



Region of Waterloo

Waste Management Division

Generator Information: Waste Requiring Disposal Approval

The Region of Waterloo's (Region) **Waterloo** Waste Management Facility (Site) accepts solid non-hazardous waste material generated within the Region which meets the requirements of the Environmental Compliance Approval (ECA) issued by the Ontario Ministry of the Environment and Climate Change (MECP). Generally, curbside municipal and general industrial, commercial and institutional waste do not require waste approval.

Waste materials that require approval for disposal are typically soil type materials which may or may not be contaminated, wastes that are by-products of manufacturing and certain construction & demolition wastes.

Soil may be accepted for daily cover/road building within the landfill footprint if the material meets certain regulatory standards as defined by the ECA and MECP and if there is a need as determined by Regional Waste Management Operations staff.

This procedure does **not** apply to disposal of asbestos waste. Refer to the Region's [Asbestos Disposal](#) procedure.

DEFINITIONS:

Inert Waste: Residential small quantities of inert waste do not require waste approvals (typically 10 m³ or less, couple pickup truck loads) and will follow the current [Fee Schedule](#). Residential maximum quantity will be determined on a case by case basis.

No current need for clean soil material.

In addition to O.Reg. 347, inert material must meet the following requirements:

1. Topsoil: must meet Ontario Provincial Standards and Specification No. 570 (See Table 2 for Typical Guidelines).
2. Rubble: must be smaller than 30 cm pieces of brick or concrete. No rebar, metal, dirt or other debris allowed.
3. Clean Soil: must be a **clean** soil material that meets the requirements of O.Reg 153/04 Record of Site Condition, "Soil, Ground Water and Sediment Standards for Use Under Part XV.1 of the Environmental Protection Act" (MECP Table 2 - Industrial, Commercial and Community Properties), which are summarized in Table 1.

Approved Waste:

Approved Waste is non-hazardous solid material that meets the requirements of O.Reg 347 for sanitary landfill disposal and meets the conditions of the Provisional ECA. The material must meet the criteria presented in Table 1 or any other MECP policy as applicable.

Hazardous and/or liquid wastes, as defined by O.Reg 347 and [O.Reg. 347: Schedule 9, Test Method for Determination of "Liquid Waste"](#), or wastes that do not meet the criteria set forth in Table 1, **cannot** be accepted at the Site.

PROCESS:

The Region will accept the solid non-hazardous waste material in question as defined under this procedure **ONLY** when written approval has been given to the generator in advance of the waste being brought in for disposal. This pre-approval is required to allow a thorough review of the origin and chemical composition of the contaminants that may be in the waste material.

1. Submitting Requests:

Generators must complete a Waste Disposal Request & Approval form and email the completed form to wasteopsadmin@regionofwaterloo.ca (instructions on form). NOTE: approvals require a minimum of 48 hours notice.

2. Initial Screening:

Material will be screened based upon the initial information provided and the Region's current need for that material, if appropriate. If it is apparent that the material will not meet requirements for acceptance as waste or inert material, or was not generated within the Region of Waterloo, the request will be denied.

3. Inspection:

If deemed necessary, a Waste Management Engineer (Engineer) will arrange a site visit to inspect the material. Based on a visual inspection and any current analytical test results, further testing may be requested. The Engineer will specify the chemical testing to be completed and may witness the sampling. Any analytical testing and related expenses are the responsibility of the generator and must be undertaken by a laboratory accredited by the [Canadian Association for Laboratory Accreditation Inc. \(CALA\)](#). The material will be assessed for nuisances such as dust and/or odour. Materials (e.g. soil and catch basin cleanout materials) must also pass physical requirements including a slump test as defined in O.Reg. 347: Schedule 9.

4. Chemical sampling (if required):

Composite samples of the material are required for classification of waste material. Generally, the Region requires one composite sample per 100 cubic metres of material; however this is dependent on material information. Grab sample results collected from discrete borehole and/or

test pit locations are not acceptable as this may not be representative of the material being classified for disposal. The generator must submit the results to the Engineer for review who in turn will compare sampling results to Table 1.

5. Handling:

Waste materials that may generate nuisance dust, windblown particles, have an obvious odour, or are difficult to handle due to being large or bulky require special handling to landfill in order to minimize potential health and safety risks to operation staff and equipment.

Generators must provide advance notice of loads requiring special handling, see Section 7.

A surcharge (double general waste fee) is applied to waste materials that require special handling, see [Fee Schedule](#), and the applicable charge will be noted on the Waste Disposal Request & Approval Form.

6. Waste Disposal APPROVAL:

Staff may reject soil type materials even if the material meets all applicable criteria if there is no current need for it.

For all approved materials, a completed and signed Waste Disposal Request & Approval form will be emailed by the Engineer to the generator.

a) Evaluation of Quantity & Timing:

For material accepted as inert, a determination of the quantities and time frame for disposal required will be made.

For material that is a by-product of an on-going industrial process (e.g. foundry sands or paint filters), the approval will be for all identical material delivered to the landfill for a period of **up to one year from the date of approval or the occurrence of a process change in the generator's operation, whichever occurs first.**

It is the responsibility of the generator to inform the Engineer of a process change.

b) Fees:

See [Fee Schedule](#) for current rates. It is at the Region's discretion to determine the acceptability of the load based on the quality and quantity.

Exceptions to Fee Schedule:

Type of Material	Fee
Soils: clean or contaminated, non-residential quantities: > than 10m ³	Special Handling
Rubble used for road construction (non-residential quantities: > than 10m ³)	No charge

c) Method of Payment:

The Region accepts payment by cash, debit, credit (credit card must be presented with each load) and on hauler account (account must be active and in good standing). The Region will not bill to a third party.

d) Vehicle Registrations:

Please ensure all vehicles bringing approved material are registered. Hauling cannot begin until all vehicles have been registered. Registration requires 24-48 notice. Vehicles will not be registered at the scale.

Email wasteopsadmin@regionofwaterloo.ca with vehicle licence plates and vehicle identification numbers.

e) Expiry of Approval:

All APPROVAL Forms will have an expiry date. **NO material will be accepted after the expiry date.** It is the **generator's responsibility** to request a renewal with sufficient lead time so that the procedures for approval can be followed. The Region will NOT initiate this process.

7. Delivery:

- The generator must contact Waterloo Main Scale staff (519-575-4400 ext 8426) **two hours** before hauling any approved material requiring **special handling**.
- The hauler must present the completed Waste Disposal Request & Approval form to the scale operator with each load. This requirement avoids delays at the scales and notifies operations staff that an investigation on the materials as per this policy has been completed.
- The hauler will be charged the material type and tip fee identified.
- Loads without a completed Waste Disposal Request & Approval form will be rejected.

8. Quality Control:

The Region, at its own expense, may randomly sample any approved load to ensure that the material being received has been accurately represented by the generator. The generator will be notified of the results. If at any time as the material is being hauled or disposed of, it is deemed unacceptable for any reason by the Region, the approval will be cancelled and the material will no longer be accepted. The Region may also revoke waste disposal privileges for the generator.

To request an alternate format of this document, call 519-575-4400 or TTY: 519-575-4608.

TABLE 1
Waste Disposal Approval Guidelines
 (All values in µg/g unless otherwise stated)

Chemical Compound	< = Unrestricted use but should be redirected O.Reg.153 (2011): Table 1 Standards (Inerts)	< = Can only be used within the landfill footprint. Can be refused based on need. > = TCLP required O.Reg.153 (Part XV.1 - July 1, 2011) Table 2 Standards (daily cover must meet this standard)**	TCLP fail = Material is hazardous, REFUSED O.Reg.347: Schedule 4 TCLP Standards (mg/L TCLP)
Acenaphthene	0.072	(29) 21	N/V
Acenaphthylene	0.093	(0.17) 0.15	N/V
Acetone	0.5	(28) 16	N/V
Aldicarb	N/A	N/A	0.9
Aldrin	0.05	(0.11) 0.088	N/V
Aldrin + Dieldrin	N/A	N/A	0.07
Anthracene	0.16	(0.74) 0.67	N/V
Antimony	1.3	(50) 40	N/V
Arsenic	18	18	2.5
Atrazine + N-Dealkylated Metabolites (Weedex)	N/A	N/A	0.5
Azinphos-Methyl	N/A	N/A	2
Barium	220	670	100
Bendiocarb	N/A	N/A	4
Benzene	0.02	(0.4) 0.32	0.5
Benzo(a)Anthracene	0.36	0.96	N/V
Benzo(a)Pyrene	0.3	0.3	0.001
Benzo(b)Fluoranthene	0.48	0.96	N/V
Benzo(g,h,i)Perylene	0.68	9.6	N/V
Benzo(k)Fluoranthene	0.48	0.96	N/V

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Beryllium	2.5	(10) 8	N/V
Biphenyl, 1,1-	0.05	(210) 52	N/V
BIS(2-Chloroethyl) Ether	0.5	0.5	N/V
BIS(2-Chloroisopropyl) Ether	0.5	(13) 11	N/V
BIS(2-Ethylhexyl) Phthalate	5	(35) 28	N/V
Boron (hot water soluble)	NA	2.0	NV
Boron (Total)	36	120	500
Bromodichloromethane	0.05	(1.9) 1.5	N/V
Bromoform	0.05	(1.7) 0.61	N/V
Bromomethane	0.05	0.05	N/V
Bromoxynil	N/A	N/A	0.5
Cadmium	1.2	1.9	0.5
Carbaryl/Sevin/1-Naphyl-N Methyl Carbonate	N/A	N/A	9
Carbofuran	N/A	N/A	9
Carbon Tetrachloride	0.05	(0.71) 0.21	0.5
Chlordane	0.05	0.05	0.7
Chloride	NA	N/V	N/V
Chloroaniline, p-	0.5	(0.53) 0.5	N/V
Chlorobenzene	0.05	(2.7) 2.4	8
Chloroform	0.05	(0.18) 0.47	10
Chlorophenol, 2-	0.1	(3.9) 3.1	N/V
Chloropyrifos	N/A	N/A	9

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Chromium (Total)	70	160	5
Chromium (VI)	0.66	(10) 8.0	N/V
Chrysene	2.8	9.6	N/V
Cresol (Mixture - total of all Isomers, when Isomers cannot be differentiated)	N/A	N/A	200
M-Cresol	N/A	N/A	200
O-Cresol	N/A	N/A	200
P-Cresol	N/A	N/A	200
Cobalt	21	(100) 80	N/V
Copper	92	(300) 230	N/V
Cyanide (free)	0.051	0.051	20
2,4-D / (2,4-Dichlorophenoxy) Acetic Acid	N/A	N/A	10
2,4-DCP (2,4-Dichlorophenol)	N/A	N/A	90
DDD	0.05	4.6	N/V
DDE	0.05	(0.65) 0.52	N/V
DDT	1.4	1.4	3
Diazinon/Phosphordithioic Acid, O,O-Diethyl O-(2-Isopropyl 6-Methyl-4-Pyrimidinyl) Ester	N/A	N/A	2
Dicamba	N/A	N/A	12
Dibenzo(a,h)Anthracene	0.1	0.1	N/V
Dibromochloromethane	0.05	(2.9) 2.3	N/V
Dichlorobenzene, 3,3'-	1	1	N/V

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Dichlorobenzene, 1,2- (o-DCB)	0.05	(1.7) 1.2	20
Dichlorobenzene, 1,4- (p-DCB)	0.05	(0.57) 0.2	0.5
Dichlorobenzene, 1,3- (m-DCB)	0.05	(12) 9.6	N/V
Dichlorodifluoromethane	0.05	(25) 16	N/V
Dichloroethane, 1,1-	0.05	(0.6) 0.47	N/V
Dichloroethane, 1,2-	0.05	0.05	0.5
Dichloroethylene, 1,1-	0.05	(0.48) 0.064	1.4
Dichloroethylene, CIS-1,2-	0.05	(2.5) 1.9	N/V
Dichloroethylene, TRANS-1,2-	0.05	(2.5) 1.3	N/V
Dichloromethane (Methylene Chloride)	N/A	N/A	5
Diclofop-Methyl	N/A	N/A	0.9
Dichlorophenol, 2, 4-	0.1	(0.27) 0.19	N/V
Dichloropropane, 1,2-	0.05	(0.68) 0.16	N/V
Dichloropropene, 1,3-	0.05	(0.081) 0.059	N/V
Dieldrin	0.05	(0.11) 0.088	N/V
Diethyl Phthalate	0.5	0.5	N/V
Dimethoate	N/A	N/A	2
Dimethyl Phthalate	0.5	0.5	N/V
Dimethylpenol, 2, 4-	0.2	(53) 38	N/V
Dinitrophenol, 2, 4-	2	(2.9) 2	N/V
Dinitrotoluene, 2,4-	0.5	0.5	0.13
Dinoseb	N/A	N/A	1

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Dioxane – 1,4	0.2	1.8	N/V
Dioxin/Furan (ng TEQ/g soil)	0.000007	0.000099 TEQ	0.0000015
Diquat	N/A	N/A	7
Diuron	N/A	N/A	15
Endosulfan	0.04	(0.38) 0.3	N/V
Endrin	0.04	0.04	0.02
Ethylbenzene	0.05	(1.6) 1.1	N/V
Ethylene Dibromide	0.05	0.05	N/V
Fluoranthene	0.56	9.6	N/V
Fluroene	0.12	(69) 62	N/V
Fluoride	N/A	N/A	150
Glyphosate	N/A	N/A	28
Heptachlor Epoxide	0.05	0.05	0.3
Heptachlor	0.05	0.19	N/A
Heptachlor + Heptachlor Epoxide	N/A	N/A	0.3
Hexachlorobenzene	0.01	0.66	0.13
Hexachlorobutadiene	0.01	(0.095) 0.031	0.5
Hexachlorocyclohexane, gamma	0.01	(0.063) 0.056	N/V
Hexachloroethane	0.01	(0.43) 0.21	3
Hexane (n)	0.05	(88) 46	N/V
Indeno(1,2,3-cd)pyrene	0.23	(0.95) 0.76	N/V
Lead	120	120	5

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Lindane	N/A	N/A	0.4
Malathion	N/A	N/A	19
Mercury	0.27	(20) 3.9	0.1
Methoxychlor	0.05	1.6	N/A
Methoxychlor/1,1,1,-Trichloro-2,2,BIS(P-Methoxyphenyl) Ethane	N/A	N/A	90
Methyl Isobutyl Ketone	0.5	(210) 31	N/V
Methyl Mercury	NV	(0.0094) 0.0084	N/V
Methyl Tert Butyl Ether	0.05	(2.3) 1.6	N/V
Methyl Ethyl Ketone	0.5	(88) 70	200
Methylene Chloride	0.05	(2) 1.6	5
Methylnaphthalene, *1-	0.59	(42) 30	N/V
Methylnaphthalene, 2-	0.59	(42) 30	N/V
Methyl Parathion	N/A	N/A	0.7
Methylene Chloride/Dichloromethane	N/A	N/A	5
Metolachlor	N/A	N/A	5
Metribuzin	N/A	N/A	8
Molybdenum	2	40	N/V
Naphthalene	0.09	(28) 9.6	N/V
NDMA	N/A	N/A	0.0009
Nickel	82	(340) 270	N/V
Nitrate/Nitrate	N/V	N/V	1000
Nitrilotriacetic Acid (NTA)	N/A	N/A	40

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Nitrobenzene	N/A	N/A	2
Paraquat	N/A	N/A	1
Parathion	N/A	N/A	5
Pentachlorophenol	0.1	(3.3) 2.9	6
Petroleum Hydrocarbons F1 (C6-C10) ^a	10	(65) 55	N/V
Petroleum Hydrocarbons F2 (>C10-C16) ^a	10	(250) 230	N/V
Petroleum Hydrocarbons F3 (>C16-C34) ^a	50	(2500) 1700	N/V
Petroleum Hydrocarbons F4 (>C34) ^a	50	(6600) 3300	N/V
Phenanthrene	0.69	(16) 12	N/V
Phenol	0.5	9.4	N/V
Phorate	N/A	N/A	0.2
Picloram	N/A	N/A	19
Polychlorinated Biphenyls	0.3	1.1	0.3
Pyrene	1.0	96	N/V
Pyridine	N/A	N/A	5
Selenium	1.5	5.5	1
Silver	0.5	(50) 40	5
Simazine	N/A	N/A	1
Styrene	0.05	(43) 34	N/V
2,4,5-T (2,4,5-Trichlorophenoxyacetic Acid)	N/A	N/A	28

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2,4,5-TP/Silvex/ 2-(2,4,5-Trichlorophenoxy) Propionic Acid	N/A	N/A	1
Temephos	N/A	N/A	28
Terbufos	N/A	N/A	0.1
Tetrachloroethane, 1,1,2,2,-	0.05	(0.094) 0.05	N/V
Tetrachloroethane, 1,1,1,2-	0.05	(0.11) 0.087	N/V
Tetrachloroethylene	0.05	(2.5) 1.9	3
2,3,4,6-Tetrachlorophenol/ (2,3,4,6-TECP)	N/A	N/A	10
Thallium	1	3.3	N/V
Toluene	0.2	(9) 6.4	N/V
Toxaphene	N/A	N/A	0.5
Triallate	N/A	N/A	23
Trichlorobenzene, 1,2,4-	0.05	(16) 3.2	N/V
Trichloroethane, 1,1,2-	0.05	(0.11) 0.05	N/V
Trichloroethane, 1,1,1-	0.05	(12) 6.1	N/V
Trichloroethylene	0.05	(0.61) 0.55	5
Trichlorofluoromethane	0.25	(5.8) 4	N/V
Trichlorophenol, 2,4,6-	0.1	(2.9) 2.1	0.5
Trichlorophenol, 2,4,5-	0.1	(10) 9.1	400
Trifluralin	N/A	N/A	4.5
Uranium	2.5	33	10
Vanadium	86	86	N/V

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Vinyl Chloride	0.02	(0.25) 0.032	0.2
Xylenes	0.05	(30) 26	N/V
Zinc	290	340	N/V
Electrical Conductivity (mS/cm)	0.57	1.4	N/V
Sodium Adsorption Ratio (SAR)	2.4	12	N/V

Notes:

Highlighted parameters are O.Reg. 153 inorganics, if the Region prescribes a composite soil test.

- ** - Soil, Ground Water and Sediment Standards for Use Under Part XV.1 (July 1, 2011) of the Environmental Protection Act (MECP Table 2 - Industrial, Commercial and Community Properties)
- N/V - No Value
- (*1-) - 2-Methyl Naphthalene soil standard is applicable to 1-methyl naphthalene with the provision that if both are detected in the soil, the sum of the two concentrations cannot exceed the soil standard.
- () - Criterion value in brackets applies to medium and fine textured soils. Note: values without brackets apply to course textured soils.
- a - For a site to meet this standard, there must be no evidence of free products including, but not limited to, visible petroleum hydrocarbon film or sheen present on groundwater, surface water or in any groundwater or surface water samples. Groundwater must be free of objectionable petroleum hydrocarbon odour and taste.

TABLE 2**Topsoil Quality Guidelines**

Test Description	Typical Guidelines	Units
pH	5.5 - 7.5	-
Organic Matter	4 - 15	%
Total Salts	< 1.5	mmhos/cm
Phosphorus	10 - 60	ppm
Potassium	80 - 250	ppm
Calcium	1000 - 4000	ppm
Magnesium	100 - 300	ppm
Chloride	< 100	ppm
Sodium	< 200	ppm
Sodium Adsorption Ratio	< 15	-
Sand Fraction	20 - 75	%
Silt Fraction	5 - 50	%
Clay Fraction	5 - 30	%
Texture	Loam/Sandy Loam	-