

# Organic Matter Recycling Regulation Update and Policy Intentions Paper for Consultation

## 1. Introduction

The Ministry of Environment (the ministry) intends to revise the [Organic Matter Recycling Regulation](#) (OMRR), of the [Environmental Management Act](#) (EMA) and the [Public Health Act](#). The regulation, enacted in 2002, governs the construction and operation of composting facilities, and the production, distribution, storage, sale and use or land application of biosolids and compost.<sup>1</sup>

The review process and proposed revisions discussed in this intentions paper reflect advances in science and feedback from stakeholders, as well as addressing minor “housekeeping” amendments.

## 2. Review process update

The ministry prepared a “policy intentions paper for consultation” (intentions paper) posted in October 2006. More than thirty substantive responses were received and are summarized in a consultation report. The intentions paper and summary of comments can be viewed and downloaded from the ministry’s [Organic Matter Recycling Regulation webpage](#).

Subsequent to posting and receiving comment on the intentions paper, the ministry has undertaken a number of regulatory changes relevant to the OMRR:

- ♦ The [Soil Amendment Code of Practice](#), addressing land application of suitable pulp or paper mill wastewater treatment residuals, was enacted in 2007;
- ♦ The [Slaughter and Poultry Processing Industries Code of Practice](#) was enacted in 2007;
- ♦ The [OMRR was amended in 2007](#) to provide consistent definitions and guidance for red-meat waste;
- ♦ [Land Application Guidelines](#) (best management practices) for the OMRR and the Soil Amend-

<sup>1</sup> The OMRR defines five types of organic matter: class A and B compost; class A and B biosolids; and biosolids growing medium. “Biosolids” are defined under the regulation as “stabilized municipal sewage sludge resulting from a municipal treatment process or septage treatment process which has been sufficiently treated to reduce pathogen densities and vector attraction to allow the sludge to be beneficially recycled.”

ment Code of Practice have been developed and posted by the ministry in 2008; and

- ♦ The [Compost Facility Requirements Guideline: how to comply with part 5 of the Organic Matter Recycling Regulation](#) has been developed and posted by the ministry in 2010.

The purpose of this intentions paper is to seek responses and comments from stakeholders and the public on the proposed revisions for the Organic Matter Recycling Regulation. This intentions paper provides an update of the ministry’s proposed revisions to the regulation for consultation prior to drafting and implementation of the revised regulation (in keeping with the ministry’s review process).

This intentions paper provides a summary of the ministry’s mandate and objectives, background information, proposed revisions to the regulation, and sections addressing development of guidance documents and assuring compliance. The final section of the intentions paper describes the avenues for providing comment on proposed revisions to the regulation.

The intentions paper and response form for providing comments to the ministry, as well as further information and links to related legislation, are posted on the ministry’s [consultation webpage](#) and the [Organic Matter Recycling Regulation webpage](#). The information can also be accessed from the [Ministry of Environment homepage](#) by following the “*Environmental Management Act* Codes of Practice and regulatory review” link.

## 3. Ministry mandate and objectives

The Ministry of Environment provides leadership in environmental management through legislation and programs, compliance activities and shared stewardship initiatives. The ministry’s mandate is to protect human health and safety, and to restore and maintain the diversity of native species, ecosystems and habitats. The ministry’s core business areas include environmental protection, stewardship and compliance, in support of the government’s goals.<sup>2</sup>

The composting and recycling of organic matter under the Organic Matter Recycling Regulation

<sup>2</sup> See: [Ministry of Environment Service Plan 2011](#)

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helps to divert material from disposal and supports the ministry's goal of reducing municipal solid waste disposal.

The ministry's objectives in reviewing and revising the regulation are to:

- ◆ Protect the environment (and in particular, soil quality and drinking water sources);
- ◆ Provide clear and effective guidance for local governments and other compost and biosolids producers; and
- ◆ Provide an opportunity to beneficially use specified organic material (as an alternative to chemical fertilizers).

#### **4. Background information**

The OMRR was enacted jointly under the *Public Health Act* and the *Environmental Management Act*. The regulation contains provisions for Medical Health Officers (MHOs) and director (of the ministry) to review, and direct or deny, the land application of managed organic matter. Organic matter suitable for composting under the regulation includes animal bedding, biosolids, brewery and winery wastes, domestic septic tank sludge, fish and hatchery wastes, food waste, manure, milk processing waste and whey, plant matter derived from processing plants, poultry carcasses, untreated and unprocessed wood residuals, and yard waste. The regulation does not apply to the composting of agricultural wastes (such as farm animal manures, mushroom medium and agricultural vegetation waste) on farms – which is governed under the [Agricultural Waste Control Regulation](#) or the operation of a mushroom composting facility – which is governed under the [Mushroom Composting Pollution Prevention Regulation](#).

Municipalities and regional districts in British Columbia that recycle organic matter under the OMRR include Prince George, Whistler, Saanich, Salmon Arm, Kelowna, Chilliwack, District of Kent, Greater Vancouver, Capital and Comox-Strathcona Regional Districts. A range of private operators, in various regions of the province, also recycle organic matter under the regulation.

#### **5. Ministry intentions**

The ministry is considering a number of changes to the OMRR, based on advances in science, feedback from stakeholders and to address operational issues or gaps that have been identified through implementation of the regulation.

Key changes proposed by the ministry in 2006 and discussed in this intentions paper include:

- ◆ Amendments to schedule 12 (Organic Matter Suitable for Composting) – see section 5.1;
- ◆ Replacing the requirement for preparation of an “environmental impact study” triggered by tonnage of production with a requirement to prepare a “leachate impact assessment report” regardless of production tonnage – see section 5.2;
- ◆ A requirement for all existing facilities to prepare plans and specifications before January 1, 2013– see section 5.3 A;
- ◆ A requirement that a land application plan be prepared when the volume of managed organic matter to be land applied is greater than 5m<sup>3</sup> in a year– see section 5.3 A; and
- ◆ A requirement for all facilities to provide the ministry with a notification of operation before January 1, 2013– see section 5.3 B and 5.5.

Changes that are being proposed by the ministry that were not discussed in the previous (2006) intentions paper include:

- ◆ Updated sampling and record keeping requirements – see section 5.4 B; and
- ◆ Additional “housekeeping” changes – see section 5.6.

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## 5.1 Organic matter suitable for composting

The OMRR sets out a list of organic matter suitable for composting and management under the regulation (schedule 12). The following categories of material are addressed under the regulation or related regulations or codes of practice. The ministry is seeking comments regarding potential definitions and inclusion of these categories.

### A. Primary or secondary pulp or paper mill wastewater treatment residuals

Wood or paper fibre removed from a pulp or paper mill wastewater treatment plant or a spill retention pond after primary treatment (primary or secondary pulp or paper mill wastewater treatment residuals) are materials that are potentially suitable for composting and/or land application. The [Soil Amendment Code of Practice](#), enacted in 2007 under the Waste Discharge Regulation of the *Environmental Management Act*, authorizes the **land application** of these materials as a fertilizer or soil amendment.

Definition and inclusion of these organic materials under the OMRR would allow them to be **composted** and enable consistent regulation, and reduce potentially confusing or conflicting regulatory provisions.

The ministry intends to amend schedule 12 of the OMRR to include “pulp and paper mill residual solids” – residual solids from the primary or secondary treatment of liquid waste produced after 1995 from a pulp or paper mill, including domestic sewage if it is mixed with those residual solids.

### B. Clean wood from any source

The OMRR currently includes a definition for “untreated and unprocessed wood residuals.”

The ministry intends to amend the definitions section of the OMRR and schedule 12 (organic matter suitable for composting) to clarify untreated and unprocessed wood under the proposed title of **industrial wood residue**. The proposed definition will explicitly define industrial wood residues as “wood that originates from industrial sources including wood shavings, sawdust, wood chips, hog fuel, bark and mill ends.

Industrial wood residue must:

- (a) Not originate from demolition or construction sources;
- (b) Not contain composite wood products including plywood, particle board, fibreboard, hardboard, oriented strandboard, laminated lumber, laminated wood, veneer, laminate flooring, or engineered wood products;
- (c) Not be contaminated with, or have been treated or coated with, antiseptant, preservative, fire retardant, glue, adhesive, laminate, bonding agents, resin, paint, stain, varnish or another substance harmful to humans, animals, plants or the environment; and
- (d) Not contain other organic matter including food waste or manure.

### C. Unstabilized sewage sludge

The OMRR currently allows composting of unstabilized domestic septic tank sludge within provisions of the regulation. However, it does not enable composting of other unstabilized (i.e., untreated) domestic sewage sludge.

The ministry intends to amend schedule 12 of the regulation to include “**domestic composting toilet sludge**” – sludge removed from a composting toilet used for receiving and treating domestic sewage. Unstabilized (i.e., untreated) domestic sewage sludge **will not** be defined or included in the regulation.

### D. Paper and cardboard

The OMRR presently does not contain provisions for the composting of paper and cardboard. Enabling this material to be categorized as organic matter suitable for composting under the regulation could support viable operation of composting facilities (providing an additional potential feedstock for composting) and potentially reduce the disposal in landfills of paper and cardboard contaminated with organic food waste (that is not acceptable for recycling).

The ministry intends to amend schedule 12 of the regulation to include **paper and cardboard** that cannot be reasonably recycled into a paper product

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and is not contaminated with any substance harmful to humans, animals, plants or the environment.

### **5.2 Leachate management and leachate impact assessment report requirements**

Effective leachate management is essential for composting facilities to ensure protection of human health and the environment.

The ministry intends to amend the regulation to:

- ◆ Replace the requirement for preparation of an environmental impact study (if production tonnage exceeds a specified amount) with a requirement that **all** composting facilities prepare a **leachate impact assessment report** if discharging leachate (irrespective of production tonnage);
- ◆ Prohibit the discharge of leachate in all areas of the province, unless the discharge is in accordance with a leachate impact assessment report prepared by a **qualified professional**<sup>3</sup>;
- ◆ Require an impermeable surface, roof, cover, prepared surface and leachate collection system – unless deemed unnecessary by a qualified professional as documented in the leachate impact assessment report; and
- ◆ Require submission of the leachate impact assessment report to the director at least 90 days prior to any discharge of leachate.

The regulation also provides the director with the authority to specify additional requirements for composting facilities.

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<sup>3</sup> The regulation defines a qualified professional as “a person who (a) is registered in British Columbia with his or her appropriate professional association, acts under that professional association's code of ethics, and is subject to disciplinary action by that professional association, and (b) through suitable education, experience, accreditation and knowledge may be reasonably relied on to provide advice within his or her area of expertise as it relates to this regulation.”

### **5.3 Plans and notification requirements**

#### **A. Plans and associated requirements**

The ministry intends to amend the regulation to include provisions that:

- ◆ Require that all existing facilities prepare plans and specifications by January 1, 2013;
- ◆ Clarify that all plans required of composting facilities be prepared by qualified professionals;
- ◆ Specify that the **odour management plan** required of composting facilities describes how air contaminants from the facility will be “managed, treated and discharged in a manner that does not cause pollution”;
- ◆ Specify that the **operating plan** required of composting facilities addresses the “management and control of wildlife, litter, air quality and dust”;
- ◆ Specify that a **land application plan** must be prepared when the volume of managed organic matter to be land applied is greater than 5m<sup>3</sup> in a year (any 12 month period). The land application plan must provide the required details on all discharges expected for that year;
- ◆ Require any materials, products or substances at the composting facility – including organic matter, managed organic matter, compost, municipal solid waste, residuals and waste – be managed and stored in a manner that prevents access by, and attraction of, wildlife, domestic animals, birds and associated vectors; and
- ◆ Specify that all plans, reports and specifications required of composting facilities under the regulation are kept up to date, and the ministry notified of any change within 30 days of the change.

Note that the OMRR includes setback requirements for the land application of organic matter but does not specify mandatory buffers or setbacks for facility siting. Siting considerations and requirements however, are set out under municipal and/or regional district zoning and related bylaws.

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## **B. Notification of operation**

All new composting facilities will be required to give notice in writing to the director and the Provincial Agricultural Land Commission (if the facility is located in the Agricultural Land Reserve) at least 90 days before beginning operation. Existing facilities will have until January 1, 2013 to provide notification.

## **5.4 Updates to technical standards and record keeping requirements**

### **A. Consistency of schedules with other national standards and regulations**

The OMRR contains a number of schedules that set out technical standards and requirements for recycling organic matter. These include: pathogen reduction processes; vector attraction reduction; pathogen reduction limits; quality criteria; sampling and analysis protocols and frequency (schedules 1-5).

The proposed amendments to the OMRR will ensure that the technical standards in the regulation are consistent with national standards (such as the Canadian Council of Ministers of the Environment (CCME) [Guidelines for Compost Quality](#)) and federal regulations (such as the federal [Fertilizer Act and Regulations and trade memoranda](#)). The regulation will also allow for alternative treatment processes approved by a director.

### **B. Sampling and record keeping requirements**

The ministry is proposing the following changes to sampling and record keeping requirements:

- ◆ Sampling of the finished product be done every 1,000 m<sup>3</sup> (not every 1,000 tonnes), or once per year, whichever comes first;
- ◆ Fecal coliform levels be met in all seven discrete (not representative) samples; and
- ◆ Records be kept for ten (rather than three) years.

### **C. Consistency with the Contaminated Sites Regulation**

Many areas of the province have naturally occurring background levels of some trace elements such as chromium, nickel and selenium that are higher

than the limit currently specified in the OMRR. The [Contaminated Sites Regulation](#) (CSR) includes soil trace element standards, as well as a protocol for determining background trace element levels.

The ministry is suggesting that a “background release” section (analogous to the provisions contained in the CSR) be incorporated into the OMRR. This could allow the beneficial application of organic matter (processed according to the Organic Matter Recycling Regulation) in soils with naturally occurring background levels of some trace elements.

## **5.5 Requirements for production of “biosolids growing medium”**

The regulation sets out requirements for production of **biosolids growing medium**<sup>4</sup>, including process and quality criteria and distribution requirements.<sup>5</sup>

The ministry intends to:

- ◆ Revise schedule 11 of the regulation to reflect national standards<sup>6</sup> – biosolids growing medium must be derived from: class A biosolids; class B biosolids which meet the pathogen and vector attraction reduction requirements for class A biosolids; class A or B compost; or yard waste, industrial wood residue or soil; and
- ◆ Update standards for biosolids growing medium to maintain consistency with related guidelines:
  - Delete reference to the carbon to nitrogen ratio (consistent with CCME Guidelines for Compost Quality), and
  - Specify that Total Kjeldahl Nitrogen must be <1.0 by weight and that organic matter content must not exceed 20 percent dry weight (consistent with the BC Landscape Standard).

<sup>4</sup> “Biosolids growing medium” is a prescribed blend of class A biosolids, or class B biosolids that meet the pathogen and vector attraction reduction requirements for class A biosolids and mineral material such as sand.

<sup>5</sup> See OMRR sections 10 and 11, and schedule 11.

<sup>6</sup> See, for example, CCME Guidelines for Compost Quality and the current edition of the BC Landscape Standard (produced jointly by the BC Landscape and Nursery Association and the BC Society of Landscape Architects).



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The ministry also intends to require that all bio-solids growing medium facilities give notice in writing to the director and to the Provincial Agricultural Land Commission (if the facility is located in the Agricultural Land Reserve) at least 90 days before beginning operation. Existing facilities will have until January 1, 2013 to provide notification (similar to notification requirements for a “composting facility” under the OMRR section 25).

## **5.6 Additional housekeeping changes**

Additional “housekeeping” changes to the regulation proposed by the ministry include:

- ◆ Allowing backyard composting of up to 20 m<sup>3</sup>/yr at non-residential sites (i.e., schools, universities);
- ◆ Repealing a requirement that the regulation be reviewed every 3 years; and
- ◆ Adding the Greater Vancouver Regional District to areas that must cover stored compost between October 1<sup>st</sup> and March 31<sup>st</sup>.

## **6. Best Management Practices**

The OMRR is supported by guidelines and “best management practices” (BMPs). For example, the ministry has developed and posted [Land Application Guidelines](#) for the OMRR and the Soil Amendment Code of Practice and the [Compost Facility Requirements Guideline: how to comply with part 5 of the Organic Matter Recycling Regulation](#).

These practices and procedures can be based on existing BMPs developed by the industry and/or developed jointly with government and do not have the force of law. Guidelines or BMPs may be viewed as assistance to persons governed by a regulation in meeting their legal obligations.

The ministry is seeking comment on the utility and effectiveness of current guidance documents and suggestions for development of further guidance.

## **7. Assuring compliance**

### **7.1 Compliance promotion**

The ministry will develop a strategy for the promotion of voluntary compliance with the requirements of this regulation, in cooperation with industry associations and other interests. Compliance promotion may entail training for ministry staff, as well as information and education for those operating composting facilities.

### **7.2 Compliance verification**

The ministry’s approach to assuring compliance with the OMRR will include regular and random compliance reviews and inspections, as well as reviews and inspections in response to identified or potential issues or concerns regarding protection of the environment or human health.

The ministry is committed to utilizing the compliance verification data to guide the ongoing management of composting facilities and assure the goals for environmental protection are being met.

### **7.3 Enforcement**

The ministry response to non-compliance will entail written advisories, warnings, directives, tickets and prosecutions. The choice of response will be based on standard ministry-wide policy, the compliance history for the composting facility and the significance of the impact from the non-compliance occurrence.

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## **8. Providing comment**

The ministry is intending to finalize and implement revisions to the Organic Matter Recycling Regulation by late Fall 2011. Comments regarding the proposed intentions of the ministry are being solicited and will be carefully considered in the review and revision process. The ministry welcomes all suggestions with respect to any aspect of the regulation.

Submissions will be compiled and summarized, without specific attribution, by an independent contractor and the summary posted on the ministry website. Following review of comments and submissions, the ministry will complete legal drafting of the revised regulation for legislative review and implementation.

This intentions paper and a response form with questions based on proposed revisions to the regulation have been posted on the ministry's web site: <http://www.env.gov.bc.ca/epd/codes/index.htm>.

Those interested are invited to submit comments on the ministry's intentions. All submissions will be reviewed for inclusion in a consultation summary report and comments will be treated with confidentiality by ministry staff and contractors when preparing consultation reports. Please note that comments you provide and information that identifies you as the source of those comments may be publicly available if a Freedom of Information request is made under the *Freedom of Information and Protection of Privacy Act*.

If you have any questions or comments regarding the consultation process, review the information posted on the ministry website, or contact Cindy Bertram of C. Rankin & Associates, who has been contracted to manage consultation comments, at:

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**Comments to the ministry should be made on or before September 15, 2011.**

*Thank you for your time and comments!*