

**MINISTRY OF ENVIRONMENT AND
CLIMATE CHANGE STRATEGY
BULLETS**

April 1st, 2019

File: 280-40

CLIFF/eApprovals #: 342689/13817

PREPARED FOR: Honourable George Heyman, Minister of Environment and Climate Change Strategy

SUBJECT: Minister meeting with Cermaq Canada to discuss new technology that could lessen the impact of the fish farming in BC oceans.

BULLET RESPONSE:

- Cermaq Canada is one of the largest aquaculture companies currently operating open net salmon farms in BC. These include sites in the Broughton Archipelago. Members of both the public and some First Nations have concerns about the potential environmental impact of these farms, including the potential impacts from sea lice and the products used to control them.
- Sea lice are primarily controlled through the use of the drug SLICE. However, they may also be controlled through the use of the pesticide hydrogen peroxide. The use of any pesticide in aquaculture requires a Pesticide Use Permit issued by the ministry under the requirements of the *Integrated Pest Management Act*.
- There are currently 10 permits in effect for 59 separate aquaculture sites in BC authorizing the use of hydrogen peroxide either by well boat or tarp treatment method. While both treatment methods are approved by Health Canada, the well boat method has some environmental benefits over the tarp method: it generally uses less pesticide and the treated water can be discharged in motion away from shore where there is less potential for any environmental impacts.
- Cermaq Canada does not currently have a permit to use pesticides in the Broughton Archipelago. However, they do have one permit application submitted to the ministry to use hydrogen peroxide exclusively via the well boat method at seven sites in the Broughton Archipelago. Ministry staff are currently conducting First Nations consultation on this permit application, prior to review and decision.
- The aquaculture industry increasingly appears to be moving toward well boat applications over tarp treatments whenever possible. In 2017, permit holders reported that 79 percent of the 572,517 litres of hydrogen peroxide used under permit was done via the well boat method as opposed to the tarp method.
- Ministry staff are aware of new technologies being developed by the aquaculture industry as a whole to control sea lice. These include non-chemical control methods such as Cermaq's "hydrolicer", which uses fresh water to remove sea lice.
- Ministry staff are also aware of an emerging well boat technology, that involves treating the pesticide waste water prior to discharge to minimize potential impacts. This technology is called "CleanTreat" and is marketed by the maker of the pesticide Salmosan. This pesticide is not currently authorized for use anywhere in B.C. but is used extensively on the East Coast of Canada.

Contact:

*David Morel, ADM
Environmental Protection
Division
778-698-9242*

Alternate Contact:

*Matt Maclean
A/Director, IPM
Regional Operations Branch
(778) 698-9411*

Prepared by:

*Andreas Wins-Purdy
Section Head, Integrated Pest
Management, ROB
(250) 490-8257*

ENV Approvals		
Reviewed by	Initials	Date
DM	MZ	Apr 11
DMO	KK	Apr 4
ADM	DM	April 2
ED	TG	April 2
Dir./Mgr.	MM	April 2
Author	AWP	Jan 8