



June 20, 2022
Our File: 212298

Via Email: Ian.Mitchell@ontario.ca

Ministry of the Environment, Conservation and Parks
Owen Sound District Office
3rd Floor 101 17th Street
Owen Sound, ON N4K 0A5

Attention: Mr. Ian Mitchell

Re: Southgate Landfill Site
Township of Southgate
Trigger Exceedance Notification (OW20)
ECA No. A261602

Dear Ian,

On behalf of the Township of Southgate, we are providing notification of a recent site-specific trigger level exceedance for groundwater noted at the Southgate (formerly Egremont) Landfill Site. Based on Condition 40 of the Environmental Compliance Approval (ECA No. A261602), the trigger parameters include chloride, sodium, iron, alkalinity, DOC, barium and boron as these have proven to be reliable indicators of leachate-impacted groundwater at the Site. In addition, the Trigger Levels for groundwater are set at either:

- i. Where indicator parameters are naturally low, 80% of the RUC at monitoring locations situated in close proximity to the property boundary (i.e., OW-16S/D and OW-19) or 100% of the RUC for trigger locations that are greater than 50 meters from the property boundary (i.e., compliance monitoring locations to the west within the CAZ); or
- ii. Where the indicator parameter is naturally elevated in the groundwater at the Site (i.e., where the RUC is less than the background concentrations noted), the trigger level be based on the 95th percentile of the background concentration regardless of proximity to the property boundary.

The measures outlined in the contingency plan are activated when two or more parameters exceed the trigger level at the same trigger location for two (or more) consecutive events. If a trigger exceedance occurs, the *District Manager* is to be notified. This notification is being provided to satisfy the notification requirements of Condition 40(i) of the ECA. A copy of the ECA is provided in Attachment A. A summary of the trigger locations, parameters and levels, compared to the recent monitoring results, is provided in the attached Table.

At the Egremont Landfill Site the compliance boundary to the east is located in close proximity to the approved fill area. Trigger level exceedances at well OW20 were first reported to the MECP in correspondence dated March 26, 2021 (provided in Attachment B). This well was installed in the shallow overburden soils in August 2019, between the recently active area of landfilling (i.e., Cell 2) and the compliance boundary to the east, where shown on the Figure provided. Groundwater quality monitoring at well OW20 continues to show exceedances of the site-specific trigger levels for alkalinity, DOC, chloride and sodium, with trigger exceedances for barium, boron and iron more recently noted. The combination of parameters and parameter concentrations appears to be indicative of leachate-derived impacts.

Condition 40(ii) of the Approval states that resampling within 30-days of the receipt of the result be conducted. However, considering the consistency of the groundwater quality reported for the samples collected from this location, it is our opinion that re-sampling would only confirm the overall groundwater quality, rather than negate the trigger exceedances noted.

IMPLEMENTATION OF CONTINGENCY MEASURES

Although the migration of leachate-impacted groundwater to the east is related to a localized radial flow pattern, which will ultimately tie into the larger regional groundwater flow system that generally flows in a westerly direction, monitoring well OW20 is situated along the easterly compliance boundary and, as such, it was previously recommended that the Township consider implementing measures to mitigate the identified impacts along the easterly property boundary.

Following the trigger notification in March 2021, the Township explored the option of acquiring additional buffer lands to the east. More specifically, the vacant land described as Concession 21, West Part Lot 1, where shown on the Figure provided. Based on our interpretation of past site activities, the property appears to have been used as a recreational property (snowmobiling, ATV's, etc.), with the nearest structure to the east located approximately 70 metres from the landfill area at its closest point. MECP well records suggest that a drinking water supply well does not exist on the property.

The 20.4-hectare (50.38-acre) property was successfully purchased in September 2021. Once the property is registered on title as a contaminant attenuation zone (CAZ), these additional lands will mitigate the impacts identified along the existing easterly compliance limit by extending the buffer distance (i.e., the easterly compliance boundary) by an additional 200-meters to the east. The Township intends to submit an application to amend the Environmental Compliance Approval to the MECP to request that the definition for 'Buffer' and Condition 35 of the ECA be updated to recognize the additional buffer lands to the east as a supplemental contaminant attenuation zone for the Site. Once the additional lands are recognized in ECA, the Township will register the additional CAZ lands against the title of the subject property.

NEXT STEPS

Well Installation:

The Township has retained London Soil Test (LST) to complete the installation of two shallow groundwater monitoring wells within the additional lands to the east in 2022. The wells will be installed greater than 50 meters east of wells OW19 and OW20 and will become the new trigger locations for the assessment of groundwater quality compliance to the east of the landfill.

Application to Amend the ECA:

In recognition of the supplemental contaminant attenuation zone to the east of the Site, an application to amend the ECA will be submitted to the MECP. The application will recommend the following:

1. Updates to some of the definitions and conditions of the ECA, as needed, to reflect the additional supplemental contaminant attenuation zone to the east of the site.
2. Revision to PDO Addendum No.1 (April 2018): Due to various design constraints and the westerly groundwater flow direction, a limited buffer area of 10-meters was previously established to the east of the approved landfill. In order to support the limited buffer area, a bentofix mat was proposed for the eastern below grade sidewall of the approved landfill. In consideration of the additional buffer distance of 200-meters achieved with the recent acquisition of the property to the east of the site, the provision for the bentofix liner, limited to the eastern sidewall, is no longer necessary.



OTHER MITIGATIVE EFFORTS: REVIEW OF OPERATIONAL PRACTICES

An assessment of the recent operational practices, including site grading, particularly in the area to the east of the landfill could be conducted. In addition, the relocation of waste from the old fill area could be completed in the near future. The waste relocation efforts, which were described in the PDO Addendum (April 2018), could be used as a means to ensure the bottom elevation of the landfill is sloped to the west, ultimately directing contact stormwater flows and leachate within the landfill footprint to the west, away from the existing easterly compliance limit. These efforts would serve to reduce the radial flow of groundwater to the east, ultimately reducing the magnitude of impacts in the vicinity of OW20.

I trust this is sufficient for your use at this time. Please do not hesitate to contact me if you have any questions.

Yours truly,

GM BLUEPLAN ENGINEERING LIMITED

Per:

A handwritten signature in blue ink, appearing to read 'Alen Bringleston', with a long horizontal flourish extending to the right.

Alen Bringleston, B.E.S., C.E.T.
AN/md

Encl.

cc: Township of Southgate: Jim Ellis – One Digital Copy (jellis@southgate.ca)
Our File No.: 212298

**COMPARISON OF GROUNDWATER QUALITY AT THE ESTABLISHED
TRIGGER LOCATIONS TO TRIGGER LEVELS**

Indicator Parameter		Alkalinity	DOC	Chloride	Sodium	Barium	Boron	Iron
		(in mg/L)						
Background (Range)		205 - 255	<0.2 - 17.2	1.3 - 45.4	3.9 - 63.2	0.02 - 0.04	<0.005 - 0.035	0.072 - 0.42
Background		252	6.2	11	20.4	0.03	0.02	0.30
ODWS		500	5.0	250	200	1.0	5.0	0.30
RUC		376	6.2	131	110	0.27	1.3	0.30
Trigger Levels (100% RUC)		376	6.2	131	110	0.27	1.3	0.30
WEST COMPLIANCE BOUNDARY								
OW17S	6-May-14	250	1.1	1	1.3	0.0062	<0.01	<0.1
	23-Oct-14	330	1.7	<1	2.0	0.0078	0.01	<0.1
	21-Apr-15	240	1.2	1	1.6	0.0057	<0.01	<0.1
	19-Oct-15	280	1.1	1.2	1.2	0.0081	<0.01	<0.1
	12-Apr-16	240	1.4	1.2	0.95	0.0060	<0.01	<0.1
	24-Oct-16	290	1.1	1.1	1.3	0.0075	<0.01	<0.1
	19-Apr-17	230	1.1	1.4	1.1	0.0056	<0.01	<0.1
	16-Nov-17	320	1.2	1.1	1.2	0.0091	<0.01	<0.1
	6-Jun-18	280	1.2	<1.0	0.81	0.0072	<0.01	<0.1
	6-Nov-18	310	0.81	1.3	1.2	0.0080	0.011	<0.1
	2-May-19	230	1.2	1.5	0.77	0.0061	<0.01	<0.1
	6-May-20	260	1.0	<1.0	0.85	0.0062	0.01	<0.1
	20-Dec-21	300	1.3	1.2	0.83	0.0089	0.01	<0.1
OW17D	6-May-14	270	0.67	2	3.5	0.031	<0.01	<0.1
	23-Oct-14	280	1.1	1	3.4	0.027	<0.01	<0.1
	21-Apr-15	270	0.58	2	3.3	0.025	<0.01	<0.1
	19-Oct-15	280	0.81	1.5	3.2	0.026	<0.01	<0.1
	12-Apr-16	290	0.77	1.4	3.4	0.028	<0.01	<0.1
	24-Oct-16	290	0.91	1.0	3.1	0.027	<0.01	<0.1
	19-Apr-17	280	0.63	1.7	3.4	0.025	<0.01	<0.1
	16-Nov-17	290	<0.50	1.1	3.3	0.025	<0.01	<0.1
	6-Jun-18	290	0.62	1.3	3.0	0.025	<0.01	<0.1
	6-Nov-18	300	0.63	1.5	3.2	0.030	<0.01	<0.1
	2-May-19	280	0.75	1.3	2.8	0.026	<0.01	<0.1
	6-May-20	290	0.49	1.2	3.1	0.025	<0.01	<0.1
	20-Dec-21	280	0.65	1.7	3.3	0.027	0.018	<0.1
OW18S	6-May-14	240	1.2	1	2.9	0.0084	<0.01	<0.1
	23-Oct-14	340	1.6	<1	2.3	0.011	0.014	<0.1
	21-Apr-15	270	1.3	<1	3.8	0.0091	<0.01	<0.1
	19-Oct-15	310	0.58	2.6	1.8	0.0096	<0.01	<0.1
	12-Apr-16	240	1.2	<1.0	1.9	0.012	<0.01	<0.1
	19-Apr-17	250	0.96	1.2	0.82	0.0081	<0.01	<0.1
	16-Nov-17	380	0.67	6.2	1.4	0.010	0.020	<0.1
	6-Jun-18	260	0.79	1.3	1.6	0.0080	<0.01	<0.1
	2-May-19	220	1.1	1.3	2.2	0.0078	<0.01	0.15
	6-May-20	270	0.91	<1.0	0.79	0.0074	<0.01	<0.1
	20-Dec-21	310	1.3	1.3	1.0	0.0078	0.015	<0.1

**COMPARISON OF GROUNDWATER QUALITY AT THE ESTABLISHED
TRIGGER LOCATIONS TO TRIGGER LEVELS**

Indicator Parameter		Alkalinity	DOC	Chloride	Sodium	Barium	Boron	Iron
		(in mg/L)						
Background (Range)		205 - 255	<0.2 - 17.2	1.3 - 45.4	3.9 - 63.2	0.02 - 0.04	<0.005 - 0.035	0.072 - 0.42
Background		252	6.2	11	20.4	0.03	0.02	0.30
ODWS		500	5.0	250	200	1.0	5.0	0.30
RUC		376	6.2	131	110	0.27	1.3	0.30
Trigger Levels (100% RUC)		376	6.2	131	110	0.27	1.3	0.30
OW18I	6-May-14	240	1.4	1	0.84	0.0059	<0.01	<0.1
	23-Oct-14	370	1.8	<1	0.94	0.0098	0.015	<0.1
	21-Apr-15	290	0.91	1	0.69	0.0055	<0.01	<0.1
	19-Oct-15	340	1.0	2.2	1.4	0.010	<0.01	<0.1
	12-Apr-16	240	1.3	<1.0	0.54	0.0050	<0.01	<0.1
	24-Oct-16	330	1.3	2.1	1.2	0.0083	0.011	<0.1
	19-Apr-17	250	1.1	1.1	0.58	0.0055	0.010	<0.1
	16-Nov-17	380	0.76	<1.0	0.91	0.0078	0.012	<0.1
	6-Jun-18	290	0.94	<1.0	0.61	0.005	0.011	<0.1
	6-Nov-18	320	0.95	1.2	0.92	0.008	0.019	<0.1
	2-May-19	230	1.0	1.1	0.43	0.0046	<0.01	<0.1
	6-May-20	270	0.84	<1.0	0.53	0.0049	<0.01	<0.1
	20-Dec-21	320	0.91	1.3	0.61	0.0074	0.017	<0.1
OW18D	6-May-14	280	0.60	1	5.2	0.013	<0.01	<0.1
	23-Oct-14	290	1.1	1	2.4	0.012	<0.01	<0.1
	21-Apr-15	270	0.58	2	2.2	0.011	<0.01	<0.1
	19-Oct-15	280	0.58	1.6	2.5	0.011	<0.01	<0.1
	12-Apr-16	290	0.59	1.1	2.1	0.013	<0.01	<0.1
	24-Oct-16	290	0.83	1.2	2.1	0.012	<0.01	<0.1
	19-Apr-17	290	0.60	1.4	2.0	0.012	0.010	<0.1
	16-Nov-17	290	<0.50	1.3	1.9	0.012	<0.01	<0.1
	6-Jun-18	300	<0.50	1.1	2.1	0.012	<0.01	<0.1
	6-Nov-18	290	0.59	1.1	2.4	0.011	<0.01	<0.1
	2-May-19	290	0.51	1.4	1.9	0.014	0.010	<0.1
	6-May-20	290	0.55	<1.0	1.8	0.012	<0.01	<0.1
	20-Dec-21	300	0.69	1.1	1.8	0.013	0.021	<0.1
Werner	6-May-14	230	0.75	6	4.0	0.017	<0.01	<0.1
	23-Oct-14	240	0.88	6	3.5	0.018	0.012	1.6
	21-Apr-15	230	0.56	6	4.0	0.018	0.014	<0.1
	19-Oct-15	230	0.40	6.5	3.9	0.017	<0.01	<0.1
	12-Apr-16	240	0.44	7.3	3.7	0.015	<0.01	<0.1
	24-Oct-16	240	0.77	7.0	3.5	0.017	<0.01	1.6
	19-Apr-17	240	0.22	6.5	3.8	0.016	0.012	<0.1
	16-Nov-17	250	<0.50	7.5	3.6	0.015	0.011	<0.1
	2-May-19	230	<0.50	7.5	3.5	0.017	0.011	<0.1

**COMPARISON OF GROUNDWATER QUALITY AT THE ESTABLISHED
TRIGGER LOCATIONS TO TRIGGER LEVELS**

Indicator Parameter		Alkalinity	DOC	Chloride	Sodium	Barium	Boron	Iron
		(in mg/L)						
Background (Range)		205 - 255	<0.2 - 17.2	1.3 - 45.4	3.9 - 63.2	0.02 - 0.04	<0.005 - 0.035	0.072 - 0.42
Background		252	6.2	11	20.4	0.03	0.02	0.30
ODWS		500	5.0	250	200	1.0	5.0	0.30
RUC		376	6.2	131	110	0.27	1.3	0.30
Trigger Levels (80% RUC)		301	6.2*	104	88	0.22	1.0	0.30*
NORTH COMPLIANCE BOUNDARY								
OW16S	6-May-14	230	0.61	3	6.2	0.030	<0.01	<0.1
	23-Oct-14	230	1.4	2	4.5	0.027	<0.01	0.21
	21-Apr-15	230	1.0	2	5.2	0.026	<0.01	<0.1
	19-Oct-15	230	0.45	1.9	4.3	0.025	<0.01	<0.1
	12-Apr-16	240	0.55	2.5	5.0	0.026	<0.01	<0.1
	24-Oct-16	240	0.76	1.8	3.6	0.025	0.011	0.22
	19-Apr-17	240	0.56	2.5	4.8	0.025	<0.01	<0.1
	16-Nov-17	240	<0.50	1.8	3.5	0.024	<0.01	<0.1
	6-Jun-18	240	<0.50	1.9	3.7	0.022	<0.01	<0.1
	6-Nov-18	230	0.50	2.0	3.6	0.022	0.01	<0.1
	2-May-19	240	<0.50	2.9	5.2	0.029	<0.01	<0.01
	14-Nov-19	230	<0.50	3.0	5.4	0.026	<0.01	<0.01
	6-May-20	240	0.52	2.4	4.9	0.028	<0.01	<0.10
	26-Nov-20	240	0.71	2.7	5.1	0.028	<0.01	<0.10
	8-Apr-21	240	0.42	3.1	6.0	0.028	0.020	0.20
OW16D	20-Dec-21	240	<0.40	2.7	4.9	0.029	0.011	<0.1
	16-May-22	240	<0.40	2.4	5.2	0.027	0.011	<0.1
	6-May-14	210	0.56	<1	4.5	0.024	0.018	<0.1
	23-Oct-14	220	1.0	<1	4.1	0.024	0.018	<0.1
	21-Apr-15	210	0.60	1	4.3	0.025	0.019	<0.1
	19-Oct-15	210	0.26	<1.0	4.2	0.023	0.017	<0.1
	12-Apr-16	220	0.50	<1.0	4.0	0.023	0.015	<0.1
	24-Oct-16	210	0.71	<1.0	3.9	0.024	0.017	<0.1
	19-Apr-17	210	<0.20	1.1	4.5	0.026	0.022	<0.1
	16-Nov-17	220	<0.50	<1.0	4.3	0.022	0.016	<0.1
	6-Jun-18	220	<0.50	<1.0	4.2	0.024	0.019	<0.1
	6-Nov-18	210	<0.50	<1.0	4.3	0.025	0.018	<0.1
	2-May-19	210	<0.50	1.0	4.5	0.026	0.018	<0.1
	6-May-20	220	0.42	<1.0	4.6	0.025	0.016	<0.1
	20-Dec-21	210	<0.40	<1.0	4.3	0.025	0.018	<0.1

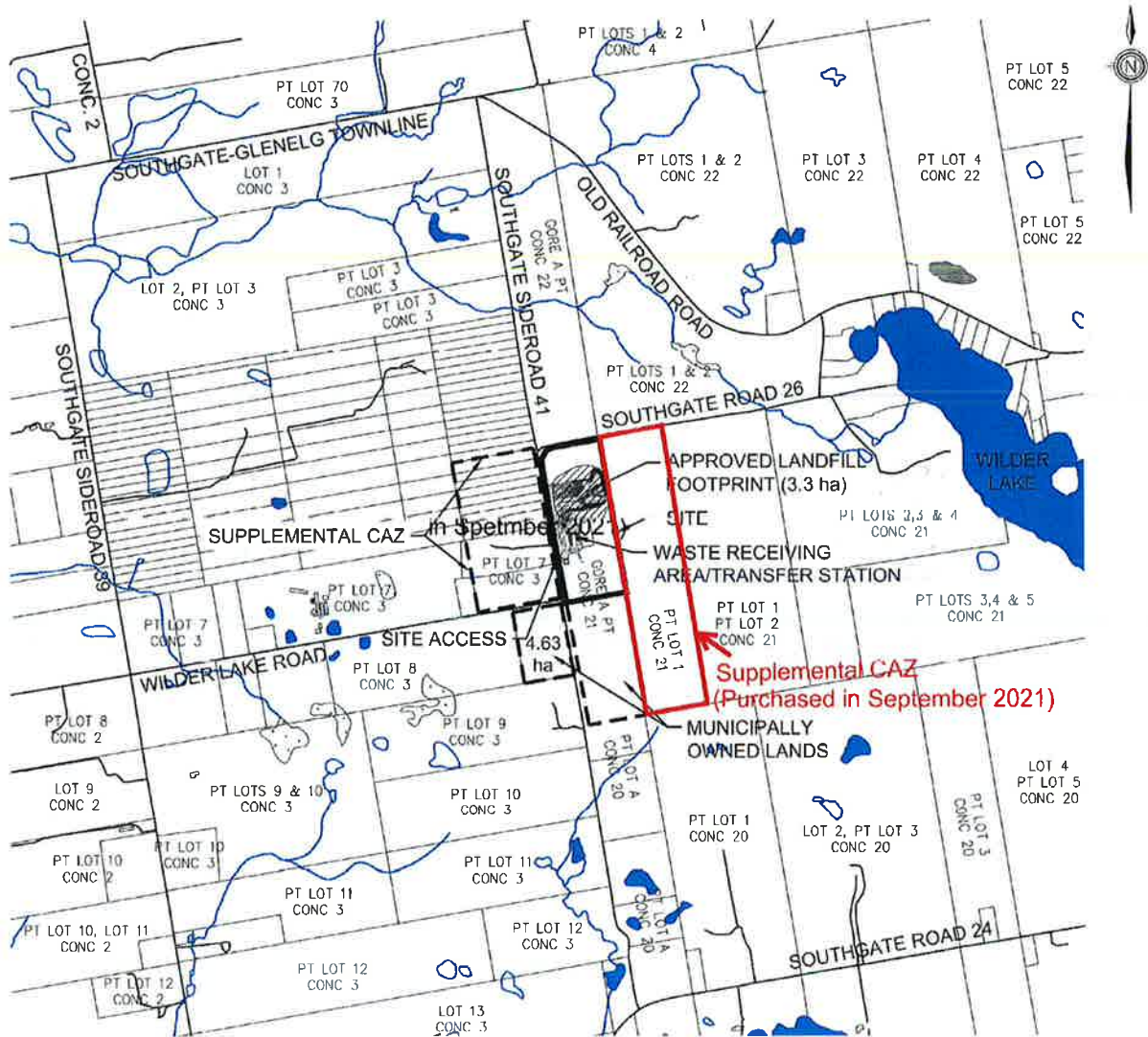
**COMPARISON OF GROUNDWATER QUALITY AT THE ESTABLISHED
TRIGGER LOCATIONS TO TRIGGER LEVELS**

Indicator Parameter	Alkalinity	DOC	Chloride	Sodium	Barium	Boron	Iron
	(in mg/L)						
Background (Range)	205 - 255	<0.2 - 17.2	1.3 - 45.4	3.9 - 63.2	0.02 - 0.04	<0.005 - 0.035	0.072 - 0.42
Background	252	6.2	11	20.4	0.03	0.02	0.30
ODWS	500	5.0	250	200	1.0	5.0	0.30
RUC	376	6.2	131	110	0.27	1.3	0.30
Trigger Levels (80% RUC)	301	6.2*	104	88	0.22	1.0	0.30*
EAST COMPLIANCE BOUNDARY							
OW19	23-Oct-14	780	5.6	2	26	0.048	0.027
	21-Apr-15	680	3.5	2	7.5	0.033	0.012
	19-Oct-15	710	2.2	1.9	7.9	0.030	0.019
	12-Apr-16	740	3.0	2.1	7.5	0.025	0.028
	24-Oct-16	720	3.9	3.6	9.2	0.023	0.029
	19-Apr-17	720	2.7	2.9	6.2	0.030	0.029
	16-Nov-17	670	2.4	1.8	5.3	0.021	0.023
	6-Jun-18	670	2.2	1.7	2.9	0.019	0.018
	6-Nov-18	640	2.3	1.9	3.2	0.024	0.022
	2-May-19	650	2.3	3.5	8.1	0.022	0.022
	14-Nov-19	630	2.7	2.7	4.1	0.023	0.027
	6-May-20	650	3.0	5.2	6.0	0.019	0.027
	26-Nov-20	640	2.6	9.4	2.9	0.022	0.020
	8-Apr-21	620	3.2	7.4	5.5	0.017	0.022
	20-Dec-21	660	3.3	4.0	9.7	0.019	0.035
OW20	16-May-22	600	2.9	2.1	5.2	0.016	0.032
	14-Nov-19	790	18	160	100	0.095	0.66
	6-May-20	1600	48	160	250	0.28	1.4
	26-Nov-20	2200	62	220	270	0.26	2.2
	8-Apr-21	1700	59	130	210	0.35	1.7
	20-Dec-21	1700	74	150	190	0.22	1.7
	16-May-22	2900	1600	440	490	0.44	1.7

Notes:

1. Background concentrations were based on available water quality data from OW-16S collected from 2002 to April 2013 . 95-th percentile background concentrations were used for the determination of the RUC.
2. * Where the indicator parameter is naturally elevated (i.e. DOC and iron), the trigger level is based on the 95th-percentile of the concentrations historically reported, regardless of proximity to the property boundary.
3. ODWS = Ontario Drinking Water Standards
4. mg/L = milligrams per litre
5. The measures outlined in the contingency plan will not be activated unless two or more parameters exceed the same trigger levels at the same trigger location for two consecutive events.
6. Values in bold and shaded represent concentrations greater than the Trigger Levels.

212298
 Egremont Landfill
 Lot A, Concession 21
 Township of Southgate



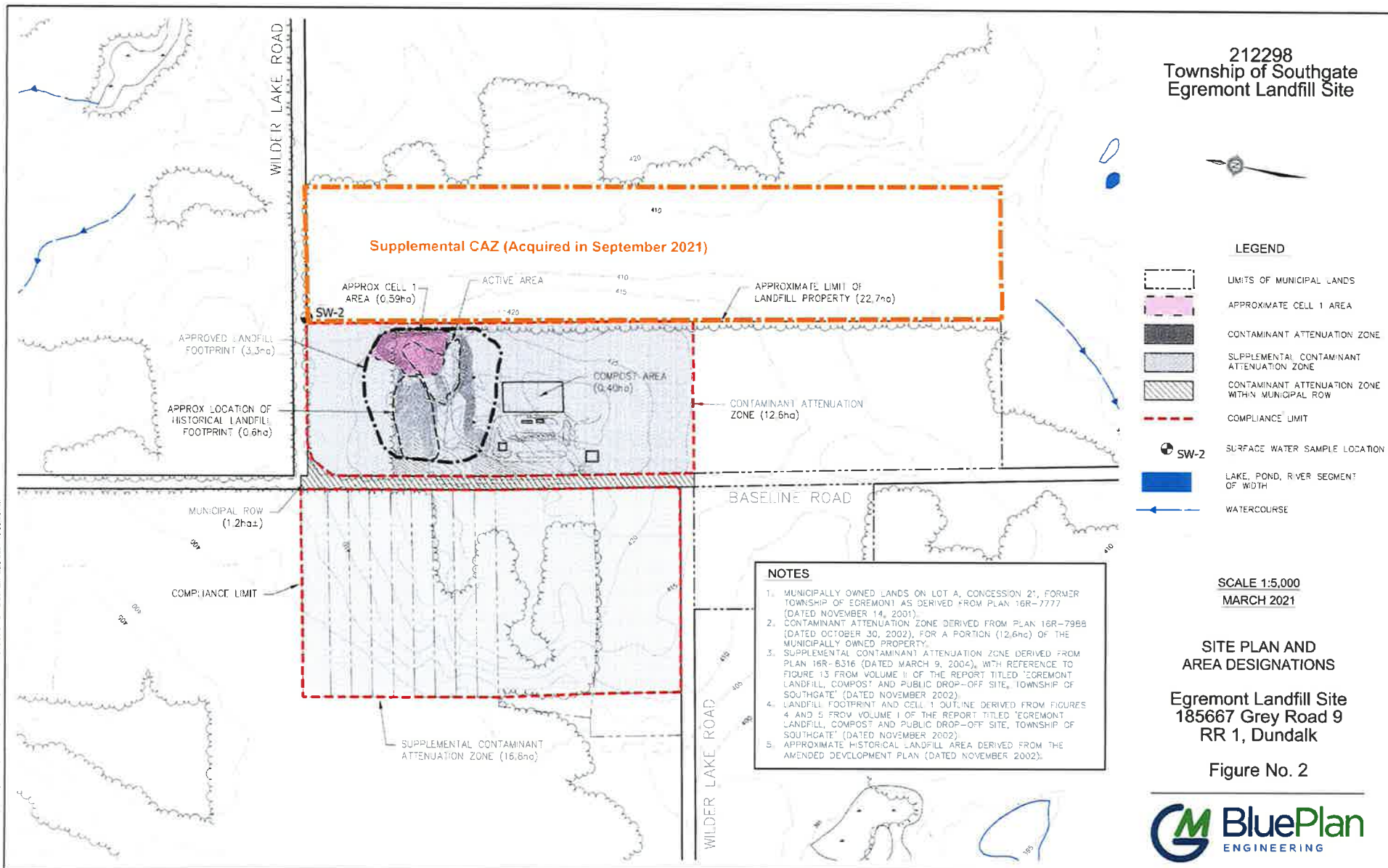
NOT TO SCALE
 MARCH 2021

CAZ - CONTAMINANT ATTENUATION ZONE

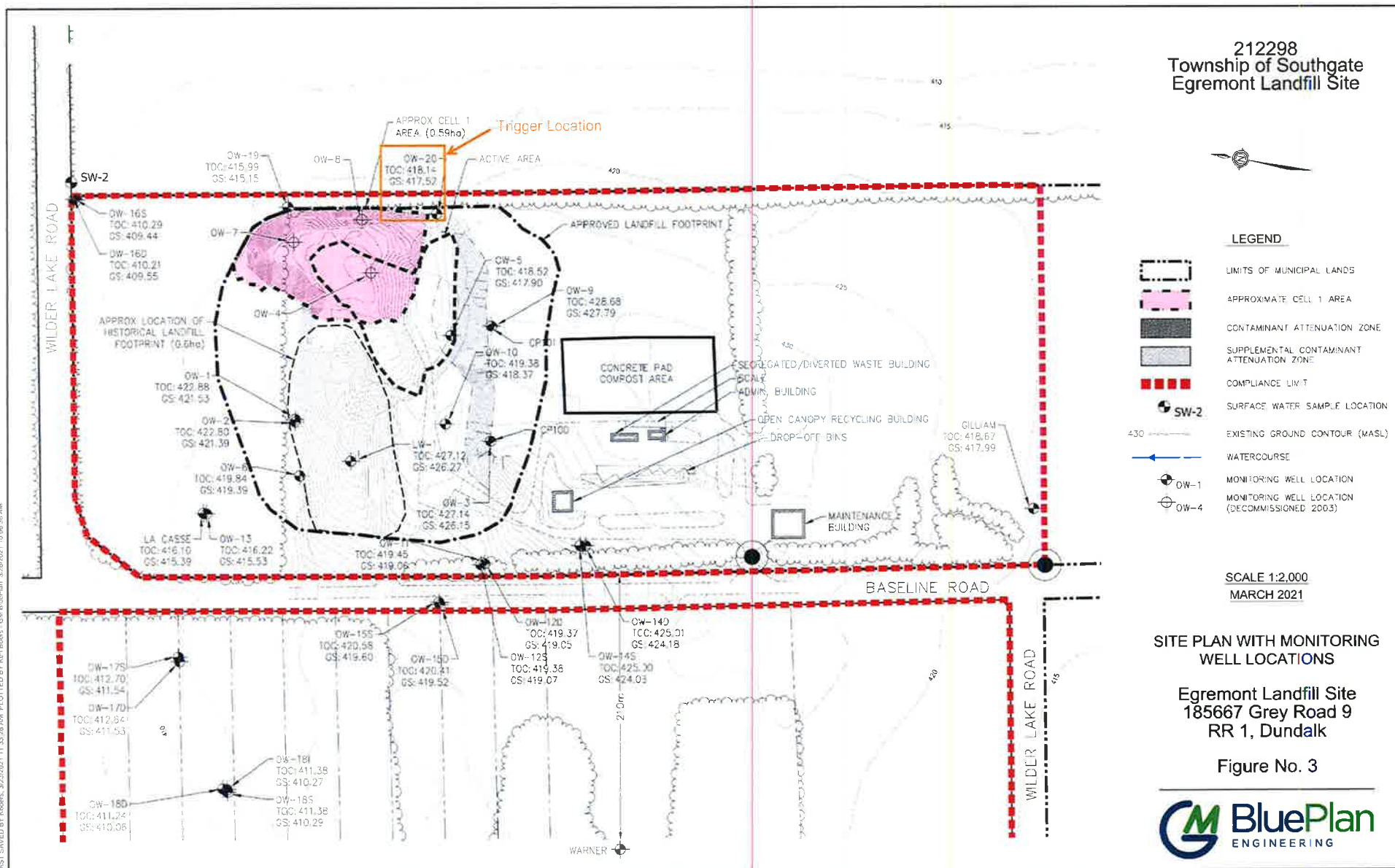
SITE LOCATION PLAN



212298
Township of Southgate
Egremont Landfill Site



212298
Township of Southgate
Egremont Landfill Site



FILE C:\cwl 3D Projects\21228\AMR Figures.dwg LAYOUT 3-Size
 LAST SAVED BY Kboots. 3/23/2021 11:33:28 AM PLOTTED BY Ken Boers: GM BluePlan 3/26/2021 10:06:36 AM

ATTACHMENT A

AMENDED ENVIRONMENTAL COMPLIANCE APPROVAL

NUMBER A261602

Issue Date: April 22, 2022

The Corporation of the Township of Southgate
185667 Grey County Road 9
Rural Route, No. 1
Dundalk, Ontario
N0C 1B0

Site Location: Southgate (Formerly Egremont) Landfill Site
413013 Southgate Sideroad 41, Township of Sougate, ON N0G 1R0
Lot A, Concession 21
Southgate Township, County of Grey

You have applied under section 20.2 of Part II.1 of the Environmental Protection Act, R.S.O. 1990, c. E. 19 (Environmental Protection Act) for approval of:

the use and operation of a 3.3 hectare landfiling site within a total site area 30.8 hectares for non-hazardous waste disposal, waste transfer depot, MHSW depot and organic waste composting facility.

For the purpose of this environmental compliance approval, the following definitions apply:

1. For the purposes of this *Approval*, unless the contrary intention appears, the following words and phrases shall have the following meaning:

"45-cubic metre MHSW storage container" means the specialized portable storage container that is referred to in the Design and Operations Report that is identified in Item 18 of Schedule "A";

"Approval" means this Environmental Compliance Approval A261602, and any Schedules to it, including the application and supporting documentation listed in Schedule "A".

"Adverse Effect" as defined in the EPA;

"Buffer" means the 27.3 hectare property areas labelled as "Approved CAZ" and "Proposed Supplemental CAZ" on Figure 13 from Volume II, Item 11 of Schedule "A", but excludes the landfill Footprint;

"Bulking" means the mixing of similar waste types into a single container in a secure and safe

manner;

"Competent Person" means a person or people who through their knowledge, training and experience is/are able to carry out any necessary duties in the following, through instruction and practice:

- i. relevant waste management legislation, regulations and guidelines;
- ii. major environmental concerns pertaining to the waste to be handled;
- iii. the environmental emergency plan required by Condition 65 of this Approval;
- iv. use and operation of any equipment to be used;
- v. operation and management of the Site, or area(s) within the Site, in accordance with the specific job requirements of each individual operator, and which may include procedures for receiving, screening and identifying, refusing, handling and temporarily storing wastes;
- vi. Owner specific written procedures for the control of conditions that may cause an adverse effect;
- vii. requirements of the Approval; and
- viii. record keeping procedures;

"CAZ" means Contaminant Attenuation Zone which is further described in Figure 13 from Volume II, Item 11 of Schedule "A";

"Compost Quality Standards" means the Ministry standards for compost as set out in the document "Ontario Compost Quality Standards" dated July 25, 2012, as amended;

"Director" means the one or more persons who from time to time are so designated for the purpose of Part V of the Environmental Protection Act, R.S.O. 1990, as amended from time to time;

"District Manager" means the District Manager of the District Office of the Ministry in which the Site is located;

"EPA" and "Act" means the Environmental Protection Act, R.S.O. 1990, as amended from time to time;

"excess soil" has the same meaning as in Ontario Regulation 406/19.

"Fire Code" means Regulation 213/07 of the Fire Protection and Prevention Act, 1997;

"Footprint" means the 3.3 hectare area located inside the landfill property boundary where waste may be disposed;

"Finished Compost" means waste types described in Condition 64 of this Approval that has been composted and fully cured and is considered ready for sampling and testing for compliance in accordance with Compost Quality Standards;

"Immature Compost" means waste types described in Condition 64 of this Approval which has been composted in the windrows and is considered an Immature Compost until it has been fully cured and is ready for compliance testing in accordance with Compost Quality Standards. Immature Compost is considered a waste;

"lab packed" means the waste management industry's recognized method of temporarily storing and transporting inventoried miscellaneous organic and inorganic wastes in a drum;

"Landfill" or "Site" means the 30.6 hectare property comprising the Footprint and the Buffer as shown on Figure 13 from Volume II, Item (11) of Schedule "A";

"Ministry" or "MECP" means the Ontario Ministry of the Environment, Conservation and Parks;

"MHSW Guidelines" refers to the Ministry publication entitled "Household Hazardous Waste Collection and Facility Guidelines", dated May 1993;

"Municipal Hazardous and Special Waste" and the acronym "MHSW" means hazardous waste or special waste that fall within waste classes 135, 145, 147, 148, 211, 212, 213, 221, 222, 231, 242, 251, 252, 253, 254, 261, 262, 263, 312 and 331 as defined in Regulation 347 and also includes waste anti-freeze, WEEE, waste wet cell batteries, waste dry cell batteries, waste lithium batteries from electronic devices, waste fluorescent tubes and waste energy efficient light bulbs and waste switches and thermostats that may contain mercury;

"Municipal Waste" has the same meaning as in Regulation 347;

"NMA" means Nutrient Management Act, 2002, S.O. 2002, c.4, as amended from time to time;

"Owner" or "Applicant" means any person that is responsible for the establishment or operation of the Site described in this Approval, and includes the Corporation of the Township of Southgate, its successors and assigns;

"OWRA" means the Ontario Water Resources Act, R.S.O. 1990, as amended from time to time;

"PA" means the Pesticides Act, R.S.O. 1990, c. P.11, as amend from time to time;

"PCB" and "PCBs" means any monochlorinated or polychlorinated biphenyl or any mixture of them or mixture that contains one or more of them;

"Provincial Officer" means any person designated in writing by the Minister as a provincial officer pursuant to Section 5 of the OWRA or Section 5 of the Act or Section 17 of PA or Section 4 of NMA or Section 8 of SDWA;

"PWQO" means the Provincial Water Quality Objectives included in the July 1994 MECP publication entitled Water Management Policies, Guidelines, Provincial Water Quality Objectives;

"Reasonable Use Guideline (RUG)" means Ministry Guideline B-7 entitled "Incorporation of the Reasonable Use Concept into MOEE Groundwater Management Activities", dated April 1994;

"Regulation 347" means R.R.O. 1990, Regulation 347, General – Waste Management, made under the EPA, as amended from time to time;

"SDWA" means Safe Drinking Water Act, 2002, S.O. 2002, c. 32, as amended from time to time;

"Service Area" means the area from which waste may be received, namely, the counties of Grey, Bruce, Huron, Wellington, Simcoe, Dufferin and Perth and the Region of Waterloo for compostable and MHSW materials and from the Township of Southgate for waste for landfilling or recycling;

"Storage Guidelines" means the Ministry document entitled "Guidelines for Environmental Protection Measures at Chemical and Waste Storage Facilities" dated May 2007;

"tire unit" is a standardized means of describing the total weight of all of the tires at the Site regardless of the individual weight of each of the tires. To report the number of tires in standardized tire units each tire weighing less than twelve kilograms is one tire unit and each tire weighing twelve kilograms or more is the number of tire units that results from dividing twelve into the number of kilograms that the tire weighs; and

"WEEE" means waste electrical and electronic equipment listed in Schedules 1 through 7 of Ontario Regulation 393/04 of the Waste Diversion Act.

You are hereby notified that this environmental compliance approval is issued to you subject to the terms and conditions outlined below:

TERMS AND CONDITIONS

General

2. Pursuant to Section 197 of the Environmental Protection Act, neither the Owner nor any person having an interest in the property comprising the Site shall deal with the Site in any way without first giving a copy of this Approval to each person acquiring an interest in the Site as a result of the dealing.

Change of Owner

3. The Owner shall notify the Director in writing, and forward a copy of the notification to the District Manager, within thirty (30) days of the occurrence of any changes to the:
 - (a) ownership of the Site;
 - (b) operator of the Site;
 - (c) address of the Owner;
 - (d) partners, where the Owner is or at any time becomes a partnership and a copy of the most recent declaration filed under the Business Names Act, R.S.O. 1990, c. B.17, as amended, shall be included in the notification;
 - (e) name of the corporation where the Owner is or at any time becomes a

- corporation, other than a municipal corporation, and a copy of the most current information filed under the Corporations Information Act, R.S.O. 1990, c. C.39, as amended, shall be included in the notification; and
- (f) directors or officers of the corporation where the Owner is or at any time becomes a corporation, and a copy of the most current "Initial Notice" or "Notice of Change" as referred to in 3(e).
4. No portion of this Site shall be transferred or encumbered prior to or after closing of the Site unless the Director is notified in advance and sufficient financial assurance is deposited with the Ministry to ensure that these conditions will be carried out. In the event of any change in ownership of the Site, other than change to a successor municipality, the Owner shall notify the successor of and provide the successor with a copy of this Approval, and the Owner shall provide a copy of the notification to the District Manager and the Director.

Revokes and Replaces and other issues

5. This Approval revokes and replaces the previously issued Approval No. A261602 and notices issued thereto.

Legal Rights and Responsibilities

6. Where there is a conflict between a provision of any document referred to in Schedule "A", and the conditions of this Approval, the conditions in this Approval shall take precedence. Where there is a conflict between the documents listed in Schedule "A", the document bearing the most recent date shall prevail.
7. The requirements specified in this Approval are the requirements under the EPA. The issuance of this Approval in no way abrogates the Applicant's legal obligations to take all reasonable steps to avoid violating other applicable provisions of this legislation and other legislation and regulations.
8. The requirements of this Approval are severable. If any requirement of this Approval, or the application of any requirement of this Approval to any circumstance, is held invalid, the application of such requirement to other circumstances and the remainder of this Approval shall not be affected in anyway.
9. The Applicant shall ensure compliance with all the terms and conditions of this Approval. Any non-compliance constitutes a violation of the EPA and is grounds for enforcement.
10. (a) The Applicant shall, forthwith upon request of the Director, District Manager, or Provincial Officer (as defined in the Act), furnish any information requested with respect to compliance with this Approval, including but not limited to, any records required to be kept under this Approval; and
- (b) In the event the Applicant provides the Ministry with information, records, documentation or notification in accordance with this Approval (for the

purposes of this condition referred to as "Information"),

- (i) the receipt of Information by the Ministry;
- (ii) the acceptance by the Ministry of the Information's completeness or accuracy; or
- (iii) the failure of the Ministry to prosecute the Applicant, or to require the Applicant to take any action, under this Approval or any statute or regulation in relation to the Information;

shall not be construed as an approval, excuse or justification by the Ministry of any act or omission of the Applicant relating to the Information, amounting to non-compliance with this Approval or any statute or regulation.

Inspections by the Ministry

11. No person shall hinder or obstruct a Provincial Officer from carrying out any and all inspections authorized by the OWRA, the Act, the PA, the SDWA or the NMA of any place to which this Approval relates, and without limiting the foregoing:
 - (a) to enter upon the premises where the approved processing is undertaken, or the location where the records required by the conditions of this Approval are kept;
 - (b) to have access to, inspect, and copy any records required to be kept by the conditions of this Approval;
 - (c) to inspect the Site, related equipment and appurtenances;
 - (d) to inspect the practices, procedures, or operations required by the conditions of this Approval; and
 - (e) to sample and monitor for the purposes of assessing compliance with the terms and conditions of this Approval or the Act, the OWRA, the PA, the SDWA or the NMA.

Correspondence

12. The Applicant shall ensure that all communications/correspondence made pursuant to this Approval includes reference to the Approval number A261602.

Freedom of Information

13. Any information relating to this Approval and contained in Ministry files may be made available to the public in accordance with the provisions of the Freedom of Information and Protection of Privacy Act, R.S.O. 1990, C. F-31.

Keeping of Records

14. All records and monitoring data required by the conditions of this Approval must be kept on the Owner's premises for a minimum period of two (2) years from the date of their creation.

LANDFILL OPERATIONS

15. The landfill shall be developed, operated and maintained in accordance with the plans and specifications in the documents listed in Schedule "A", including the relocation of historical fill within the Footprint and the staged deposition of waste in the Footprint according to the Plan of Development & Operations Report Addendum No. 1 document noted in Item 22 in Schedule "A".
16.
 - (a) The theoretical maximum volumetric capacity for waste disposal at this Site is 350,000 cubic metres as per Item 8 of Schedule "A". This theoretical capacity includes waste, daily, and intermediate cover, but excludes final cover.
 - (b) Maximum daily quantity of waste being received at the Site for final disposal in the landfilling area shall not exceed 28.5 tonnes per day.
17.
 - (a) The lands comprising the Site total 34.0 hectares in area (Footprint plus Buffer) and is shown on Drawing No. 13 contained in Volume 2 of item 11, Schedule "A"; and
 - (b) Wastes may only be disposed of within the 3.3 hectare Footprint as described in the Plan of Development & Operations Report Addendum No. 1 document noted in Item 22 in Schedule "A".
18. Only Municipal Wastes may be received for landfilling at the Site.
19. For all appliances or equipment which contain, or may contain refrigerants, including but not restricted to refrigerators, freezers, dehumidifiers and air-conditioning systems, the Owner shall:
 - (a) If the appliance or equipment is not tagged in accordance with Ontario Regulation (O.Reg.) 463/10 under the EPA, then it must be stored in an upright position and in such a manner to allow for the safe handling and removal of refrigerants;
 - (b) Ensure refrigerant removal is completed by a licensed technician as required by O.Reg. 463/10 prior to removal from the Site; and
 - (c) Maintain a detailed log, which shall include as a minimum the following information:
 - (i) Upon receipt, record the date, type of appliance or equipment, quantities received, source and refrigerant removal tag details;
 - (ii) If the appliance or equipment is not tagged, this information shall be noted in the log;
 - (iii) If refrigerant removal is required, note the date of refrigerant removal and name and license number of the technician; and
 - (iv) Upon removal from the Site, note the date, quantities of each appliance

or equipment types, hauler name and, if applicable, the hauler's Approval number, the destination name and, if applicable, the Approval number of destination.

20. No liquid industrial waste or hazardous wastes as defined under Regulation 347 shall be received for landfilling at the Site.
21. The geographical area from which waste may be received shall be limited to the Service Area.

Signs

22. The Owner shall place a sign at the main entrance to the Site on which is displayed in prominent letters the following information:
 - (a) the name of the Site and Approval Number;
 - (b) the Owner's Name;
 - (c) the approved hours of operation;
 - (d) the hours the Site is open to accept waste from the public;
 - (e) the telephone number for reporting emergency situations occurring at the Site during non-operating hours;
 - (f) the telephone number for reporting of complaints;
 - (g) the Approval number for the Site; and
 - (h) the waste types acceptable for landfilling.

Operations

23. Waste shall be deposited in a manner that minimizes the exposure area at the landfill working face and shall be compacted before cover material is applied.
24. No waste shall be received at the Site except during operating hours and while under the supervision of a Competent Person.
25. The normal operating hours of the Site, shall not exceed 9:00 a.m. to 5:00 p.m., Monday to Saturday. The Site shall be closed on Sundays and Statutory Holidays. The Site may open two hours earlier and two hours later than the waste disposal operating hours for maintenance and placement of cover. These hours of operation may be temporarily adjusted in writing by the District Manager.
26. During non-operating hours, the Site entrance gate shall be locked to secure against access by unauthorized persons.

Operational Cover

27. Wastes shall be compacted and then covered with a minimum of 15 centimetres of operational cover at the end of each operating day.

Cover Materials Allowed for Daily and Intermediate Cover

28. (a) The following materials may be used as operational cover:
- (i) soils and granular soils;
 - (ii) subject to Conditions 29.1, 29.2, 29.3, and 29.4, of this Approval, non-hazardous excess soil;
 - (iii) wood chips;
 - (iv) non-hazardous foundry sand;
 - (v) compost imported to the Site; and
 - (vi) processed material described in Condition 64 below.
- (b) All of the materials listed in Condition 28 (a) of this Approval shall all be non-hazardous and shall meet the Land Disposal Requirements of Regulation 347;
- (c) The use of any other alternative materials as operational cover material is subject to approval by the Director; and
- (d) Use of specific cover materials shall be discontinued within two (2) operating days of receipt of written notification, stating the reason(s) why use of the cover materials has proven to be environmentally unsuitable, from the District Manager.

Use of Excess Soil as Cover

- 29.1 Solid non-hazardous excess soil may be used for daily/intermediate cover but only on slopes where surface water drainage is into the waste fill and isolated from any storm water collection system.
- 29.2 The Owner shall keep a record of the delivery of all excess soil to the Site. The record shall include the following information as a minimum:
- (i) The name and Approval number of the hauler;
 - (ii) The name and address of the generator of the excess soil and the source of the excess soil delivered;
 - (iii) The date and time of delivery;
 - (iv) Analytical test results of the excess soil, conducted prior to delivery to the Site by a professional engineer, geoscientist or other qualified person, that is independent of the generator and the hauler; and
 - (v) If the excess soil was a characteristic waste but had been properly treated to remove the characteristic waste designation prior to receipt at the Site, a copy of the Land Disposal Restrictions notification form required by Regulation 347 along with a statement that such excess soil was not "leachate toxic waste" as defined in Regulation 347.
- 29.3 The volume of excess soils stored at the Site shall not exceed the quantity required

for three months use.

29.4 Excess soil for use as cover shall be stockpiled within the 3.3 hectare Footprint.

Landfill Gases - Combustible Gas Detectors for On-Site Buildings

30. (a) The Owner shall ensure that methane combustible gas detectors (alarms) shall be installed in all enclosed on-Site buildings;
- (b) All alarms shall be clearly audible and visible from outside the buildings;
- (c) The alarms shall be maintained in a fully-operable condition at all times;
- (d) The alarms shall provide a warning upon exceeding 10 percent of the lower explosion level;
- (e) The alarms shall be calibrated at least once every two (2) years or as required by the alarm manufacturer. Calibration shall be completed in accordance with the manufacturer's instructions; and
- (f) A record of where the alarms are located and a record of their calibration shall be kept on Site.

Water Supply

31. No water obtained from surface water or from a well constructed on the Site shall be used for drinking purposes. Any water supply system that obtains water from a well or surface water source on the Site shall be clearly marked to indicate that the water is not potable.

Vermin & Vector

32. The Owner shall:
- (a) implement necessary housekeeping procedures to eliminate sources of attraction for vermin and vectors; and
- (b) if necessary, hire a qualified, licensed pest control professional to design and implement a pest control plan for the Site. The pest control plan shall remain in place, and be updated from time to time as necessary, until the Site has been closed and this Approval has been revoked.

Litter

33. Litter shall be controlled at the Site through use of litter control fencing. Litter shall be picked up as needed. At a minimum, the Site attendant shall undertake a weekly inspection for litter.

Burning

34. Burning of waste at the Site is restricted as follows:

- (a) only brush and clean wood may be burned;
- (b) clean wood does not include painted, laminated (including but not limited to chip board and plywood), or treated woods;
- (c) burning shall be restricted to the designated burn area;
- (d) burning shall be undertaken only during daylight hours when wind speed are under 10 kilometres per hour and when there is an attendant on-Site; and
- (e) burning shall be discontinued upon the written direction of the District Manager.

Contaminant Attenuation Zone

35. The Buffer shall be maintained for the Site comprised of the lands shown as "Approved CAZ" and Proposed Supplemental CAZ" on Figure 13 from Volume II, Item 11 of Schedule "A".

Monitoring

36. (1) The Owner shall monitor groundwater, surface water and landfill gas at the Site according to Schedule "B".
- (2) Changes to the monitoring plans for the Site shall be submitted to the District Manager for review by regional technical support staff prior to submission to the Director for approval.
- (3) Changes to the monitoring plans for which the Owner has received written concurrence from the District Manager shall be submitted to the Director for approval prior to implementation.
37. All monitoring wells shall be properly capped, locked, and protected from damage. Any monitoring wells that are damaged shall be repaired or replaced forthwith in a manner that ensures that no more than one regular sampling event is missed.
38. All monitoring wells which are no longer required as part of the monitoring program, and which have been approved in writing by the District Manager for abandonment, shall be decommissioned in accordance with Ontario Regulation 903, R.R.O. 1990, made under the OWRA, in a manner which will prevent contamination through the abandoned monitoring well. A report on the abandonment of the monitor shall be included in the next report required by Condition 58 of this Approval.

Trigger Mechanisms and Contingency Plans

39. The Owner shall ensure that the reasonable use criteria outlined in the Reasonable Use Guideline are met at the Site property line.

40. The Owner shall abide by the following trigger mechanisms for groundwater in accordance with the document entitled Trigger Mechanism & Contingency Plan (Revised) dated April 2018 noted in Item 22 in Schedule "A" and the correspondence described in Item 23 in Schedule "A":

Compare Site boundary downstream groundwater quality to the reasonable use criteria (RUC) using the method specified in Reasonable Use Guideline B-7. The background value used in the RUC calculation for each trigger parameter shall be the 95th percentile background concentration from historic sampling events. Trigger parameters are to include chloride, sodium, iron, alkalinity, DOC, barium and boron. The trigger level for each parameter shall be 80% of the RUC, or where the indicator parameter is naturally elevated (i.e. RUC is less than background) the trigger level for that parameter shall be the 95th percentile background concentration, for monitoring locations that are less than 50 metres from the property boundary.

If two or more parameters exceed the trigger levels for those trigger parameters at the same location (wells(s) down gradient of the Site) for two consecutive events, take the following action:

- (i) notify the District Manager immediately of the result;
 - (ii) conduct resampling within thirty (30) days of receipt of the result;
 - (iii) conduct an investigation into the cause of the adverse result and submit a report within 120 days of the resampling date to the District Manager that includes an assessment of whether contingency measures need to be carried out;
 - (iv) if contingency measures are needed, submit detailed plans, specifications and descriptions for the design, operation and maintenance of the contingency measures, and a schedule as to when these measures will be implemented, to the Director and notify the District Manager at the same time as the report is submitted to the Director; and
 - (v) implement the required contingency measures upon approval by the Director.
41. (a) The Owner shall carry out the monitoring program to determine compliance with the trigger mechanism for surface water at downstream surface water sampling locations. The Owner shall abide by the following trigger mechanisms for surface water, in accordance with the document entitled Trigger Mechanism & Contingency Plan (Revised) dated April 2018 noted in Item 22 in Schedule "A" and the correspondence described in Item 23 in Schedule "A":
- (i) Trigger Monitoring Locations – Trigger and compliance monitoring locations shall be at the downstream sampling station identified as SW1, as listed in Table B-1 of Schedule "B" in this Approval.

(ii) Trigger Parameters and Level/Criteria – The trigger parameters for surface water shall include alkalinity, chloride, sodium, barium, boron and iron. The trigger level for downstream surface water quality shall:

- Be equivalent to surrogate values previously established for the Site;
- Where a PWQO exists, be the higher of 75% the PWQO or the background surface water quality; or
- For parameters in which a PWQO value does not exist and a surrogate value has not been previously established, be based on the groundwater trigger level or the background concentration in groundwater.

Using this approach, the trigger levels for surface water are as follows:

Alkalinity = 301 mg/L;

Barium = 0.22 mg/L;

Boron = 1.0 mg/L;

Chloride = 26 mg/L;

Iron = 0.23 mg/L;

Sodium = 20.4 mg/L.

- (b) The results of this monitoring shall be assessed promptly when received, and if a result exceeds the trigger level specified above, the Owner shall re-sample within thirty (30) days of receiving the result. A confirmed trigger level shall be considered to be reached when two (2) consecutive sets of events exceed the specific trigger criteria for two (2) or more parameters at the same location(s).
- (c) In the event of a confirmed exceedance of any site-specific trigger level, measured at the trigger locations, as identified in Condition 41 above, the District Manager shall be notified immediately, and an investigation into the cause and the need for implementation of remedial/contingency action, shall be conducted and a report submitted to the District Manager within 120 days following the confirmed exceedance,
- (d) If contingency measures are required, the Owner shall submit detailed plans, specifications and descriptions for the design, operation and maintenance of the contingency measures, and a schedule of implementation, to the District Manager for review by regional technical support staff prior to submission to the Director for approval, and shall initiate/implement the contingency measures within a reasonable time following approval by the Director. A summary of the results of this monitoring and any trigger/contingency action taken, shall be reported in the subsequent Annual Monitoring Report.

Certificate of Requirement

42. If not already complied with, no operation shall be carried out at the Site after sixty days from the date of this Approval unless this Approval has been registered by the Owner in the appropriate Land Registry Office against title to each of the property parcels that make up the Site, and a duplicate registered copy thereof has been returned to the Director.

Public Liaison Committee (PLC)

43. The Owner shall make every attempt to establish and maintain a Public Liaison Committee (PLC) to review and provide recommendations on annual operational and monitoring reports, Site protocols, and any other information which is pertinent to operations at the Site and to the handling of waste that the Site may receive and manage. These recommendations, along with any minority positions, shall be forwarded to the Owner for consideration. The PLC shall not exercise any supervisory, regulatory or approval roles with respect to the Site. The Owner shall maintain a list of current documents which govern the operation of the Site. The PLC shall be entitled upon request to copies of records and documents in the Owner's possession relevant to the Site, except for such information as the Owner is entitled to withhold from the public at law.

WASTE TRANSFER DEPOT and MHSW DEPOT

44. (a) Waste at the Public Drop-Off Area shall be stored on-Site in accordance with Item 18 of Schedule "A"; and
- (b) The maximum quantity of waste stored on-Site at the Public Drop-Off Area shall be in accordance with Schedule "D".
45. A fire extinguisher of appropriate size and type shall be available to the Site attendant. It shall be maintained in operable condition at all times.

Site Operations - MHSW depot

46. The Municipal Hazardous and Special Waste (MHSW) depot for the Site shall be developed, operated and maintained in accordance with the Conditions of this Approval and the plans and specifications in Schedule "A" of this Approval.
47. The following Conditions apply to the MHSW depot:
- (a) The MHSW Depot may accept only MHSW;
- (b) The operation of the MHSW depot is limited to the Bulking of waste oil, waste anti-freeze, the collection of waste paint for Bulking or offer for re-use to the public and the collection and transfer of MHSW and associated MHSW solids and sludges;
- (c) The Owner shall have absolute discretion in the refusal of any waste;
- (d) MHSW shall be only accepted at the MHSW depot:
- (i) from the Service Area defined for MHSW;
- (ii) from householders responsible for those wastes;
- (iii) from industrial, commercial and institutional (IC&I) businesses and farm operations where such wastes are considered unrelated to the

- operation of the business;
- (iv) for any MHSW coming to the Site from industrial, commercial and institutional (IC&I) businesses and farm operations, the Owner shall fill out a form that identifies the name of the business or operation, the Vehicle Licence Plate number, the name of the person dropping off the waste, and shall have that person sign the form indicating that the business or operation is currently exempt from generator registration requirement for hazardous waste and/or waste oil and/or anti-freeze because they generate less than 5 kg per month of hazardous waste and/or less than 25 litres of waste oil and/or less than 25 litres of waste anti-freeze per month; and
 - (v) the maximum amount of MHSW that may be accepted at the Site from industrial, commercial and institutional (IC&I) businesses and farm operations in one day is 5 oil filters, 25-litres of waste oil, 25-litres of waste anti-freeze and 25-kilograms of hazardous waste;
- (e) The maximum amounts of MHSW that are allowed to be received per day, stored on Site and the maximum allowed time of storage on Site are outlined in Schedule "D" of this Approval;
- (f) MHSW storage shall be restricted to three areas of the Site as follows:
- (i) An outdoor caged area of maximum size of 9 square metres, for the storage of waste cylinders such as propane containers;
 - (ii) A Special Waste Building for storage of oil and antifreeze, WEEE and wet cell batteries;
 - (iii) a 45-cubic metre MHSW storage container for the storage of the remainder of the MHSW that is allowed to be stored on Site;
- (g) Storage of MHSW in the 45-cubic metre MHSW storage container shall be in 205-litre drums that are either lab packed or contain non fragile solids or a homogeneous liquid;
- (h) A maximum of 100 of the 205-litre drums containing MHSW may be stored in the 45-cubic metre MHSW storage container;
- (i) The holding tanks for waste oil or anti-freeze shall never exceed 90% of their capacities;
- (j) In regards to the haulage of the 45-cubic metre MHSW storage container from the Site the following applies:

Before the 45-cubic metre MHSW storage container is allowed to be loaded onto a roll-off container truck, a competent person shall inspect the waste that is stored in the container and assess whether the storage is sufficiently safe and secure to allow it to be loaded onto a roll-off container truck. Once the competent person is satisfied that the waste is properly secured in the container, they shall provide written permission for the container to be loaded. A copy of the written permission shall be kept as part of the daily records that are required by Condition 57 of this Approval; and

- (k) The receipt of waste class 312, is restricted to Sharps and Syringes that are received in biohazardous containers.

48. Management and Storage of MHSW shall be in accordance with the Storage Guidelines and the MHSW Guidelines, including but not limited to the following aspects:

- (a) storage areas and containers containing flammable and/or ignitable materials shall be stored and managed in accordance with the Fire Code and shall be adequately grounded;
- (b) waste motor oil may be bulked in a double-walled above ground waste oil storage tank that has a maximum capacity of 2200 litres. In addition, a maximum of 300 litres of oil may be stored in the 45-cubic metre MHSW storage container;
- (c) waste anti-freeze may be bulked in a storage tank maximum capacity of 1,300 litres that is provided with secondary containment of minimum capacity of 1430 litres. In addition, a maximum of 700 litres of waste anti-freeze may be stored in the 45-cubic metre MHSW storage container;
- (d) the waste oil and waste anti-freeze tanks shall be clearly labelled indicating their contents;
- (e) with respect to the storage of waste wet cell batteries the following applies:
 - (i) they may only be stored in neatly arranged non conducting wood or fibreglass trays for secondary containment;
 - (ii) they shall be placed on a skid of approximate size 1.1 metres square;
 - (iii) if they are not cracked, they may be stacked to a maximum of 4 high on a skid if the batteries are suitable for stacking;
 - (iv) if safe to do so, a maximum of 2 skids of wet cell batteries may be stacked on one another;
 - (v) batteries on skids shall be banded or shrink wrapped on the pallets before shipping; and
 - (vi) cracked or leaking batteries shall not be stacked and shall be handled with best management practices;
- (f) waste propane cylinders and other waste cylinders may be stored only outside in a secure segregated area in a manner which prevents cylinders from being knocked over or cylinder valves from breaking;
- (g) incompatible types of waste shall be segregated from one another during storage;
- (h) waste received in fragile containers shall be lab packed if safe to do so;
- (i) with respect to waste pharmaceuticals the following applies:
 - (i) they may only be contained in a locked container to prevent unauthorized access or

- removal; and
- (ii) when they are ready for transport, pharmaceuticals may be lab packed;
- (j) the Owner shall have sufficient drums and lab-pack containers available on the premises for the storage of the waste collected;
- (k) paint may either be bulked in to 205-litre drums or offered to the public for re-use;
- (l) with the exception of cylinders such as used propane tanks, all MHSW shall be stored indoors;
- (m) storage containers shall be clearly labelled indicating the type and nature of the MHSW stored;
- (n) the indoor storage area shall be equipped with spill clean-up material;
- (o) the indoor storage areas for MHSW shall be equipped with a means of ventilation;
- (p) mercury containing devices such as switches, thermostats and thermometers shall be packed in suitable specialized containers or drums with packaging to prevent breakage;
- (q) fluorescent bulbs and tubes shall be stored in suitable specialized containers or in drums with packaging to prevent breakage;
- (r) sharps and syringes shall be placed in a sealed container that is labelled biohazardous and lab packed into a 205-litre storage drum or other suitable container;
- (s) dry cell batteries shall be stored separately in pails by type (i.e. lithium batteries stored separately from nickel-cadmium batteries etc.) and in manner which prevents spontaneous ignition of stored batteries; and
- (t) the electric terminals of lithium batteries shall be taped with electrical insulating tape to prevent shorting of the electric terminals.

49. With respect waste oil, paint or ballasts that may contain PCBs the following apply:

- (a) For unidentified oils and/or oils which are suspected of containing PCBs, they shall not be mixed (bulked), with other oils prior to testing. Oils which are lab packed are not considered to be mixed under this Approval;
- (b) oil based paint which has been manufactured prior to 1972 shall be assumed to contain PCBs unless tested and found to contain less than 50 parts per million of PCBs;
- (c) Waste light ballasts shall be checked by a competent person to see if they may contain PCBs. If they are found to likely contain PCBs, they shall be treated as PCB waste and shall be lab packed in a 205-Litre drum that is labelled "Ballasts that may contain PCBs"; and

- (d) Light ballasts that are suspected of containing PCBs and waste oil, and paint which have been found to contain PCBs at or above 50 parts per million shall be reported forthwith to the District Manager and shall be managed in accordance with Ontario Regulation 362, made under the EPA and stored or removed from the Site to an approved PCB storage site, in accordance with written instructions from the District Manager.

50. The Owner may only offer waste paint for reuse provided that the following conditions are met:

- (a) the container is labelled as to its contents;
- (b) the container is undamaged such that the material may be transported without risk of leaks or spills;
- (c) all transactions are recorded by invoice; and
- (d) information on the type and volume of waste paint returned to the public through the MHSW depot shall be recorded in the records that are required by Condition 57 of this Approval.

COMPOSTING

51. Compostable waste received at the Site shall not exceed 20 tonnes per day.

Organic Waste Composting - Waste Type

52. (1) The Organic Waste Compost Pad is approved to receive Organic Waste of the following types including clean woodchips and bulking agents as necessary:
- (a) Food: All food including meat, bones, peels, cores, tea bags, coffee filters and grinds and eggshells;
 - (b) Household Organics: Paper plates and cups, paper bags, pet fur, pet feces, dryer lint, dust bunnies, human hair, shredded paper, tissues, paper towels, wooden toothpicks/popsicle sticks and egg cartons; and
 - (c) Yard Waste: grass clippings, weeds, leaves, brush, small branches and tree limbs having a diameter not greater than 2.5 centimeters (1-inch) and less than 0.5 meters (20 inches) in length, hedge trimmings and all woody plants including vines, rose bushes and the like that can fit in the compost cart with the lid closed.
- (2) The Organic Waste Compost Pad is approved for the following waste management activities:
- (a) the receipt and windrow composting of organic waste; and
 - (b) ancillary activities to meet market specifications such as blending of Finished Compost with wood chips and/or soil.

Adverse Effects

53. Windrow composting, curing and storage on the Organic Waste Compost Pad shall be operated and maintained such that their operation does not create an Adverse Effect as defined in the Act.
54. If in the opinion of the District Manager:
 - (a) the duration of organic waste storage from Condition 53 results in Adverse Effect and odour complaint(s), the Owner, in consultation with the District Manager shall undertake appropriate steps, including reducing organic waste storage duration, so that Adverse Effect are eliminated;
 - (b) if the odours causing Adverse Effect originating from the Site are not eliminated in accordance with Condition 54(a) above, the Owner shall discontinue operating the Organic Waste Compost Pad until additional, appropriate construction/installation of contingency measures are completed satisfactorily to the District Manager and the odour is eliminated.
55. In the event that odours from the Site consistently re-occur, and cause an Adverse Effect outside the boundary of the Site, the Owner shall acquire the services of a qualified consultant to undertake an odour management study.

Organic Waste Handling and Rejected Waste

56. All organic waste arriving at the Site shall be inspected by a Competent Personnel, prior to its acceptance at the Site, to ensure that the waste meets the requirements of this Approval.
57. Residual waste arising out of the processing of the organic waste that can be accepted in the landfilling area of the Site shall be immediately transferred to the active face of the landfill.
58.
 - (a) If the rejected waste is a waste acceptable to be landfilled at the Site, the rejected waste shall be immediately disposed of at the active face of the Site;
 - (b) If the rejected waste is a non-hazardous waste but cannot be landfilled at the Site, it shall be removed off-site within forty eight (48) hours from its receipt and disposed of at a waste disposal site approved by the Ministry to accept such waste.

Stormwater and Leachate Management at the Organic Waste Compost Pad

59. The Organic Waste Compost Pad shall be graded and/or constructed and maintained in good order such that surface water run-off is diverted away from compost piles and raw material storage areas and such that the Organic Waste Compost Pad remains free of any accumulation of water from rain and snow.

60. The Owner shall notify the local fire department of the Organic Waste composting operations at the Site, including the storage of clean woodchips,
61. The Owner shall have in place a contingency plan which shall include, but not be limited to:
 - (a) procedures to follow in the event of equipment failures, power outages, inclement weather; and
 - (b) procedures to follow for other events which may cause an operational upset.

Employee Training

62. The Owner shall ensure that Site personnel are trained, and receive annual refresher training, on the operation and management of the Organic Waste Compost Pad, in accordance with the specific job requirements of each individual, including but not limited to:
 - (a) proper receiving and recording procedures (including recording procedures of wastes which are refused at the Site);
 - (b) proper storage, handling and sorting procedures;
 - (c) operation of equipment and procedures to be followed in the event of a process upset or an emergency situation,
 - (d) recording procedures;
 - (e) inspection procedures and preventative maintenance program;
 - (f) nuisance impact control procedures;
 - (g) procedures for recording and responding to public complaints;
 - (h) any environmental concerns pertaining to the wastes accepted at the Site; and
 - (i) occupational health and safety concerns pertaining to the wastes received;

Compost Curing Operations and Quality Standards

63. The Owner shall ensure that composting and curing are conducted subject to the following conditions:
 - (a) Organic Waste accepted for organic waste composting shall be limited to composting feed stock specified in Condition 52(1) including clean wood chips. All organic waste received shall not exceed the maximum concentrations for metals in accordance with Table 3.1 of Compost Quality Standards for intended end use category of organic compost (AA, A or B);
 - (b) all activities associated with the organic waste composting operation shall take place on the Organic Waste Compost Pad;
 - (c) Organic Waste shall be incorporated into windrows within twenty four (24) hours of receipt;
 - (d) Finished Compost may be stored for a maximum of eighteen (18) months after the curing phase is complete;
 - (e) windrows shall be arranged in a manner which allows equipment access for efficient turning of windrows and to allow access for emergency vehicles;
 - (f) windrows shall be constructed at bulk densities and heights which promote aerobic conditions;

- (g) all Organic Waste being composted shall be held at a temperature of at least 55 °C for a minimum of fifteen (15) cumulative days to ensure proper bacteria growth and pathogen inactivation. During this period, the temperature of the Organic Waste being composted shall be monitored and recorded on each day that the Organic Waste composting facility is in operation **OR** a temperature monitor that demonstrates that the windrow did not drop below 55 degrees Celsius may be used. During the high temperature period, the windrows shall be turned at least five times;
 - (h) during the remainder of the Organic Waste composting process, the temperature shall be monitored and recorded on a weekly basis at a minimum; and
 - (i) Organic Waste compost shall be cured for a minimum of six (6) months; **OR** the Organic Waste compost has been cured for a minimum of 21 days from the day the last portion of material went into the batch, and the respiration rate is less than, or equal to, 400 milligrams of oxygen per kilogram of volatile solids (on a dry weight basis) per hour or less than or equal to, 4 milligrams of carbon in the form of carbon dioxide per gram of organic matter (on a dry weight basis) per day.
64. (a) The Owner shall ensure that all incoming Organic Waste received does not exceed the maximum concentrations for metals as set out in Table 3.2 of the Compost Quality Standards, for the intended end use category of compost.
-
- (b) Prior to being transferred from the Site for its intended end use, the Owner shall:
 - (i) conduct quality control testing of the Finished Compost in accordance with the requirements set out in the Compost Quality Standards;
 - (ii) ensure that all production records demonstrate compliance with the temperature and residency time requirements for pathogen inactivation set out in the Compost Quality Standards.
 - (c) All sampling and testing required in this Approval for the purpose of verifying compliance shall be undertaken in compliance with the Compost Quality Standards.
 - (d) Finished Compost which does not exceed the maximum concentrations for metals as set out in Column 2 of Table 3.1 of the Compost Quality Standards and which complies with the foreign matter quality requirements, the maturity criteria, the pathogen reduction requirements and the pasteurization temperature and residency time requirements set out in the Compost Quality Standards may be transferred from the Site:
 - (i) for unrestricted use as Category AA Compost;
 - (ii) for use as a non-agricultural source material in accordance with the NMA; or
 - (iii) for use as alternative daily, interim or final landfill cover.

- (e) Finished Compost which does not exceed the maximum concentrations for metals as set out in Column 3 of Table 3.1 of the Compost Quality Standards and which complies with the foreign matter quality requirements, the maturity criteria, the pathogen reduction requirements and the pasteurization temperature and residency time requirements set out in the Compost Quality Standards may be transferred from the Site:
 - (i) for unrestricted use as Category A Compost, provided that the labelling requirements as specified in the Compost Quality Standards are met;
 - (ii) for use as a non-agricultural source material in accordance with the NMA; or
 - (iii) for use as alternative daily, interim or final landfill cover.
- (f) Finished Compost which does not exceed the maximum concentrations for metals as set out in Column 4 of Table 3.1 of the Compost Quality Standards and which complies with the foreign matter quality requirements, the maturity criteria, the pathogen reduction requirements and the pasteurization temperature and residency time requirements set out in the Compost Quality Standards may be transferred from the Site:
 - (i) for use as a non-agricultural source material in accordance with the NMA; or
 - (ii) for use at a waste disposal facility approved to receive this type of waste.
- (g) Finished Compost which does not exceed the maximum concentrations for metals as set out in Table 3.1 of the Compost Quality Standards and which complies with the foreign matter quality requirements, the pathogen reduction requirements and the pasteurization temperature and residency time requirements but not with the maturity requirements set out in the Compost Quality Standards is considered to be an Immature Compost and a waste and shall:
 - (i) be re-tested and/or shall continue to undergo curing at the Site;
 - (ii) be disposed of as waste at a waste disposal site approved by the Ministry, or its equivalent if in jurisdictions outside of Ontario, to accept such waste.
- (h) Finished Compost which does not exceed the maximum concentrations for metals as set out in Table 3.1 of the Compost Quality Standards and which complies with the foreign matter quality requirements, the maturity requirements but not with the pathogen reduction requirements and the pasteurization temperature and residency time requirements set out in the Compost Quality Standards is considered to be a waste and shall:
 - (i) be returned to the Composting process for pasteurization as set out in this Approval;
 - (ii) be disposed of as waste at a waste disposal site approved by the Ministry, or its equivalent if in jurisdictions outside of Ontario, to accept such waste.

- (i) If Finished Compost exceeds the maximum concentrations for metals in Compost for its intended end use, as set out in Table 3.1 of the Compost Quality Standards, but meets the maximum concentrations for metals in the incoming organic waste referred to as feedstock in Table 3.2 of the Compost Quality Standards, it may be returned to the composting process as waste for re-processing and handled in accordance with the applicable end use requirements.

Environmental Emergency Plan

65. (1) The Owner shall maintain an Environmental Emergency Plan (E2 Plan) at the Site. The E2 Plan shall include, but is not limited to:
- (a) the preparation for, the prevention of, the response to and the recovery from an environmental emergency;
 - (b) a list of emergency response equipment and spill clean up materials, including names and telephone numbers of waste management companies available for emergency response; and
 - (c) a notification protocol with names and telephone numbers of persons to be contacted, including Owner's personnel, the Ministry's Spills Action Centre and District Office, the local Municipality and Fire Department.
- (2) The Owner shall annually review and update as needed the Environmental Emergency Plan (E2 Plan). An updated copy of the E2 Plan shall be kept in a central location available to the operating personnel and for inspection by the Ministry. A copy of the E2 Plan shall be submitted within 30-days of an update to:
- (a) the District Manager; and
 - (b) the local Fire Department.
- (3) The Owner shall ensure that:
- (a) the equipment and materials outlined in the Environmental Emergency Plan are in a good state of repair, fully operational and immediately available; and
 - (b) all operating personnel are fully trained in the Environmental Emergency response equipment and materials use and in the procedures to be employed in the event of an emergency.

Inspections

66. On each operating day, a visual inspection by a competent person shall be conducted of the following areas of the Site:
- (a) loading/unloading area(s);
 - (b) processing area(s);
 - (c) active face of the landfill area;
 - (d) storage area(s); and

- (e) perimeter security fence or barriers to ensure that:
 - (i) the Site is secure;
 - (ii) there are no off-Site impacts such as vermin, vectors, odour, dust or litter resulting from the operation of the Site;
 - (iii) that the operations of the Site are not causing any adverse effects on the environment; and
 - (iv) the Site is being operated in compliance with the Approval.

67. The Owner shall have a Competent Person:

- (a) on a regular basis, inspect all containment systems for cracks and spalling;
and
- (b) on an annual basis, examine or test the oil storage tank and antifreeze storage tank to ensure there are no leaks.

68. (a) The Owner shall ensure that, on each operating day, a visual inspection of the following areas of the Organic Waste Compost Pad and other areas of the Site is conducted by a Competent Person ensure security and cleanliness:

- (i) receiving areas;
- (ii) processing areas;
- (iii) storage areas; and
- (iv) security fence and entrance/exit gates.

- (b) Any deficiencies that might negatively impact the environment detected during these regular inspections shall be promptly corrected.

69. (a) The Owner shall develop and implement a preventative maintenance program for the Owner's on-site equipment (excluding on-site equipment owned by a contractor), associated with the processing and managing of Organic Waste and/or Finished Compost.

- (b) The preventative maintenance program shall consist of the following as a minimum:

- (i) the program shall specifically stipulate the part of the equipment inspected for all process equipment on-site;
- (ii) the frequency of the inspections required and carried out; and
- (iii) the dates of any repairs conducted.

- (c) The preventative maintenance programs for the Owner's on-site equipment and contracted on-site equipment shall be available at Site for inspection by a Provincial Officer upon request.

70. Any deficiencies noted during the inspections required by Conditions 66 to 69 of this Approval shall be promptly corrected, including temporarily ceasing operations at the Site if needed.

Daily Log Book and Record Keeping

71. A log book or electronic file shall be maintained for a minimum of two (2) years and shall include daily records of the following information. All amounts must be recorded in metric units:

- (a) date of record;
- (b) the type, time of arrival, hauler name, Approval number (if applicable), source and quantity (tonnes) of all waste received at the Site in excess of 0.25 tonnes (250 kilograms);
- (c) all complaints from the public received by the Owner and an indication of the action taken by the Owner in response;
- (d) a record of any excess soils received at the Site in accordance with Condition 29.2 of this Approval;
- (e) a list of the refusal of waste shipments, the reason(s) for refusal, and the origin of the waste, if known;
- (f) calculation of the total quantity (by weight) of waste received at the Site for each day;
- (g) a record of litter collection activities;
- (h) a record of the forms collected in accordance with Condition 47 (d) (iv) of this Approval;
- (i) types, quantities, source and persons delivering the MHSW;
- (j) daily estimates of the amount of MHSW and other wastes stored at the Site;
- (k) quantities and destination of waste and residual materials shipped from the Site;
- (l) quantities of paint provided to the public for reuse;
- (m) any environmental and operational problems, that could negatively impact the environment or human health, encountered during the operation of the Site and any actions taken to mitigate the situation;
- (n) the action taken for the clean up or correction of a spill, the time and date of the spill or process upset, and for spills, the time that the Ministry and other persons were notified of the spill in fulfilment of the reporting requirements in the Act; and
- (o) any recommendations to minimize environmental impacts from the operation of the Site.

72. For composting operations, the Owner shall maintain, for a minimum of two (2) years, a log book or electronic file format the following information on the days the composting facility at the Site is open:

- (a) date of record;
- (b) quantities and source of organic waste received and quantity of bulking material used;
- (c) the amount of Finished Compost and/or rejected compost shipped from the Site;

- (d) a record of daily inspections including the following information as a minimum;
 - (i) time and date of inspection;
 - (ii) name and title of inspector;
 - (iii) potential impacts noted;
 - (iv) remedial actions taken; and
 - (v) measures to prevent the problem from recurring;
- (e) required windrow temperature readings;
- (f) composting activities undertaken (e.g. windrow formation, turning, screening etc);
- (g) meteorological information including ambient temperature, wind direction and wind speed; and
- (h) with respect to the compost sampling required by Condition 64, the Owner shall maintain the following records as a minimum:
 - (i) sample collection locations and volume of the samples collected;
 - (ii) day and time of collection;
 - (iii) sample handling procedures;
 - (iv) parameters tested for and the resulting concentrations;
 - (v) name of the laboratory facility doing the testing; and
 - (vi) conclusions drawn with respect to the results of the monitoring and testing.

Record Keeping for Organic Composting Operations

73. The Owner shall maintain daily records including, but not limited to:

- (a) date of record;
- (b) quantity, source and type of waste accepted at the Site for composting;
- (c) quantity and source of bulking agents received at the Site for use in composting;
- (d) quantity, type (if known) and destination of any rejected and residual wastes transferred from the Site;
- (e) quantity of Finished Compost transferred from the Site;
- (f) activities (e.g., windrow turning, screening, etc.) taking place that day;
- (g) atmospheric conditions; and
- (h) monitoring parameter measurements taking place that day (e.g., windrow temperature reading).

74. The Owner shall establish and maintain a written record of all monitoring, sampling and testing activities at the Compost Pad. This record shall be in written or electronic format and include, as a minimum, the following information:

- (a) sample collection locations and volume of the samples collected;
- (b) day and time of collection;
- (c) sample handling procedures;
- (d) parameters tested for and the resulting concentrations;
- (e) name of the laboratory facility doing the testing;

- (f) temperature and respiration rates as outlined in Condition in 63(g) and 63(i); and
- (g) conclusions drawn with respect to the results of the monitoring and testing.

75. The Owner shall maintain a record of the site inspections required by Condition 68. The record shall include the following information as a minimum:

- (a) the name and signature of person that conducted the inspection;
- (b) the date and time of the inspection;
- (c) a list of any deficiencies discovered;
- (d) any recommendations for action; and
- (e) the date, time and description of actions taken.

Once Every Two Years Reporting

76. A status report on the operations at the Site shall be prepared and submitted every second year as follows:

- (i) The first report shall be submitted to the District Manager and Public Liaison Committee by April 1, 2013;
- (ii) Each report shall cover the previous two full calendar years;
- (iii) Each report shall include and address the following items:
 - a. a summary, in tabular form where possible, of the information required by Conditions 72 & 73 of this Approval;
 - b. a list of competent people responsible for Site operations during the reporting period;
 - c. an updated waste disposal Site plan showing historic fill areas, the areas filled during the report period, areas planned for filling in the next report period, Buffer zones, ultimate limit of fill (Footprint); present contours, monitoring locations and surface water control systems;
 - d. a calculation of the remaining capacity of the Site, an estimate of the remaining Site life and a comparison of actual capacity used to approved Site capacity;
 - e. the optimization of remaining Site capacity with respect to refining final contours, having regard to minimizing the potential for off-Site impacts;
 - f. approved changes to the operation;
 - g. a summary of any equipment or procedural changes at the Site;
 - h. a summary of any occurrences or incidents where this Approval was not complied with, the reason for non-compliance and the measures to be implemented to ensure that future non-compliance does not occur;
 - i. results in tabular format and an interpretive analysis of the results of all leachate, groundwater, surface water and landfill gas monitoring, including an assessment of the need to amend the monitoring programs;
 - j. the interpretive analysis referred to in part (i) of this Approval shall include a discussion of groundwater parameters and compliance with the Reasonable Use Guideline at the property boundary as well as

- recommendations for future action (contingency measures) that may be necessary should the monitoring program detect failure of the design;
- k. groundwater flow and contaminant migration analyses for the entire Site;
- l. surface water quality with respect to Provincial Drinking Water Objectives and trigger points outlined in Condition 41 of this Approval;
- m. an assessment of the operation and performance of all engineered facilities, the need to amend the design or operation of the Site, and the adequacy of and need to implement the contingency plans/environmental emergency plan;
- n. leachate characterization results;
- o. the progress of final cover, vegetative cover, and any intermediate cover application;
- p. facilities installed during the reporting period;
- q. Site preparations and facilities planned for installation during the next reporting period;
- r. calculations of the amount of excess soil used as cover at the Site;
- s. the amount of excess soil stored at the Site at the end each year;
- t. summary of the weekly, maximum daily and total annual quantity (tonnes) of waste received at the Site;
- u. a report on the status of all monitoring wells and a statement as to compliance with Ontario Regulation 903;
- v. a statement as to compliance with all conditions of this Approval;
- w. any recommendations to minimize environmental impacts from the operation of the Site and to improve Site operations and monitoring programs in this regard; and
- x. any other information with respect to the Site which the District Manager may require from time to time.

77. The implementation of any of the recommendations contained in an Report required by Condition 76 of this Approval that come within the scope of Section 27 of the Act, shall be by the approval of the Director.

Closure Plan and Post Closure Maintenance and Monitoring

78. Three (3) years prior to closure of the Site, a closure plan for the landfill at the Site shall be submitted to the Director for approval and the plan shall include items listed in Schedule "C" of this Approval.
79. One (1) year prior to closure of the transfer station and composting facility at the Site, a closure plan for the transfer station and composting facility, including a post closure maintenance and monitoring program, shall be submitted to the Director for approval.

Staff Training

80. The Owner shall ensure that all people working at the Site, including supervisors,

are Competent Persons.

81. The Owner shall ensure that it provides the needed training, with annual refresher training, that is sufficient to fulfil the requirements of a Competent Person, to the people working at the Site, including supervisors.

Public Complaints

82. The Owner, in cooperation with the Public Liaison Committee shall establish a complaints procedure which will ensure that complaints, regarding the Site are promptly investigated and quickly addressed. The complaints procedure shall include:
 - (a) designating specific staff to receive any complaints, and within 10 working days of that staff person receiving notice of the complaint, to respond in writing indicating the course of action taken by the Owner and the outcome;
 - (b) posting the complaints telephone number at the Site entrance; and
 - (c) keeping an accurate record of the following related complaints information:
 - the name and address of the complainant,
 - the date and time that the complaint was received,
 - the nature of the complaint,
 - wind speed and wind direction at the time of the complaint,
 - details of the response to the complainant, action taken and outcome.

SCHEDULE "A"

This Schedule "A" forms part of Approval No. A261602

1. The Application for Approval of a Waste Disposal Site dated February 24, 1998, signed by Brenda Anderson, Clerk-Treasurer of the Corporation of the Township of Egremont.
2. The document entitled "Plan of Operations and Development, Township of Southgate, Egremont Disposal Site A261602" dated October 2000 by Fletcher Associates.
3. The set of Plans entitled "Township of Egremont, Waste Disposal Site", prepared by Fletcher Associates as follows:
 - Drawing 101: "Existing Conditions" : Rev dated August 1999
 - Drawing 102: "Development Plan" : Rev dated June 2000
 - Drawing 103: "Cross Sections" : Rev dated June 2000
 - Drawing 104: "Cross Sections & Details" : Rev dated June 2000
 - Drawing 105: "Preparatory Work" : Rev dated June 2000
4. The document entitled "Supplement to Plan of Operations and Development, Egremont Disposal Site A261602, Township of Southgate, Draft Certificate of Approval, April 17, 2001" dated August 28, 2001 by Fletcher Associates.
5. The letter dated September 26, 2001 to Mark Turner of the Ministry of the Environment, Environmental Assessment and Approvals Branch from Robert Kearse of R.J. Burnside & Associates Limited providing a final response to the Ministry's review comments.
6. The letter dated October 4, 2001 to John Kaasalainen of the Ministry of the Environment, Environmental Assessment and Approvals Branch from Bindu Uppaltri of R.J. Burnside & Associates; Limited providing additional details with respect to the proposed monitoring programs.
7. The letter dated October 25, 2001 to John Kaasalainen of the Ministry of the Environment, Environmental Assessment and Approvals Branch from Robert Kearse of R.J. Burnside & Associates Limited providing additional details with respect to the rates of fill, theoretical capacity and the proposed contaminant attenuation zone requirements.
8. The facsimile dated October 26, 2001 to John Kaasalainen of the Ministry of the Environment, Environmental Assessment and Approvals Branch from Robert Kearse of R.J. Burnside & Associates Limited providing additional details with respect to the proposed rates of fill and theoretical capacity for the Site.
9. The letter dated October 31, 2001 to John Kaasalainen of the Ministry of the Environment, Environmental Assessment and Approvals Branch from Robert Kearse of R.J. Burnside & Associates Limited providing an updated interim fill plan/Site plan for the Site.
10. Application for a Provisional Certificate of Approval for a Waste Disposal Site, dated December 5, 2002.
11. The two volume Report titled "Egremont Landfill, Compost, and Public Drop-Off Site,

Township of Southgate, (County of Grey)," dated November 2002, prepared by R. J. Burnside & Associates Limited.

12. The letter dated June 17, 2003 to John Gasbarri, P. Eng., Ministry of the Environment, from R. J. Burnside & Associates Limited, outlining Public Consultation Efforts.
13. Application for a Provisional Certificate of Approval for a Waste Disposal Site dated June 10, 2005, signed by Don Seim, CAO of the Corporation of the Township of Southgate, including all attached documents and supporting information.
14. Forwarding letter dated August 8, 2007 from James R Hollingsworth of R. J. Burnside & Associates Limited, along with application for amendment to Provisional Certificate of Approval signed by Dave Milliner dated July 26, 2007 including the supporting documents.
15. Letter dated March 13, 2008 from James R Hollingsworth of R. J. Burnside & Associates Limited to Jatinbhai Patel of Ministry of the Environment, along with supporting documents.
16. Letter dated April 24, 2008 from James R Hollingsworth of R. J. Burnside & Associates Limited to Jatinbhai Patel of Ministry of the Environment, re: Table B-1, along with supporting documents.
17. Application for a Provisional Certificate of Approval for a Waste Disposal Site dated March 10, 2011, signed by David Milliner, CAO of the Corporation of the Township of Southgate, including all attached documents and supporting information.
18. Report entitled "Township of Southgate, Egremont Public Drop-off Area Operations," prepared by R.J. Burnside & Associates Limited, March 2011.
19. Letter dated October 25, 2011 addressed to David Milliner, CAO, Township of Southgate from G.W. Deverell of Deverell & Lemaiche LLP regarding the definition of the site and the parts of the site that still need a Certificate of Registration.
20. E-mail dated October 25, 2011 from Jamie Hollingsworth, of R.J. Brunside & Associates Limited to Jim Chisholm of the Ministry indicating that upon approval of the Certificate of Approval, the Township will be directing their lawyer to register the CofA on title for the three parcels of land that are not currently registered and are indicated in the letter that are identified in Item 19 of Schedule "A".
21. Letter dated September 10, 2013 from A. W. Bringleston, Gamsby and Mannerow Ltd. to the Director, Environmental Approvals Access and Service Integration Branch, Ontario Ministry of the Environment, with attached Environmental Compliance Approval Application, dated August 29, 2013 and signed by Jim Ellis, Public Works Manager, Township of Southgate.
22. Environmental Compliance Approval application received June 1, 2018, signed by Jim Ellis, Public Works Manager, Corporation of the Township of Southgate, including all supporting documentation and: (1) the attached report entitled "Egremont Landfill Site / Trigger Mechanism & Contingency Plan (Revised) / Township of Southgate / ECA No. 261602 / GMBP File: 212298" dated April 2018, prepared by GM BluePlan Engineering Limited; and (2) the attached report entitled

"Township of Southgate / Plan of Development & Operations Report (Addendum No. 1) / Southgate (Formerly Egremont) Landfill Site / Lot A, Concession 21 / ECA No. 261602" dated April 2018, prepared by GM BluePlan Engineering Limited.

23. Email dated May 24, 2019 from Andrea Nelson, M.Sc., Senior Hydrogeologist, GM BluePlan Engineering Limited, to Ian Mitchell, P.Eng., MECP, with responses to Tech Support comments and revised trigger mechanisms.
24. Email dated March 22, 2021 from Andrea Nelson, M.Sc., Senior Hydrogeologist, GM BluePlan Engineering Limited, to Andrew Neill, P.Eng., MECP, with additional information on previously accepted updates to the monitoring plans and Schedule "B", including: (1) the attached letter dated April 4, 2019 from Rick Chappell, District Manager, MECP, to Jim Ellis, Public Works Manager, Corporation of the Township of Southgate; and (2) the attached letter dated July 20, 2015 from Ian Mitchell, P.Eng., District Engineer, MECP, to Jim Ellis, Public Works Manager, Corporation of the Township of Southgate.
25. Application for Environmental Compliance Approval for Waste Disposal Site dated July 19, 2021, including a report titled "Compost Facility: Operations Plan, Township of Southgate, GM BluePlan Engineering, dated July 2021.

SCHEDULE "B"

This Schedule "B" forms part of *Certificate* No. A261602

B.1 Groundwater Monitoring Program

The objectives of the *Site* groundwater monitoring program are:

- to monitor groundwater quality, levels and flow direction surrounding the *Site*;
- to identify and characterize movement of any leachate-related contaminants in the groundwater;
- to confirm compliance with the MECP Reasonable Use Policy objectives at the down gradient *Site* boundaries; and
- to determine the need for implementation of groundwater contingency measures.

B.2 Groundwater Monitoring Plan

The groundwater monitoring program shall be carried out in accordance with Condition (36) of this *Approval* and address the stated objectives. The monitoring plan shall include:

- Measuring water levels: Water level measurements shall be carried out in all identified groundwater monitors as listed in Table B-1 during each of the monitoring events as noted in Table B-2.
- Collecting groundwater samples: Groundwater samples shall be collected from all monitoring wells identified in Table B-1 and the samples shall be analysed for the parameters noted in Table B-2. Accepted practices for groundwater sampling, handling and sample analysis shall be followed in the monitoring program to ensure adequate quality assurance and quality control.
- Inspection and maintenance of the monitoring wells: All monitoring wells which form part of the monitoring program shall be inspected and maintained in accordance with Condition (37) of this *Approval*. The monitoring wells that are no longer required as part of the monitoring program shall be abandoned in accordance with Condition (38) of this *Approval*.
- Notwithstanding this Section B.2 and Table B-2 below, VOC sampling for LW1, OW10, OW11, OW12S, OW19 and OW20 shall be carried out no less than once per year, with VOC sampling for all other groundwater wells to be carried out no less than once every 3 years starting in 2021, where that sampling shall be carried out during the October/November sampling period.

B.3 Surface Water Monitoring Program Objectives

The objectives of the surface water monitoring program are:

- to evaluate the impact of landfilling on surface water quality and quantity; and
- to confirm compliance with the Provincial Water Quality Objectives at the downstream

Site boundary.

B.4 Surface Water Monitoring Plan

The surface water monitoring program outlined in this section shall be carried out in accordance with Condition (36) of this *Approval* and address the objectives stated in Section B.3 above. The monitoring plan shall include:

- Surface water samples shall be collected at the locations identified in Table B- 1 and analysed for the parameters indicated in Table B-2.
- During each of the monitoring events, surface water flow measurements at each of the identified monitoring locations shall be carried out.

B.5 Landfill Gas Monitoring Program Objective

The objective of the landfill gas monitoring program is to ensure combustible gas from the landfill does not collect in any on-*Site* buildings or migrate to the nearby buildings off-*Site*.

B.6 Landfill Gas Monitoring Plan

The landfill gas monitoring plan shall be carried out to address the stated objective and will include the measurements of combustible gas concentrations at the selected landfill gas monitors identified in Table B-3.

B.7 Landfill Site Topographic Surveys:

Every second year, during the fall monitoring period, undertake a total station or similar topographic site survey of the areas of the site that have changed since the previous survey. This survey data shall be used in the reporting requirements of Condition 58.

The following tables, Table B-1, Table B-2 and Table B-3, constitute the monitoring requirements for the landfill *Site* for groundwater, surface water and landfill gas.

Table B-1: Groundwater & Surface Water

Monitoring Program for Groundwater & Surface Water				
	Groundwater		Surface Water	
	List 1	List 2	List 1	List 2
Sample Locations	Werner Well		SW1	SW1
	Gilliam Well	Gilliam Well	SW2	SW2
	La Casse Well		SW3	SW3
	Washroom Well			
	LW1	LW1		
	OW1			
	OW2	OW2		
	OW3	OW3		
	OW5	OW5		
	OW6	OW6		
	OW9	OW9		
	OW10	OW10		
	OW11	OW11		
	OW12D			
	OW12S	OW12S		
	OW13	OW13		
	OW14D			
	OW14S	OW14S		
	OW15D			
	OW15S	OW15S		
	OW16D			
	OW16S	OW16S		
	OW17S			
	OW17D			
	OW18S			
	OW18I			
	OW18D			
	OW19	OW19		
	OW20	OW20		

Table B-2: Groundwater and Surface Water Monitoring Parameters

Twice Annual Monitoring Program for Groundwater & Surface Water			
Parameters: GROUNDWATER		Parameters: SURFACE WATER	
LIST 1	LIST 2	LIST 1	LIST 2
Oct/Nov	April/May	Oct/Nov	April/May
Inorganics			
Alkalinity	Alkalinity	Alkalinity	Alkalinity
Arsenic		Arsenic	Arsenic
Ammonia	Ammonia	Ammonia	Ammonia
Barium	Barium	Barium	Barium
Boron	Boron	Boron	Boron
Cadmium		Cadmium	Cadmium
Calcium	Calcium	Calcium	Calcium
Chloride	Chloride	Chloride	Chloride
Chromium		Chromium	Chromium
Conductivity	Conductivity	Conductivity	Conductivity
Copper		Copper	Copper
Iron	Iron	Iron	Iron
Lead		Lead	Lead
Magnesium	Magnesium	Magnesium	Magnesium
Manganese	Manganese	Manganese	Manganese
Mercury		Mercury	Mercury
Nitrate	Nitrate	Nitrate	Nitrate
Nitrite		Nitrite	Nitrite
Total Kjeldahl Nitrogen (TKN)		Total Kjeldahl Nitrogen (TKN)	Total Kjeldahl Nitrogen (TKN)
pH	pH	pH	pH
Total Phosphorus		Total Phosphorus	Total Phosphorus
Potassium	Potassium	Potassium	Potassium
Sodium	Sodium	Sodium	Sodium
TSS (LW1 Only)	TSS (LW1 Only)		
Total Dissolved Solids	Total Dissolved Solids	Total Dissolved Solids	Total Dissolved Solids
Sulphate	Sulphate	Sulphate	Sulphate
Zinc		Zinc	Zinc
Volatile Organic Compounds (VOCs)**			
Benzene			
1,4 Dichlorobenzene			
Dichloromethane			
Toluene			
Vinyl Chloride			
Other Organics			
Biochemical Oxygen Demand (BODs)	Biochemical Oxygen Demand (BODs)	Biochemical Oxygen Demand (BODs)	Biochemical Oxygen Demand (BODs)
Chemical Oxygen Demand (COD)	Chemical Oxygen Demand (COD)	Chemical Oxygen Demand (COD)	Chemical Oxygen Demand (COD)
Dissolved Organic Carbon Phenol	Dissolved Organic Carbon Phenol	Phenol	Phenol
Field Parameters			
pH	pH	pH	pH
Conductivity	Conductivity	Conductivity	Conductivity
		Dissolved Oxygen	Dissolved Oxygen
		Flow	Flow
		Temperature	Temperature
		Hardness	Hardness

**VOC sampling for LW1, OW10, OW11, OW12S, OW19 and OW20 shall be carried out no less than once per year, with VOC sampling for all other groundwater wells to be carried out no less than once every 3 years, starting in 2021.

Table B-3: Landfill Gas

Landfill Gas Monitoring Program
<u>Sample Locations</u>
Leachate Monitor (LW1)
<u>Parameters</u>
Methane
<u>Sampling Frequency and Timing</u>
April/May and October/November
<u>Other Notes</u>
(I) The leachate monitor shall be screened across the water table so as to permit collection of leachate samples as well as conduct landfill gas measurements.

SCHEDULE "C"

This Schedule "C" forms part of Approval No. A261602

CLOSURE PLAN AND POST CLOSURE MAINTENANCE AND MONITORING

A closure plan and post-closure maintenance and monitoring program shall be developed for the *Site*. The plan shall be submitted to the *Director* for approval in accordance with Condition 60 of this *Approval*. The plan shall include:

- (a) Changes to the final contour plan that may have been previously identified in the annual reports or recommended from the development of the closure plan;
- (b) Fencing and access control;
- (c) Details of any additional cover;
- (d) Details of additional vegetative plantings;
- (e) Post-closure and end-use plans;
- (f) Plans and schedules for the continued monitoring of surface water and ground water;
- (g) Plans and schedules for the routine monitoring and maintenance of the surface water drainage ditches and swales; and
- (h) Updated groundwater and surface water contingency plans, if necessary.

SCHEDULE "D"

This Schedule "D" forms part of Approval No. A261602

Material	Maximum Drop-off Area Storage Volume	Maximum daily amount received	Maximum storage time at Site
Materials going to Landfill	31 m ³	31 m ³	7 days
Compostable Materials	31 m ³	31 m ³	7 days
Recyclables (Blue Box)	31 m ³	31 m ³	6 months
Scrap Metals	31 m ³	31 m ³	6 months
White Goods	31 m ³	31 m ³	6 months
Tires	4999 <i>tire units</i>	1500 <i>tire units</i>	6 months
Used Oil	2500 Litres	2500 Litres	Until tank 90% full
Construction and Demolition waste	31 m ³	31 m ³	6 months
Shingles	50 m ³	50 m ³	6 months
Bale Wrap	50 m ³	50 m ³	6 months
Re-use Goods	35 m ³	35 m ³	6 months
Antifreeze	2000 Litres	2000 Litres	Until tank 90% full
Cylinders	1000 cylinders	100 cylinders	6 months
Paint and solvent	2500 litres	2500 litres	6 months
Aerosol cans	5m ³	5m ³	6 months
Wet Cell Batteries	500 batteries	100 batteries	6 months
<i>WEEE</i>	5 tonnes	1 tonnes	6 months
All other MHSW not covered above in this table	Reasonable amounts reflective of normal activity of MHSW depot	Reasonable amounts reflective of normal activity of MHSW depot. Maximum total MHSW in the <i>45-cubic metre MHSW storage container</i> is 45 cubic metres	6 months

The reasons for the imposition of these terms and conditions are as follows:

The reason for Condition 1 is to simplify the wording of the subsequent Conditions and define the specific meaning of terms as used in this Approval,

The reason for Conditions 2, 3 and 42 requiring registration of the Approval is that Section 46 of the Environmental Protection Act, R.S.O. 1990, prohibits any use being made of the lands after they cease to be used for waste disposal purposes within a period of twenty-five years from the year in which such land ceased to be used for waste disposal, unless the approval of the Minister for the proposed use has been given. The purpose of this prohibition is to protect future users of the Site and the environment from any hazards which might occur as a result of waste being disposed of on the Site. This prohibition and potential hazard should be drawn to the attention of future owners and users of the Site by the Approval being registered on title.

The reason for Condition 4 and 5 is to ensure that the Site is operated in accordance with this Approval and no other previously issued Notice or Certificate.

The reason for Conditions 6, 7, 8, 11, 12, 13, 14, and 15 is to clarify the legal rights and responsibilities of the Applicant.

The reason for Conditions 9 and 10 is to ensure that the appropriate Ministry staff have ready access to information and the operations of the Site which is approved under this Approval. Condition (10) is supplementary to the powers of entry afforded a Provincial Officer pursuant to the Environmental Protection Act, the Ontario Water Resources Act, and the Pesticides Act, as amended.

The reason for Conditions 16 to 51 are to ensure that the continued use of the Site is done in an environmentally acceptable manner.

The reason for Condition 41 is to provide a mechanism which provides early warning of potential impact to allow sufficient time to prepare and implement remedial action.

The reason for Conditions 52 to 64 is to ensure that compost is produced in a manner which does not result in a nuisance or a hazard to the health and safety of the environment or people.

The reasons for Condition 65 is to ensure that the Owner immediately responds to a spill or unusual emission and notify the Ministry forthwith of any spills as required in Part X of the EPA so that appropriate spills response can be determined. In addition, the reasons for Condition 53 is that the Owner develop an Environmental Emergency Plan for the Site.

The reasons for Condition 66 through 70 is to insure that the site is properly inspected and maintained.

The reason for Conditions 71, 72, 73, and 75 to ensure that proper records of the operations of the site are kept and that the Ministry is informed annually of the operations of the site.

The reason for Condition 76 & 77 is for the Owner to provide a report every other year to the Ministry that summarizes the activity at the Site for the previous 2 years and to provide a mechanism for changes to the operation.

The reason for Condition 78 and 79 is to ensure that the Site is closed in accordance with MECP standards and to protect the health and safety of the environment.

The reasons for Conditions 80 and 81 are to ensure that the Site is operated by competent persons and that the Owner's staff are properly trained in the operation of the equipment used at the Site and emergency response procedures. This will minimize the possibility of spills or unusual emissions occurring and will enable staff to deal promptly and effectively with any spills or unusual emissions that do occur.

The reason for Condition 82 is to ensure that complaints are properly and quickly resolved and that complaints and follow-up actions have been documented.

Upon issuance of the environmental compliance approval, I hereby revoke Approval No(s). A261602 issued on May 8, 2021

In accordance with Section 139 of the *Environmental Protection Act*, you may by written notice served upon me and the Ontario Land Tribunal within 15 days after receipt of this notice, require a hearing by the Tribunal. Section 142 of the *Environmental Protection Act* provides that the notice requiring the hearing ("the Notice") shall state:

- a. The portions of the environmental compliance approval or each term or condition in the environmental compliance approval in respect of which the hearing is required, and;
- b. The grounds on which you intend to rely at the hearing in relation to each portion appealed.

Pursuant to subsection 139(3) of the *Environmental Protection Act*, a hearing may not be required with respect to any terms and conditions in this environmental compliance approval, if the terms and conditions are substantially the same as those contained in an approval that is amended or revoked by this environmental compliance approval.

The Notice should also include:

1. The name of the appellant;
2. The address of the appellant;
3. The environmental compliance approval number;
4. The date of the environmental compliance approval;
5. The name of the Director, and;
6. The municipality or municipalities within which the project is to be engaged in.

And the Notice should be signed and dated by the appellant.

This Notice must be served upon:

Registrar*
Ontario Land Tribunal
655 Bay Street, Suite 1500
Toronto, Ontario
M5G 1E5
OLT.Registrar@ontario.ca

and

The Director appointed for the purposes of Part II.1 of the *Environmental Protection Act*
Ministry of the Environment, Conservation and Parks
135 St. Clair Avenue West, 1st Floor
Toronto, Ontario
M4V 1P5

*** Further information on the Ontario Land Tribunal's requirements for an appeal can be obtained directly from the Tribunal**

at: Tel: (416) 212-6349 or 1 (866) 448-2248, or www.olt.gov.on.ca

The above noted activity is approved under s.20.3 of Part II.1 of the *Environmental Protection Act*.

DATED AT TORONTO this 22nd day of April, 2022



Mohsen Keyvani, P.Eng.

Director

appointed for the purposes of Part II.1 of the
Environmental Protection Act

AQ/

c: District Manager, MECP Owen Sound

Melissa Robinson, GM BluePlan Engineering Limited

ATTACHMENT B



March 26, 2021
Our File: 212298

Via Email: Ian.Mitchell@ontario.ca

Ministry of the Environment, Conservation and Parks
Owen Sound District Office
3rd Floor 101 17th Street
Owen Sound, ON N4K 0A5

Attention: Mr. Ian Mitchell

Re: Egremont Landfill Site
Township of Southgate
Status Report (2019/2020) and
Trigger Exceedance Notification
ECA No. A261602

Dear Ian:

Please find enclosed, the Status Report (2019/2020) for the Egremont Landfill Site. This report has been prepared on behalf of the Township to fulfill the requirements of the Environmental Compliance Approval No. A261602. A copy of the Monitoring and Screening Checklist included in the *Monitoring and Reporting for Waste Disposal Sites Groundwater and Surface Water Technical Guidance Document* (MECP, 2010) has also been enclosed with the Report as per the MECP's request. It should be noted that the attached checklist is not intended to replace the Annual Monitoring Reports, but rather provide a general summary of the findings. Consequently, for details regarding the annual monitoring program and site operations, please refer directly to the report.

EGREMONT LANDFILL: TRIGGER EXCEEDANCE AT OW20

On behalf of the Township of Southgate, we are providing notification of a site-specific trigger level exceedance for groundwater noted at the Southgate (formerly Egremont) Landfill Site. Based on Condition 40 of the Approval, the Trigger Levels for groundwater are considered to be the Reasonable Use Criteria (RUC) for each parameter specified in *Reasonable Use Guideline B-7*. If a given parameter exceeds the RUC at the same compliance well location for three (3) consecutive events, the *District Manager* is to be notified. This notification is being provided to satisfy the requirements of Condition 40(i) of the ECA for the Site.

At the Egremont Landfill Site the compliance boundary to the east is located in close proximity to the approved fill area. Trigger level exceedances were noted at well OW20 which was installed in the shallow overburden soils in August 2019, between the recently active area of landfilling (i.e. Cell 2) and the compliance boundary to the east. With the recent installation of monitoring well OW20, the site-specific trigger levels have been exceeded for several parameters. Based on the first three groundwater quality samples collected from this monitoring location, alkalinity, TDS, DOC, hardness and chloride have consistently exceeded the RUC. In addition, the combination of parameters and parameter concentrations appears to be indicative of leachate-derived impacts.

Condition 40(ii) of the Approval states that resampling within 30-days of the receipt of the result be conducted. However, considering the consistency of the groundwater quality reported for the samples collected from this location, it is our opinion that re-sampling would only confirm the overall groundwater quality, rather than negate the trigger exceedances noted.

Although the migration of leachate-impacted groundwater to the east is related to a localized radial flow pattern, which will ultimately tie into the larger regional groundwater flow system that generally flows in a westerly direction, this monitoring well is situated along the easterly compliance boundary and, as such, measures should be taken to mitigate these impacts. It is noted that a review of the information available indicates that the adjacent property to the east, described as Concession 21, West Part Lot 1, consists of vacant residential land (Grey County Maps). Based on our interpretation of the aerial photos available, the property appears to be used as a works yard with the nearest structure to the east located approximately 70 metres from the landfill area at its closest point. MECP well records suggest that there is not a supply well on the property. Therefore, based on the regional groundwater flow direction, the absence of a nearby receptor, and the nature of the trigger parameters noted, the potential risk to off-site receptors to the east is considered to be low.

At this time, landfill operations have moved to the south of the Cell 1 area, where shown on the Figures included in the Status Report. As such, landfill operations may be having a greater impact on the water quality along the easterly compliance limit directly east of the active area (i.e., OW20). It is recommended that, in recognition of the transition of landfill operations into the Cell 2 area, a review of site conditions and operations be completed in the spring.

An assessment of the recent operational practices, including site grading, particularly in the area to the east of the landfill should also be completed. In addition, pending approval from the MECP of the PDO Addendum submitted in April 2018, the Cell 2 area should be prepared, including the establishment of the bottom contours and the installation of the recommended bentonite liner along the easterly below grade sidewall of the approved fill area. The relocation of waste from the old fill area should also be completed in the near future. The waste relocation efforts, which were described in the PDO (April 2018), could be used as a means to ensure the bottom elevation of the landfill is sloped to the west, ultimately directing contact stormwater flows and leachate within the landfill footprint to the west and toward the existing contaminant attenuation zone. These efforts would serve to reduce the radial flow of groundwater to the east, ultimately reducing the magnitude of impacts in the vicinity of OW20. In general, mitigation measures should be implemented to alter (or modify) site conditions and/or activities to alleviate the groundwater exceedance at this location. On-going groundwater monitoring would continue to be reviewed to evaluate the adequacy of the mitigation measures implemented.

I trust this is sufficient for your use at this time. Please do not hesitate to contact me if you have any questions.

Yours truly,

GM BLUEPLAN ENGINEERING LIMITED

Per:

Alen Bringleton, B.E.S., C.E.T.

AN/mr

cc: Township of Southgate: Jim Ellis – One Hardcopy & One Digital Copy (jellis@southgate.ca)

Our File No.: 212298