

Organic Matter Recycling Regulation

Summary of public input in response to the 2018 Intentions Paper

Final Report

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Submitted to: Environmental Standards Branch
Ministry of Environment and Climate Change Strategy

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Abbreviations

| | |
|----------|---|
| AEM Code | Agricultural Environmental Management Code of Practice |
| AWCR | Agricultural Waste Control Regulation (repealed and replaced with AEM Code) |
| BAT | Best available technology |
| BGM | Biosolids growing medium |
| BMP | Best management practices |
| BP | Best practices |
| CCME | Canadian Council of Ministers of the Environment |
| CEC | Contaminants of emerging concern |
| COPSA | Code of Practice for Soil Amendments |
| CSR | Contaminated Sites Regulation |
| ENV | The Ministry of Environment and Climate Change |
| FEMP | Facility environmental management plan |
| FM | Foreign Matter |
| FOIPPA | Freedom of Information and Privacy Protection Act |
| GHG | Greenhouse gas |
| IP | Intentions Paper (specifically, the September 2018 Intentions Paper) |
| LAP | Land application plan |
| MEMPR | Ministry of Energy Mines and Petroleum Resources |
| MHO | Medical Health Officer |
| MOM | Managed organic matter |
| OMRR | Organic Matter Recycling Regulation |
| PPP | Printed paper and packaging |
| QP | Qualified Professional |
| RGOM | Retail grade organic matter |
| TMECC | Test Methods for the Examination of Composting and Compost |
| UNDRIP | United Nations Declaration on the Rights of Indigenous Peoples |

A. Introduction

In September 2018, the BC Ministry of Environment and Climate Change Strategy (“ENV”) released the fourth intentions paper on the Organic Matter Recycling Regulation (OMRR). The September 2018 Intentions Paper (IP) is a result of policy elaboration and development following three previous policy intentions papers (October 2006, July 2011 and October 2016) with consultations, a follow up Summary of Public Input and Policy Update (March 2017), and policy work completed this past year by ENV.

The purpose of the 2018 intentions paper is to seek comments and feedback on the proposed revisions from all interested parties, including: First Nations, local governments, stakeholders and the public. This report serves two purposes:

- 1) providing a summary of the input received, and
- 2) providing a response from the ENV to these comments, where applicable.

Background on the regulation

In 2002, the ENV enacted the OMRR under the *Environmental Management Act* and the *Public Health Act* to regulate the following activities:

- the construction and operation of **composting facilities**, and
- the production, distribution, sale, storage, use, and **land application of biosolids and compost**.

The purpose of the regulation is to facilitate the recycling of organic material (through land application and composting) while protecting the environment and human health.

Over time, the OMRR has gone through several regulatory reviews. The proposed revisions to the OMRR from this review are intended to:

- Reflect present day practices and advances in science,
- Increase harmonization with federal and provincial regulations, requirements and standards,
- Promote best achievable technology and best management practices,
- Increase clarity around requirements and expected end results and provide clear and effective guidance,
- Increase transparency, and,
- Enhance First Nations engagement through increased information sharing and better engagement around organic matter management in BC.

Background to the consultation process

Previous policy intentions papers for the OMRR regulatory review were published in September 2016, July 2011 and October 2006. The 2016 policy intentions paper presented potential revisions to the OMRR under consideration at that time, including in relation to comments received on the 2011 and 2006 policy intentions papers. The summarized comments in response to the previous intentions papers can be viewed at the ENV's [OMRR website](#)¹.

As part of the ENV's review process, consultation feedback was reviewed. A summary of comments with ENV response was presented in The Summary of Public Input and Policy Update which addressed consultation feedback and comments, updated proposed policy and identified potential areas for further exploration or policy development, including:

- Enhancing First Nations engagement;
- Strengthening qualified professional requirements;
- Improving the authorization process for land applications of managed organic matter;
- Creating more rigorous standards for compost product(s);
- Creating more rigorous biosolids processing requirements; and,
- Considering more stringent requirements for use of surface application methods for land application of biosolids.

The fourth intentions paper, released September 7, 2018, incorporates all of the above, and outlines proposed changes to the OMRR.

Table 1. Consultation timeline

| Date | Event (The released documents listed below are available on the ENV OMRR website) |
|--------------------------|--|
| October 2006 | <ul style="list-style-type: none">• Intentions Paper 1 released |
| July 2011 | <ul style="list-style-type: none">• Intentions Paper 2 released |
| September 2016 | <ul style="list-style-type: none">• Intentions Paper 3 released |
| March 2017 | <ul style="list-style-type: none">• Summary of Public Input and Policy Update released |
| September 7, 2018 | <ul style="list-style-type: none">• Intentions Paper 4 released |
| November 8, 2018 | <ul style="list-style-type: none">• Deadline to provide feedback |
| March 2019 | <ul style="list-style-type: none">• Summary of Public Input released |

¹ <https://www2.gov.bc.ca/gov/content/environment/waste-management/food-and-organic-waste/regulations-guidelines>

Format of this document

This report summarizes the results of the 60-day consultation period and includes:

- a high-level summary of all input (section B);
- a summary of the responses to the overall summary questions in section 12 of the Intentions Paper Response Form (section C); and
- a summary of the responses to the specific questions by topic area in the Intentions Paper Response Form (section D).

Comments from responses received in letter or e-mail form that were not organized using the Intentions Paper Response Form format were reviewed and incorporated into the applicable topic areas. For each question, example responses are organized in the following categories (if applicable):

- Support (if appropriate for the question);
- Do not support (if appropriate for the question);
- Clarify;
- Concerns; and
- Recommendations and suggestions.

Within the summary of responses, **bolded text** is added to highlight pertinent aspects of the input received and guide the reader through those key messages. Quotes from respondents are in *italics*.

B. Summary of input received and ENV responses

Summary of respondents and formats

During the consultation period, ENV received a total of 53 submissions, of which 53% submitted letters, 32% completed the Intentions Paper Response Form (fillable PDF), and the remaining 15% submitted input via email. Respondents included:

- 29 local, provincial or federal governments and associated agencies
- 6 industry associations
- 10 private sector individuals working in the agriculture industry
- 1 First Nation band
- 1 community group
- 6 unaffiliated individuals

Summary of all submissions

The extent of support for the proposed changes to the OMRR outlined in the Intentions Paper is summarized by topic area in Table 2.

Table 2. Summary of responses to questions on the Response Form

| Response Form Section/Question | No. responses | General Response |
|---|---------------|---|
| S.1 General level of Support | 15 | <ul style="list-style-type: none"> • See chart in Section C |
| S.2 Reasons for choice | 15 | <ul style="list-style-type: none"> • General support for proposed amendments |
| S.3 Further comments | 33 | <ul style="list-style-type: none"> • Need clarification; suggestions for improvement |
| Background information | | |
| 1a. General comments | 27 | <ul style="list-style-type: none"> • Clarify details • Recommendations for improvement |
| 1. Authorization process under the OMRR | | |
| 1a. General comments on registration process | 24 | <ul style="list-style-type: none"> • Clarify engagement process • Suggestions for improvement |
| 1b. Notice requirements for BGM facilities using > 5 m ³ /year | 6 | <ul style="list-style-type: none"> • General support |
| 1c. Comments on Table 1. | 15 | <ul style="list-style-type: none"> • Clarify process and Directors qualifications • Various recommendations |
| 1.1 Composting facilities thresholds; waste management plans | | |
| 1.1a Composting facilities requirements based on mass of feedstock | 17 | <ul style="list-style-type: none"> • Support • Clarify details |
| 1.1b Registration documents available online | 12 | <ul style="list-style-type: none"> • General support • Concern re: publishing details of site and equipment |
| 1.2 Registration of composting facilities | | |
| 1.2a Comments on requirements to give notice | 12 | <ul style="list-style-type: none"> • Support • Clarify definitions and reasons behind the changes |
| 1.2b Proposed information on registration form | 8 | <ul style="list-style-type: none"> • Clarify timelines • Various recommendations |

Organic Matter Recycling Regulation – Summary of Public Input

| Response Form Section/Question | No. responses | General Response |
|--|---------------|---|
| 1.2.1 Registration process for composting facilities | | |
| 1.2.1a Comments on registration process | 9 | <ul style="list-style-type: none"> • Clarify details • Concern about impact to other government procedures |
| 1.2.1b Comments on timeframe for existing compost facilities | 9 | <ul style="list-style-type: none"> • Clarify time period for registration • Various recommendations |
| 1.2.2 Notification to changes of registration | | |
| 1.2.2 Proposed requirements to notify | 11 | <ul style="list-style-type: none"> • Clarify parameters that trigger a change • Clarify process for meaningful input from public |
| 1.3 Registration of land application of managed organic matter | | |
| 1.3 General comments | 15 | <ul style="list-style-type: none"> • Support • Clarify roles, responsibilities and timing • Concerns regarding privacy of landowners |
| 1.3.1 Registration process for land application of managed organic matter | | |
| 1.3.1a Comments on proposed submission requirements | 16 | <ul style="list-style-type: none"> • Clarify proof of notification, timeline and process • Concerns on length of pre-registration process, duration of LAPs |
| 1.3.1b Information included in registration form | 9 | <ul style="list-style-type: none"> • Support for reducing duplication of information • Define watershed |
| 1.3.1c Requirements for pre-registration and engagement | 12 | <ul style="list-style-type: none"> • Support for increased engagement • Clarify definitions and process to address concerns |
| 1.3.2 Notification of changes to registration | | |
| 1.3.2 Comments on notifying authorities | 14 | <ul style="list-style-type: none"> • Clarify length of registration process, communication with local governments; concerns regarding health |
| 1.4 Notification requirement for biosolids growing medium facilities | | |
| 1.4a Comments on definition of “discharger” | 5 | <ul style="list-style-type: none"> • 3 respondents support • 2 do not support |
| 1.4b Notification requirements for existing facilities | 4 | <ul style="list-style-type: none"> • 2 respondents support • Clarify definitions • Recommend that notification only apply to significant changes |
| 1.4c Proposed timeframe for documents available online | 4 | <ul style="list-style-type: none"> • Support for increased transparency |
| 2. Engagement with First Nations | | |
| 2a. Amend the regulation to support the draft principle | 18 | <ul style="list-style-type: none"> • Support • Do not support until there is a defined resolution process • Clarify if changes discussed with First Nations |
| 2b. Comments on pre-registration and notification requirements | 13 | <ul style="list-style-type: none"> • Clarify details • Concerns on capacity to review applications and timelines |
| 3. Substitutions under the OMRR | | |
| 3. Comments on proposed changes | 15 | <ul style="list-style-type: none"> • Clarify details • Recommendation on director ability to substitute requirements |
| 4. Fee Payments | | |
| 4. Comments on proposed fees | 17 | <ul style="list-style-type: none"> • Support • 2 did not support • Clarify details • Recommendations for registration durations of two-, three- and four-year periods • Concerns for time spent reviewing applications |

Organic Matter Recycling Regulation – Summary of Public Input

| Response Form Section/Question | No. responses | General Response |
|--|---------------|---|
| 5. Organic Matter Suitable for Composting | | |
| 5.1 Comments on untreated and unprocessed wood | 13 | <ul style="list-style-type: none"> • Clarify definition • Concern about soil-free requirements |
| 5.2 Comments on including domestic wastewater treatment plant sludge | 14 | <ul style="list-style-type: none"> • Support • Various recommendations |
| 5.3 Comments on non-recyclable paper material | 12 | <ul style="list-style-type: none"> • Support • Clarify types of paper products • Various recommendations |
| 5.4 Comments on compostable plastic | 17 | <ul style="list-style-type: none"> • Clarify details • Various recommendations • Multiple concerns |
| 5.5 Comments used mushroom substrate | 10 | <ul style="list-style-type: none"> • Support • One concern |
| 6. Composting Facilities | | |
| 6.1 Facility environmental management plan | | |
| 6.1a Requirement for FEMP | 22 | <ul style="list-style-type: none"> • General support • Clarify details • Various recommendations |
| 6.1b Comments on proposed requirements | 12 | <ul style="list-style-type: none"> • Clarify details • Various recommendations • Concerns about odour |
| 6.1c Enabling director to request additional information | 8 | <ul style="list-style-type: none"> • General support • Clearly outline roles and responsibilities • Recommend additional Director training and support |
| 6.2 Best practices | | |
| 6.2a BMPs and BAT | 17 | <ul style="list-style-type: none"> • Clarify definition • Various recommendations • Concern about infrastructure costs and enclosure requirements |
| 6.3b Phased-in requirements for updated standards and practices | 11 | <ul style="list-style-type: none"> • Support; recommend to explore best practice approaches; concern on time frames |
| 6.3 Compost quality criteria and safety | | |
| 6.3a Comments on proposed standards | 21 | <ul style="list-style-type: none"> • Clarify details • Concerns on difficulty in removing noxious weeds and invasive species from yard waste stream |
| 6.3b Harmonize OMRR with other standards | 12 | <ul style="list-style-type: none"> • General support • Various recommendations |
| 6.3c Less rigorous provisions for yard waste only facilities | 7 | <ul style="list-style-type: none"> • General support |
| 6.4 Setbacks | | |
| 6.4 Comments | 19 | <ul style="list-style-type: none"> • General support • Clarify details • Various recommendations • Multiple concerns |
| 7. Land Application and Distribution of Organic Matter | | |
| 7.1 Updates to quality criteria | | |
| 7.1a Update quality standards | 20 | <ul style="list-style-type: none"> • General support • Clarify rationale |
| 7.1b Update Section 2 of Schedule 4 | 14 | <ul style="list-style-type: none"> • Clarify rationale for testing • Define analysis for plastics concentrations |

Organic Matter Recycling Regulation – Summary of Public Input

| Response Form Section/Question | No. responses | General Response |
|---|---------------|--|
| 7.1c Request sampling for CECs | 18 | <ul style="list-style-type: none"> • Support • Clarify details • Concern about test costs |
| 7.2 Labelling and disclosure | | |
| 7.2 Information disclosure | 9 | <ul style="list-style-type: none"> • Recommendations on labelling requirements and education on product safety |
| 7.3 Best practices for land application | | |
| 7.3a General comments | 15 | <ul style="list-style-type: none"> • Clarify details • Various recommendations • Some concerns |
| 7.3b Proposed minimum setbacks | 12 | <ul style="list-style-type: none"> • Clarify details • Concerns on setbacks from watercourse |
| 7.3c Waiting periods for Class A biosolids | 9 | <ul style="list-style-type: none"> • Concern on waiting period |
| 7.3d Align with AWCR for field storage | 11 | <ul style="list-style-type: none"> • Clarify definition • Recommendations on agronomic rate and field storage requirements |
| 7.4 Compliance | | |
| 7.4 Compliance with LAPs | 14 | <ul style="list-style-type: none"> • General support • Clarify details • Provide clear guidance • Concern on sampling schedule and QP requirements |
| 7.5 Mine site reclamations and landfill closures | | |
| 7.5 Comments | 14 | <ul style="list-style-type: none"> • Clarify details • Recommendation to define a clear process and requirements |
| 8. Sampling, Monitoring and record Keeping | | |
| 8. Comments on general provision | 12 | <ul style="list-style-type: none"> • Support for using most current manuals or guidelines • Clarify number of samples • Various recommendations |
| 8.1 Sampling and monitoring of managed and retail grade organic matter | | |
| 8.1a Revisions to sampling and monitoring requirements | 18 | <ul style="list-style-type: none"> • Less than half of respondents support • Clarify <i>Salmonella</i> limit • Various recommendations and concerns |
| 8.1b Proposal to clarify intended sampling and monitoring requirements | 13 | <ul style="list-style-type: none"> • Mix of support and not supportive responses • Clarify rationale for regulatory limit • Concern about cost |
| 8.1c Amendments to Schedule 5 of OMRR | 9 | <ul style="list-style-type: none"> • Not supportive • Clarify pre-screening requirement • Concerns about cost |
| 8.1d Requirement for sampling and monitoring of BGM | 6 | <ul style="list-style-type: none"> • Support • Clarify sampling procedures and methodology • Recommend to reference TMECC • Concern about sample timing and collection |
| 8.2 Soil sampling and monitoring at land application sites | | |
| 8.2a Proposed requirements | 12 | <ul style="list-style-type: none"> • Mix of support and not supportive comments • Clarify details • Recommend clear guidance and sampling requirements |
| 8.2b Enable director to request post application sampling | 12 | <ul style="list-style-type: none"> • General support • Recommendations on Director training and when to sample |

Organic Matter Recycling Regulation – Summary of Public Input

| Response Form Section/Question | No. responses | General Response |
|---|---------------|---|
| 8.2c Sampling and analysis of CECs | 13 | <ul style="list-style-type: none"> • Support sampling • Do not support posting CEC data online • Clarify details • Concerns on costs of testing |
| 8.3 Record keeping | | |
| 8.3a Record keeping requirements | 6 | <ul style="list-style-type: none"> • Support |
| 8.3b Intent to post documentation online | 12 | <ul style="list-style-type: none"> • Support • Clarify sampling requirements • Concerns on public access to technical information and operating procedures |
| 9. Updates to Technical Standards | | |
| 9.1 Consistency of schedules with other national and provincial standards and regulations | | |
| 9.1 Ensure consistency with CCME standards and federal regulations | 12 | <ul style="list-style-type: none"> • Support |
| 9.2 Consistency with the Contaminated Sites Regulation | | |
| 9.2 Questions on this topic | 9 | <ul style="list-style-type: none"> • Support consistency with CSR • Clarify protocols |
| 9.2 Consistency with the Agricultural Waste Control Regulation | | |
| 9.2 Questions on this topic | 10 | <ul style="list-style-type: none"> • Support alignment with AWCR • Consider seasonal variations |
| 10. Additional Housekeeping Changes | | |
| 10.1 Comments on proposed changes | 13 | <ul style="list-style-type: none"> • Support • Concerns about compost cover requirements |
| 11. Additional Comments | | |
| 11.1 Development of Guidance | 8 | <ul style="list-style-type: none"> • Support • Various recommendations |
| 11.2 Assuring Compliance | 10 | <ul style="list-style-type: none"> • Support • Various recommendations |

C. Response form input: Overall summary questions

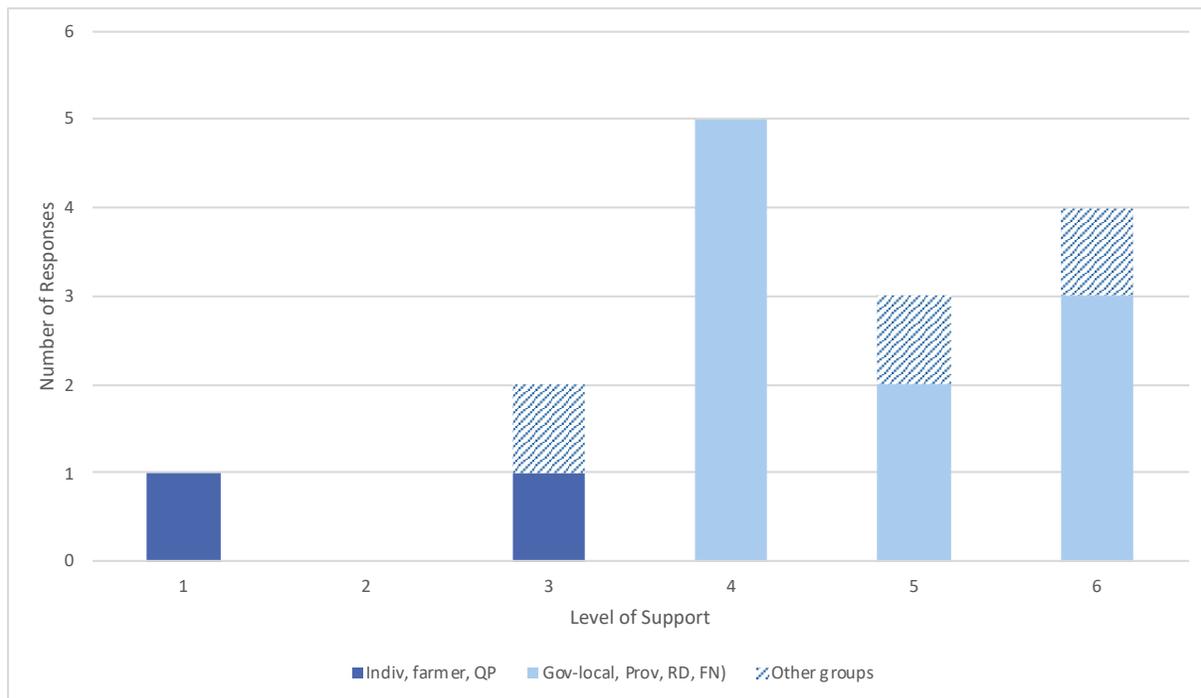
This section summarizes the input corresponding to Section 12 in the Intentions Paper Response Form, as well summary comments provided by letter and email, where applicable.

General Level of Support

S.1 Level of support: Please indicate your level of support for the proposed amendments to the OMRR as described in the September 2018 Policy Intentions Paper (scale: 1 = Not at all supportive to 6 = Extremely supportive). [15 responses]

A total of 15 out of 53 respondents provided a numerical representation of their level of support. Letter and email respondents did not specifically provide a numerical ranking in their responses, and are not included in the results. Letter and email responses were generally supportive, though a number suggested that clarifications are required. Written responses also provided recommendations for improvement, and expressed concerns with some proposed changes. The following chart shows the results by response submitted. Note that some submissions represent individuals (private citizens, individuals working in agriculture, Qualified Professionals), while others represent organizations (with input from local, regional provincial government, First Nations, industry associations or other community groups).

Figure 1: Level of Support (Numerical Responses)



S.2 Reasons: What are the reasons for your choice? [15 responses]

Most respondents that completed this question stated that they **generally support the proposed amendments overall**, but several noted **further clarification is required and/or concerns about specific sections**. Two respondents were concerned about cost implications, and two were not supportive stating amendments are not strong enough.

Support:

- *“We are very supportive of the substitution clause that will provide more flexibility to Directors when reviewing OMRR submissions. We feel that the amended OMRR will provide increased transparency and increased monitoring without reducing our ability to beneficially use biosolids in BC if adequate guidance documents are created to support the regulation.”*
- *“A level of support of 4 is based on lack of language about invasive species management throughout.”*

Do not support:

- Two individuals were not supportive as they found the response too weak relative to the seriousness of the concern being addressed.

Concerns:

- Requiring *“... ALL biosolids composting facilities [to] be fully covered, including storage regardless of location or impact on sensitive land ... could kill composting for [the respondent’s community], pushing us to land application of digested biosolids.”*
- Two responses highlighted concerns about cost implications of additional permitting processes, and ability of local governments to address this prior to 2020.

Recommendations and suggestions:

- *“Production and use of Class A compost over Class A or B biosolids should be a priority and the regulations should facilitate or encourage compost over land application of biosolids.”*

S.3 Summary comments: Do you have any further comments on the September 2018 Policy Intentions Paper? [33 responses]

Many respondents requested further clarification of terms, reasoning behind changes, cost implications and timing contained in the intentions paper. Many respondents requested to review the draft regulation prior to finalization, including other provincial ministries and organizations.

Support:

- Supportive of the substitutions clause that will **provide flexibility for the Directors**.

Do not support:

- Two individuals stated a lack of support for the use of biosolids to fertilize food crops, or on farm land, as *“sewage sludge used as fertilizer on farms can leave traces of prescription drugs and household chemicals deep in the soil,”* and can *“contaminate groundwater near farms with a variety of chemicals.”*

Clarify:

- Definition of **“proponents”**: *“Clarification is requested to confirm if this would include a contractor hired by the proponents to handle the biosolids.”*
- Definition of **“non-organic.”**
- If OMRR permits the composting of **marijuana growing substrate**.
- Several provincial entities request the opportunity to be involved in **next steps**, including a joint working group, clarifying roles and responsibilities, and aligning procedures or requirements.
- There was a question as to whether a Director can substitute an ALR-related requirement, and whether there is a **role for the ALC** in this process.

Concerns:

- One First Nation submitted that they are concerned with any activities that may affect **constitutional rights and interests on their territory**.
- **Fear that compost is a vector for invasive plants, that** *“soil disturbance is not regulated... of the continued sale of invasive plants at garden supply stores... [and] of limited application of best management practices for public works and landfill sites.”*
- Balance **confidentiality** of landowners with need for **transparency**.

Recommendations and suggestions:

- Separately define **“contact storm water”** from **“leachate.”**
- **Harmonize efforts to protect groundwater sources with health authorities, including** - Drinking Water Officers and ENV field staff.
- **Need for definitive legislation timing as it currently presents great uncertainty for related local government operational contracts** in the coming two years. The proposal creates potential including additional consulting costs and risk of delays. *“Perhaps a grace period could be granted on a case-by-case basis.”*
- Attention to **newer technologies** to get the most benefit from municipal sewage waste.
- Encourage **strong stewardship through use of scientific principles**.
- Recommendations to **review models from other jurisdictions**, such as *“the State of Washington Department of Ecology’s where there a dedicated State Biosolids Program Coordinator position.”*
- The province could require that all LAPs require sub-surface application to deal with odour and other land application concerns (as other provinces do).

- **Include anaerobic digestion:** *“Enabling [biosolids] assessment against Schedule 4 chemical quality and digestion process quality ([vector attraction reduction] VAR and pathogen stabilization), and further enabling [biosolids] beneficial use through land application would be a valuable inclusion in OMRR.”*
- Develop greater understanding of **upstream source control**.
- **Consider heat-dried biosolids** a *“product of commerce”*, with similar standards and controls as any commercial fertilizer product.
- **Require mandatory training for compost facility operators** to address operational issues which have arisen in the past: *“Composting is a complex process and while operator training and qualifications are required in BC for water systems and wastewater systems, the requirements are silent for compost operations. Alberta Environment requires mandatory operator certification for compost (and landfill) facilities.”*
- Deal with all citizen **complaints** in a timely manner.
- Develop **communication materials for ranchers and farmers** *“considering using biosolids/compost to help raise awareness about the process and landowner responsibilities.”*
- **Conduct** *“more oversight of the municipal waste generators and suppliers to avoid anymore [sic] situations where poor operational practices cause community concern.”*
- Include a **threshold of 1,000 tonnes/year of compostable feedstock:** *“The intentions paper does not consider the potential to regulate stockpiled organics not undergoing composting. These [feedstock storage] activities can have the same impacts as an active compost facility.”*
- Develop **storm water management plan criteria and best practices** *“...to help the majority of processor[s] in BC to succeed. Building organic waste processing operations that are all inside of enclosed structures are [sic] costly and inefficient for most communities in BC. Therefore, if finished compost contacted storm water is classified and managed differently than leachate, it would help most organic diversion programs of municipalities be successful.”*
- Improve **collaboration with industry** *“through a user-pays system (perhaps assessed as a fee per tonne based on production of solids), which may also fund a Guidance Office, as well as improve budgets for authorization inspection and enforcement, as well as training.”*
- Use the **Likert Scale for future feedback:** *“Please have the relevant people educate themselves on the five-point Likert Scale, which is far superior and far more meaningful its choices”* than a vague 1-5 scale.”
- Conduct **face to face consultation** with First Nations.
- **Work with provincial invasive species agencies** to develop methods that limit the reproductive capacity of invasive species in feedstock.

Background Information

Q: Do you have any general comments on the Background Information, including the following sections: Managing and Recycling of Organic Matter; Ministry Service Plan Targets; Provincial Review

of the Professional Reliance Model; Province of British Columbia's Relationship with Indigenous Peoples; or Canada-wide Approach for the Management of Wastewater Biosolids? [27 responses]

This section has a number of varied responses. Respondents expressed support for the land application of biosolids and biosolids growing medium, seeing this as the best sustainable management option. A small number opposed the land application of biosolids. Some respondents requested additional clarification.

Clarify:

- The **details**, as *"...the document does not provide sufficient detail in certain areas to provide support for or against the proposed revisions.*
- The **term "local regional district"**: Clearly distinguish whether the regional government or the local municipality would receive notification of the intent to register.

Concerns:

- **Regarding the following Intentions Paper (IP) statement and lack of transparency:** *"The OMRR contains provisions for medical health officers (under the Public Health Act) and [ENV] directors to review, and direct or deny, the land application of managed organic matter."* Specifically: *"...it is our understanding that [ENV] directors are simply "acknowledging receipt" of the registration and not conducting a review therefore not making a statutory decision. There is concern around the lack of transparency and/or clarity in withholding acknowledgement to deny a registration, rather than rejecting it and providing rationale. Likewise, if receipt is simply acknowledged, how is pertinent information (ex. First Nations consult) verifiably incorporated into the final registration."*

Recommendations and suggestions:

- **Increase minimum volume for "unrestricted distribution"** to greater than 5 m³ to facilitate research trials.
- **Provide training to health authority staff** to help assess risks related to ground and surface water contamination.
- On **regulatory burdens:** *"... regulations should be clear, simple language and streamlined to reduce regulatory burdens (time, steps, cost)."*

ENV Response to Background Information

Questions on specific details will be addressed in subsequent sections.

Local governments will retain control over administering their own bylaws and zoning decisions, and for issuing their own authorizations. Proponents are expected to comply with the requirements of local governments and other regulations as applicable.

The registration process will be streamlined as much as possible to maximize efficiency for proponents while protecting the environment and human health. There is no statutory decision involved in the registration process. Statutory decision makers will be involved in site-specific applications, including permits, operational certificates and approvals. The authorization mechanism is determined by specific parameters including but not limited to the size or location of an activity. Transparency in the process and decision-making is important to ENV to help support well-informed decisions and to provide information to communities and citizens while respecting privacy. ENV welcomes the recommendations and suggestions provided by all respondents, including the representative responses reported in this summary report. ENV will take suggestions under advisement as the OMRR policy and supporting guidance documents are drafted.

D. Response form input: Proposed regulatory changes

1. Authorization Process under the OMRR

Q1a: Do you have any general comments on the proposed change to a registration process? [24 responses]

Comments on this question were mixed and included statements of support (generally from local governments) and non-support (particularly in relation to additional requirements for small businesses), in addition to requests to clarify communication and engagement processes with other government entities, and some comments related to Qualified Professionals.

Support:

- Two regional districts stated **support** for the proposed changes, one specifically stating strong support for registration to replace notification for facilities that are too small to require a permit.
- Several organizations stated support for the changes if a **clear and consistent timeline** is defined, e.g., 30 days for approval of submissions. The lack of a defined timeline may present a challenge to generators, landowners and consultants engaged in planning processes.

Do not support:

- One government organization and one business **do not support the changes**, as they appear to “*simply increase regulation and an excuse to charge additional fees rather than solve any tangible problem*”, and concern that the changes will result in hardship for small businesses:
“The revised regulation attempts to minimize the impact to small business by “tiering” the requirements proportionately to the size of the facility but this requirement may still create hardships for smaller businesses. We recommend that pre-populated templates in clear language (working with design specialists in government) be provided to make it easier for small business to comply with these requirements.”

Clarify:

- **The communications process with health authority** investigations or reports: “*...we need to have a clear understanding of the process and how resolution is achieved in a timely manner. A timely communication process should be developed to clarify expectations for all.*”
- Definition of **Qualified Professional** and provide clear guidance on acceptable credentials and experience.

Recommendations and suggestions:

- Provide more information on the **registration and engagement process with regional districts, First Nations and other agencies**: “*There is a lack of clarity regarding the time frame for a registration to be processed and approval received. The previous approach of notification with short time lines before activities could proceed had clear benefits especially with respect to*

biosolids projects. Having longer timelines increases the risk of nuisance conditions through the need to stockpile organic matter for longer periods of time. It is also assumed that any application will be approved, but this is not clarified in the documents, and raises concerns on risks of whether a project will be able to proceed.”

- **Develop a system to notify local governments** when registration/notification requirement has been met. This will allow the local government to process relevant permits only after receiving notification that all requirements have been met by the applicant.
- **Qualified Professionals**, in addition to **ENV staff**, **should review** all “...operating plans, site plans, leachate management plans and odour management plans (or submit all of these under a combined “environmental plan”) to ENV for approval.”
- **Requirement of one Certified Compost Operator** at each facility, minimum.

ENV Response to 1a

Many respondents have indicated concerns for efficiency and timeliness of the application process as they pertain to overall cost. The proposed changes to the OMRR are intended to promote responsible use of organic material while supporting fair business practices and consistent standards for marketable compost products. ENV will endeavor to streamline requirements to minimize costly impacts to businesses while protecting the environment and human health.

The definition of a qualified professional will be developed and provided in the OMRR. The definition will consider the recommendations of the Professional Reliance Review and harmonize with the *Professional Governance Act*.

Q1b: Do you have any comments on a requirement to give notice for biosolids growing medium facilities using 5 m³ or more of biosolids at a site per calendar year? [6 responses]

Commenters expressed **general support** for the requirement to give notice for biosolids growing medium facilities using 5 m³ or more of biosolids at a site per calendar year.

Support

- *“We strongly support the addition of a regulated process for authorization of all BGM facilities using 5 m³ or more biosolids per site per year. ... We support registration because the type of concerns that arise from such facilities are similar to those from a land application site or composting facility (odours, truck traffic, leachate, and requirements for quality control and contingency).”*

Q1c: Do you have any comments on Table 1: Overview of proposed authorization processes under the OMRR? [15 responses]

Responses to this question included requests for the same registration requirements for both retail grade organic matter and managed organic matter, several comments about the notification process, and a number of other varied comments.

Support:

- **Support for the proposed registration process** for land application of Class B biosolids, provided that clear timelines for review and approval are established. One respondent suggested a phased implementation.

Clarify:

- Request for **further clarification** on the notification process and details of the notice.
- **Qualifications of the Directors:** *“Presumably, the Directors will evaluate a range of application[s] involving a range of technologies. As such, it seems essential that they have suitable qualifications and credentials.”*

Recommendations and suggestions:

- **Requests for the same registration requirements** for both Retail Grade Organic Matter (RGOM) (which includes Biosolids Growing Medium (BGM) and Class A compost) and Managed Organic Matter (MOM) (which includes Class A and B biosolids and Class B compost): *“The [local government] supports the addition of a consistent regulated process for all instances of organic matter management which have the potential to impact the environment in similar ways; to this end, we recommend a harmonized registration process for land application of organic matter, composting facilities, and BGM facilities using >5 m³ biosolids per year. We support the proposed registration process for Land application of Class B biosolids, provided that clear timelines for review and approval have been established.”*
- Develop **“light” registration process for BGM facilities** with *“registration requirements for BGM facilities [are] based on a “light” version of the composting registration process. No exemption should be given based on facility development timelines.”*
- Add a **flow chart of the process** that could *“assist with the understanding and could assist with addressing concerns with project delays/timing windows. It is important that there is a clear understanding of what is required for registration so that local governments know when to budget and for how much.”*
- **Establish and maintain a complaint management system** at each facility where a Qualified Professional conducts an annual review and provides recommendations to reduce concerns.
- **Change permitting threshold** by *“lowering the threshold for permitting composting facilities processing food or putrescible waste to 5,000 tonnes/year of feedstock.”*
- **Land application of biosolids should be done by certified person** similar to pesticide application: *“Biosolid applicator training and certification will help ensure the applicators*

understand and abide by the submitted application plan and can handle changes in field conditions that may require the plan to be amended.”

ENV Response to 1c

ENV will give careful consideration to identifying those activities which will require a qualified professional. A “director”, as defined in the EMA, refers to a person employed by the government and designated in writing by the minister as a director of waste management or as an acting, deputy or assistant director of waste management.

Both RGOM and MOM must comply with the protective setbacks, agronomic nutrient balances and other measures which are protective of the environment and human health. Land application requirements for RGOM and MOM differ because RGOM has a lower potential to impact the environment.

ENV proposes to phase-in some of the requirements for facilities which already exist or are already under construction, to allow operators time to make the appropriate alterations. ENV does not intend that exemptions will be granted based on facility development timelines.

Guidance materials will be developed to help proponents through the registration process. Because each application is unique, the timeline for any given application may vary. ENV will endeavor to provide timelines so that proponents can budget their resources accordingly.

ENV will consider the suggestion to require a plan for community engagement to address complaints. This plan may be a component of the facility environmental management plan, along with the odour management and operating plan.

The threshold for determining when an operation becomes subject to the requirements of a composting facility is currently based on the dry weight of finished product leaving the operation. ENV proposes changing this threshold to a wet weight of incoming material because recording the incoming wet weight is easier and more accurate than estimating the finished product dry weight. Some respondents indicate the proposed threshold is too high and others that the threshold is too low. ENV intends to base the threshold on the wet weight and will investigate further if the value of 15,000 tonnes (wet weight) of feedstock per year provides a reasonable estimate of a facility’s overall size and activities.

1.1 Composting facilities thresholds; waste management plans

Q1.1a: Do you have any comments on basing composting facilities requirements on total annual mass of feedstock received? [17 responses]

There is **support** for classifying compost facility requirements on the basis of mass of feedstock received, with **additional clarification** requested in some responses.

Support:

- **Aligns with industry approach:** *“Since new feedstocks for composting are proposed to include non-recyclable paper material and compostable plastic, measurement of inbound wet tonnes of feedstock received would be consistent with [our] measurement of PPP [printed paper and packaging] in the organics waste stream and would also harmonize with [our] measurement of collected residential PPP inbound to a receiving facility.”*

Clarify:

- How the **threshold of 15,000 tonnes** of input material was determined. Some respondents wished to see a higher threshold while others felt that it should be lower.

Definition of ‘feedstock received’: *“When classifying facilities by the amount of feedstock received, the OMRR should clarify how the threshold will account for the processing of materials generated on site and the repeated processing of oversized items that are screened out of the finished product and reintroduced into the composting process.”* As an example, *“Up to 1/3 of our feedstock is diverted. If this were to be included in our “feedstock received”, it would substantially increase our tonnage and bring us close to the 15,000 tonnes/year cut-off.”*

- If **existing facilities** currently permitted under OMRR will need to reapply for permits when the proposed changes are implemented.
- How **regional districts that regulate composting facilities** should respond if a conflict is created between regional district requirements and OMRR requirements.
- The term **‘wet tonnes’**. Some facilities have interpreted this to mean food waste or biosolids but not bulking material such as yard waste.

ENV Response to 1.1a

ENV will give consideration to the definition of “feedstock” versus “incoming material” in order to clarify the threshold used to determine when a facility is required to obtain a permit approval or operational certificate. To be clear, when material is brought on to the facility’s site and subsequently diverted, the processing step for diverting the material is a component of the on-site activity and is considered in the determination of the size of the facility.

With regard to any potential conflict between regional district requirements and the OMRR requirements, local governments have the authority to create bylaws regulating compost **in addition to** requirements set out under the OMRR provincial regulation. Proponents will need to be familiar with local bylaws that may apply to the production, application or storage of compost.

Q1.1b: Do you have any comments on making registration documents available online to the public?

[12 responses]

In general, there is **support** for access to information (i.e., under *Freedom of Information and Protection of Privacy Act* [FOIPPA]), however, there were **several concerns** from local governments and industry, about posting proprietary or private information, and providing technical details to the general public who do not have the technical expertise to interpret it.

Suggestion:

- Provide **registration questions and details** prior to implementing changes to OMRR: *“Depending on the required information, there may or not be proprietary and/or competitive advantage information required.”*

Concern:

- **Details of site and equipment plans should remain confidential.**
“It is reasonable to expect that application may contain proprietary information and therefore needs to be an expectation of certain information being kept confidential.”
“Documents posted online should be restricted to those that are relevant to the general public.”
“There is an ongoing concern from proponents and professionals that the materials may be misconstrued by individuals without appropriate technical expertise.”
“The [respondent] strongly urges the province to protect the privacy of landowners.”

ENV Response to 1.1b

Section 8.3 of the Intentions Paper provides further clarification regarding proprietary information. Under the FOIPPA, proponents currently have the ability to identify information they believe is confidential, and can provide a rationale, in writing, regarding why the information should not be disclosed.

ENV understands the need for context when releasing technical information and will provide guidance documents to aid in comprehension.

1.2 Registration of composting facilities

Q1.2a: Do you have any comments on the requirement to give notice of operation being replaced with a registration process for all composting facilities (that do not require a permit, approval or operational certificate)? [12 responses]

Most respondent **supported the proposed requirement**, although there is some **concern that this would add time to the process**, and clear timelines for processing the registration are needed to avoid uncertainty. *“We encourage ENV to ensure that there are clear service standards and timelines for registration once the information has been provided completely to [ENV].”* One respondent felt that this was attempting to solve a problem that, in their view, does not exist. Other comments requested clarification on specific items.

Support:

- **For the provision** that OMRR facilities must comply with Solid Waste Management Plans (SWMPs), however the respondent has questions on how SWMP and OMRR approval processes work together: *“Can approval processes for the Province in OMRR and amending SWMPs work together in this case? Amending a SWMP can take a lot of time. If the financial case and direction to construct a facility has been approved in the SWMP the actual siting should follow under these updated OMRR provisions.”*

Clarify:

- Definition of **‘local’** as it relates to First Nations. One respondent asked if this meant within a certain distance of the facility or within traditional territory.
- **Why** is ENV to be notified of changes within 30 days of the change and not prior to the change?
- **If BGM facilities will be registered**, are they accepting 5 m³ or more of Class A biosolids? *“They are processing the same material as other processing facilities that have different permitting or registration processes.”*

Suggestions:

- Include **referral to local government** in the registration process.

ENV Response to 1.2a

ENV will consider the suggestion to register BGM facilities, based on the materials being processed.

ENV will consider the definition of the word “local” as it pertains to First Nations, governments, stakeholders, medical health officers, regional districts, and the public. ENV’s intention is to include those who are or may be potentially impacted by a facility’s activities and are interested in participating.

ENV will clarify when notification must be provided prior to facility changes, with the acknowledgement that most changes can be anticipated.

Q1.2b: Do you have any comments on the proposed information to be included in the registration form? [8 responses]

Responses to this question included clarifications, recommendations and suggestions on what additional information should be included in the registration form.

Clarify:

- **Clearly identify timelines for the process** to reduce uncertainty for proponents: *“The existing absence of processing timelines or standards for service is a point of significant uncertainty for potential proponents, and risks both the environment and public health as it does not offer generators the ability to plan effectively.”*
- The **additional information a Director may request.**

Recommendations and suggestions:

- Include **communication between neighbours/community** and facility in the registration process.
- Only include **information** in the form **that is unlikely to change** over the five-year period.
- Include details about **invasive species management and action plan**, as well as information on personnel training program for invasive species.
- **Proof of local government notification:** *“There is no indication that proof of notification to the local municipality is required, should the site be located within a municipal boundary. It is requested that the need for notifying the local municipality also be added if the site is located within a municipal boundary.”*
- Add an **‘other feedstock’ category** to capture one-time or infrequent organic feedstock received by the facility, with a limit of 5% of the total feedstock received in a year (if more than 5%, then they would need to identify the feedstock).

ENV Response to 1.2b

ENV will consider the suggestion to require a plan for community engagement and communication. This plan may be a component of the facility environmental management plan, along with the odour management and operating plan

ENV intends that the process to amend information will be streamlined and efficient. The information collected will be for the purpose of managing and understanding organic material management in the province. Limiting the information requested to that which is unlikely to change may not be sufficient to fulfill the purpose.

ENV proposes that a proponent may apply for a substitution for inclusion of organic matter which is not listed as feedstock in the OMRR.

In addition to following the provincial OMRR, local governments have the authority to create bylaws to regulate activities within their jurisdiction.

Invasive species are discussed in Section 6.3.

1.2.1 Registration process for composting facilities

Q1.2.1a: Do you have any comments on the registration process? [9 responses]

There is **general support** for the registration process.

Clarify:

- **The dispute resolution process** with regional districts, First Nations, and other agencies.
- **The expected length of processing time** for the registration documents. Many respondents support clear service standards and timelines for registration once the information has been submitted: *“Direction is needed as to how long processing of the registration will take. This is important for proponents to understand when planning projects and actions that are needed to provide for the management of the existing organic waste stream (e.g. stockpiling). Direction is also needed to provide some level of assurance as to whether a project will be allowed to proceed.”*
- **Fee payments** associated with registration:
“Is the registration fee on top of the annual fee for the first year? If information is missing from the application, does the applicant have to pay the fee again?”
- **How local governments will be engaged by ENV:**
“The applicant is only required to inform the local government. Will [ENV] then verify with the Local Government that all zoning and SWMP provisions are met? How will this process work?”

Concerns:

- **Changes from notification process** will impact other government procedures: *“Changing from a notification process to a registration process will require ALC acknowledgment and review. Currently the ALC is only being notified and does not always receive Land Application Plans (LAPs) for application sites or Operating Plans for new facilities. Review of this information will require a more concerted effort by ALC staff.”*

Recommendations:

- **Minimize barriers for smaller facilities** (e.g., less than 1,000 tonnes (wet weight) per year of feedstock) through reducing document submission requirements to encourage small scale and on-site composting.

ENV Response to 1.2.1a

The dispute resolution process is expected to be unique to each situation and will be approached with the objective of timely resolutions which are amenable to all parties.

Many respondents have indicated concerns for efficiency and timeliness of the application process as they pertain to overall cost. ENV will endeavor to streamline processing time to minimize cost impacts to businesses.

ENV is continuing to streamline all application processes including informing proponents when information is missing from an application form, before the form is accepted for processing. The objective is to reduce delays and staff time spent on incomplete applications.

The provincial Ministry does not enforce local bylaws. Notification to appropriate local authorities is the responsibility of the proponent and enforcement of applicable bylaws under the authority of the local agencies which created those bylaws.

Currently facilities processing less than 100 cubic metres of yard waste, or backyard composters are not required to register under the OMRR. ENV will consider if 1,000 tonnes wet weight is an appropriate measure, consistent with the intention to continue to exempt backyard and demonstration composters.

Q1.2.1b: Do you have any comments on the proposed timeframe for existing compost facilities?
[9 responses]

The few comments received for this question were varied.

Clarify:

- The **two-year time period for existing compost facilities**: *“...it is assumed that this focuses on the preparation, collation and submission of the information and does not include [ENV]*

processing time. If this timeframe does include processing time, then direction and clarity is required on what this means to the time frame needed for information preparation, collation and submission.”

Concerns:

- Timelines put undue financial burden on companies while waiting for permitting or registration approval.”

Recommendation:

- Provide a **grace period to existing facilities** to complete the registration process. Suggestions range from two to three years, as well as providing an interim registration option.
- Develop **service standards and timelines** for the registration process once information has been submitted: *“Is the 90 day timeline also meant as a hard deadline for the government to approve any registration?” “The existing absence of processing timelines or standards for service is a point of significant uncertainty for potential proponents, and risks both the environment and public health as it does not offer generators the ability to plan effectively.”*
- One respondent suggested the timelines should be shorter for registration of **existing facilities**.

ENV Response to 1.2.1b

Many respondents have expressed concerns regarding efficiency and timeliness of the application process as they pertain to overall cost. ENV will endeavor to create a predictable timeline estimate so that businesses can budget accordingly.

1.2.2 Notification to changes of registration

Q1.2.2: Do you have any comments on the proposed requirements to notify authorities regarding changes to registration? [11 responses]

In general, there is **support for the proposed requirements for notification** of changes.

Clarify:

- Definition of **‘local’** First Nations.

Concerns:

- One respondent feels that the list of triggers is comprehensive and could result in regular submissions without additional benefit: *“Are the implications of this high frequency for a submission balanced by the benefit that would be achieved? Are there alternative approaches that could be used instead specifically for a change in qualified professional which would not trigger the need for a notification change?”*

- Regarding the **parameters that trigger a need to change the registration**, specifically the following statement: ‘Changes to the total annual mass (wet weight) of feedstock received per calendar year and/or design production capacity, greater than 10 percent’: *“This statement seems untenable without some lower threshold value. A new facility starting up and testing their process may ramp up a number of times and easily pass more than 10% change each time if the initial quantities are small. There should be a threshold at which point this begins to apply, and below which changes in received feedstock does not need to be reported for changes in registration.*

The same should apply to the following statement “A change in the proportion of any type of organic matter feedstock of greater than 10 percent, e.g., from 50 percent yard waste, 30 percent food waste and 20 percent biosolids by weight, to 30 percent yard waste, 50 percent food waste and 20 percent biosolids by weight.”

Recommendations and suggestions:

- **Notification** should also be given for **significant changes** to types of organic matter:
“(i.e. a new feedstock addition to the facility, or a more concentrated form of the same feedstock such as organic matter from commercial or multi-family sources) that will be processed in advance to allow for concerns to be addressed before changes proceed.”
- **Add a category** *“to capture one-time/infrequent feedstock acceptance up to 5% of overall feedstock.”*
- The ‘change to registration’ should also include a **requirement for facilities to review the operating document on a regular basis**, e.g. five years.
- Develop a **clear process** whereby members of the public can provide **meaningful input** such as submit questions, comments, concerns or other input to the decision maker.

ENV Response to 1.2.2

ENV continues to streamline notification processes and to make change notifications as simple as possible.

ENV proposes that a proponent may apply for a substitution for inclusion of organic matter which is not listed as feedstock in the OMRR.

ENV will consider a requirement for facilities to review operating documents in a timely manner.

The tools available for consulting with members of the public continue to evolve. ENV considers the best tools available to support the public in providing meaningful input.

1.3 Registration of land application of managed organic matter

Q1.3: Do you have any general comments on the proposed registration for land application of managed organic matter? [15 responses]

One respondent did not support land application of organic matter. Several **respondents generally support the proposed changes**, but with significant emphasis on the need to have a **timely process**. Respondents also queried **additional costs** associated with the new proposed process.

Support:

- The change to the registration process if an **approval timeline is established** to reduce uncertainty in the process.
- For **multiple year registrations up to five years** as a way to reduce administrative requirements.

Clarify:

- **Who is responsible for reviewing land application plans** from an agronomic perspective with the ALC, as this has resourcing implications.
- **Local governments'** role, responsibilities and requirements under the OMRR as producers of managed organic matter.
- Why both the **generator and the landowner are proposed to be the registrant/discharger**: *"We propose that the landowner or lease-holder be the registrant/discharger. We also propose that the generator(s) be listed on the registration form as opposed to being identified as registrants. This would greatly reduce the administrative burden for sites where multiple generators are managed, a benefit to both ENV and landowners."*
- **Timing of applicability for current sites**: *"We propose that any authorization for a biosolids land application site which is current at the time of the release of the revised OMRR, and which is intended to be renewed, have the authorization end date extended until such time as a new authorization under the new registration process has been renewed or denied."*

Concerns:

- Online registration forms could **impact the privacy of landowners**: *"How will the [ENV] address privacy issues? The Intentions Paper indicates a desire for harmonization between the Agricultural Waste Control Regulation (AWCR) and the OMRR; however, under the AWCR, Nutrient Management Plans are not required to be posted online."*
- That **the process appears to be onerous**: *The "...proposed registration process is more onerous and will therefore be more costly than the previous process. Through this, it becomes apparent that smaller landowners risk being "cut out" of the opportunity of organic matter utilization, as the costs to register will not be cost effective for small land holdings."*

Recommendations and suggestions:

- Referrals sent to health authorities should also be sent to the local government authority to **foster an efficient and collaborative approach.**
- **Only the registration form should be available online:** *“The remainder of the registration documents could be made publically accessible through FOIPPA rather than simply posting the documents online as this will reduce the potential for misinterpretation of documents by individuals without appropriate technical expertise.”*
- **Use a similar approach to the Integrated Pest Management Plan process:** *“The focus of an Integrated approach would meet the Intentions Papers [sic] goal of looking at agronomic and soil health concerns rather than just waste disposal.”*

ENV Response to 1.3

ENV continues to streamline registration processes. ENV will consider the efficiency of multiple-year registrations.

ALR land will continue to be under the purview of ALC. The OMRR will be amended to harmonize as efficiently as possible with existing regulations such as the Code of Practice for Soil Amendments (COPSA) and the Code of Practice for Agricultural Environmental Management (AEM Code). This harmonization will include consideration for managing publicly available information in accordance with the FOIPPA.

In addition to following the provincial OMRR, local governments have the authority to create bylaws to regulate activities within their respective jurisdictions.

ENV will work to build an efficient registration format to aid in documentation of what organic matter is applied where. The suggestion to list the manufacturer on the land application form will be considered.

Various tools will be used with the OMRR to ensure that currently registered operations and land applications follow the OMRR while minimizing abrupt changes to existing operations.

1.3.1 Registration process for land application of managed organic matter

Q1.3.1a: Do you have any comments on the proposed submission requirements? [16 responses]

Although submission requirements are generally supported, several concerns and clarifications were raised.

Clarify:

- What constitutes **proof of notification:** *“Proof that local First Nations communities have been notified of the intent to register”* needs to be further defined. *“It is generally the government’s*

duty to consult with First Nations; clarify why this responsibility is being transferred to the individual producer.”

- **Timeline and process with local governments:** Clarify the process for the ENV to contact local governments in regards to concerns. *“This information is important as it has significant implications to the [local government’s] biosolids operations processes (storage time, storage capacity) and costs. Understanding the land application approval timeline will allow municipalities to adequately plan for ongoing operations.”*
- **Authorized dischargers:** *“The generator and landowner would both be considered “authorized dischargers”, what does this entail/mean for the land owner?”*
- Whether consideration has been given to instances of land application of biosolids occurring after **manure spreading advisories** have been issued.

Concerns:

- The **fees and length** of pre-registration engagement and notification process is a barrier to uptake: *“By imposing fees on registrants and a lengthy pre-registration engagement and notification process, producers may shy away from using the managed organic matter. Is there a contingency plan for any potential drop in use of biosolids for land application?”*
- On one-year versus five-year **LAPs**: *“operationally a one-year LAP is sometimes difficult to do, but a five-year LAP is a long financial commitment that a generator may not want to enter into. As such, we recommend a two, or three-year option as well.”*

Recommendations and suggestions:

- The registration for land application should **not limited to the calendar year** in which it is approved as *“...biosolids are often stockpiled over winter months for application in the spring/summer.”*
- **Update the requirements** for land application plans include data that *“would assist in **capturing benefits and [greenhouse gas] GHG emissions** associated with biosolids management, as well as enable [ENV] to track this information province-wide in a consistent, ongoing manner (and supports [ENV]’s Service Plan Targets). It is recommended that this information be provided to [ENV] in a standard template; the existing Biosolids Emissions Assessment Model (BEAM), as endorsed by the CCME, could be used for consistency in GHG emissions accounting.”*

ENV Response to 1.3.1a

ENV is considering the appropriate steps for implementing the United Nations Declaration on the Rights of Indigenous Peoples (UNDRIP) and for facilitating government-to-government dialogue with Indigenous peoples. *“There is no legal obligation for proponents to consult with or accommodate First Nations – the responsibility lies with the Province. However, government can assign certain procedural aspects of consultation to proponents and, where authority exists to do so, can ask for modifications to plans to avoid potential impacts to Aboriginal interests.”*² Within the OMRR, ENV proposes assigning to the proponent the procedural aspects of informing First Nations as part of the application process.

Both producers and land owners are responsible for the quality and distribution of organic matter in a manner which is protective of the environment and human health. ENV is requiring that both producers and land owners are identified and that both understand their respective responsibilities. For example, a land owner’s responsibility may include developing a nutrient management plan which accounts for the total nutrient input from multiple sources such as manure and/or fertilizer and/or compost and/or biosolids in conjunction with scheduling with respect to manure spreading advisories and seasonal limitations. A producer’s responsibility may include sampling and analysis of the organic matter.

ENV will clarify the notification process and expected timelines in supporting guidance documents. ENV is aware that proponents require this information in order to be able to schedule and budget their plans accordingly.

ENV will consider the feasibility of multi-year land-application plans and how time periods can affect storage requirements with regards to seasons.

Q1.3.1b: Do you have any comments on the proposed information to be included in the registration form? [9 responses]

The limited responses to this question were **supportive**.

Support:

- **Reducing duplication of information** between separate documents which form part of the submission in order to streamline information.

Clarify:

- **Definition** of “watershed.”

² BC Government. **Building Relationships with First Nations: Respecting Rights and Doing Good Business**, https://www2.gov.bc.ca/assets/gov/environment/natural-resource-stewardship/consulting-with-first-nations/first-nations/building_relationships_with_first_nations__english.pdf

ENV Response to 1.3.1b

ENV will endeavor to streamline the information requested, in order to minimize impacts to businesses while protecting the environment and human health.

ENV aims to harmonize the OMRR with existing regulations. This will include harmonizing with the definition of watershed as used in the AEM Code. Guidance tools will be developed to aid in site identification in relation to watersheds.

Q1.3.1c: Do you have any comments on the requirements for pre-registration engagement and notification? [12 responses]

There is **general support** for the process; however, pre-registration engagement and notification requires more details, including how concerns will be addressed, further definition required for key terms, and support for Government-to-Government discussions.

Support:

- For **increased engagement with First Nations and Local Governments**, *“but we would like [ENV] to clearly define the level of engagement required and carefully define whatever vocabulary is chosen to discuss this (e.g., what are the differences between “engagement”, “information sharing”, “notification”, “enhanced notification”, or “consultation” and which of these activities applies?).”*

Clarify:

- How watershed effects will be considered by stakeholders.
- Definition of **“potentially impacted”** in regards to First Nations and other agencies. Who determines which groups are affected?
- Process to **address concerns of stakeholders** in the pre-registration engagement period.

Recommendations and suggestions:

- **Notification should include adjacent properties** and these properties should also receive a copy of the land application process.
- **Government-to-Government discussion** to share information:
“The [local government] sees immense value in a Government-to-Government discussion with all BC First Nations on acceptable use of biosolids which occurs outside of the LAP review process, which is site-specific and not meant to provide feedback on general concerns with biosolids use. [ENV] is the best positioned party as the regulator to lead an effort to communicate that biosolids management as per the OMRR is protective of human health and the environment.”

ENV Response to 1.3.1c

ENV is committed to implementing the UNDRIP and to protecting the environment and human health. The steps in the process to implement the UNDRIP are expected to evolve and ENV will be providing guidance to clarify expectations and to aid in identifying those who may be potentially impacted.

1.3.2 Notification of changes to registration

Q1.3.2: Do you have any comments on the proposed requirements to notify authorities regarding changes to registration? [14 responses]

Responses to this question primarily **requested clarification on the requirements** to notify authorities regarding changes to registration.

Clarify:

- The **length of registration process**: *“Why are you giving so much time for facilities to be compliant?”*
- How ENV will **communicate with local governments** to ensure concerns are addressed.
- **Expectations or process for new questions from stakeholders**, which result from a notification of change: *“for example, what is the threshold for project detail change which would require a new round of stakeholder engagement? What are the expectations for proponents for changes which do not meet this threshold but which generate significant interest or concern from stakeholders?”*

Concerns:

- Regarding the provision that MHO must be notified of any change within 30 days of the changes, there is **concern that this could result in a health hazard**: *“Unlike the initial registration process which allows for the MHO to deny the application or require specific conditions, this allows the applicant to make changes to their registration and only notify the MHO after the fact. A mechanism must be in place to ensure changes do not result in a public health hazard.”*

Recommendations and suggestions:

- **Notification should include any high priority invasive species** detected on site.
- A **minor change** in the LAP does not require notification: *“Propose that only information contained on the registration form be subject to a requirement of notification in the event of change. Other factors which may change more frequently should not be subject to this requirement as this will likely require numerous change notifications and burden the process.”*
- **Set limits** on what is required with respect to **notification of changes**: *“The requirement to notify all parties of every change seems excessive, and runs the risk of overwhelming small First*

Nations communities and local municipalities with unnecessary information. This should apply to material changes only”

ENV Response to 1.3.2

Various tools will be used in the OMRR to ensure that currently operating facilities are compliant with the OMRR while minimizing abrupt changes to existing operations. One potential option is to phase-in implementation of the new requirements.

ENV encourages operators to plan for resources to facilitate communication with stakeholders and communities. ENV is considering various options to accomplish this including a community communication plan as a component of the FEMP.

The requirement for notification of a change within 30 days will be clarified. In addition to harmonizing with the notification process under the AEM Code, ENV will consider which changes may be considered minor and/or unforeseeable and which changes should be preceded by notification.

ENV is receptive to concerns regarding invasive species and will consider effective means of minimizing their spread.

1.4 Notification requirement for biosolids growing medium facilities

Q1.4a: Do you have any comments on the proposed amendment of the definition of “discharger”?
[5 responses]

Three respondents were supportive with commentary, and two respondents were generally not supportive of BGM application.

Support:

- The respondent is supportive of the amendment to **ensure clarity of roles and responsibilities.**
- The respondent is supportive, however, **suggests the use of a different name:** “‘producer’ or ‘manufacturer’ or similar, discharge usually has a connotation of exiting a defined system.”

Do not support:

- **No support for the use of BGM:** “The use of biosolids in growing medium should be reduced over time to zero. There is no justification for the continued use of this material given the current knowledge of the contamination with compounds of interest and diverse pathogens which have not been tested for.”

Q1.4b: Do you have any comments on the proposed notification requirements for existing biosolids growing medium facilities to come into compliance with requirements? [4 responses]

Responses were **supportive and offered recommendations**. The few respondents provided detailed responses.

Support:

- Two of the respondents were supportive of allowing **temporary facilities to operate without notification**

Clarify:

- Definition of **'clean soil and sand'**: “[ENV] is proposing clarity around feedstocks suitable for BGM production and identifies feedstocks that are currently defined in the OMRR, with the exception of “clean soil and sand”. What is the definition of “clean soil and sand”?”

Recommendations and suggestions:

- In regards to ENV proposing notification of change within 30 days of the change, the respondents suggest that notification of changes **apply to significant changes only**, as defined.
- Use **weight (in addition to volume)** as a measure of biosolids in growing mediums.
- ENV **require (permanent) BGM facilities have a light FEMP** “because they have the potential to impact the environment”
- **Include municipal drinking water residuals** as a feedstock suitable for BGM production.

Q1.4c: Do you have any comments on the proposed timeframe for making notification documents available online to the public? [4 responses]

Of the few responses received for this question, there was **support for increased transparency** and the **proposed timeline**. One respondent did caution that “It should be considered that the percentage of biosolids used and other material might be **proprietary**.”

ENV Response to 1.4

Definitions of terms, such as “clean soil and sand” will be provided within the regulation or supporting guidance as appropriate.

Appropriate notifications for changes have been addressed in ENV responses elsewhere in this report.

To minimize confusion ENV is proposing to require only one parameter as a measure of quantity for biosolids in BGM production. ENV is proposing the use of the parameter of “weight” in order to enable producers to use measuring tools which are already commonly available and to be consistent with measurements of mass elsewhere in the regulation.

ENV will consider additional feedstocks as well as appropriate measures for BGM facilities.

2. Engagement with First Nations

Q2a: Do you have any comments on ENV's intention to amend the regulation to support the draft principles? [18 responses]

Half the respondents **support ENV's intention to amend the regulation to support the draft principles**. Some respondents had questions or comments for further clarification while three respondents did not support the amendment.

Support:

- A couple of local government respondents indicated that they were supportive, however, **timelines may need to be longer** to allow First Nations to review and respond.
- A respondent suggested that while they were **supportive of consultation and engagement**, the regulation may be **infringing upon rights of private landowners**.

Do not support:

- There were a few respondents who were **not supportive** of the regulation: *"We recommend delay of this requirement until the province has a clearly defined resolution process for engagement with First Nations and key stakeholders..."* for a number of issues. *"This has the potential to get messy with delay. Resources must be available to review this information. There needs to be a review time limit."*

Clarify:

- Whether these changes have been **identified and discussed with First Nations** directly: *"The Intentions Paper is a large document directed at specialists. A break out discussion with First Nations should be a priority as they are the only respondents that can comment accurately on this section."*
- Who has the **final decision-making authority**: *"I can't see in your proposed requirement for First Nations consultation who makes the final decision as to whether a project will go ahead."*

Q2b: Do you have any comments on the pre-registration and notification requirements? [13 responses]

Many respondents had **questions or comments** about the pre-registration and notification requirements.

Clarify:

- **Questions about the process**, including queries such as:
 - Have the tools for engagement been created?
 - How will you determine which First Nations will have interest in the land use question?
 - Who will mediate if there is a dispute?
 - What happens when the 60-day period ends with no agreement on the proposed LAP project?

Concerns:

- **Potential lack of capacity by First Nations to review applications:** *“Having too much paper work being sent to bands on each application and requirements on them to consult on each is not proper consultation, it is better to have a large-scale Plan as a focus of consultation with notification being sent for each application.”*
- **Regarding the timelines:** *“Will the process move from pre-engagement to the registration process regardless after 60 days?” “..the [local government] supports the pre-registration requirements if [ENV] defines a service standard timeline for review of submissions (including the LAP Review Report) prior to issuing a registration”.*

Recommendations:

- **Regarding the timelines:** *“We propose a timeline of 30 days.”*

ENV Response To 2a and 2b

The BC Government is committed to adopting and implementing the UNDRIP and the Calls to Action of the Truth and Reconciliation Commission. This includes a review of all policies, programs, and legislation to determine how to bring the principles of the declaration into action in British Columbia. ENV, in conjunction with Indigenous peoples, intends to develop an engagement process within the OMRR to support this commitment. ENV anticipates the process will evolve to meet the needs of each unique proposal. ENV is aware of proponents’ need for predictable timelines in order to budget resources appropriately, and will consider this in the process.

3. Substitutions under the OMRR

Q3: Do you have any comments on the proposed changes for substitutions? [15 responses]

Over half of respondents were supportive of the proposed changes for substitutions, of those that did not indicate full support, questions were posed about process and regulations:

Clarify:

- The **objective/intent in notifying First Nations of the substitution.**
- The **role of the Directors, their qualifications and training** that will allow them to make the necessary decisions.
- Wording of **“substitutions”**:

“substitutions are not intended to apply to the application of biosolids or compost to soils that contain elevated metal concentrations exceeding specified standards.”

“What is meant by ‘substitution would be transferable on a case-by-case basis’, i.e. transferable to what?”

Recommendations and suggestions:

- In regards to the ability for Directors to substitute one requirement for another: *“A mechanism must be in place to ensure substitutions do not allow for the creation of a **health hazard**.”*

ENV Response To 3

The purpose of substitutions is to allow for flexibility in the regulation, while protecting the environment and human health. Applications for substituted requirements under the regulation are subject to a statutory decision-making process under the authority of an ENV director, which may include consultation with potentially impacted parties. Applications are reviewed by ministry staff that hold the necessary qualifications, professional designations, and experience.

4. Fee Payments

Q4: Do you have any comments on the proposed fee payments as outlined in Table 2? [17 responses]

In general, respondents are **supportive of fee payments**.

Support:

- There is general support for registration fees; however, two respondents would like to see the fee processed only after the registration has been issued.

Do not support:

- Two respondents did **not support** the fee structure for the following reasons:
 1. It would “*decrease the frequency of updates to registration information,*” and
 2. It creates an additional burden on smaller businesses. Respondent suggested a tiered fee structure.

Clarify:

- How will substitution fees be determined and who will be evaluating the substitution requests? Suggestions include determining a flat fee for all substitution requests rather than an hourly rate, setting a cap on the hourly fee, or the lesser of the flat fee or hourly rate. All comments request **transparency in how the fee is determined**.

Concerns:

- One local government respondent noted that local government and First Nations staff could spend **considerable time reviewing applications**, and that First Nations may require compensation for undertaking reviews: “*How will these concerns be met and will First Nations and Local Governments be in the position to request additional fees to review applications if they become a requirement?*”

Recommendations and suggestions:

- Develop registration fees for **registration durations of two, three, and four year periods**.
- A health authority also requested **cost recovery considerations** in the event a site visit is required.

ENV Response To 4

ENV is aware of the challenges to small businesses that fees may represent. The ministry’s intention is to coordinate the need for supporting ENV resources while promoting the responsible production and use of organic matter. Modifications, such as a tiered structures and multi-year registrations, will be considered.

5. Organic Matter Suitable for Composting

5.1 Treated and unprocessed wood

Q5.1: Do you have any comments on the proposed amendments to Schedule 12 for untreated and unprocessed wood? [13 responses].

The comments in this section are varied. Many are requests for **further clarification** on the amendments to Schedule 12, others provide **considerations for ENV**, and a few are **supportive**.

Clarify:

- The type of wood, as it is confusing for clean lumber recovered from construction; the amendment does not specify these clean wood cuts.

Concerns:

- **A soil-free requirement may not be realistic:** *“If the residue originates from land clearing, it may not be possible for the wood residue to be 100% soil free. Therefore, we recommend clarification such as <2% soil by weight/volume.”*

Recommendations and suggestions:

- Use the term “untreated and unprocessed wood”, rather than “wood residue”.

ENV Response To 5.1

Definitions will be provided in the OMRR and harmonized with other regulations as appropriate. ENV intends to exclude construction and demolition waste from feedstock and use the definition of “wood residue” as it is used in the AEM Code. If a proponent wishes to use construction waste that does not include composite wood products (e.g., plywood or particle board) and is not contaminated with non-wood products (e.g., glue, paint, stain, or insulation) then the proponent would have the option to apply for a substitution.

ENV will address the concern for soil residuals from land clearing activities to be practical and protective of the environment.

5.2 Domestic composting toilet sludge; domestic wastewater treatment plant sludge

Q5.2: Do you have any comments on the proposed amendments to include the broader category of domestic wastewater treatment plant sludge in Schedule 12? [14 responses]

Most respondents **were supportive** of the proposed amendments to include the broader category of domestic wastewater treatment plant sludge in Schedule 12; however, some **recommendations** were provided.

Support:

- One local government was strongly supportive of the changes and indicated that they have had excellent success in composting undigested sewage sludge.

Recommendations and suggestions:

- Add a **clear definition** of domestic wastewater treatment plant sludge to OMRR.
- Establish a **regulatory verification process** for facilities composting this feedstock.

ENV Response To 5.2

A definition will be provided in the regulation.

Compliance with the OMRR, including record keeping and FEMP requirements (which address aspects including pathogen reduction and vector attraction) will be verified by the Regional Operations Branch.

5.3 Non-recyclable paper material

Q5.3: Do you have any comments on the proposed addition of “non-recyclable paper material” and its definition in Schedule 12 of the OMRR? [12 responses].

The addition of “non-recyclable paper material” is **supported** by respondents; however, potential amendments to the **definition, and clarification** of materials are requested.

Support:

- While supportive of the addition, one respondent asked for, *“more clarity is required to ensure that the intent of this provision is clear.”*

Clarify:

- The types of paper products, inks and potential plastic resins accepted for composting.”

Recommendations and suggestions:

- Change the term for **‘non-recyclable paper material’**:
“Suggests replacing the term ‘non-recyclable paper material’ with ‘compostable paper material’, to avoid confusion. This would be in alignment with ‘compostable plastic’, i.e. not ‘non-recyclable plastic’.”
“Consider [a] “food-soiled paper” category. “Non-recyclable paper material” is a misnomer since the majority of food-soiled paper was once recyclable.”
- That the OMRR wording for ‘non-recyclable paper material’ be **aligned with the BC Recycling Program** definition.

ENV Response To 5.3

The proposed definition of “non-recyclable paper” is intended to allow the use of compostable paper as feedstock and to prevent the diversion of recyclable paper from existing recycling programs.

5.4 Compostable plastic

Q5.4: Do you have any comments on the proposed addition of “compostable plastic” to Schedule 12 of the OMRR? [17 responses]

Responses to the proposed addition of “compostable plastic” to Schedule 12 included questions, comments and concerns.

Clarify:

- How the **type of plastics** suitable for composting would be controlled?
- How compostable plastics will be handled with the **new plastic limits** for compost (i.e., 0.25% dry weight)?
- Referring to the statement “Compostable plastic would be required to meet the BNQ 9011-911/2007 or BPI-ASTM D6400 and/or ASTM D6868 standards, how the proposed requirement was **determined**?”
- How composting facilities seeking to include compostable plastic as a feedstock suitable for composting would meet **time and temperature standards** applicable to the compostable plastics being accepted? What specific tests would be used to ensure standards are being achieved? *“And once achieved, will the MOECC [ENV] provide a certificate or other available documentation to know that a composting facility will produce organic matter to an acceptable end fate standard?”*
- If ENV will provide a **certificate** or other available documentation to know that a composting facility will produce organic matter to an acceptable end-fate standard.
- In regards to the proposed requirement that “compostable plastic would be required to meet the BNQ 9011 911/2007 or BPI-ASTM D6400 and/or ASTM D6868 standards in order to be defined as compostable plastic”, clarify whether **one, two or all three standards** are required to be met in the definition.
- If compost facilities would be required to seek an amendment to their **existing permit** by adding compostable plastics as the list of acceptable materials? If so, what would the process be?

Concerns:

- Include the need for independent standards to ensure the plastics completely breakdown in the composting process (which many do not, quickly enough). Concerns included the time required to achieve complete finished compost.
- About the use of plastics in feedstock, and its impact on the environment.

- Regarding claims that products are ‘compostable’: *“The challenge right now is that these “compostable” claims are often not certified nor are category- wide, making it very difficult for facility operators to trust the claims nor distinguish these products from others in the category which might look alike but do not compost.*
- That **existing standards cannot predict the biodegradability** in real-life conditions: *“Experience and research have shown that the existing international industry standards (for example BNQ or ASTM) are insufficient and cannot predict the biodegradability (or compostability) of plastics in real life conditions.”*
- That given the prevalence of **compostable plastics in organic waste streams** and that these plastics do **not decompose quickly**, they could easily be included during compost lab testing and skew the plastics content results.

Recommendations and suggestions:

- The BNQ9011-911/2007 is out of date, **replaced by BNQ 0017-988.**
- Regarding **labelling and marketing** of ‘compostables’: *“With respect to the note on specific clarification being provided around biodegradable materials as compared to compostable materials (where biodegradable materials are not necessarily compostable; however, compostable materials are biodegradable) will this clarification include all types of labeling and marketing of ‘compostables’, ‘biodegradables’ and PLA [polylactic acid or polylactide] on the market today to be as comprehensive as possible in the guidance?”* Develop and implement a **proper communication and education program** in order to support consumers as there is still considerable confusion about these regulations by the public.
- Funding may be required to **upgrade facilities and infrastructure** to properly process food waste and compostable plastics. *“Proper infrastructure should be funded in order for Certified Compostable products and packaging to achieve their intended end life, contribute to a circular economy, reduce greenhouse gas emissions, and create a valuable resource, compost.”*
- Incorporate **technical requirements for compostable plastics** into OMRR.
- Certify items by **third party BPI or BNQ**: *“...it is important that these items **are certified by 3rd party BPI or BNQ.** This will separate the proper products from those that can actually do damage.”*
- The inclusion of these materials would be strengthened by **including specific requirements or independent standards** that they must meet in order to be considered ‘compostable’ under OMRR.

ENV Response To 5.4

The proposed addition of compostable plastics to Scheduled 12 of the OMRR is under review. Items under consideration include:

- How to practically exclude non-compostable plastic
- Compost systems and time/temperature standards which are capable of completely composting the feedstock
- If /when incorporation of compostable plastics contributes value to the final product

5.5 Used mushroom growing substrate

Q5.5: Do you have any comments on enabling “used mushroom growing substrate” to be categorized as organic matter suitable for composting? [10 responses]

There is **support** to enable “used mushroom growing substrate” to be categorized as organic matter suitable for composting.

Support:

- Municipal respondents are supportive *“of the proposed inclusion of used mushroom growing substrate as organic matter suitable for composting. This will provide a **more environmentally conscious** management process for this material than is often observed in current practice.”*

Recommendation:

- One regional district indicated composters using *“more than a specified amount of used mushroom growing substrate per year should be required to **obtain a permit** due to potential odour impacts.”*

ENV Response to 5.1 through 5.5

ENV endeavors to harmonize definitions, including wood residue and domestic sludge, with other provincial regulations including COPSA and AEM Code.

The suggestions offered for refining the feedstocks will be considered for inclusion in the regulation while prioritizing the need to minimize contaminants, invasive species, and other undesirables.

6. Composting Facilities

6.1 Facility environmental management plan

Q6.1a: Do you have any comments on ENV’s proposed requirement for all composting facilities to prepare a “facility environmental management plan” (FEMP)? [22 responses]

While respondents **generally supported** the intent of the requirement for composting facilities to prepare FEMPs, there were a number of **requests for clarifications** and **recommendations**.

Clarify:

- How the **threshold for FEMP requirement** was selected. One respondent suggested that the threshold for “full” FEMP should be lower. *“The 15,000 tonnes/year threshold for a full facility management plan may trigger facilities to limit feedstock to 14,999 tonnes/year or run multiple composting businesses on the same site to avoid the more rigorous permitting process.”*
- **ENV’s role in the FEMP process**. There are a number of questions regarding what ENV intends to do with the FEMP and how it will ensure the minimum standards are addressed. One respondent asks *“...is the Qualified Professional who prepared the FEMP also approving the document?”* *“Who will be responsible for the approval?”*
- Whether the **two-year grace period includes the processing** time by ENV.

Concerns:

- That the “light” FEMP is **significant work load for yard waste-only facilities**.

Recommendations and suggestions:

- **Define and requirements of “light” & “full” FEMP**: One respondent suggested providing templates outlining the information required for each FEMP. Another respondent suggested that *“the annual monitoring and maintenance report that larger facilities would be required to submit to ENV as part of the facility’s Environmental Impact Study should include a list of complaints, responses, and resolutions or outcomes at the facility and in the affected community.”*
- Consider an *“exemption for a “light” facility management plan when small-scale operations (for example < annual 10,000 tonnes) meet the requirements of a permitted farm-use under the [Agricultural Land Reserve Use, Subdivision and Procedure Regulation] ALRUSPR and if at least 50% of the feedstock is agricultural waste.”*
- Address **invasive species**, vectors, and species-at-risk in the FEMP.
- Regarding **odour management**, include in OMRR a definition, criteria, and standards of odour as an air contaminant.
- A **90-day period** from the time of ratification was sufficient time for facilities to prepare a FEMP.
- **Include ground water and hydrology** as part of the Environmental Impact Assessment and include **visual impact** to surrounding properties.

- A **phased-in approach for small operators**: *“Size of businesses, time and resources available should be considered in the FEMP requirement.”*

ENV Response to 6.1a

Regulations routinely use thresholds for determining when an operation needs to comply with specific requirements. The potential for modifying activities to remain below the threshold is always an option for operators, regardless of the number or measure that defines the threshold. ENV intends to tier specific FEMP requirements based on the size of the facility as determined by the wet weight of feedstocks brought onto the site.

ENV intends to update the Compost Facility Requirements Guideline with a full description of FEMP requirements, including: odour management, impact assessment, monitoring plans, leachate management plans, operating plans and plan preparation by a QP. ENV will consider the suggestions for the addition of an invasive species plan and the use of templates to aid in preparation of complete FEMPs.

Facility operators would be required to comply with the FEMP, which will also be posted online and managed in accordance with the FOIPPA.

Regional district regulations, local bylaws and permits will continue to be enforced and managed by the local governments which create them.

Air contaminants will continue to be regulated under the EMA.

A phased-in approach will be considered for implementation. ENV will consider the suggested time periods and facility-sizes for this approach.

Q6.1b: Do you have any comments on the proposed FEMP requirements? [12 responses]

The majority of the comments received in this section referred to the **odour management plan and odour modeling requirements**. While the respondents support the intent of odour modelling (*“good in theory”*), many felt that this was only one tool and may provide a false sense of assurance. In addition, the respondents indicated that odour dispersion modeling can be costly and, at best, provide estimates. The remaining comments were requesting clarification on the leachate management plan.

Clarify:

- The **threshold** for requiring a “full” FEMP and odour dispersion modelling: clarify whether the threshold *“include[s] feedstock originating from the facility site, in cases where facilities are located on **agricultural land**. The OMRR should also clarify whether the requirement to complete a “full” FEMP would also apply to facilities processing more than a specified amount of **domestic***

wastewater treatment plant sludge (undigested or raw) and domestic composting toilet sludge per year.”

- **Table 3** by indicating if there is a limit on tonnes of yard waste for composting facilities processing only wood residue and/or yard waste.
- **Expectations on the design and maintenance of leachate collection systems** to prevent leakage as the system ages.
- **Requirements for existing odour management and leachate management plans**, including the impacts on regional district regulations and permits:

“Will separate existing plans be accepted if they meet the requirements?”

Concerns:

- That odour should not pass the facility boundary or that these facilities should not be located within 10 km of residential areas.

Recommendations and suggestions:

- Provide **guidance on measurement and assessment** methods: *“For example, identification of substances that may cause odour (related to organic matter recycling) should be identified in the OMRR along with appropriate thresholds/standards to compare levels against, such that it is regulated in a similar manner as other air pollutants.”*
- Emphasize that **odour modelling** is only one tool: *“We suggest that it must be emphasized in the Regulation that modelling is only one tool, and that [ENV] will continue to follow up appropriately on odour concerns and complaints.”*
- Set out **minimum requirements** for FEMP in the regulation, not the guidance document, to ensure high quality assessment reports.

ENV Response to 6.1b

The facility-size threshold is intended to identify the size of an operation and is not limited to the type of feedstock. Composting of agricultural-by-products on agricultural land is subject to the thresholds and requirements in the AEM Code. On-farm compost operations that process feedstocks other than agricultural by-products will be subject to the OMRR.

ENV will clarify the FEMP requirements for facilities processing more than 15,000 wet tonnes per year of only wood residue and/or yard waste.

Several separate plans will be combined to form a complete FEMP. A facility’s FEMP will be required to contain specific elements, depending on the size of the facility. The specific requirements will be included in the regulation and supporting guidance documents.

Air contaminants are regulated under the EMA. FEMPs will require the inclusion of odour management plans, regardless of the size of the facility.

Q6.1c: Do you have any comments on enabling a director to request additional information?
[8 responses]

In general, there is **support for enabling a Director** to request additional information.

Recommendations and suggestions:

- Clearly **outline the roles and responsibilities** of the assigned Directors.
- Provide **additional Director training and support**: *“The significant regulatory changes identified in ... will require considerable government resources.”*
- Develop *“a centralized group within MoE [ENV] specializing in OMRR...”* rather *“...than relying on local Directors.”*

ENV Response to 6.1c

The designation of “director”, as defined in the EMA, means a person employed by the government and designated in writing by the minister as a director of waste management or as an acting, deputy or assistant director of waste management. Directors are supported by staff possessing the necessary subject matter expertise and professional designations to review decision packages prior to issuance of statutory decisions.

6.2 Best practices

Q6.2a: Do you have any comments on ENV’s intention to include specific provisions related to BMPs and BAT at composting facilities? [17 responses]

Respondents have **concerns about the requirement for indoor storage**. Otherwise respondents **generally support** ENV’s intention regarding BMPs and BATs at composting facilities.

Clarify:

- **Definition of enclosure**: Does the Gore Cover System meet the requirements?

Concerns:

- **About level of effort and infrastructure costs being prohibitive** if covering is required for all operations.

Recommendations and suggestions:

- Consider requiring *“the **most “appropriate” technology based on site-specific conditions** rather than a more general requirement for BAT (best available technology) as the objective is protection of human and environmental health, not employment of the most recent technology.”*

- Add a provision that allows **reduced requirements on a case-by-case basis**: *“It is important for facilities near populated areas to meet the proposed standards, but there should be a provision for reduced requirements on a case-by-case basis. In remote areas, there may not be a need to fully contain all phases of the composting operation and it would result in significant additional expense.”*
- The enclosure requirement should include **consideration of the location and its impact**.
- Consider the enclosure requirement on a case-by-case basis. Some respondents suggest that the **enclosure requirement** will negatively impact facilities that process >15,000 tonnes per year: *“Consider requiring only the feedstock receiving and the first 3 weeks of the composting process (the “active” composting phase) to be within enclosed structures. This would allow to substantially control odor without the need to cover the much less odorous, but space-wise more significant areas of curing.”*
- Consider including *“...a provision that new compost operations must be located in an adequately **zoned area** within local [Official Community Plans] OCPs and zoning bylaws (i.e. industrial). An exemption from that provision could be considered for operations that use at least 50% agricultural waste.”*
- Facilities be allowed to demonstrate that they meet odour, leachate and environmental criteria before facility is required to meet enclosure requirements.
- The ENV should **explore risk-based management approaches**: *“We recommend [ENV] explore [a risk-based] approach in other revisions including registration, record keeping, and reporting, to minimize the impact of the revisions on smaller waste management businesses.”*
- ENV’s BMPs should **provide more than only guidance**.

ENV Response to 6.2a

Gore® Covers, used in the absence of other BMPs and BATs, do not fulfill the requirements for an in-vessel or fully enclosed structure. Questions regarding specific equipment or operations are best addressed in the context of the entire facility including, but not limited to, location, annual precipitation, other equipment, and operations. Questions regarding specific sites should be directed to ENV staff in the Regional Operations Branch.

The level of effort and cost for remediating environments which have been impacted by industrial activities is prohibitive. ENV will consider the suggestions for BATs and BMPs for the purpose of protecting the environment and human health. The ministry intends to include a process for application for substitutions as described in section 3 of the IP.

The purpose of requiring enclosure is to protect the environment and human health, in addition to managing odour production and vector attraction. Because leachate from nutrient rich organic material, vector attraction and odours occur at all stages of screening, processing, handling and storage, the best practices described in the intentions paper will be required, including coverage of the operation.

Regional district regulations, local bylaws and permits will continue to be enforced and managed by the local governments. Provincial regulations do not establish or enforce local siting requirements.

Q6.2b: Do you have any comments on ENV's intention to establish phased-in requirements for updated standards and practices? [11 responses]

Responses are **generally supportive** and offer **recommendations** for improving phased-in requirements.

Support:

- One municipality stated **general support for the proposed timeframes** for adoption of updated standards.

Recommendation and suggestions:

- Shorten time frame for enclosing facilities. Two municipal respondents suggest that **time frames are too long**: *"It is unclear why new facilities, particularly those managing food or putrescible waste, will have 5 years to compost in-vessel or contain facilities within enclosed structures. New facilities should meet the requirement immediately. A 10-year time frame for existing facilities seems excessive. Recommend a 5-year time frame. A Director could give a longer grace period where it is justified."*
- ENV **explore best practice approaches in regulatory reform.**

ENV Response to 6.2b

The timeframes for enclosing facilities, as suggested by respondents, will be considered moving forward.

6.3 Compost quality criteria and safety

Q6.3a: Do you have any comments on ENV’s proposed standards for organic matter suitable for composting? [21 responses]

Many respondents commented on the proposed prohibition on composting noxious or invasive plant species. The majority of these comments focused on the difficulty in removing these ‘weeds’ from the yard waste stream and suggested alternative paths.

*“...this criteria [sic] is impractical because it assumes that landowners will be able to identify invasive species and not put them in the organic waste stream. It **should be assumed that invasive species will make it into the compost stream** and measures should be in place to ensure that the finished compost does not become a vector. Similarly, facilities that only process yard waste should also not become a vector due to the inevitable invasive species content.”*

*“The management of **invasive weeds** should be considered after the application of bulk compost. Even if compost is free of weeds it may encourage the development of in situ weeds. **Education** on managing invasive plants during the composting process would be the better approach. Residentially collected yard waste should be assumed to contain invasive plants. Local governments **provide options for free disposal** of invasive or infested plants. This is successful with land managers, ranchers or informed homes [sic] owners.”*

Additional comments on noxious weed and invasive species include:

Clarify:

- **Definition** of “noxious weed” and “invasive species”.
- If **wood residue infested with Japanese Beetle** is considered an invasive species.
- **Alternative disposal methods for city residents** disposing noxious weeds and invasive species.
- **Process to seek approvals** from Directors to allow composting of invasive species: *“I believe we have to agree that composting may not be an effective way to kill invasive species or noxious weeds and as such we shouldn’t oppose to this proposed intention. I believe that [respondent] would however want to ensure that an efficient mechanism is in place to facilitate exemption under this specific regulations when [respondent] has reasonable ground to believe that composting would be a useful tool in the control of an invasive species.”*
- How the OMRR will **address the storage of the finished product** to ensure there is no contamination from noxious weeds and invasive species.

- The **procedure for measurement of the 0.25 per cent foreign matter**: The respondents questions where does the measurement ~~will~~ take place - at facility receiving area or post-screening?
- If effluent from finished compost (i.e., from rainwater on finished compost) will be considered leachate.
- How to “enforce 0.25 percent dry weight from an operational perspective? Is it measured in the receiving stage area or at finished product stage area?”

Concerns:

- Typo in IP: “There is a typo in the intention paper for 0.25 percent dry weight (p.26) vs. wet weight (p.8). Please confirm that dry weight is correct. We support the 0.25 percent dry weight as a means to reduce microplastic pollution in compost. However, it may result in unintended consequences such as facilities not accepting compostable plastics since they look similar to non-compostable plastics.”

Recommendations and suggestions:

- Require facilities to **prepare and implement a noxious weed and invasive species plan** (similar to proposed requirements for vector attractants).
- Focus on ensuring composting facilities can appropriately deal with noxious weeds and invasive species. In communities that lack alternate disposal options, composting may be the most appropriate option.
- Work with provincial invasive species agencies to support additional research: “We recommend that [ENV] works with the Soil and Invasive Species Working Group [under the [BC Inter-Ministry Invasive Species Working Group](#)³] to support local research trials on priority invasive species, and collaboratively develop requirements for temperature, duration, and perhaps method/facility type restrictions to increase confidence that the reproductive capacity of any invasive species in the feedstock would be rendered unviable.”
- Further research to lower new **0.25 per cent foreign matter limit**: “I agree that the allowable limit for foreign debris content should be reduced significantly, and that the proposed 0.5% foreign debris limit and 0.25% plastic limits are neither too restrictive nor too difficult for industry to achieve. To achieve high quality outputs, industry will need supporting government policy that is coordinated with local governments to improve input feedstock quality. ...Lowering the allowable plastic content further should be considered through reviewing scientific literature regarding the potential environmental and health effects of plastic, as well as through direct consultation with jurisdictions that already have experience with lower allowable limits.”

³ <https://www.for.gov.bc.ca/hra/invasive-species/index.htm>

ENV Response to 6.3a

ENV shares concerns regarding invasive species and will consider effective means for minimizing their spread. ENV expects to conduct further research on this issue.

FM content is perceived to be a potential risk to human health as well as a significant impediment to promoting the beneficial use of high quality organic matter. Research supports that a 0.25 percent (dry weight) threshold is comparable to that of other jurisdictions. ENV will conduct further research to estimate achievability and relative cost with respect to establishing a workable FM limit.

The limit as noted on page 8 of the IP is incorrectly referenced; to clarify, the correct unit is dry weight.

Q6.3b: Do you have any comments on ENV's intent to harmonize the OMRR with other national standards and federal regulations? [12 responses]

There is general support for the harmonization of OMRR with other national standards and federal regulations.

Recommendations and suggestions:

- Consider that **yard waste is not the only source of noxious weeds and invasive species**, and that:
"OMRR treatment and other requirements for all types of facilities should address invasive species."
- Align measurements or provide guidance regarding Agricultural Land Commission (ALC) requirements. The ALC requires measurements in **volume rather than weight**:
"Will there be specific criteria for what must be considered in the annual reports (for composting facilities in the ALR) and how this work is to be conducted?"
- Explore option of **maturity testing** based on size of the pile: *"...the requirement for compost maturity is problematic because large piles tend to heat up more than 8 degrees Celsius compared to ambient air, due to inherent microbial activity."*
- Follow **the approach of European countries** that *"...prohibit or significantly limit the use of sewage sludge on agricultural land."*

ENV Response to 6.3b

ENV has consulted with other agencies, including the ALC, and is working to harmonize regulations and minimize conflicting measurements. At this time, weight is generally agreed to be simpler than volume to measure because most operations already manage their feedstocks by weight and subjective calculations are not required to estimate volumes of either finished or raw feedstock.

ENV is researching representative and simpler sampling programs to incorporate into the OMRR and reduce uncertainty with regards to some standards, such as “maturity testing”.

ENV will continue to limit the use of certain classifications of compost and biosolids products.

Q6.3c: Do you have any comments on ENV’s intent to include less rigorous provisions for facilities processing only yard waste? [7 responses]

Generally, there is **support for less rigorous provisions** for facilities processing yard waste only. However, one respondent felt that *“less rigorous provisions for facilities processing only yard wastes has the risk of increasing transfer of invasive plant species and seed.”*

ENV Response to 6.3c

ENV shares concerns regarding invasive species and will consider effective means of minimizing their spread. ENV expects to conduct further research on this issue.

6.4 Setbacks

Q6.4: Do you have any comments on mandatory setbacks? [19 responses]

Respondents **generally support** the proposed mandatory setbacks.

Clarify:

- How **setbacks will be measured** and to what structures they apply.
- **Setbacks for BGM and Class A biosolids.**
- Definition of **“watercourse.”**

Concerns:

- That setbacks as described in the IP do **not limit public exposure to odours.**
- Regarding the **30 meter setback**: *“We see no evidence of safety for the 30 meter setback, and in the event of a conflict with a water supply, a Drinking Water Officer may issue intervention orders pursuant to the Drinking Water Protection Act. [Also] materials produced under the*

OMRR may contain high levels of pathogens, along with traces of prescription drugs, toxic metals and other parameters of health significance – which may be transported great distances as runoff depending on local geographic conditions and climate.”

- **On setbacks for composting facilities:**

“The [respondent] has the view that setbacks for composting facilities should remain under the jurisdiction of the municipality or regional district.”

“Establishing minimum setbacks to neighbours, although may reduce odour complaints, has the potential for facilities on agricultural land to render properties less farmable. Suggest keeping the composting facilities within a certain distance of the road at least.”

Recommendations and suggestions:

- Setback requirements should include rules for placement of composting facilities.
- Setbacks consider **application of product near waterways**.
- **Incorporate site-specific characteristics** into setback requirements.

ENV Response to 6.4

ENV recognizes that although setbacks are valuable for protecting the environment, they are less efficient in limiting exposure to odours which can travel a significant distance from a facility. The setbacks recommended will be reviewed by ENV for consistency with other regulations. Additional jurisdictional scans and research will be conducted to further inform reasonable setback distances for the purpose of protecting the environment.

7. Land Application and Distribution of Organic Matter

7.1 Updates to quality criteria

Q7.1a: Do you have any comments on updating standards contained in the OMRR? (IP page 28)

[20 responses]

While there is general support for harmonization with 2017 CFIA and other standards, the changes in **limits for chromium and copper in biosolids are generally not supported**.

Clarify:

- **Rationale for regulating trace elements such as copper:** *“While harmonization with other provincial and federal regulations is a goal that we support, in the case of new trace element limits for biosolids it is our understanding that the new copper limit of 757 mg/kg in particular is not supported by any science-based risk assessment.*

Concerns:

- Concern that *“Keeping the selenium limit to 2 ug/g for Class A compost, particularly screened compost from biosolids, limits the uses for composted biosolids as composted biosolids make an excellent fertilizer product, with its higher N and P contents, particularly when it is finely screened. At the moment, any fertilizer produced from composted biosolids needs to meet Class A compost requirements, including the 2 ug/g selenium. This is not consistent with T-4-93 which includes the maximum acceptable cumulative metal additions as noted in Table No.1. [The respondent] recommends that Class A compost, particularly those produced from biosolids, can be registered for use as a fertilizer, having a selenium limit of 14 ug/g, which is consistent with federal regulation (Trade Memorandum T-4-93).”*

Recommendations and suggestions:

- *We would recommend that [ENV] reconsider such a significant change to quality criteria which have been working well since the OMRR was introduced, or, alternatively, consider science-based criteria such as those derived by the EPA: under Part 503, the “EQ” limit for copper is 1,500 mg/kg. The EPA Part 503 trace element concentration limits are based upon rigorous scientific risk assessment. In considering varying from such risk-based criteria, the regulation or guidance documentation should explain the basis for these alternative policy-based limits. Rationale for regulating only certain trace elements and the basis for the limits for these trace elements should be made clear.”*
- **The reduction in the copper standard may impact generators of biosolids:** *“We recommend that exceedances in copper be tolerated (without the need for a substitution) to meet Class A or Class B standards, as long as this parameter is monitored in the receiving soil and is in compliance with Schedule 10.1.”*
“The biosolids quality requirement for copper of 757ug/g will prohibit the use of much of [the regional district’s] biosolids and require it be directed to landfill, even though it is able to meet the performance standards of Schedule 10.1. We recommend removing reference to the CFFA [CFIA] T-4-93. Copper is very difficult to reduce from a source control perspective in [the region] given that most of the copper in our wastewater is a result of copper drinking water pipes. It would be a very slow and costly process to replace these pipes. Adjustments to pH/Alkalinity on the Drinking Water side are being studied for the next two years, so any reduction in copper levels due to alkalinity changes won’t be realized for several years.”
- **The copper limit should remain at 2,200 mg/kg** to avoid the need for a substitution.
- Use application rates to determine **maximum concentrations**, to reduce confusion between CFIA regulations and OMRR: *“The proposed maximum concentrations only appear to be concerned with the metal in the product, regardless of the application rate of the product. ...Even if the provincial OMMR and CFIA’s T-4-93 are based on the same data, the fact that CFIA considers application rates to determine compliance and the OMMR does not, it will lead to confusion among our jointly regulated parties. I would suggest that Schedule 4 Section 1 be presented in a way so that application rates become an integral part of determining maximum concentrations.”*

ENV Response to 7.1a

ENV is re-assessing the use of the application rates in the T-4-93 memorandum for establishing acceptable concentrations in biosolids, compost or BGM. ENV will consider use of an established risk-based analysis to determine concentration standards. ENV will also consider the suggestion to incorporate monitoring of the receiving soil, to ensure compliance with Schedule 10.1, as appropriate.

The objective is to identify concentration limits for producers and application rates for land, which are both protective of the environment and human health.

Q7.1b: Do you have any comments on ENV's proposal to update Section 2 of Schedule 4?

[14 responses]

In general, there is support for the proposed updates.

Clarify:

- **Rationale for additional testing** and restrictions for Class A biosolids: *“Currently, Class A biosolids in volumes > 5 m³ are not available for distribution without a Land Application Plan; in addition [ENV] is proposing in the Intentions Paper that following land application of Class A biosolids, there will be a requirement for a 30-day waiting period before domestic animal grazing as well as waiting periods before harvest of plant material for human consumption, similar to waiting periods for Class B biosolids. [ENV] should clarify the scientific rationale for requiring similar restrictions for products (Class A and B biosolids) which undergo different treatment processes.”*

Recommendations and suggestions:

- Define how foreign matter and plastics concentration are analyzed as these are not described in the BC Laboratory Manual.

ENV Response to 7.1b

The standards for Class A and B biosolids, as well as the treatment processes, are different and result in products which present different risks. ENV will re-evaluate the allowed uses for these two products to determine if the uses are reflective of the risks.

ENV intends to establish a reliable testing procedure for determining dry weight concentration of FM.

Q7.1c: Do you have any comments on ENV's proposal to enable a director to request sampling of biosolids for some CECs? [18 responses]

Most respondents **support the testing of CECs and the ongoing review of scientific information** to inform policy and regulations.

Support:

- There is support for “*continuing to study and test CEC to ensure that the science can progress.*”
- Several local governments **support the testing of CECs** on a case-by-case basis, but **do not support the public release of CEC testing results**. *We propose that CEC data collection not be specified in any form within the OMRR, but we support a director’s ability to request it on a site-by-site basis. We do not support the posting of this information online due to the potential for misinterpretation. Any CEC data collected by [ENV] should be collated in a report along with relevant guidelines and without specific site information.*

Do not support:

- One respondent indicated they did **not support land application of organic matter**: “*The [regional district] urges the Province of BC to transition away from a land application focused Organic Matter Recycling strategy to an alternate system of Organic Matter Recycling.*”

Clarify:

- The **details of testing and reporting on CECs**, specifically:
 - How would the director determine which CECs to test for?
 - What might trigger a director to request CEC sampling to be conducted?,
 - What is the frequency for updating the list of CECs?, and
 - How will ENV communicate the criteria for what contaminants will be considered CECs?

Concerns:

- Regarding potential **testing expense for CECs**, given the long list of potential CECs that could be tested.

Recommendations and suggestions:

- **Identify a timeline and commit resources** to studying CECs: “*[ENV] should specify a periodic timeline and process to review new CECs and provide a decision for why these CECs are to be regulated or not. A commitment from [ENV] to a periodic review of contaminants and a scientific evidence-based decision on regulation will ensure the highest level of protection for human health and the environment and provide stakeholders with assurance that changes to the regulation are enabled based on current and future scientific knowledge.*”
- Include **microplastics** as a CEC.

ENV Response to 7.1c

ENV appreciates the interest shown by respondents in supporting continued studies of CECs. When developing a study of CECs, ENV will be mindful of the costs and labor required. The selection of specific CECs, timelines and processes for review will be focused for the purpose of understanding CECs in BC and establishing standards, as necessary.

ENV agrees that publication of data without context is of limited use and open to misinterpretation. ENV will develop appropriate contextual material, and the data will be presented as metadata and managed according to FOIPPA.

7.2 Labelling and disclosure

Q7.2: Do you have any comments on this additional information disclosure? [9 responses]

The majority of respondents provided **no comment** on this section. There is **general support** for increased transparency. Those who did not support made the following comments:

Do not support:

- Two respondents felt that **these materials should not be used at all**; both viewed these materials as toxic.

Recommendations and suggestions:

- **Labeling requirements** for Class A compost be harmonized with existing CFIA labeling requirements to avoid confusion.
- Labeling requirements should include **limitations of use** to protect the user and generator.
- **Inform public on product safety:** *“Transparency is good. However, the labelling has the effect of scaring people, which results in objections to use and is counter to the sustainability goal of returning nutrients to the land. The fact that product must be labelled implies to consumers that there is something unsafe about it, which is why the government demands it to be labelled. If compost is not restricted why does it need to be labelled? Is the Province going to make any effort to inform the public that composting biosolids into Class A compost is less risky than untreated cow or horse manure?”*

ENV Response to 7.2

ENV will consider the harmonization of labelling with other required standards (e.g., CFIA) to streamline labelling requirements for producers. Transparency, with regards to the contents of composted products, will allow users to make informed decisions and will promote the use of biosolids as a safe and regulated product.

7.3 Best practices for land application

Q7.3a: Do you have any general comments on the proposed amendments to increase clarity? [15 responses]

Most comments requested clarification on specific points of the proposed changes.

Clarify:

- Definition of **'contaminated site'**.
- **If sites with naturally occurring trace elements are considered 'contaminated':** *"Whether biosolids application sites with trace elements exceeding limits (naturally, or as they are managed through biosolids applications) may be considered 'contaminated' or not."*
- **How BGM would be applied agronomically:** *"How would the application, setback and storage be controlled for Class A compost and BGM, given they are Retail Grade Organic Matter and are rarely applied by the generator? If this is meant to apply to lands in the Agricultural Land Reserve only, this needs to be clarified."*
- **"Examples of BMP include ... limiting soil pH:** *The intention is not clear. Is the concern with reducing the mobility of metals in soil at low pH?"*

Concerns:

- Regarding applications to agricultural land including **limiting the dumping of excess compost** on [the Agricultural Land Reserve] ALR through the OMRR.

Recommendations and suggestions:

- Include *"...N and P application rates in the agronomic rate definitions."*
- Change OMRR to **allow 'non-agronomic' rate of application** to recognize that in some land application contexts (e.g., land fill closure, reclamation) the objective is soil building and the application rate would exceed a strict agronomic rate. In this case, the regulation should *"require that the QP provide a rationale, assessment of the nutrient input and a monitoring plan"*.
- Add a requirement for **QP confirmation on land application:** *The "requirement for QP confirmation that land application occurred as per the submitted plan, and possibly require QP to be present on at least one occasion. The latter is to avoid the QP solely relying on information provided by their client."*
- Include a **storm water management plan** as a best practice.

ENV Response to 7.3a

Contaminated sites are regulated under the CSR. The ministry intends to harmonize with the definitions in the CSR, including the soil substance concentrations currently listed in Schedule 10.1 of the OMRR.

Application of organic matter on agricultural land is also subject to the AEM Code including setbacks, and nutrient management plans.

Examples of BMPs were presented very briefly in the Intentions Paper. Guidance documents will be developed to provide more detail.

A definition of “agronomic rate” will be provided in consideration of how the term is used within the AEM Code. Agronomically significant nutrients include but are not limited to nitrogen and phosphorus.

Special situations where “non-agronomic” rates may be desirable, such as mine site applications, landfill closures and other degraded soil sites, are discussed in Section 7.5.

ENV will consider the participation of QPs in land application.

ENV will consider the addition of storm water management plans as a best management practice.

Q7.3b: Do you have any comments on the proposed minimum setbacks for Class A biosolids?

[12 responses]

There is **general support** for the proposed minimum setbacks, however, there are also some requests for clarification and a concern over cost implications at some sites.

Support:

- Setbacks for odour control are supported as an interim step prior to abolishing the practice of applying biosolids to land.

Clarify:

- **How setbacks from watercourses and drinking water address the risk of odour.**
- **Rationale for 15 m vs 30 m setbacks as well as how land use affects the setback:**
“30 m is too much as the absolute minimum. During dry weather and low runoff risk conditions, why would you need much more than 3 m? At the same time, the IP is silent about greater minimum setback distances that would be required if risk factors changed (e.g., slope, runoff potential of soil).”
- **How the proposed setback affects applications at landfills or mine sites:** *“The requirement to adhere to strict setbacks could result in the need to import other material for final cover, which could have significant cost implications.”*

Concerns:

- Setbacks from watercourses and drinking water are considered dangerous given the existing examples of contamination in this province: *“We have already seen extensive examples of contamination in this province, and this will only increase with climate change and changes in precipitation patterns and runoff. the practice of land application needs to be terminated, why are we willing to risk our watercourses and drinking water, and other jurisdictions are not?”*

Recommendations and suggestions:

- **Only allow Class B biosolids or compost only to be applied during the driest months** of the year and increase the 30 m setback from water bodies.

ENV Response to 7.3b

While some jurisdictions also account for slope and permeability of soil when establishing setbacks, the calculations can become complicated and open to interpretation. At this time, ENV proposes to use standard setbacks which harmonize with other BC regulations including the AEM Code, CSR, and Landfill Criteria for Municipal Solid Waste for agricultural land, contaminated sites and landfills, respectively.

ENV proposes BMPs in areas of high precipitation and setbacks from wells and waterbodies as protective measures for the environment.

Setbacks were also discussed in Section 6.4.

Q7.3c: Do you have any comments on the proposed waiting periods for Class A biosolids?

[9 responses]

There is a **mixture of support and non-support** for the proposed waiting periods, with the majority of respondents supporting some waiting period(s).

Do not support:

- One individual does not support the waiting period as they do not support land application of biosolids.

Concerns:

- **Regarding waiting periods:** *“Any waiting periods for a Class A biosolids should in theory be less than that for a Class B biosolids in consideration of a higher quality product that has been subjected to a higher level of treatment.”*
“[Respondent] does not support the proposed waiting periods for Class A biosolids unless those waiting periods are based, as waiting periods for Class B biosolids are, on scientific evidence.”

ENV Response to 7.3c

The standards for Class A and B biosolids, as well as the treatment processes, are different and result in products which present different risks. ENV will re-evaluate the waiting periods for these two products to determine if the uses are commensurate with the risks.

Q7.3d: Do you have any comments on the ENV's intent to align with the Agricultural Waste Control Regulation [AWCR] for field storage requirements? [11 responses]

There is support for alignment of the AWCR (which was repealed and replaced by the AEM Code February 2019) field storage requirements.

Clarify:

- Definition of 'vulnerable aquifers'.

Recommendations and suggestions:

- Strongly recommend that OMRR **does not define** 'agronomic rate': *"Changes to the AWCR [AEM Code] do NOT explicitly define 'agronomic rate'. Ensure that OMRR follows the same approach, where the desired outcome is described instead of defining (and thereby restricting the application of) the term. Strongly recommend against a definition for this term in the OMRR."*
- **Storage should be allowed for less than one month with suitable contingency** such as impermeable surface, suitable cover and monitoring plan.

ENV Response to 7.3d

In harmonization with the definitions in the AEM Code, guidance material will be developed to identify and locate vulnerable aquifers.

ENV will endeavor to harmonize the OMRR with the AEM Code, which does refer to agronomic nitrogen balance in the context of nutrient management plans. The AEM Code also stipulates timelines, and suitable contingencies.

7.4 Compliance

Q7.4: Do you have any comments on the proposed amendments to the OMRR regarding compliance with land application plans? [14 responses]

There is general support on the proposed amendments. However, many respondents had additional comments or suggestions.

Do not support:

- One individual does not support land application of biosolids.

Clarify:

- **What will be in the guidance documents:** *“Without understanding what will be in the guidance LAP Certification, we can’t provide informed feedback/recommendations. Depending on requirements outlined in the guidance, it may be cost prohibitive and subsequently may result in beneficial use of managed organic matter being directed to landfill instead.”*
- **Testing requirements and do not exclude Class B due to fecal regrowth:** *“It is not clear to me whether this is testing of the managed organic matter that will be land applied or the soil on site,”* and if referring to on-site testing, respondent notes having observed *“fecal regrowth in Class B biosolids that are stockpiled on a site for a period of time before land application. These are biosolids that have been produced in a facility using an acceptable process for Class B biosolids and have met the Class B pathogen standards at the time of production so they meet all OMRR Class B requirements and are therefore Class B biosolids. Class B biosolids have higher pathogen densities than Class A material and are handled on site on this understanding. Therefore I see no reason to exclude some Class B material because of fecal regrowth when they are going to be handled with care already because they contain pathogens. This would derail some land applications of Class B material and would lead to generators being unable to stockpile Class B material for a land application project. It seems counter-intuitive to promoting beneficial reuse.”*

Concerns:

- *“The proposed sampling schedule requirements for fecal coliforms is not clearly supported by evidence demonstrating how it is relevant to the protection of human health and the environment.”*
- It is difficult for a Qualified Professional to confirm that land application was done in accordance with the LAP, if the QP is not on site for the duration of the application.

Recommendations and suggestions:

- **Provide clear guidance** to Qualified Professionals on the management of non-compliant biosolids.
- Propose to **test for E. coli rather than fecal coliforms** to promote transparency: *“Along with total coliforms, these indicators are used and widely understood in the drinking water industry. We think this would assist with data comparison and promote public transparency.”*
- **Certification** for the individual applying biosolids, similar to the application of pesticides.

ENV Response to 7.4

The purpose of a confirmatory soil sampling program is to demonstrate protection of human health following application of Managed Organic matter (MOM). ENV will consider if all applications of all MOM products, regardless of volume, should be subject to confirmatory sampling.

Consistent with the expectations in the *Professional Governance Act*, QPs are expected to verify the content of documents which they endorse. The written certification of the post-application is a current requirement in Part 3, Section 5 (3). ENV proposes additional document retention in order to create a record of the applications and provide transparency.

Non-compliant biosolids should be managed in accordance with the EMA and other regulations which are pertinent to the source and application. By definition, a person who is qualified to manage the material is a QP with regards to that material.

Sampling schedules, frequency, selection of test protocol and parameters will be refined to harmonize with other regulations and streamline requirements for beneficial use. Indicator organisms, for example, may require less or more frequent testing depending on the propensity for regrowth. There are several test protocols that can be used for indicator organisms to estimate pathogens, including fecal coliforms, *E. Coli* and Salmonella. Each test has advantages and disadvantages such as holding times, matrix (e.g. soil or water), sampling requirements, and correlation with disease-causing organisms. ENV has proposed using fecal coliforms and Salmonella and will continue to investigate if a different combination of test protocols has been shown to be indicative and protective of human health in other jurisdictions.

ENV is researching the applicability of certification programs for producers, applicators and dischargers, as is currently required in other provinces.

7.5 Mine site reclamations and landfill closures

Q7.5: Do you have any comments on this section? [14 responses]

While comments **generally support** the proposed changes, there were requests for clarification in the responses:

Clarify:

- If this section applies to **landfill closures**: “... *The second paragraph in Section 7.2 [sic] [7.5] indicates a registration process for sites “outside the scope of OMRR that exceed soil quality standards in the OMRR and the Contaminated Sites Regulation.” However, this appears to be in contradiction with Section 9.2 Updates to Technical Standards, Consistency with the Contaminated Sites Regulation which indicates: director issued permits/approvals on a case-by case basis for landfill closure or other specific sites outside the scope of OMRR.... What is the intention?”*

- If **protocols approved under the CSR are approved under the OMRR** for all site types: *“The [respondent] supports the proposal to enable registration for sites that exceed soil quality standards. This process should not be restricted to mine sites and landfills, as many agricultural sites in BC have elevated background metals concentrations. The OMRR should be clear if protocols approved under the CSR are consequently approved under the OMRR for all types of sites.”*
- Will **landfill closure application** be different from the registration process for other land application plans (LAPs)?
- *“...if the statement “land application of managed organic matter must not exacerbate a contaminated site” means the site’s existing soil background trace element concentration prior to land application of biosolids.”*
- **If the Medical Health Officer (MHO) can reject land application** if mine site is in a watershed.
- If **OMRR allows for the mixed application of biosolids** for creating bio-covers to be managed through the operational certificate process.

Recommendations and suggestions:

- Define a **clear process** within OMRR to coordinate Ministry of Energy Mines and Petroleum Resources (MEMPR) and ENV with mine reclamation programs.
- Ensure **requirements are included for sampling** organic matter for invasive species prior to application on reclamation projects.

ENV Response to 7.5

Application of material to agricultural land is subject to the AEM Code and must comply with the OMRR and CSR criteria for agricultural land use. CSR and OMRR determine upper limits for metal concentrations based on environmental protection risks which are based on water use (e.g. groundwater for livestock or irrigation) and land-use (e.g., agricultural, commercial, residential).

The IP was unclear in section 7.5 and prompted several questions regarding use of MOM on landfills and/or mines. ENV's intent is to enable a process for the MOM to be used for landfill closures and reclamation at mine sites, in addition to the existing regulatory regime pertaining to landfills and mines.

- Proponents would be required to apply for registration; and,
- The land application must not exacerbate the contaminant concentrations on a site. This would be required to be demonstrated by the land application plan; and,
- Landfill closure will follow the site-specific closure plans and authorization requirements.
- Contaminated sites, and mine sites, will follow the requirements under CSR.

To clarify, the LAPs and/or the registration proposed for the OMRR material are not intended to replace authorizations pertaining to landfills or mines.

Guidance to coordinate requirements within different regulations and programs will be developed.

ENV is aware that invasive species are a concern, as discussed in Section 6.3, and will consider appropriate measures for suppressing growth of invasive species on reclamation projects.

8. Sampling, Monitoring and Record Keeping

Q8: Do you have any comments on the general provision to be included in the regulation and applied to all sampling? [12 responses]

Of the 12 responses, **half support the general provision** that sampling standards and procedures would be based on the most current manuals or guidelines. One respondent does not support the general provision and feels that this does not ensure safety.

Clarify:

- **The number of samples.**

Recommendations and suggestions:

- Focus on invasive species: *“implement sampling, monitoring and record keeping **focused on invasive species.**”*

- Require “...that all analyses requirements be completed by an accredited laboratory to ensure that results obtained are accurate and reliable. Laboratory accreditation provides a means of evaluating the competence of a laboratory to perform specific types of testing, measurement and calibration. It also allows a laboratory to determine if work is being performed correctly and meets appropriate standards. Formal recognition is provided to competent laboratories, enabling the public to find reliable testing services that will produce accurate results.”

ENV Response to 8

ENV will clarify the number of samples and the sampling protocol for piles and continuous processes, to obtain analytical results which are representative of the total mass and to streamline the sampling requirements.

Invasive species are discussed in Section 6.3

ENV will consider the requirement for an accredited laboratory, as is currently noted in the Land Application Guidelines for the Organic Matter Recycling Regulation and the Soil Amendment Code of Practice [<https://www2.gov.bc.ca/assets/gov/environment/waste-management/recycling/landappguidelines.pdf>].

8.1 Sampling and monitoring of managed and retail grade organic matter

Q8.1a: Do you have any comments regarding the proposed revisions to sampling and monitoring requirements? [18 Responses]

Comments in this section were **varied**. Some included support, while others had **questions** about the sampling and monitoring requirements, and others voiced **concern**.

Support:

- Nearly half indicated that they “*support the change to sampling frequency being based on wet weight rather than dry, as well as the proposed frequency of sampling.*”

Clarify:

- The regulatory parameter limit for Salmonella testing for Class A biosolids.

Concerns:

- The compliance with the proposed sampling frequency would come at a significant added **cost**.
- A respondent disagreed with the producers of biosolids do sampling and monitoring: “*...having the producers of biosolids do sampling and monitoring is not appropriate. Frequent random spot testing and sampling by independent testers in the minimum needed. However, testing for 2 pathogens only is not sufficient. A much better approach would be to require biochar production to eliminate pathogens and thus remove the need for testing.*”

Recommendations and suggestions:

- The suggested **sampling frequency** (1/500 tonne) is too many – it should be 1/1000 tonne.
- Changes to **screening protocols** were suggested, including:
 - the requirement for screening is waived if biosolids meet the quality for foreign matter,
 - a request for clarification of the pre-screening requirements on p.34 of the intentions paper, and
 - acceptable methods for pre-screening should be defined.
- Review the use of the **geometric mean** as a method to determine compliance.
- Provide more detailed sampling protocols and procedures within the revised guidance document (for all methods of stored biosolids).

ENV Response to 8.1a

ENV will identify an appropriate limit for Salmonella in Class A biosolids. Indicator organisms are discussed further in Section 7.4.

ENV recognizes that continuous processes will require different sampling protocols from piles of material. The purpose of prescribing the minimum sampling frequency is: to obtain analytical data that is representative of the entire mass, to align with other jurisdictions and to efficiently manage required costs for analyses. For example, each composite sample will be made up of several grab samples; however, only the composite sample needs to be analyzed.

Consistent with other regulations, proponents are responsible for conducting sampling on their project. Compliance issues are addressed by the Regional Operations Branch.

Screening requirements are intended for compost operations. If there is clear evidence that a specific feedstock, such as a biosolids from an identified source which excludes foreign matter, does not contain foreign matter, then omission of additional screening of the feedstock may be justified.

Geometric mean is an appropriate statistical tool for micro-organisms because the distribution of micro-organisms is unlikely to be a normal distribution. Whereas an arithmetic mean is appropriate for other substances, such as metals, which typically do have a normal distribution.

Guidance material will be developed to help clarify acceptable sampling methods.

Q8.1b: Do you have any comments on ENV’s proposal to clarify the intended sampling and monitoring requirements applicable to pathogen limits in finished product? [13 responses]

Responses for this question were **varied**. In most cases, **clarification or justification** for the regulation was requested by respondents.

Support:

- Just two respondents were **supportive** of the proposed sampling and monitoring requirements applicable to pathogen limits in finished product.

Do not support:

- A few respondents were **not supportive** of the proposed requirement that fecal coliform sampling occur within two months prior to land application. These same respondents suggested:
 - **Sampling for fecal coliform densities in the field is not a good** indication of whether or not the pathogen reduction process was achieved at the treatment plant, nor of whether pathogen re-growth has occurred or not.
 - Recommend that the regulation clearly provide QPs with the leeway to “...*determine suitable management approaches in the case of fecal coliform population changes through regrowth or climatic conditions (e.g., by conducting follow-up pathogen sampling and/or adjusting management requirements: increasing setback distances, increasing harvesting/grazing restrictions).* [ENV] should provide clear guidance to QPs on the full extent of those capabilities in the management of non-compliant biosolids, and specific guidance where [ENV] considers that biosolids may not be suitable for beneficial use.”

Clarify:

- The rationale that the sample be taken from at **least 30cm inside the pile** (as per the Land Application Guidelines): Depending on the “...*maturity of the compost, the feedstock, type of operation and the duration a pile has been stored, pathogens may be more prevalent exactly in the outer 30-cm layers.*”
- The rationale for the **regulatory limit the OMRR** will set. The respondent stated: “*If salmonella testing, as required under T-4-120 Regulation of Compost under the Federal Fertilizer Act and Regulations, is extended to Class A biosolids we recommend that OMRR stipulate: if fecal coliforms are greater than 1,000 MPN/g (dry), then salmonella must be less than 3MPN/4g total solids dry, as consistent with the US EPA Part 503 biosolids rule. The addition of salmonella testing for Class A biosolids would result in considerable costs, without clear scientific justification or benefit to public health and safety.*”

Concerns:

- The regulation could add **significant cost and logistical challenges**.

ENV Response to 8.1b

Indicator organisms are discussed in Section 7.4.

The purpose of testing for indicator organisms is to protect human health. ENV is evaluating if testing soils in-situ is a reliable indicator for the potential of organisms to impact human health. Testing of indicator organisms should be conducted within a short period of time prior to when the material is land applied to minimize effects from re-growth or in-situ degradation.

The purpose of sampling is to obtain samples that are representative of the entire mass. Sampling methods and regulatory limits will be clarified. Current industry standards for sampling indicate that the surface of piles may yield non-representative concentrations of indicator pathogen such as: fecal matter from birds may elevate counts and degradation from UV may lower counts.

Suitable management approaches for material that is unfit for the original intended purpose may include finding an end-use that is conducive with the quality of the material, as determined by a QP. Other approaches may be further discussed in guidance material.

ENV will evaluate regulatory limits for Class A biosolids based on jurisdictional scans and available scientific evidence.

Q8.1c: Do you have any comments regarding the proposed amendments to Schedule 5 of the OMRR?

[9 responses]

Comments for this question ranged from indicating that they were **not supportive**, to asking questions for **clarity**.

Do not support:

- Several respondents were **not supportive** of the requirement that samples for trace element analysis be collected at the same time as samples for fecal coliform analysis: *"For trace elements monitoring, a large biosolids stockpile at a treatment plant or a land application site is the perfect location to take all required samples for a generator or generators at the same time. This is not the case for microbiological samples, which should be taken from freshly produced biosolids (i.e., the point of treatment)."*

Clarify:

- **Pre-screening of foreign materials** requirement: *"It [pre-screening] does not seem related to Schedule 5 as it would be a demand on processing and not just on compost quality?"*

Concerns:

- A few respondents were concerned about **cost**:

“The [local government] is concerned that this could substantially impact operations processes and costs, and negate the investment the [local government] has made prior to the potential change in regulation to produce Class A biosolids. The [local government] recommends that a further review of implications for industry is required before considering changing the standards for copper.”

“The proposed sampling schedule will result in an increase in costs, but it is expected that this increase would be low, compared with other processing costs.”

Recommendations and suggestions:

- Change the sampling requirement to for every 500 metric tonnes produced: *“It would be better if it is per 1000 metric tonnes produced. There would be stockpiling of compost for curing that would be more than 1000 tonnes at a time”.*

ENV Response to 8.1c

Proponents may collect samples and analyze for metals anytime following processing and prior to land application. However, indicator organisms should be analyzed within a short period of time prior to land application. ENV has proposed that the sampling for multiple parameters could be conducted at the same time to save the cost of sampling. A proponent can opt to conduct multiple sampling events to collect multiple composite samples. A composite sample must be comprised of grab samples taken during the same sampling event.

The intent for pre-screening is to ensure that the feedstocks are limited to those acceptable organic materials as currently listed in Schedule 12. Pre-screening is intended to remove non-organics such as FM and non-compostable plastics prior to additional processing, which will make recovery of these items more difficult.

ENV will evaluate the sampling frequency based on the annual production, to protect the environment and human health.

Q8.1d: Do you have any comments on the intention to clarify the requirement for sampling and monitoring of biosolids growing medium? [6 responses]

The responses for this question were **mixed**.

Support:

- Two of the respondents **support clarification** of the requirement for sampling and monitoring of biosolids growing medium.

Clarify:

- The **sampling procedures**. The respondent noted that proposed sampling would require the creation of a new sampling and analysis plan.
- Alignment of sampling methodology for Class A and B biosolids, Class A and B compost, and BGM – it was noted that the process and production for each of these products varies, and therefore **one methodology is not necessarily appropriate**.

Concerns:

- **Concerns** were raised that this process could allow for **selective timing** of sample collection to avoid periods of higher contamination.

Recommendations and suggestions:

- Suggestion: *“Laboratories frequently apply methods developed for the analyses of soils to the analyses compost... Consider including a reference to the [Test Methods for the Examination of Composting and Compost] TMECC for analysis procedures.”*

ENV Response to 8.1d

Requirements for BGM are currently specified in Schedule 11 of the OMRR. ENV will provide additional clarification for the sampling plan, which every BGM producer is currently required to conduct in order to show compliance with the requirements in Schedule 11.

ENV recognizes that continuous processes will require different sampling protocols from piles of material as discussed in Section 8.1a.

Consistent with other regulations, proponents are responsible for conducting sampling on their project. Compliance issues are addressed by the Regional Operations Branch.

TMECC has been consulted and the analytical methods do not appear to be significantly different. Due to the cost for labs to acquire the TMECC and accreditation for specific test methodologies, ENV is not requiring analysis with TMECC methods. If additional information becomes available, and/or the laboratories indicate that the TMECC provides superior results, the requirement may be revisited.

8.2 Soil sampling and monitoring at land application sites

Q8.2a: Do you have any comments on the proposed requirements for soil sampling and monitoring at land application sites? [12 responses]

The comments on the proposed requirements for soil sampling and monitoring at land application sites were **varied**.

Support:

- A couple of respondents had **no issues** with the proposed requirements and were **supportive**.
- Another respondent **supports sampling biosolids** for fecal coliforms prior to the land application of **Class A biosolids**. For **Class B biosolids, the current management restrictions** should be adequate for the management of biosolids if a temporary re-growth occurs.

Do not support:

- Several respondents stated: *“The proposed sampling requirements for fecal coliforms at the land application site is not clearly supported by any evidence demonstrating how it is relevant to the protection of human health and the environment. As such the [respondent] **does not support this proposal.**”*

Clarify:

- If information collected from biosolids will be **made available on-line**? If so, respondents recommended that there be context provided or comparative sampling for manure, compost, other managed organic matter, or fertilizers.
- The matrix for proposed sampling requirements (i.e., soil or biosolids).
- Explain the benefit of sampling biosolids at the land application site prior to land application.

Recommendations and suggestions:

- Provide **clear guidance to QPs** in the management of non-compliant biosolids, and specific guidance where the ENV considers that biosolids may not be suitable for beneficial use and where biosolids disposal options may be limited.
- Consider including **metals** in requirements for confirmatory **sampling three months prior** to application. If only post-application and standards are exceeded, remediation is often difficult to enforce.
- Consider a provision that **post-application sampling and analyses is a requirement** (proposed only on director’s request): *“The impact of land application on chemical and physical soil properties depends on various soil properties, water regime and climate factors. Predictions by pre-application sampling are often not reliable.”*

ENV Response to 8.2

The purpose of testing for indicator organisms is to protect human health. The sampling and analysis of indicator organisms is discussed in Section 7.4. Interference from several factors, such as vectors, moisture, UV radiation, and vegetation, may produce false positives when testing for bacteria that are pathogenic to humans. ENV will consider if testing indicator organisms in material which is stored for a period of time prior to land application will yield results pertinent to human health.

ENV agrees that context is important to support understanding of analytical results. Contextual material will be developed in conjunction with the guidance material.

The use of the phrase “confirmatory sampling” may have created confusion. As discussed in Section 8.1b, ENV does not intend to request post-application analysis for indicator organisms. Some circumstances will require pre-application sampling of the receiving soils such as when a LAP is required.

Proponents and their designated QPs are required to manage material in compliance with provincial regulations.

ENV agrees that post-application exceedances are difficult to manage. ENV intends to identify standards that must be met prior to application to minimize post-application exceedances.

Q8.2b: Do you have any comments on ENV’s proposal to enable a director to request post application sampling? [12 responses]

In general, comments were **supportive** of the proposal to enable a director to request post-application sampling, however, there were several comments about the **timeline and process**.

Support:

- Several respondents supported post-application sampling, however, *“it should be noted in the regulation that the timeline must be a minimum of **six-month post-application** to enable soil and biosolids to suitably mix together.”*
- One respondent indicated they were supportive if there was a **clear rationale** for the post-application sampling.

Do not support:

- Two respondents indicated that they were **not supportive**, that this process was a **“stop-gap”** and **“mere paperwork”**.

Recommendations and suggestions:

- Suggestion that *“this sampling be requested when the land application **exceeds** the agronomic rate for **annual nutrient requirements only**.”*
- *“The Director must have the proper time and training to review. **A centralized group within [ENV]** specializing in OMRR would be better than relying on local Directors.”*
- *“[ENV] should also be **obtaining pro-forma information** about every beneficial use, in order to ensure that both accurate records are kept across the province, but also that [ENV] is able to gather and utilize this data for reporting and transparency purposes.”*

ENV Response to 8.2b

ENV will consider the intent and rationale for post-application sampling requirements such as verification of agronomic application.

ENV intends to develop standard reporting forms to facilitate reporting and comparability of data.

Q8.2c: Do you have any comments on the proposed sampling and analysis of contaminants of emerging concern? [13 responses]

There was considerable feedback to the proposed sampling and analysis of contaminants of emerging concern. Half of respondents stated that they **support** ENV being able to request additional sampling, but **do not support the posting of CEC data online** with site information appended without relevant limits/guidelines for individual CECs.

- *“The intent of the regulation to beneficially manage biosolids would be undermined if raw CEC data is provided to the public without explanation or relevant limits, and this data may create unnecessary fear when taken out of context. Landowners would likely be concerned that data from their property may be distributed online without any indication that their soils are in fact safe with respect to human health and the environment.”*
- *“Any CEC data collected by [ENV] should be **collated in a report** along with relevant guidelines and without specific site information.”*
- In keeping with [ENV]’s statement that *“that there is not enough information to determine if biosolids contain unsafe concentrations of CECs when applied according to the regulation”... we propose that **CEC data collection not be specified in any form within the OMRR**, but support a director’s ability to request it on a **site-by-site basis**.”*

Clarify:

- Source control bylaws: *“Will a **Source Control Bylaw** become a requirement as part of a treatment facility registration under the MWR?”*
- Expanding sampling requirements, including CECs: *“when will this list be **defined and implemented** as a monitoring requirement?”*
- **If sampling for CECs will be required for food waste compost:** *“Will sampling for contaminants of emerging concern be required for food waste compost? If [ENV]’s intent is to harmonize the OMRR with the Agricultural Waste Control Regulation (AWCR), will CECs in residuals applied to land under the AWCR require this?”*
- What **triggers sampling analysis of CECs** in biosolids: *Does testing only apply to biosolids? At what stage in the process cycle does it occur?”*

Concerns:

- **On cost** was also raised by a few respondents: *“Consideration should be given to the cost required to undertake analysis of the suite of CECs proposed. We emphasize the importance of keeping costs manageable.”*

ENV Response to 8.2c

ENV agrees that context is important to support understanding of analytical results. Contextual material will be developed in conjunction with the guidance material. Note that the IP indicates that requests will be for biosolids only, on a case-by-case basis. There is no definitive list of CECs at this time and no identified triggers.

ENV will consider the cost of sampling and analysis when determining which CECs and frequency to request.

8.3 Record keeping

Q8.3a: Do you have any comments on the change in recordkeeping requirement? [6 responses]

All but one of respondents were **supportive** of the changes in recordkeeping requirements – one respondent highlighted that *“With modern electronic information systems and databases, there is **no concern with keeping records for a prescribed length of time.**”*

Q8.3b: Do you have any comments on ENV’s intent to post all documentation online? [12 responses]

Most respondents **were supportive** on ENV’s intent to post all documentation online. A few **questions and concerns** were raised.

Clarify:

- **Biosolids sampling requirements:** *“The requirement for sampling biosolids is increasing to every 500 wet tons for Class B. Will those specific results be sent to the Province and posted for public viewing or kept at the facility?”*

Concerns:

- A few respondents were worried about the impacts of posting **technical information online**, that may be misconstrued by public who do not have the expertise to read and understand the information.
- Several respondents indicated that the *“information collected by a **Director** for research and policy development **should not be made available to the public.**”*

ENV Response To 8.3

ENV agrees that context is important to support understanding of analytical results. Contextual material will be developed in conjunction with the guidance material. BC's Open Government policy is working towards better transparency for policy development.

9. Updates to Technical Standards

9.1 Consistency of schedules with other national and provincial standards and regulations

Q9.1: Do you have any comments on ENV's proposal to update the OMRR to ensure consistency with CCME standards and federal regulations? [12 responses]

Most are **supportive** of the proposal to ensure consistency with the CCME standards and federal regulations.

- Regarding regulations outside of the purview of ENV: *"This could present challenges/confusion such as was the case when the T-4-93 trade memorandum was updated. We recommend that for regulations outside the purview of [ENV], that the standards be repeated in the OMRR to ensure clarity."*
- A respondent recommends that ENV consider the use of **"ambulatory references"** to reduce the need to amend regulations in the OMRR to meet shifting industry innovations and practices.

ENV Response to 9.1

ENV will clarify when a regulatory standard is based on another regulation, as amended.

9.2 Consistency with the Contaminated Sites Regulation (CSR)

Q9.2: Do you have questions regarding this topic? [9 responses]

Over half of respondents indicated that they **support** this decision, and suggest:

- **Clarifying what CSR protocols** can be used under the OMRR to develop soil standards. A number of the CSR protocols would be useful for managed organic matter beneficial use project.
- A respondent suggested that *"the flexibility for landfill and mine sites is required and should be incorporated with OMRR."*

ENV Response to 9.2

The CSR protocols are not governed by the OMRR and proponents are encouraged to engage a QP in order to apply the protocols correctly.

ENV is considering BMPs and defining the appropriate use of biosolids and compost under the OMRR for landfills, mine sites and degraded soil sites.

9.3 Consistency with the Agricultural Waste Control Regulation (AWCR)

Q9.3: Do you have questions regarding this topic? [10 responses]

Almost all of respondents to this question **support an alignment** between these two regulations and the creation of guidance documents for nutrient planners on how to fertilize using biosolids. Additional comments include:

- Considerations of **seasonal variation**:
“We recommend flexibility with regards to the seasonal restriction where managed organic matter is being applied under a Land Application Plan.”
- Considerations of cost for use of **qualified professionals**: *“...we recognize the need to use Qualified Professionals (QP) for the purposes of OMRR, [the respondent] is concerned that this would be cost-prohibitive for [some]... under the AWCR.”*

ENV Response to 9.3

Limits for land application depending on the season and for land within high precipitation areas are intended to be protective of waterbodies in the environment. Flexibility will be considered application when the land application is protective of the environment.

The AWCR has been repealed and replaced with the AEM Code. The requirements for QPs under the AEM Code will not be affected by the OMRR.

10. Additional Housekeeping Changes

Q10: Do you have any comments on the proposed “housekeeping” changes? [13 responses]

Comments for this question were **wide-ranging**, and included **support** for the housekeeping changes, as well as requests for **clarity**.

Support:

- Nearly half of respondents stated support for **alignment** with the **Drinking Water Protection Act**.
- A local government respondent *“supports the intention to exempt very small, community-scale composting of food waste and yard waste at sites where production is not greater than 20 m³/year, as long as local governments ... can regulate these facilities as needed to manage any problematic emissions of air contaminants. The exemption threshold should be listed in wet tonnes annually for consistency.”*

Concerns:

- There were some concerns and questions about the need to **cover compost between Oct 1 - April 1** including:
 - *“It may be overly prescriptive to require all compost to be covered between October 1 and April 1 in areas that receive greater than 600mm/year of precipitation if all leachate is captured and appropriately managed.”*
 - This regulation will add significant cost.
 - *“Does this relate to all aspects of the compost operation or does “compost” refer to the final product only?”*
 - *“Does this include areas where the precipitation from October to April occurs as snow or is this focus for rainfall only?”*
 - *“Confirm that the 600 mm refers to the full year, not just the October to April window, even if precipitation does occur at other times of the year and the compost is not necessarily covered.”*
- About exempting composting sites with production not greater than 20 m³/year, in that government may not be able to establish bylaws and zoning requirements to manage odours sufficiently.
- About the language describing the exemption – one respondent stated: *“...this sentence is misleading in that ... Local governments under these circumstances [farm operations that meet certain requirements of the provincial Farm Practices Protection (Right to Farm) Act] currently do not have the ability to establish such bylaws.”*

ENV Response to 10

ENV will endeavor to make references to feedstock and production thresholds consistent and easy to estimate. Consideration will be given to using wet weight of feedstock, including the 20 m³ per year, if this is the most feasible way for operators to estimate the size of an operation.

In addition to following the provincial OMRR, local governments have the authority to create bylaws to regulate activities within their respective jurisdiction(s). The *Farm Practices Protection (Right to Farm) Act* places specific restrictions on the bylaws which local governments can enforce with regards to farm operations.

Proponents may apply for substitutions to the operational requirement for coverage and/or in-vessel processing. However, because an impermeable surface is required to prevent leachate from infiltrating soils, in addition to managing surface runoff, the cost for providing multiple mechanisms is expected to be greater than covering compost operations.

The 600 mm per year refers to one years' worth of precipitation and characterizes those areas which receive significant rainfall.

11. Additional Comments

Q11.1: Do you have any comments on the section titled Development of Guidance? [8 responses]

Responses to this question were **varied**.

Support:

- Several municipal respondents were supportive of the approach to update best practices and ensure they are aligned with proposed revisions to the regulation.

Recommendations and suggestions:

- The guidance documents be completed prior to enactment of the revised OMRR, to allow industry adequate time to prepare for the changes.
- Rather than focus on composting technology, *“the Guidance documents should stick to best practices relating to issues such as odour, leachate, vectors and invasive plants...”*.
- Additional guidance should be provided for:
 - Analysis of foreign matter,
 - Sampling and analysis of CECs,
 - Processing/composting of cannabis, and
 - Adherence to Best Management Practices.

ENV Response to 11.1

ENV will consider additional consultation as the OMRR is drafted. Guidance documents are typically published after a regulation is amended.

Proponents may apply for substitutions for new compost practices that are outside of the OMRR. The intent for prescribing some composting technology is based on current practices and to prevent known issues, such as leachate production, vector attraction and odours.

Additional guidance will be provided.

Q11.2: Do you have any comments on the section titled Assuring Compliance? [10 responses]

Almost half (4) of respondents are **supportive** of the ability to assure compliance as this provides additional support for the beneficial use of organic matter. A few comments and suggestions were given.

Recommendations and suggestions:

- There should be allowance for time and training for ENV staff who are overseeing OMRR.
- ENV should improve communication – there were sentiments that the act of submitting a Notification and having an Operations plan, does not make a facility compliant.
- *“For Class A compost, consider working with the [Compost Council of Canada] on a seal ‘Produced in Compliance with the BC OMRR’.”*
- More specific training requirements/licenses for compost facility operators including working with the Compost Council of Canada on certification and refresher courses every 5 years.
- One community group states the measures outlined in this section are good and suggests *“implementation be clear and decisive – revoke a permit rather than a fine.”*

ENV Response to 11.2

ENV intends to improve communication and transparency. For example, ENV proposes posting and managing information in accordance FOIPPA. ENV will consider including a plan for communication with stakeholders as a component of a complete FEMP. Compliance with the FEMP is required and will be addressed by the Regional Operations Branch.

ENV is researching the training and certification which is currently required in Alberta and Manitoba, in order to determine if certification in BC is advisable.