



WHOLE OCEANS™
MAINE SUSTAINABLE SALMON

October 29, 2018

Mr. Gregg Wood
Maine Department of Environmental Protection
Bureau of Water Quality
Division of Water Quality Management
17 State House Station
Augusta, ME 04333-0017

Re: Whole Oceans, LLC
Maine Pollutant Discharge Elimination System (MEPDES) Permit # ME0037478
Maine Waste Discharge License (WDL) # W009190-6F-A-N
Proposed Draft Permit

Dear Mr. Wood:

Thank you for the opportunity to comment on the above-referenced draft permit. Whole Oceans appreciates the time taken and effort made by DEP staff to develop this permit. As a general comment, Whole Ocean agrees with the key permit findings that the proposed discharge will meet existing water quality standards, including the antidegradation law, and that the proposed discharge will be subject to best practicable treatment.

Whole Oceans offers the following specific comments:

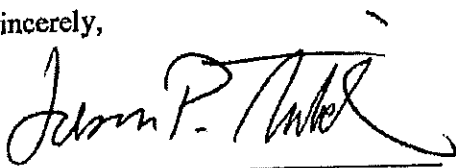
- As you know, the loading rates that were provided to DEP in the waste discharge license application are maximum loading rates. Once the facility's treatment system is detail designed and operational, Whole Oceans expects a reduction in those maximum projected loading rates. Further, as noted in the application, the use of antibiotics and other therapeutic/disinfection compounds will be used only as necessary and it is not expected that they will frequently be necessary due to the careful management of intake water and egg supplies. Again, it is Whole Oceans' goal to avoid the use of these compounds but, in the unlikely event that they do need to be used, Whole Oceans has been conservative in its estimate of frequency and volume of use.
- Special Condition A.1. – Measurement Frequency. The draft permit requires that BOD and TSS be monitored three times a week and that Total Nitrogen be monitored once a week. Whole Oceans understands that initially, additional BOD, TSS and Total Nitrogen data is needed. However, given the facility's steady-state operations, unlike a municipal facility for example, these monitoring frequencies will not be necessary in the long term. As soon as a sufficient number of samples have been obtained to establish a baseline for BOD, TSS and Total Nitrogen, Whole Oceans will request a reduction in monitoring frequency. In addition, Whole Oceans may seek to develop a surrogate measure for BOD.

Whole Oceans notes that the BOD limit for the University of Maine Center for Cooperative Aquaculture Research was recently removed entirely based on such new information. Similarly, Whole Oceans will likely ask DEP to consider elimination of other parameters such as Total Phosphorus and Total Ammonia after initial monitoring provides information necessary for the modification.

- Whole Oceans supports the phased licensing framework of the permit. Whole Oceans has no objections to the additional monitoring requirements (the dye study and the ambient water quality monitoring) contained in Special Conditions F and G. However, based on extensive water quality modeling of the projected loadings (which are maximum projected loadings), DEP has determined that there is no measurable water quality impact associated with Whole Oceans' proposed discharge. Based on water quality data obtained beginning on May 1st of 2019, Whole Oceans may request a reduction in the instream monitoring frequency of twice per month in subsequent years.
- As the Department knows, there are no numeric effluent limitation guidelines for recirculating aquaculture systems (RAS). The Department has appropriately incorporated into the permit the narrative guidelines set out in 40 C.F.R. 451.11. The Department has determined that 30 milligram per liter as a monthly average and 50 milligram per liter as a daily maximum represent its best professional judgment of numeric best practical treatment for RAS facilities. This determination has been consistently applied to RAS facilities in Maine (e.g., Palom Aquaculture LLC and the Center for Cooperative Aquaculture Research). These BPJ/BPT numeric limitations are based on EPA draft guidelines and represent a secondary level of treatment. (See Fact Sheet at page 9 of 15.) It should also be noted that compliance with these BOD and TSS limitations will ensure removal efficiencies equivalent to or greater than those applicable to publicly-owned treatment works with secondary treatment.

Thank you for your consideration of these comments.

Sincerely,



Jason Mitchell
Whole Oceans
President & Chief Operating Officer
www.wholeoceans.com
jmitchell@wholeoceans.com
207-751-3530