

Lindsay Ops Landfill 51 WILSON RD, KAWARTHA LAKES, ON, K9V 4R3

Inspection Report

System Number:

Inspection Start Date: 10/28/2021 Inspection End Date: 11/24/2021

Inspected By: Glenn Rutherford

Badge #: 472

(signature)

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NON-COMPLIANCE/NON-CONFORMANCE ITEMS

This should not be construed as a confirmation of full compliance with all potential applicable legal requirement and BMPs. These inspection findings are limited to the components and/or activities that were assessed, and the legislative framework(s) that were applied. It remains the responsibility of the owner to ensure compliance with all applicable legislative and regulatory requirements.

If you have any questions related to this inspection, please contact the signed Provincial Officer.

INSPECTION DETAILS

This section includes all questions that were assessed during the inspection.

Ministry Program: Regulated Activity: WASTE: Landfills

Component Assessed: LANDFILL

Question ID NOL 1		
Question	Question	Legislative
	Type	Requirement
Does the Open landfill site have an Environmental	Legislative	EPA 27 (1)
Compliance Approval (ECA)?		

Observation

Yes

An inspection site visit was conducted on October 28, 2021.

The 2020 Annual Monitoring Report (AMR) was used as a resource to address inspection questions as needed.

This section present some landfill background followed by a discussion of the ECA.

Background

The Lindsay Ops Landfill site is located at 51 Wilson Road, in the former Township of Ops. The site is just outside the town of Lindsay and is located next to the Lindsay Wastewater Treatment facility. The site is owned by the City of Kawartha Lakes.

Landfill operations originally began at the site in 1980. The original landfill at the site is now closed and the currently operating landfill, known as the north expansion area, is located to the north of the closed landfill. The current landfill operation was first approved in 2001.

The site consists of a 21.2 hectare waste fill area within a total site area of 53.9 hectares. The landfill site is one of five operating Landfills serving the City of Kawartha Lakes, population approximately 80,000. The site is approved to receive solid, non-hazardous municipal wastes generated within the City of Kawartha Lakes, including residential, commercial, institutional and industrial sectors, contaminated fill, and biosolids (processed organic wastes) restricted to treated and dewatered sewage sludge from the Lindsay Water Pollution Control Plant (WPCP).

ECA

ECA A321504 was consolidated into a single document dated December 5, 2019 as a "housekeeping" measure to eliminate the seven amending notices and to modernize the ECA wording.

A subsequent minor amendment was issued on January 8, 2021. This amendment approved

changes related to discharge of water from the compost pond. This amendment was incorporated into the main body of the ECA.

Question ID NOL 3		
Question	Question	Legislative
	Type	Requirement
Does the holder of the landfill ECA own the entire site?	Information	EPA 27 (1),
		EPA O. Reg.
		232/98 3

Observation

Yes

The 2020 AMR provides a general description of the CAZ lands for the landfill site, as follows:

2020 AMR page 2 indicates:

"The Lindsay WPCP is located immediately west of the original landfill and southwest of the expansion area. The Sturgeon Lake Wetland and the Scugog River are west of the Lindsay WPCP and Landfill Site. The City owns the land to the north of the Site. Immediately south of the Site is Lagoon Road, with the adjacent land south of the road owned by the City as a contaminant attenuation zone (CAZ). Immediately east of the Site is Wilson Road. The City owns all of the properties to the east side of Wilson Road with the exception of one at the northeast corner of Wilson Road and Highway 36."

Question ID NOL 2		
Question	Question Type	Legislative Requirement
Is this landfill on Crown land?	Information	Not Applicable
Observation	Information	Not Applicable
No		

Question ID NOL 4		
Question	Question	Legislative
	Type	Requirement
Does the landfill have a Contaminant Attenuation Zone	Information	Not Applicable
(CAZ)?		
Observation		
Yes		

Question ID NOL 5		
Question	Question	Legislative
	Туре	Requirement

Is the CAZ on Crown land?	Information	Not Applicable
Observation		
No		

Question ID NOL 13		
Question	Question	Legislative
	Type	Requirement
Are access roads and on-site roads provided so that vehicles hauling waste to and on the site may travel readily on any day under all normal weather conditions?	Information	EPA 27 (1)
Observation		
Yes		

Question ID NOL 14		
Question	Question	Legislative
	Type	Requirement
Is site access limited to times when an attendant is on duty?	Legislative	EPA 27 (1)
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Yes

Access to the site is controlled. The site is fenced and gated. When open all vehicles entering the site must pass the scale house.

Current site public operating times:

(Winter and summer hours)

Monday: 8am to 5pm Tuesday: 8am to 5pm Wednesday: closed Thursday: 8am to 5pm Friday: 8am to 5pm Saturday: 8am to 3pm

Question ID NOL 15		
Question	Question Type	Legislative Requirement
Does the site only receive waste from within its approved service area?	Legislative	EPA 27 (1)
Observation		
Yes		

Question ID	NOL 16		
Question		Question	Legislative
		Type	Requirement

Is the site required to have a ground water monitoring	Information	Not Applicable
program by the ECA?		
Observation		
Yes		

Question ID NOL 17		
Question	Question Type	Legislative Requirement
Is the site implementing the groundwater monitoring program as required by the ECA?	Legislative	EPA 27 (1)
Observation		
Yes		

Question	Question	Legislative
	Type	Requirement
Are monitoring well samples taken and tested to determine the quality of the ground water?	Legislative	EPA 27 (1), EPA O. Reg. 232/98 25
Observation	•	•
Yes		

Question ID NOL 19		
Question	Question	Legislative
	Type	Requirement
Is the ministry concerned with the results of the samples that	Information	Not Applicable
have been tested?		
Observation		

No

Groundwater monitoring results from the AMR for the site are periodically reviewed.

Based on a limited review of the 2019 AMR for this inspection report, the 2019 AMR's main conclusions appear to be that the contaminate plume from the old landfill does not extend significantly beyond the old landfill site boundary and that loadings to the bedrock aquifer from the landfill are considered acceptable. A single round of PFAS sampling was evaluated.

As well, the 2019 AMR does not identify any Reasonable Use Guideline concerns with the site.

PFAS sampling has been undertaken at the site and this may assist in identifying the landfill groundwater plume from any other contaminant plume associated with the sewage lagoons or off-site sources.

Question ID NOL 20		
Question	Question Type	Legislative Requirement
Is there ongoing abatement to address any concerns the ministry has with the ground water monitoring?	Information	Not Applicable
Observation	<u> </u>	1
No		

Question ID NOL 21		
Question	Question	Legislative
	Type	Requirement
Is the site required to manage leachate by the ECA?	Information	Not Applicable
Observation		

Yes

Leachate control at the site is provided by the following:

- An engineered leachate collection system constructed to service the north expansion area. This includes Cells 1, 2, 3, and 6, and more recently Cells 4 and 5 (north half).
- The old landfill is serviced by a perimeter leachate collection system installed as part of the site closure but has no base liner system. As well, the old landfill is capped with a synthetic membrane to prevent precipitation from infiltrating to the waste mound.

Additionally, sewage from the onsite buildings, septage from the RV dumping station are directed to leachate pump chambers.

Leachate is pumped to the water pollution control plant for treatment and disposal.

Leachate flow volumes are monitored at the water pollution control plant. The total leachate/groundwater volume pumped in 2020 was approximately 47,235 cubic metres with the majority coming from the landfill expansion area.

As per ECA Condition 5.16, annual high pressure flushing and CCTV video inspection of the collection system is completed. The CCTV video inspection was in progress on the day of the inspection.

Question ID NOL 22		
Question	Question Type	Legislative Requirement
Is the landfill implementing the procedures required by the ECA to manage leachate?	Legislative	EPA 27 (1)
Observation		
Yes		

Question ID NOL 23		
Question	Question Type	Legislative Requirement
Are samples taken to monitor leachate quality?	Legislative	EPA 27 (1), EPA O. Reg. 232/98 26
Observation		
Yes		

Question ID NOL 24		
Question	Question	Legislative
	Type	Requirement
Is the ministry concered with the leachate quality?	Information	Not Applicable
Observation		
No		

Question ID NOL 25		
Question	Question Type	Legislative Requirement
Is there ongoing abatement to address any concerns the ministry has with the leachate monitoring?	Information	Not Applicable
Observation		
No		

Question ID NOL 26		
Question	Question	Legislative
	Type	Requirement
Is the site required to manage landfill gas by the ECA?	Information	Not Applicable

Yes

The Lindsay Ops Landfill is equipped with landfill gas collection. Landfill gas collection wells were added to the older sections of the landfill post-closure while the newer cells were engineered and built with landfill gas collection systems.

Landfill gas is collected and pumped to a central facility which cleans the gas for use in engines which are used to generate electricity. The facility is also equipped with a landfill gas flare which operates when the engines are not operational and for burning off wastes from the siloxane filter.

The 2020 AMR reports that the landfill gas monitoring program continues to confirm that methane gas from the landfill is not migrating off-site at significant levels. Significant detections of methane gas are found on-site at locations near the waste mound but significant concentrations are not found beyond the vicinity of the waste mound.

Question ID NOL 27		
Question	Question Type	Legislative Requirement
Is the site implementing the landfill gas manangement requirements in the ECA?	Legislative	EPA 27 (1)
Observation		
Yes		

Question ID NOL 29		
Question	Question	Legislative
	Type	Requirement
Is the ministry concerned with landfill gas at this site?	Information	Not Applicable
Observation		
No		

Question ID NOL 30		
Question	Question	Legislative
	Type	Requirement
Is there ongoing abatement to address any concerns the	Information	Not Applicable
ministry has with landfill gas at this site?		
Observation		
No		

Question ID NOL 31		
Question	Question Type	Legislative Requirement
Is the site required to have a surface water monitoring program by the ECA?	Information	Not Applicable
Observation		

Yes

Reviews of previous AMRs have suggested some possible impacts to the Scugog River from either the landfill, the Lindsay Water Pollution Control Plant or another nearby but off-site source. PFAS monitoring that is currently underway and additional sample results may assist in ruling out the landfill as a source of this contamination.

Question ID NOL 32		
Question	Question	Legislative
	Type	Requirement
Is the site implementing the surface water monitoring	Legislative	EPA 27 (1)
program as required by the ECA?		
Observation		

Question	Legislative
Type	Requirement
Legislative	EPA 27 (1), EPA O. Reg. 232/98 24
	Type

Question ID NOL 34		
Question	Question Type	Legislative Requirement
Are there water quality concerns with the results of the samples that have been tested?	Information	Not Applicable
Observation		
No		

Question ID NOL 35		
Question	Question Type	Legislative Requirement
Is there ongoing abatement to address any concerns the ministry has with the surface water monitoring?	Information	Not Applicable
Observation		
No		

Question ID NOL 36		
Question	Question	Legislative
	Type	Requirement
Is proper equipment available for the compaction of waste	Legislative	EPA 27 (1)
and applying cover material?		
Observation		
Yes		

Question ID NOL 37		
Question	Question	Legislative
	Type	Requirement
Is the landfill able to accurately determine the amount of waste received?	Legislative	EPA 27 (1)
Observation		

Question ID NOL 38		
Question	Question Type	Legislative Requirement
Are all disposal operations at the site adequately and continually supervised?	Legislative	EPA 27 (1)
Observation		
Yes		

Question Type	Legislative Requirement
Information	Not Applicable
	Type

Question ID NOL 40		
Question	Question Type	Legislative Requirement
Does the landfill operator have a procedure in place to address issues identified by staff during the site inspection?	Legislative	EPA 27 (1)
Observation		
Yes		

Question ID NOL 41		
Question	Question	Legislative
	Type	Requirement
Is the waste being compacted adequately?	Legislative	EPA 27 (1)
Observation		
Yes		

Question ID NOL 42		
Question	Question	Legislative
	Type	Requirement
Is Daily cover applied to the waste at the end of each working day or as otherwise specified in the ECA?	Legislative	EPA 27 (1), EPA O. Reg. 232/98 7
Observation		
Yes	_	

Question ID NOL 43		
Question	Question Type	Legislative Requirement
Are procedures implemented to control rodents or other animals and insects at the site?	Legislative	EPA 27 (1)
Observation		
Yes		

Question ID NOL 44		
Question	Question Type	Legislative Requirement
Is site access restricted by use of a gate, fence, or physical barrier when the site is not operating?	Legislative	EPA 27 (1)
Observation		
Yes		

Question ID NOL 45		
Question	Question	Legislative
	Type	Requirement
Is the waste disposal area adequately screened from public	Legislative	EPA 27 (1)
view?		
Observation	-	-

Yes

The active waste disposal area is visible from the access road but cannot be observed from local public roads.

Question ID NOL 46		
Question	Question	Legislative
	Type	Requirement
Are daily records of site operations available at the site for at	Legislative	EPA 27 (1),
least the past 2 years or as otherwise required by the ECA?		EPA O. Reg.
		232/98 21
Observation		
Yes		

Question ID NOL 47		
Question	Question	Legislative
	Type	Requirement
Has the annual operations report been submitted to MECP or	Legislative	EPA 27 (1)

available on site as required by the ECA?		
Observation		
Yes		

Type	Requirement
	Requirement
Legislative	EPA 27 (1), EPA O. Reg. 232/98 23

Question ID NOL 51		
Question	Question Type	Legislative Requirement
Is the landfill only accepting the types of waste that they are approved to receive?	Legislative	EPA 27 (1)
Observation		
Yes		

Question ID NOL 52		
Question	Question	Legislative
	Type	Requirement
Does the landfill have a waste refusal procedure in place to manage waste that arrives at the site that the site is not approved the accept?	Information	Not Applicable
Observation		
Yes		

Question ID NOL 53		
Question	Question	Legislative
	Type	Requirement
is the waste refusal procedure being followed?	Legislative	EPA 27 (1)
Observation		
Yes		

Question ID NOL 54		
Question	Question	Legislative
	Type	Requirement
Does the landfill have a procedure in place to address and	Legislative	EPA 27 (1)

document spills and fires?	
Observation	
Yes	

Question ID NOL 55		
Question	Question Type	Legislative Requirement
Does the landfill have emergency contingency plan as required by the ECA?	Legislative	EPA 27 (1)
Observation	•	·
Yes		

Question ID NOL 59		
Question	Question	Legislative
	Type	Requirement
Does the landfill have a procedure in place to address	Legislative	EPA 27 (1)
complaints?		
Observation		
Yes		

Question ID NOL 61		
Question	Question Type	Legislative Requirement
Has the landfill operator developed a Design and Operations Manual?	Information	EPA 27 (1)
Observation Yes		

Question ID NOL 62		
Question	Question	Legislative
	Type	Requirement
Is the Design and Operations Manual up to date?	Information	Not Applicable
Observation		
Yes		

Question ID NOL 63		
Question	Question Type	Legislative Requirement
Does the landfill operator have training procedures for site personnel?	Legislative	EPA 27 (1)
Observation	•	

Question ID NOL 64		
Question	Question Type	Legislative Requirement
Is the landfill operator following the established training procedures?	Legislative	EPA 27 (1)
Observation		
Yes		

Question	Legislative Requirement
	EPA 27 (1)
8	
	Question Type Legislative

Question ID NOL 60		
Question	Question	Legislative
	Type	Requirement
Has the landfill operator addressed the complaints to the satisfaction of the ministry?	Legislative	EPA 27 (1)
Observation		
Yes		

Ministry Program: Regulated Activity: WASTE : Receiver Transfer Processing Component Assessed: HOUSEHOLD HAZARDOUS WASTE DEPOT

Question ID 1-E2RB6L		
Question	Question Type	Legislative Requirement
Is the site only accepting wastes limited to the types specified in the ECA?	Legislative	EPA 27 (1)

Observation

Yes

The site is only collecting the waste classes identified in the ECA.

Collected wastes are picked up by Terrapure. Collection is generally completed weekly with fewer collections during winter months as received volumes decrease.

Question ID	1-E2TK4R		
Question		Question	Legislative

	Type	Requirement
Is waste received at the Site within the approved limits as specified in the ECA?	Legislative	EPA 27 (1)
Observation		
Vas		·

All waste volumes are recorded via the manifests and tracked.

Question ID 1-E2TK4Z		
Question	Question	Legislative
	Type	Requirement
Are wastes stored and handled in accordance with the ECA	Legislative	EPA 27 (1)
conditions?		
Observation	-	•

Yes

Collected materials are stored in drums. Separate drums are used for each waste class. Drums are provided by the carrier.

Question ID 1-E2TODX		
Question	Question	Legislative
	Type	Requirement
Are waste areas of the site being inspected, as specified in	Legislative	EPA 27 (1)
the ECA?		
Observation		
Yes		

Question ID 1-E2TOEX		
Question	Question	Legislative
	Type	Requirement
Are trained/competent personnel inspecting the waste areas,	Legislative	EPA 27 (1)
as specified in the ECA?		
Observation		
37		

Yes

All staff working in the HHW depot are trained. This includes TDGA training every 3 years.

Question ID 1-E2TOF5		
Question	Question	Legislative
	Type	Requirement
Is the site maintaining records on incoming, outgoing, and	Legislative	EPA 27 (1)
waste storage amounts, as specified in the ECA?		

Observation	
Yes	

Question ID 1-E2TOBB		
Question	Question Type	Legislative Requirement
Are wastes stored in accordance with the storage duration limits specified in the ECA?	Legislative	EPA 27 (1)
Observation	·	·
Yes		

n Legislative Requirement		
EPA 27 (1)		
Observation Yes		

Question ID 1-E2TOCF		
Question	Question Type	Legislative Requirement
Are wastes stored in accordance with the storage quantity limits specified in the ECA?	Legislative	EPA 27 (1)
Observation		
Yes		

Question ID 1-E2TOCN		
Question	Question	Legislative
	Type	Requirement
Are wastes stored in accordance with the storage locations specified in the ECA?	Legislative	EPA 27 (1)
Observation		
Yes		