



## Solid Non-Hazardous Waste Disposal Site Inspection Report

<b>Client:</b>	The Corporation of the Municipality of Southwest Middlesex Mailing Address: 153 McKellar St, Post Office Box, 218, Glencoe, Ontario, Canada, N0L 1M0 Physical Address: 153 McKellar St, Southwest Middlesex, Municipality, County of Middlesex, Ontario, Canada, N0L 1M0 Telephone: (519)287-2015, FAX: (519)287-2359, email: jfrancisco@southwestmiddlesex.ca Client #: 2308-4XUQEP, Client Type: Municipal Government, NAICS: 913910		
<b>Inspection Site Address:</b>	Trillium Drive Landfill Site (Ekfrid Landfill) Address: 3945 Trillium Dr, Southwest Middlesex, Municipality, County of Middlesex, N0L 1M0 District Office: London - District GeoReference: , LIO GeoReference: Zone: 17, UTM Easting: 445036.6, UTM Northing: 4731827.0, Latitude: 42.736988, Longitude: -81.67147		
<b>Contact Name:</b>	Jaime Francisco	<b>Title:</b>	Public Works Manager
<b>Contact Telephone:</b>	519-287-2015 ext	<b>Contact Fax:</b>	
<b>Last Inspection Date:</b>	2010/09/14		
<b>Inspection Start Date:</b>	2014/10/01	<b>Inspection Finish Date:</b>	2014/10/31
<b>Region:</b>	Southwestern		

### 1.0 INTRODUCTION

On October 1, 2014 Ministry of the Environment and Climate Change Provincial Officer, Pawel Kucharski, commenced a solid non-hazardous waste disposal site inspection of Trillium Drive Landfill located on Lot 22, Concession R1N, in the Ekfrid Township of the Municipality of Southwest Middlesex. This inspection was conducted as part of the Ministry of the Environment 's London District Office 2013-14 Planned Inspection Program, to assess compliance with the requirements of the Environmental Protection Act, the Ontario Water Resources Act, Regulation 347 (Waste), Certificate of Approval number A041403, and all other applicable Ministry of the Environment policies and guidelines.

Inspection Note: Changes to the Environmental Protection Act effective in November of 2011 have resulted in Certificates of Approval now being referred to as Environmental Compliance Approvals. This Inspection Report form has not been updated to reflect this change.

### 2.0 INSPECTION OBSERVATIONS

**Certificate of Approval Number(s):**  
A041403

Certificate of Approval number A041403 was issued on July 3, 1980 and approved a 20.2 hectare (50 acre) waste disposal site in accordance with the application and supporting information forms. The approval was issued originally in 1971 and renewed each year until 1980. After 1980 no renewals were required.

The site is approved to receive domestic, commercial and non-hazardous solid industrial waste and that the approval be a register instrument on title.

**2.1 FINANCIAL ASSURANCE:**

**Specifics:**

Financial assurance requirements do not apply to Trillium Drive Landfill.

**2.2 APPROVED AREA OF THE SITE:**

**Specifics:**

Trillium Drive Landfill is a 20.2 hectare (50 acre) site surrounded by agricultural and natural areas. The landfill footprint is not defined in the approval and is difficult to determine where filling has taken place. The active cell which is being filled is identifiable north-east upon entering the landfill. Previous landfill activities which have occurred are generally known by the municipality. The closest residential dwelling was observed to be approximately 250 metres north-east of the landfill. Newbiggen Creek borders the property from the north-east corner to the southeast corner, with drainage from the site being generally directed towards the creek.

**2.3 APPROVED CAPACITY:**

**Specifics:**

There is no approved capacity listed in the approval. The remaining capacity at the landfill is currently unknown. There is an active recycling program and refuse is primarily taken to the landfill by residents and Emterra, who performs the municipal collection, bringing 3 loads a week.

An estimate provided by the public works manager indicated that there is capacity for four (4) cells with a life span of four (4) years per cell resulting in approximately 16 years of capacity.

**2.4 ACCESS CONTROL:**

**Specifics:**

At the time of the inspection the landfill was observed to have a secure entrance. During the hours of operation the site is supervised by an employee of the County. There are signs posted at the entrance which includes hours of operation, approved wastes, unapproved wastes, and tipping fees.

**2.5 COVER MATERIAL:**

**Specifics:**

There are no specific requirements for cover material identified on the approval. On the day of the inspection, the area being used for waste tipping was considerable in height and had little to no soil coverage. Applying cover material at the tipping face does not appear to be an operational practice at this site. Given the heavily vegetated area surrounding the active landfill area there was little to no off-site litter observed.

**2.6 WASTE BURNING:**

**Specifics:**

At the time of the inspection there was a burn area observed on the south-east side of the landfill which showed signs of use and had various metal parts from what is believed to be material other than clean wood.

As a result of the findings, it is the opinion of the undersigned provincial officer that Trillium Drive Landfill did not meet its requirements for burning of clean wood and brush. Burning at the landfill shall not include any Municipal waste as defined by Regulation 347.

"municipal waste" means,

(a) any waste, whether or not it is owned, controlled or managed by a municipality, except,

(i) hazardous waste,

(ii) liquid industrial waste, or

(iii) gaseous waste, and

(b) solid fuel, whether or not it is waste, that is derived in whole or in part from the waste included in clause (a);

The Municipality of Southwest Middlesex shall develop a burning procedure, in writing, that shall be implemented at the municipal landfills by no later than November 28, 2014. A copy of this procedure shall be forwarded to the author of this report no later than the above date.

**2.7 GROUNDWATER/SURFACEWATER IMPACT:**

**Specifics:**

During the inspection a leachate seep was identified approximately 50 metres north-east of the active working face. During a rain event this seep would travel in the north-east direction into Newbiggen Creek. The area could not be fully assessed at the time of the site visit due to the heavy vegetative growth.

A follow-up site visit will be conducted to better assess any leachate break-out at the landfill.

**2.8 LEACHATE CONTROL SYSTEM:**

**Specifics:**

During the inspection, there was pool of leachate observed the bottom of the working face. It appears as though the large working face may be contributing significantly to leachate production, which is collecting in the pond at the bottom of the face. This pond was estimated to be 6-10 metres below the grade of the land surrounding it. There was a pump observed to located on the slope of the pond which was used to pump leachate to the top of the incline. The site operator indicated that occasionally the leachate will be pumped out of the pond when it gets full. A marking left from the high leachate point on the side of the pond, suggest that there was 20-30 centimetres of leachate pumped out of the pond. Following the hose marks observed on the clay, from the pump to the top of the incline, the outfall for the hose was a vegetated area with cattails growing. It appears as though the leachate then flowed downhill, in the north-east direction, entering one of the large channels which have eroded. This channel led directly down the slope into Newbiggen Creek. Pools of suspected leachate were noted from the hose outfall downslope towards the eroded channel.

It should be noted that according to the Ontario Water Resources Act, Section 30.(1) Every person that discharges or causes or permits the discharge of any material of any kind into or in any waters or on any shore or bank thereof or into or in any place that may impair the quality of the water of any waters is guilty of an offence. R.S.O. 1990, c. O.40, s. 30 (1).

Additionally, in order to operate and maintain any type of leachate management system at Trillium Drive Landfill, an application must be submitted to the Ministry to amend Environmental Compliance Approval (ECA) number A041403. This application must be approved prior to implementing the changes.

**Environmental Protection Act, Part II, General Provisions.**

9. (1) No person shall, except under and in accordance with an environmental compliance approval, (a) use, operate, construct, alter, extend or replace any plant, structure, equipment, apparatus, mechanism or thing that may discharge or from which may be discharged a contaminant into any part of the natural environment other than water; or

If the Municipality of Southwest Middlesex does not seek to make amendments to the ECA then it shall adjust landfill practices, immediately, in order to reduce leachate production at the working face.

The Municipality of Southwest Middlesex shall provide a response in writing as to how the leachate issues identified will be addressed. This response must be provided to the undersigned provincial officer no later than November 28, 2014.

**2.9 METHANE GAS CONTROL SYSTEM:**

**Specifics:**

There are no methane gas control requirements or controls for Trillium Drive Landfill.

**2.10 OTHER WASTES:**

**Specifics:**

ECA number A041902 approved the site to receive domestic, and non-hazardous solid industrial wastes. The municipality also operates recycling and composting programs at the site. Construction and demolition wastes are taken at the site some of which are segregated.

During the inspection there were approximately three (3) containers observed, near the concrete pile, which contained an unknown liquid material. Also observed during the inspection was a makeshift storage container full of tanks, some of which were suspected to be propane tanks

The Municipality of Southwest Middlesex shall immediately stop taking unapproved wastes at the landfill sites. Waste located at the site shall be assessed, characterized, and if found to be subject waste, removed by an approved carrier and disposed of at an approved receiver. Documentation that the wastes were moved by an approved hauler and disposed of at an approved waste site shall be provided to the undersigned provincial officer by no later than November 28, 2014

**3.0 REVIEW OF PREVIOUS NON-COMPLIANCE ISSUES**

After a review of previous inspection reports for Trillum Drive Landfill, there were minor compliance and operational issues identified which were addressed at that time.

**4.0 SUMMARY OF INSPECTION FINDINGS (HEALTH/ENVIRONMENTAL IMPACT)**

**Was there any indication of a known or anticipated human health impact during the inspection and/or review of relevant material, related to this Ministry's mandate?**

No

**Specifics:**

**Was there any indication of a known or anticipated environmental impact during the inspection and/or review of relevant material ?**

No

**Specifics:**

**Was there any indication of a known or suspected violation of a legal requirement during the inspection and/or review of relevant material which could cause a human health impact or environmental impairment ?**

No

**Specifics:**

At the time of the inspection the following suspected violations were observed:

1) There was a burn area observed on the south-east side of the landfill which showed signs of use and had various metal parts from what is believed to be material other than clean wood.

Burning at the landfill shall not include any Municipal waste as defined by Regulation 347.

"municipal waste" means,

(a) any waste, whether or not it is owned, controlled or managed by a municipality, except,

(i) hazardous waste,

(ii) liquid industrial waste, or

(iii) gaseous waste, and

(b) solid fuel, whether or not it is waste, that is derived in whole or in part from the waste included in clause (a);

2) In order to operate and maintain any type of leachate management system at Trillum Drive Landfill, an application must be submitted to the Ministry to amend Environmental Compliance Approval (ECA) number A041403. This application must be approved prior to implementing the changes.

**Environmental Protection Act, Part II, General Provisions.**

9. (1) No person shall, except under and in accordance with an environmental compliance approval,

(a) use, operate, construct, alter, extend or replace any plant, structure, equipment, apparatus, mechanism or thing that may discharge or from which may be discharged a contaminant into any part of the natural environment other than water; or

**Was there any indication of a potential for environmental impairment during the inspection and/or the review of relevant material ?**

Yes

**Specifics:**

At the time of the inspection the following suspected non-compliance issues were identified:

1) During the inspection a leachate seep was identified approximately 50 metres north-east of the active working face. During a rain event this seep would travel in the north-east direction into Newbiggen Creek. The area could not be fully assessed at the time of the site visit due to the heavy vegetative growth.

2) During the inspection, there was pool of leachate observed the bottom of the working face. It appears as though the large working face size may be contributing significantly to leachate production, which is collecting in the pond at the bottom of the face. This pond was estimated to be 6-10 metres below the grade of the land surrounding it. There was a pump observed to located on the slope of the pond which was used to pump leachate to the top of the incline. The site operator indicated that occasionally the leachate will be pumped out of the pond when it gets full. A marking left from the high leachate point on the side of the pond, suggest that there was 20-30 centimetres of leachate pumped out of the pond. Following the hose marks observed on the clay, from the pump to the top of the incline, the outfall for the hose was a vegetated area with cattails growing. It appears as though the leachate then flowed downhill, in the north-east direction, entering one of the large channels which have eroded. This channel led directly down the slope into Newbiggen Creek. Pools of suspected leachate were noted from the hose outfall downslope towards the eroded channel. violations of

It should be noted that in accordance with the Ontario Water Resources Act, Section 30.(1) Every person that discharges or causes or permits the discharge of any material of any kind into or in any waters or on any shore or bank thereof or into or in any place that may impair the quality of the water of any waters is guilty of an offence. R.S.O. 1990, c. O.40, s. 30 (1).

**Was there any indication of minor administrative non-compliance?**

No

**Specifics:**

## 5.0 ACTION(S) REQUIRED

As a result of the findings of this inspection report the following actions are required:

1) The Municipality of Southwest Middlesex shall develop a burning procedure, in writing, that shall be implemented at the municipal landfills by no later than November 28, 2014. A copy of this procedure shall be forwarded to the author of this report no later than the above date.

2) The Municipality of Southwest Middlesex shall immediately stop taking unapproved wastes at the landfill sites. Waste located at the site shall be assessed, characterized, and if found to be subject waste, removed by an approved carrier and disposed of at an approved receiver. Documentation that the wastes were moved by an approved hauler and disposed of at an approved waste site shall be provided to the undersigned provincial officer by no later than November 28, 2014

3) The Municipality of Southwest Middlesex shall provide a response in writing describing how the leachate issues identified will be addressed. This response must be provided to the undersigned provincial officer no later than November 28, 2014.

1. As a result of the findings of this inspection report the following actions are required:

- 1) The Municipality of Southwest Middlesex shall develop a burning procedure, in writing, that shall be implemented at the municipal landfills by no later than November 28, 2014. A copy of this procedure shall be forwarded to the author of this report no later than the above date.
- 2) The Municipality of Southwest Middlesex shall immediately stop taking unapproved wastes at the landfill sites. Waste located at the site shall be assessed, characterized, and if found to be subject waste, removed by an approved carrier and disposed of at an approved receiver. Documentation that the wastes were moved by an approved hauler and disposed of at an approved waste site shall be provided to the undersigned provincial officer by no later than November 28, 2014
- 3) The Municipality of Southwest Middlesex shall provide a response in writing describing how the leachate issues identified will be addressed. T

**6.0 OTHER INSPECTION FINDINGS**

**7.0 INCIDENT REPORT**

Applicable  
8585-9QSSL3 



**8.0 ATTACHMENTS**

**PREPARED BY:**

**Environmental Officer:**

**Name:**

**Pawel Kucharski**

**District Office:**

**London District Office**

**Date:**

**2014/11/12**

**Signature**

**REVIEWED BY:**

**District Supervisor:**

**Name:**

**Jason Lehouillier**

**District Office:**

**London District Office**

**Date:**

**2014/11/13**

**Signature:**

**File Storage Number:**

**TEMP**

**Note:**

"This inspection report does not in any way suggest that there is or has been compliance with applicable legislation and regulations as they may apply to this facility. It is, and remains, the responsibility of the owner and/or the operating authority to ensure compliance with all applicable legislative and regulatory

requirements"