Appendix I



APPROVAL TO OPERATE

I-9921

Pursuant to paragraph 8(1) of the *Water Quality Regulation - Clean Environment Act*, this Approval to Operate is hereby issued to:

Kelly Cove Salmon Ltd. for the operation of the Oak Bay Salmon Hatchery

Description of Source: An aquaculture recirculation facility consisting of covered grow-out tank fields for the culture of Atlantic salmon to the smolt stage. Source Classification: **Fees for Industrial Approvals** Class 6 **Regulation - Clean Water Act** Parcel Identifier: 01265925, 01270503, 15155419 Mailing Address: 93 Oak Haven Road Oak Haven, NB E3L 3S7 Conditions of Approval: See attached Schedule (s)"A", "B" and "C" of this Approval Supersedes Approval: I-9758 Valid From: November 02, 2017 March 31, 2018 Valid To: Recommended by:

Issued by:

for the Minister of Environment and Local Government

November 06, 2017 Date

SCHEDULE "A"

A. DESCRIPTION AND LOCATION OF SOURCE

Kelly Cove Salmon Ltd. operate an aquaculture facility consisting of a hatchery, enclosed tank fields and wastewater treatment system. The facility is located on the Lower Ledge Road, Oak Bay, Charlotte County. The facility also includes a broodstock rearing operation for gamete production and incubation room for housing salmon eggs. The broodstock portion of the operation has a capacity of 40,000 kg.

The facility requires approximately 600 IGPM of water at the peak of the production cycle. Approximately 200 IGPM are provided by drilled wells, with the remainder obtained from a spring source. The facility incorporates recirculation technology with the wastewater treated for the removal of solids using a 60 micron screen drumfilter with a capacity of 2,700 litres/minute. The solids are directed into a septic tank with the filtered water discharged to an intertidal area within Oak Bay.

This facility located adjacent to Oak Bay and referenced by parcel identifiers 01265925, 01270503 and 15155419 is hereby approved subject to the following:

B. DEFINITIONS

- 1. "Approval Holder" means Kelly Cove Salmon Ltd.
- 2. **"after hours"** means the hours when the Department's offices are closed. These include statutory holidays, weekends, and the hours before 8:15 a.m. and after 4:30 p.m. from Monday to Friday.
- 3. "**Chemical**" means antibacterial and antibiotic agents, therapeutants, pesticides, herbicides, anesthetics, feed additives, hormones, veterinary biologics, biotechnology products, disinfectants, water treatment agents, fertilizers, paint products, organic solvents, anti-foulant products, petroleum products, liquid and gaseous fuels, sealants, lubricants, flocculants, and any other hazardous, toxic, or potentially harmful substance.
- 4. "**Department**" means the New Brunswick Department of Environment and Local Government.
- 5. **"Director"** means the Director of the Authorizations Branch of the Department of Environment and Local Government and includes any person designated to act on the Director's behalf.
- 6. **"Facility"** means all property, real or personal, utilized in the operation or maintenance of the source.

- 7. **"Inspector"** means an Inspector designated under the *Clean Air Act*, the *Clean Environment Act*, or the *Clean Water Act*.
- 8. **"Minister"** means the Minister of Environment and Local Government and includes any person designated to act on the Minister's behalf.
- 9. "**Mixing Zone**" a predefined area within a surface watercourse beyond an outfall or discharge point in which the applicable jurisdiction or regulatory agency permits water quality criteria to be exceeded while remaining below acute toxicity thresholds for the protection of aquatic life. Beyond the mixing zone boundary, applicable water quality criteria for the protection of aquatic life must be observed.
- 10. **"Source"** means "source of contaminant" as defined in the Act.
- 11. **"watercourse"** means the full width and length, including the beds, banks, sides and shoreline, or any part of a river, creek, stream, spring, brook, lake, pond, reservoir, canal, ditch or other natural or artificial channel open to the atmosphere, the primary function of which is the conveyance or containment of water whether the flow be continuous or not.

C. EMERGENCY REPORTING

- 12. The Approval Holder, operator or any person in charge of the Facility shall **immediately** report to the New Brunswick Department of the Environment where:
 - a) there has been, or is likely to be, an unauthorized release of solid, liquid or gaseous material including wastewater, petroleum or hazardous materials, to the environment;
 - **b**) there has been a violation of the *Air Quality Regulation*, the *Water Quality Regulation* or any Approval issued thereunder; or
 - c) a release of a contaminant or contaminants is of such magnitude or period that there is concern for the health or safety of the general public, or there could be significant harm to the environment.

During normal business hours, contact the: Saint John Regional Office

(506) 658-2558

After hours, or in the event the Regional Office cannot be reached contact the: Canadian Coast Guard

1-800-565-1633

All reports shall include:

- a) a description of the source, including the name of the owner or operator;
- **b**) the nature, extent, duration and environmental impact of the release;
- c) the cause or suspected cause of the release; and
- d) any remedial action taken or to be taken to prevent a recurrence of the release.

An Inspector will be contacted to return the call and provide direction, where required.

D. GENERAL INFORMATION

- 13. The Approval Holder shall operate the facility in compliance with the *Water Quality Regulation Clean Environment Act.*
- 14. This Certificate of Approval does not relieve the owner from complying with municipal bylaws, other provincial acts and regulations, or any federal acts and regulations.
- 15. Violation of any conditions of this Certificate of Approval constitutes a violation of the *Clean Environment Act*.
- 16. An Inspector, at any reasonable time, has the authority to inspect the Facility and carry out such duties as defined in the *Clean Air Act*, the *Clean Environment Act* or the *Clean Water Act*.
- 17. The Minister may revoke this approval at any time and the approval is automatically revoked by the issuing of a new approval applying to the same source.
- 18. The terms and conditions of this Approval are severable. If any term or condition of this Approval is held invalid, is revoked or is modified, the remainder of the Approval shall not be affected.

E. TERMS AND CONDITIONS

GENERAL CONDITIONS

- 19. The Approval holder shall operate the facility in accordance with the most recent version of the *Environmental Management Program for Land Based Finfish Aquaculture in New Brunswick* issued by the Department.
- 20. All water withdrawals, including those from ground, surface or pipeline sources shall be equipped with flow meters.
- 21. Ground water withdrawal from onsite well(s) shall not exceed 200 IGPM [909 litres/minute]. Requirements in excess of this will require a Water Supply Source Assessment to be conducted to establish a safe pumping limit.
- 22. The development of additional water supplies for this facility requires the Approval of the Minister.
- 23. The Approval Holder shall ensure that a copy of the Approval, including all attached schedules is maintained onsite at all times. A copy of the Approval must also be posted in a prominent and accessible location.

- 24. The Approval Holder shall apply in writing to the Director and receive approval for an amendment of this Approval before making any changes, including fish species, to the currently approved Facility.
- 25. The Approval Holder shall immediately notify the Minister in writing of any change in its legal name or address.

WASTE MANAGEMENT PLAN

26. The Approval Holder shall ensure that all wastes generated throughout the operation and maintenance of the facility are managed and disposed of in accordance with the procedures and practices detailed in the Waste Management Plan in the attached SCHEDULE "C", or in a manner deemed acceptable by an Inspector, or as otherwise directed by the Department.

SOLID WASTE MANAGEMENT

- 27. The Approval Holder shall ensure that all wastes generated during the maintenance and operation of the facility, including moribund fish, are disposed of in a manner approved by the Minister, or in a manner acceptable to an inspector.
- 28. The Approval Holder shall remove sludge from the catch basin at least once per year and make arrangements for disposal in a manner which is acceptable to an inspector. Additional cleanout(s) of sludge from the catch basin may be required should any monitoring results indicate a failure to achieve the limits specified within this Approval.

CHEMICAL STORAGE AND HANDLING

29. The Approval Holder shall ensure that all chemicals are stored in a manner such that any spill is contained and not released to the environment.

DISCHARGE LIMITS

30. The Approval Holder shall ensure that the level of total phosphorus and nitrogen at the edge of the established mixing zone is in accordance with Table 2.10 of the most recent version of the *Environmental Management Program for Land Based Finfish Aquaculture in New Brunswick*.

TESTING AND MONITORING

31. The Approval Holder shall conduct a water quality monitoring program in accordance Section 2.4, Table 2.9 and methodology in accordance with Appendix 1 and Table A1-4 within the most recent version of the *Environmental Management Program for Land Based Finfish Aquaculture in New Brunswick* issued by the Department and summarized in SCHEDULE "B".

32. The Approval Holder shall establish a monitoring program as outlined in SCHEDULE "B". Monitoring shall include samples taken from the outer perimeter and outside of the mixing zone as established by an inspector and approved by the Minister.

REPORTING

33. The Approval Holder shall submit reports in accordance with Appendix 2 of the most recent version of the document titled *Environmental Management Program for Land Based Finfish Aquaculture in New Brunswick*, issued by the Department.

Prepared by:

Joyce Wang, EIT Approvals Coordinator

Reviewed by:

Mark Glynn, P.Eng. Manager, Permitting South Authorizations Branch



SCHEDULE ''B''

MONITORING AND SAMPLING PLAN

1. WATER QUALITY MONITORING PROGRAM Level 1

<u>Station</u> *	Parameters**	<u>Analysis</u>	<u>Time Period</u>	Frequency	Method
1	Flow	Self	Jan. 1-Dec. 31	weekly	Meter
3,4,5	TP _L , TN Temp DO, pH	Lab Self	June 1-Nov.15	monthly	Grab Meter

Level 2

<u>Station</u> *	Parameters**	<u>Analysis</u>	Method
1	Flow	Self	Meter
2	TP _{L,} TSS	Lab	Grab
3	TP_L , TN, TSS Temp, DO and pH	Lab Self	Grab
4,5	TP _L , TN Temp, DO and pH	Lab Self	Grab

* Stations

1. Hatchery water intakes

- 2. Effluent water prior to entry into catch basin.
- 3. Effluent water at point of discharge from catch basin.
- 4. Oak Bay: Edge of mixing zone.
- 5. Oak Bay: Control station

** <u>Parameters</u>

TN -	Tot	al Ni	trogen,	reported	in	milli	igrams	per li	tre.	
-	-	1								

- TP Total Phosphorus, reported in milligrams per litre.
- Temp Temperature in degrees Celsius.
- DO Dissolved Oxygen in milligrams per litre.
- TSS Total Suspended Solids

<u>Note</u>:

Sampling to be conducted on the ebb (outgoing) tide.

SCHEDULE "C"

WASTE MANAGEMENT PLAN

1. The following Waste Management Plan was developed through consultation between the Department and the Approval Holder. This plan must be updated, and approved whenever operational practices require substantive and routine deviation from the procedures outlined herein.

ATTACHMENT 5.2

Minor Hazardous Material Leak or Spillage Form:					
Originator:Spill Site:	Date				
Problem identified:					
In connection with: □ Oil □ Formalin □ Caustic □ other	Released to: [] air [] water [] well [] ground [] soil [] containment [] pavement [] other:				
Identified Cause of Spill/leak:					
Corrective Action Taken:					
Disposal of Hazardous Material:					
Clean-up Completion Date					
Verification of Action Complete and Effective:	Detai				
VP of Freshwater Operations					

ATTACHMENT 5.3

SPILL NOTIFICATION FORM

Part A: Basic Spill Data					
Type of Spilled Substance:		Notification Person:			
Quantity Released:		Spill Date and Time:			
Location of Spill:		Discovery Date and Time:			
		SPILL DURATION:			
Facility Name & Location: Kelly Cove Salmon Oak Bay Hatchery 93 Oak Haven Road Oak Haven NB E3L 2S7		Release to: []air []well []soil []containment []other	[] water [] ocean [] sewer		
Owner / Company Name: Kelly Cove Salmon Ltd. 874 Main Street, Blacks Harbour NB E5H 1E6	Telephone: Facility: 24 hr.:				
Nature of spill and any environmental or health effects: []Injuries [] Fatalities					
Part B: Notification Checklist					
Spill Type	Notif Time	ication Date and	Name of Person that Received Call		
Spill is any amount of petroleum product:					
Department of Environment 1-506-658-2558					
Spill reaches groundwater or surface water:					
Canadian Coast Guard 1-800-565-1633					