

PERMIT TO TAKE WATER
Ground Water
NUMBER 6543-9ZGNU5

Pursuant to Section 34.1 of the Ontario Water Resources Act, R.S.O. 1990 this Permit To Take Water is hereby issued to:

Revolution Landfill Acquisition GP Inc. o/a Revolution Landfill LP
Suite 500 - 1100 Burloak Dr.
Burlington, Ontario L6L 6B2

For the water

taking from: Well CW2, Well CW3, Well CW4, Well CW5, Well CW13, Well CW15, Well CW16,
Well L1, GW-PS, North Sump, Well M4, Well M5a, Well 5R, Perimeter Drain

Located at: Lot 25-28, Concession 6, Geographic Township of Saltfleet
Hamilton

For the purposes of this Permit, and the terms and conditions specified below, the following definitions apply:

DEFINITIONS

- (a) "Director" means any person appointed in writing as a Director pursuant to section 5 of the OWRA for the purposes of section 34.1, OWRA.
- (b) "Provincial Officer" means any person designated in writing by the Minister as a Provincial Officer pursuant to section 5 of the OWRA.
- (c) "Ministry" means Ontario Ministry of the Environment and Climate Change.
- (d) "District Office" means the Hamilton District Office.
- (e) "Permit" means this Permit to Take Water No. 6543-9ZGNU5 including its Schedules, if any, issued in accordance with Section 34.1 of the OWRA.
- (f) "Permit Holder" means Revolution Landfill Acquisition GP Inc. operating as Revolution Landfill LP.

- (g) "OWRA " means the *Ontario Water Resources Act*, R.S.O. 1990, c. O. 40, as amended.

You are hereby notified that this Permit is issued subject to the terms and conditions outlined below:

TERMS AND CONDITIONS

1. Compliance with Permit

- 1.1 Except where modified by this Permit, the water taking shall be in accordance with the application for this Permit To Take Water, dated May 27, 2015 and signed by Brad Bodo, and all Schedules included in this Permit.
- 1.2 The Permit Holder shall ensure that any person authorized by the Permit Holder to take water under this Permit is provided with a copy of this Permit and shall take all reasonable measures to ensure that any such person complies with the conditions of this Permit.
- 1.3 Any person authorized by the Permit Holder to take water under this Permit shall comply with the conditions of this Permit.
- 1.4 This Permit is not transferable to another person.
- 1.5 This Permit provides the Permit Holder with permission to take water in accordance with the conditions of this Permit, up to the date of the expiry of this Permit. This Permit does not constitute a legal right, vested or otherwise, to a water allocation, and the issuance of this Permit does not guarantee that, upon its expiry, it will be renewed.
- 1.6 The Permit Holder shall keep this Permit available at all times at or near the site of the taking, and shall produce this Permit immediately for inspection by a Provincial Officer upon his or her request.
- 1.7 The Permit Holder shall report any changes of address to the Director within thirty days of any such change. The Permit Holder shall report any change of ownership of the property for which this Permit is issued within thirty days of any such change. A change in ownership in the property shall cause this Permit to be cancelled.

2. General Conditions and Interpretation

- 2.1 Inspections
The Permit Holder must forthwith, upon presentation of credentials, permit a Provincial Officer to carry out any and all inspections authorized by the OWRA, the *Environmental Protection Act*, R.S.O. 1990, the *Pesticides Act*, R.S.O. 1990, or the *Safe Drinking Water Act*, S. O. 2002.
- 2.2 Other Approvals
The issuance of, and compliance with this Permit, does not:

- (a) relieve the Permit Holder or any other person from any obligation to comply with any other applicable legal requirements, including the provisions of the *Ontario Water Resources Act* , and the *Environmental Protection Act* , and any regulations made thereunder; or
- (b) limit in any way any authority of the Ministry, a Director, or a Provincial Officer, including the authority to require certain steps be taken or to require the Permit Holder to furnish any further information related to this Permit.

2.3 Information

The receipt of any information by the Ministry, the failure of the Ministry to take any action or require any person to take any action in relation to the information, or the failure of a Provincial Officer to prosecute any person in relation to the information, shall not be construed as:

- (a) an approval, waiver or justification by the Ministry of any act or omission of any person that contravenes this Permit or other legal requirement; or
- (b) acceptance by the Ministry of the information's completeness or accuracy.

2.4 Rights of Action

The issuance of, and compliance with this Permit shall not be construed as precluding or limiting any legal claims or rights of action that any person, including the Crown in right of Ontario or any agency thereof, has or may have against the Permit Holder, its officers, employees, agents, and contractors.

2.5 Severability

The requirements of this Permit are severable. If any requirements of this Permit, or the application of any requirements of this Permit to any circumstance, is held invalid or unenforceable, the application of such requirements to other circumstances and the remainder of this Permit shall not be affected thereby.

2.6 Conflicts

Where there is a conflict between a provision of any submitted document referred to in this Permit, including its Schedules, and the conditions of this Permit, the conditions in this Permit shall take precedence.

3. Water Takings Authorized by This Permit

3.1 Expiry

This Permit expires on **August 31, 2025**. No water shall be taken under authority of this Permit after the expiry date.

3.2 Amounts of Taking Permitted

The Permit Holder shall only take water from the source, during the periods and at the rates and amounts of taking specified in Table A. Water takings are authorized only for the purposes

specified in Table A.

Table A

	Source Name / Description:	Source: Type:	Taking Specific Purpose:	Taking Major Category:	Max. Taken per Minute (litres):	Max. Num. of Hrs Taken per Day:	Max. Taken per Day (litres):	Max. Num. of Days Taken per Year:	Zone/ Easting/ Northing:
1	Well CW2	Well Drilled	Other - Remediation	Remediation	240	24	345,600	365	17 598964 4783326
2	Well CW3	Well Drilled	Other - Remediation	Remediation	240	24	345,600	365	17 598808 4783276
3	Well CW4	Well Drilled	Other - Remediation	Remediation	240	24	345,600	365	17 598702 4783149
4	Well CW5	Well Drilled	Other - Remediation	Remediation	240	24	345,600	365	17 599342 4783628
5	Well CW13	Well Drilled	Other - Remediation	Remediation	240	24	345,600	365	17 599062 4783432
6	Well CW15	Well Drilled	Other - Remediation	Remediation	240	24	345,600	365	17 599062 4783456
7	Well CW16	Well Drilled	Other - Remediation	Remediation	240	24	345,600	365	17 599210 4783530
8	Well L1	Well Drilled	Other - Remediation	Remediation	240	24	345,600	365	17 598550 4783430
9	GW-PS	Well Drilled	Other - Remediation	Remediation	5,455	24	7,856,000	365	17 599807 4783100
10	North Sump	Well Drilled	Other - Remediation	Remediation	355	24	68,200	365	17 599825 4783485
11	Well M4	Well Drilled	Other - Remediation	Remediation	265.0	24	381,600	365	17 599825 4783319
12	Well M5a	Well Drilled	Other - Remediation	Remediation	200	24	288,000	365	17 599186 4783634
13	Well 5R	Well Drilled	Other - Remediation	Remediation	200	24	288,000	365	17 599200 4783640
14	Perimeter Drain	Well Dug	Other - Remediation	Remediation	720	24	1,036,800	365	17 599314 4683340
						Total Taking:	9,976,200		

3.3 Under this Permit, the maximum combined rate and maximum combined total daily amount for the Containment Well System (CW2, CW3, CW4, CW5, CW13, CW15 & CW16) and the Lower Flow Zone Pumping System (L1) is 240 LPM and 345,600 LPD.

3.4 Under this Permit, the maximum combined rate and maximum combined total daily

amount for the M5 Shatter Trench System (M5a and M5R) is 200 LPM and 288,000 LPD.

4. Monitoring

- 4.1 Under section 9 of O. Reg. 387/04, and as authorized by subsection 34(6) of the *Ontario Water Resources Act*, the Permit Holder shall, on each day water is taken under the authorization of this Permit, record the date, the volume of water taken on that date and the rate at which it was taken. The daily volume of water taken shall be measured by a flow meter or calculated in accordance with the method described in the application for this Permit, or as otherwise accepted by the Director. A separate record shall be maintained for each source. The Permit Holder shall keep all records required by this condition current and available at or near the site of the taking and shall produce the records immediately for inspection by a Provincial Officer upon his or her request. A separate record shall be maintained for each source. The Permit Holder, unless otherwise required by the Director, shall submit, on or before March 31st in every year, the records required by this condition to the ministry's Water Taking Reporting System.

4.2 M5 Shatter Trench Monitoring:

- 4.2.1 The Permit Holder shall conduct the following monitoring program for the M5 Shatter Trench System (M5a and M5R):

Monitor	Water Level Monitoring (Frequency)	Sampling Frequency
P1-I	Monthly	Quarterly
P15	Monthly	Quarterly
P16	Monthly	Quarterly
59-II	Monthly	Quarterly
59-III	Monthly	Quarterly
62-I	Monthly	Quarterly
62-II	Monthly	Quarterly
62-III	Monthly	Quarterly
62-IV	Monthly	Quarterly
75-I	Monthly	Quarterly
75-II	Monthly	Quarterly
75-III	Monthly	Quarterly
75-IV	Monthly	Quarterly
67-I	Monthly	Quarterly
67-II	Monthly	Quarterly
67-III	Monthly	Quarterly

ST 1	Monthly	Quarterly
ST 2	Monthly	Quarterly
ST 1-I	Monthly	
ST 2-I	Monthly	
ST 1-II	Monthly	
ST 2-II	Monthly	
M5	Monthly	
M5R	Weekly	Quarterly
M5a	Weekly	Quarterly

4.2.2 Continuous monitoring and recording of pumping rates and amounts from M5R and M5a, when pumping, is required.

4.2.3 Samples shall be analyzed for: pH, Conductivity, Alkalinity, Hardness, TDS, Phenols, TKN, NH₃-N, Ca, K, Mg, Na, Cl, F, Br, NO₂-N, NO₃-N, PO₄, SO₄, Al, Ba, B, Cd, Cr, Co, Cu, Pb, Fe, Mn, Mo, Ni, Si, Sr, Ti, V, Zn, DOC in addition to appropriate field measurements.

4.3 M4 Pumping Well:

4.3.1 The Permit Holder shall conduct the following monitoring program for the M4 pumping Well:

Monitor	Water Level Monitoring (Frequency)	Sampling Frequency
M4	Monthly	Quarterly
47-I	Quarterly	Quarterly
60-I	Quarterly	Quarterly
61-I	Quarterly	Quarterly
55-I	Monthly	
Banovac Residential, Former Prendergast Well		Quarterly (upon permission of the owner)

4.3.2 Continuous monitoring and recording of pumping rates and amounts from M4 is required.

4.3.3 Samples shall be analyzed for: pH, Conductivity, Alkalinity, Hardness, TDS, Phenols, TKN, NH₃-N, Ca, K, Mg, Na, Cl, F, Br, NO₂-N, NO₃-N, PO₄, SO₄, Al, Ba, B, Cd, Cr, Co, Cu, Pb, Fe, Mn, Mo, Ni, Si, Sr, Ti, V, Zn, DOC in addition to appropriate field measurements.

4.4 Containment Well Pumping/ Lower Flow Zone Pumping System:

- 4.4.1 The Permit Holder shall conduct the monitoring program for the Containment Well Pumping System (including CW2, CW3, CW4, CW5, CW10, CW11, CW13, CW15) and the Lower Flow Zone Pumping System (L1):

Monitor	Water Level Monitoring Frequency
34-II, 34-III, 46-I, 46-II, 56-I, 56-II, P1-II, P1-III, P3-III, P4-II, P4-III, P5-II, P5-III, P6-I, P10-III, P11-III, P12, P13, P14, P17	Quarterly
CW2, CW3, CW4, CW5, CW11, CW13, CW15, CW16, L1	Monthly

- 4.4.2 Continuous monitoring and recording of pumping discharge from the Containment Well Pumping System (including CW2, CW3, CW4, CW5, CW11, CW13, CW15, CW16) and the Lower Flow Zone Pumping System (L1), when pumping, is required.

4.5 Perimeter Drainage System (East Quarry):

- 4.5.1 Continuous monitoring and recording of the discharge from the Perimeter Drainage System is required.

4.6 Groundwater Pumping Station (GW-PS) and North Sump:

Continuous monitoring and recording of the pumping rates and amounts from the Groundwater Pumping Station (GW-PS) and North Sump is required. A separate record shall be kept for each source.

- 4.7 Monitoring shall be conducted as outlined in Conditions 4.2, 4.3, 4.4, 4.5 and 4.6 above until otherwise indicated in writing by the Director.
- 4.8 The Permit Holder shall submit to the Director, an annual monitoring report which presents and interprets the monitoring data as required under Conditions 4.2, 4.3, 4.4, 4.5 and 4.6 above. The report shall be submitted to the Director by June 30 of each year and include the monitoring data for the 12 month period ending December 31 of the previous year. This report shall be prepared by a licensed Professional Geoscientist, or a licensed Professional Engineer specializing in Hydrogeology. This report shall be incorporated into the Annual Monitoring Reports as specified by the site's Certificate of Approval No. 130404 and No. 181008 within a specific section relating to the monitoring requirements outlined within this permit including, but not limited to, a detailed discussion of the effects of this taking on the groundwater resources in the area and recommendations for future monitoring.

5. Impacts of the Water Taking

5.1 Notification

The Permit Holder shall immediately notify the local District Office of any complaint arising from the taking of water authorized under this Permit and shall report any action which has been taken or is proposed with regard to such complaint. The Permit Holder shall immediately notify the local District Office if the taking of water is observed to have any significant impact on the surrounding waters. After hours, calls shall be directed to the Ministry's Spills Action Centre at 1-800-268-6060.

5.2 For Groundwater Takings

If the taking of water is observed to cause any negative impact to other water supplies obtained from any adequate sources that were in use prior to initial issuance of a Permit for this water taking, the Permit Holder shall take such action necessary to make available to those affected, a supply of water equivalent in quantity and quality to their normal takings, or shall compensate such persons for their reasonable costs of so doing, or shall reduce the rate and amount of taking to prevent or alleviate the observed negative impact. Pending permanent restoration of the affected supplies, the Permit Holder shall provide, to those affected, temporary water supplies adequate to meet their normal requirements, or shall compensate such persons for their reasonable costs of doing so.

If permanent interference is caused by the water taking, the Permit Holder shall restore the water supplies of those permanently affected.

6. Director May Amend Permit

The Director may amend this Permit by letter requiring the Permit Holder to suspend or reduce the taking to an amount or threshold specified by the Director in the letter. The suspension or reduction in taking shall be effective immediately and may be revoked at any time upon notification by the Director. This condition does not affect your right to appeal the suspension or reduction in taking to the Environmental Review Tribunal under the *Ontario Water Resources Act* , Section 100 (4).

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

1. Condition 1 is included to ensure that the conditions in this Permit are complied with and can be enforced.
2. Condition 2 is included to clarify the legal interpretation of aspects of this Permit.
3. Conditions 3 through 6 are included to protect the quality of the natural environment so as to safeguard the ecosystem and human health and foster efficient use and conservation of waters. These conditions allow for the beneficial use of waters while ensuring the fair sharing, conservation and sustainable use of the waters of Ontario. The conditions also specify the water takings that are authorized by this Permit and the scope of this Permit.

*In accordance with Section 100 of the Ontario Water Resources Act, R.S.O. 1990, you may by written notice served upon me, the Environmental Review Tribunal and the Environmental Commissioner, **Environmental Bill of Rights**, R.S.O. 1993, Chapter 28, within 15 days after receipt of this Notice, require a hearing by the Tribunal. The Environmental Commissioner will place notice of your appeal on the Environmental Registry. Section 101 of the Ontario Water Resources Act, as amended provides that the Notice requiring a hearing shall state:*

1. The portions of the Permit or each term or condition in the Permit in respect of which the hearing is required, and;
2. The grounds on which you intend to rely at the hearing in relation to each portion appealed.

In addition to these legal requirements, the Notice should also include:

3. The name of the appellant;
4. The address of the appellant;
5. The Permit to Take Water number;
6. The date of the Permit to Take Water;
7. The name of the Director;
8. The municipality within which the works are located;

This notice must be served upon:

*The Secretary
Environmental Review Tribunal
655 Bay Street, 15th Floor
Toronto ON
M5G 1E5
Fax: (416) 314-4506
Email:
ERTTribunalsecretary@ontario.ca*

AND

*The Environmental Commissioner
1075 Bay Street
6th Floor, Suite 605
Toronto, Ontario M5S 2W5*

AND

*The Director, Section 34.1,
Ministry of the Environment and
Climate Change
12th Floor
119 King St W
Hamilton ON L8P 4Y7
Fax: (905) 521-7820*

Further information on the Environmental Review Tribunal's requirements for an appeal can be obtained directly from the Tribunal:

by telephone at (416) 314-4600

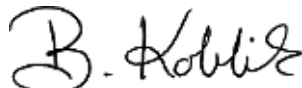
by fax at (416) 314-4506

by e-mail at www.ert.gov.on.ca

*This instrument is subject to Section 38 of the **Environmental Bill of Rights** that allows residents of Ontario to seek leave to appeal the decision on this instrument. Residents of Ontario may seek to appeal for 15 days from the date this decision is placed on the Environmental Registry. By accessing the Environmental Registry, you can determine when the leave to appeal period ends.*

This Permit cancels and replaces Permit Number 5161-88QLS6, issued on 2010/09/07.

Dated at Hamilton this 21st day of August, 2015.



Belinda Koblik
Director, Section 34.1
Ontario Water Resources Act , R.S.O. 1990

Schedule A

This Schedule “A” forms part of Permit To Take Water 6543-9ZGNU5, dated August 21, 2015.

The Environmental Review Tribunal (ERT) has recently changed its phone and fax phone numbers, and as such you will need to use the following should you wish to contact the ERT:

New Public Inquiry Telephone Number:

Tel. (416) 212-6349

Toll Free 1(866) 448-2248

New Fax Number:

Fax: (416) 326-5370

Toll Free: 1(844) 213-3474