

1. INTRODUCTION

The British Columbia (BC) Ministry of Environment and Climate Change Strategy (ENV) is intending to update the Integrated Pest Management Regulation to address the release of pesticides during sea lice treatment activities to the marine environment.

This paper is intended to provide an update to the proposed changes described in the [2018 Regulatory Proposal](#). This Policy Update:

- Outlines the regulatory review and consultation process used by ENV to develop the proposed changes;
- Updates the proposed changes to current legal provisions in response to consultation on the 2018 Regulatory Proposal, with a discussion of rationale and implications;
- Provides a summary table of proposed changes; and
- Describes planned next steps and timeframe for implementing the proposed changes.

Please refer to the 2018 Regulatory Proposal for information on current aquaculture pesticide use provisions in BC, a discussion on concerns surrounding pesticide use to manage sea lice, and a description of the original proposed changes.

The ENV [Integrated Pest Management website](#) provides links to additional information, such as the [Integrated Pest Management Act](#) and the [Integrated Pest Management Regulation \(IPMR\)](#).

2. REGULATORY REVIEW AND CONSULTATION PROCESS

The ENV has worked since December 2017 to develop the proposed changes – confirming issues with the existing process, clarifying ENV priorities and objectives, engaging in consultations, reviewing experience in other jurisdictions, and drawing on technical expertise for specific issues.

A summary of the review process, with links to the ENV website with associated documents, is provided in Appendix 1 of this Policy Update paper.

3. POLICY UPDATE – PROPOSED CHANGES TO REGULATION

3.1 CLARIFYING THAT PESTICIDE USE IN AQUACULTURE REQUIRES A PERMIT

IPMR Section 18(2) would be amended to clearly confirm that the use of pesticides in aquaculture to manage sea lice requires an authorization. The proposed changes would clarify that use of a pesticide in aquaculture, irrespective of the application method or equipment employed, would require a pesticide use permit issued under the IPMR. The changes would reduce potential for misunderstanding among responsible persons, and support ENV compliance and enforcement measures. This change would represent an administrative

clarification only and would not alter what activities are included or how they are regulated under the IPMR.

Change from 2018 Regulatory Proposal: None

3.2 REQUIRING CLOSED-CONTAINMENT APPLICATION TECHNOLOGY

For all pesticide use permits, proponents would be required to employ well boats for the use of pesticides in aquaculture. Similar to other industry specific sections in Part 2 of the IPMR, a new “use requirements – permittee in relation to sea lice management” section would be created and establish that well boats must be consistently used as the primary application technology.

This new section would also enable aquaculture facility operators to substitute other “closed containment” application technology in place of using well boats as long as it prevents release of pesticide into the environment when conducting sea lice treatments. It is not intended that this substitution would require a separate approval process nor constitute a statutory decision.

Adopting IPM when managing pests is critical to avoid the unnecessary use of pesticides. This is important to reduce risks to the environment and human health by minimizing exposure to pesticides. An important aspect of reducing unnecessary pesticide use is using application technology that maximizes efficiency of treatment while minimizing unintended release to the environment. Systems that treat farmed fish stock in a closed containment system, such as with the use of well boats, best control the release of pesticide to the environment. However, the ministry recognizes that other technology may be developed that achieves the desired environmental outcome and wishes to enable innovation and adoption of better application technology.

Furthermore, the ministry is encouraged to see the initial adoption of innovative technology within BC’s aquaculture industry. In 2019, industry began operational trials with a new technology that manages sea lice without the use of pesticides or medications. The Hydrolicer is a specially constructed boat that uses ocean water to wash sea lice off salmon; the lice are then collected so they do not reenter the marine environment.

Change from 2018 Regulatory Proposal: None

3.3 ESTABLISHING AN EXEMPTION TO PROTECT AQUATIC ECOSYSTEMS

The proposed changes described in 3.2 above would also include an exemption to the requirement to use a well boat or other closed containment application technology. This exemption would be accessible when no well boat is reasonably available.

The ministry understands that under certain conditions, the use of well boats or other closed containment application technology may not be practical within a critical treatment window and that not treating an infestation of sea lice could present a hazard to wild salmon populations. Challenges such as mechanical breakdowns and scheduling issues could result in delays when managing sea lice which could increase the risk of infestation of wild salmon.

The changes will provide an exemption to this requirement and enable aquaculture facility operators to employ other application methods to manage sea lice populations. Use of this exemption is not intended to impede widespread adoption of closed containment application technology in aquaculture and industry would be required to satisfy ENV staff that no well boat is reasonably available.

Change from 2018 Regulatory Proposal: This item was modified from the original proposal due to several concerns being raised. These concerns included the lack of real-time and geographically specific information regarding juvenile wild salmon, the inability to confidently determine risk to specific populations and concerns that administrative delays in declaring emergencies could impact efficient treatment schedules. The new proposed change would protect wild salmon by enabling ENV staff to authorize the use of other application technology when well boats or other closed containment methods are not reasonably available.

3.4 PROPOSED TIMELINES

A transition period of one year was originally proposed in the 2018 Regulatory Proposal. However, the ministry balances the time desired for a transition period with the need to adopt practices that minimize future introduction of pesticides into the marine environment. Furthermore, extra time has already been added to the regulatory amendment process. It is for these reasons that no additional transition period is currently proposed; the new requirements would come into force immediately once the IPMR is amended.

Existing permits would not be affected but new applications would need to meet the new requirements once the IPMR is amended.

Change from 2018 Regulatory Proposal: This item was modified from the original proposal due to a change in the implementation timeline. It was ENV's intention at the time that the IPMR would be amended soon after consultation closed in 2018.

However, a considerable assessment period following consultation on the Regulatory Proposal was added in 2019. This provided additional time to transition to adopting technology which controls release of pesticide into the marine environment. Industry has been able to use this additional time to assess the proposed changes, analyze potential impacts to their current operations, develop strategies to meet the new requirements and explore access to suitable equipment, if necessary.

4. NEXT STEPS IN IMPLEMENTING THE PROPOSED REGULATORY CHANGES

The ENV plans to submit the proposed changes for amendment to the IPMR in August 2019.

The ENV is planning to conduct outreach throughout 2019 to support communication and understanding of the proposed changes. This will include presentations to affected parties and development of material explaining the amendments.

Parties who have expressed interest or submitted comments to the ENV through the regulatory review consultation process will be notified of the proposed changes. Webinars for affected parties will be provided to support implementation. Outreach material will also be posted on the Integrated Pest Management Program website at www.gov.bc.ca/PestManagement.

Questions can be sent to the ENV at IPMProgram@gov.bc.ca.

Thank you for your time and interest.

APPENDIX A– SUMMARY OF REGULATORY DEVELOPMENT PROCESS

REGULATORY PROPOSAL AND CONSULTATIONS – 2018

The ENV considered information generated from the regulatory review and this information was used in preparing a [Regulatory Proposal](#) paper dated October 2018. This paper was posted on the [IPM Stakeholder Engagement](#) webpage for public review and comment from October to November 30, 2018. A series of presentations were held to update interested stakeholders on the contents of the Regulatory Proposal during this period.

The Regulatory Proposal outlined proposed regulatory provisions, including: an administrative improvement to clarify the need for a permit when using pesticides in aquaculture; a requirement to use closed-containment application technology such as a well boat when treating sea lice with pesticides; an exemption in the case of environmental emergencies such as threats to wild salmon. An implementation period of one year was proposed following amendment to the IPMR.

REVIEW OF FEEDBACK AND DEVELOPMENT OF FINAL POLICY DIRECTION – 2018-2019

Comments and responses received through the consultation process were compiled and reviewed by the ENV between December 2018 and January 2019. Detailed responses were received from a range of interested parties, including non-governmental organizations, government agencies, Indigenous Peoples, and private companies directly involved in the aquaculture industry. Comments included both direct responses to the material in the Regulatory Proposal and views on pesticide use in general. These responses helped support development of this revised proposal. The Final Policy Direction paper has been prepared to address stakeholder comments and to communicate the final proposed changes to the IPMR.

APPENDIX B– SUMMARY TABLE OF PROPOSED REGULATORY CHANGES

<p>1. Clarify the use of pesticides in aquaculture to manage sea lice requires a pesticide use permit</p>
<p>The Integrated Pest Management Regulation would potentially be amended to include pesticide use in aquaculture under Section 18(2) and explicitly clarify that an authorization is required for this activity.</p>
<p>2. Require the use of well boats or other closed-containment technology when applying pesticides in aquaculture</p>
<p>(1) For all pesticide use permits, proponents would be required to employ well boats for the use of pesticides in aquaculture.</p> <p>(2) Aquaculture facility operators would be able to substitute other “closed containment” application technology in place of using well boats that prevents release of pesticide into the environment when conducting sea lice treatments. It is not intended that this substitution would require an approval process nor constitute a statutory decision.</p>
<p>3. Establish an exemption for closed-containment application technology to protect wild salmon</p>
<p>The amendments would include an exemption to the requirement to use a well boat or other closed containment application technology. This exemption would be accessible when no well boat or other closed containment technology is reasonably available. This exemption is to enable the administrator to allow the use of other application technology to manage sea lice to protect wild salmon. The permit holder would need to satisfy the administrator that no well boat is actually available.</p>