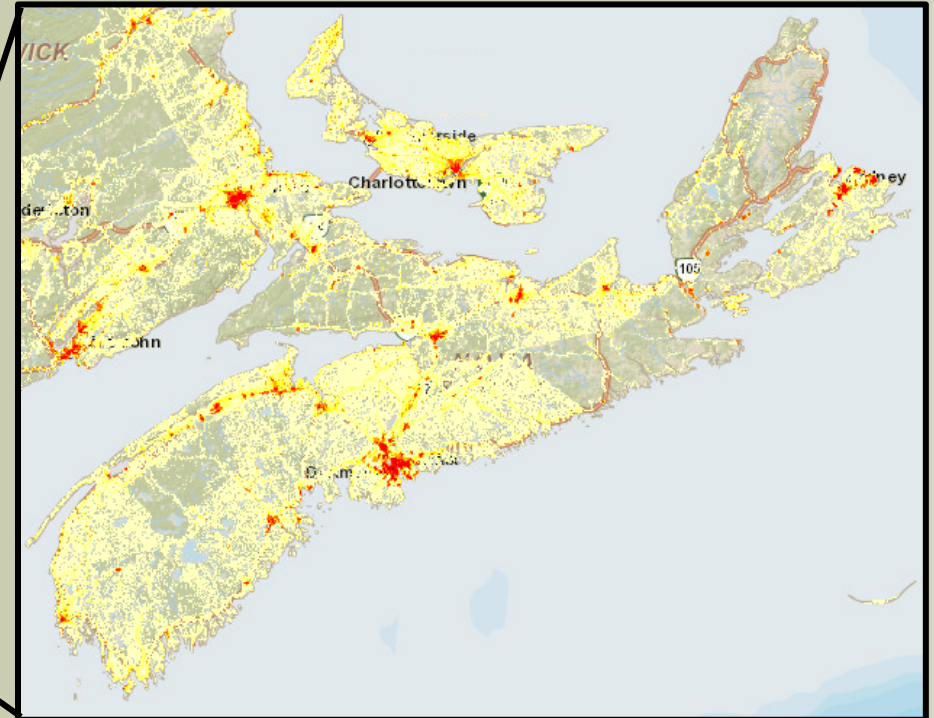


Regulatory Update: Nova Scotia, Canada

**North East Residuals & Biosolids
Specialty Conference & Workshop Series, 2014
Presented by Ashley Hosier,
Nova Scotia Environment**

Regulatory Update: Nova Scotia

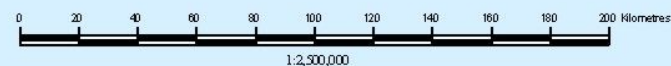


Population: 921 727 (2011 Census)

Sewage Treatment Plants of Nova Scotia

New Brunswick

P.E.I.



Disclaimer

The information on this map may have come from a variety of government and non-government sources and is subject to change without notice. Nova Scotia Environment accepts no liability for any errors, deficiencies, or faults on this map.

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Map Notes

Cartographic compilation, design and production by Nova Scotia Environment, Water and Wastewater Branch, 2009.
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1995: Organics Ban



GUIDELINES FOR LAND APPLICATION AND STORAGE OF MUNICIPAL BIOSOLIDS IN NOVA SCOTIA

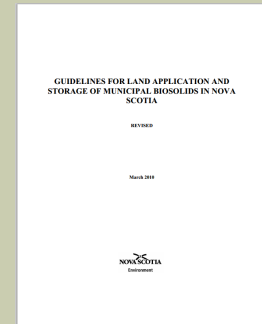
REVISED

March 2010


NOVA SCOTIA
Environment



2010: Biosolids Guidelines



Treatment Options:

- Composting
- Aerobic Digestion
- Anaerobic Digestion
- Alkaline Stabilization
- Heat Drying
- Pasteurization
- Other approved method

Class A:
Unrestricted Use

Class B:
Limited
Application

2010: Biosolids Guidelines

Table 1: Maximum Acceptable Metal and Selected Contaminant Concentrations in Municipal Biosolids (mg/kg of dry weight), along with Pathogen Reduction Requirements

Metals	Class A	Class B
Arsenic	13	75
Cadmium	3	20
Chromium	210	1060
Cobalt	34	150
Copper	400	760
Mercury	0.8	5
Molybdenum	5	20
Nickel	62	180
Lead	150	500
Selenium	2	14
Zinc	700	1850
Dioxins and Furans	0.000017	0.00005
PCB's	0.8	
Fecal Coliform	1000 MPN/g total solids (dry weight)	2,000,000 MPN/g total solids (dry weight)
Salmonella	3 MPN/4 g total solids (dry weight)	

2010: Public Outcry

2010: 'Dunbrack Incident' lead to Biosolids Moratorium in HRM

2011: Moratorium Lifted, preceding scientific study

Slow recovery to gaining back public trust

Biosolids cause stink in HRM

Actress Ellen Page among those speaking out against practice
A Small Victory Against Biosolids in Nova Scotia

CBC Score a small victory for opponents of HRM's use of biosolids, or human waste converted into fertilizer. City hall says the controversial fertilizer will not be used on city property this spring and summer. The city will hold off using it pending the completion of a consultant's study on the stuff.

That's not expected for some months yet. City staffers insist biosolids are safe, but critics disagree, arguing the screening process does not completely remove heavy metals or traces of pharmaceutical drugs contained in the human waste. Halifax-born actress Ellen Page has

CBC - Biosolid use needs more study: Halifax council

Biosolid use needs more study: Halifax council

Sludge Storm

Conference organizers want biosolids out of Nova Scotia

Sludge Watch ==> Halifax: Let's get the real poop on biosolid costs

Maureen Reilly maureen.reilly@sympatico.ca
Tue Nov 16 10:49:47 EST 2010

Review of Halifax Water's N-Viro Biosolids Treatment Process

Final Report

Prepared for:

Review suggests Halifax should lift ban on biosolids

Text: [+] [-] [print]

CTV Atlantic

Published Monday, October 24, 2011 7:07PM ADT

and

Stephenson Environmental Services, Ltd.
Port Burwell, ON

August 25, 2011

Hydromantis
Environmental Services, Inc.

Today: Program Assessment

- Promote beneficial use management programs (public & stakeholder education)
- Identifying Program Gaps:
 - Estimated Sludge Influent \neq Biosolids Produced
 - Investigating WWTP regulations
 - Focus on liquid effluent quality
 - Limited reporting requirement on solids
 - Some smaller facilities claim no solids production

Path Forward...

New Wastewater Strategy will include operator requirements:

- Raw Feedstock Sampling
- Develop a Solids Management Plan

More Accountability = Increased Biosolids Production

Next Steps:

- Comprehensive review of Biosolids Oversight
- Inclusion of other substances that could be land-applied