2022 Landfill Annual Report (ME-15273)

Town of Osoyoos

March 2023

Project No. 302-708-010

ENGINEERING ■ PLANNING ■ URBAN DESIGN ■ LAND SURVEYING

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Revision Log

Revision #	Revised by	Date	Issue / Revision Description

Report Submission

Report Prepared By:

Anthony Martins, EIT
Project Engineer

Report Reviewed By:

Steve Underwood, P. Eng.
Project Engineer

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List of Acronyms

AO	Aesthetic Objective
DOCP	Design, Operations and Closure Plan
DLC	Demolition, land clearing and construction Waste
EPO	Environmental Protection Officer
GCDWQ	Guidelines for Canadian Drinking Water Quality
HDPE	High density polyethylene
LFG	Landfill gas
MAC	Maximum Allowable Concentration
MOE	Ministry of Environment and Climate Change Strategy
OMRR	Organic Matter Recycling Regulation
OC	Operational Certificate
RDOS	Regional District of Okanagan Similkameen
TRUE	TRUE Consulting

Units of Measure

ft	feet
Igpm	Imperial gallons per minute
km	kilometre
L/d	Litres per day
L/m	Litres per minute
L/s	Litres per second
lpcd	Litres per capita per day
m	metre
mg/L	milligrams per Litre
mm	millimetre
NTU	Nephelometric Turbidity Units
psi	pounds per square inch
USgpm	US gallon per minute

Referenced Reports

BC MoE	“Landfill Criteria for Municipal Solid Waste,” June 2016
TRUE Consulting	Town of Osoyoos, “Landfill Design/Operation/Closure Plan,” August 2018
TRUE Consulting	Town of Osoyoos, “Landfill Gas Generation Assessment Report for the Town of Osoyoos Landfill,” April 2019

1.0 Description and General Operation

The Town of Osoyoos Landfill is located approximately 3 km north of the municipal boundary and 1.5 km west of Highway 97. This area is locally described as the Osoyoos West Bench. The Osoyoos landfill has been in operation for more than 60 years at this location.

During the 1950's and 1960's, the northwest corner of the landfill site was used for landfilling. The Town employed the trench and cover method for landfilling operations. Through the 1970's, 1980's and 1990's, landfilling was undertaken in the area legally described as DL829, extending east to the designated Stage 1 area. The landfill site plan can be seen in Figure 1-1.

In December 2010, the starter berm for Stage 2 was constructed along the eastern property line (see Figure 1-1). Five groundwater monitoring wells were constructed at the landfill site to enable more comprehensive groundwater analysis. Three of the five monitoring wells are placed down gradient of the Stage 2 landfill area (see Figure 1-1). In January of 2011, the active landfilling area moved to Stage 2.

Figure 1-1 illustrates four receiving basins for hauled liquid waste located in the southeast corner of the landfill site. Waste quantities discharged to the hauled liquid waste basins are measured at the landfill scale and are presented on the waste summaries herein. The hauled liquid waste system is authorized by a separate waste management permit (Operational Certificate ME-12214) and described in a separate annual report.

In 2008, a 100 mm diameter water service was constructed to the landfill site from Irrigation System No. 8. The water service is approximately 2 km in length, is designated as non-potable and is protected by a backflow prevention device approved by the Interior Health Authority. Since construction of the water service, organic wastes have been composted by the landfill operations contractor.

The operation of the landfill is contracted to the private sector by the Town of Osoyoos. B and B Wood Grinding Services had the operation and maintenance contract from 2005-2020. Whissell Waste Solutions (now Environmental 360 Solutions) was awarded this contract in January 2021. The landfill scale is operated by Town staff.

MONITORING WELLS

MW-1-'97: T.O.C.=359.577; GROUND=359.800

LFMW-3-'10: T.0.C.=359.859; GROUND=359.270

FMW-4-'10: T.O.C.=361.748; GROUND=361.100

LFMW-5-'10: T.O.C.=361.098; GROUND=360.408

LFMW-6-'10: T.O.C.=382.273; GROUND=381.563

LFMW-7-'10: T.O.C.=383.189; GROUND=382.600

NOTE: T.O.C.=TOP OF EXTERIOR COVER

UTM COORDINATES

MW-1-'97: N 5436715.552 E 315818.076

LFMW-3-'10: N 5436801.491 E 315800.68

LFMW-4-'10: N 5436908.687 E 315802.288

LFMW-5-'10: N 5436976.356 E 315804.245

LFMW-6-'10: N 5437174.161 E 315586.691

LFMW-7-'10: N 5436935.496 E 315464.741

NOTES

1) BACKGROUND IMAGERY WITHIN LANDFILL SITE BOUNDARY FROM OCTOBER 27, 2017. BACKGROUND IMAGERY OUTSIDE LANDFILL SITE BOUNDARY FROM OCTOBER 23, 2015

LANDFILL GATE

SCALE HOUSE

STORM INLET

LFMW-7-'10

MW OCTOBER 2010

EXISTING 600Ø STORM

1950's &1960's TRENCH & COVER AREA

D.L.829

D.L.993

D.L.993

LFMW-6-'10

MW OCTOBER 2010

LANDFILL SITE BOUNDARY

ACCESS ROAD

STAGE 1

STAGE 2

HAUL ROAD

ACTIVE LANDFILL AREA

EXISTING ROAD

D.L.993

OUTLET

LANDFILL SITE BOUNDARY

MW OCTOBER 2010

MW OCTOBER 2010

MW OCTOBER 2010

BERM

HAULED LIQUID WASTE DISPOSAL LAGOONS

MW LANDFILL LEASE

MW-1-'97

LFMW-3-'10

LFMW-4-'10

LFMW-5-'10

DESERT INTERPRETIVE CENTRE

OSOYOOS LANDFILL
SITE PLAN & ASBUILT MONITORING WELL LOCATIONS

TRUE CONSULTING
PERMIT TO PRACTICE #1000129

DESIGN BY: NA

SCALE: 1:2500

DRAWN BY: RA

DATE: 03/18/2022

DWG NO.: FIG 1-1

302-708-009

REV: 01

FILE:r:\clients\300-399\302\302-708-009\03 drawings\cad\02 design drawings\302-708-009 figure 1-1.dwg

2.0 Operational Certificate Authorization

The operation of the Osoyoos Landfill is authorized by Operational Certificate (OC) No. MR 15273, dated March 26, 2002 (see Appendix A). The OC describes general operational requirements as well as requirements for the landfill's Operations and Closure Plan.

The Design, Operation, and Closure Plan (DOCP) for the Osoyoos Landfill was completed in August 2018. Referring to Figure 1-1, the DOCP envisions development of two separate stages:

- Stage 1 represents the northern half of the landfill site. Landfilling in this area was discontinued in December 2011. Final cover is in place on Stage 1.
- Stage 2 represents the southern half of the landfill site and will be developed by landfilling from the eastern boundary to the west. The Stage 2 area was surveyed on September 9, 2022. The remaining airspace capacity at that time was approximately 208,040 m^3, as shown in Figure 2-1. Specifically, this figure illustrates the volumetric analysis conducted between the existing topography surface and final contour surface, as shown in the 2018 DOCP. The volume between these two surfaces represents the remaining airspace. Landfilling in the Stage 2 area was initiated in January 2011.

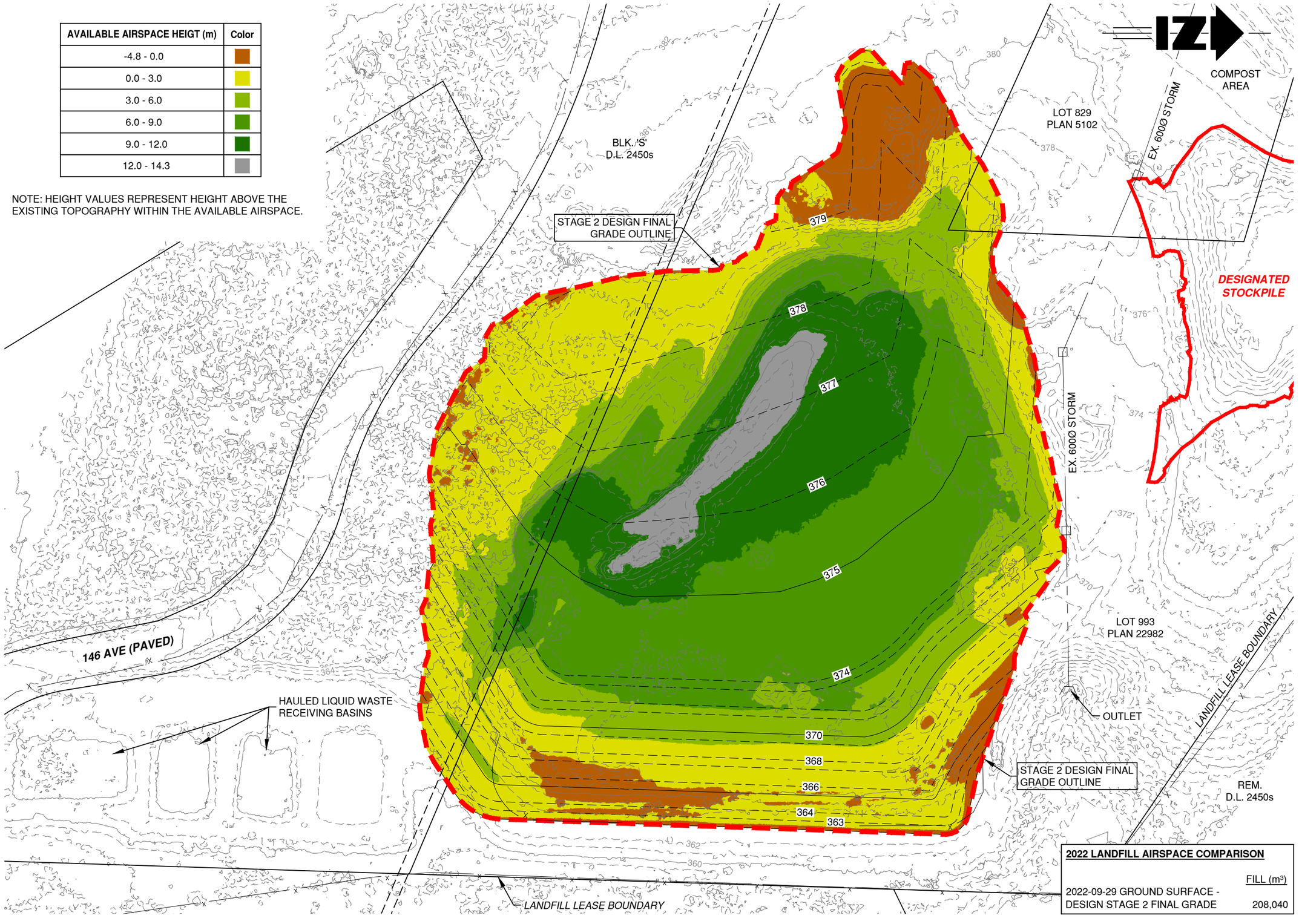
Final cover placement for Stage 1 proceeded on a phased basis, beginning in 2010. Completion of the cover occurred in 2013. The final cover is comprised of silt and clay, derived from a borrow area within the Stage 2 footprint area, and includes a 150 mm thick top cover of existing Class 'B' compost material available at the landfill. A site plan of the landfill is presented in Figure 2-2.

In 2016, removal of cover material from Stage 2 was initiated and stockpiled on Stage 1. This material will be used as future cover material for Stage 2. In 2016, approximately 5,000 m^3 of material was removed from Stage 2. In 2017, an additional 20,000 m^3 of material was removed and stockpiled on Stage 1.

Remaining airspace is intended to be updated every two years (based on aerial survey). The last aerial survey was completed on September 29, 2022. Thus, the next scheduled survey will be completed in late September or early October of 2024.

AVAILABLE AIRSPACE HEIGT (m)	Color
-4.8 - 0.0	
0.0 - 3.0	
3.0 - 6.0	
6.0 - 9.0	
9.0 - 12.0	
12.0 - 14.3	

NOTE: HEIGHT VALUES REPRESENT HEIGHT ABOVE THE EXISTING TOPOGRAPHY WITHIN THE AVAILABLE AIRSPACE.



2022 LANDFILL AIRSPACE COMPARISON

	FILL (m³)
2022-09-29 GROUND SURFACE - DESIGN STAGE 2 FINAL GRADE	208,040

2022 GROUND SURFACE TELEMETRY CAPTURED BY TRUE CONSULTING ON SEPTEMBER 29, 2022

CONTOUR INTERVAL= 1.0m

CONSULTANT SEAL

TRUE CONSULTING

Osoyoos — Canada's warmest welcome

TOWN OF OSOYOOS LANDFILL

2022 AIR SPACE CAPACITY SUMMARY

SCALE	1:1250
DESIGN BY	
DRAWN BY	DF
DATE	SEPTEMBER 2022
PROJECT REFERENCE No.	302-7010
DRAWING No.	302-712-001
SHEET	1 OF 1
ISSUE/REV.	-

FIG 2-1

FILE: n:\clients\300-399\302\302-712\03 drawings\cad\02 design drawings\dgn 302-712 am.dwg

No.	DATE	DESCRIPTION	BY	APP'D
1	MAR 30/22	FIGURE UPDATED	SPC	NA

ISSUES / REVISIONS

CONSULTANT SEAL

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PERMIT TO PRACTICE #1000129

2079 Falcon Road ▪ Kamloops BC ▪ V2C 4J2
tel 250.828.0881 ▪ info@true.ca

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LANDFILL ANNUAL REPORT

LANDFILL ORTHO SITE PLAN

SCALE	N.T.S.
DESIGN BY	TRU
DRAWN BY	TT
DATE	JULY 2017
PROJECT REFERENCE No.	302-708-005

DRAWING No.

Fig. 2-2

302-708-006

SHEET

ISSUE/REV.

1

FILE: r:\clients\300-399\302\302-708-006\03 drawings\cad\02 design drawings\302-708-006

3.0 Landfill Quantities (OC 4.6a)

3.1 Current and Historical Landfill Quantities

Quantity summaries for materials accepted at the Town of Osoyoos Landfill for the last ten years (2012-2022) are summarized in Table 3-1. A complete historical record of quantities dating from 1996 - 2022 may be found in Appendix B. The classification of material is to some extent subjective and based on the judgement of the scale operator.

From the perspective of the landfill lifespan and expansion phasing, the important quantity is the actual total volume of material landfilled. This volume is referred to as consumed airspace in the Solid Waste Management Industry. Material streams which contribute to airspace include materials for operations and closure, and solid waste. Some examples of operations and closure materials include cover soils, fire breaks, containment berms, temporary roads, and leachate management, landfill gas and cover system (LFG) infrastructure. Whereas solid waste is limited to regulated materials as defined in the OC. For the Osoyoos landfill, solid waste materials are categorized in Table 3-2. The quantity of landfilled material derived from recorded data has the following sources of variation:

- The waste categories change from year to year as determined by the scale operator. The landfilled material quantity is a summation of these discreet categories and accounts for any operational changes to waste diversion streams.
- In 2007, the Town initiated composting. Since this time, the volume of wastes landfilled has decreased significantly.
- Recycled materials are not included in monthly totals as shown in Table 3-2. These materials include demolition, land clearing, and construction waste (DLC), recycled metals and plastics, tires, white goods, clean wood, yard and garden waste, and compostable organics.
- There is uncertainty whether the new category “Clean Cover Material” is recycled or landfilled. As of 2012, Clean Cover Material is not included in the actual total quantity of material landfilled, but instead listed as a separate line item.
- The hauled liquid waste system is authorized by a separate Permit (PE 14804) under the provisions of the Waste Management Act and described in a separate annual report. Therefore, hauled liquid waste is reported separate from actual total quantities.

A summary of the total and monthly quantities generated within each 2022 waste stream is presented in Table 3-2. In 2022, a total of 5,763 tonnes of material were scaled at the landfill facility. Of this quantity, 4,045 tonnes was solid waste and 1,717 tonnes was diverted. These

quantities show an approximate 12% decrease in landfilled solid waste materials (when compared to 2021 totals), and approximately 30% of scaled materials were diverted.

As seen in Table 3-3 capital projects produced a total of 385 tonnes of construction waste (e.g., concrete, rubble, asphalt, etc.) in 2022. The Town of Osoyoos implements a strict segregation policy for waste streams generated from construction to allow for recycling of materials such as clean wood, concrete, asphalt and clean soils. For this reason, corresponding waste categories are diverted from the landfill and recycled. For this reason, these materials are not included in the actual quantity of material landfilled.

In minor cases, recycled materials such as crushed concrete and asphalt millings are used as operational materials to maintain landfill roads. Impacts to airspace consumption from these materials are considered in the lifespan analysis. This analysis is updated every two years with the actual remaining air space determined by volumetric analysis produced with topographic survey of existing ground. This is then compared to the final cover to establish a remaining airspace calculation Based on this, it can be determined if the projection is being significantly impacted. This does not appear to be case for 2022.

TABLE 3-1: ANNUAL LANDFILL WASTE QUANTITIES FROM 2012-2022 (TONNES)

WASTE CATEGORY	Total 2012	Total 2013	Total 2014	Total 2015	Total 2016	Total 2017	Total 2018	Total 2019	Total 2020	Total 2021	Total 2022
Batteries	0	0	0	0	0	0	0	0	0	0	0
Const Waste A (conc, asphalt, etc.)	2,575	2,155	1,037	239	595	3,199	4,635	582	1,757	1,143	489
Const Waste B (demolition)	527	194	238	357	67	43	55	29	48	58	50
Const Waste C (compostable)	470	224	159	190	193	226	169	214	256	128	72
Const Waste - Mixed	0	0	0	34	15	1	85	14	22	6	0
Metals - Type A (white goods)	0	0	21	25	27	27	33	31	33	26	16
Metals - Type B (scrap metal)	47	37	0	0	0	0	0	0	0	0	0
Tires	6	1	0	5	4	5	6	5	5	3	6
Commercial Waste	2,173	1,872	2,177	1,966	2,075	2,037	1,949	2,181	1,961	2,107	1,638
Municipal Waste	2,105	2,228	1,890	1,736	1,897	1,976	2,809	2,008	2,136	2,424	2,357
Yard Waste A (compostable garden)	300	835	849	866	1,058	1,043	969	916	928	1,090	1,062
Yard Waste B (chippable limbs, compost, puncture vine, etc.)	0	0	0	16	2	2	1	6	4	6	0
Yard Waste C	491	0	0	0	0	0	0	0	0	0	0
Refrigerators	25	26	26	19	23	23	26	29	26	28	17
Propane Tanks											
Agricultural Plastics- Recycled	0	0	0	0	0	0	0	0	0	0	0
Recycled DLC	0	0	0	16	57	36	88	73	105	134	56
Biosolids	396	0	0	0	0	0	0	0	0	2	0
ANNUAL TOTALS	9,115	7,572	6,397	5,469	6,013	8,618	10,825	6,087	7,280	7,156	5,763

SUMMARY OF PROCESSING											
ORGANICS COMPOSTED	1,260	1,059	1,007	1,072	1,253	1,272	1,139	1,136	1,188	1,223	1,135
RECYCLED	78	64	48	65	112	91	153	138	168	192	94
CONSTRUCTION	2,575	2,155	1,037	239	595	3,199	4,635	582	1,757	1,143	489
LANDFILLED	5,201	4,293	4,305	4,093	4,054	4,056	4,898	4,231	4,167	4,598	4,045
ANNUAL TOTALS	9,115	7,572	6,397	5,469	6,013	8,618	10,825	6,087	7,280	7,156	5,763

CATEGORIES NOT INCLUDED IN SUMMARY											
HAULED LIQUID WASTE	5,225	2,622	2,084	1,920	2,021	2,352	2,119	2,680	3,160	4,579	5,108
COMPOST SALES									321	181	204
CLEAN COVER MATERIAL (CCMT & CGC)	5,664	320	1,531	175	1,430	1,718	8,116	2,040	3,451	836	1,096
ANNUAL TOTALS	10,889	2,942	3,616	2,095	3,451	4,070	10,235	4,720	6,932	5,597	6,409

(1) Annual totals account for all waste brought to the landfill but do not include the hauled liquid waste and clean cover material.
Note that Annual Totals are equivalent to the summation of: Landfilled, Construction, Recycled, and Organics Composted.
(2) Landfilled category refers to the materials deposited in active landfill face.
(3) Recycled category refers to materials stored within the limits of the landfill site until such time that these materials are salvaged and/or recycled by others (Batteries, Type 'A' & 'B' Metals, Tires, Refrigerators, Propane Tanks and Agricultural Plastics).
(4) Organic are materials which biodegrade naturally (Yard Waste 'A', 'B', and 'C').
(5) Demolition materials may be salvageable and are kept separate from active landfill face (Construction Waste 'A' and 'C').
(6) Refrigerators are counted by piece (of freon removal). An average mass of 75kg per piece is applied.
(7) Propoane tanks are recycled and not included in annual totals.

TABLE 3-2: SUMMARY OF MONTHLY LANDFILL QUANTITIES FOR 2022 (TONNES)

2022 WASTE CATEGORY	2022 January	2022 February	2022 March	2022 April	2022 May	2022 June	2022 July	2022 August	2022 September	2022 October	2022 November	2022 December	Total to Date
Const Waste A (conc, rubble, asphalt, etc.)	32	190	3	80	32	105	8	2	16	3	17	-	**489**
Const Waste B (drywall or asphalt shingles)	0	2	6	4	7	2	5	3	7	8	3	2	**50**
Const Waste C (white wood, lumber, stump, compost, etc.)	2	7	1	3	27	6	2	3	4	5	12	2	**72**
Mixed Load Construction Waste	-	-	-	-	-	-	0	-	-	-	-	-	**0**
Mixed Load Commercial Waste	0.7	1.1	0.4	6.4	11.7	11.1	10.2	10.1	15.1	18.7	21.4	18.8	**126**
Mixed Load Residential Waste	8	10	17	22	25	37	26	22	31	24	32	16	**270**
Metals - (white goods, 80% metal or more)	0	1	1	2	1	3	1	0	1	5	1	0	**16**
Tires	0	0	0	1	1	0	2	1	0	0	0	-	**6**
Commercial Waste	109	70	145	152	195	150	183	73	151	108	104	72	**1,513**
Municipal Waste (Town & WSI pickup)	98	110	112	115	129	98	140	303	66	111	112	70	**1,465**
Gravel from Road Construction													**-**
Residential Waste	25	28	40	90	60	61	69	49	44	58	12	6	**541**
Yard Waste A (all green wood less than 5", compost)	7	8	7	0	5	13	18	- 5	25	8	9	-	**95**
Yard Waste B (white wood, lumber, compost, etc.) - PW	-	-	-	-	-	-	-	-	-	-	-	-	**-**
WSI Yard & Garden Waste - Curbside p/u (compost)	-	-	22	33	62	45	38	35	36	38	41	-	**349**
Free Chippable & Compostable	1	9	56	79	54	98	48	56	79	68	38	2	**587**
Free Compostable (fruit or vegetables)	-	0	-	-	-	0	2	1	0	15	14	0	**31**
Demolition and Land Clearing	-	42	-	-	6	5	1	-	-	0	-	-	**54**
Recycled DLC	2	5	4	6	5	8	5	6	5	4	4	2	**56**
Asbestos	2	4	0	7	1	0	1	7	1	0	1	0	**27**
Puncture Vine	-	-	0	-	-	0	-	0	0	-	-	-	**0**
Agricultural Plastics	-	-	-	-	-	-	-	-	-	-	-	-	**-**
Agricultural Plastics - Recycled	-	-	-	-	-	-	-	-	-	-	-	-	**-**
Refrigerators**	1	1	1	1	3	2	2	1	1	1	2	1	**17**
Bio Solids	-	-	-	-	-	-	-	-	-	-	-	-	**-**
TOTALS	288	488	416	601	625	645	562	565	482	474	424	191	**5,763**

** Refrigerators were counted by pieces therefore an average mass of 75kg per piece has been assumed

SUMMARY OF PROCESSING

Recycled and Composted													
- Organics, incl. White Wood, Yard & Garden Wastes, Compost	9	24	86	115	147	162	108	89	145	133	114	4	**1,135**
- Recycled Metals, Tires, Const. Waste 'A', Ag. Plastic, Refrigerators	34	192	5	84	37	110	13	4	17	9	20	1	**527**
- Recycled DLC	2	5	4	6	5	8	5	6	5	4	4	2	**56**
Landfilled	243	267	321	397	436	365	437	467	315	328	286	184	**4,045**
TOTALS	288	488	416	601	625	645	562	565	482	474	424	191	**5,763**

CATEGORIES NOT INCLUDED IN SUMMARY

Hauled Liquid Waste	138	127	366	352	278	345	533	343	354	849	1,341	82	**5,108**
Compost Sales	-	-	17	110	40	14	4	0	2	13	4	-	**204**
Clean Cover Material (CCMT & CGC)	-	41	123	148	141	210	49	174	58	131	20	-	**1,096**
TOTALS	138	169	505	611	460	569	587	517	415	993	1,364	82	**6,409**

*Tire rims are taken by the tire recyclers and not included in metal recycling. They are not included in the landfill summary.

TABLE 3-3: LANDFILL QUANTITIES FOR 2022 WITH TABULATION OF TOWN PROJECTS (TONNES)

2022 WASTE CATEGORY	Gross at Scale	Town Waste Capital Projects	Net Waste Without Town Capital Projects
Const Waste A (conc, rubble, asphalt, etc.)	489	369	119
Const Waste B (drywall or asphalt shingles)	50	-	50
Const Waste C (white wood, lumber, stump, compost, etc.)	72	14	58
Mixed Load Construction Waste	0	-	0
Mixed Load Commercial Waste	126	-	126
Mixed Load Residential Waste	270	-	270
Metals - (White goods, 80% metal or more)	16	1.1	15
Tires	6	0	6
Commercial Waste	1,513	-	1,513
Municipal Waste (Town & Curbside pickup)	1,465	-	1,465
Gravel from Road Construction	-	-	-
Residential Waste	541	-	541
Yard Waste A (All green wood less than 5", compost)	95	-	95
Yard Waste B (white wood, lumber, compost, etc.) - PW	-	-	-
WSI Yard & Garden Waste - Curbside p/u (compost)	349	-	349
Free Chippable & Compostable	587	-	587
Free Compostable (Fruit or Vegetables)	31	-	31
Demolition and Land Clearing	54	-	54
Recycled DLC (subtract from the totals)	56	-	56
Asbestos	27	1	26
Puncture Vine	0	-	0
Agricultural Plastics	-	-	-
Agricultural Plastics - Recycled	-	-	-
Refrigerators**	17	-	17
Bio Solids	-	-	-
TOTALS	**5,763**	**385**	**5,377**

** Refrigerators were counted by pieces therefore an average mass of 75Kg per piece has been assumed.

SUMMARY OF PROCESSING

Recycled and Composted			
- Organics, incl. White Wood, Yard & Garden Wastes, Compost	1,135	14	**1,121**
- Recycled Metals, Tires, Const. Waste 'A', Ag. Plastic, Refrigerators	527	371	**156**
- Recycled DLC	56	-	**56**
Landfilled	4,045	1	**4,045**
TOTALS	**5,763**	**385**	**5,377**

CATEGORIES NOT INCLUDED IN SUMMARY

Hauled Liquid Waste (sludge)	5,108	13.05	5,095.10
Compost Sales	10	-	9.63
Clean Cover Material (CCMT & CGC)	1,096	382	713.84
TOTALS	**6,214**	**395**	**5,819**

With respect to long-term planning for the landfill site, the quantity actually landfilled is the most significant. The total quantity actually landfilled, and the total quantity recycled or composted for the last five years is summarized in Table 3-4.

TABLE 3-4: TOWN OF OSOYOOS LANDFILL QUANTITIES

YEAR	LANDFILLED (TONNES)	RECYCLED AND COMPOSTED (TONNES)	TOTAL QUANTITY (TONNES)
2017	4,056	4,562	8,618
2018	4,898	5,927	10,825
2019	4,231	1,856	6,087
2020	4,167	3,113	7,280
2021	4,598	2558	7156
2022	4,045	1,717	5,763

3.1.1 Prohibited Wastes (OC 3.2)

In compliance with OC Section 3.2 Prohibited Wastes, the Town of Osoyoos does not accept Hazardous Waste. These types of waste include:

a) Special Wastes other than those specifically authorized in the *Special Waste Regulation,*
b) Biomedical waste as defined in the document *Guidelines for the Management of Biomedical Waste in Canada* (CCME, February 1992), and
c) Liquids or semisolid wastes which contain free liquid, except as otherwise authorized by the Waste Management Act Permit PE-14804.

In addition to these prohibited wastes, the following wastes are also prohibited unless specifically authorized by the Regional Waste Manager:

d) Automobiles, white goods, other large metallic objects (now diverted through recycling programs), and tires,
e) Dead animals and slaughter house, fish hatchery and farming wastes or cannery wastes and by products.

It is verbally confirmed by the Town of Osoyoos that operations staff at the Osoyoos Landfill are trained to recognize and reject these materials.

3.2 Composting Operations

The composting area of the landfill is comprised of a 3,800 m^2 compost pad. The pad includes a 150 mm subgrade layer of pit run sand, overlain by a 60 mil high density polyethylene (HDPE) geomembrane, 150 mm pitrun sand, filter fabric and 200 mm gravel travel surface. The pad is graded so any leachate generated will collect in a sump located on the southwest corner of the pad. Leachate generation is minimal at the landfill site due to the arid climate. Any leachate generated is recycled back onto the compost pile, preventing seepage into the ground and solid waste under the compost pad area. The compost pad plan and details can be found in Appendix C.

In accordance with the Organic Matter Recycling Regulation (OMRR), the Town of Osoyoos submitted notification of composting operations at the municipal landfill. An Acknowledgment Letter was received from the Ministry of Environment and Climate Change Strategy (MOE) on December 10, 2018 (see Appendix C). The effective date of notification for the form submission was November 21, 2018. The Authorization Number for this facility is 109610.

As required under Section 24(2) of the OMRR and noted in the Acknowledgement Letter, supplemental information was submitted to the Ministry in February 2019 with additional correspondence in February 2021 (see Appendix C). Due to changes in Ministry staffing, a response was not received by the Town until they reached out to an Environmental Protection Officer ("EPO") in February 2023. As specified by the EPO, the Town will be preparing detailed descriptions of the operating, leachate and odor management plans for the facility for review and approval.

4.0 Service Population and Per Capita Generation Rates (OC 4.6b)

Section 4.6 (b) of the OC requires reporting of the service population and waste discharge rates with a comparison and trend analysis in relation to the 1996 baseline rate of 1.20 tonnes per capita. Table 4-1 is a summary of the estimated landfill service population, with the Regional District of Okanagan Similkameen ("RDOS") Electoral Area A and the Town of Osoyoos listed separately. The total quantity of solid waste, and per capita contributions are summarized from 1996-2022. This total does not include materials recycled, composted, clean cover material and hauled liquid waste.

TABLE 4-1: SERVICE POPULATION AND LANDFILL QUANTITY SUMMARY

Year	Service Population		Total Population	Landfilled Quantity (Tonnes)	Landfilled Quantity (Annual Tonnes/Capita)
	Town	Electoral Area A			
1996	4,021	1,968	5,989	4,614	0.77
1997	4,076	1,954	6,030	4,311	0.71
1998	4,131	1,940	6,071	3,679	0.61
1999	4,188	1,926	6,113	3,306	0.54
2000	4,245	1,912	6,157	3,430	0.56
2001	4,295	1,897	6,192	3,980	0.64
2002	4,353	1,902	6,255	5,785	0.92
2003	4,466	1,907	6,373	4,799	0.75
2004	4,441	1,911	6,352	5,587	0.88
2005	4,623	1,916	6,539	5,285	0.81
2006	4,752	1,921	6,673	6,563	0.98
2007	4,848	1,915	6,763	6,049	0.89
2008	4,889	1,909	6,798	6,854	1.01
2009	4,965	1,904	6,869	6,616	0.96
2010	4,896	1,898	6,794	6,872	1.01
2011	4,845	1,892	6,737	6,538	0.97
2012	4,886	1,885	6,771	5,201	0.77
2013	4,927	1,878	6,805	4,293	0.63
2014	4,968	1,872	6,840	4,305	0.63
2015	5,009	1,865	6,874	4,093	0.60
2016	5,050	1,858	6,908	4,054	0.59
2017	5,151	1,914	7,065	4,056	0.57
2018	5,252	1,970	7,223	4,898	0.68
2019	5,354	2,027	7,380	4,231	0.57
2020	5,455	2,083	7,538	4,167	0.55
2021	5,556	2,139	7,695	4,598	0.60
2022	5,657	2,195	7,852	4,045	0.52

Source: BC Stats, Government of B.C.

Source: Statistics Canada Census Profile

Interpolated Values Between Know Years

Referring to Table 4-1:

- The service populations reflect population information as provided by BC Stats and Statistics Canada Census Profile. Sources for annual populations have been identified.
- The service populations listed for RDOS Electoral Area A are generated from census data for 1996, 2001, 2006, 2011, 2016, and 2021. Between census years, populations are extrapolated estimates.
- The annual per capita waste generation rate ranges between 0.52 tonnes/capita to a maximum value of 1.01 tonnes/capita. Since 2010, the landfilled quantity has decreased

annually from 1.01 annual tonnes/capita in 2010, to 0.52 annual tonnes/capita in 2022. This is the lowest value for annual waste generation to date.

- With respect to the 1996 baseline of 1.2 tonnes per capita, referenced in the Operational Certificate, the per capita generation rate for the Osoyoos Landfill has been consistently less than this value. In 2022, the per capita rate was approximately 45% of the 1996 baseline value.

A summary of the waste generation by source is provided in Figure 4-1. The landfilled material has been grouped into four sub-categories: municipal waste excluding municipal projects, municipal projects, commercial waste, and other. The subcategory "other" consists of Construction Waste B (un-burnable demolition), Mixed Load Construction Waste and Bio Solids. Figure 4-1 shows the relative contributions of different waste generation sectors. This summary quantifies the total quantity of solid waste that is actually landfilled (approximately 4,045 tonnes).

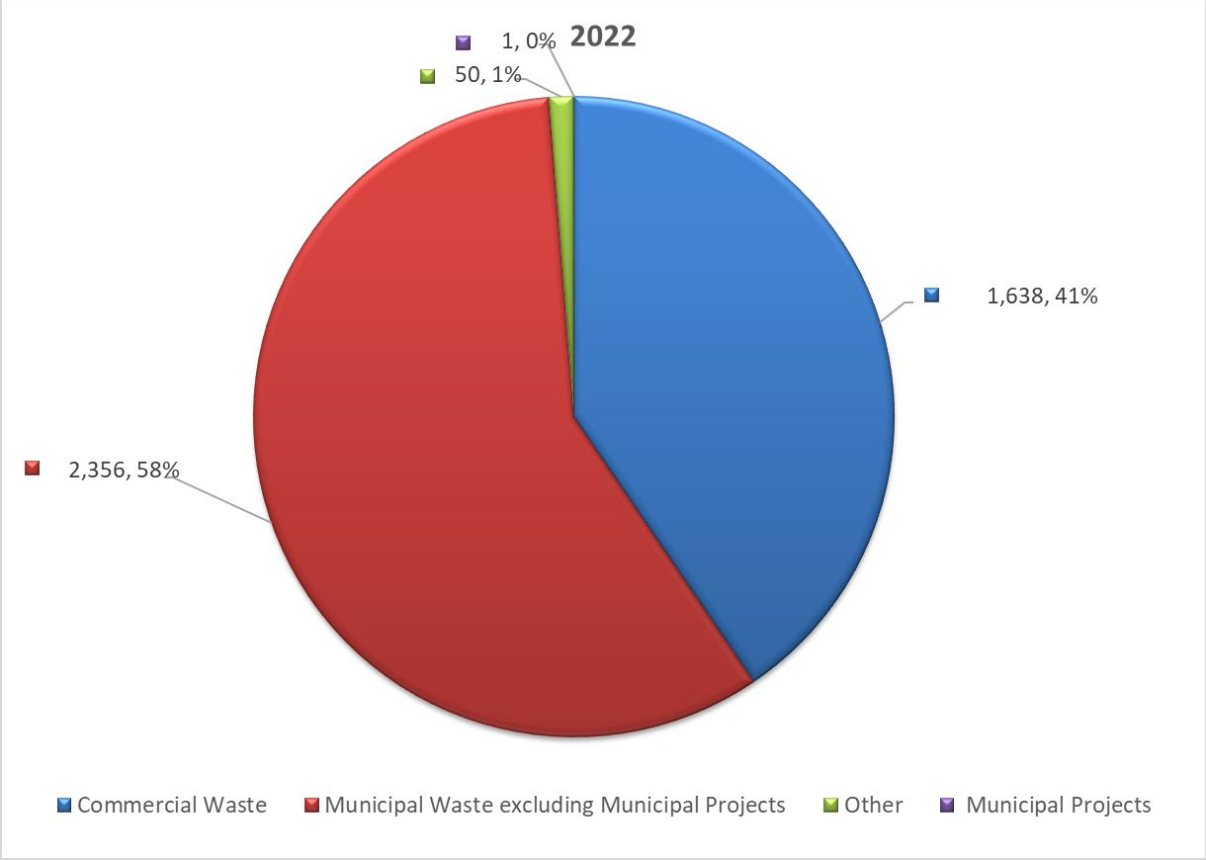


FIGURE 4-1: SOURCE BREAKDOWN OF LANDFILLED WASTE IN 2022

5.0 Remaining Site Life and Capacity (OC 4.6c)

The remaining lifetime of the Town's landfill is represented by the designated Stage 2 area as shown in Table 5-1. The total airspace available in the Stage 2 area was updated by TRUE in 2022 by aerial survey (September 2022). On December 31, 2022, the total air space available was calculated to be approximately 207,641 m^3 (see Table 5-1).

Generation Rate 0.6 tonnes/capita:

The estimated usable life of the landfill assuming a 0.60 tonnes/capita waste generation rate is approximately 25 years. This value is generated based on the following assumptions:

- The per capita waste generation rate will remain constant at approximately 0.6 tonnes/capita in the future.
- The annual growth rate of the contributing population to the landfill will be approximately 1.5% (combined Town and Electoral Area A growth rate).
- A solid waste in place compacted density of 600 kg/m^3 and an assumed long-term settlement rate of 15% (in situ densification).

Generation Rate 0.8 tonnes/capita:

The estimated usable life of the landfill assuming a 0.80 tonnes/capita waste generation rate is approximately 19 years. This value is generated based on the following assumptions:

- The per capita waste generation rate will remain constant at approximately 0.8 tonnes/capita in the future.
- The annual growth rate of the contributing population to the landfill will be approximately 1.5% (combined Town and Electoral Area A growth rate).
- A solid waste in place compacted density of 600 kg/m^3 and an assumed long-term settlement rate of 15% (in situ densification).

While the annual per capita generation rate has steadily decreased since 2012, the annual tonnes per capita has varied from 0.52 to 0.77. Therefore, two generation rate scenarios are displayed. As recycling and compost practices become more refined, the lifetime of the landfill can be increased.

TABLE 5-1: PRELIMINARY STAGE 2 AREA LIFESPAN CALCULATION

* Landfilling assumed to start in Stage 2 in January 2011

Year at December 31st	0.6 Generation Rate					0.8 Generation Rate				
	Population	Total Landfilled		Annual Settlement Reduction of 15%	Airspace Available	Population	Total Landfilled		Settlement Reduction of 15%	Current Residual Airspace
		tonnes/year	m^3/year	m^3	m^3		tonnes/year	m^3/year	m^3	m^3
2011	6,737	6,538	10,897	1,635	-	6,737	6,538	10,897	1,635	-
2012	6,771	5,201	8,668	1,300	-	6,771	5,201	8,668	1,300	-
2013	6,805	4,293	7,155	1,073	-	6,805	4,293	7,155	1,073	-
2014	6,840	4,305	7,175	1,076	-	6,840	4,305	7,175	1,076	-
2015	6,874	4,093	6,822	1,023	-	6,874	4,093	6,822	1,023	-
2016	6,908	4,054	6,757	1,014	-	6,908	4,054	6,757	1,014	-
2017	7,065	4,056	6,760	1,014	-	7,065	4,056	6,760	1,014	-
2018	7,223	4,898	8,163	1,225	-	7,223	4,898	8,163	1,225	-
2019	7,380	4,231	7,052	1,058	-	7,380	4,231	7,052	1,058	-
2020	7,108	4,167	6,945	1,042	-	7,108	4,167	6,945	1,042	-
2021	7,695	4,598	7,664	1,150	-	7,695	4,598	7,664	1,150	-
2022	7,852	4,045	6,742	1,011	207,641	7,852	4,045	6,742	1,011	**207,641**
2023	7,970	4,782	7,970	1,196	200,866	7,970	6,376	10,627	1,594	**198,608**
2024	8,090	4,854	8,090	1,213	193,990	8,090	6,472	10,786	1,618	**189,439**
2025	8,211	4,927	8,211	1,232	187,010	8,211	6,569	10,948	1,642	**180,133**
2026	8,334	5,001	8,334	1,250	179,926	8,334	6,667	11,112	1,667	**170,688**
2027	8,459	5,076	8,459	1,269	172,736	8,459	6,767	11,279	1,692	**161,101**
2028	8,586	5,152	8,586	1,288	165,437	8,586	6,869	11,448	1,717	**151,370**
2029	8,715	5,229	8,715	1,307	158,030	8,715	6,972	11,620	1,743	**141,493**
2030	8,846	5,307	8,846	1,327	150,511	8,846	7,077	11,794	1,769	**131,468**
2031	8,978	5,387	8,978	1,347	142,879	8,978	7,183	11,971	1,796	**121,292**
2032	9,113	5,468	9,113	1,367	135,133	9,113	7,290	12,151	1,823	**110,964**
2033	9,250	5,550	9,250	1,387	127,271	9,250	7,400	12,333	1,850	**100,481**
2034	9,388	5,633	9,388	1,408	119,291	9,388	7,511	12,518	1,878	**89,841**
2035	9,529	5,718	9,529	1,429	111,191	9,529	7,623	12,706	1,906	**79,041**
2036	9,672	5,803	9,672	1,451	102,969	9,672	7,738	12,896	1,934	**68,079**
2037	9,817	5,890	9,817	1,473	94,625	9,817	7,854	13,090	1,963	**56,953**
2038	9,965	5,979	9,965	1,495	86,155	9,965	7,972	13,286	1,993	**45,660**
2039	10,114	6,068	10,114	1,517	77,558	10,114	8,091	13,485	2,023	**34,197**
2040	10,266	6,159	10,266	1,540	68,832	10,266	8,213	13,688	2,053	**22,562**
2041	10,420	6,252	10,420	1,563	59,975	10,420	8,336	13,893	2,084	**10,753**
2042	10,576	6,346	10,576	1,586	50,986	10,576	8,461	14,101	2,115	**-1,233**
2043	10,735	6,441	10,735	1,610	41,861	10,735	8,588	14,313	2,147	**-13,399**
2044	10,896	6,537	10,896	1,634	32,600	10,896	8,717	14,528	2,179	**-25,747**
2045	11,059	6,635	11,059	1,659	23,199					
2046	11,225	6,735	11,225	1,684	13,658					
2047	11,393	6,836	11,393	1,709	3,974					
2048	11,564	6,939	11,564	1,735	-5,856					
2049	11,738	7,043	11,738	1,761	-15,833					
2050	11,914	7,148	11,914	1,787	-25,960					
2051	12,093	7,256	12,093	1,814	-36,238					
2052	12,274	7,364	12,274	1,841	-46,671					

This landfill lifespan projection assumes the following:
- Annual population growth of 1.5%
- Compacted landfill density of 0.6 tonnes per m^3
- 15% settlement reduction

6.0 Operation Plan for Next 12 Months (OC 4.6d)

The Operational Certificate requires that the annual report describes the operation plan for the next 12-month period. Operation plans for 2022 included:

i. Hydrogeological Review of the Town of Osoyoos Landfill Groundwater Monitoring Programme – (Budgeted for 2023 – 2024).

   The work programme will include compilation and interpretation of existing background information and water level/water quality data, assessment of the adequacy of the current groundwater monitoring programme, and assessment the effect the landfill activity is having on groundwater. The assessment will also include a preliminary assessment of the impacts from the hauled liquid waste disposal and composting operations that occur on the property.

Operations planning beyond 2023 includes the following:

ii. Design, Operations and Closure Plan ("DOCP"):

   Per the requirements of the BC Ministry of Environment Landfill Criteria for Municipal Solid Waste (June 2016), it is recommended that the landfill owner prepare and maintain a current DOCP. This shall be reviewed and updated as needed, at least once every five years. The Town completed their last DOCP update in August 2018. An update has been budgeted for 2025.

7.0 Environmental Monitoring Data (OC 4.6e)

The Osoyoos Landfill has six groundwater monitoring wells located both up and down gradient of the landfill. This allows for determination of ambient water quality characteristics versus those which can be impacted from landfill operations. The Town's public works staff measured the depth to groundwater for measurable wells monthly, as seen in Figure 7-1.

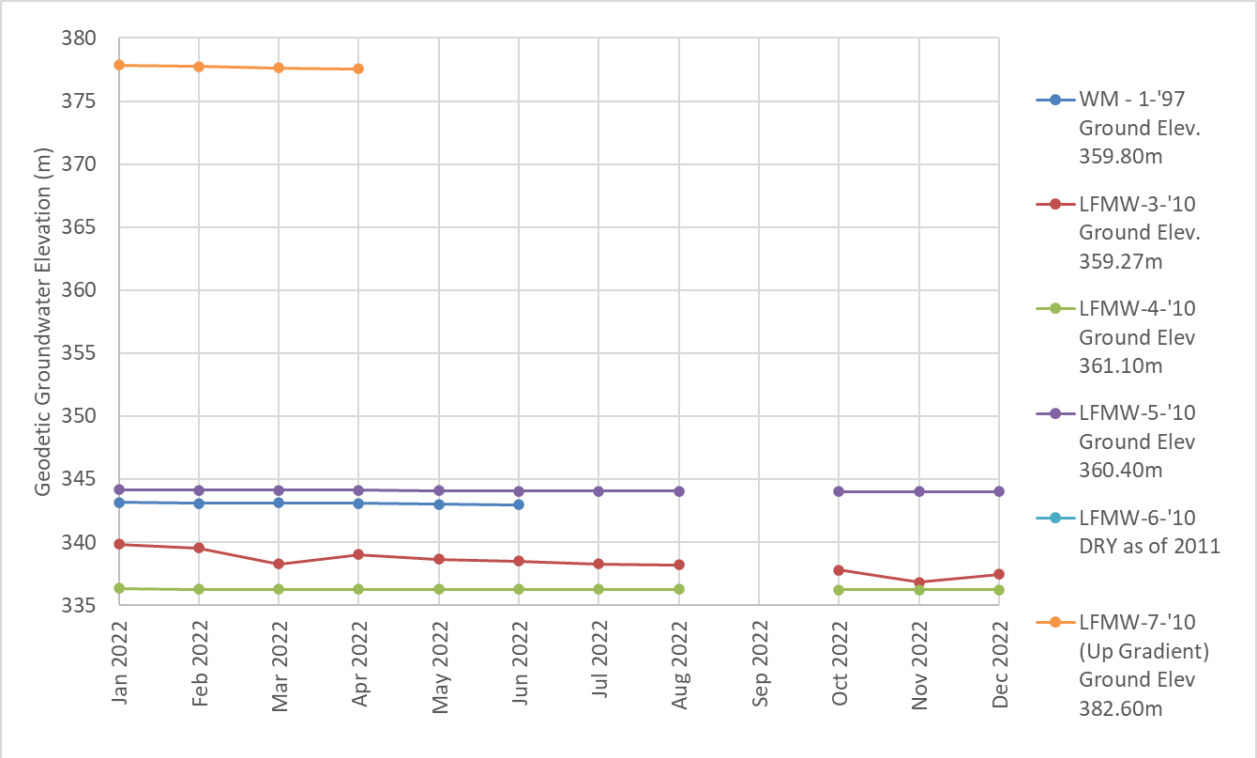


FIGURE 7-1: MONITORING WELL GROUNDWATER TABLE ELEVATIONS

The following is a summary of observed trends in 2022:

- LFMW-1-'97 was dry from July to December 2022.
- The monitoring well water levels in all measured wells remained relatively unchanged throughout the year.
- Sampling was completed for all months except for September 2022.
- LFMW-6-'10 has been dry since 2011.
- LFMW-7-'10 was damaged in May 2022 and it was not accessible for the remainder of the year.

The average groundwater table elevations from 2012 to 2022 are summarized in Table 7-1.

TABLE 7-1: AVERAGE GROUNDWATER TABLE ELEVATIONS FOR LANDFILL MONITORING WELLS

WELL NO.	AVERAGE GROUNDWATER TABLE ELEVATION (M)									
	2013	2014	2015	2016	2017	2018*	2019	2020	2021	2022
MW-1-'97	344.01	343.51	343.37	343.33	343.87	344.50	343.89	343.88	343.29	343.07
LFMW-3-'10	338.10	338.73	337.74	338.17	340.72	345.71	344.82	343.40	341.47	338.41
LFMW-4-'10	336.18	305.68	336.21	336.29	337.83	341.63	341.06	340.13	338.07	336.27
LFMW-5-'10	343.91	344.41	344.27	344.17	344.79	345.50	345.14	344.70	344.32	344.08
LFMW-6-'10	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY
LFMW-7-'10	380.34	378.51	377.82	377.93	379.81	379.98	378.42	377.56	378.55	377.69

Each of the wells are sampled for water quality characterization twice a year. Groundwater sampling was not conducted in 2022. This is not compliant with Section 4.1, 4.3, 4.5, and 4.6 (e) of the OC.

8.0 Review of Closure Plan (OC 4.6f)

A Landfill Design, Operation, Closure Plan (DOCP) was prepared for the Osoyoos Landfill in August 2018. This document is an update to the previous plan that was approved in 1996 and presents the programs, services, infrastructure, and policies that will be implemented in future years. The DOCP includes the following:

- Location and Site Description
- Topography and Natural Drainage
- Subsurface Conditions
- Climate
- Adjacent Land Use
- Historical Use
- Regulatory Agency Authorization
- Historical Landfill Data and Future Projections
- Landfill Design, Filling Plan and Closure Plan
- Post Closure Operation and Maintenance
- Hauled Liquid Waste

Within the DOCP, a capital cost estimate for closure and post-closure operation and maintenance costs are provided. This includes suggested post-closure uses for the site. Currently, the Town of Osoyoos regularly contributes to a closure fund in compliance with Section 4.8 of the OC. 2021 Financial statements for the closure fund are presented in Appendix D.

As per the requirements of the BC Ministry of Environment's 2016 Landfill Criteria for Municipal Solid Waste, the DOCP demonstrates the planning, design, construction, operation, monitoring and closure plans in accordance with the criteria outlined. The plan shall be updated as needed at least once every five years. The last DOCP was completed in August 2018. The Town has budgeted an update in their 2025 capital budget.

9.0 Landfill Gas Management (OC 4.6g)

A Landfill Gas Generation Assessment Report for the Town of Osoyoos Landfill was prepared by TRUE in March 2011 in accordance with the Landfill Gas Generation Assessment Procedure Guidance Report (the Guidelines), prepared for the Ministry of Environment by Conestoga-Rovers & Associates (CRA) and in accordance with the requirements of the British Columbia Ministry of Environment's Landfill Gas Generation Management Regulation (the Regulation).

Subsequent updates to this report were prepared in March 2014, and April 2019 in accordance with the Guidelines and Regulation. The updated reports re-characterized the waste summaries to be more representative of the solid waste composition. The 2019 Landfill Gas Generation Assessment Report is included in Appendix E of this report. As per section 15(4) of the Regulation, a supplementary report is required by March 31st on the fifth calendar year (or March 31st of 2024).

As per section 12(3) of the Regulation, records for the quantity and sources for municipal solid waste received at the landfill are retained for a period of at least 10 years as seen in Table 3-1 of this report.

APPENDIX A

Certificate MR15273

ENVIRONMENTAL
PROTECTION

BRITISH
COLUMBIA

1259 Dalhousie Drive
Kamloops
British Columbia V2C 5Z5
Telephone: (250) 371-6200
Fax: (250) 828-4000

MINISTRY OF WATER, LAND AND
AIR PROTECTION

OPERATIONAL CERTIFICATE
MR 15273

Under the provisions of the Waste Management Act and in accordance with the Approved Regional District of Okanagan-Similkameen Solid Waste Management Plan,

Town of Osoyoos

PO Box 3010

Osoyoos, British Columbia

VOH 1VO

is authorized to manage municipal solid waste and to discharge residual solid waste to the ground at a sanitary landfill facility located on 146th Avenue, Osoyoos, approximately 7 km northwest of Osoyoos, British Columbia, subject to the conditions listed below. Contravention of any of these conditions is a violation of the ***Waste Management Act*** and may result in prosecution.

This Operational Certificate does not authorise entry upon, crossing over, or use for any purpose of private or Crown lands or works, unless and except as authorised by the owner of such lands or works. The responsibility for obtaining such authority shall rest with the Operational Certificate holder. This Operational Certificate is issued pursuant to the provisions of the *Waste Management Act* to ensure compliance with Section 54 of that statute, which makes it an offence to discharge waste without proper authorisation. It is also the responsibility of the Operational Certificate holder to ensure that all activities conducted under this authorisation are carried out with regard to the rights of third parties, and comply with other applicable legislation that may be in force.

This Operational Certificate supersedes all previous authorizations issued under the authority of the Waste Management Act.

T.R. Forty, P.Eng.
Assistant Regional Waste Manager

1. AUTHORIZED DISCHARGES

1.1 This authorization applies to the discharge of solid waste to a sanitary landfill known as the Osoyoos Landfill. The Environmental Monitoring System (EMS) reference number for this discharge is **E212323**.

1.1.1 The authorized discharge is municipal solid waste and other wastes as allowed by the Regional Waste Manager.

1.1.2 The works authorized are a sanitary landfill and related appurtenances located approximately as shown on the attached Site Plan A.

1.1.3 The discharge originates generally from the Osoyoos area of the Regional District of Okanagan-Similkameen.

1.1.4 The legal description of the location of the authorized landfill facility is Lot 993 Plan 22982 and Lot 829 Plan 5102, both in District Lot 2450s, and that portion of District Lot 2450s lying south of Lot 993 Plan 2298 to the Old Richter Pass Road, Similkameen Division of Yale District, as shown on Site Plan A.

1.2 The discharge of emissions to the air to which this Sub-Section is applicable is the burning of wood residues. The EMS reference number for this discharge is **E212325**.

The authorization to open burn shall expire on December 31, 2002, after which time open burning shall be strictly prohibited.

Prior to the expiration of the authorization to open burn, the following shall apply.

1.2.1 The type of wood residues which may be burned shall be from municipal sources and is restricted to brush and untreated wood, but excluding stumps.

1.2.2 The maximum duration of each open burn shall be limited to the period between dawn and dusk of a single day.

1.2.3 The maximum authorized volume of wood residues to be burned is that which can successfully be burned in a single dawn to dusk time period in any number of separate piles.

1.2.4 The location from which the wood residues discharge originates is generally the Osoyoos area.

1.2.5 The location of the source of discharge is legally described as Lot 993 Plan 22982 and Lot 829 Plan 5102, both in District Lot 2450s, and that portion of District Lot 2450s lying south of Lot 993 Plan 2298 to the Old Richter Pass Road, Similkameen Division of Yale District, as shown on Site Plan A.

T.R. Forty, P.Eng.
Assistant Regional Waste Manager

2. DESIGN AND PERFORMANCE REQUIREMENTS

2.1 Operations and Closure Plan

An ***Operations and Closure Plan*** shall be submitted to the Regional Waste Manager. The ***Operations and Closure Plan*** shall be prepared by a qualified professional, knowledgeable in the field of landfill design, operation and closure and licensed to practice in British Columbia. The ***Operations and Closure Plan*** shall include at least the following:

(a) Anticipated total waste volumes and tonnage and the estimated life of the landfill;
(b) A landfill cell development and filling plan, outlining procedures for the placement, compaction and covering of wastes
(c) Litter, odour, dust, rodent and nuisance wildlife control measures;
(d) A screening plan, e.g.: vegetative or berm;
(e) A perimeter fencing plan to control access;
(f) Contingency plans & notification procedures in the event of an emergency;
(g) Training procedures for operators
(h) A final cover design including the thickness and permeability of barrier layers and drainage layers, topsoil requirements, vegetative cover and erosion prevention controls;
(i) A topographic plan showing the final elevation contours of the landfill and surface water diversion and drainage controls;
(j) A plan and implementation schedule for monitoring the receiving environment groundwater, surface water, landfill gas, erosion and settlement throughout the remaining life of the landfill and for a minimum post-closure period of 25 years;
(k) A plan and implementation schedule for operation of any required pollution abatement engineering such as landfill gas or leachate collection, management and treatment works for the remaining life of the landfill and a minimum post-closure period of 25 years;
(l) A forecast of the cost of completed closure and post-closure activities, plus a reasonable contingency, for the purposes of determining a schedule of reserve funds or security to be collected each year until landfill closure:
(m) A proposed end use of the property after closure;
(n) Procedures for notifying the public about the closure and about alternative waste disposal facilities; and
(o) Any other site specific concerns as identified by the Regional Waste Manager.

T.R. Forty, P.Eng.
Assistant Regional Waste Manager

Operation of this landfill is to be in substantial accordance with the ***Operations and Closure Plan***. If there should be any inconsistency between this Operational Certificate and the ***Operations and Closure Plan***, this Operational Certificate shall take precedence.

Written notification shall be provided to the Regional Waste Manager prior to implementing any changes to the ***Operations and Closure Plan***. Should circumstances warrant, a revision or addition to the ***Operations and Closure Plan*** may be required by the Regional Waste Manager.

2.2 Maintenance of Works, Emergency Procedures and Non-Compliance Reporting

2.2.1 The Operational Certificate holder shall regularly inspect the landfill and related pollution control works, designated areas for managing recyclable materials or controlled substances and maintain them in good working order.

2.2.2 In the event of an emergency or condition beyond the control of the Operational Certificate holder that prevents the continued operation of the authorized works and/or continued performance of the prescribed methods of operation, the Operational Certificate holder shall immediately notify the Regional Waste Manager and take appropriate action.

Specific requirements of the Operational Certificate may be suspended for such time as the emergency exists or as otherwise directed by the Regional Waste Manager provided that:

(a) The Operational Certificate holder can demonstrate the exercise of due diligence in relation to the process, operation or event which has caused the emergency, and that the emergency has occurred notwithstanding this exercise of due diligence;

(b) The Regional Waste Manager has been immediately notified of the emergency; and

(c) The Operational Certificate holder is proceeding with due diligence to correct the emergency condition.

2.3 Public Health Safety and Nuisance

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

T.R. Forty, P.Eng.
Assistant Regional Waste Manager

2.4 Surface Water Diversion

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

2.5 Property Boundary

The buffer zone between any municipal solid waste discharged and the property boundary is to be at least 50 metres, of which the 15 metres closest to the property boundary must be reserved for natural or landscaped screening (berms or vegetative screens). Depending on adjacent land use and environmental factors, buffer zones of less than 50 metres, but not less than 15 metres, may be authorised by the Regional Waste Manager.

2.6 Setbacks

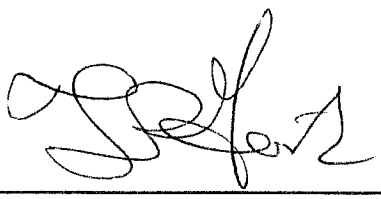
The distance between the discharged municipal solid waste and the nearest surface water is to be a minimum of 100m. The distance between the discharged municipal solid waste and the nearest residence, water supply intake, hotel, restaurant, food-processing facility, school, church or public park is to be a minimum of 300 metres. Greater or lesser separation distances may be authorised by the Regional Waste Manager where justified.

Accordingly, the Operational Certificate holder shall initiate action immediately to obtain or reserve those lands within the buffer area, or otherwise negotiate an agreement with adjacent property owners, to ensure the buffer lands are adequately protected and reserved for the future.

2.7 Ground and Surface Water Quality Impairment

The landfill must be operated in a manner such that ground or surface water quality does not decrease beyond that specified by the British Columbia Water Quality Guidelines, or other appropriate criteria as may be specified by the Regional Waste Manager, at or beyond the landfill property boundary.

If excursions result to the specified water quality criteria, the Regional Waste Manager may require that leachate management control measures or works be undertaken. Terms of reference for any leachate management study and/or design work shall be subject to the authorization of the Regional Waste Manager.



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2.8 Landfill Gas Management

Combustible gas concentrations shall not exceed the lower explosive limit in soils at the property boundary or 25% of the lower explosive limit at or in on-site or off-site structures.

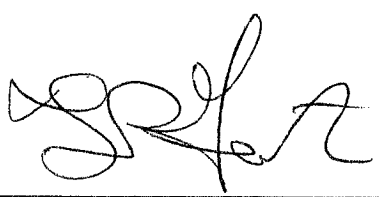
In accordance with the Provincial Landfill Criteria for Municipal Solid Waste, an assessment of the emissions of non-methane organic compounds (NMOCs) is required for landfills exceeding a total capacity of 100,000 tonnes. If NMOCs are determined to exceed 150 tonnes/year, landfill gas recovery and management systems will be required and shall be designed, installed and operational within 3 years. If NMOCs are projected to be less than 150 tonnes/year for the operating life of the landfill, an assessment for the need of passive gas venting will be required.

Accordingly, the Operational Certificate holder is directed to submit to the Regional Waste Manager a Landfill Gas Management Plan on or before October 1, 2003. The Landfill Gas Management Plan may consider actual site-specific measurements for determining the actual rate of NMOCs emissions. In the event that active gas recovery systems are not required, the Landfill Gas Management Plan shall evaluate the need for passive gas venting. The Landfill Gas Management Plan shall provide a design and an implementation schedule for any required works and measures for the management and recovery of landfill gas.

The Landfill Gas Management Plan is subject to the approval of the Regional Waste Manager. The Regional Waste Manager may require revisions to the Landfill Gas Management Plan where warranted.

2.9 Final Cover

Final cover for landfill sites is to consist of a minimum of 1 metre of low permeability (<1 x 10-5 cm/s) compacted soil plus a minimum of 0.15 metre of topsoil with suitable vegetation established. The depth of the topsoil layer should be related to the type of vegetation proposed (i.e. rooting depth). Soils of higher permeability may be authorized based on leachate generation potential at the landfill site. Final cover is to be constructed with slopes between 4% and 33% with appropriate run-on/run-off drainage controls and erosion controls. Additional design elements may be necessary due to site specific conditions and the presence of management systems for leachate and landfill gas. Completed portions of the landfill are to progressively receive final cover during the active life of the landfill.



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3. OPERATIONAL REQUIREMENTS

3.1 Landfill Supervision and Access

A suitably trained landfill operator shall be present on-site at all times during operating hours. The operator shall be familiar with the requirements of the Operational Certificate and the specifications of the approved ***Operations and Closure Plan***.

Perimeter fencing, gates and/or barriers shall be installed where necessary to prevent unauthorized access to the site by vehicles. All access points are to have locking gates, and all gates are to be locked during non-operating hours to prevent unauthorized access. Properly designed and maintained public waste disposal and/or recyclable material bins situated outside the main gate may be provided for after hours use.

3.2 Prohibited Wastes

3.2.1 The disposal of the following types of wastes is strictly prohibited:

a) Special Wastes other than those specifically authorized in the ***Special Waste Regulation***

b) Biomedical waste as defined in the document ***Guidelines for the Management of Biomedical Waste in Canada*** (CCME, February 1992)

c) Liquids or semisolid wastes which contain free liquid, except as otherwise authorized by the Waste Management Act Permit PE-14804

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3.2.2 The disposal of the following wastes is prohibited unless specifically authorized by the Regional Waste Manager:

a) Automobiles, white goods, other large metallic objects and tires

b) Dead animals and slaughter house, fish hatchery and farming wastes or cannery wastes and by-products

Burial of these wastes in dedicated locations (i.e. avoiding co-disposal) at a landfill site may be authorized by the Regional Waste Manager only if there is no other viable alternative such as treatment/disposal, recycling, reprocessing or composting. The specific location of the disposal shall be recorded to allow ready access to the waste should corrective or further action pertaining to the management of these wastes be required by the Ministry at some time in the future.

3.3 Hydrocarbon Contaminated Soils

The deposit of hydrocarbon contaminated soils below the ***Special Waste Regulation*** criteria is authorized at this landfill subject to the following conditions:

3.3.1 Soil contaminated with hydrocarbons shall be deposited in layers less than 0.3 meters; and

3.3.2 Soil contaminated with hydrocarbons shall be deposited a minimum of 1.2 meters above the seasonal high groundwater level and a minimum of 2.0 meters below the final grade of the landfill to prevent the impact on groundwater and any future vegetation on the site.

3.4 Ozone Depleting Substances

Release of ozone depleting substances from the storage, handling and disposal of used appliances, equipment, or any material containing ozone depleting substances is strictly prohibited in accordance with the requirements of the ***Ozone Depleting Substances Regulation***.

3.5 Designated Areas

Maintain areas for the separation, handling and storage of recyclable or reusable materials where applicable.

When a separated recyclable material is a special waste it is to be stored and managed in accordance with the ***Special Waste Regulation***.

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3.6 Scavenging

Scavenging of waste is to be prevented. The salvaging of wastes should be encouraged by providing areas and facilities for separation of recyclable or reusable materials.

3.7 Dust Control

Dust created within the landfill property is to be controlled, using methods and materials acceptable to the Regional Waste Manager, such that it does not cause a public nuisance.

3.8 Waste Compaction and Covering

Wastes are to be spread in thin layers (0.6 m or less) on the working face and compacted. The working face area should be minimized as much as possible. A compacted layer of cover material of at least 0.15 metre of soil or functionally equivalent depth of other cover material, as authorized by the Regional Waste Manager, is to be placed on all exposed solid waste at the end of each day of operation. If the landfill should operate continuously 24 hours per day, 0.15 m of cover material is to be applied at a frequency authorized by the Regional Waste Manager. Under specific circumstances, such as during bear season, the Regional Waste Manager may specify more stringent cover requirements. During periods of extreme weather conditions, such as those that cause the ground to freeze, an exemption to the normal cover requirements may be authorized by the Regional Waste Manager.

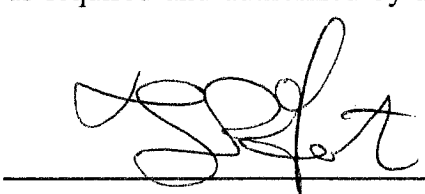
An intermediate cover consisting of a compacted layer of at least 0.30 metre of soil or functionally equivalent depth of other cover material is to be placed where no additional solid waste has been deposited or will be deposited within a period of 30 days.

3.9 Litter Control

Litter is to be controlled by compacting the waste, minimizing the working face area, applying cover, providing litter control fences and instituting a regular litter pickup and general good housekeeping program or any other measures required by the Regional Waste Manager.

3.10 Vectors

Vectors are to be controlled by the application of cover material at a specified frequency or by other control measures as required and authorized by the Regional Waste Manager.



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3.11 Wildlife

The landfill is to be operated so as to minimize the attraction of wildlife such as bears and birds by applying cover at required frequencies and instituting a good housekeeping program. Further control measures, such as bear control fences, and bird control devices, may be specified by the Regional Waste Manager.

3.12 Fire Protection

Adequate fire fighting equipment is to be available to extinguish surface or underground fires. Recyclables and reusable materials are to be stored in such a manner to not constitute a fire hazard.

3.13 Open Burning

The controlled open burning operation is authorized until December 31, 2002, at which time all open burning shall cease. The time limited authorization to open burn is subject to the following conditions:

3.13.1 The maximum duration of each open burn event shall be limited to the period between dawn to dusk of a single day, after which time the fire shall be extinguished. In order to limit the smoke that will be created from having to extinguish a fire, the wood residue to be burned shall be stacked in piles of a size that may be consumed by the fire in the dawn to dusk time frame.

3.13.2 The open burn shall not be initiated until the Venting Index for the Okanagan Valley is classified as "good". The Venting Index may be obtained from the information line at 250-861-7480.

3.13.3 Additional authorizations for open burning may be required from other government agencies. In particular, the Operational Certificate holder shall ensure that the necessary authorizations have been obtained from the British Columbia Forest Service and any applicable municipal authority.

3.13.4 The wood residues shall be segregated from the municipal solid waste and sorted to ensure that there are no unacceptable materials in the burn pile(s). Unacceptable materials are those that will produce unacceptable emissions or will not fully incinerate within the dawn to dusk time period of the burn and includes tires, plastics, insulation, asphalt shingles, putrescible waste, stumps, metal hulks, animal carcasses and the like. The wood waste shall be piled in a manner that will promote rapid and hot combustion.

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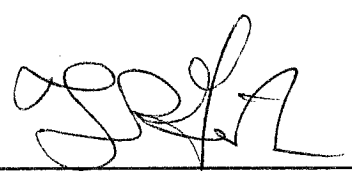
3.13.5 The open burn shall be conducted on ground that has not been previously landfilled, and a minimum 15 meter setback is to be maintained between the discharged municipal solid waste and burn area. A minimum 15 meter combustible free zone or firebreak shall be maintained around the burn area.

3.13.6 The Operational Certificate holder shall ensure that full time supervision shall be provided until the open burn is complete, that is, until there is no smoke and no further danger of fire exists). Suitable equipment is to be available to promote rapid and hot combustion of the wood residue pile(s).

3.13.7 Suitable equipment shall be available for extinguishing fires to prevent them from spreading to surrounding areas and to extinguish the fire at dusk. Such devises may include a pressurized water supply, chemical type fire extinguishers, or an earth stockpile. If an earth stockpile is used for fire control, earth-moving equipment shall be available at the site during the burning.

3.13.8 The residue of combustion shall be monitored to ensure it has cooled to ambient temperature prior to incorporating into the adjacent landfill.



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4. MONITORING AND REPORTING REQUIREMENTS

4.1 Receiving Environment Monitoring

The Operational Certificate holder shall submit for the approval of the Regional Waste Manager a monitoring program design. The monitoring program design shall be prepared by an engineer or geoscientist who is knowledgeable in the field of hydrogeology, experienced in modeling and evaluating the environmental impact from landfill sites, and licensed to practice in the province of BC. The monitoring program design shall recommend the location of monitoring wells and devises and a monitoring program sufficient to determine the environmental impact from the landfill, including groundwater contamination from landfill leachate and potential impacts from the generation of landfill gas.

Upon approval, the monitoring wells and devices specified in the monitoring program design shall be installed under the direction of the design professional and the monitoring program shall be undertaken as specified.

As-constructed drawings, sealed by the design professional, of the monitoring wells and devices shall be submitted to the Regional Waste Manager. The drawings shall include elevations relative to a common datum, and a scaled site location plan indicating the landfill footprint, associated works and all existing monitoring wells and devices.

The receiving environment monitoring devices shall be adequately secured and maintained, including provisions to ensure protection from damage due to vehicles or vandalism.

The Operational Certificate holder shall maintain records of all monitoring program data and analyses available for inspection. Data from monitoring and analyses shall be submitted to the Regional Waste Manager annually as part of the annual report required under **Section 4.6.** The adequacy of the monitoring program shall be reviewed at least annually and any revisions to the monitoring program shall be outlined in the annual report. On the basis of the information submitted in the annual report, routine inspections and any other information related to the effect of the discharge on the receiving environment, the Regional Waste Manager may vary the frequency, location, and/or analyses of any or all components of the receiving environment monitoring program.

4.2 Vegetation Monitoring

Inspect vegetation during the growing season in the vicinity of the landfill at least once per year to determine if any environmental impacts are occurring.

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4.3 Sampling and Analytical Procedures

The receiving environment sampling and monitoring shall be carried out in accordance with the appropriate procedures listed in the table below. Alternative test methods may be used only where authorized by the Regional Waste Manager. Test methods for parameters not listed below are subject to the approval of the Regional Waste Manager.

LIQUID EFFLUENTS, SURFACE WATER, GROUND WATER, SOILS, SEDIMENTS, VEGETATIVE MATTER:		
Parameter	**Sampling Procedure**	**Analytical Procedure**
Metals Nutrients Organics Toxicity	British Columbia Field Sampling Manual for Continuous Monitoring plus the Collection of Air, Air-Emission, Water, Wastewater, Soil, Sediment, and Biological Samples, 1996 or most recent edition	British Columbia Environmental Laboratory Manual for the Analysis of Water, Wastewater, Sediment and Biological Materials, 1994 or most recent edition and supplements

The above manuals are available from Queen's Printer Publications Centre, P.O. Box 9452, Stn. Prov. Govt, Victoria, BC, V8W 9V7 (1-800-663-6105 or (250)387-4609).

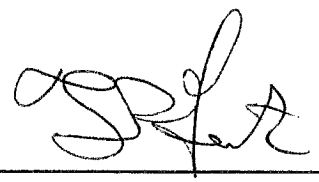
Proper care should be taken in sampling, storing and transporting the samples to adequately control temperature and avoid contamination and breakage.

4.4 Environmental Monitoring System (EMS) Sites

The receiving environment monitoring program will take into consideration existing ground and surface water monitoring sites that were previously established by the Ministry. The Operational Certificate holder shall provide precise latitude and longitude values for each of the EMS sites monitored and for any additional sites that are required.

4.5 Data Quality Assurance

The Operational Certificate holder is required to follow the terms and `conditions of the *Environmental Data Quality Assurance Regulation* (EQDA), or other legislation which may be in effect at the time. The EQDA specifies ten percent of the samples collected shall be duplicated to provide data quality assurance. Quality control information generated by the laboratory while analyzing parameters required by this Operational Certificate shall also be provided with the data required to be reported.



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4.6 Annual Report

The Operational Certificate holder shall submit an annual operations and monitoring report to the Regional Waste Manager by **March 1st** of each calendar year. The annual report shall include the following information:

(a) Total volume and/or weight of waste discharged into the landfill for the year, along with documentation of the method used to quantify the waste discharged;
(b) Service population and waste discharge rate for the year (in tonnes per capita per year) and a trend analysis with a comparison to the 1996 baseline waste discharge rate of 1.2 tonnes per capita per year;
(c) Remaining site life and capacity;
(d) Operational plan for next 12 months including any proposed changes to the ***Operations and Closure Plan***;
(e) A compilation, interpretation and trend analysis of the receiving environment monitoring data prepared by a suitably qualified professional;
(f) Review of the closure plan and associated estimated costs, for the purposes of establishing the closure fund required in **Section 4.8;** and
(g) Any other data relevant to this Operational Certificate.

4.7 Format of Submission

Monitoring and/or reporting information shall be submitted in an electronic and/or printed format which is suitable for review by the public and/or other government agencies and is satisfactory to the Regional Waste Manager.

4.8 Closure Fund

The Operational Certificate holder shall provide for the funding of operations at and beyond closure by establishing a closure fund. The ultimate value of the closure fund shall meet or exceed the estimated closure and post-closure costs as outlined in the ***Operations and Closure Plan*** and updated in the annual report, plus a reasonable contingency for any remediation which may be required.

The Operational Certificate holder shall determine and ensure that the closure fund is adequate by preparing annually a financial statement of the fund which shall be made available to the Regional Waste Manager upon request. The financial statement shall report the accrued capital, interest and additions to the fund for the previous year, and shall review the sufficiency of the fund and the rate of accrual in consideration of the projected costs of closure and post-closure obligations.

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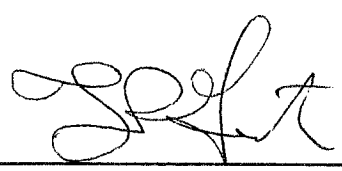
4.9 Declaration of Landfill

Landfills sited on titled land must register a covenant that the property was used for the purpose of waste disposal as a charge against the title to the property as provided for under Section 215.1 of the ***Land Title Act***. Landfills located on crown land are to have a "notation on file" registered that the property was used for the purpose of waste disposal.

4.10 Buildings and Structures

The construction of buildings and other structures on landfills containing putrescible wastes is not recommended for a minimum period of 25 years after closure due to concerns about combustible gas and excessive settlement. Such activity will only be considered and /or authorized after an investigation and report by qualified persons. The report is to be submitted for authorization to the Regional Waste Manager prior to initiating construction activities.



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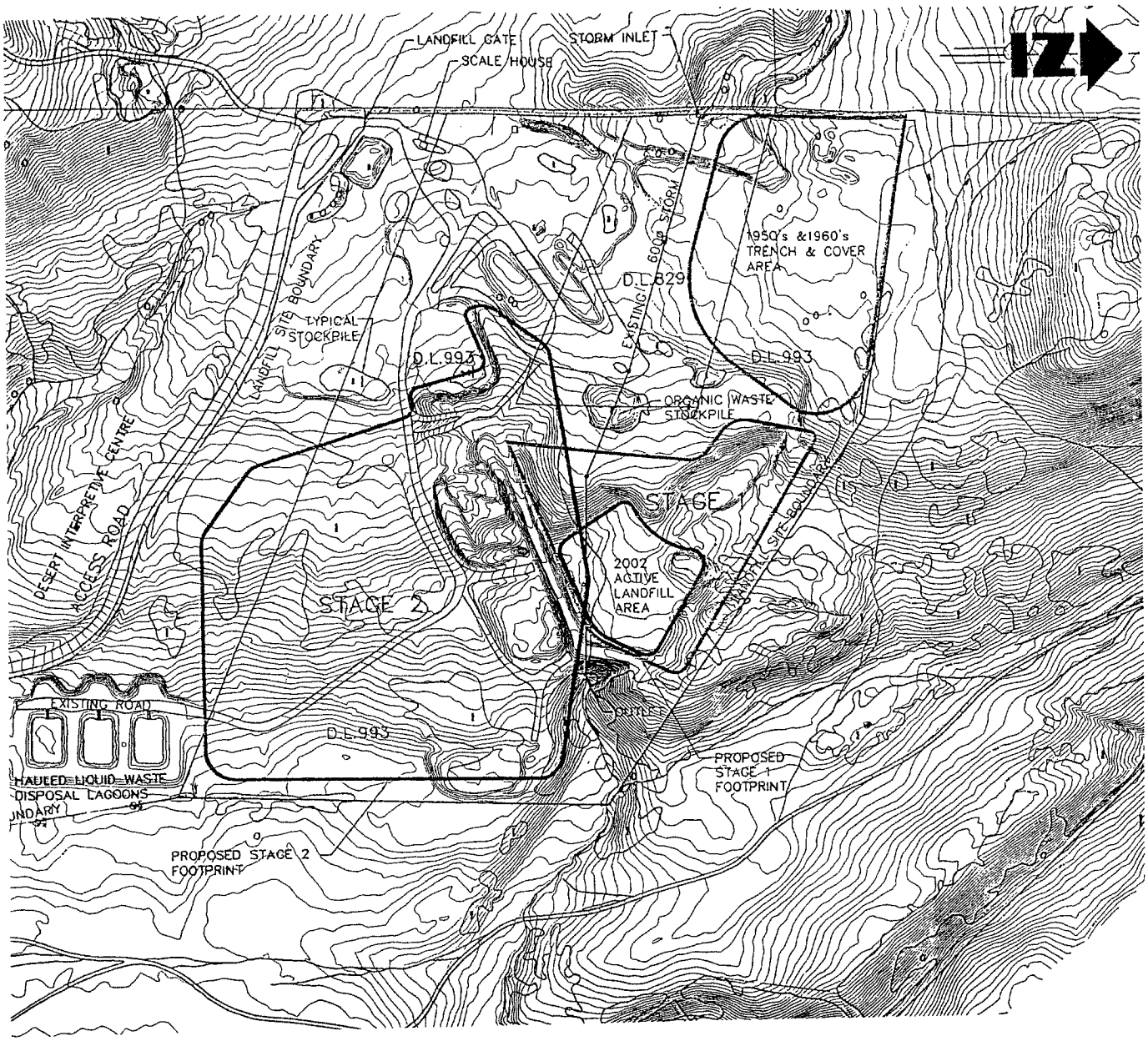
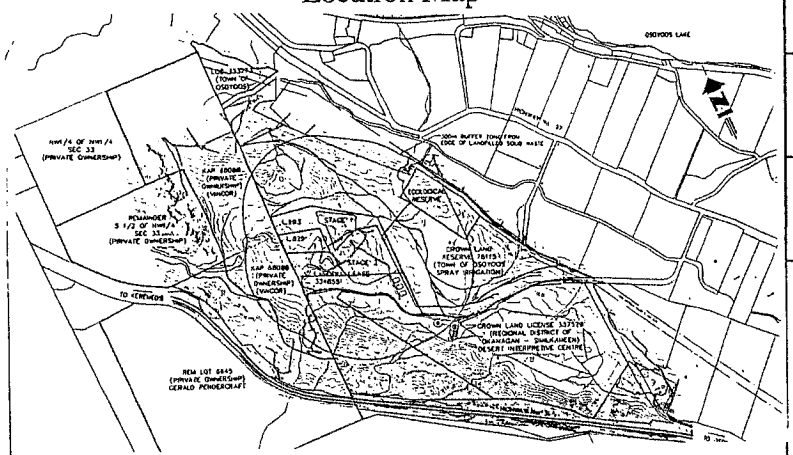
SITE PLAN A



Location Map



Scale: NTS

Operational Certificate No.: MR-15273

Date: March 26, 2002

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Assistant Regional Waste Manager

APPENDIX B

Waste Quantity Monthly Summaries 1996 to 2022

APPENDIX B: ANNUAL LANDFILL WASTE QUANTITIES FROM 1996-2022 (TONNES)

WASTE CATEGORY	Total 1996	Total 1997	Total 1998	Total 1999	Total 2000	Total 2001	Total 2002	Total 2003	Total 2004	Total 2005	Total 2006	Total 2007	Total 2009	Total 2010	Total 2011	Total 2012	Total 2013	Total 2014	Total 2015	Total 2016	Total 2017	Total 2018	Total 2019	Total 2020	Total 2021	Total 2022
Batteries	1	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Const Waste A (conc, asphalt, etc.)	458	282	266	880	26	716	80	131	271	709	169	1,051	894	413	2,888	2,575	2,155	1,037	239	595	3,199	4,635	582	1,757	1,143	489
Const Waste B (demolition)	668	311	94	0	148	199	323	291	366	191	429	387	970	1,886	418	527	194	238	357	67	43	55	29	48	58	50
Const Waste C (compostable)	40	437	179	233	592	517	572	502	620	936	905	312	787	392	455	470	224	159	190	193	226	169	214	256	128	72
Const Waste - Mixed																			34	15	1	85	14	22	6	0
Metals - Type A (white goods)	8	7	9	4	41	37	23	19	0	0	0	0	0	0	0	0	0	21	25	27	27	33	31	33	26	16
Metals - Type B (scrap metal)	84	78	90	67	96	111	75	104	153	149	105	84	103	50	38	47	37	0	0	0	0	0	0	0	0	0
Tires	9	11	8	3	6	13	6	4	9	8	8	2	2	2	3	6	1	0	5	4	5	6	5	5	3	6
Commercial Waste	1,439	1,603	1,578	1,781	1,799	2,166	3,688	2,605	3,102	2,992	3,513	2,966	3,299	3,071	2,335	2,173	1,872	2,177	1,966	2,075	2,037	1,949	2,181	1,961	2,107	1,638
Municipal Waste	1,677	1,441	1,267	1,071	1,376	1,468	1,611	1,748	1,868	1,922	2,021	2,696	2,348	1,915	3,349	2,105	2,228	1,890	1,736	1,897	1,976	2,809	2,008	2,136	2,424	2,357
Yard Waste A (compostable garden)	71	74	120	107	60	102	122	146	210	145	578	634	862	974	762	300	835	849	866	1,058	1,043	969	916	928	1,090	1,062
Yard Waste B (chippable limbs, compost, puncture vine, etc.)	758	623	569	328	0	20	31	9	42	35	22	62	25	41	33	0	0	0	16	2	2	1	6	4	6	0
Yard Waste C		258	52	19	47	24	10	0	0	0	0	0	0	0	0	491	0	0	0	0	0	0	0	0	0	0
Refrigerators							21	21	24	30	31	21	30	25	24	25	26	26	19	23	23	26	29	26	28	17
Propane Tanks																										
Agricultural Plastics- Recycled													10	9	0	0	0	0	0	0	0	0	0	0	0	0
Recycled DLC															2,182	0	0	0	16	57	36	88	73	105	134	56
Biosolids																396	0	0	0	0	0	0	0	0	2	0
ANNUAL TOTALS	5,214	5,126	4,232	4,493	4,191	5,374	6,562	5,580	6,664	7,117	7,780	8,216	9,329	8,777	12,486	9,115	7,572	6,397	5,469	6,013	8,618	10,825	6,087	7,280	7,156	5,763

SUMMARY OF PROCESSING																										
ORGANICS COMPOSTED	0	0	0	0	0	0	0	0	0	0	0	1,008	1,674	1,407	1,250	1,260	1,059	1,007	1,072	1,253	1,272	1,139	1,136	1,188	1,223	1,135
RECYCLED	102	97	108	74	143	161	125	149	186	187	144	108	145	85	2,247	78	64	48	65	112	91	153	138	168	192	94
CONSTRUCTION	498	718	445	1,113	618	1,233	652	633	891	1,645	1,074	1,051	894	413	2,888	2,575	2,155	1,037	239	595	3,199	4,635	582	1,757	1,143	489
LANDFILLED	4,614	4,311	3,679	3,306	3,430	3,980	5,785	4,799	5,587	5,285	6,563	6,049	6,616	6,872	6,102	4,805	4,293	4,305	4,093	4,054	4,056	4,898	4,231	4,167	4,598	4,045
ANNUAL TOTALS	5,214	5,126	4,232	4,493	4,191	5,374	6,562	5,580	6,664	7,117	7,780	8,216	9,329	8,777	12,486	8,719	7,572	6,397	5,469	6,013	8,618	10,825	6,087	7,280	7,156	5,763

CATEGORIES NOT INCLUDED IN SUMMARY																										
HAULED LIQUID WASTE			30	1,393	2,977	3,974	8,810	8,489	6,435	6,399	7,663	9,935	6,129	4,855	5,363	5,225	2,622	2,084	1,920	2,021	2,352	2,119	2,680	3,160	4,579	5,108
COMPOST SALES																								321	181	204
CLEAN COVER MATERIAL (CCMT & CGC)																5,664	320	1,531	175	1,430	1,718	8,116	2,040	3,451	836	1,096
ANNUAL TOTALS	0	0	30	1,393	2,977	3,974	8,810	8,489	6,435	6,399	7,663	9,935	6,129	4,855	5,363	10,889	2,942	3,616	2,095	3,451	4,070	10,235	4,720	6,932	5,597	6,409

(1) Annual totals account for all waste brought to the landfill but do not include the hauled liquid waste and clean cover material. Note that Annual Totals are equivalent to the summation of: Landfilled, Recycled, Organic, and Demolition.
(2) Landfilled refers to the materials deposited in active landfill face.
(3) Recycled refers to materials stored within the limits of the landfill site until such time that these materials are salvaged and/or recycled by others (Batteries, Type 'A' & 'B' Metals, Tires, Refrigerators, Propane Tanks and Agricultural Plastics).
(4) Organic are materials which biodegrade naturally (Yard Waste 'A', 'B', and 'C').
(5) Demolition materials may be salvageable and are kept separate from active landfill face (Construction Waste 'A' and 'C').
(6) Refrigerators are counted by piece (of freon removal). An average mass of 75kg per piece is applied.
(7) Propoane tanks are recycled and not included in annual totals.

Refuse Type Total

From 1/1/2022 to 1/31/2022

MATERIAL ID		Loads	Pcs In	Total Net Wt	Wt Sales	Ttl Sales	Ext Sale	Mat Ext Sale
ABS	Abestos	3	0	2275	2275	$477.75	$477.75	$477.75
ASPHT	clean asphalt from Town of O	4	0	20220	20220	$0.00	$0.00	$0.00
BXMAT	Boxsprings & Mattresses for	17	26	0	0	$390.00	$390.00	$390.00
CNCRTT	clean concrete from Town of O	3	0	11995	11995	$0.00	$0.00	$0.00
CW	Commercial Waste	45	0	109165	109165	$12,561.23	$12,561.23	$12,561.23
CWC	Clean White Wood	2	0	625	625	$75.50	$75.50	$75.50
CWCT	Wood Only - Town	2	0	885	885	$0.00	$0.00	$0.00
FINE	Double Charge for Contaminatin	1	0	0	0	$102.25	$102.25	$102.25
FREON	Freon Removal	10	12	0	0	$180.01	$180.01	$180.01
FREONTOWN	freon charge for town contract	1	5	0	0	$0.00	$0.00	$0.00
FYWA	Free Compostable Materials	22	0	1165	1165	$26.00	$26.00	$26.00
GYPSM	Clean Gypsom/Drywall	1	0	210	210	$23.75	$23.75	$23.75
HWL	Hauled Liquid Waste (sludge)	25	0	137860	137860	$5,583.50	$5,583.50	$5,583.50
MB	All Metals	4	0	165	165	$27.50	$27.50	$27.50
MBT	All Metals - Town	1	0	260	260	$0.00	$0.00	$0.00
MIXEDCW	Mixed load commercial	1	0	715	715	$82.25	$82.25	$82.25
MIXEDRW	Mixed Load Residential	47	0	8140	8140	$960.76	$960.76	$960.76
MMBCFIBRE	MMBC fibre 40yard	3	0	1785	1785	$0.00	$0.00	$0.00
MW	Municipal Waste Household Gar.	26	0	74285	74285	$8,542.75	$8,542.75	$8,542.75
MWT	Municipal Waste-Town	12	0	23505	23505	$0.00	$0.00	$0.00
PT20-25LB	Regular Propane Tanks 20 to 25 lbs	2	3	6575	6575	$0.00	$0.00	$0.00
RW	Residential Waste	217	0	24850	24850	$3,110.75	$3,110.75	$3,110.75
T	Recyclable Tires	1	0	70	70	$0.00	$0.00	$0.00
TIRET	tires from town	1	0	210	210	$0.00	$0.00	$0.00
YWAT	Compostable Mat. - Town	18	0	6625	6625	$0.00	$0.00	$0.00
		469	**46**	**431585**	**431585**	**$32,144.00**	**$32,144.00**	**$32,144.00**

Void tickets have been excluded from report
Includes all (Invoiced and Uninvoiced)

Refuse Type Total

From 2/1/2022 to 2/28/2022

MATERIAL ID		Loads	Pcs In	Total Net Wt	Wt Sales	Ttl Sales	Ext Sale	Mat Ext Sale
ABS	Abestos	6	0	4135	4135	$916.75	$916.75	$916.75
ASDRC	Assessed DRC	17	0	41625	41625	$21,854.50	$21,854.50	$21,854.50
ASPHSH	clean asphalt shingles	2	0	210	210	$27.75	$27.75	$27.75
ASPHT	clean asphalt from Town of O	12	0	180455	180455	$0.00	$0.00	$0.00
BXMAT	Boxsprings & Mattresses for	19	47	0	0	$720.22	$720.22	$720.22
BXMATT	Box Spring and Mattress from Town	1	1	0	0	$0.00	$0.00	$0.00
CCM	Clean Cover Material	6	0	41445	41445	$0.00	$0.00	$0.00
CNCRT	clean concrete	2	0	9570	9570	$1,100.50	$1,100.50	$1,100.50
CONTROLW	Controlled Waste	1	0	55	55	$50.00	$50.00	$50.00
CW	Commercial Waste	26	0	70132	70132	$8,068.25	$8,068.25	$8,068.25
CWC	Clean White Wood	11	0	6645	6645	$777.25	$777.25	$777.25
FREON	Freon Removal	12	16	0	0	$239.97	$239.97	$239.97
FREONTOWN	freon charge for town contract	1	2	0	0	$0.00	$0.00	$0.00
FYWA	Free Compostable Materials	40	0	9485	9485	$442.27	$442.27	$442.27
FYWACW	clean fruit waste	1	0	35	35	$0.00	$0.00	$0.00
GYPSM	Clean Gypsom/Drywall	5	0	2060	2060	$235.25	$235.25	$235.25
HWL	Hauled Liquid Waste (sludge)	19	0	127055	127055	$5,146.00	$5,146.00	$5,146.00
MB	All Metals	8	0	365	365	$57.25	$57.25	$57.25
MBT	All Metals - Town	2	0	445	445	$0.00	$0.00	$0.00
MIXEDCW	Mixed load commercial	1	0	1105	1105	$127.00	$127.00	$127.00
MIXEDRW	Mixed Load Residential	56	0	10000	10000	$1,183.13	$1,183.13	$1,183.13
MMBCFIBRE	MMBC fibre 40yard	4	0	3210	3210	$0.00	$0.00	$0.00
MW	Municipal Waste Household Gar.	31	0	89105	89105	$10,246.75	$10,246.75	$10,246.75
MWT	Municipal Waste-Town	23	0	21265	21265	$0.00	$0.00	$0.00
RECRECV	Recovery of Recyclable	1	0	1335	1335	$0.00	$0.00	$0.00
RW	Residential Waste	222	0	27570	27570	$3,450.66	$3,450.66	$3,450.66
T	Recyclable Tires	4	0	250	250	$0.00	$0.00	$0.00
YWAT	Compostable Mat. - Town	19	0	7820	7820	$0.00	$0.00	$0.00
		552	**66**	**655377**	**655377**	**$54,643.50**	**$54,643.50**	**$54,643.50**

Void tickets have been excluded from report
Includes all (Invoiced and Uninvoiced)

Refuse Type Total

From 3/1/2022 to 3/31/2022

MATERIAL ID		Loads	Pcs In	Total Net Wt	Wt Sales	Ttl Sales	Ext Sale	Mat Ext Sale
ABS	Abestos	2	0	180	180	$100.00	$100.00	$100.00
ASPHT	clean asphalt from Town of O	1	0	1560	1560	$0.00	$0.00	$0.00
BXMAT	Boxsprings & Mattresses for	27	37	0	0	$555.28	$555.28	$555.28
CCM	Clean Cover Material	26	0	65870	65870	$0.00	$0.00	$0.00
CCMT	clean cover material - Town	8	0	57280	57280	$0.00	$0.00	$0.00
CNCRT	clean concrete	1	0	1125	1125	$129.25	$129.25	$129.25
CRBPUFYWA	yard and garden curbside pick up	10	0	21650	21650	$0.00	$0.00	$0.00
CW	Commercial Waste	47	0	145200	145200	$16,705.36	$16,705.36	$16,705.36
CWC	Clean White Wood	13	0	1045	1045	$128.25	$128.25	$128.25
CWCT	Wood Only - Town	1	0	155	155	$0.00	$0.00	$0.00
FREON	Freon Removal	15	17	0	0	$255.12	$255.12	$255.12
FYWA	Free Compostable Materials	502	0	55834	55834	$1,735.50	$1,735.50	$1,735.50
GYPSM	Clean Gypsom/Drywall	15	0	6470	6470	$739.00	$739.00	$739.00
HWL	Hauled Liquid Waste (sludge)	50	0	365625	365625	$14,808.25	$14,808.25	$14,808.25
MB	All Metals	13	0	1040	1040	$142.25	$142.25	$142.25
MIXEDCW	Mixed load commercial	2	0	365	365	$43.75	$43.75	$43.75
MIXEDRW	Mixed Load Residential	94	0	16830	16830	$1,985.08	$1,985.08	$1,985.08
MMBCFIBRE	MMBC fibre 40yard	5	0	4185	4185	$0.00	$0.00	$0.00
MW	Municipal Waste Household Gar.	33	0	94290	94290	$10,842.25	$10,842.25	$10,842.25
MWT	Municipal Waste-Town	15	0	17985	17985	$0.00	$0.00	$0.00
PT2-3LB	Camping Propane Tank 2 to 3 lb	1	1	0	0	$0.00	$0.00	$0.00
PTVIN	Puncture Vine	1	0	50	50	$0.00	$0.00	$0.00
RW	Residential Waste	344	0	39520	39520	$4,916.19	$4,916.19	$4,916.19
SOILAMND5	less than 5 tonnes	14	0	16570	16570	$831.25	$831.25	$831.25
T	Recyclable Tires	2	0	115	115	$0.00	$0.00	$0.00
TIRERIM	tire with rim	4	21	0	0	$62.97	$62.97	$62.97
TIRET	tires from town	1	0	130	130	$0.00	$0.00	$0.00
YWAT	Compostable Mat. - Town	37	0	7080	7080	$0.00	$0.00	$0.00
		1,284	**76**	**920154**	**920154**	**$53,979.75**	**$53,979.75**	**$53,979.75**

Void tickets have been excluded from report
Includes all (Invoiced and Uninvoiced)

Refuse Type Total

From 4/1/2022 to 4/30/2022

MATERIAL ID		Loads	Pcs In	Total Net Wt	Wt Sales	Ttl Sales	Ext Sale	Mat Ext Sale
ABS	Abestos	4	0	6800	6800	$1,428.00	$1,428.00	$1,428.00
ABST	Asbestos Town	1	0	595	595	$0.00	$0.00	$0.00
ASPHSH	clean asphalt shingles	1	0	60	60	$7.00	$7.00	$7.00
ASPHT	clean asphalt from Town of O	3	0	39780	39780	$0.00	$0.00	$0.00
BLKITFRN	freon bulky item	7	38	-12475	-12475	$569.91	$569.91	$569.91
BLKITMMAT	Bulky item resi pick up mattrs	11	54	35	35	$229.95	$229.95	$229.95
BXMAT	Boxsprings & Mattresses for	21	32	0	0	$495.06	$495.06	$495.06
BXMATT	Box Spring and Mattress from Tow	1	0	0	0	$0.00	$0.00	$0.00
CCM	Clean Cover Material	40	0	139505	139505	$0.00	$0.00	$0.00
CCMT	clean cover material - Town	2	0	8340	8340	$0.00	$0.00	$0.00
CNCRT	clean concrete	10	0	9724	9724	$1,118.00	$1,118.00	$1,118.00
CNCRTT	clean concrete from Town of O	6	0	30990	30990	$0.00	$0.00	$0.00
CRBPUFYWA	yard and garden curbside pick up	14	0	32773	32773	$0.00	$0.00	$0.00
CW	Commercial Waste	77	0	152110	152110	$17,507.59	$17,507.59	$17,507.59
CWC	Clean White Wood	19	0	3125	3125	$365.50	$365.50	$365.50
CWCT	Wood Only - Town	1	0	45	45	$0.00	$0.00	$0.00
FINE	Double Charge for Contaminatin	1	0	0	0	$91.54	$91.54	$91.54
FREON	Freon Removal	15	15	0	0	$240.14	$240.14	$240.14
FYWA	Free Compostable Materials	554	0	78575	78575	$2,872.97	$2,872.97	$2,872.97
GYPSM	Clean Gypsom/Drywall	12	0	3760	3760	$442.50	$442.50	$442.50
HWL	Hauled Liquid Waste (sludge)	52	0	352340	352340	$14,270.00	$14,270.00	$14,270.00
MB	All Metals	13	0	1278	1278	$163.25	$163.25	$163.25
MBT	All Metals - Town	1	0	380	380	$0.00	$0.00	$0.00
MIXEDCW	Mixed load commercial	17	0	6420	6420	$744.21	$744.21	$744.21
MIXEDRW	Mixed Load Residential	137	0	22055	22055	$2,588.96	$2,588.96	$2,588.96
MMBCFIBRE	MMBC fibre 40yard	4	0	5509	5509	$0.00	$0.00	$0.00
MW	Municipal Waste Household Gar.	29	0	82738	82738	$9,520.50	$9,520.50	$9,520.50
MWT	Municipal Waste-Town	15	0	32421	32421	$0.00	$0.00	$0.00
PT2-3LB	Camping Propane Tank 2 to 3 lb	3	12	0	0	$0.00	$0.00	$0.00
PT20-25LB	Regular Propane Tanks 20 to 25 l	1bs	2	-15	-15	$0.00	$0.00	$0.00
RDOSBKYITM	bulky item pick up Area A	11	0	32910	32910	$3,619.89	$3,619.89	$3,619.89
RW	Residential Waste	365	3	56610	56610	$6,904.27	$6,904.27	$6,904.27
SOILAMMEND	greater than 5 tonnes	1	0	655	655	$19.75	$19.75	$19.75
SOILAMND5	less than 5 tonnes	61	0	109765	109765	$5,501.75	$5,501.75	$5,501.75
T	Recyclable Tires	6	0	555	555	$0.00	$0.00	$0.00
TIRERIM	tire with rim	1	2	0	0	$6.01	$6.01	$6.01
TIRET	tires from town	2	0	-25	-25	$0.00	$0.00	$0.00
TWF	TOWN OF OSOYOOS WAIVED FEES	1	0	305	305	$0.00	$0.00	$0.00
YWAT	Compostable Mat. - Town	4	0	490	490	$0.00	$0.00	$0.00
		1,526	**158**	**1198133**	**1198133**	**$68,706.75**	**$68,706.75**	**$68,706.75**

Void tickets have been excluded from report
Includes all (Invoiced and Uninvoiced)

Refuse Type Total

From 5/1/2022 to 5/31/2022

MATERIAL ID		Loads	Pcs In	Total Net Wt	Wt Sales	Ttl Sales	Ext Sale	Mat Ext Sale
ABS	Abestos	4	0	1320	1320	$285.75	$285.75	$285.75
ASPH	clean Asphalt	2	0	440	440	$51.25	$51.25	$51.25
ASPHSH	clean asphalt shingles	5	0	2940	2940	$338.00	$338.00	$338.00
ASPHT	clean asphalt from Town of O	3	0	23995	23995	$0.00	$0.00	$0.00
BXMAT	Boxsprings & Mattresses for	17	27	0	0	$419.86	$419.86	$419.86
CCM	Clean Cover Material	39	0	66505	66505	$0.00	$0.00	$0.00
CCMT	clean cover material - Town	10	0	74770	74770	$0.00	$0.00	$0.00
CNCRT	clean concrete	14	0	7685	7685	$884.00	$884.00	$884.00
COMCARDBRD	commercial fibre	1	0	1600	1600	$0.00	$0.00	$0.00
CONTROLW	Controlled Waste	2	0	5905	5905	$1,240.00	$1,240.00	$1,240.00
CRBPUFYWA	yard and garden curbside pick up	17	0	61655	61655	$0.00	$0.00	$0.00
CW	Commercial Waste	93	0	195380	195380	$22,484.02	$22,484.02	$22,484.02
CWC	Clean White Wood	28	0	14855	14855	$1,717.75	$1,717.75	$1,717.75
CWCT	Wood Only - Town	9	0	11645	11645	$0.00	$0.00	$0.00
FINE	Double Charge for Contaminatin	1	0	0	0	$10.05	$10.05	$10.05
FREON	Freon Removal	18	31	0	0	$480.12	$480.12	$480.12
FREONTOWN	freon charge for town contract	1	6	0	0	$0.00	$0.00	$0.00
FYWA	Free Compostable Materials	465	0	53780	53780	$1,792.05	$1,792.05	$1,792.05
GYPSM	Clean Gypsom/Drywall	10	0	4450	4450	$515.75	$515.75	$515.75
HWL	Hauled Liquid Waste (sludge)	51	0	278210	278210	$11,268.50	$11,268.50	$11,268.50
MB	All Metals	16	0	1205	1205	$164.50	$164.50	$164.50
MIXEDCW	Mixed load commercial	19	0	11705	11705	$1,346.25	$1,346.25	$1,346.25
MIXEDRW	Mixed Load Residential	165	0	25455	25455	$3,046.99	$3,046.99	$3,046.99
MMBCFIBRE	MMBC fibre 40yard	3	0	3015	3015	$0.00	$0.00	$0.00
MW	Municipal Waste Household Gar.	31	0	96695	96695	$11,118.75	$11,118.75	$11,118.75
MWT	Municipal Waste-Town	22	0	32635	32635	$0.00	$0.00	$0.00
PT2-3LB	Camping Propane Tank 2 to 3 lb	6	17	0	0	$0.00	$0.00	$0.00
PT20-25LB	Regular Propane Tanks 20 to 25 lbs	6	6	-20	-20	$0.00	$0.00	$0.00
PT30-40LB	Large Propane Tanks 30 to 40 lbs	1	2	0	0	$0.00	$0.00	$0.00
PT5-10LB	Small Propane Tanks 5 to 10 lb	1	1	0	0	$0.00	$0.00	$0.00
RW	Residential Waste	357	0	59910	59910	$7,369.44	$7,369.44	$7,369.44
SOILAMMEND	greater than 5 tonnes	4	0	30625	30625	$919.00	$919.00	$919.00
SOILAMND5	less than 5 tonnes	28	0	9635	9635	$494.75	$494.75	$494.75
T	Recyclable Tires	3	0	565	565	$0.00	$0.00	$0.00
TIRERIM	tire with rim	5	20	0	0	$59.97	$59.97	$59.97
YWAT	Compostable Mat. - Town	8	0	5255	5255	$0.00	$0.00	$0.00
		1,465	**110**	**1081815**	**1081815**	**$66,006.75**	**$66,006.75**	**$66,006.75**

Void tickets have been excluded from report
Includes all (Invoiced and Uninvoiced)

Refuse Type Total

From 6/1/2022 to 6/30/2022

MATERIAL ID		Loads	Pcs In	Total Net Wt	Wt Sales	Ttl Sales	Ext Sale	Mat Ext Sale
ABS	Abestos	2	0	420	420	$100.00	$100.00	$100.00
ASPH	clean Asphalt	6	0	51625	51625	$5,936.50	$5,936.50	$5,936.50
ASPHT	clean asphalt from Town of O	5	0	37515	37515	$0.00	$0.00	$0.00
BXMAT	Boxsprings & Mattresses for	43	67	0	0	$1,095.04	$1,095.04	$1,095.04
BXMATT	Box Spring and Mattress from Town	1	1	0	0	$0.00	$0.00	$0.00
CCM	Clean Cover Material	29	0	70935	70935	$0.00	$0.00	$0.00
CCMT	clean cover material - Town	17	0	138680	138680	$0.00	$0.00	$0.00
CNCRT	clean concrete	10	0	4505	4505	$521.75	$521.75	$521.75
CNCRTT	clean concrete from Town of O	2	0	11425	11425	$0.00	$0.00	$0.00
COMCARDBRD	commercial fibre	2	0	3570	3570	$0.00	$0.00	$0.00
CONTROLW	Controlled Waste	1	0	4685	4685	$983.75	$983.75	$983.75
CRBPUFYWA	yard and garden curbside pick up	13	0	45315	45315	$0.00	$0.00	$0.00
CW	Commercial Waste	48	0	149630	149630	$17,220.25	$17,220.25	$17,220.25
CWC	Clean White Wood	22	0	5585	5585	$650.75	$650.75	$650.75
FREON	Freon Removal	18	23	0	0	$375.12	$375.12	$375.12
FYWA	Free Compostable Materials	606	0	97640	97640	$3,830.85	$3,830.85	$3,830.85
FYWARW	Yard & Garden waste w Fruit or	3	0	245	245	$0.50	$0.50	$0.50
GYPSM	Clean Gypsom/Drywall	6	0	2130	2130	$249.75	$249.75	$249.75
HWL	Hauled Liquid Waste (sludge)	58	0	344705	344705	$13,961.50	$13,961.50	$13,961.50
MB	All Metals	17	0	2840	2840	$365.75	$365.75	$365.75
MIXEDCW	Mixed load commercial	14	0	11120	11120	$1,280.00	$1,280.00	$1,280.00
MIXEDRW	Mixed Load Residential	218	0	37290	37290	$4,410.46	$4,410.46	$4,410.46
MMBCFIBRE	MMBC fibre 40yard	3	0	4765	4765	$0.00	$0.00	$0.00
MW	Municipal Waste Household Gar.	25	0	80440	80440	$9,249.75	$9,249.75	$9,249.75
MWT	Municipal Waste-Town	15	0	17790	17790	$0.00	$0.00	$0.00
PT100LB	Commercial Propane Tanks 100lbs	2	2	130	130	$0.00	$0.00	$0.00
PT2-3LB	Camping Propane Tank 2 to 3 lb	2	6	0	0	$0.00	$0.00	$0.00
PT20-25LB	Regular Propane Tanks 20 to 25 lbs	10	11	120	120	$0.00	$0.00	$0.00
PT30-40LB	Large Propane Tanks 30 to 40 lbs	1	1	0	0	$0.00	$0.00	$0.00
PTVIN	Puncture Vine	1	0	25	25	$0.00	$0.00	$0.00
RW	Residential Waste	414	0	61458	61458	$7,713.31	$7,713.31	$7,713.31
SOILAMND5	less than 5 tonnes	19	0	14475	14475	$732.00	$732.00	$732.00
T	Recyclable Tires	11	0	480	480	$0.00	$0.00	$0.00
TIRERIM	tire with rim	2	5	0	0	$14.97	$14.97	$14.97
YWAT	Compostable Mat. - Town	8	0	12815	12815	$0.00	$0.00	$0.00
		1,654	**116**	**1212358**	**1212358**	**$68,692.00**	**$68,692.00**	**$68,692.00**

Void tickets have been excluded from report
Includes all (Invoiced and Uninvoiced)

Refuse Type Total

From 7/1/2022 to 7/31/2022

MATERIAL ID		Loads	Pcs In	Total Net Wt	Wt Sales	Ttl Sales	Ext Sale	Mat Ext Sale
ABS	Abestos	2	0	1130	1130	$237.50	$237.50	$237.50
ASPH	clean Asphalt	3	0	6015	6015	$691.75	$691.75	$691.75
ASPHSH	clean asphalt shingles	1	0	610	610	$70.25	$70.25	$70.25
BXMAT	Boxsprings & Mattresses for	23	45	2760	2760	$780.09	$780.09	$780.09
CCM	Clean Cover Material	22	0	45985	45985	$0.00	$0.00	$0.00
CGC	clean gravel cover	1	0	3395	3395	$0.00	$0.00	$0.00
CNCRT	clean concrete	2	0	1575	1575	$181.00	$181.00	$181.00
COMCARDBRD	commercial fibre	2	0	1295	1295	$0.00	$0.00	$0.00
CONSTMXD	Construction Mixed Load	1	0	200	200	$146.00	$146.00	$146.00
CONTROLW	Controlled Waste	1	0	1305	1305	$274.00	$274.00	$274.00
CRBPUFYWA	yard and garden curbside pick up	16	0	37760	37760	$0.00	$0.00	$0.00
CW	Commercial Waste	23	0	183330	183330	$21,083.00	$21,083.00	$21,083.00
CWC	Clean White Wood	13	0	2280	2280	$269.75	$269.75	$269.75
FREON	Freon Removal	27	28	2755	2755	$540.18	$540.18	$540.18
FYWA	Free Compostable Materials	491	0	48320	48320	$1,493.00	$1,493.00	$1,493.00
FYWACW	clean fruit waste	3	0	520	520	$17.00	$17.00	$17.00
FYWARW	Yard & Garden waste w Fruit or	6	0	1000	1000	$28.75	$28.75	$28.75
GYPSM	Clean Gypsom/Drywall	9	0	4385	4385	$509.50	$509.50	$509.50
HWL	Hauled Liquid Waste (sludge)	74	0	533445	533445	$21,605.00	$21,605.00	$21,605.00
MB	All Metals	8	0	565	565	$75.25	$75.25	$75.25
MIXEDCW	Mixed load commercial	9	0	10225	10225	$1,176.25	$1,176.25	$1,176.25
MIXEDRW	Mixed Load Residential	133	0	25865	25865	$3,064.27	$3,064.27	$3,064.27
MMBCFIBRE	MMBC fibre 40yard	3	0	4100	4100	$0.00	$0.00	$0.00
MW	Municipal Waste Household Gar.	29	0	127280	127280	$14,636.50	$14,636.50	$14,636.50
MWT	Municipal Waste-Town	53	0	13000	13000	$0.00	$0.00	$0.00
OT	Over size tires as per bylaw	1	0	0	0	$0.00	$0.00	$0.00
PT20-25LB	Regular Propane Tanks 20 to 25 lbs	4	22	245	245	$0.00	$0.00	$0.00
PT30-40LB	Large Propane Tanks 30 to 40 lbs	1	6	0	0	$0.00	$0.00	$0.00
RW	Residential Waste	504	0	69245	69245	$8,642.46	$8,642.46	$8,642.46
SOILAMND5	less than 5 tonnes	4	0	3960	3960	$202.25	$202.25	$202.25
T	Recyclable Tires	6	0	2275	2275	$0.00	$0.00	$0.00
TIRERIM	tire with rim	2	9	0	0	$27.00	$27.00	$27.00
YWAT	Compostable Mat. - Town	5	0	17650	17650	$0.00	$0.00	$0.00
		1,482	**110**	**1152475**	**1152475**	**$75,750.75**	**$75,750.75**	**$75,750.75**

Void tickets have been excluded from report
Includes all (Invoiced and Uninvoiced)

Refuse Type Total

From 8/1/2022 to 8/31/2022

MATERIAL ID		Loads	Pcs In	Total Net Wt	Wt Sales	Ttl Sales	Ext Sale	Mat Ext Sale
ABS	Abestos	4	0	7280	7280	$1,554.50	$1,554.50	$1,554.50
ASPHSH	clean asphalt shingles	1	0	195	195	$22.50	$22.50	$22.50
BXMAT	Boxsprings & Mattresses for	27	36	0	0	$675.20	$675.20	$675.20
CCM	Clean Cover Material	34	0	164695	164695	$0.00	$0.00	$0.00
CGC	clean gravel cover	2	0	9785	9785	$0.00	$0.00	$0.00
CNCRT	clean concrete	3	0	1900	1900	$218.50	$218.50	$218.50
COMCARDBRD	commercial fibre	2	0	3055	3055	$0.00	$0.00	$0.00
CRBPUFYWA	yard and garden curbside pick up	14	0	34515	34515	$0.00	$0.00	$0.00
CW	Commercial Waste	9	0	72640	72640	$8,353.00	$8,353.00	$8,353.00
CWC	Clean White Wood	11	0	2705	2705	$311.75	$311.75	$311.75
FREON	Freon Removal	17	9	0	0	$285.07	$285.07	$285.07
FYWA	Free Compostable Materials	524	0	55675	55675	$1,830.54	$1,830.54	$1,830.54
FYWACW	clean fruit waste	6	0	140	140	$0.00	$0.00	$0.00
FYWARW	Yard & Garden waste w Fruit or	7	0	475	475	$6.25	$6.25	$6.25
GYPSM	Clean Gypsom/Drywall	9	0	2480	2480	$285.75	$285.75	$285.75
HWL	Hauled Liquid Waste (sludge)	52	0	338240	338240	$13,699.00	$13,699.00	$13,699.00
HWLT	Hauled Sewage Waste for Town	1	0	4515	4515	$0.00	$0.00	$0.00
MB	All Metals	8	0	380	380	$60.75	$60.75	$60.75
MIXEDCW	Mixed load commercial	12	0	10090	10090	$1,162.50	$1,162.50	$1,162.50
MIXEDRW	Mixed Load Residential	122	0	21830	21830	$2,579.85	$2,579.85	$2,579.85
MMBCFIBRE	MMBC fibre 40yard	3	0	3275	3275	$0.00	$0.00	$0.00
MW	Municipal Waste Household Gar.	55	0	260220	260220	$29,923.99	$29,923.99	$29,923.99
MWT	Municipal Waste-Town	52	0	43100	43100	$0.00	$0.00	$0.00
PT2-3LB	Camping Propane Tank 2 to 3 lb	1	7	0	0	$0.00	$0.00	$0.00
PT20-25LB	Regular Propane Tanks 20 to 25 lbs	1	2	395	395	$0.00	$0.00	$0.00
PTVIN	Puncture Vine	1	0	20	20	$0.00	$0.00	$0.00
RW	Residential Waste	462	0	48765	48765	$6,278.10	$6,278.10	$6,278.10
SOILAMND5	less than 5 tonnes	2	0	115	115	$10.00	$10.00	$10.00
T	Recyclable Tires	7	0	635	635	$0.00	$0.00	$0.00
TIRERIM	tire with rim	3	0	0	0	$0.00	$0.00	$0.00
TIRET	tires from town	1	0	15	15	$0.00	$0.00	$0.00
YWAT	Compostable Mat. - Town	6	0	-4995	-4995	$0.00	$0.00	$0.00
		1,461	**54**	**1082140**	**1082140**	**$67,257.25**	**$67,257.25**	**$67,257.25**

Void tickets have been excluded from report
Includes all (Invoiced and Uninvoiced)

Refuse Type Total

From 9/1/2022 to 9/30/2022

MATERIAL ID		Loads	Pcs In	Total Net Wt	Wt Sales	Ttl Sales	Ext Sale	Mat Ext Sale
ABS	Abestos	3	0	1185	1185	$287.25	$287.25	$287.25
ASPH	clean Asphalt	1	0	390	390	$44.75	$44.75	$44.75
ASPHSH	clean asphalt shingles	3	0	3760	3760	$432.50	$432.50	$432.50
BLKITFRN	freon bulky item	2	0	0	0	$30.01	$30.01	$30.01
BXMAT	Boxsprings & Mattresses for	19	26	0	0	$464.94	$464.94	$464.94
BXMATT	Box Spring and Mattress from Town	1	0	0	0	$0.00	$0.00	$0.00
CCM	Clean Cover Material	15	0	41540	41540	$0.00	$0.00	$0.00
CGC	clean gravel cover	1	0	16685	16685	$0.00	$0.00	$0.00
CNCRT	clean concrete	9	0	15480	15480	$1,780.00	$1,780.00	$1,780.00
COMCARDBRD	commercial fibre	1	0	1390	1390	$0.00	$0.00	$0.00
CRBPUFYWA	yard and garden curbside pick up	1	0	36350	36350	$0.00	$0.00	$0.00
CW	Commercial Waste	30	0	150660	150660	$17,324.00	$17,324.00	$17,324.00
CWC	Clean White Wood	18	0	4035	4035	$470.75	$470.75	$470.75
CWCT	Wood Only - Town	4	0	-140	-140	$0.00	$0.00	$0.00
FREON	Freon Removal	17	10	0	0	$285.11	$285.11	$285.11
FYWA	Free Compostable Materials	599	0	79285	79285	$2,927.06	$2,927.06	$2,927.06
FYWACW	clean fruit waste	9	0	340	340	$0.00	$0.00	$0.00
FYWARW	Yard & Garden waste w Fruit or	1	0	85	85	$0.00	$0.00	$0.00
GYPSM	Clean Gypsom/Drywall	10	0	3400	3400	$395.00	$395.00	$395.00
HWL	Hauled Liquid Waste (sludge)	56	0	353595	353595	$14,320.50	$14,320.50	$14,320.50
HWLT	Hauled Sewage Waste for Town	1	0	815	815	$0.00	$0.00	$0.00
MB	All Metals	14	0	575	575	$110.25	$110.25	$110.25
MIXEDCW	Mixed load commercial	26	0	15135	15135	$1,753.30	$1,753.30	$1,753.30
MIXEDRW	Mixed Load Residential	171	0	31045	31045	$3,654.13	$3,654.13	$3,654.13
MMBCFIBRE	MMBC fibre 40yard	3	0	3610	3610	$0.00	$0.00	$0.00
MW	Municipal Waste Household Gar.	25	0	100145	100145	$11,515.94	$11,515.94	$11,515.94
MWT	Municipal Waste-Town	28	0	-34175	-34175	$0.00	$0.00	$0.00
PT20-25LB	Regular Propane Tanks 20 to 25 lbs	1	0	20	20	$0.00	$0.00	$0.00
PTVIN	Puncture Vine	1	0	110	110	$0.00	$0.00	$0.00
RW	Residential Waste	454	0	43780	43780	$5,650.01	$5,650.01	$5,650.01
SOILAMND5	less than 5 tonnes	4	0	2325	2325	$116.25	$116.25	$116.25
T	Recyclable Tires	4	0	230	230	$0.00	$0.00	$0.00
TIRERIM	tire with rim	2	0	0	0	$0.00	$0.00	$0.00
YWAT	Compostable Mat. - Town	10	0	24630	24630	$0.00	$0.00	$0.00
		1,554	**36**	**896285**	**896285**	**$61,561.75**	**$61,561.75**	**$61,561.75**

Void tickets have been excluded from report
Includes all (Invoiced and Uninvoiced)

Refuse Type Total

From 10/1/2022 to 10/31/2022

MATERIAL ID		Loads	Pcs In	Total Net Wt	Wt Sales	Ttl Sales	Ext Sale	Mat Ext Sale
ABS	Abestos	2	0	20	20	$100.00	$100.00	$100.00
ASPHSH	clean asphalt shingles	4	0	2100	2100	$241.50	$241.50	$241.50
ASPHT	clean asphalt from Town of O	1	0	1570	1570	$0.00	$0.00	$0.00
BXMAT	Boxsprings & Mattresses for	32	48	2785	2785	$765.15	$765.15	$765.15
CCM	Clean Cover Material	15	0	27695	27695	$0.00	$0.00	$0.00
CCMT	clean cover material - Town	13	0	103355	103355	$0.00	$0.00	$0.00
CNCRT	clean concrete	3	0	1675	1675	$192.50	$192.50	$192.50
COMCARDBRD	commercial fibre	2	0	1650	1650	$0.00	$0.00	$0.00
CONTROLW	Controlled Waste	1	0	50	50	$50.00	$50.00	$50.00
CRBPUFYWA	yard and garden curbside pick up	13	0	37685	37685	$0.00	$0.00	$0.00
CW	Commercial Waste	15	0	108440	108440	$12,469.25	$12,469.25	$12,469.25
CWC	Clean White Wood	12	0	4315	4315	$505.25	$505.25	$505.25
CWCT	Wood Only - Town	1	0	535	535	$0.00	$0.00	$0.00
FREON	Freon Removal	19	18	0	0	$300.02	$300.02	$300.02
FYWA	Free Compostable Materials	547	0	67540	67540	$2,369.56	$2,369.56	$2,369.56
FYWACW	clean fruit waste	8	0	11765	11765	$679.50	$679.50	$679.50
FYWARW	Yard & Garden waste w Fruit or	1	0	2765	2765	$160.00	$160.00	$160.00
GYPSM	Clean Gypsom/Drywall	10	0	5855	5855	$671.50	$671.50	$671.50
HWL	Hauled Liquid Waste (sludge)	91	0	841265	841265	$34,071.25	$34,071.25	$34,071.25
HWLT	Hauled Sewage Waste for Town	2	0	7720	7720	$0.00	$0.00	$0.00
MB	All Metals	13	0	4710	4710	$565.00	$565.00	$565.00
MIXEDCW	Mixed load commercial	20	0	18675	18675	$2,147.46	$2,147.46	$2,147.46
MIXEDRW	Mixed Load Residential	136	0	23925	23925	$2,829.14	$2,829.14	$2,829.14
MMBCFIBRE	MMBC fibre 40yard	2	0	1940	1940	$0.00	$0.00	$0.00
MW	Municipal Waste Household Gar.	30	0	89135	89135	$10,249.25	$10,249.25	$10,249.25
MWT	Municipal Waste-Town	21	0	22125	22125	$0.00	$0.00	$0.00
PT30-40LB	Large Propane Tanks 30 to 40 lbs	2	6	0	0	$0.00	$0.00	$0.00
PT5-10LB	Small Propane Tanks 5 to 10 lb	1	10	0	0	$0.00	$0.00	$0.00
RW	Residential Waste	462	0	58030	58030	$7,266.88	$7,266.88	$7,266.88
SOILAMND5	less than 5 tonnes	14	0	12525	12525	$628.25	$628.25	$628.25
T	Recyclable Tires	4	0	180	180	$0.00	$0.00	$0.00
TIRERIM	tire with rim	2	3	0	0	$9.04	$9.04	$9.04
YWAT	Compostable Mat. - Town	12	0	8415	8415	$0.00	$0.00	$0.00
		1,511	**85**	**1468445**	**1468445**	**$76,270.50**	**$76,270.50**	**$76,270.50**

Void tickets have been excluded from report
Includes all (Invoiced and Uninvoiced)

Refuse Type Total

From 11/1/2022 to 11/30/2022

MATERIAL ID		Loads	Pcs In	Total Net Wt	Wt Sales	Ttl Sales	Ext Sale	Mat Ext Sale
ABS	Abestos	3	0	1355	1355	$346.75	$346.75	$346.75
ASPH	clean Asphalt	1	0	650	650	$74.75	$74.75	$74.75
ASPHSH	clean asphalt shingles	2	0	2060	2060	$237.00	$237.00	$237.00
BXMAT	Boxsprings & Mattresses for	14	20	0	0	$300.01	$300.01	$300.01
CCM	Clean Cover Material	6	0	19795	19795	$0.00	$0.00	$0.00
CNCRT	clean concrete	2	0	6675	6675	$767.50	$767.50	$767.50
CNCRTT	clean concrete from Town of O	2	0	9990	9990	$0.00	$0.00	$0.00
CRBPUFYWA	yard and garden curbside pick up	13	0	41120	41120	$0.00	$0.00	$0.00
CW	Commercial Waste	12	0	104105	104105	$11,970.50	$11,970.50	$11,970.50
CWC	Clean White Wood	8	0	11395	11395	$1,313.00	$1,313.00	$1,313.00
CWCT	Wood Only - Town	1	0	790	790	$0.00	$0.00	$0.00
FREON	Freon Removal	14	20	0	0	$285.26	$285.26	$285.26
FYWA	Free Compostable Materials	301	0	38125	38125	$1,262.50	$1,262.50	$1,262.50
FYWACW	clean fruit waste	4	0	13640	13640	$798.75	$798.75	$798.75
FYWARW	Yard & Garden waste w Fruit or	2	0	295	295	$5.50	$5.50	$5.50
GYPSM	Clean Gypsom/Drywall	5	0	920	920	$113.75	$113.75	$113.75
HWL	Hauled Liquid Waste (sludge)	129	0	1340670	1340670	$54,298.25	$54,298.25	$54,298.25
MB	All Metals	11	0	1215	1215	$168.50	$168.50	$168.50
MIXEDCW	Mixed load commercial	42	0	21355	21355	$2,459.90	$2,459.90	$2,459.90
MIXEDRW	Mixed Load Residential	135	0	32045	32045	$3,771.21	$3,771.21	$3,771.21
MMBCFIBRE	MMBC fibre 40yard	4	0	3890	3890	$0.00	$0.00	$0.00
MW	Municipal Waste Household Gar.	38	0	104155	104155	$11,976.25	$11,976.25	$11,976.25
MWT	Municipal Waste-Town	8	0	7430	7430	$0.00	$0.00	$0.00
RW	Residential Waste	173	1	12150	12150	$1,785.58	$1,785.58	$1,785.58
SOILAMND5	less than 5 tonnes	2	0	3525	3525	$176.25	$176.25	$176.25
T	Recyclable Tires	2	0	190	190	$0.00	$0.00	$0.00
TIRERIM	tire with rim	2	11	0	0	$33.04	$33.04	$33.04
YWAT	Compostable Mat. - Town	29	0	9085	9085	$0.00	$0.00	$0.00
		965	**52**	**1786625**	**1786625**	**$92,144.25**	**$92,144.25**	**$92,144.25**

Void tickets have been excluded from report
Includes all (Invoiced and Uninvoiced)

Refuse Type Total

From 12/1/2022 to 12/31/2022

MATERIAL ID		Loads	Pcs In	Total Net Wt	Wt Sales	Ttl Sales	Ext Sale	Mat Ext Sale
ABS	Abestos	1	0	10	10	$50.00	$50.00	$50.00
ASPHSH	clean asphalt shingles	1	0	1040	1040	$119.50	$119.50	$119.50
BXMAT	Boxsprings & Mattresses for	7	11	0	0	$164.91	$164.91	$164.91
CW	Commercial Waste	9	0	71830	71830	$8,260.00	$8,260.00	$8,260.00
CWC	Clean White Wood	3	0	1805	1805	$207.50	$207.50	$207.50
FREON	Freon Removal	9	9	0	0	$135.06	$135.06	$135.06
FYWA	Free Compostable Materials	24	0	1900	1900	$52.00	$52.00	$52.00
FYWACW	clean fruit waste	2	0	80	80	$0.00	$0.00	$0.00
GYPSM	Clean Gypsom/Drywall	2	0	850	850	$97.25	$97.25	$97.25
HWL	Hauled Liquid Waste (sludge)	7	0	82085	82085	$3,324.25	$3,324.25	$3,324.25
MB	All Metals	5	2	430	430	$56.74	$56.74	$56.74
MIXEDCW	Mixed load commercial	28	0	18825	18825	$2,169.12	$2,169.12	$2,169.12
MIXEDRW	Mixed Load Residential	88	0	15785	15785	$1,927.52	$1,927.52	$1,927.52
MMBCFIBRE	MMBC fibre 40yard	3	0	2390	2390	$0.00	$0.00	$0.00
MW	Municipal Waste Household Gar.	26	0	66620	66620	$7,661.00	$7,661.00	$7,661.00
MWT	Municipal Waste-Town	8	0	2990	2990	$0.00	$0.00	$0.00
PT2-3LB	Camping Propane Tank 2 to 3 lb	1	3	0	0	$0.00	$0.00	$0.00
RW	Residential Waste	110	0	5840	5840	$951.89	$951.89	$951.89
TIRERIM	tire with rim	2	2	0	0	$6.01	$6.01	$6.01
		336	**27**	**272480**	**272480**	**$25,182.75**	**$25,182.75**	**$25,182.75**

Void tickets have been excluded from report
Includes all (Invoiced and Uninvoiced)

Refuse Type Total

From 1/1/2022 to 12/31/2022

MATERIAL ID		Loads	Pcs In	Total Net Wt	Wt Sales	Ttl Sales	Ext Sale	Mat Ext Sale
ABS	Abestos	36	0	26110	26110	$5,884.25	$5,884.25	$5,884.25
ABST	Asbestos Town	1	0	595	595	$0.00	$0.00	$0.00
ASDRC	Assessed DRC	17	0	41625	41625	$21,854.50	$21,854.50	$21,854.50
ASPH	clean Asphalt	13	0	59120	59120	$6,799.00	$6,799.00	$6,799.00
ASPHSH	clean asphalt shingles	20	0	12975	12975	$1,496.00	$1,496.00	$1,496.00
ASPHT	clean asphalt from Town of O	29	0	305095	305095	$0.00	$0.00	$0.00
BLKITFRN	freon bulky item	9	38	-12475	-12475	$599.92	$599.92	$599.92
BLKITMMAT	Bulky item resi pick up mattrs	11	54	35	35	$229.95	$229.95	$229.95
BXMAT	Boxsprings & Mattresses for	266	422	5545	5545	$6,825.76	$6,825.76	$6,825.76
BXMATT	Box Spring and Mattress from Town	4	2	0	0	$0.00	$0.00	$0.00
CCM	Clean Cover Material	232	0	683970	683970	$0.00	$0.00	$0.00
CCMT	clean cover material - Town	50	0	382425	382425	$0.00	$0.00	$0.00
CGC	clean gravel cover	4	0	29865	29865	$0.00	$0.00	$0.00
CNCRT	clean concrete	56	0	59914	59914	$6,893.00	$6,893.00	$6,893.00
CNCRTT	clean concrete from Town of O	13	0	64400	64400	$0.00	$0.00	$0.00
COMCARDBRD	commercial fibre	10	0	12560	12560	$0.00	$0.00	$0.00
CONSTMXD	Construction Mixed Load	1	0	200	200	$146.00	$146.00	$146.00
CONTROLW	Controlled Waste	6	0	12000	12000	$2,597.75	$2,597.75	$2,597.75
CRBPUFYWA	yard and garden curbside pick up	121	0	348823	348823	$0.00	$0.00	$0.00
CW	Commercial Waste	434	0	1512622	1512622	$174,006.45	$174,006.45	$174,006.45
CWC	Clean White Wood	160	0	58415	58415	$6,793.00	$6,793.00	$6,793.00
CWCT	Wood Only - Town	19	0	13915	13915	$0.00	$0.00	$0.00
FINE	Double Charge for Contaminatin	3	0	0	0	$203.84	$203.84	$203.84
FREON	Freon Removal	191	208	2755	2755	$3,601.18	$3,601.18	$3,601.18
FREONTOWN	freon charge for town contract	3	13	0	0	$0.00	$0.00	$0.00
FYWA	Free Compostable Materials	4,675	0	587324	587324	$20,634.30	$20,634.30	$20,634.30
FYWACW	clean fruit waste	33	0	26520	26520	$1,495.25	$1,495.25	$1,495.25
FYWARW	Yard & Garden waste w Fruit or	20	0	4865	4865	$201.00	$201.00	$201.00
GYPSM	Clean Gypsom/Drywall	94	0	36970	36970	$4,278.75	$4,278.75	$4,278.75
HWL	Hauled Liquid Waste (sludge)	664	0	5095095	5095095	$206,356.00	$206,356.00	$206,356.00
HWLT	Hauled Sewage Waste for Town	4	0	13050	13050	$0.00	$0.00	$0.00
MB	All Metals	130	2	14768	14768	$1,956.99	$1,956.99	$1,956.99
MBT	All Metals - Town	4	0	1085	1085	$0.00	$0.00	$0.00
MIXEDCW	Mixed load commercial	191	0	125735	125735	$14,491.99	$14,491.99	$14,491.99
MIXEDRW	Mixed Load Residential	1,502	0	270265	270265	$32,001.50	$32,001.50	$32,001.50
MMBCFIBRE	MMBC fibre 40yard	40	0	41674	41674	$0.00	$0.00	$0.00
MW	Municipal Waste Household Gar.	378	0	1265108	1265108	$145,483.68	$145,483.68	$145,483.68
MWT	Municipal Waste-Town	272	0	200071	200071	$0.00	$0.00	$0.00
OT	Over size tires as per bylaw	1	0	0	0	$0.00	$0.00	$0.00

Void tickets have been excluded from report
Includes all (Invoiced and Uninvoiced)

Refuse Type Total

From 1/1/2022 to 12/31/2022

MATERIAL ID		Loads	Pcs In	Total Net Wt	Wt Sales	Ttl Sales	Ext Sale	Mat Ext Sale
PT100LB	Commercial Propane Tanks 100lbs	2	2	130	130	$0.00	$0.00	$0.00
PT2-3LB	Camping Propane Tank 2 to 3 lb	14	46	0	0	$0.00	$0.00	$0.00
PT20-25LB	Regular Propane Tanks 20 to 25 lbs	72	46	7320	7320	$0.00	$0.00	$0.00
PT30-40LB	Large Propane Tanks 30 to 40 lbs	5	15	0	0	$0.00	$0.00	$0.00
PT5-10LB	Small Propane Tanks 5 to 10 lb	2	11	0	0	$0.00	$0.00	$0.00
PTVIN	Puncture Vine	4	0	205	205	$0.00	$0.00	$0.00
RDOSBKYITM	bulky item pick up Area A	11	0	32910	32910	$3,619.89	$3,619.89	$3,619.89
RECRECV	Recovery of Recyclable	1	0	1335	1335	$0.00	$0.00	$0.00
RW	Residential Waste	4,084	4	507728	507728	$64,039.54	$64,039.54	$64,039.54
SOILAMMEND	greater than 5 tonnes	5	0	31280	31280	$938.75	$938.75	$938.75
SOILAMND5	less than 5 tonnes	148	0	172895	172895	$8,692.75	$8,692.75	$8,692.75
T	Recyclable Tires	50	0	5545	5545	$0.00	$0.00	$0.00
TIRERIM	tire with rim	25	73	0	0	$219.01	$219.01	$219.01
TIRET	tires from town	5	0	330	330	$0.00	$0.00	$0.00
TWF	TOWN OF OSOYOOS WAIVED FEES	1	0	305	305	$0.00	$0.00	$0.00
YWAT	Compostable Mat. - Town	156	0	94870	94870	$0.00	$0.00	$0.00
		14,259	**936**	**12157872**	**12157872**	**$742,340.00**	**$742,340.00**	**$742,340.00**

Void tickets have been excluded from report
Includes all (Invoiced and Uninvoiced)

HWL Waste Stream

From 1/1/2022 to 12/31/2022

SOURCE ID		Loads	Total Net Wt	Ttl Sales
		204	259744	$9,631.50
AA	Electoral Area "A"	1,683	1427631	$98,235.25
ELSE	Outside of Osoyoos and Area A	339	2419300	$119,262.75
O	Osoyoos	12,033	8051197	$515,210.50
		14,259	**12157872**	**$742,340.00**

Void tickets have been excluded from report
Includes all (Invoiced and Uninvoiced)

WasteStream Osoyoos & District Sanitary Landfill

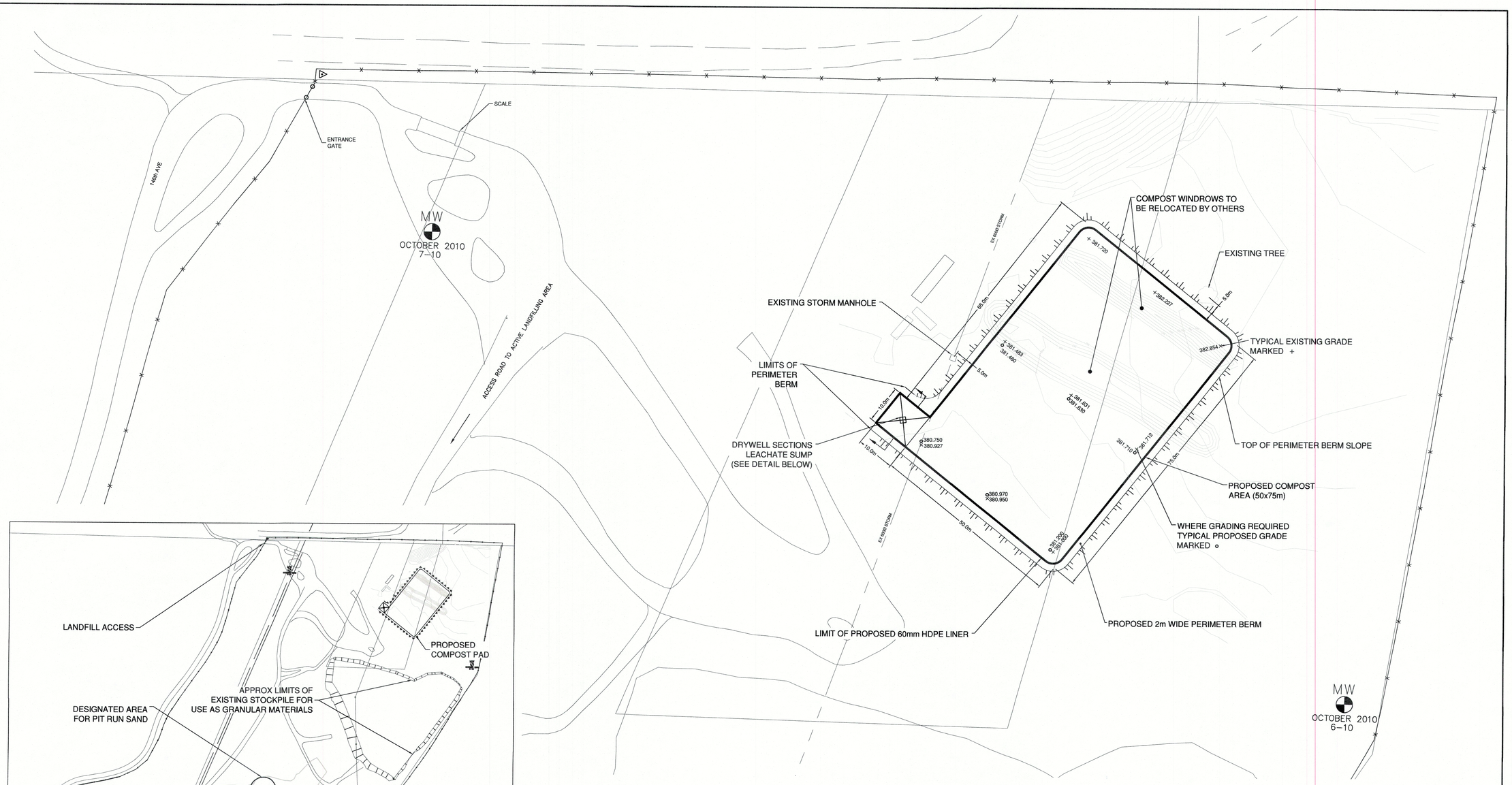
From 1/1/2022 to 12/31/2022

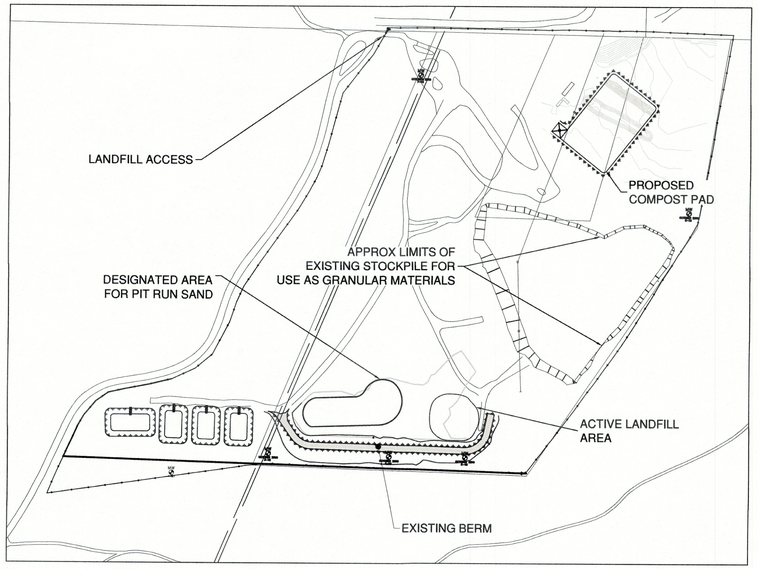
SOURCE ID		Loads	Total Net Wt	Ttl Sales
AA	Electoral Area "A"	1,683	1427631	$98,235.25
ELSE	Outside of Osoyoos and Area A	339	2419300	$119,262.75
O	Osoyoos	12,033	8051197	$515,210.50
		14,055	**11898128**	**$732,708.50**

Filter = (Ticket Detail.SOURCE ID <> '')
Void tickets have been excluded from report
Includes all (Invoiced and Uninvoiced)

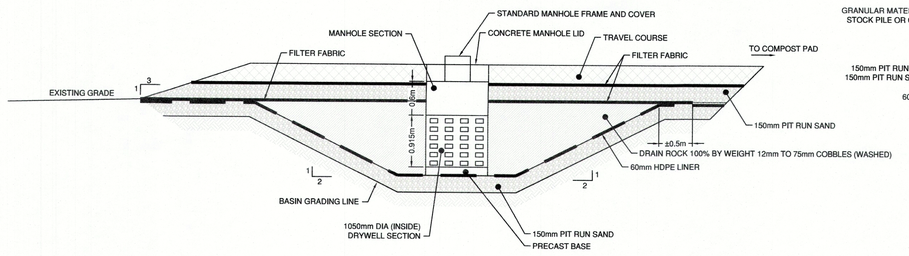
APPENDIX C

Composting Operations

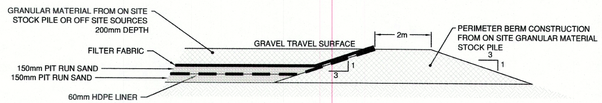




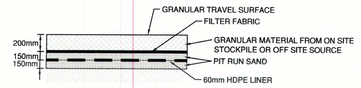
LOCATION PLAN FOR BORROW AREA
SCALE 1:2500



LEACHATE SUMP
N.T.S.



EDGE OF COMPOST AREA TYPICAL SECTION
N.T.S.



COMPOST AREA TYPICAL SECTION
N.T.S.

No.	DATE	DESCRIPTION	BY	APPD
3	OCT 20/11	REISSUED FOR TENDER	CH	TRU
2	OCT 5/11	REVISED PAD LOCATION	CH	TRU
1	JULY 4/11	ISSUED FOR TENDER	CH	TRU

ISSUES / REVISIONS

CONSULTANT SEAL
PROFESSIONAL ENGINEER — T. R. UNDERWOOD — PROVINCE OF BRITISH COLUMBIA
Feb 16/2021

TRUE CONSULTING
201 - 2079 Falcon Road ■ Kamloops BC ■ V2C 4J2
tel 250.828.0881 ■ fax 250.828.0717
info-kam@TRUE.bc.ca

TOWN OF OSOYOOS

COMPOST PAD PLAN AND DETAILS

SCALE	1:500
DESIGN BY	KK
DRAWN BY	CH
DATE	JULY 2011
PROJECT REFERENCE No.	302-706
DRAWING No.	302-706-01
SHEET	1 OF 1
REVISION	3

X:\Land\Projects\2009\302-706\dwg\302-706.dwg, 10/21/2011 1:34:40 PM, PDFCreator, ARCH D, 1:1

February 10, 2021 Our File: 302-708-006

Ministry of Environment and Climate Change Strategy
Environmental Protection Division
#200-10470 152nd St.
Surrey, BC
V3R 0Y3

Attn: Regional Director

Dear Sir or Madam:

RE: *Authorization Number 109610 - Osoyoos Landfill Compost Facility Engineering Design*

This letter is to provide confirmation that the Professional Engineer of Record for design and construction of the Town of Osoyoos Compost Facility per TRUE drawing 302-706-01-R3 enclosed herein was Terry Underwood, P.Eng.

This letter also provides verification that the response provided to the Ministry of Environment and Climate Change Strategy on February 28, 2019 titled *Authorization Number 109610-Osoyoos Landfill Compost Facility* was prepared by Natalie Alteen, E.I.T. and reviewed by Terry Underwood, P.Eng. This letter has been amended with Mr. Underwood's seal affixed and is enclosed herein.

Should questions arise or for additional information, please do not hesitate to contact the undersigned.

Yours truly,

TRUE CONSULTING

PROFESSIONAL ENGINEER PROVINCE OF BRITISH COLUMBIA N. ALTEEN # 52248 Feb.16 2021

Natalie Alteen, P. Eng.

PROFESSIONAL ENGINEER PROVINCE OF BRITISH COLUMBIA T. R. UNDERWOOD Feb16/2021

Terry Underwood, P. Eng.

NA/tu

Enclosures

cc: Town of Osoyoos

R:\Clients\300-399\302\302-708-006\02 Correspondence\Outgoing\To MoE- Sec24(2) OMRR\15273-Auth. No.109610-Osoyoos Compost Facility Engineering Design-2021 02 10.docx

February 28, 2019

Our File: 302-708-006

Ministry of Environment and Climate Change Strategy
Environmental Protection Division
#200-10470 152nd St.
Surrey, BC
V3R 0Y3

Attn: Regional Director

Dear Sir or Madam:

RE: *Authorization Number 109610 - Osoyoos Landfill Compost Facility*

As required under section 24(2) of the Organic Matter Recycling Regulation and noted in the Acknowledgement letter received from the Ministry on December 10, 2018 (enclosed herein), the following subsections regarding construction and operation of a composting facility are addressed as follows:

24(2)(a): The Town of Osoyoos Compost Pad Plan and Detail Drawing (Dwg. No.302-706-01) is enclosed herein. The pad is 3800 m^2 and includes a pit-run sand base, 60 mil HDPE liner, filter fabric, pitrun gravel surface course and leachate collection sump.

24(2)(b): The design capacity of the compost facility is approximately 7000 m^3/annum.

24(2)(c): Leachate generation on the compost pad is directed toward a collection sump. Leachate generation rates are minimal due to the arid climate. Any leachate generated is re-circulated onto the compost pile, preventing seepage into the ground and solid waste under the compost pad area.

24(2)(d): Composting material accepted at the landfill consists of white wood and yard and garden waste. Due to the compost material type, remote location of the compost pad and landfill facility as a whole, odor production is not an issue. As such, a comprehensive odor management plan has not been required.

24(2)(e): Operations of the compost facility will be ongoing. Closure of the composting area will require the Town to find an alternate disposal site for yard and garden waste at the landfill facility.

.../2

Should questions arise or for additional information, please do not hesitate to contact the undersigned.

Yours truly,

TRUE CONSULTING

Prepared By:

Natalie Alteen

Natalie Alteen, E.I.T.

Reviewed By:

T. R. UNDERWOOD
PROFESSIONAL ENGINEER
PROVINCE OF BRITISH COLUMBIA

Feb 16/2021

Terry Underwood, P. Eng.

NA/tu

Enclosures

cc: Town of Osoyoos

R:\Clients\300-399\302\302-708-006\02 Correspondence\Outgoing\To MoE- Sec24(2) OMRR\15273-Auth. No.109610-Osoyoos Compost Facility OMRR Sect24(2) Plans and Sepcs R1-2019 02 28 .docx

December 10, 2018

Tracking Number: 375554
Authorization Number: 109610

TOWN OF OSOYOOS
BOX 3010
OSOYOOS, BC
V0H 1V0

Dear TOWN OF OSOYOOS,

Re: Notification under the Organic Matter Recycling Regulation

Receipt of your completed notification under the Organic Matter Recycling Regulation is acknowledged. The effective date of notification is November 21, 2018. Initial notification was received on August 31, 2018; however, the notification was incomplete in accordance with section 25(2)(b) of the Organic Matter Recycling Regulation. Ninety days following the effective date of notification you are exempt from section 6(2) and 6(3) of the Environmental Management Act so long as compost is produced and used only in accordance with the regulation.

Please indicate the ministry authorization number shown above on all future correspondence with the Ministry regarding this facility.

Please submit the plans and specifications required under section 24(2) of the Organic Matter Recycling Regulation once they have been finalized and before operation of the facility.

Your attention is respectfully directed to the terms and conditions specified in the regulation. Contravention of any of the conditions is a violation of the Environmental Management Act and may result in prosecution. If the regulation does not cover all waste streams at the site, additional authorizations may be required under the Environmental Management Act.

This acknowledgement of your notification should not be construed as a representation that the works are adequately designed or will satisfy the regulation requirements. It is the responsibility of the discharger to ensure that the facility is adequately designed, constructed and operated to ensure compliance.

Acknowledgement of your notification under the regulation is without prejudice to any additional requirements that may be specified by the Director. The Director may also issue Orders under the Environmental Management Act.

Acknowledgement of your notification under the regulation does not authorize entry upon, crossing over, or use for any purpose of private or Crown lands or works, unless

and except as authorized by the owner of such lands or works. The responsibility for obtaining such authority rests with the operator. It is also the responsibility of the operator to ensure that all activities conducted under this regulation are carried out with regard to the rights of third parties and comply with other applicable legislation that may be in force. The operator must also obtain any necessary approvals from other agencies.

Administration of this regulation will be carried out by Ministry of Environment Compliance staff. Plans, data and reports pertinent to the regulation are to be submitted to the Regional Director, Environmental Protection, in accordance with the electronic data and reporting submissions requirements located at the following website: http://www2.gov.bc.ca/gov/content/environment/waste-management/waste-discharge-authorization/data-and-report-submissions

Yours truly,

Jordan Tam, P.Ag
Environmental Protection Officer
Authorizations South
Email: Jordan.Tam@gov.bc.ca, Phone: (604) 930-7106

ENCL: None

APPENDIX D

2021 Financial Statement

9. Landfill closure and post-closure liability

The provincial Waste Management Act, as well as the B.C. Landfill Criteria for Municipal Solid Waste, sets out the regulatory requirements to properly close and maintain all active and inactive landfill sites. The Town is committed to ensuring that the landfill in its care is managed in a fiscally responsible manner, which has included setting aside funds to pay for landfill closure and post-closure activities in accordance with the Solid Waste Management Plan which was updated in 2018. Landfill closure and post-closure requirements have been defined in accordance with industry standards and remediation activities include final covering of the site, groundwater and surface water monitoring, maintenance of the drainage structure, site inspection and environmental monitoring. Post-closure care is estimated to continue for 30 years after final closure of the landfill site, which is planned for 2042. Based on current estimates, remaining capacity of the landfill is 75.0% (2020 – 77.1%).

This requirement is being provided for based on a number of factors including the percentage of landfill capacity already filled, usage based on tipping fees and consultant estimates, the projected closure dates, the regulated monitoring period, the estimated annual management costs and a present value discount rate. As at December 31, 2021, using the most recent closure plans and updated cost estimates for closure and post-closure care, the Town has estimated its liability for these costs at $227,710 (2020 - $210,062). The unspent reserves that were established towards funding the landfill closure and post-closure care costs form part of the accumulated surplus and had a balance of $322,713 at December 31, 2021 (2020 - $359,438).

The estimate for closure and post-closure liability in these financial statements has been calculated based on consultants' estimates in their preparation of the closure plans for the landfill and estimated timing of closure projects. The 2021 increase in closure and post-closure costs of $17,648 (2020 - $nil) has been included in the environmental health services repairs and maintenance expenses.

APPENDIX E

2019 Landfill Gas Generation Assessment Report

2019 Landfill Gas Generation Assessment Report for the Town of Osoyoos Landfill

April 2019

Project No. 302-710

Prepared For: British Columbia Ministry of Environment

Prepared By: TRUE Consulting

ENGINEERING ■ PLANNING ■ URBAN DESIGN ■ LAND SURVEYING

201-2079 Falcon Rd | Kamloops BC | V2C 4J2 | www.true.bc.ca | tel 250.828.0881 | fax 250.828.0717

Distribution List

# of Hard Copies	PDF Required	Association / Company Name
	1	Ministry of Environment
1	1	Town of Osoyoos
1	1	TRUE Consulting

Revision Log

Revision #	Revised by	Date	Issue / Revision Description

Report Submission

Report Prepared By:

Natalie Alteen, EIT.
Project Engineer

Report Reviewed By:

PROFESSIONAL ENGINEER
PROVINCE OF BRITISH COLUMBIA
S. J. UNDERWOOD
29528

April 11 2019

Steve Underwood, P. Eng.
Project Engineer

R:\Clients\300-399\302\302-710\05 Reports\302-710-Osoyoos Landfill Gas Assessment Update- April 2019.docx

Table of Contents

List of Tables

List of Acronyms

CRA	Conestoga-Rovers & Associates
LFG	Landfill Gas Generation
MOE	Ministry of Environment
OC	Operational Certificate
TRUE	TRUE Consulting

Referenced Reports

Conestoga-Rovers & Associates	"Landfill Gas Generation Assessment Procedure Guidelines," March 2009
TRUE Consulting	"Update to the Landfill Gas Generation Assessment Report for the Town of Osoyoos Landfill," March 2014

1.0 Introduction

This report serves as an update to the *Update to the Landfill Gas Generation Assessment Report for the Town of Osoyoos Landfill - March 2014* prepared by TRUE Consulting. This report has been prepared in accordance with the Landfill Gas Generation Assessment Procedure Guidance Report (the Guidelines), prepared for the British Columbia Ministry of Environment by Conestoga-Rovers & Associates (CRA), dated March 2009, and in accordance with the requirements of the British Columbia Ministry of Environment's Landfill Gas Management Regulation (the Regulation), approved and ordered on December 8, 2008. This report has been prepared by a qualified professional and meets the requirements of Section 4(3)(e) of the Regulation.

1.1 LFG Assessment Requirements

The following section presents the information required by Section 4(5) of the Regulation.

The Town of Osoyoos Landfill is located approximately 3 km north of the municipal boundary and 1.5 km west of Highway 97 in an area described as the Osoyoos West Bench. The Landfill, in its current location has been in operation for more than 50 years. Per section 4.1 of the Guidelines, the first year the landfill received waste was assumed to be 1981, or 30 years prior to the 2011 assessment.

The total waste in place at the landfill in 2010 was estimated to be approximately 129,000 tonnes, with an annual tonnage of 6,872 tonnes in 2010. This prompted completion and submission of a Landfill Gas (LFG) Generation Assessment Report to the director as required by Section 4(5) of the Regulation.

This report serves as an update to the *Update to the Landfill Gas Generation Assessment Report for the Town of Osoyoos Landfill-March 2014* and includes waste generation summaries up to December 31, 2018.

1.2 Previous LFG Generation Assessments

The following section presents the information described in Section 3.0 of the Guidelines.

A LFG Generation Assessment Report for the Town of Osoyoos Landfill was prepared by TRUE and submitted to the Ministry in March 2011. The LFG generation assessment report was updated in March 2014 to reflect recommendations from the Ministry, which included re-categorizing waste, as the previous estimates were overly conservative. The revised updated report was submitted to the Ministry in March 2014.

2.0 LFG Generation Assessment

2.1 Landfill Information

The following section presents the information required by Sections 4(2)(a), 4(2)(b), 4(2)(c), 3(3)(a), and 4(3)(d) of the Regulation and described in Section 5.1 of the Guidelines.

2.1.1 Historical Waste Tonnages

A scale was constructed at the Osoyoos Landfill in 1995. Scale data was recorded from 1996 onwards. Prior to installation of the scale, waste quantities accepted at the landfill were not documented.

Categorization of waste streams recorded at the scale and diversion practices were modified between 1996-2007 and 2008-present. A significant change was the implementation of a recycling programme in 2008. Appendix A includes the annual waste tonnage records from 1996-2018.

2.1.2 Waste Categorization

A waste characterization study has not been completed at the Osoyoos Landfill. However, multiple landfills in southern British Columbia have completed waste characterization studies, including the Beach Side Landfill in Vancouver, the McKelvey Creek Landfill in the Regional District of Kootenay Boundary, and the Kelowna Landfill. Both the Beach Side Landfill and the McKelvey Creek Landfill characterized waste into Relatively Inert (RI), Moderately Decomposable (MD), and Decomposable (D) categories. Mean composition percentages were established as summarized in Table 2-1.

These summaries were used to derive a waste composition profile for the Osoyoos Landfill. To provide a conservative estimate, waste composition for all calculations is approximated as 20% RI, 40% MD, 40% D.

TABLE 2-1: SOUTHERN BC LANDFILL WASTE CHARACTERIZATION SUMMARY

Landfill	Relatively Inert (RI)	Moderately Decomposable (MD)	Decomposable (D)
Beach Side (Vancouver)	28%	49%	21%
McKelvey Creek (RDKB)	23%	40%	37%
Kelowna Landfill-Commercial	24%	41%	35%
Kelowna Landfill-Residential	21%	38%	42%
Average	24%	42%	34%
Osoyoos Landfill (Used for 1996-2018 categorization)	**20%**	**40%**	**40%**

2.1.3 Landfill Information

The Osoyoos Landfill is authorized to manage municipal solid waste and to discharge residual solid waste to the ground under Operational Certificate (OC) MR 15273, issued on March 26, 2002. While there is no discharge limit specified in the OC, design and performance requirements are outlined in the Landfill Design, Operations and Closure Plan. This report was last updated in August 2018 and submitted to the Ministry.

A summary of historical landfilling by weight is summarized in Table 2-2. As seen, per capita waste generation has ranged from 1.01 to 0.54 tonnes per capita, with a per capita generation rate of 0.70 in 2018. This per capita generation rate includes municipal projects. A summary of per capita generation excluding municipal projects from 2003 to 2018 is included for reference. Average per capita generation rates were assessed for pre (1996-2007) and post (2008-2018) implementation of the recycling program.

TABLE 2-2: HISTORICAL ANNUAL TONNAGES AND PER CAPITAL SUMMARIES

	Landfilled (Tonnes)	Population (Town and Electoral Area A)	Per Capita Generation (Tonnes/Capita)	Per Capita Generation excl. Municipal Projects (Tonnes/Capita)
1996	4,614	5,989	0.77	-
1997	4,311	6,030	0.72	-
1998	3,679	6,071	0.61	-
1999	3,306	6,113	0.54	-
2000	3,430	6,157	0.56	-
2001	3,980	6,192	0.64	-
2002	5,785	6,255	0.92	-
2003	4,799	6,373	0.75	0.27
2004	5,587	6,352	0.88	0.29
2005	5,285	6,539	0.81	0.29
2006	6,563	6,673	0.98	0.30
2007	6,049	6,763	0.89	0.40
2008	6,854	6,798	1.01	0.39
2009	6,616	6,869	0.96	0.34
2010	6,872	6,794	1.01	0.28
2011	6,102	6,737	0.91	0.50
2012	5,201	6,778	0.77	0.31
2013	4,293	6,819	0.63	0.33
2014	4,305	6,861	0.63	0.28
2015	4,093	6,902	0.59	0.22
2016	4,054	6,943	0.58	0.21
2017	4,056	6,984	0.58	0.28
2018	4,898	7,025	0.70	0.35
Average 1996-2007			0.76	-
Average 2008-2018			0.76	-

Prior to 1996, measured quantities and waste categorization were not recorded. For preparation of this report, waste quantities were estimated based on a per capita generation rate of 0.76 tonnes/capita.

Population estimates for the landfill service area from 1981-1995 were obtained from the Town's *Waste Management Plan* (dated 1987) and *2010 Landfill Annual Report* (dated February 2011). Years between published population census were extrapolated. Table 2-3 provides an estimate of landfilled waste from 1981-1995.

TABLE 2-3: ESTIMATED LANDFILLED WASTE TONNAGES FROM 1981-1995

Year	Populations			Tonnes of Waste
	Town	Elect. A*	Total	
1981	2,738	777	3,515	2,671
1982	2,844	800	3,644	2,769
1983	2,929	824	3,753	2,852
1984	3,017	849	3,866	2,938
1985	3,107	874	3,981	3,026
1986	3,200	900	4,100	3,116
1987	3,321	934	4,255	3,234
1988	3,447	969	4,416	3,356
1989	3,577	1,006	4,583	3,483
1990	3,712	1,044	4,756	3,615
1991	3,853	1,084	4,937	3,752
1992	3,999	1,125	5,124	3,894
1993	4,150	1,168	5,318	4,042
1994	4,307	1,212	5,519	4,194
1995	4,470	1,258	5,728	4,353

*Electoral Area A of Regional District of Okanagan Similkameen

All landfilled material from 1981-2018 was categorized as Relatively Inert (RI), Moderately Decomposable (MD) or Decomposable (D), as specified in Section 5.1 of the Guidelines. A summary using the Landfill Gas Generation Estimation Tool T2 - Calculator is presented in Appendix B.

A waste composition of 20% RI, 40% MD, and 40%D was used in calculations for all landfilled waste between 1981-1995. Following waste categorization and documentation in 1996, waste composition was characterized more specifically. A detailed waste composition summary from 1996-2018 is presented in Appendix A. Table 2-4 provides an overall summary of landfilled waste from 1981-2018, including a summary of the cumulative waste in place.

TABLE 2-4: WASTE QUANTITY SUMMARY FROM 1981-2018 (TONNES)

Year	Relatively Inert (RI)	Moderately Decomposable (MD)	Decomposable (D)	Total Quantity (tonnes)	Cumulative Waste in Place (tonnes)
1981	534	1,069	1,069	2,671	2,671
1982	554	1,108	1,108	2,769	5,441
1983	570	1,141	1,141	2,852	8,293
1984	588	1,175	1,175	2,938	11,231
1985	605	1,210	1,210	3,026	14,257
1986	623	1,246	1,246	3,116	17,373
1987	647	1,294	1,294	3,234	20,607
1988	671	1,342	1,342	3,356	23,963
1989	697	1,393	1,393	3,483	27,446
1990	723	1,446	1,446	3,615	31,060
1991	750	1,501	1,501	3,752	34,813
1992	779	1,558	1,558	3,894	38,707
1993	808	1,617	1,617	4,042	42,748
1994	839	1,678	1,678	4,194	46,943
1995	871	1,741	1,741	4,353	51,296
1996	1,292	1,246	2,076	4,614	55,910
1997	920	1,218	2,173	4,311	60,221
1998	662	1,138	1,879	3,679	63,901
1999	570	1,141	1,595	3,306	67,207
2000	783	1,270	1,377	3,430	70,637
2001	926	1,454	1,600	3,980	74,617
2002	1,382	2,120	2,283	5,785	80,402
2003	1,162	1,741	1,897	4,799	85,201
2004	1,360	1,988	2,239	5,587	90,788
2005	1,174	1,966	2,146	5,285	96,073
2006	1,536	2,213	2,813	6,563	102,635
2007	1,519	2,265	2,265	6,049	108,684
2008	1,431	3,103	2,319	6,854	115,538
2009	1,512	2,848	2,256	6,616	122,154
2010	2,312	2,559	2,000	6,872	129,026
2011	1,137	2,692	2,274	6,102	135,128
2012	923	2,163	2,114	5,201	140,329
2013	910	1,737	1,645	4,293	144,622
2014	996	1,725	1,584	4,305	148,928
2015	833	1,807	1,454	4,093	153,021
2016	834	1,703	1,517	4,054	157,075
2017	807	1,733	1,516	4,056	161,131
2018	1,001	2,043	1,854	4,898	166,030

2.1.4 Projected Waste Tonnages

The projected waste tonnages for four (4) consecutive years following this assessment update (i.e. 2019-2023) is presented in Table 2-5. An annual population growth rate of 1.5% and an annual per capita generation rate of 0.76 tonnes/capita was assumed. Waste categorization percentages for the projected tonnages were calculated as 20% RI, 40% MD, and 40% D.

TABLE 2-5: PROJECTED LANDFILL TONNAGES 2019-2023

	Projected Population	Projected Annual Waste Generation (tonnes)	Estimated Total Waste in Place (tonnes)
2019	7,130	5,419	171,447
2020	7,237	5,500	176,947
2021	7,346	5,583	182,530
2022	7,456	5,667	188,197
2023	7,568	5,752	193,948

2.1.5 Total Waste Tonnage Landfilled in Place

Table 2-6 presents a summary of the estimated total tonnage of waste landfilled from 1981-2018 as required by Section 4(2)(c) of the Regulation.

TABLE 2-6: TOTAL WASTE TONNAGE LANDFILLED IN PLACE 1981-2018

Year	Annual Waste Generation (tonnes)	Cumulative Waste Generation (tonnes)
1981	2,671	2,671
1982	2,769	5,441
1983	2,852	8,293
1984	2,938	11,231
1985	3,026	14,257
1986	3,116	17,373
1987	3,234	20,607
1988	3,356	23,963
1989	3,483	27,446
1990	3,615	31,060
1991	3,752	34,813
1992	3,894	38,707
1993	4,042	42,748
1994	4,194	46,943
1995	4,353	51,296
1996	4,614	55,910
1997	4,311	60,221
1998	3,679	63,901
1999	3,306	67,207
2000	3,430	70,637

Year	Annual Waste Generation (tonnes)	Cumulative Waste Generation (tonnes)
2001	3,980	74,617
2002	5,785	80,402
2003	4,799	85,201
2004	5,587	90,788
2005	5,285	96,073
2006	6,563	102,635
2007	6,049	108,684
2008	6,854	115,538
2009	6,616	122,154
2010	6,872	129,026
2011	6,102	135,128
2012	5,201	140,329
2013	4,293	144,622
2014	4,305	148,928
2015	4,093	153,021
2016	4,054	157,075
2017	4,056	161,131
2018	4,898	166,030

2.2 Climate

The following section presents the information required by Section 4(3)(d) of the Regulation and described in Section 5.1 of the guidelines.

The Town of Osoyoos Landfill is located on 146th Avenue, Osoyoos, with the closest active Environment Canada climatic station being "Osoyoos West". The average annual precipitation recorded at this station is 323.2 mm (1981-2010).

2.3 Model Input Parameters Used and Justification

The following section presents the information required by Section 4(3)(d) of the Regulation and described in Sections 5.2 and 5.3 of the Guidelines.

As presented in Section 5.2 of the Guidelines, the methane generation potential represents the total potential yield of methane from a mass of waste and is dependent on the composition of waste. The methane generation values given by the Guidelines are presented in Table 2-7 as follows:

TABLE 2-7: METHANE GENERATION POTENTIAL (L_o)

Waste Characterization	Methane Generation potential L_o (m^3 methane/tonne)
Relatively Inert (RI)	20
Moderately Decomposable (MD)	120
Decomposable (D)	160

As described in Section 5.3 of the Guidelines, the methane generation rate constant, k, represents the first order biodegradation rate at which methane is generated following waste placement. It is influenced by moisture content, the availability of nutrients, pH, and temperature. Given an average annual precipitation of 323.2 mm, the methane generation rate for each waste category was determined and is presented in Table 2-8. These values were adjusted using a water addition factor to account for stormwater management, leachate recirculation, cover properties, etc. Although there are stormwater management practices at the landfill and leachate is not recirculated, a water addition factor of 1.1 was used for conservative approximations.

TABLE 2-8: METHANE GENERATION RATE (K)

	Methane Generation Rate (k) Values for >250mm and <500mm Precipitation		
	Relatively Inert	Moderately Decomposable	Decomposable
Rate	0.01	0.02	0.05
Rate c/w Water Addition Factor	0.011	0.022	0.055

2.4 Waste Categorization Summary Table

Table 2-9 presents the information required by Section 4(3)(d) of the Regulation and described in Section 5.1 of the Guidelines.

TABLE 2-9: LANDFILL WASTE CATEGORIZATION SUMMARY TABLE 1981-2018

	Landfilled Waste (tonnes)			
	RI	MD	D	Total
1981	534	1,069	1,069	2,671
1982	554	1,108	1,108	2,769
1983	570	1,141	1,141	2,852
1984	588	1,175	1,175	2,938
1985	605	1,210	1,210	3,026
1986	623	1,246	1,246	3,116
1987	647	1,294	1,294	3,234
1988	671	1,342	1,342	3,356
1989	697	1,393	1,393	3,483
1990	723	1,446	1,446	3,615
1991	750	1,501	1,501	3,752
1992	779	1,558	1,558	3,894
1993	808	1,617	1,617	4,042
1994	839	1,678	1,678	4,194
1995	871	1,741	1,741	4,353
1996	1,292	1,246	2,076	4,614
1997	920	1,218	2,173	4,311
1998	662	1,138	1,879	3,679
1999	570	1,141	1,595	3,306

	Landfilled Waste (tonnes)			
	RI	MD	D	Total
2000	783	1,270	1,377	3,430
2001	926	1,454	1,600	3,980
2002	1,382	2,120	2,283	5,785
2003	1,162	1,741	1,897	4,799
2004	1,360	1,988	2,239	5,587
2005	1,174	1,966	2,146	5,285
2006	1,536	2,213	2,813	6,563
2007	1,519	2,265	2,265	6,049
2008	1,431	3,103	2,319	6,854
2009	1,512	2,848	2,256	6,616
2010	2,312	2,559	2,000	6,872
2011	1,137	2,692	2,274	6,102
2012	923	2,163	2,114	5,201
2013	910	1,737	1,645	4,293
2014	996	1,725	1,584	4,305
2015	833	1,807	1,454	4,093
2016	834	1,703	1,517	4,054
2017	807	1,733	1,516	4,056
2018	1,001	2,043	1,854	4,898

3.0 Landfill Gas Generation Model Results

Table 3.1 presents information required in Sections 4(2)(d), 4(2)(e), and 4(3)(a) of the Regulation. A printout of the landfill gas generation estimate is provided in Appendix B.

TABLE 3-1: LANDFILL GAS GENERATION MODEL RESULTS

	Year of Estimate	Mass of Methane Produced (tonnes)
Estimated Quantity of Methane Produced in Year Preceding the Assessment	2018	230
Estimated Quantity of Methane Produced in Year of the Assessment	2019	235
Estimated Quantity of Methane Produced One Year After the Assessment	2020	241
Estimated Quantity of Methane Produced Two Years After the Assessment	2021	248
Estimated Quantity of Methane Produced Three Years After the Assessment	2022	255
Estimated Quantity of Methane Produced Four Years After the Assessment	2023	262

4.0 Discussion of Next Steps

The following section presents the information required by Section 4(3)(c) of the Regulation.

As presented in Table 3-1, the LFG assessment calculator estimated less than 1,000 tonnes of annual methane production from 2018 - 2023. Given this result, the Town of Osoyoos will be required to submit a supplementary LFG Generation Assessment within five (5) years.

Reporting for the landfill is in place and submitted annually to the Ministry. The annual report addresses the quantity and composition of municipal solid waste received, a description of any organics diversion program used at the landfill site, reporting requirements outlined within their Operational Certificate and any additional information requested in writing by the Director.

Submission of a supplementary report by a qualified professional to the Director no later than March 31, 2016 will be required.

APPENDIX A

Annual Waste Tonnage Records

Appendix A. Waste Quantity Summaries From 1996-2007 (Tonnes)

Waste Categorization		1996				1997				1998				1999			
Description	% in Category	RI	MD	D	Total	RI	MD	D	Total	RI	MD	D	Total	RI	MD	D	Total
Const Waste B (unburnable demolit'n)	100% RI	668			668	311			311	94			94	0			0
Yard Waste B (chippable limbs, etc)	100% D			758	758			623	623			569	569			328	328
Commercial Waste	20% RI, 40% MD, 40% D	288	576	576	1439	321	641	641	1603	316	631	631	1578	356	712	712	1781
Municipal Waste		335	671	671	1677	288	576	576	1441	253	507	507	1267	214	429	429	1071
Yard Waste A (compostable garden)	100% D			71	71			74	74			120	120			107	107
Yard Waste C (incl in Mun Waste)				0	0			258	258			52	52			19	19
Total		**1292**	**1246**	**2075**	**4613**	**920**	**1218**	**2173**	**4311**	**663**	**1138**	**1879**	**3679**	**570**	**1141**	**1595**	**3306**

Waste Categorization		2000				2001				2002				2003			
Description	% in Category	RI	MD	D	Total	RI	MD	D	Total	RI	MD	D	Total	RI	MD	D	Total
Const Waste B (unburnable demolit'n)	100% RI	148			148	199			199	323			323	291			291
Yard Waste B (chippable limbs, etc)	100% D			0	0			20	20			31	31			10	9
Commercial Waste	20% RI, 40% MD, 40% D	360	720	720	1799	433	866	866	2166	738	1475	1475	3688	521	1042	1042	2605
Municipal Waste		275	550	550	1376	294	587	587	1468	322	645	645	1611	350	699	699	1748
Yard Waste A (compostable garden)	100% D			60	60			102	102			122	122			146	146
Yard Waste C (incl in Mun Waste)				47	47			24	24			10	10			0	0
Total		**783**	**1270**	**1377**	**3430**	**926**	**1454**	**1600**	**3980**	**1383**	**2120**	**2283**	**5785**	**1162**	**1741**	**1897**	**4799**

Waste Categorization		2004				2005				2006				2007			
Description	% in Category	RI	MD	D	Total	RI	MD	D	Total	RI	MD	D	Total	RI	MD	D	Total
Const Waste B (unburnable demolit'n)	100% RI	366			366	191			191	429			429	387			387
Yard Waste B (chippable limbs, etc)	100% D			42	42			35	35			22	22				0
Commercial Waste	20% RI, 40% MD, 40% D	620	1241	1241	3102	598	1197	1197	2992	703	1405	1405	3513	593	1187	1187	2966
Municipal Waste		374	747	747	1868	384	769	769	1922	404	808	808	2021	539	1078	1078	2696
Yard Waste A (compostable garden)	100% D			210	210			145	145			578	578			0	0
Yard Waste C (incl in Mun Waste)				0	0			0	0			0	0			0	0
Total		**1360**	**1988**	**2240**	**5587**	**1174**	**1966**	**2146**	**5285**	**1536**	**2213**	**2813**	**6563**	**1519**	**2265**	**2265**	**6049**

Appendix A. Waste Quantity Summaries From 2008-2018 (Tonnes)

Waste Categorization		2008				2009				2010			
Description	**% in Category**	**RI**	**MD**	**D**	**Total**	**RI**	**MD**	**D**	**Total**	**RI**	**MD**	**D**	**Total**
Const Waste B (drywall or asphalt shingles)	100% RI	257			257	372			372	83			83
Asbestos		0			0	0			0	0			0
Agricultural Plastics		15			15	15			15	6			6
Other (landfilled lagoon liner)		0			0	0			0	1,230			1,230
Demolition and Land Clearing *	100% MD		785		785		598		598		572		572
Mixed Load Commercial Waste	20% RI, 40% MD, 40% D	19	37	37	93	17	34	34	86	21	42	42	104
Mixed Load Residential Waste		94	187	187	468	52	103	103	258	52	103	103	258
Commercial Waste		613	1,225	1,225	3,063	638	1,277	1,277	3,192	590	1,179	1,179	2,948
Municipal Waste (Town & WSI pickup)		349	698	698	1,745	355	710	710	1,775	271	542	542	1,355
Residential Waste		85	171	171	427	63	126	126	314	61	121	121	303
Puncture Vine	100% D			1	1			4	4			14	14
Total		**1,431**	**3,103**	**2,319**	**6,854**	**1,512**	**2,848**	**2,254**	**6,616**	**2,312**	**2,559**	**2,000**	**6,872**

* 10% of Demolition and Land Clearing to Recycling, 90% to Landfill

Waste Categorization		2011				2012				2013				2014			
Description	**% in Category**	**RI**	**MD**	**D**	**Total**	**RI**	**MD**	**D**	**Total**	**RI**	**MD**	**D**	**Total**	**RI**	**MD**	**D**	**Total**
Const Waste B (drywall or asphalt shingles)	100% RI				0	66			66	89			89	87			87
Asbestos					0	4			4	5			5	122			122
Agricultural Plastics					0	0			0	0			0	0			0
Other (Town of Osoyoos Marina Contract) **					0	0			0	0			0	0			0
Demolition and Land Clearing *	100% MD		418		418		457		457		105		105		151		151
Mixed Load Commercial Waste	20% RI, 40% MD, 40% D				0	17	35	35	87	14	27	27	68	12	24	24	60
Mixed Load Residential Waste					0	52	104	104	259	45	90	90	225	52	103	103	258
Commercial Waste		467	934	934	2,335	415	830	830	2,075	357	714	714	1,785	397	794	794	1,985
Municipal Waste (Town & WSI pickup)		670	1340	1340	3,349	333	665	665	1,663	368	736	736	1,839	298	595	595	1,488
Residential Waste					0	36	73	73	182	33	66	66	164	29	58	58	144
Puncture Vine	100% D				0			12	12			13	13			10	10
Biosolids	100% D				0			396	396			0	0				0
Total		**1,137**	**2,692**	**2,274**	**6,102**	**923**	**2,163**	**2,114**	**5,201**	**910**	**1,737**	**1,645**	**4,293**	**996**	**1,725**	**1,584**	**4,305**

* Recycled DLC has been subtracted from total
** 20% of total to landfill

Waste Categorization		2015				2016				2017				2018			
Description	**% in Category**	**RI**	**MD**	**D**	**Total**	**RI**	**MD**	**D**	**Total**	**RI**	**MD**	**D**	**Total**	**RI**	**MD**	**D**	**Total**
Const Waste B (drywall or asphalt shingles)	100% RI	74			74	67			67	43			43	55			55
Asbestos		40			40	9			9	7			7	19			19
Demolition and Land Clearing *	100% MD		267		267		134		134		195		195		162		162
Mixed Load Commercial Waste	20% RI, 40% MD, 40% D		102		102		51		51		25		25		28		28
Mixed Load Residential Waste		42	84	84	210	46	93	93	231	53	107	107	267	48	96	96	240
Commercial Waste		380	759	759	1,898	405	809	809	2,023	402	805	805	2,012	384	769	769	1,922
Municipal Waste (Town & WSI pickup)		274	549	549	1,372	278	556	556	1,390	261	523	523	1,306	445	890	890	2,224
Residential Waste		23	45	45	113	30	59	59	148	40	79	79	199	50	99	99	248
Puncture Vine	100% D			16	16				0			2	2			1	1
Biosolids	100% D			0	0				0			0	0			0	0
Total		**833**	**1,807**	**1,454**	**4,093**	**834**	**1,703**	**1,517**	**4,054**	**807**	**1,733**	**1,516**	**4,056**	**1,001**	**2,043**	**1,855**	**4,899**

* Recycled DLC has been subtracted from total
** 20% of total to landfill

APPENDIX A
SUMMARY OF WASTE QUANTITIES
ACCEPTED AT OSOYOOS LANDFILL

1996 WASTE CATEGORY	1996 January	1996 February	1996 March	1996 April	1996 May	1996 June	1996 July	1996 August	1996 September	1996 October	1996 November	1996 December	Total to Date
Batteries	0.00	0.00	0.08	0.44	0.12	0.22	0.07	0.35	0.11	0.00	0.00	0.00	1.38
Const Waste A (conc, asphalt, etc)	0.13	0.00	13.09	63.49	136.99	117.19	1.7 *	19.76	80.74	25.07	0.00	0.00	458.16
Const Waste B (unburnable demolit'n)	3.95	0.62	5.30	420.86	0.47	45.19	12.79	13.19	35.08	4.30	6.52	120.20	668.45
Const Waste C (burnable)	0.90	0.45	0.00	2.72	6.57	10.96	2.57	3.41	8.20	3.94	0.29	0.18	40.18
Metals - Type A (White Goods)	0.22	0.37	1.22	0.77	1.49	1.20	1.18	0.25	0.51	0.82	0.13	0.00	8.14
Metals - Type B (Scrap Metal)	2.10	0.42	4.93	7.45	8.56	22.28	7.68	16.97	4.69	4.95	3.25	0.32	83.58
Tires	5.27	0.32	1.41	0.22	0.18	0.61	0.58	0.00	0.00	0.20	0.00	0.00	8.78
Commercial Waste	85.18	63.97	83.55	125.38	113.57	123.76	213.36	206.46	132.11	122.37	88.76	81.04	1439.50
Municipal Waste	70.72	79.12	126.98	119.05	176.41	176.83	206.31	218.88	164.40	150.56	117.36	69.97	1676.58
Yard Waste A (compostable garden)	0.09	0.22	1.26	4.73	2.72	5.63	11.06	25.38	4.41	11.55	4.28	0.00	71.31
Yard Waste B (chippable limbs, etc)	29.73	19.59	72.42	74.26	119.14	134.48	67.78	49.26	43.03	109.51	31.63	7.30	758.11
Yard Waste C (incl in Mun Waste)													
TOTALS	198.29	165.08	310.24	819.37	566.20	638.32	525.05	553.90	473.26	433.26	252.20	279.00	5214.15
Demolition	1.03	0.45	13.09	66.21	143.56	128.15	4.27	23.17	88.94	29.01	0.29	0.18	498.34
Organics	29.82	19.81	73.68	78.99	121.85	140.11	78.83	74.64	47.43	121.06	35.90	7.30	829.42
Landfilled	159.85	143.71	215.83	665.29	290.45	345.77	432.45	438.53	331.59	277.22	212.64	271.20	3784.53
Recycled	7.59	1.11	7.64	8.88	10.34	24.30	9.50	17.56	5.31	5.97	3.37	0.32	101.87

* Construction Waste Type A for July does not include 490.32 tonnes of asphalt millings used for road surfacing in the Landfill.

1997 WASTE CATEGORY	1997 January	1997 February	1997 March	1997 April	1997 May	1997 June	1997 July	1997 August	1997 September	1997 October	1997 November	1997 December	Total to Date
Batteries	0.00	0.00	0.00	0.00	0.21	0.14	0.00	0.00	0.00	0.00	0.00	0.00	0.35
Const Waste A (conc, asphalt, etc)	0.00	0.52	0.17	31.98	17.05	4.60	19.09	76.52	37.72	80.40	0.77	12.85	281.65
Const Waste B (unburnable demolit'n)	18.32	38.32	26.49	13.13	63.82	23.88	34.71	18.13	59.21	14.63	0.00	0.00	310.61
Const Waste C (burnable)	6.40	0.94	5.62	17.73	64.68	14.54	36.28	26.02	31.67	154.00	39.13	39.77	436.75
Metals - Type A (White Goods)	0.00	0.00	0.72	1.52	0.71	0.24	1.42	1.10	0.40	1.01	0.21	0.17	7.48
Metals - Type B (Scrap Metal)	0.91	1.41	5.21	10.68	10.88	6.34	11.49	4.32	4.29	10.70	8.61	3.42	78.23
Tires	0.05	0.54	0.42	1.72	2.46	1.31	0.32	0.32	1.20	0.95	1.47	0.00	10.71
Commercial Waste	69.52	80.93	74.21	13.07	105.36	282.57	250.84	238.51	153.60	121.28	105.75	107.78	1603.42
Municipal Waste	70.64	72.27	110.86	125.00	141.27	156.28	174.01	147.80	128.09	123.81	99.01	92.14	1441.18
Yard Waste A (compostable garden)	0.00	0.64	4.00	20.87	3.46	3.14	8.13	6.07	9.47	6.17	10.72	1.79	74.43
Yard Waste B (chippable limbs, etc)	4.88	7.88	48.61	71.53	71.20	38.12	33.77	131.24	71.61	99.32	36.27	8.66	623.09
Yard Waste C	0.00	6.18	13.02	52.75	25.66	35.41	5.54	39.54	34.89	22.09	15.91	7.46	258.45
TOTALS	170.70	209.62	289.31	359.97	506.73	566.55	575.58	689.55	532.14	634.34	317.83	274.04	5126.33
Demolition	6.40	1.46	5.79	49.71	81.72	19.13	55.37	102.54	69.39	234.40	39.90	52.62	718.40
Organics	4.88	14.70	65.63	145.15	100.32	76.67	47.44	176.85	115.97	127.58	62.90	17.91	955.97
Landfilled	158.48	191.52	211.56	151.20	310.45	462.73	459.56	404.44	340.90	259.72	204.76	199.92	3355.21
Recycled	0.96	1.95	6.34	13.92	14.25	8.03	13.22	5.73	5.88	12.65	10.28	3.59	96.76

1998 WASTE CATEGORY	1998 January	1998 February	1998 March	1998 April	1998 May	1998 June	1998 July	1998 August	1998 September	1998 October	1998 November	1998 December	Total to Date
Batteries	0.00	0.00	0.00	0.10	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.10
Const Waste A (conc, asphalt, etc)	0.00	27.34	15.26	23.87	3.48	27.48	16.59	45.33	68.84	24.61	12.79	0.51	266.10
Const Waste B (unburnable demolit'n)	0.64	63.56	1.74	1.22	25.80	0.06	0.77	0.00	0.00	0.00	0.00	0.00	93.79
Const Waste C (burnable)	8.26	16.82	12.11	2.08	12.46	36.59	44.60	9.65	14.01	6.99	5.48	9.70	178.75
Metals - Type A (White Goods)	0.41	0.94	0.76	0.29	0.54	2.24	1.16	0.54	0.58	0.28	1.62	0.00	9.35
Metals - Type B (Scrap Metal)	1.95	6.47	15.98	9.36	14.24	7.46	5.10	3.90	6.75	6.58	6.68	6.00	90.47
Tires	0.56	0.65	2.28	0.17	0.87	0.54	0.65	0.81	0.00	0.53	0.33	0.56	7.95
Commercial Waste	19.57	79.72	119.48	36.51	202.65	188.01	260.32	234.84	197.04	131.67	16.11	92.07	1577.99
Municipal Waste	73.84	74.20	120.19	109.83	112.42	114.23	135.77	130.92	126.40	105.94	85.42	77.78	1266.94
Yard Waste A (compostable garden)	0.00	0.82	11.73	6.63	19.07	4.82	22.27	10.57	8.06	4.40	28.89	2.37	119.63
Yard Waste B (chippable limbs, etc)	6.80	35.51	99.77	80.80	53.16	49.38	55.66	35.20	67.36	34.13	39.33	11.43	568.53
Yard Waste C	0.00	0.00	13.56	8.99	1.25	1.63	1.43	12.16	0.41	1.21	11.66	0	52.30
TOTALS	112.03	306.03	412.86	279.85	445.94	432.44	544.32	483.92	489.45	316.32	208.29	200.42	4231.87
Hauled Liquid Waste (sludge)											6.62	23.14	29.76
Demolition	8.26	44.16	27.37	25.95	15.94	64.07	61.19	54.98	82.85	31.60	18.26	10.21	444.84
Organics	6.80	36.33	125.06	96.42	73.48	55.83	79.36	57.93	75.83	39.74	79.88	13.80	740.46
Landfilled	94.05	217.48	241.41	147.56	340.87	302.30	396.86	365.76	323.44	237.60	101.53	169.85	2938.71
Recycled	2.92	8.06	19.02	9.92	15.65	10.24	6.91	5.25	7.33	7.38	8.63	6.56	107.87

1999 WASTE CATEGORY	1999 January	1999 February	1999 March	1999 April	1999 May	1999 June	1999 July	1999 August	1999 September	1999 October	1999 November	1999 December	Total to Date
Batteries	0.00	0.00	0.00	0.00	0.00	0.12	0.00	0.02	0.17	0.27	0.00	0.00	0.58
Const Waste A (conc, asphalt, etc)	0.00	0.00	0.94	0.70	0.62	856.94	0.42	12.82	6.77	0.89	0.17	0.00	880.25
Const Waste B (unburnable demolit'n)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Const Waste C (burnable)	1.94	6.31	11.64	65.19	10.23	22.75	66.98	6.87	31.38	6.67	1.12	1.70	232.75
Metals - Type A (White Goods)	0.13	0.11	0.24	0.12	0.87	0.00	0.29	0.43	0.57	0.61	0.00	0.16	3.51
Metals - Type B (Scrap Metal)	2.57	2.20	8.38	10.42	3.79	6.30	4.95	10.38	4.39	9.46	3.31	0.57	66.70
Tires	0.00	0.23	0.00	0.00	1.02	0.78	0.15	0.44	0.17	0.29	0.00	0.00	3.07
Commercial Waste	121.97	14.53	200.52	161.39	136.28	176.38	248.67	239.40	149.92	130.02	114.41	87.07	1780.55
Municipal Waste	62.88	63.53	88.91	80.60	89.16	108.19	104.90	116.55	104.21	95.24	86.82	70.32	1071.27
Yard Waste A (compostable garden)	22.55	9.32	20.77	5.96	2.57	5.84	5.89	4.79	5.04	11.01	12.60	1.09	107.40
Yard Waste B (chippable limbs, etc)	10.95	28.81	28.01	28.95	26.19	64.32	18.33	48.14	26.20	21.16	11.41	15.59	328.03
Yard Waste C	2.77	1.61	2.71	1.96	0.00	1.65	0.81	0.00	0.84	6.64	0.26	0.00	19.23
TOTALS	225.74	126.62	362.10	355.28	270.71	1243.25	451.37	439.83	329.64	282.25	230.08	176.48	4493.32
Hauled Liquid Waste (sludge)	39.11	22.85	57.93	52.29	69.43	89.83	268.87	211.76	255.20	109.19	131.47	85.07	1392.97
Demolition	1.94	6.31	12.58	65.89	10.84	879.68	67.40	19.69	38.15	7.56	1.29	1.70	1112.99
Organics	36.26	39.74	51.49	36.87	28.76	71.80	25.03	52.92	32.08	38.80	24.26	16.67	454.66
Landfilled	184.85	78.06	289.42	241.99	225.44	284.57	353.57	355.95	254.13	225.26	201.23	157.39	2851.82
Recycled	2.70	2.53	8.62	10.54	5.67	7.20	5.38	11.27	5.29	10.63	3.31	0.73	73.85

2000 WASTE CATEGORY	2000 January	2000 February	2000 March	2000 April	2000 May	2000 June	2000 July	2000 August	2000 September	2000 October	2000 November	2000 December	Total to Date
Batteries	0.08	0.07	0.04	0.13	0.31	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.62
Const Waste A (conc, asphalt, etc)	0.26	2.90	0.00	3.12	4.02	0.94	6.64	2.83	0.51	0.51	3.84	0.26	25.81
Const Waste B (unburnable demolit'n)	0.00	0.00	0.00	25.11	25.77	8.74	8.00	11.04	17.24	38.22	1.44	12.24	147.77
Const Waste C (burnable)	16.86	33.21	35.90	72.36	80.86	114.35	41.16	45.99	50.71	72.62	21.97	6.06	592.03
Metals - Type A (White Goods)	0.63	1.55	2.18	2.87	5.61	4.25	3.32	4.06	4.25	6.24	2.24	3.38	40.55
Metals - Type B (Scrap Metal)	2.79	3.36	9.11	8.79	12.40	11.57	5.60	8.55	7.21	9.15	4.55	12.96	96.02
Tires	0.07	0.42	0.23	1.38	0.39	0.77	0.37	0.00	0.86	0.77	0.00	0.31	5.55
Commercial Waste	76.44	78.08	103.04	115.68	159.00	169.76	259.63	316.97	195.36	157.97	90.00	77.16	1799.05
Municipal Waste	70.93	99.38	135.86	131.62	149.36	115.90	111.04	141.40	110.35	112.19	95.98	102.21	1376.20
Yard Waste A (compostable garden)	0.52	2.79	7.33	8.70	7.67	2.70	3.15	1.41	3.62	10.24	10.48	1.20	59.80
Yard Waste B (chippable limbs, etc)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Yard Waste C	0.78	0.00	0.00	0.80	2.93	27.44	0.44	0.00	0.00	15.02	0.00	0	47.39
TOTALS	169.34	221.74	293.67	370.54	448.29	456.41	439.34	532.23	390.10	422.90	230.48	215.75	4190.76
Hauled Liquid Waste (sludge)	62.19	84.16	123.90	176.97	177.32	329.49	603.70	688.57	234.31	271.13	164.12	60.93	2976.77
Demolition	17.12	36.10	35.90	75.48	84.88	115.29	47.80	48.82	51.22	73.12	25.80	6.31	617.83
Organics	1.30	2.79	7.33	9.50	10.60	30.14	3.59	1.41	3.62	25.26	10.48	1.20	107.19
Landfilled	147.37	177.46	238.89	272.40	334.13	294.39	378.67	469.41	322.94	308.37	187.41	191.61	3323.02
Recycled	3.56	5.39	11.55	13.17	18.69	16.59	9.29	12.60	12.32	16.16	6.79	16.64	142.73

2001 WASTE CATEGORY	2001 January	2001 February	2001 March	2001 April	2001 May	2001 June	2001 July	2001 August	2001 September	2001 October	2001 November	2001 December	Total to Date
Batteries	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Const Waste A (conc, asphalt, etc)	3.24	46.81	25.42	0.86	10.03	7.39	3.28	4.69	14.01	6.31	593.83	0.00	715.87
Const Waste B (unburnable demolit'n)	8.29	4.02	25.44	20.53	13.97	24.23	9.99	17.07	27.29	17.70	12.48	18.02	199.03
Const Waste C (burnable)	47.72	13.02	53.84	37.98	67.80	39.86	42.31	56.03	69.76	57.52	21.95	9.56	517.35
Metals - Type A (White Goods)	3.98	2.39	1.97	2.30	3.97	2.05	5.20	3.58	2.75	4.32	3.36	0.81	36.68
Metals - Type B (Scrap Metal)	13.87	1.69	11.86	9.98	10.32	14.57	13.07	9.19	8.52	9.88	5.96	1.94	110.85
Tires	1.82	0.00	1.00	0.97	2.44	1.12	0.00	0.18	0.20	0.50	5.15	0.00	13.38
Commercial Waste	91.54	77.57	112.29	131.84	221.90	208.03	342.38	347.18	220.18	150.22	130.13	132.48	2165.74
Municipal Waste	90.16	83.99	109.60	104.94	168.80	140.07	135.92	194.83	111.14	124.68	132.01	72.25	1468.39
Yard Waste A (compostable garden)	0.58	1.01	8.09	10.77	6.39	8.01	3.24	4.13	2.45	15.56	24.16	18.02	102.41
Yard Waste B (chippable limbs, etc)	0.00	0.99	0.00	5.58	0.00	0.00	0.00	7.61	0.71	2.00	0.00	3.27	20.16
Yard Waste C	0.00	2.33	3.95	5.64	0.09	0.00	9.02	0.52	1.20	0.00	1.59	0.00	24.34
TOTALS	261.20	233.82	353.46	331.39	505.71	445.33	564.41	645.01	458.21	388.69	930.62	256.35	5374.20
Hauled Liquid Waste (sludge)	120.67	110.95	76.43	140.39	190.29	264.32	738.15	1157.81	273.44	231.39	262.49	407.32	3973.65
Demolition	50.96	59.83	79.26	38.84	77.83	47.25	45.59	60.72	83.77	63.83	615.78	9.56	1233.22
Organics	0.58	4.33	12.04	21.99	6.48	8.01	12.26	12.26	4.36	17.56	25.75	21.29	146.91
Landfilled	189.99	165.58	247.33	257.31	404.67	372.33	488.29	559.08	358.61	292.60	274.62	222.75	3833.16
Recycled	19.67	4.08	14.83	13.25	16.73	17.74	18.27	12.95	11.47	14.70	14.47	2.75	160.91

2002 WASTE CATEGORY	2002 January	2002 February	2002 March	2002 April	2002 May	2002 June	2002 July	2002 August	2002 September	2002 October	2002 November	2002 December	Total to Date
Batteries	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Const Waste A (conc, asphalt, etc)	0.50	4.74	0.00	12.84	11.09	4.03	0.75	0.00	18.51	20.54	6.95	0.00	79.95
Const Waste B (unburnable demolit'n)	11.77	10.53	23.24	20.32	15.85	30.72	14.52	16.78	46.74	60.92	36.05	35.06	322.50
Const Waste C (burnable)	7.35	15.63	33.98	76.80	78.67	58.76	49.04	71.61	59.53	64.57	47.56	8.53	572.03
Metals - Type A (White Goods)	1.95	2.01	0.71	2.31	2.40	3.31	1.46	2.38	1.23	2.22	1.76	1.49	23.23
Metals - Type B (Scrap Metal)	1.37	6.61	6.02	9.97	9.45	7.45	3.91	6.61	2.83	11.52	5.96	3.56	75.26
Tires	0.94	1.20	0.30	0.10	1.22	0.20	0.58	0.05	0.27	0.50	0.49	0.00	5.85
Commercial Waste	96.96	98.23	164.36	259.50	267.27	227.83	1265.76	590.77	245.29	182.38	148.01	141.90	3688.26
Municipal Waste	118.17	86.94	122.67	143.93	155.89	148.40	160.00	175.02	129.74	144.67	132.34	93.69	1611.46
Yard Waste A (compostable garden)	0.51	1.57	2.09	7.65	7.15	6.46	19.22	5.99	5.96	31.91	32.19	1.08	121.78
Yard Waste B (chippable limbs, etc)	2.39	0.00	0.00	10.91	0.32	0.00	0.00	11.80	0.00	2.61	0.00	3.20	31.23
Yard Waste C	0.00	0.00	0.00	0.00	0.42	0.00	0.00	9.22	0.00	0.00	0.00	0.00	9.64
Refrigerators	1.54	0.72	1.67	1.83	1.00	4.75	1.91	2.08	0.64	2.13	1.22	1.43	20.92
TOTALS	243.45	228.18	355.04	546.16	550.73	491.91	1517.15	892.31	510.74	523.97	412.53	289.94	6562.11
Hauled Liquid Waste (sludge)	443.19	414.62	655.58	678.16	714.77	547.52	1060.05	1535.80	728.93	727.00	847.09	456.82	8809.53
Demolition	7.85	20.37	33.98	89.64	89.76	62.79	49.79	71.61	78.04	85.11	54.51	8.53	651.98
Organics	2.90	1.57	2.09	18.56	7.89	6.46	19.22	27.01	5.96	34.52	32.19	4.28	162.65
Landfilled	226.90	195.70	310.27	423.75	439.01	406.95	1440.28	782.57	421.77	387.97	316.40	270.65	5622.22
Recycled	5.80	10.54	8.70	14.21	14.07	15.71	7.86	11.12	4.97	16.37	9.43	6.48	125.26

2003 WASTE CATEGORY	2003 January	2003 February	2003 March	2003 April	2003 May	2003 June	2003 July	2003 August	2003 September	2003 October	2003 November	2003 December	Total to Date
Batteries	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Const Waste A (conc, asphalt, etc)	0.00	7.13	2.51	16.77	27.75	17.89	2.89	4.89	38.14	7.61	0.34	4.90	130.82
Const Waste B (unburnable demolit'n)	28.55	5.86	16.35	19.21	30.98	8.73	25.12	42.99	28.70	37.99	31.51	14.69	290.68
Const Waste C (burnable)	8.73	13.67	36.47	60.37	56.18	53.34	83.29	45.29	52.71	63.89	22.32	5.53	501.79
Metals - Type A (White Goods)	0.85	1.97	1.48	1.99	1.83	1.74	1.99	2.34	1.12	1.61	1.35	0.84	19.11
Metals - Type B (Scrap Metal)	2.86	1.75	14.29	12.91	10.37	8.33	11.05	10.14	8.36	10.28	9.52	4.54	104.40
Tires	0.00	0.00	0.00	0.67	0.17	0.60	0.64	0.10	0.65	0.96	0.27	0.29	4.35
Commercial Waste	109.33	126.61	193.23	216.44	242.62	228.11	329.17	341.01	237.43	243.97	191.07	146.25	2605.24
Municipal Waste	89.29	87.23	126.92	162.43	160.77	141.78	207.89	183.44	172.45	174.12	121.42	119.80	1747.54
Yard Waste A (compostable garden)	0.26	5.46	5.76	3.07	11.24	8.56	20.19	38.15	14.59	13.42	23.18	1.83	145.71
Yard Waste B (chippable limbs, etc)	0.00	0.00	0.00	9.45	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	9.45
Yard Waste C	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Refrigerators	1.17	0.00	1.84	1.45	1.83	2.92	3.15	3.48	1.78	2.01	0.38	1.17	21.18
TOTALS	241.04	249.68	398.85	504.76	543.74	472.00	685.38	671.83	555.93	555.86	401.36	299.84	5580.27
Hauled Liquid Waste (sludge)	430.75	410.76	662.13	597.78	694.87	641.12	1139.52	1161.43	779.44	711.21	647.30	612.61	8488.92
Demolition	8.73	20.80	38.98	77.14	83.93	71.23	86.18	50.18	90.85	71.50	22.66	10.43	632.61
Organics	0.26	5.46	5.76	12.52	11.24	8.56	20.19	38.15	14.59	13.42	23.18	1.83	155.16
Landfilled	227.17	219.70	336.50	398.08	434.37	378.62	562.18	567.44	438.58	456.08	344.00	280.74	4643.46
Recycled	4.88	3.72	17.61	17.02	14.20	13.59	16.83	16.06	11.91	14.86	11.52	6.84	149.04

2004 WASTE CATEGORY	2004 January	2004 February	2004 March	2004 April	2004 May	2004 June	2004 July	2004 August	2004 September	2004 October	2004 November	2004 December	Total to Date
Batteries	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Const Waste A (conc, asphalt, etc)	0.25	18.96	13.48	12.11	59.61	16.69	33.97	1.22	11.77	36.00	40.21	26.54	270.81
Const Waste B (unburnable demolit'n)	10.17	22.39	34.47	47.81	59.07	53.98	23.55	37.89	18.16	27.40	14.87	15.78	365.54
Const Waste C (burnable)	3.46	16.22	54.48	68.46	61.16	54.85	66.62	94.29	46.78	98.45	31.97	23.44	620.18
Metals - Type A (White Goods)													0.00
Metals - Type B (Scrap Metal)	2.58	6.71	16.00	15.32	17.50	10.31	18.25	12.21	11.38	11.13	12.64	19.04	153.07
Tires	0.00	0.52	1.80	1.67	0.19	0.42	1.11	0.46	0.00	0.82	1.31	0.34	8.64
Commercial Waste	138.75	251.43	289.22	285.76	332.40	301.90	384.92	358.51	217.34	178.14	188.69	174.77	3101.83
Municipal Waste	88.55	95.59	156.15	150.79	187.59	176.46	274.19	177.57	152.97	149.88	144.58	113.72	1868.04
Yard Waste A (compostable garden)	1.92	3.99	15.44	11.53	9.98	23.06	33.04	21.87	24.82	30.49	30.24	3.27	209.65
Yard Waste B (chippable limbs, etc)	0.00	0.00	5.83	12.09	10.60	0.00	0.00	0.00	0.00	8.69	4.70	0.00	41.91
Yard Waste C	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Refrigerators	0.90	0.79	0.66	2.81	2.88	2.78	4.24	2.30	1.34	2.20	2.28	0.90	24.08
TOTALS	246.58	416.60	587.53	608.35	740.98	640.45	839.89	706.32	484.56	543.20	471.49	377.80	6663.75
Hauled Liquid Waste (sludge)	453.81	331.35	548.62	545.92	592.09	490.74	759.86	812.72	517.73	542.73	423.96	415.02	6434.55
Demolition	3.71	35.18	67.96	80.57	120.77	71.54	100.59	95.51	58.55	134.45	72.18	49.98	890.99
Organics	1.92	3.99	21.27	23.62	20.58	23.06	33.04	21.87	24.82	39.18	34.94	3.27	251.56
Landfilled	237.47	369.41	479.84	484.36	579.06	532.34	682.66	573.97	388.47	355.42	348.14	304.27	5335.41
Recycled	3.48	8.02	18.46	19.80	20.57	13.51	23.60	14.97	12.72	14.15	16.23	20.28	185.79

2005 WASTE CATEGORY	2005 January	2005 February	2005 March	2005 April	2005 May	2005 June	2005 July	2005 August	2005 September	2005 October	2005 November	2005 December	Total to Date
Batteries													0.00
Const Waste A (conc, asphalt, etc)	0.00	1.67	51.55	419.68	13.92	10.22	129.17	26.21	45.42	4.90	5.54	1.05	709.33
Const Waste B (unburnable demolit'n)	18.03	10.29	15.87	22.08	10.25	4.73	12.63	14.60	28.29	22.90	29.59	1.61	190.87
Const Waste C (burnable)	80.51	35.47	55.89	68.34	89.94	75.80	114.30	65.56	116.01	72.25	152.86	8.76	935.69
Metals - Type A (White Goods)													0.00
Metals - Type B (Scrap Metal)	4.30	8.83	13.82	13.49	15.99	12.80	27.49	7.88	10.16	11.30	10.46	12.67	149.19
Tires	1.17	0.59	0.72	1.38	0.83	1.92	0.16	0.10	0.57	0.00	0.26	0.00	7.70
Commercial Waste	95.04	146.16	204.92	265.10	306.44	283.58	388.02	382.90	249.45	200.41	307.28	162.78	2992.08
Municipal Waste	83.30	136.80	172.51	142.81	193.70	177.91	180.22	209.52	214.49	157.56	156.81	96.44	1922.07
Yard Waste A (compostable garden)	0.42	3.40	10.91	13.53	10.94	25.95	32.70	12.90	4.51	14.82	14.41	0.54	145.03
Yard Waste B (chippable limbs, etc)	0.00	10.72	3.66	10.10	0.00	0.00	0.00	0.00	0.00	0.00	10.42	0.00	34.90
Yard Waste C													0.00
Refrigerators	0.39	1.20	2.19	2.22	3.92	3.68	3.46	2.55	4.38	2.28	2.32	1.55	30.14
TOTALS	283.16	355.13	532.04	958.73	645.93	596.59	888.15	722.22	673.28	486.42	689.95	285.40	7117.00
Hauled Liquid Waste (sludge)	431.20	347.39	531.09	705.33	465.33	525.52	670.83	754.24	690.47	494.08	426.42	357.11	6399.01
Demolition	80.51	37.14	107.44	488.02	103.86	86.02	243.47	91.77	161.43	77.15	158.40	9.81	1645.02
Organics	0.42	14.12	14.57	23.63	10.94	25.95	32.70	12.90	4.51	14.82	24.83	0.54	179.93
Landfilled	196.37	293.25	393.30	429.99	510.39	466.22	580.87	607.02	492.23	380.87	493.68	260.83	5105.02
Recycled	5.86	10.62	16.73	17.09	20.74	18.40	31.11	10.53	15.11	13.58	13.04	14.22	187.03

2006 WASTE CATEGORY	2006 January	2006 February	2006 March	2006 April	2006 May	2006 June	2006 July	2006 August	2006 September	2006 October	2006 November	2006 December	Total to Date
Batteries													0.00
Const Waste A (conc, asphalt, etc)	64.79	11.49	15.46	13.87	14.73	4.48	2.54	4.15	6.54	10.40	20.24	0.00	168.66
Const Waste B (unburnable demolit'n)	10.11	14.39	14.86	32.00	67.35	59.90	30.48	30.92	44.02	48.45	23.85	52.95	429.26
Const Waste C (burnable)	51.05	46.09	79.22	49.56	83.35	51.15	21.56	25.70	243.20	245.40	3.88	5.10	905.23
Metals - Type A (White Goods)													0.00
Metals - Type B (Scrap Metal)	6.04	14.03	6.49	15.60	17.33	13.48	2.16	6.58	9.14	7.20	4.75	2.02	104.79
Tires	0.48	0.35	1.34	1.20	1.60	0.45	1.58	0.00	0.00	0.96	0.00	0.00	7.95
Commercial Waste	173.08	193.87	218.65	233.16	330.66	356.89	382.30	455.26	324.96	462.78	220.89	160.41	3512.88
Municipal Waste	140.84	104.60	168.53	177.62	202.00	203.65	238.61	225.27	161.45	163.88	136.00	98.24	2020.65
Yard Waste A (compostable garden)	4.02	6.17	34.10	25.66	31.43	53.28	32.05	52.37	45.82	228.44	31.99	32.56	577.88
Yard Waste B (chippable limbs, etc)	0.00	0.00	0.00	1.79	0.00	0.00	2.70	0.00	0.00	0.00	0.20	17.20	21.88
Yard Waste C													0.00
Refrigerators	1.81	1.10	5.32	1.50	3.53	8.31	3.30	5.44	0.50	0.03	0.00	0.01	30.83
TOTALS	452.19	392.07	543.96	551.95	751.96	751.56	717.26	805.66	835.64	1167.51	441.78	368.47	7779.99
Hauled Liquid Waste (sludge)	395.17	289.80	736.84	648.80	711.07	658.96	879.74	1016.04	640.04	597.05	553.30	536.47	7663.25
Demolition	115.84	57.58	94.68	63.43	98.08	55.62	24.10	29.85	249.74	255.79	24.12	5.10	1073.89
Organics	4.02	6.17	34.10	27.45	31.43	53.28	34.75	52.37	45.82	228.44	32.18	49.76	599.76
Landfilled	324.02	312.85	402.03	442.78	600.00	620.44	651.39	711.44	530.43	675.10	380.74	311.59	5962.78
Recycled	8.33	15.48	13.15	18.30	22.46	22.23	7.03	12.01	9.64	8.18	4.75	2.03	143.57

2007 WASTE CATEGORY	2007 January	2007 February	2007 March	2007 April	2007 May	2007 June	2007 July	2007 August	2007 September	2007 October	2007 November	2007 December	Total to Date
Batteries													0.00
Const Waste A (conc, asphalt, etc)	3.35	6.80	79.73	32.56	20.04	13.24	104.16	20.23	15.36	425.30	157.58	173.04	1051.36
Const Waste B (unburnable demolit'n)	49.22	22.80	61.03	102.12	30.60	15.07	11.00	25.61	17.69	23.51	13.05	15.18	386.87
Const Waste C (burnable)	4.70	7.04	18.73	54.36	28.45	22.90	30.24	48.01	35.11	0.00	38.79	23.78	312.07
Metals - Type A (White Goods)													0.00
Metals - Type B (Scrap Metal)	3.28	6.47	5.67	4.61	3.28	3.23	5.82	6.88	11.65	16.36	9.22	7.41	83.85
Tires	1.54	0.38	0.49	0.00	0.00	0.00	0.00	0.00	0.00	0.06	0.00	0.00	2.46
Commercial Waste	154.41	159.73	291.53	178.84	320.78	322.17	355.48	413.88	231.91	251.26	149.93	136.56	2966.45
Municipal Waste	142.92	221.50	175.60	197.77	238.34	188.57	280.41	258.21	210.58	428.87	240.27	112.47	2695.51
Yard Waste A (compostable garden)	23.02	15.77	46.42	69.35	89.24	51.34	47.97	70.15	53.28	78.35	73.79	15.47	634.14
Yard Waste B (chippable limbs, etc)	35.40	0.54	0.88	0.00	0.00	0.00	1.12	0.85	3.08	4.74	11.53	4.15	62.26
Yard Waste C													0.00
Refrigerators **	1.58	1.35	1.35	2.40	1.95	1.58	2.55	2.40	2.85	1.50	1.28	0.53	21.30
TOTALS	419.41	442.35	681.42	642.00	732.68	618.08	838.73	846.21	581.50	1229.93	695.43	488.56	8216.27
** Refrigerators were counted by pieces therefore an average mass of 75Kg per piece has been assumed													
Hauled Liquid Waste (sludge)	502.07	560.38	757.77	862.66	1112.15	860.33	1058.71	1025.58	946.32	977.75	656.16	614.94	9934.81
Demolition	8.05	13.84	98.46	86.92	48.49	36.13	134.39	68.23	50.47	425.30	196.37	196.81	1363.43
Organics	58.42	16.31	47.29	69.35	89.24	51.34	49.09	71.00	56.36	83.08	85.32	19.62	696.40
Landfilled	346.55	404.02	528.16	478.73	589.72	525.81	646.88	697.70	460.18	703.64	403.25	264.20	6048.82
Recycled	6.39	8.19	7.51	7.01	5.23	4.80	8.37	9.28	14.50	17.91	10.49	7.94	107.61

2008 WASTE CATEGORY	2008 January	2008 February	2008 March	2008 April	2008 May	2008 June	2008 July	2008 August	2008 September	2008 October	2008 November	2008 December	Total to Date
Const Waste A (conc, rubble, asphalt, etc.)	68.73	23.28	9.85	17.51	93.13	198.16	133.68	129.61	29.22	18.71	9.59	80.83	812.27
Const Waste B (drywall or asphalt shingles)	11.23	11.07	15.76	24.00	31.15	43.69	16.87	15.47	27.61	24.11	7.22	28.80	256.96
Const Waste C (white wood, lumber, stump, etc)	38.26	67.43	55.98	152.71	86.45	97.02	106.80	114.62	108.88	101.64	43.97	38.71	1012.43
Mixed Load Commercial Waste	9.48	5.62	10.49	6.66	11.62	12.23	8.12	5.14	5.27	12.42	2.56	3.05	92.64
Mixed Load Residential Waste	26.14	25.80	46.71	55.93	74.93	54.71	61.95	35.28	33.53	36.35	9.25	7.67	468.21
Metals - (White goods, 80% metal or more)	4.78	3.97	5.51	3.68	15.51	3.67	4.85	4.37	7.54	3.69	6.00	6.63	70.17
Tires	0.00	0.30	0.69	2.35	0.08	0.00	2.78	0.00	0.67	0.00	0.08	0.00	6.93
Commercial Waste	133.81	134.98	167.56	229.59	305.24	295.40	433.53	421.87	303.23	245.40	215.63	177.10	3063.30
Municipal Waste (Town & WSI pickup)	74.24	39.70	246.07	151.54	132.44	167.22	153.21	192.52	137.61	131.86	178.67	140.03	1745.10
Residential Waste	24.90	86.92	31.06	42.03	34.50	35.38	32.30	35.12	32.74	31.03	25.64	15.37	426.97
Yard Waste A (All green wood less than 5")	2.74	7.67	0.11	4.13	3.69	3.98	7.87	8.26	3.10	5.50	0.74	0.00	47.77
Yard Waste B (white wood, lumber, etc) - PW	0.00	0.00	2.01	6.45	3.10	1.76	7.66	0.12	0.58	3.54	11.77	0.00	36.96
WSI Yard & Garden Waste - Curbside p/u	0.00	0.00	0.00	20.61	0.00	16.38	17.62	12.19	0.00	18.27	33.37	0.00	118.42
Free Chippables & Compostables	4.64	18.61	60.60	127.99	70.99	55.65	82.73	73.11	57.13	58.33	43.85	8.62	662.22
Demolition and Land Clearing	64.56	74.50	3.59	56.77	124.84	429.08	10.37	10.48	21.33	36.61	9.40	30.97	872.46
Asbestos	6.78	0.00	0.00	0.00	0.00	0.59	0.00	0.00	0.00	0.00	0.00	0.00	7.37
Punture Vine	0.00	0.00	0.12	0.00	0.15	0.00	0.00	0.00	0.29	0.00	0.00	0.00	0.56
Agricultural Plastics	0.00	2.45	0.29	3.31	0.33	0.00	0.05	1.00	0.37	0.83	5.18	0.87	14.66
Agricultural Plastics - Recycled	0.05	0.00	0.55	0.00	0.34	0.19	0.12	0.50	0.32	1.51	0.26	0.00	3.82
Refrigerators**	0.83	1.35	0.83	1.40	4.73	1.58	3.15	2.33	2.03	2.10	1.73	0.53	22.55
TOTALS	471.12	503.61	657.73	906.62	993.16	1416.67	1083.61	1061.94	771.41	731.87	604.87	539.13	9741.72
** Refrigerators were counted by pieces therefore an average mass of 75Kg per piece has been assumed													
Hauled Liquid Waste (sludge)	746.20	380.86	601.21	595.09	502.10	547.33	623.15	537.63	764.39	735.83	496.59	351.66	6882.02
Organics													
- White Wood, Yard & Garden Wastes	45.63	93.71	118.69	311.87	164.22	174.78	222.67	208.28	169.69	187.27	133.69	47.32	1877.80
Recycled													
- Metals, Tires, Const. Waste 'A', Ag. Plastic	87.60	36.33	17.77	30.61	126.25	247.09	145.61	137.85	41.90	29.67	18.59	91.08	1010.34
Landfilled	337.88	373.57	521.27	564.14	702.69	994.80	715.33	715.81	559.82	514.94	452.59	400.73	6853.58

2009 WASTE CATEGORY	2009 January	2009 February	2009 March	2009 April	2009 May	2009 June	2009 July	2009 August	2009 September	2009 October	2009 November	2009 December	Total to Date
Const Waste A (conc, rubble, asphalt, etc.)	0.00	18.34	7.74	41.66	17.61	16.31	227.54	10.82	45.99	429.96	9.85	1.27	827.08
Const Waste B (drywall or asphalt shingles)	32.86	62.56	18.87	40.12	37.84	54.28	26.28	34.15	21.79	16.39	19.16	7.46	371.75
Const Waste C (white wood, lumber, stump, etc)	34.71	57.06	79.99	82.42	88.37	92.80	77.67	52.44	58.82	83.95	45.97	32.37	786.55
Mixed Load Commercial Waste	4.84	3.59	6.39	2.39	16.30	8.18	12.73	10.19	4.96	4.01	7.01	5.38	85.95
Mixed Load Residential Waste	7.81	10.55	25.24	12.45	17.93	20.00	27.08	22.68	33.30	40.43	27.75	13.05	258.25
Metals - (White goods, 80% metal or more)	2.98	12.45	13.10	15.07	8.01	15.34	10.97	9.78	5.73	3.96	3.64	1.97	102.97
Tires	0.00	0.00	0.18	0.82	0.79	0.29	0.17	0.00	0.16	0.00	0.05	0.00	2.44
Commercial Waste	169.21	181.09	241.32	306.81	331.76	313.16	407.78	365.62	264.80	294.24	164.75	151.77	3192.28
Municipal Waste (Town & WSI pickup)	69.18	69.27	219.79	239.79	366.89	114.18	100.78	175.25	144.00	99.01	98.72	78.48	1775.32
Residential Waste	13.82	20.44	37.31	34.49	29.94	29.32	26.74	28.13	29.15	37.17	18.43	9.50	314.42
Yard Waste A (All green wood less than 5")	0.00	1.68	81.77	0.00	10.31	6.33	10.93	8.18	16.05	0.78	21.60	3.22	160.83
Yard Waste B (white wood, lumber, etc) - PW	3.65	3.84	3.32	0.00	0.00	2.06	0.00	3.15	7.17	0.15	1.41	0.15	24.88
WSI Yard & Garden Waste - Curbside p/u	0.00	0.00	0.00	18.87	0.00	21.43	14.57	19.46	0.00	20.21	36.11	0.00	130.63
Free Chippables & Compostables	0.40	8.03	48.72	82.26	79.13	60.97	49.67	50.12	66.48	74.11	36.42	8.18	564.46
Free Compostables (Fruit or Vegetables)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	3.47	2.99	0.00	6.46
Demolition and Land Clearing	1.29	5.04	149.31	105.77	48.49	59.45	11.79	125.18	13.15	68.83	64.48	11.47	664.22
Asbestos	0.00	0.00	0.00	0.00	0.00	0.08	0.00	0.00	0.00	0.00	0.00	0.00	0.08
Punture Vine	0.00	0.00	0.00	0.00	0.00	0.00	0.50	1.29	3.01	0.24	0.10	0.00	5.13
Agricultural Plastics	1.19	0.00	0.73	0.05	2.05	0.00	0.82	0.54	0.00	0.00	10.12	0.00	15.47
Agricultural Plastics - Recycled	0.04	0.01	0.17	0.22	1.09	1.66	0.02	1.42	0.36	3.90	1.25	0.20	10.32
Refrigerators**	0.68	1.28	1.43	5.33	4.05	4.13	3.38	2.03	2.70	2.18	1.28	1.13	29.55
TOTALS	342.63	455.19	935.34	988.48	1060.53	819.91	1009.40	920.40	717.60	1182.96	571.03	325.56	9329.02
** Refrigerators were counted by pieces therefore an average mass of 75Kg per piece has been assumed													
Hauled Liquid Waste (sludge)	336.48	296.12	340.45	625.01	636.99	602.19	609.97	527.82	652.00	548.83	565.03	388.59	6129.46
Organics													
- White Wood, Yard & Garden Wastes	38.75	70.60	213.78	183.54	177.81	183.58	152.83	133.34	148.51	182.66	144.48	43.92	1673.80
Recycled													
- Metals, Tires, Const. Waste 'A', Ag. Plastic	3.82	32.57	37.54	73.66	36.39	43.65	243.25	36.56	56.26	446.87	22.50	5.70	1038.77
Landfilled	300.06	352.02	684.02	731.28	846.33	592.68	613.32	750.50	512.83	553.42	404.05	275.94	6616.45

2010 WASTE CATEGORY	2010 January	2010 February	2010 March	2010 April	2010 May	2010 June	2010 July	2010 August	2010 September	2010 October	2010 November	2010 December	Total to Date
Const Waste A (conc, rubble, asphalt, etc.)	12.23	17.46	6.82	18.24	14.37	29.47	134.78	6.58	35.64	40.27	33.33	0.00	349.17
Const Waste A (Milled Ashpalt 87th, Finch)	0.00	0.00	0.00	0.00	0.00	214.35	0.00	0.00	0.00	692.18	195.95	0.00	1102.48
Const Waste B (drywall or asphalt shingles)	6.97	19.56	9.36	7.80	3.41	2.61	1.32	5.60	6.23	16.16	2.33	1.72	83.05
Const Waste C (white wood, lumber, stump, etc)	16.08	21.29	30.33	45.51	36.51	53.29	24.56	95.54	23.21	30.08	10.95	4.99	392.33
Mixed Load Commercial Waste	5.08	3.14	6.84	13.16	21.08	7.40	13.29	9.07	5.86	7.24	5.98	5.65	103.75
Mixed Load Residential Waste	18.63	15.41	21.80	29.00	31.80	24.56	30.32	21.96	17.87	24.33	15.01	7.46	258.12
Metals - (White goods, 80% metal or more)	2.30	4.12	4.09	5.49	6.94	4.99	8.54	4.33	2.77	2.40	3.20	0.81	49.96
Tires	0.00	0.00	0.00	0.04	0.84	0.00	0.00	0.53	0.00	0.00	0.50	0.00	1.89
Commercial Waste	174.40	146.12	215.56	221.66	241.07	310.22	397.22	418.11	272.90	231.13	178.79	140.45	2947.60
Municipal Waste (Town & WSI pickup)	90.45	133.62	189.08	90.10	89.63	113.21	126.07	118.02	95.84	72.73	180.83	55.08	1354.65
	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	795.86	27.24	0.00	823.10
Residential Waste	12.88	14.35	27.37	22.77	47.33	42.11	38.78	25.91	23.60	18.94	12.65	15.96	302.61
Yard Waste A (All green wood less than 5")	1.68	0.20	0.00	2.42	1.51	11.34	10.95	2.81	2.64	2.99	7.76	0.56	44.82
Yard Waste B (white wood, lumber, etc) - PW	0.31	0.00	0.00	2.04	0.67	0.20	6.19	4.50	0.94	5.02	20.05	1.30	41.20
WSI Yard & Garden Waste - Curbside p/u	0.00	0.00	11.23	24.80	5.40	252.69	18.71	20.62	9.46	13.39	36.75	0.00	393.02
Free Chippables & Compostables	6.01	29.39	63.47	51.40	66.02	64.51	40.92	46.63	54.60	58.26	38.76	14.81	534.77
Free Compostables (Fruit or Vegetables)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.23	0.41	0.16	0.15	0.00	0.94
Demolition and Land Clearing	65.83	7.50	92.62	68.72	5.59	91.34	52.86	81.67	18.57	116.15	34.50	0.56	635.89
Asbestos	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Punture Vine	0.00	0.22	0.05	0.01	0.16	0.17	6.44	3.83	2.52	0.38	0.04	0.00	13.80
Agricultural Plastics	0.00	0.00	0.00	1.78	0.00	0.00	0.00	0.00	0.00	1.04	1.10	2.01	5.92
Agricultural Plastics - Recycled	0.04	0.00	0.00	0.18	1.02	0.00	0.59	0.00	0.00	5.34	0.00	1.44	8.59
Refrigerators**	0.83	0.75	1.88	3.75	4.95	2.18	3.45	2.85	1.05	1.65	0.83	0.75	24.90
Other (landfilled lagoon liner)	0.00	0.00	0.00	1230.43	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1230.43
TOTALS	413.69	413.10	680.47	1839.27	578.28	1224.59	914.96	868.75	574.07	2135.65	806.66	253.51	10702.96
** Refrigerators were counted by pieces therefore an average mass of 75Kg per piece has been assumed													
Hauled Liquid Waste (sludge)	326.61	347.86	436.25	357.15	382.90	457.47	398.72	484.99	365.68	439.22	552.81	305.58	4855.23
Organics													
- White Wood, Yard & Garden Wastes	24.07	50.87	105.03	126.16	110.11	382.02	101.32	170.32	91.25	109.88	114.41	21.65	1407.07
Recycled													
- Metals, Tires, Const. Waste 'A', Ag. Plastic	21.97	23.08	22.04	34.55	28.67	260.12	152.64	22.44	41.32	1549.30	264.48	3.05	2423.67
Landfilled	367.65	339.15	553.40	1678.55	439.50	582.46	660.99	675.99	441.50	476.46	427.76	228.81	6872.23

2011 WASTE CATEGORY	2011 January	2011 February	2011 March	2011 April	2011 May	2011 June	2011 July	2011 August	2011 September	2011 October	2011 November	2011 December	Total to Date
Const Waste A (conc, rubble, asphalt, etc.)	0.00	29.11	10.74	6.70	7.25	501.92	203.70	588.65	32.86	930.90	401.24	174.75	2887.79
Const Waste A (Milled Ashpalt . . . . .)													0.00
Const Waste B (drywall or asphalt shingles)	1.58	1.58	5.42	12.50	5.99	13.23	6.97	5.10	5.35	13.64	2.26	4.17	77.76
Const Waste C (white wood, lumber, stump, etc)	10.40	6.88	17.65	36.63	52.19	74.57	44.44	23.40	13.41	14.32	106.41	54.65	454.92
Mixed Load Commercial Waste	1.96	1.40	6.51	7.54	20.66	22.66	1.80	5.52	11.53	7.79	9.56	1.43	98.33
Mixed Load Residential Waste	14.43	11.16	14.15	29.35	27.28	29.02	36.21	29.25	27.74	37.72	21.84	14.67	292.79
Metals - (White goods, 80% metal or more)	2.50	2.22	4.17	5.47	6.13	4.31	2.99	1.62	2.73	3.25	1.50	0.89	37.75
Tires	0.00	0.00	0.55	0.26	0.66	0.47	0.14	0.14	0.22	0.14	0.70	0.00	3.26
Commercial Waste	125.03	138.96	187.42	191.77	197.37	197.68	273.43	288.66	215.02	149.31	176.55	90.99	2232.18
Municipal Waste (Town & WSI pickup)	81.68	178.82	143.14	97.90	114.42	181.65	404.05	974.48	204.15	106.43	235.41	114.64	2836.75
				0.00	0.00	0.00	0.00	0.00	0.00	0.00			0.00
Residential Waste	13.70	12.44	14.08	30.55	32.50	14.13	16.65	29.24	14.93	16.94	14.49	9.85	219.48
Yard Waste A (All green wood less than 5")	0.74	1.75	8.73	3.96	6.51	19.11	0.04	18.07	10.56	6.52	3.58	4.22	83.77
Yard Waste B (white wood, lumber, etc) - PW	0.94	24.00	8.27	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	33.21
WSI Yard & Garden Waste - Curbside p/u	0.00	0.00	2.41	25.54	27.42	33.32	18.21	16.76	18.76	20.92	34.66	0.00	197.97
Free Chippables & Compostables	5.52	8.12	32.72	69.60	63.68	58.18	57.60	35.84	39.48	46.24	43.84	15.41	476.22
Free Compostables (Fruit or Vegetables)	0.00	0.00	0.00	0.25	0.00	0.00	0.06	0.56	0.46	1.19	1.00	0.56	4.05
Demolition and Land Clearing	0.00	0.00	1.03	67.07	208.62	38.66	46.86	6.78	1.28	3.67	0.82	0.77	375.54
Recycled DLC (subtract from the totals)	0.00	0.00	0.00	-1.10	-10.32	-5.12	-2.43	-0.47	-1.41	-12.83	-1.43	-0.60	-35.70
Asbestos	0.00			0.00	0.00	0.00	0.00	0.00	0.00	0.00			0.00
Punture Vine	0.00	0.00	0.00	0.00	0.00	0.02	0.00	2.26	0.45	0.12	0.00	0.00	2.84
Agricultural Plastics	1.69	0.00	0.09	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.78
Agricultural Plastics - Recycled	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Refrigerators**	0.60	0.83	0.83	2.25	4.58	2.85	2.48	2.40	2.10	2.70	1.50	1.20	24.30
Other (Town of Osoyoos Marina Contract)	0.00	1.27	100.75	1274.75	22.81	0.00	15.08	160.77	74.73	0.00	486.60	44.80	2181.54
TOTALS	260.74	418.51	558.61	1860.95	787.71	1186.63	1128.24	2189.00	674.32	1348.93	1540.49	532.37	12486.49
** Refrigerators were counted by pieces therefore an average mass of 75Kg per piece has been assumed													
Hauled Liquid Waste (sludge)	302.97	261.43	322.77	430.27	552.80	427.79	425.59	471.73	461.21	434.27	874.46	397.59	5362.85
Organics													
- White Wood, Yard & Garden Wastes	17.59	40.75	69.76	135.97	149.79	185.17	120.35	94.63	82.66	89.18	189.48	74.83	1250.13
Recycled													
- Metals, Tires, Const. Waste 'A', Ag. Plastic, 80% of Other	3.10	33.16	96.88	1035.56	47.18	514.66	223.78	721.89	99.10	949.81	795.64	213.27	4734.02
Landfilled	240.05	344.61	391.97	690.52	601.06	491.92	786.54	1372.96	493.97	322.78	556.80	244.87	6538.05

2012 WASTE CATEGORY	2012 January	2012 February	2012 March	2012 April	2012 May	2012 June	2012 July	2012 August	2012 September	2012 October	2012 November	2012 December	Total to Date
Const Waste A (conc, rubble, asphalt, etc.)	348.8	140.9	464.5	346.8	556.5	26.8	593.9	0.9	36.9	40.1	7.8	11.6	2575.5
Const Waste B (drywall or asphalt shingles)	1.2	2.5	14.1	7.1	7.3	7.7	6.8	5.2	3.5	1.9	7.0	1.9	66.3
Const Waste C (white wood, lumber, stump, etc)	7.4	4.8	52.1	25.6	39.0	172.8	40.4	32.1	40.0	27.4	16.8	11.6	470.0
Mixed Load Commercial Waste	3.4	3.2	7.3	18.4	18.0	13.1	7.0	3.8	4.5	0.6	5.7	1.8	86.8
Mixed Load Residential Waste	13.1	13.6	25.7	41.3	41.5	30.8	20.6	16.0	19.9	23.4	7.3	6.2	259.3
Metals - (White goods, 80% metal or more)	5.7	1.3	2.2	1.8	11.6	6.0	2.9	2.4	3.9	6.7	1.7	0.9	47.2
Tires	2.0	0.0	0.4	0.2	0.0	0.6	0.1	0.2	0.6	0.4	0.7	0.5	5.7
Commercial Waste	94.8	103.4	149.6	138.8	175.1	189.5	280.8	292.7	270.9	149.9	126.2	103.2	2074.9
Municipal Waste (Town & WSI pickup)	77.4	289.2	280.5	91.4	135.9	97.3	149.1	119.5	127.2	127.5	90.8	77.3	1663.1
Gravel from Road Construction													0.0
Residential Waste	4.8	6.7	11.4	17.9	28.5	15.2	16.1	24.4	13.4	29.6	7.6	7.0	182.4
Yard Waste A (All green wood less than 5")	13.6	0.0	3.5	0.1	42.7	4.4	0.0	2.5	17.0	14.5	27.3	3.4	128.9
Yard Waste B (white wood, lumber, etc) - PW													0.0
WSI Yard & Garden Waste - Curbside p/u	0.0	0.0	11.0	24.6	11.5	24.3	20.8	18.9	19.4	34.2	2.8	0.0	167.4
Free Chippables & Compostables	1.9	5.0	42.0	73.4	64.3	51.1	41.7	42.5	40.3	51.4	45.6	31.5	490.6
Free Compostables (Fruit or Vegetables)	0.0	0.0	0.0	0.3	0.0	0.2	1.9	0.7	0.1	0.0	0.1	0.0	3.2
Demolition and Land Clearing	74.2	5.4	0.0	215.3	42.5	28.8	6.3	7.3	5.7	14.6	12.7	67.5	480.3
Recycled DLC (subtract from the totals)	-0.5	-0.3	-0.9	-0.9	-4.9	-0.8	-9.7	-2.4	-0.6	0.0	-2.0	-0.7	-23.7
Asbestos	2.8	0.0	1.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	3.9
Punture Vine	0.0	0.0	0.0	0.0	0.0	2.2	4.4	3.5	1.4	0.2	0.1	0.0	11.8
Agricultural Plastics													0.0
Agricultural Plastics - Recycled													0.0
Refrigerators**	0.5	1.5	1.7	1.5	5.9	3.1	2.8	2.3	1.8	2.3	1.2	0.9	25.4
Bio Solids	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	396.0	0.0	396.0
TOTALS	651.1	577.2	1065.9	1003.5	1175.6	673.0	1185.7	572.2	605.9	524.6	755.6	324.6	9115.0
	** Refrigerators were counted by pieces therefore an average mass of 75Kg per piece has been assumed												
Hauled Liquid Waste (sludge)	359.8	351.5	491.4	504.4	668.9	420.2	483.1	439.3	398.6	550.4	444.7	112.7	5225.0
Clean Cover Material (CCMT)	0.0	18.9	142.9	3542.8	1389.9	64.5	162.3	42.4	0.0	199.5	100.5	0.0	5663.7
Organics													
- White Wood, Yard & Garden Wastes	22.9	9.8	108.5	123.9	157.5	252.8	104.8	96.6	116.9	127.4	92.6	46.5	1260.2
Recycled													
- Metals, Tires, Const. Waste 'A', Ag. Plastic	358.2	146.2	482.9	357.3	581.4	44.2	606.5	10.9	46.6	51.4	18.4	15.8	2720.0
Landfilled	270.0	421.1	474.5	522.3	436.7	376.0	474.5	464.7	442.4	345.7	644.5	262.3	5134.8

2013 WASTE CATEGORY	2013 January	2013 February	2013 March	2013 April	2013 May	2013 June	2013 July	2013 August	2013 September	2013 October	2013 November	2013 December	Total to Date
Const Waste A (conc, rubble, asphalt, etc.)	-	1.5	20.2	9.0	42.7	19.2	11.3	0.2	434.5	837.8	692.3	86.5	2,155.1
Const Waste B (drywall or asphalt shingles)	2.1	6.8	4.2	15.2	17.8	8.9	4.1	8.6	9.6	6.1	1.5	3.8	88.6
Const Waste C (white wood, lumber, stump, etc)	3.3	6.2	18.5	25.9	36.6	28.7	24.8	29.9	12.2	15.6	9.6	13.0	224.3
Mixed Load Commercial Waste	3.0	2.3	6.2	8.4	12.2	2.4	5.5	7.9	7.0	7.2	3.1	2.8	67.9
Mixed Load Residential Waste	2.8	7.4	16.4	26.0	31.7	27.9	24.7	20.3	15.8	27.5	17.2	7.5	225.2
Metals - (White goods, 80% metal or more)	0.7	1.6	3.0	5.7	7.1	4.9	4.9	1.7	2.1	3.3	1.0	0.6	36.7
Tires	-	-	0.3	0.5	-	-	0.1	-	0.2	0.1	0.2	-	1.3
Commercial Waste	87.8	82.1	96.4	135.1	148.7	135.8	256.9	280.2	199.9	147.0	113.6	101.6	1,785.2
Municipal Waste (Town & WSI pickup)	71.7	96.5	215.8	210.9	205.2	202.1	160.6	179.0	89.8	142.5	136.0	128.5	1,838.5
Gravel from Road Construction	-	-	-	-	-	-	-	-	-	-	-	-	-
Residential Waste	10.1	6.6	12.6	17.4	28.8	14.2	11.8	12.4	12.7	14.6	15.1	7.6	164.0
Yard Waste A (All green wood less than 5")	1.2	-	0.6	5.8	6.3	3.5	2.5	3.1	1.6	10.9	9.6	5.5	50.6
Yard Waste B (white wood, lumber, etc) - PW	-	-	-	-	-	-	-	-	-	-	-	-	-
WSI Yard & Garden Waste - Curbside p/u	-	-	19.4	34.8	30.6	24.9	22.4	23.7	27.1	41.2	33.6	-	257.7
Free Chippables & Compostables	0.4	13.2	59.0	67.6	71.3	50.9	46.9	42.1	48.7	58.2	56.2	9.3	523.9
Free Compostables (Fruit or Vegetables)	-	-	-	-	-	0.6	1.2	0.1	-	0.7	-	-	2.6
Demolition and Land Clearing	-	0.2	9.8	6.6	7.6	0.6	15.9	1.0	77.2	0.3	-	-	119.3
Recycled DLC (subtract from the totals)	- 0.8	- -	1.0 -	2.7 -	1.5 -	1.1 -	1.5 -	1.5 -	0.1 -	1.5 -	1.2 -	1.2 -	14.0
Asbestos	-	0.8	1.4	-	-	-	0.9	0.6	-	1.0	0.2	-	4.9
Punture Vine	-	-	-	0.0	-	-	7.9	3.4	2.0	0.3	-	-	13.6
Agricultural Plastics	-	-	-	-	-	-	-	-	-	-	-	-	-
Agricultural Plastics - Recycled	-	-	-	-	-	-	-	-	-	-	-	-	-
Refrigerators**	0.5	1.5	1.5	3.0	5.6	2.0	3.8	2.9	1.3	2.7	0.7	0.9	26.3
Bio Solids	-	-	-	-	-	-	-	-	-	-	-	-	-
TOTALS	182.9	226.7	484.3	569.3	650.8	525.5	604.7	615.4	941.6	1,315.6	1,088.4	366.5	7,571.5
Hauled Liquid Waste (sludge)	72.2	46.7	179.7	153.4	266.0	158.5	254.2	273.5	356.5	567.1	200.4	93.6	2,621.8
Clean Cover Material (CCMT)	-	7.4	-	-	-	-	-	-	-	-	312.6	-	320.0
Organics													
- White Wood, Yard & Garden Wastes	4.9	19.4	97.5	134.1	144.8	108.7	97.8	98.8	89.6	126.6	109.0	27.8	1,059.1
Recycled													
- Metals, Tires, Const. Waste 'A', Ag. Plastic	1.2	4.6	25.0	18.2	55.5	26.1	20.2	4.7	438.1	843.8	694.1	88.0	2,219.3
Landfilled	176.8	202.7	361.8	417.0	450.5	390.7	486.7	511.9	413.9	345.1	285.3	250.8	4,293.1

2014 WASTE CATEGORY	2014 January	2014 February	2014 March	2014 April	2014 May	2014 June	2014 July	2014 August	2014 September	2014 October	2014 November	2014 December	Total to Date
Const Waste A (conc, rubble, asphalt, etc.)	-	-	146.19	123.64	20.06	290.26	64.66	19.28	0.42	7.43	359.59	5.98	1,037.47
Const Waste B (drywall or asphalt shingles)	5.53	5.93	8.79	8.54	7.37	3.97	10.11	9.27	12.22	3.54	5.66	6.34	87.23
Const Waste C (white wood, lumber, stump, etc)	6.13	3.93	10.24	14.84	20.06	19.44	15.69	17.76	11.74	15.84	8.37	14.53	158.55
Mixed Load Commercial Waste	2.28	2.30	4.44	10.64	11.07	2.22	2.53	2.31	7.73	5.25	2.18	7.25	60.17
Mixed Load Residential Waste	9.37	12.13	29.12	38.55	24.72	20.83	29.08	27.01	23.08	20.07	14.48	9.30	257.72
Metals - (White goods, 80% metal or more)	0.70	0.04	0.60	2.15	1.23	3.08	4.35	2.34	1.86	2.70	0.91	1.37	21.29
Tires	-	0.05	-	-	0.04	0.20	0.13	0.03	-	-	-	-	0.44
Commercial Waste	108.82	96.42	114.17	164.41	152.89	137.07	231.38	249.56	205.75	236.86	160.16	127.95	1,985.41
Municipal Waste (Town & WSI pickup)	64.97	68.94	91.47	125.78	110.16	214.11	204.83	125.91	116.22	119.35	156.93	83.40	1,482.04
Gravel from Road Construction	-	-	-	-	-	-	-	-	-	-	-	-	-
Residential Waste	7.65	6.51	14.82	17.17	26.92	10.61	16.20	13.95	15.50	10.20	7.20	3.78	150.48
Yard Waste A (All green wood less than 5")	5.17	2.66	6.16	6.11	6.09	6.45	3.49	3.16	20.72	5.45	11.10	1.43	77.95
Yard Waste B (white wood, lumber, etc) - PW	-	-	-	-	-	-	-	-	-	-	-	-	-
WSI Yard & Garden Waste - Curbside p/u	-	-	10.76	41.01	35.67	25.43	27.70	28.65	42.64	29.47	31.96	-	273.28
Free Chippables & Compostables	7.14	3.33	43.01	78.88	68.61	48.12	41.01	39.28	46.95	55.32	31.73	30.70	494.07
Free Compostables (Fruit or Vegetables)	-	-	-	-	-	-	0.56	1.36	0.58	0.18	0.48	0.07	3.23
Demolition and Land Clearing	-	32.70	2.24	2.40	2.31	-	13.00	24.96	1.01	10.21	0.99	46.31	136.11
Recycled DLC (subtract from the totals)	-	1.11	1.21	2.00	2.88	0.06	0.91	2.30	0.57	1.56	-	1.92	14.51
Asbestos	-	0.31	-	-	-	0.31	60.36	0.39	57.39	0.79	0.70	1.51	121.74
Punture Vine	-	-	0.11	0.01	0.11	0.22	6.06	1.26	1.19	0.87	-	-	9.81
Agricultural Plastics	-	-	-	-	-	-	-	-	-	-	-	-	-
Agricultural Plastics - Recycled	-	-	-	-	-	-	-	-	-	-	-	-	-
Refrigerators**	0.98	0.90	1.65	3.60	4.73	1.80	3.38	3.23	1.20	1.88	1.28	1.28	25.88
Bio Solids	-	-	-	-	-	-	-	-	-	-	-	-	-
TOTALS	218.71	237.21	484.94	639.70	494.86	784.14	735.40	571.95	566.73	526.93	793.69	343.07	6,397.32
Hauled Liquid Waste (sludge)	66.29	61.33	183.69	245.68	322.34	112.37	152.71	159.30	235.95	284.72	166.45	93.61	2,084.41
Clean Cover Material (CCMT & CGC)	-	28.15	87.04	756.82	380.90	-	-	-	20.13	3.97	274.54	-	1,551.55
Organics													
- White Wood, Yard & Garden Wastes	18.44	9.91	70.16	140.83	130.42	99.43	88.45	90.20	122.62	106.26	83.63	46.72	1,007.06
Recycled													
- Metals, Tires, Const. Waste 'A', Ag. Plastic	1.67	0.99	148.43	129.39	26.05	295.33	72.51	24.87	3.47	12.00	361.77	8.62	1,085.07
Landfilled	198.60	226.32	266.35	369.48	338.40	389.38	574.45	456.89	440.64	408.68	348.29	287.74	4,305.20

2015 WASTE CATEGORY	2015 January	2015 February	2015 March	2015 April	2015 May	2015 June	2015 July	2015 August	2015 September	2015 October	2015 November	2015 December	2015 to Date
Const Waste A (conc, rubble, asphalt, etc.)		4.53	2.73	17.98	8.44	4.48	9.78	3.11	0.15	53.82	125.75	7.83	238.58
Const Waste B (drywall or asphalt shingles)	5.36	4.06	3.25	5.40	1.89	8.72	5.37	3.72	9.46	4.56	16.05	6.52	74.35
Const Waste C (white wood, lumber, stump, compost, etc)	10.40	9.53	14.09	16.30	18.83	16.47	17.57	26.47	26.56	17.18	7.84	8.68	189.88
Mixed Load Construction Waste				24.19	3.64		0.70					5.43	33.94
Mixed Load Commercial Waste	3.88	4.81	4.30	8.21	10.54	7.53	2.44	3.28	9.63	6.00	3.29	4.57	68.44
Mixed Load Residential Waste	7.17	11.09	16.64	29.91	24.99	20.97	19.61	19.62	17.37	18.88	15.39	8.28	209.89
Metals - (White goods, 80% metal or more)	0.79	0.99	1.47	2.34	2.96	3.13	2.81	2.72	1.93	3.04	0.89	1.84	24.89
Tires		0.38	2.39	0.25	0.16	0.31	0.32	0.37	0.32	0.60	0.36		5.43
Commercial Waste	103.90	134.09	121.65	153.47	164.29	167.57	250.54	218.18	204.85	141.35	119.24	118.51	1,897.61
Municipal Waste (Town & WSI pickup)	65.45	87.63	180.12	101.06	101.74	124.00	124.88	98.48	147.46	141.09	84.97	115.79	1,372.64
Gravel from Road Construction													-
Residential Waste	3.83	5.18	7.95	13.48	23.71	7.99	13.52	8.44	10.23	5.92	9.05	4.11	113.38
Yard Waste A (All green wood less than 5")	5.05	8.83	3.31	8.79	1.24	7.64	5.40	2.93	8.68	18.09	8.59	10.11	88.62
Yard Waste B (white wood, lumber, etc) - PW													-
WSI Yard & Garden Waste - Curbside p/u			40.85	25.40	34.47	30.11	23.65	22.53	39.46	31.15	33.97	-	281.57
Free Chippables & Compostables	8.05	36.08	67.23	51.03	65.24	36.05	30.48	33.03	46.20	53.54	37.21	11.85	475.95
Free Compostables (Fruit or Vegetables)					0.05	0.25	5.84	1.77	2.83	0.69	0.36	7.65	19.42
Demolition and Land Clearing	0.59	57.08	13.26	0.20	48.56	56.52	9.44	29.02	0.40	6.69	8.93	52.34	283.00
Recycled DLC (subtract from the totals)		1.75	1.00	4.23	3.33	0.86	0.35	0.87	0.49	1.56	1.10	0.29	15.82
Asbestos			0.42	0.95	0.17	-	28.46	1.90	3.93	0.26	-	3.90	39.97
Punture Vine					0.13	0.39	14.20	0.40	0.73	0.17	0.21		16.21
Agricultural Plastics													-
Agricultural Plastics - Recycled													-
Refrigerators**	0.68	0.60	1.50	3.75	1.80	1.73	2.10	1.80	1.35	1.58	1.58	0.53	18.98
Bio Solids	-												-
TOTALS	215.12	364.84	481.12	462.67	512.79	493.81	567.07	477.72	531.48	504.55	473.64	367.91	5,452.70
piece has been assumed													
Hauled Liquid Waste (sludge)	37.76	170.90	152.40	242.65	163.84	233.92	158.42	156.67	203.56	203.81	150.83	45.19	1,919.93
Clean Cover Material (CCMT & CGC)	-	14.67	-	8.03	6.05	1.50	25.10	31.65	24.46	19.48	33.24	10.78	174.94
Recycled and Composted													
- Organics, incl. White Wood, Yard & Garden Wastes, Compost	23.49	54.43	125.47	101.51	119.82	90.51	82.93	86.71	123.71	120.64	87.95	38.28	1,055.43
- Recycled Metals, Tires, Const. Waste 'A', Ag. Plastic, Refrigerat	1.47	6.49	8.08	24.31	13.36	9.65	15.00	8.00	3.74	59.02	128.57	10.19	287.86
- Recycled DLC	-	1.75	1.00	4.23	3.33	0.86	0.35	0.87	0.49	1.56	1.10	0.29	15.82
Landfilled	190.17	302.18	346.57	332.63	376.29	392.81	468.79	382.15	403.55	323.33	256.02	319.15	4,093.60

2016 WASTE CATEGORY	2016 January	2016 February	2016 March	2016 April	2016 May	2016 June	2016 July	2016 August	2016 September	2016 October	2016 November	2016 December	Total to Date
Const Waste A (conc, rubble, asphalt, etc.)	1.6	0	313.74	87.97	11.48	93.02	2.8	1.73	3.97	12.915	34.03	31.46	594.715
Const Waste B (drywall or asphalt shingles)	3.795	3.62	11.735	6.26	5.26	2.505	15.36	6.905	5.875	2.405	2.5	0.885	67.105
Const Waste C (white wood, lumber, stump, compost, etc)	5.425	9.675	16.985	23.53	34.78	15.45	11.21	10.08	21.175	17.205	24.03	3.395	192.94
Mixed Load Construction Waste	0.435	0.14	0.175	0	0.68	0.245	0	1.8	0	3.68	5.33	2.87	15.355
Mixed Load Commercial Waste	1.16	3.745	5.26	11.21	4.92	7.64	6.705	6.1	0.865	2.75	0.7	0.43	51.485
Mixed Load Residential Waste	10.095	11.675	21.11	29.92	26.045	24.515	19.6	21.02	22.08	22.6	15.83	6.935	231.425
Metals - (white goods, 80% metal or more)	0.835	2.535	1.19	4.05	3.48	3.195	2.295	2.055	3.98	2.13	0.895	0.655	27.295
Tires	0.085	0.165	0.18	0.13	0.065	0.535	1.52	0.9	0.115	0.13	0.415	0	4.24
Commercial Waste	105.835	114.51	150.525	154.275	166.165	203.08	245.995	287.02	194.53	145.035	146.789	109.565	2023.324
Municipal Waste (Town & WSI pickup)	79.02	93.221	148.495	80.135	120.335	173.385	128.06	143.45	100.929	138.885	115.615	68.675	1390.205
Gravel from Road Construction													0
Residential Waste	6.175	7.915	11.305	34.79	14.485	7.405	10.18	9.765	9.34	10.66	17.44	8.725	148.185
Yard Waste A (all green wood less than 5", compost)	1.18	3.125	3.86	3.865	2.92	6.365	11.754	7.161	8.63	10.63	15.89	0.785	76.165
Yard Waste B (white wood, lumber, compost, etc) - PW													0
WSI Yard & Garden Waste - Curbside p/u (compost)	0	0	30.645	36.365	32.91	29.435	30.785	39.78	29.875	33.125	38.63	0	301.55
Free Chippables & Compostables	4.19	32.69	64.59	63.835	63.285	43.435	37.195	38.89	48.143	51.685	43.665	8.295	499.898
Free Compostables (fruit or vegetables)	0	0	0	0	0	0.575	0.875	51.685	126.485	0.32	0	0	179.94
Demolition and Land Clearing	15.92	12.89	10.645	7.13	3.97	3.875	2.675	3.115	0	53.105	1.905	3.31	118.54
Recycled DLC (subtract from the totals)	1.145	0.905	0.47	10	7.605	10.825	5.985	10.64	5.26	1.52	2.937	0	57.292
Asbestos	0.035	0.785	0.04	0.42	0.175	0.43	0.225	0	0.12	0.455	0	5.875	8.56
Puncture Vine	0	0	0	0	0.755	0.805	0.085	0.115	0.38	0.045	0	0	2.185
Agricultural Plastics													0
Agricultural Plastics - Recycled													0
Refrigerators**	0.75	0.675	1.35	6.3	2.025	3.225	2.25	1.725	2.175	0.975	1.125	0.45	23.025
Bio Solids	0	0	0	0	0	0	0	0	0	0	0	0	0
TOTALS	237.68	298.271	792.3	560.185	501.34	629.945	535.554	643.936	583.927	510.255	467.726	252.31	6013.429
** Refrigerators were counted by pieces therefore an average mass of 75kg per piece has been assumed													
Hauled Liquid Waste	52.45	164.955	146.83	183.57	226.665	175.44	180.17	218.455	176.655	282.79	157.375	55.195	2020.55
Clean Cover Material (CCMT & CGC)	0	0	883.46	425.325	60.315	3.235	0.685	0.785	16.36	0.695	0.115	39.47	1430.445
Recycled and Composted													
- Organics, White Wood, Yard & Garden Wastes, Compost	10.795	45.49	116.08	127.595	134.65	96.065	91.904	147.711	234.688	113.01	122.215	12.475	1252.678
- Recycl Metals, Tires, Const. Waste 'A', Ag. Plastic, Refrige.	3.27	3.375	316.46	98.45	17.05	99.975	8.865	6.41	10.24	16.15	36.465	32.565	649.275
- Recycled DLC	1.145	0.905	0.47	10	7.605	10.825	5.985	10.64	5.26	1.52	2.937	0	57.292
Landfilled	222.47	248.501	359.29	324.14	342.035	423.08	428.8	479.175	333.739	379.575	306.109	207.27	4054.184
TOTALS	237.68	298.271	792.3	560.185	501.34	629.945	535.554	643.936	583.927	510.255	467.726	252.31	6013.429

2017 WASTE CATEGORY	2017 January	2017 February	2017 March	2017 April	2017 May	2017 June	2017 July	2017 August	2017 September	2017 October	2017 November	2017 December	Total to Date
Const Waste A (conc, rubble, asphalt, etc.)	3.47	6.91	893.424	1342.056	658.915	220.355	58.283	0.425	9.26	1.85	1.27	3.26	3199.478
Const Waste B (drywall or asphalt shingles)	2.59	2.1	2.33	4.275	2.905	6.59	3.32	7.8	6.92	1.65	1.23	1.355	43.065
Const Waste C (white wood, lumber, stump, compost, etc)	2.615	9.09	28.33	47.78	25.35	17.91	21.885	28.2	11.845	14.14	10.965	7.865	225.975
Mixed Load Construction Waste	0	0	0	0	0.71	0	0	0	0	0	0	0	0.71
Mixed Load Commercial Waste	0.33	0.64	0.59	2.25	2.245	1.925	1.59	1.715	5.43	5.325	1.25	1.655	24.945
Mixed Load Residential Waste	8.885	12.15	14.235	28.26	34.68	30.805	28.46	22.8	31.36	24.995	18.225	11.725	266.58
Metals - (white goods, 80% metal or more)	0.25	0.755	1.195	2.565	3.26	3.75	3.675	4	2.935	2.27	1.375	0.95	26.98
Tires	0.945	0.045	1.01	0.58	0.16	0.055	0.405	0.5	0.335	0.26	0.31	0.235	4.84
Commercial Waste	127.58	123.465	145.02	140.03	199.015	186.47	226.625	284.315	196.15	165.845	111.98	105.605	2012.1
Municipal Waste (Town & WSI pickup)	93.13	73.96	96.734	109.645	114.945	105.101	176.499	141.663	117.445	112.892	85.16	81.14	1308.314
Gravel from Road Construction													0
Residential Waste	5.74	5.815	9.02	33.51	17.14	23.03	17.55	16.4	15.73	17.675	16.895	20.035	198.54
Yard Waste A (all green wood less than 5", compost)	1.08	2.555	8.265	4.84	9.602	4.11	2.88	2.62	10.935	17.375	7.12	24.946	96.328
Yard Waste B (white wood, lumber, compost, etc) - PW													0
WSI Yard & Garden Waste - Curbside p/u (compost)	0	0	12.8	32.62	41.08	39.25	31.935	41.69	33.89	33.76	42.31	0	309.335
Free Chippables & Compostables	6.25	9.385	34.505	78.52	54.555	48.425	43.247	42.75	55.925	64.19	38.9	14.52	491.172
Free Compostables (fruit or vegetables)	0	35.695	40.05	0	0	0	7.61	23.095	0.11	39.92	0	0	146.48
Demolition and Land Clearing	3.12	2.31	2.9	4.35	0.81	2.4	1.78	80.995	31.3	47.245	4.54	13.285	195.035
Recycled DLC (subtract from the totals)	0	0.705	0	2.175	0.875	3	1.73	3.25	5.495	4.955	4.745	8.64	35.57
Asbestos	0	0	0.53	0.325	0	1.215	0	0	0.395	4.095	0	0.57	7.13
Puncture Vine	0	0	0	0	0.05	0.295	1.725	0.31	0	0.085	0.005	0	2.47
Agricultural Plastics													0
Agricultural Plastics - Recycled													0
Refrigerators**	0.675	0.9	0.9	5.625	2.325	2.025	3.15	2.625	1.875	1.05	0.75	1.275	23.175
Bio Solids	0	0	0	0	0	0	0	0	0	0	0	0	0
TOTALS	256.66	286.48	1291.838	1839.406	1168.622	696.711	632.349	705.153	537.335	559.577	347.03	297.061	8618.222
** Refrigerators were counted by pieces therefore an average mass of 75kg per piece has been assumed													
Recycled and Composted													
- Organics, incl. White Wood, Yard & Garden Wastes, Compost	9.945	56.725	123.95	163.76	130.637	109.99	109.282	138.665	112.705	169.47	99.3	47.331	1271.76
- Recycled Metals, Tires, Const. Waste 'A', Ag. Plastic, Refrigerat	5.34	8.61	896.529	1350.826	664.66	226.185	65.513	7.55	14.405	5.43	3.705	5.72	3254.473
- Recycled DLC	0	0.705	0	2.175	0.875	3	1.73	3.25	5.495	4.955	4.745	8.64	35.57
Landfilled	241.375	220.44	271.359	322.645	372.45	357.536	455.824	555.688	404.73	379.722	239.28	235.37	4056.419
TOTALS	256.66	286.48	1291.838	1839.406	1168.622	696.711	632.349	705.153	537.335	559.577	347.03	297.061	8618.222
Hauled Liquid Waste	122.88	199.445	158.45	192.48	225.065	190.865	220.5	339.43	192.41	323.235	154.545	32.635	2351.94
Clean Cover Material (CCMT & CGC)	25.96	33.34	890.33	326.505	309.385	52.59	52.315	16.025	8.34	1.57	0.25	1.315	1717.925

2018 WASTE CATEGORY	2018 January	2018 February	2018 March	2018 April	2018 May	2018 June	2018 July	2018 August	2018 September	2018 October	2018 November	2018 December	Total to Date
Const Waste A (conc, rubble, asphalt, etc.)	6.58	31.88	1505.357	682.51	138.97	93.92	347.345	252.51	1087.505	423.515	39.135	26.16	4635.387
Const Waste B (drywall or asphalt shingles)	1.585	1.01	3.425	5.655	18.12	3.62	2.95	4.225	4.26	6.7	3.27	0.31	55.13
Const Waste C (white wood, lumber, stump, compost, etc)	6.94	8.255	12.125	18.08	22.625	17.625	15.965	22.3	19.38	10.53	5.39	9.295	168.51
Mixed Load Construction Waste	0	0.26	1.645	0	6.215	50.415	10.465	1.975	1.835	8.36	1.185	2.25	84.605
Mixed Load Commercial Waste	3.085	0.21	2.37	0.355	3.205	2.195	1.85	2.4	2.885	3.32	3.835	1.8	27.51
Mixed Load Residential Waste	4.36	10.815	17.775	32.915	39.675	32.485	26.015	25.01	24.565	13.94	7.06	5.215	239.83
Metals - (white goods, 80% metal or more)	0.835	0.96	2.955	1.57	3.215	2.545	2.435	6.73	1.815	2.655	1.105	6.325	33.145
Tires	0.82	0	0.085	0.17	0.53	0.305	2.91	0.36	0.125	0.045	0.22	0.125	5.695
Commercial Waste	112.025	107.735	127.09	148.405	169.735	211.575	266.15	249.6	145.95	146.845	116.46	120.115	1921.685
Municipal Waste (Town & WSI pickup)	165.95	395.36	70.95	82.97	143.84	153.62	186.405	165.23	253.6	218.965	122.62	264.85	2224.36
Gravel from Road Construction													0
Residential Waste	7.065	5.895	16.465	47.045	29.47	32.085	20.685	22.33	24.185	24.04	12.92	5.615	247.8
Yard Waste A (all green wood less than 5", compost)	4.798	2.357	0.24	3.045	2.4	0.39	1.97	34.945	40.49	7.625	16.745	4.27	119.275
Yard Waste B (white wood, lumber, compost, etc) - PW													0
WSI Yard & Garden Waste - Curbside p/u (compost)	0	0	28.28	32.87	42.28	38.945	40.585	35.665	35	38.32	39.965	0.54	332.45
Free Chippables & Compostables	4.065	17.16	63.11	75.669	58.42	57.535	34.97	41.265	53.815	57.92	37.05	11.52	512.499
Free Compostables (fruit or vegetables)	0	0	0	0	0.015	0	0.455	0.115	0.235	3.99	0.2	0.11	5.12
Demolition and Land Clearing	0.02	0	28.937	0	3.345	0.06	0.09	1.505	0	0	44.125	0	78.082
Recycled DLC (subtract from the totals)	0	29.756	10.64	1.605	6.51	16.01	0.99	9.375	0	6.365	6.405	0	87.656
Asbestos	2.385	0.15	0	4.655	0.78	0.125	2.35	3.655	0.07	4.895	0.09	0.08	19.235
Puncture Vine	0	0	0	0	0	0.01	0.14	0.46	0.47	0.19	0	0	1.27
Agricultural Plastics													0
Agricultural Plastics - Recycled													0
Refrigerators**	0.825	0.75	0.975	4.5	3.15	4.725	2.775	2.25	1.425	2.025	1.125	1.5	26.025
Bio Solids	0	0	0	0	0	0	0	0	0	0	0	0	0
TOTALS	321.338	612.553	1892.424	1142.019	692.5	718.19	967.5	881.905	1697.61	980.245	458.905	460.08	10825.269
** Refrigerators were counted by pieces therefore an average mass of 75kg per piece has been assumed													
Recycled and Composted													
- Organics, incl. White Wood, Yard & Garden Wastes, Compost	15.803	27.772	103.755	129.664	125.74	114.505	94.085	134.75	149.39	118.575	99.35	25.735	1139.124
- Recycled Metals, Tires, Const. Waste 'A', Ag. Plastic, Refrigerato	9.06	33.59	1509.372	688.75	145.865	101.495	355.465	261.85	1090.87	428.24	41.585	34.11	4700.252
- Recycled DLC	0	29.756	10.64	1.605	6.51	16.01	0.99	9.375	0	6.365	6.405	0	87.656
Landfilled	296.475	521.435	268.657	322	414.385	486.18	516.96	475.93	457.35	427.065	311.565	400.235	4898.237
TOTALS		612.553	1892.424	1142.019	692.5	718.19	967.5	881.905	1697.61	980.245	458.905	460.08	10825.269
Hauled Liquid Waste	95.855	49.39	130.145	219.185	212.075	212.735	246.865	207.57	160.63	275.495	203.405	105.32	2118.67
Clean Cover Material (CCMT & CGC)	0.185	0.24	808.945	151.08	592.245	157.765	1715.09	325.6	1395.09	2966.975	2.875	0	8116.09

APPENDIX B

Landfill Gas Generation Model Results

Year of Assessment	2019		LFG Management Regulation Reference
Annual Tonnage in Preceding Year	4,898	(tonnes/year)	4-2-a
Total waste in Place in the Preceding Ye	142,065	(tonnes/year)	4-2-c
Methane generation in the Preceding Ye	230	(tonnes CH4/year)	4-2-d

Next Five Years	Waste Tonnage (tonnes)	Methane Generation (tonnes CH4/year)	
2019	5,705	235	4-2-b & 4-2-e
2020	5,860	241	4-2-b & 4-2-e
2021	5,347	248	4-2-b & 4-2-e
2022	6,037	255	4-2-b & 4-2-e
2023	6,128	262	4-2-b & 4-2-e

	Relatively Inert	Moderately Decomposabl	Decomposable	
Gas Production potential, Lo =	20	120	160	m^3 CH4/tonne
lag time before start of gas production, lag =	1	years		
Historical Data Used (years)	30			
1st Year of Historical Data Used	1989			
4 Years after Reporting Year	2023			
methane (by volume)	50%			
carbon dioxide (by volume)	50%			
methane (density) - 1atm, 25C	0.6557	kg/m^3	(25C,SP)	
carbon dioxide (density)	1.7988	kg/m^3	(25C,SP)	

Year	Year Number	Annual Tonnage (tonnes)	Cumulative Waste-in-place (tonnes)	Waste Tonnage Relatively Inert (tonnes)	Moderately Decomposable (tonnes)	Decomposable (tonnes)	Methane Generation Rate, k Relatively Inert ($year^{-1}$)	Moderately Decomposable ($year^{-1}$)	Decomposable ($year^{-1}$)	Annual Methane Production (tonnes/yr)
1989	1	3,483	3,483	697	1,393	1,393	0.01	0.02	0.06	0.00
1990	2	3,615	7,098	723	1,446	1,446	0.01	0.02	0.06	10.33
1991	3	3,752	10,850	750	1,501	1,501	0.01	0.02	0.06	20.58
1992	4	3,894	14,744	779	1,558	1,558	0.01	0.02	0.06	30.77
1993	5	4,042	18,786	808	1,617	1,617	0.01	0.02	0.06	40.92
1994	6	4,194	22,980	839	1,678	1,678	0.01	0.02	0.06	51.05
1995	7	4,353	27,333	871	1,741	1,741	0.01	0.02	0.06	61.17
1996	8	4,614	31,947	1,292	1,246	2,076	0.01	0.02	0.06	71.31
1997	9	4,311	36,257	920	1,218	2,173	0.01	0.02	0.06	82.09
1998	10	3,679	39,936	662	1,138	1,879	0.01	0.02	0.06	92.81
1999	11	3,306	43,242	570	1,141	1,595	0.01	0.02	0.06	101.18
2000	12	3,430	46,672	783	1,270	1,377	0.01	0.02	0.06	107.54
2001	13	3,980	50,652	926	1,454	1,600	0.01	0.02	0.06	112.64
2002	14	5,785	56,437	1,382	2,120	2,283	0.01	0.02	0.06	119.12
2003	15	4,799	61,237	1,162	1,741	1,897	0.01	0.02	0.06	130.37
2004	16	5,587	66,824	1,360	1,988	2,239	0.01	0.02	0.06	138.26
2005	17	5,285	72,109	1,174	1,966	2,146	0.01	0.02	0.06	148.19
2006	18	6,563	78,671	1,536	2,213	2,813	0.01	0.02	0.06	157.09
2007	19	6,049	84,720	1,519	2,265	2,265	0.01	0.02	0.06	169.84
2008	20	6,854	91,574	1,431	3,103	2,319	0.01	0.02	0.06	179.01
2009	21	6,616	98,190	1,512	2,848	2,256	0.01	0.02	0.06	189.51
2010	22	6,872	105,062	2,312	2,559	2,000	0.01	0.02	0.06	198.82
2011	23	6,102	111,164	1,137	2,692	2,274	0.01	0.02	0.06	205.95
2012	24	5,201	116,365	923	2,163	2,114	0.01	0.02	0.06	214.40
2013	25	4,293	120,657	910	1,737	1,645	0.01	0.02	0.06	220.69
2014	26	4,305	124,963	996	1,725	1,584	0.01	0.02	0.06	223.34
2015	27	4,093	129,056	833	1,807	1,454	0.01	0.02	0.06	225.56
2016	28	4,054	133,110	834	1,703	1,517	0.01	0.02	0.06	227.09
2017	29	4,056	137,166	807	1,733	1,516	0.01	0.02	0.06	228.78
2018	30	4,898	142,065	1,001	2,043	1,854	0.01	0.02	0.06	230.47
2019	31	5,705	147,770	1,141	2,282	2,282	0.01	0.02	0.06	234.58
2020	32	5,860	153,629	1,158	2,351	2,351	0.01	0.02	0.06	241.38
2021	33	5,347	158,977	575	2,386	2,386	0.01	0.02	0.06	248.41
2022	34	6,037	165,014	1,193	2,422	2,422	0.01	0.02	0.06	255.31
2023	35	6,128	171,142	1,211	2,458	2,458	0.01	0.02	0.06	262.28