

INTRODUCTION

Due to growing concerns over the land application of biosolids, on June 17, 2015, the Provincial government announced that a technical working group comprised of scientists and academics would conduct a scientific review of biosolids. The scientific review includes two key parts: a review of scientific and academic literature on biosolids land applications and a soil sampling project to be conducted in the interior of the province.

On April 4, 2016 [the Provincial government announced](#) a comprehensive review of the [Organic Matter Recycling Regulation](#) (OMRR) to ensure it remains protective of human health and the environment. Enacted in 2002 under the [Environmental Management Act](#) and the [Public Health Act](#), the OMRR governs the construction and operation of composting facilities and the production, distribution, sale, storage, use, and land application of biosolids and compost.

The Regulatory Amendment Process

Effective policy development considers the range of interests from all affected parties, best practices from other jurisdictions and the legislative framework under which regulations are developed. During the scoping phase of a regulatory amendment project, information is collected and used to develop an Intentions Paper (IP). The IP outlines the policy intent for the proposed changes to a regulation and will form the basis for public consultation on the proposed policy approach. The Intentions Paper describing the proposed changes to the OMRR and results of the scientific review described above are now available for review.

Document	Location
OMRR Intentions Paper	• www2.gov.bc.ca/assets/gov/environment/waste-management/recycling/organics/omrr_ip_sept_22.pdf
Scientific Review:	
• Literature Review	• www2.gov.bc.ca/assets/gov/environment/waste-management/recycling/organics/biosolids/literature_review_cover_memo.pdf • www2.gov.bc.ca/assets/gov/environment/waste-management/recycling/organics/biosolids/lit-review-biosolids-nicola-valley.pdf
• Sampling Report	• www2.gov.bc.ca/assets/gov/environment/waste-management/recycling/organics/biosolids/sampling_project.pdf

The results of the scientific review provide important information around a number of areas of concern about the land application of biosolids, and these results will inform the province-wide review of the OMRR as a means to address these concerns, as outlined in the following summary (Table 1. Areas of Interest and Ministry Responses).

Table 1. Areas of Interest and Ministry Responses

Area of Interest	Suggestion (and Source)	Ministry Response (included in IP and other supporting resources)
More transparency is required for the public	Provide information to the public on: <ul style="list-style-type: none"> •Biosolids land application activities and monitoring results; and •Compost facility operations. <i>(literature review recommendation and feedback through consultation)</i>	<i>Proposed changes to OMRR:</i> <ul style="list-style-type: none"> •Proponents will be required to submit copies of all plans and reports to the ministry as part of the notification process; these will be published online and available to the public •Producers of compost that contains biosolids will be required to disclose to users that the product contains biosolids. <i>Other steps:</i> <ul style="list-style-type: none"> •The ministry will publish a map tool to allow the public to track where biosolids land applications are occurring.
More transparency is required for First Nations	Provide information to First Nations on: <ul style="list-style-type: none"> •Biosolids land application activities and monitoring results; and •Compost facility operations. <i>(feedback through consultation)</i>	<i>Proposed changes to OMRR:</i> <ul style="list-style-type: none"> •Proponents will be required to submit copies of all plans to local First Nations communities as part of the notification process. •Producers of compost that contains biosolids will be required to disclose to users that the product contains biosolids. <i>Other steps:</i> <ul style="list-style-type: none"> •The ministry will publish a map tool to allow First Nations to track where biosolids land applications are occurring.
Protection of human health and the environment	Addition of new standards. <i>(Ministry suggestion)</i>	<i>Proposed changes to OMRR:</i> <ul style="list-style-type: none"> •Addition of new standards including copper and chromium for Class A biosolids
	Increased planning and reporting requirements. <i>(Ministry suggestion)</i>	<i>Proposed changes to OMRR:</i> <ul style="list-style-type: none"> •Requirement for contingencies in land application plans
	Improved compost storage requirements. <i>(Ministry suggestion)</i>	<i>Proposed changes to OMRR:</i> <ul style="list-style-type: none"> •Require that all areas that receive greater than 600 mm/year of precipitation must cover stored compost.

Organic Matter Recycling Regulation (OMRR) – Policy Intentions Paper

Area of Interest	Suggestion and Source	Ministry Response (included in IP and other supporting resources)
<p>Exposure to emerging substances of concern (ESOCs)*</p> <p>*ESOCs include: personal care products, pharmaceuticals, and items such as flame retardants and plasticizers.</p>	<p>Source reduction initiatives are the best practice for reducing toxicity of sewage and the resulting biosolids (this includes proper disposal programs). (literature review recommendation)</p>	<p><i>Proposed changes to OMRR:</i></p> <ul style="list-style-type: none"> •Consideration of addition of standards for new substances including ESOCs <p><i>Other steps:</i></p> <ul style="list-style-type: none"> •Source reduction initiatives and promotion of disposal programs will be supported through guidance documents. •Potential future sampling of ESOCs is under consideration.
<p>Groundwater and aquatic ecosystems need to be protected</p>	<p>Land application of biosolids should reflect seasonality. (literature review recommendation)</p> <p>Compost must be stored properly to reduce potential for leaching. (Ministry suggestion)</p>	<p><i>Current land application guidelines recommend the following:</i></p> <ul style="list-style-type: none"> •Limiting applications to the dry summer period •Not conducting applications during the spring runoff period •Not conducting applications to wet soils or to areas with a high groundwater table <p><i>Proposed changes to OMRR:</i></p> <ul style="list-style-type: none"> •Soil amendments will only be applied at agronomic rates, i.e., will not be used as fill or applied at high volumes as a means of disposal •Large volume applications of Class A compost and biosolids growing medium will require notification to the ministry. <p><i>Proposed changes to OMRR:</i></p> <ul style="list-style-type: none"> •Require that all areas that receive greater than 600 mm/year of precipitation must cover stored compost.
<p>Grazing livestock and wildlife need to be protected</p>	<p>Determine any impacts from exposure to biosolids. (literature review recommendation; feedback through consultation)</p> <p>Reduce exposure of grazing animals to biosolids. (literature review recommendation)</p>	<p><i>Other steps:</i></p> <ul style="list-style-type: none"> •Longer term research is required in consideration of Contaminated Sites Regulation standards. <p><i>Current land application guidelines recommend the following:</i></p> <ul style="list-style-type: none"> •Application of soil amendments should not exceed agronomic rates (to prevent elevated levels of nitrogen in rangeland vegetation growth which can result in livestock health problems). <p><i>Proposed changes to OMRR:</i></p> <ul style="list-style-type: none"> •Soil amendments will only be applied at agronomic rates. <p><i>Other steps:</i></p> <ul style="list-style-type: none"> •Through guidance documents, promote the use of best practices such as direct injection and soil incorporation application methods.