

FEDERAL COURT

BETWEEN:

ALEXANDRA MORTON

Applicant

AND:

MINISTER OF FISHERIES AND OCEANS

Respondent

AFFIDAVIT OF VINCENT ERENST

I, Vincent Erenst, marine biologist, of Campbell River, in the Province of British Columbia, AFFIRM THAT :

1. I am the Managing Director of Marine Harvest Canada Inc. ("Marine Harvest") and as such have personal knowledge of the facts and matters hereinafter deposed to, except where the same are stated to be made upon information and belief, and as to such facts I verily believe the same to be true.
2. I have been the Managing Director of Marine Harvest Canada since July 2007. I have worked in the aquaculture industry for 34 years in various positions, including in production, production management and as managing director for various companies.
3. Marine Harvest is a company engaged in the business of salmon farming on the west coast of British Columbia. It is licensed to operate 6 hatcheries and 56 marine-based farms (though not all are stocked and operational at the same time). In total, it produces between 40,000 and 45,000 tonnes of Atlantic salmon each year. Marine Harvest is the largest salmon farming producer in British Columbia.

4. Transferring fish from land-based freshwater hatcheries to net cages in the marine environment is an integral part the salmon farming process. Farmed salmon are initially hatched in land-based freshwater hatcheries and then cultivated in either Marine Harvest's freshwater lake facility or its land-based hatcheries, where they are grown for at least 12 months until they reach the smoltification stage. The fish are then transferred to Marine Harvest's marine sites for grow out.

5. Farmed salmon are also transferred between marine sites. The primary reasons to transfer fish between marine sites are: (a) abiotic environmental conditions; (b) license conditions; and (c) parasite infection avoidance. These reasons are explained below.

(a) Abiotic environmental conditions: Abiotic (non – living) environmental conditions (i.e. water salinity and current speed) dictate the tolerance levels and optimal living conditions for each stage of the life cycle of the fish. Juvenile salmon (smolts) that are ponded from freshwater hatcheries to sea are vulnerable at high current facilities. Smolts ponded to facilities with lower current speeds are able to maximize energies for growth and hence perform better in the early stages of sea water rearing. Once fish reach a size where faster currents are not debilitating but are beneficial (i.e. additional dissolved oxygen availability) the fish are transferred to higher energy sites. It is also preferred to stock smolts into facilities with lower water salinity to ease the transition from fresh water to salt water.

(b) Licence conditions: License conditions stipulate the permitted maximum biomass of fish that can be present at each facility. As each site is unique in location and ecological diversity, each site license reflects a specific allowable biomass. Licensed biomass levels range from several hundred to several thousand tonnes of production. Smaller sites are used for smolt rearing. The practice of using sites specifically for smolt rearing and on-growing enables longer fallow periods at both operations. Longer fallow periods support sustainable use and best management practices.

- (c) Parasite infection avoidance: Certain areas on the coast are prone to higher parasite loads than others. One parasite in particular, Kudoa (*Kudoa thrysites*), has been noted to infect fish at an early stage (post smolt transfer to sea). Smolts ponded to areas with lower Kudoa parasite prevalence have shown lesser infection rates than smolts ponded into areas with higher prevalence. Manifestation of infection rarely occurs in fish with low infection levels. Kudoa does not manifest itself in fish with low infection levels. Hence, utilizing a staged process of ponding smolts to an area of lesser Kudoa prevalence followed by a transfer once fish are less susceptible to infection, supports both effective fish health management and good quality product.

6. Now produced to and shown to me and marked as **Exhibit "A"** to this my Affidavit is a true copy of the current finfish aquaculture licence issued by the Minister of Fisheries and Oceans for Marine Harvest's marine site at Shelter Bay. While the allowable peak biomass will vary between sites, all of Marine Harvest's marine licences are in substantially the same form as the licence attached as Exhibit "A".

7. The licence deals with, among other things, the transfer of fish to the Shelter Bay marine site. Condition 2.3 of the licence requires that all fish transfers to the site must be authorized by the BC Introductions and Transfers Committee (the "ITC"). To obtain a transfer licence from the ITC, Marine Harvest must provide a fish health attestation that the criteria in Condition 2.1 are satisfied and an application to transfer the fish to DFO. For transfers from hatcheries to marine sites, a DFO representative will usually attend at the site to review records and conduct an inspection.

8. I am informed by Dr. Diane Morrison, a veterinarian employed by Marine Harvest as its Director of Fish Health and Food Safety, that Marine Harvest has since 2010 tested thousands of samples of its fish for PRV and HSMI. Dr. Morrison has informed me that PRV has been found in some of our hatcheries. I am further informed by Dr. Morrison that none of Marine Harvest's fish have tested positive (by histology) for HSMI at any point in the freshwater and saltwater production stages.

9. Currently, the ITC does not require Marine Harvest to test samples of fish for PRV. The ITC currently permits fish with PRV to be transferred to marine sites, and between marine sites.

10. I have reviewed the Notice of Application underlying this proceeding. As I understand it, Ms. Morton seeks an order declaring the ITC's decision or policy of not testing for PRV and/or HSMI, and permitting the transfer of fish with PRV and/or HSMI, to be unlawful.

11. If the relief sought by Ms. Morton is granted it will severely impact Marine Harvest – she attacks the legal basis for Marine Harvest's transfer of fish. If the ITC's decision or policy to allow fish with PRV to be transferred is successfully challenged, Marine Harvest's legal right to transfer fish with PRV to its marine sites and in between its marine sites will be undermined.

12. I am advised by Marine Harvest's counsel, Chris Watson, that he received a copy of Ms. Morton's affidavit in this proceeding, sworn November 28, 2016, on or about December 3, 2016.

13. Now produced to and shown to me and marked as **Exhibit "B"** to this my Affidavit is a true copy of a letter Mr. Watson emailed to counsel for the parties to this proceeding on December 9, 2016, wherein Mr. Watson sought the parties' consent to adding Marine Harvest as a party.

14. Now produced to and shown to me and marked as **Exhibit "C"** to this my Affidavit is a true copy of a letter from Steven Postman, counsel for the Minister of Fisheries and Oceans, emailed to Mr. Watson on December 13, 2016, wherein Mr. Postman wrote that the Minister consented to the addition of Marine Harvest (and Cermaq Canada Ltd.) as a party to this proceeding.

15. Now produced to and shown to me and marked as **Exhibit "D"** to this my Affidavit is a true copy of an email from Morgan Blakley, counsel for Alexandra Morton, sent

