the limited airspace remaining in Cell 1, it is important to maximize the airspace consumption to ensure construction of Cell 2 is completed before Cell 1 is depleted. It is recommended that semi-annual airspace surveys be undertaken to track the airspace consumption rate and apparent density in an effort to maximize the remaining cell life. This will allow the RDFFG to identify lower apparent density rates earlier and have the contractor make operational adjustments sooner.

Dillon appreciates the opportunity to support the RDFFG with this volume and site life assessment. Should you have any questions or require additional information, please do not hesitate to contact us.

Sincerely,

**DILLON CONSULTING LIMITED**



Phillip Auclair, P.Eng.  
Senior Waste Engineer

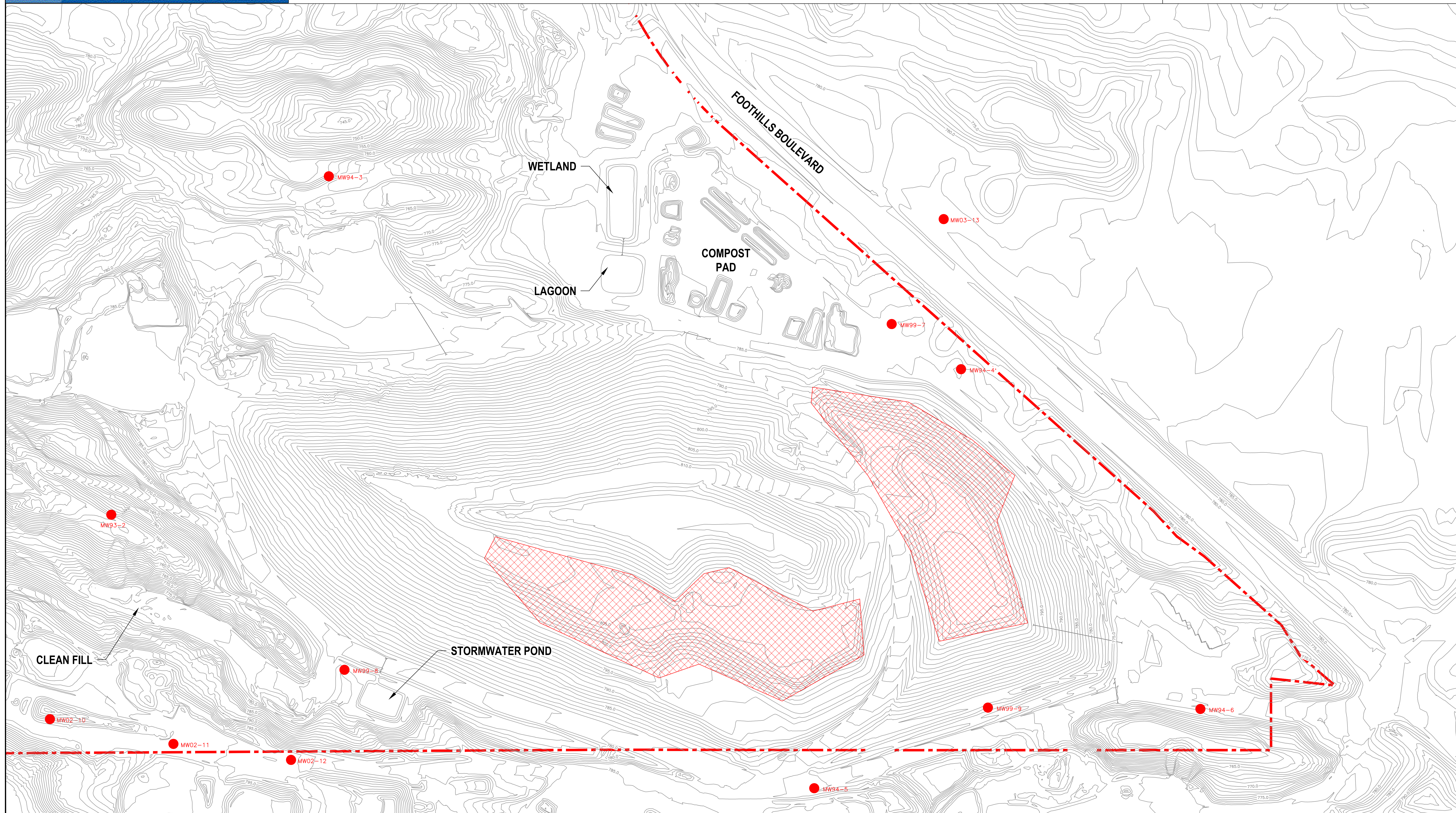
RMAA:kml



# FOOTHILLS BOULEVARD REGIONAL LANDFILL SITE TOPOGRAPHY

**LEGEND**

-  PROPERTY BOUNDARY
-  MW03-00 MONITORING WELL
-  WASTE FILL AREA



**NOTE: EXISTING CONDITIONS AS OF MAY 2023**