

## Septage Management and Private Sewage systems

*Notes from telecom b/n Terry Rees (FOCA) and MOECC*

This call with FOCA was meant to address two topics/concerns raised by FOCA in our letter, sent to MOECC October 9, 2015: 1) the permitting and oversight related to sewage works discharging to surface waters; 2) the permitting and oversight related to land application of septage.

### Private Sewage works:

There are many (see #, below) non-municipal sewage works in the province utilizing a combination of impoundments and settling and that ultimately discharge to surface waters. These systems are required to have an Environmental Compliance Approval under the Ontario Water Resources Act . Conditions / considerations of approvals include meeting standards for effluent quality, concentrations (chemicals), and also take into account the ability of the receiving waters to assimilate the quantity and quality of discharged sewage. In the case of a number of rural Ontario resorts, they are permitted to discharge from their lagoons seasonally. Operators are required to retain records of their effluent quality and quantity and other operational data.

The approvals are site-specific in terms of operational details, quality / quantity, frequency, chemical limits etc. and include a “compliance package” that details the obligations of the operator in terms of record-keeping etc. Many “problem” systems (history of non-compliance for instance) will be spot checked regularly; a number (?) of the rest of the permitted ECA’s are subject to random inspections; these inspectors also keep on the lookout for non-approved systems that are in operation (illegally).

ECA’s typically DO NOT EXPIRE, and the issues related to their operation and to operator compliance are managed of a “risk-management approach”.

FOCA question 1: are the terms of ECA’s a matter of public record and if so how would a concerned neighbour/citizen get access to what is being permitted / what limitations are in place? Don is checking this.

***To access information regarding ministry approvals for sewage systems visit this link:***

<http://www.accessenvironment.ene.gov.on.ca/AEWeb/ae/GoSearch.action?search=basic>

FOCA Question 2: how many of these systems are there in the Province, and of what types; how would one find out if someone is discharging to surface waters near them;

***Sewage works are owned and operated by public and private entities. Small systems discharging to the subsurface are generally regulated under the Building Code which is typically administered by municipalities, Health Units, or Conservation Authorities. Sewage works that discharge to surface water or the ground surface, and larger and more complex systems discharging to the subsurface, are regulated under the Ontario Water Resources Act and fall under the jurisdiction of the Ministry of the***

***Environment and Climate Change (MOECC). There are 493 approved municipal wastewater treatment systems and approximately 4500+ approved private, commercial and institutional sewage treatment facilities. They include treatment plants, lagoons and subsurface systems. More information about systems approved by MOECC can be obtained through Access Environment on-line.***

- ***The ministry uses a variety of approaches to identify and address older unapproved systems that may be operating without an approval:***
  - o ***District Environmental Officers carry out routine inspections assigned annually for a variety of regulated activities which may reveal unapproved sewage works.***
  - o ***Unapproved sewage works may be found during response to incident reports/complaints***
  - o ***Focused education and outreach is provided to sites located beyond municipal servicing areas.***
  - o ***An on-line tool is available to system operators to help them identify legislative requirements that apply to their sewage works.***
- ***Where unapproved sewage works are encountered, the ministry will work with the owner to help ensure that human health and the environment are protected while necessary steps are being taken to come into compliance.***

For the purposes of addressing complaints, bringing up concerns etc. about specific sewage works, the [MOECC District office\(s\)](#) are the place to go (e.g. Barrie office for Muskoka-area issues).

#### Septage spreading / management:

Installation of a household septic system is considered in [Part 8](#) of the Ontario Building Code (OBC). There is nothing to trigger a reinspection (usually an issuance of a building permit will instigate a review of the age and state of a household system) – most other older systems are grandfathered, and don't get looked at unless there is evidence of a failed system that is endangering public health.

Pumping and hauling septic tank waste requires an ECA under the Environmental Protection Act. (It's called "hailed sewage").

Included in these approvals are conditions related to truck and equipment maintenance, the approval of sewage disposal (or spreading) sites, spills response.

The preferred location for final disposition of this material is in municipal wastewater treatment plants – Unfortunately for most of rural Ontario, this capacity does not exist.

Other legal disposition options include: incineration, landfill (dewatering) or land application of untreated septic tank waste waters ("hailed sewage").

Land application sites are regulated under the EPA and are approved by the MOECC District office, who regulate where and how and when you can dump on a site. Site considerations include sensitive features, soil overburden, water wells, surface water, slope, depth to the water table (must be >.9m). Field officers review any proposed site prior to approval, and may set conditions about when or where on the site can be used for land application.

Note if a proposed spreading site is close to a municipal drinking water source (and therefore would constitute a “Significant Drinking Water Threat” under the CWA – a site would not be approved.

These land application approvals have terms of 1 or sometime 3 years. They must then be re-approved on some recurring basis.

In the far north, septage is often “dewatered”, that is it is deposited in trenches usually on the site of existing landfills. The remaining solids are then incorporated into the other general solid waste. These sites tend to have longer (e.g. 5 year) certificate of approvals.

MOECC abatement officers do about 50 proactive inspections/year. Records for all activities related to approved land applications must be maintained and available for inspection.

Below: Undertakings subject to ECA (screen shot from <http://www.ontario.ca/document/environmental-compliance-approval-application>):

The screenshot shows a web-based form for an Environmental Compliance Approval (ECA) application. At the top, there are tabs for 'DOCUMENT', 'PAGES', and 'TEXT', along with a 'Zoom' control and a search bar. Below these are several radio button options: 'Administrative amendment to existing ECA', 'Application for renewal of limited operational flexibility', and 'Consolidation of existing ECAs'. A question asks if a new project type or waste category is being added, with 'Yes' and 'No' radio buttons. The 'Project Type' section (2.2) has a dropdown menu set to '(select all that apply)'. Below this are two tables of project types, each with 'Yes', 'N/A', and 'Limited Operational Flexibility?' columns.

Yes	N/A		Limited Operational Flexibility?	Pilot Project?
<input type="radio"/>	<input checked="" type="radio"/>	Air – Stationary	<input type="checkbox"/>	<input type="checkbox"/>
<input type="radio"/>	<input checked="" type="radio"/>	Air – Mobile	<input type="checkbox"/>	<input type="checkbox"/>
<input type="radio"/>	<input checked="" type="radio"/>	Noise	<input type="checkbox"/>	<input type="checkbox"/>
<input type="radio"/>	<input checked="" type="radio"/>	Vibration	<input type="checkbox"/>	<input type="checkbox"/>
<input type="radio"/>	<input checked="" type="radio"/>	Waste Disposal Site – Landfill site	N/A	<input type="checkbox"/>
<input type="radio"/>	<input checked="" type="radio"/>	Waste Disposal Site – Transfer site	<input type="checkbox"/>	<input type="checkbox"/>
<input type="radio"/>	<input checked="" type="radio"/>	Waste Disposal Site – Processing site	<input type="checkbox"/>	<input type="checkbox"/>
<input type="radio"/>	<input checked="" type="radio"/>	Waste Disposal Site – Composting site	N/A	<input type="checkbox"/>
<input type="radio"/>	<input checked="" type="radio"/>	Waste Disposal Site – Thermal Treatment site	N/A	<input type="checkbox"/>

  

Yes	N/A		Limited Operational Flexibility?
<input type="radio"/>	<input checked="" type="radio"/>	Sewage – Industrial	<input type="checkbox"/>
<input type="radio"/>	<input checked="" type="radio"/>	Sewage – Municipal	<input type="checkbox"/>
<input type="radio"/>	<input checked="" type="radio"/>	Sewage – Private	<input type="checkbox"/>
<input type="radio"/>	<input checked="" type="radio"/>	Waste Management System – General Waste Management System	N/A
<input type="radio"/>	<input checked="" type="radio"/>	Waste Management System – Hauled Sewage (Septage)	N/A
<input type="radio"/>	<input checked="" type="radio"/>	Waste Management System – Soil Conditioner for transport to a site for Application on Land	N/A
<input type="radio"/>	<input checked="" type="radio"/>	Waste Management System – Mobile Waste Processing	N/A
<input type="radio"/>	<input checked="" type="radio"/>	Cleanup of contaminated sites – Mobile	N/A
<input type="radio"/>	<input checked="" type="radio"/>	Cleanup of contaminated sites – Site-specific	N/A