Fisheries and Oceans Canada | Pêches et Océans Canada

Salmonid Enhancement Program Aquaculture Licence 2010

Licensed for: Aquaculture

Date Issued: 19 December 2010

LICENCE No. «DFO_Lic_No» - «YEAR»

Expiry Date: «EXPIRY_DATE»

ISSUED to:
Department of Fisheries and Oceans
c/o «SITE_NAME»
«ADDRESS»
«CITY_PROV», «POSTAL_CODE»
Phone «Phone»
Fax «Fax»

This licence is issued under the authority of the *Fisheries Act* and confers, subject to provisions of the *Fisheries Act* and Regulations made there under, the authority to carry out aquaculture activities including cultivation and harvest of fish and prescribed activities under the conditions included herein and/or attached hereto.

The above licence holder is authorized by this licence to carry on aquaculture at the following location:

Facility Reference Number	**Location and Legal Description**
«SITE_REF_NUMBER»	Facility: «SITE_NAME» Legal Description: «Legal»

Species and Total Maximum Production at the Enhancement Facility: As listed in the annual Department of Fisheries and Oceans *Salmonid Enhancement Facility Production Plan*

Required Record Keeping and Reporting: Details are contained within the attached conditions of this licence.

Compliance Advisory: Contravening a condition of this licence is an offence under the *Fisheries Act*.

It is the responsibility of individual licence holder to be informed of, and comply with, the *Fisheries Act* and the regulations made there under as well comply with all laws, bylaws and orders of any competent government authorities which affect the enhancement facility described herein, in addition to these conditions.

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«Attachments»

Part A. Definitions

"Containment structures" are structures used to contain finfish for the purposes of aquaculture.

"Department" means the Department of Fisheries and Oceans.

"Enhancement Facility" means an aquaculture facility operated by DFO, or under the direction of DFO, culturing Pacific salmon for the purpose of increasing their freshwater survival before their intentional release into fish habitat.

"Facility operator" means the person who oversees the operation of the facility and who is authorized by the Department to act for the Department respecting the operation of the facility.

"Facility Production Plan" means Salmonid Enhancement Program facility production targets that have been developed through the Salmonid Enhancement Program integrated production planning process and approved by the Regional Director of the Oceans, Habitat and Enhancement Branch.

"Fish" as per the *Fisheries Act* includes parts of fish, shellfish, crustaceans, marine animals and any parts of shellfish, crustaceans or marine animals, and the eggs, sperm, spawn, larvae, spat and juvenile stages of fish, shellfish, crustaceans and marine animals.

"Fish Habitat" as per the *Fisheries Act* means spawning grounds and nursery, rearing, food supply and migration areas on which fish depend directly or indirectly in order to carry out their life processes.

"Fish Health Management Plan (FHMP)" means a facility specific plan to manage fish health.

"Fish Health Veterinarian" (FHV) means a veterinarian licensed in the Province of BC, on staff with the Department for the care of fish in aquaculture facilities.

"Major Mortality Event" means a significant number of fish mortalities caused by disease, life support failure, or through intentional destruction.

"Management Plan" means a facility-specific description of the infrastructure and mode of operation for each cultivated species and location specified on the face of the licence.

"Stock" means a group of fish from one production cycle that are defined by the system of origin, species and run timing.

Part B. Licence conditions specific to the licence

«Provisos»

«SeapenName»

«SeapenCoods»

Part C. General Conditions of Licence

1. **Application and Licensed Species**

1.1 These conditions apply to the cultivation of fish in an enhancement facility owned and operated by the Department.

1.2 This licence authorizes the enhancement facility to cultivate and release species of fish and quantities as set out in the Facility Production Plan (Attachment I).

2. **Production**

2.1 The maximum production of cultivated fish from this enhancement facility shall be consistent with the Facility Production Plan (Attachment I).

3. **Management Plan**

3.1 No change to the physical structure or mode of operation of the enhancement facility that deviate from the facility-specific Management Plan (Attachment II) shall be made without prior approval of the Department.

4. **Transfer of Fish**

4.1 Only fish of the species, stocks and production targets listed on the Facility Production Plan may be introduced to the enhancement facility.

4.2 Where fish are transferred between enhancement Facilities, the following conditions shall be met prior to transfer from the source enhancement facility:

(a) mortalities in any stock reared at the source enhancement facility have not exceeded 1% per day due to infectious diseases, for any four consecutive day period during the rearing period;

(b) no stock at the source enhancement facility has a clinical disease requiring treatment;

(c) no stock at the source enhancement facility is known to have had any significant diseases (Appendix I - List of Significant Diseases), or other infectious agents of concern to the Department; and

(d) where conditions 4.2 (a), (b) and (c) cannot be met, written approval from the Fish Health Veterinarian (FHV) is required following a risk assessment of site records, review of diagnostic reports, evaluation of stock compartmentalization, and related biosecurity measures, prior to fish being transferred.

4.3 Biosecurity measures for the transfer of fish shall be consistent with the Fish Health Management Plan.

4.4 Records of transfers and releases into and from the enhancement facility shall be provided annually to the Minister. As set out in Section 13.1

4.5 A copy of this licence must accompany all shipments of fish between enhancement Facilities.

4.6 Only transfers within a Salmonid Transfer Zone (Appendix II) are permitted under this licence.

4.7 Where fish are moved between Salmonid Transfer Zones (Appendix II), a separate licence is required under Sections 54-57 of the Fishery (General) Regulations.

5. Fish Health

5.1 The enhancement facility shall have in place and shall follow a Fish Health Management Plan (FHMP).

5.2 The FHMP shall contain all the Required Elements of the FHMP for enhancement Facilities set out in Appendix III.

5.3 No fish shall be introduced to the enhancement facility except as in accordance with the targets indicated in the Facility Production Plan.

5.4 The facility operator shall ensure that the fish cultivated in the enhancement facility are given care and attention consistent with their biological requirements.

5.5 The facility operator shall notify the Departmental FHV if there is a fish health problem:

(a) there shall be immediate notification if unexplained mortalities in any stock reared at the enhancement facility have exceeded 1% per day for a four consecutive day period; and

(b) on suspicion of infectious disease, surveillance shall be increased, the FHV consulted and samples must be submitted to a FHV-approved diagnostic laboratory for diagnosis, if required.

5.6 The facility operator shall keep complete and accurate records of fish health and inventory in the enhancement facility, including diagnostic test results, therapeutant use and vaccination records. (Appendices V & VI)

5.7 The facility operator shall make all fish health records available to the FHV or representative of the Department upon request.

6. Major Mortality Event

6.1 Fish health emergencies shall be addressed as part of the Fish Health Management Plan.

6.2 Where fish are destroyed, the procedures shall follow the FHMP unless otherwise directed by the FHV.

6.3 The facility operator shall report major mortality events to the FHV within 24 hours to discuss event management, mitigation and disposal of the mortalities.

6.4 The disposal of mortalities as well as the cleaning and disinfection of the containers in which the fish were held and the mortality collection equipment shall follow the FHMP bio-security protocols.

7. Escape Prevention

7.1 The facility operator shall take all reasonable precautions to prevent the escape of cultivated fish:

(a) while transporting fish on, over or through fresh or tidal waters;

(b) while transporting fish to or from the enhancement facility; and

(c) while transferring fish between containment structures within the enhancement facility.

7.2 The facility operator shall ensure that no person deliberately releases cultivated fish from the enhancement facility except as permitted under this licence.

8. Release of Fish

8.1 Fish shall only be released in accordance with the Facility Production Plan.

8.2 Fish shall only be released if:

(a) there is no suspicion of infectious disease; and

(b) in the last 3 months there was less than 5% cumulative mortality, after hatching, in that stock.

8.3 If either of the conditions set out in s.8.2 cannot be met, written approval by the FHV is required prior to release.

8.4 The release of fish which have had a disease outbreak requiring antibiotic therapy shall be based on a risk assessment of site records, diagnostic reports, evaluation of stock compartmentalization and related biosecurity measures.

8.5 A copy of this licence shall accompany the fish to the site of release.

8.6 Records of all releases shall be kept and reported as set out in s 13.1.

9. Adult Carcass Disposal

9.1 Where fish carcasses are placed in streams for stream nutrification, the placement must follow the Departmental guidelines (Appendix IV - Guidelines for In-stream Placement of Hatchery Salmon Carcasses).

9.2 A carcass placement plan shall be prepared and shall be approved by DFO prior to placing carcasses in or near fish habitat.

9.3 The written approval shall accompany all carcasses being transported for placement.

9.4 Fish that have been spawned or are in excess to spawning, not used in clause 9(1), shall be disposed of in a manner that does not impact the health of fish in fish habitat.

10. Predator Control

10.1 The enhancement facility shall have in place and shall follow an up-to-date Predator Control Plan.

11. Net Pen Rearing

11.1 If net pens are used for marine or freshwater temporary rearing, the facility operator shall follow the conditions set out in Appendix VIII- Licence Conditions for Net Pens operated by Enhancement Facilities.

12. **Records**

12.1 An up-to-date copy of all records listed below relating to the enhancement facility shall be kept at the enhancement facility for a period of 6 years and shall be produced upon request to a Fishery Officer or other representative of the Department.

12.2 Records shall be kept in accessible and legible format, protected from damage. They may be kept either electronically or in a paper version.

12.3 Using Appendix V-Brood Summary Information as a guideline, the facility operator shall maintain records of:

(a) the fish entering or introduced to the enhancement facility as well as all releases and transfers from the enhancement facility by

(i) species;

(ii) age/developmental stage;

(iii) quantity; and

(iv) date of transfer to or from the source facility or water body.

12.4 Using Appendix VI-Fish Health Information as a guideline, the facility operator shall maintain records of:

(i) the number on site, by species and age/developmental stage;

(ii) the number, by species and age/developmental stage of fish mortalities;

(iii) the reason for losses, diagnosis (where applicable);

(iv) any treatment applied; and

(v) vaccination.

13. **Reporting**

13.1 The facility operator must report all transfers to and from the facility, as well as all releases from the facility to the

Salmonid Enhancement Program Planning and Assessment Unit
200-401 Burrard Street
Vancouver, BC, V6C 3S4
Fax: 604 666 1076

(a) All information listed in the Transfer and Release Summary Information as set out in Appendix VII shall be collected and reported. Records may be submitted in hard copy or electronically.
(b) Reports shall be submitted by June 30 of each year for the information on spring releases and transfers.
(c) Reports shall be submitted by October 31 of each year for information on summer and fall releases.

APPENDIX I - List of Significant Diseases

These diseases are not treatable and/or are not known to occur in this area.

1. Infectious Hematopoietic Necrosis (IHN)
    - (causative agent: Infectious hematopoietic necrosis virus (rhabdovirus)

2. Infectious Pancreatic Necrosis (IPN)
    - (causative agent: Infectious pancreatic necrosis virus (birnavirus)

3. Viral Hemorrhagic Septicemia (VHS) – European Strain
    - (causative agent: Viral hemorrhagic septicemia virus (rhabdovirus)

4. Infectious Salmon Anemia (ISA)
    - (causative agent: Infectious salmon anemia virus (orthomyxovirus)

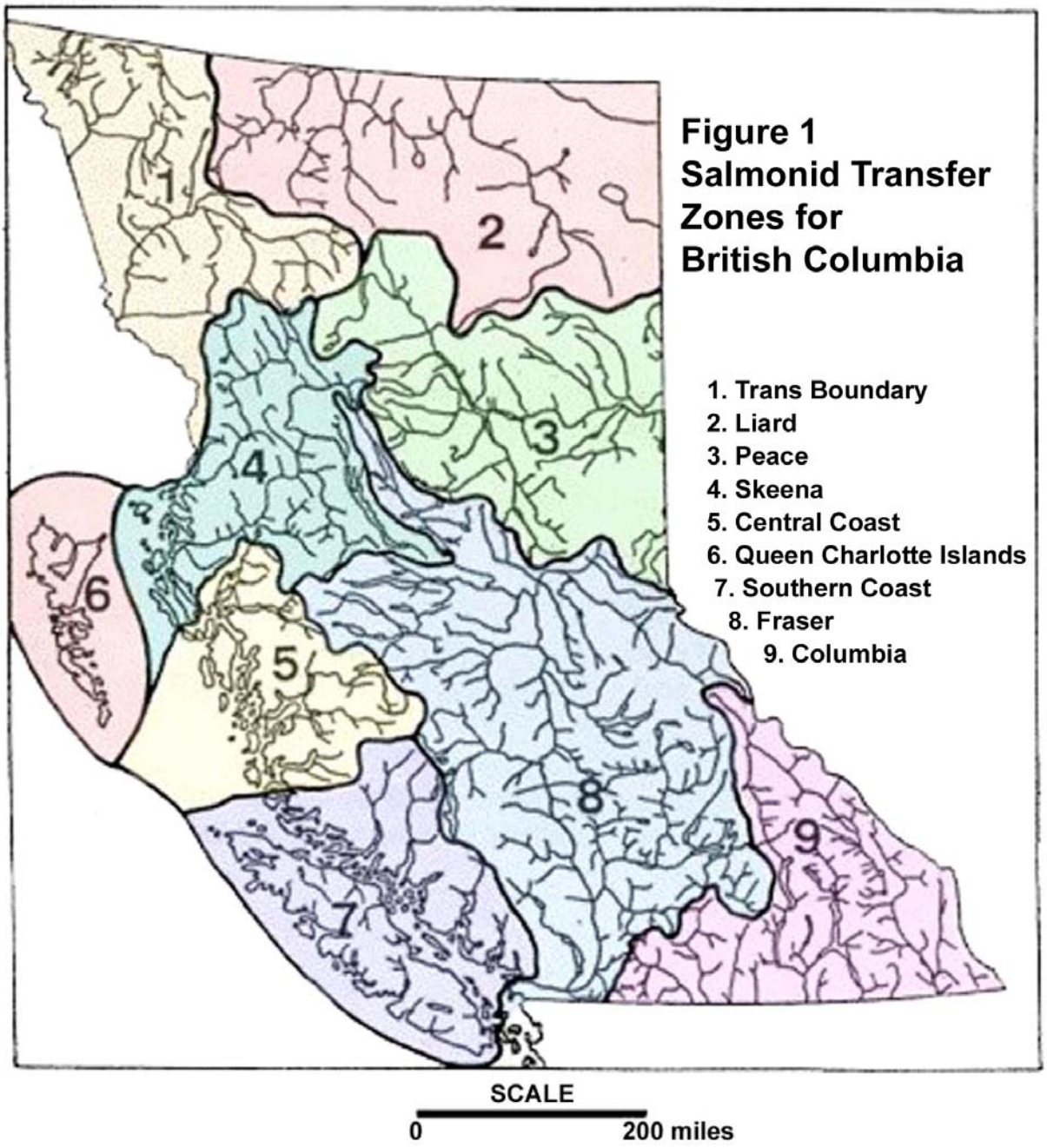
5. *Oncorhynchus masou* Virus Disease (OMV)
    - (causative agent: *Oncorhynchus masou* virus (herpes virus)

6. Any filterable agent causing cytopathic effects in tissue culture other than the above.

7. Whirling disease
    - (causative agent: *Myxobolus cerebralis*)

8. Cold Water Vibriosis (Hitra disease)
    - (causative agent: *Vibrio salmonicida*)

APPENDIX II - Map of Salmonid Transfer Zones



APPENDIX III - Required Elements of a FHMP for Enhancement Facilities

1. General Principles of Fish Health Management:

1.1 Keeping Fish Healthy

1.2 Keeping Pathogens out

1.3 Keeping disease from spreading

1.4 Record keeping

1.5 Impacts on non-enhanced stocks

2. Broodstock and spawning:

2.1 Broodstock selection

2.2 Broodstock handling

2.3 Broodstock Biosecurity

2.4 Adult carcass disposal

3. Incubation:

3.1 Egg disinfection

3.2 Egg fungal treatments

4. Rearing:

4.1 Fish Handling Procedures

4.2 Marking Procedures

4.3 Health Observations

5. Release:

5.1 Pre-release or transfer risk assessment

6. Mortalities and Responses

6.1 Mortality collection and disposal

6.2 Mortality Classification

6.3 Outbreak response

7. Quarantine/Isolation Procedures for suspected disease outbreaks

8. Juvenile treatments

9. Broodstock treatments

10. Diagnostic sampling protocols

11. Chemicals and disinfectants

- 11.1 Anaesthesia
- 11.2 Euthanasia
- 11.3 Chemicals and disinfectants, including handling and storage

12. Equipment disinfection

13. Vaccine handling, storage and administration

14. Site Biosecurity:

- 14.1 Personnel movements
- 14.2 Visitors

15. Disinfectant protocols

16. Water quality monitoring and maintenance

APPENDIX IV - Guidelines for In-Stream Placement Of Hatchery Salmon Carcasses

Planning, Review, And Awareness

Carcass placement plans must be reviewed by a DFO member of the Introductions and Transfers Committee. Projects that meet the terms of the carcass placement guidelines will be issued a letter from the Department allowing the transport and deposition of carcasses. This letter must accompany all carcass movements.

Carcass placement plans should be discussed with all relevant groups and agencies. These groups will include DFO local area staff in stock assessment, habitat, resource management, and Conservation and Protection (Fishery Officers), as well as local First Nations, stewardship groups, affected landowners or any other affected groups. It is also important to contact the regional Ministry of Environment (MoE) office to ensure that carcass placement is coordinated with MoE inorganic nutrient enrichment projects. MoE should also be contacted if placement is considered in non-anadromous waters.

Under the Water Act, downstream water users (primarily local municipalities), must be advised of activities that may potentially impact water quality of their withdrawals. Accordingly, Water Licensees on treatment streams should be advised prior to placement programs. Carcasses should be distributed in such a way so as to avoid or minimize impacts on domestic and other types of intakes or water supplies.

Background material and signage may be provided to advise members of the public of carcass placement activity and its benefits.

Carcass Management and Condition

The placement of salmon carcasses in streams may pose a risk of disease transmission if carcasses of infected fish are used, if carcasses are moved to areas within the watershed that are normally not accessible to salmon, or if carcasses are moved to streams outside the watershed.

Streams that receive carcasses are referred to as “treatment” streams and those that provide carcasses are referred to as “donor” streams. In general, no carcasses may be moved outside their natal stream because of concerns regarding disease transmission. However, in specific circumstances, movement of carcasses from the watershed to nearby streams may be considered if all of the following conditions are met:

- donor and treatment streams are geographically proximate and,
- treatment stream is within the zone of influence of the donor stock (i.e. adults may be straying from donor to treatment stream), and
- current disease history is available.

If sufficient information is not available, health testing of fish in the donor stream and treatment stream may need to be undertaken. Historical information can be obtained by searching the Pacific Biological Station (PBS) Fish Health Database; the Fish Pathology Program may be contacted at (250) 756-7057. Please note that wild fish surveys have not been conducted in many locations in

recent years so that information contained in the database does not include current disease status for many salmon stocks.

Only those fish killed with CO_2 or blunt trauma that show no visible evidence of serious disease should be used for carcass placement. Carcasses of recently dead salmon from managed spawning channels may also be considered for placement.

Because of drug clearance times, and the length of holding, fish previously treated with an antibiotic or anaesthetic must not be used for carcass placement. However, fish treated with external chemicals that do not require a withdrawal period (e.g. Parasite S or Chloramine T) are considered safe for placement. If in doubt, contact the Fish Pathology Program.

Carcasses may be frozen for later use. However, as freezing will not significantly reduce disease organism loads, it should not be considered a disease management tool.

Carcass Loading Density

All salmonid carcasses are considered equal from a nutrient content basis. That is, required placement load may be calculated as biomass and then converted to fish numbers of the available species. For example, chinook carcasses may be substituted for coho, and vice versa. Where system-specific weight data are not available, the following average weights for returning B.C. salmon are provided for weight conversion.

Suggested Average Weights for B.C. salmon *			
Pink	1.5 kg	Steelhead	4.0 kg
Sockeye	2.5 kg	Chum	4.5 kg
Coho	3.0 kg	Chinook	8.5 kg

Data sources: mean weights from B.C. catch statistics.

The maximum carcass placement within a stream segment (including the areas into which carcasses drift from the distribution point), over the course of a spawning season should be 1.9 kg/m². In treatment streams with continuous escapement records, the carcass numbers may be reduced by the recent 10 year average for natural escapement to the treatment reach. For determining total carcass deposition maximums for streams used by more than one salmon species, the area historically available to each salmon species should be used to calculate the loading rate. Spawning timing should be factored into distribution schedules.

Maximum loading densities may be adjusted to reflect the stream's carcass retention properties. Carcass retention in streams is affected by predator / scavenger activity, carcass transport during high flows, and abundance of in-stream structures to catch and retain carcasses. Accordingly, for streams with expected good carcass retention, maximum carcass densities may be reduced by the current spawner densities. For streams with expected poor carcass retention (high gradient, high flows, few pools and few in-stream structures), carcass loading densities need not be adjusted for current spawner densities.

Carcass Distribution

The temporal and spatial distribution of carcasses should reflect the historic spawn timing and abundance of salmon in the treatment reach.

Carcasses should be placed in stream areas that are normally (or recently historically) accessible to salmon, (i.e., not above barriers). Carcass placement into inaccessible stream segments may be permitted where juvenile salmon of the same stock and species have been previously outplanted (e.g., colonized upper areas above impassable barriers) but consultation with regional MWLAP staff is necessary.

Placement in the riparian zone is not necessary and often results in increased numbers of blowflies. Natural predators will remove carcasses from the treatment stream and distribute them in riparian zones.

For streams with poor access (and low public use), a few accessible sites may be used for regular carcass placement. These sites should be inspected periodically to ensure adequate natural dispersion of carcasses. Where dispersal is poor, carcass loading should be reduced.

Carcasses should be distributed in stable stream areas, where possible. This will help avoid rapid downstream transport of carcasses. Optimal sites include shallow backwater pools, side-channels, small headwater tributaries, areas with abundant woody debris and beaver-dam complexes. However, note that placing excessive numbers of carcasses in side pools with sluggish or intermittent water exchange may cause de-oxygenation.

Carcass placement should be avoided or delayed during high flow events, especially where anchoring and/or riparian placement is not feasible.

Timing of carcass placement is also important as nutrients should be made available to young salmon upon their emergence from the gravel. Placement timing may be early, mid or late, and may be used to influence the ecological response to loading within watersheds. For example, the use of carcasses from later runs of native salmon (fall and winter) may benefit the next growing season, provided that some nutrients are stored through the winter. Also, the use of carcasses from several species, each with a different run timing (e.g., early sockeye, mid-chum, late coho), will provide a longer nutrient pulse in the treatment stream than if only one or two species were used, each with a brief spawning period.

If a treatment stream has a late natural spawning timing, carcasses from earlier runs to the treatment stream may be frozen and stored for later placement. The use of frozen carcasses is also convenient for long-distance transport.

Carcass distribution schedule should consider anticipated problems of poor stream accessibility due to snow, high water, and other constraints.

Carcass Anchoring/Mutilation

Carcasses may be tethered or anchored in place, especially in unstable, higher-flow areas in order to improve carcass retention.

Where carcass anchoring is desirable, natural anchors (e.g., large woody debris, log-jams, beaver-dams) or bio-degradable tethers such as natural-weave ropes, should be used where possible. External identification tags should be removed from carcasses prior to their placement.

Non-bio-degradable tethers should be collected and removed from the stream after carcass decomposition.

Where frozen carcasses are used, they should be tethered in place (frozen carcasses float and may be readily transported downstream). Where tethering is not possible, it is preferred to thaw out at least one fourth of the frozen carcasses before distributing them in order to enhance carcass retention at the point of access.

Where escapement enumeration programs will be conducted on treatment streams, carcasses should be cut in half or otherwise mutilated at placement, as directed by area stock assessment staff. This is crucial in order to avoid double-counting and ensure that enumeration programs are not affected.

Records of Carcass Placement

Records of numbers and species of carcasses placed in treatment streams should be maintained in annual data summaries, including areas and dates of placement.

Summaries should be provided to the contact member of the Introductions and Transfers Committee.

APPENDIX V - Brood Summary Information

The following information must be recorded and made available upon request by departmental staff

Facility: Contact name:
Date of reporting:

Stock name
Stock type (Mixed, Wild, Hatchery, Captive)
Species
Run (Time adults enter fresh water)
Brood year

Broodstock taken:
Females # used: # Prespawn morts:
Males # used: # Prespawn morts:

Eggs:
taken: # Transferred out/in:

Juveniles:
ponded: # transferred out/in: # on hand:

Releases:
Release site: Release date: Release stage:

Tag code/fin clip type: # tagged/clipped
Tag retention #: Tag retention sample days:
unmarked:

Total # released: weight (g): length (mm):

Enumeration method:

APPENDIX VI - Fish Health Information

Facility name:
Licence number:
Date of report:

	Details (to be filled in)	Comments
Date of event		
Major mortality event	Yes/No Destruction/Accidental (circle as needed)	
Cause/Diagnosis		
Lot(s)/container(s) affected		
Fish species affected		
No. of fish of this species/age on site		
Number of affected lots/containers		
Estimated number of mortalities		
Name of drug used Prescription number if available		
Date treatment started		
Date treatment completed		
Withdrawal time		
How applied (bath, feed..)		
Amount (kg of treated feed used, weight/volume and concentration administered by bath)		
Response description		

Vaccine administered (Trade name)		
Vaccine lot numbers		
Date		
Fish stock		

APPENDIX VII –Fish Transfer and Release Summary Information

To be reported as stated in Section 13.1 of this licence.

Date of Report:

Facility Name:

Reporting for: Spring Release_____ Fall Release _____

Brood Year	Species	Stock	Release Stage	No. of Transfers In	No. of Transfers Out	Release Site	No. Released

APPENDIX VIII- Licence Conditions for Net Pens operated by Enhancement Facilities

1. Containment Structures and Net Pen Support Systems

1.1 Facility operators shall ensure that equipment used at the net pen facility is designed, constructed and maintained to meet generally accepted standards prevalent in the aquaculture industry.

1.2 Containment structures shall be repaired or replaced with materials that meet or exceed the specifications prevalent in the aquaculture industry.

1.3 All net pen support system weights, anchoring equipment and other equipment shall be designed, constructed, installed and maintained in a manner as to prevent entanglement, catching, chafing or abrading any component of the containment system.

1.4 Above-water visual inspections of active net pen support systems including, anchoring-line buoy orientation and the general integrity of the anchoring system shall be conducted at all net pen facilities. Inspections shall be done daily or at a minimum, at every feeding.

1.5 Any irregularity or damage during the visual inspection must be corrected or repaired immediately.

1.6 A record of the visual inspection and any repairs carried out under this section must be made and a copy of the record must be retained at enhancement facility for not less than one year.

1.7 Anchoring equipment design must be compatible with the containment structure equipment and biophysical conditions of the location.

1.8 Anchoring equipment shall be repaired or replaced as required with materials that meet or exceed specifications generally accepted in the aquaculture industry.

1.9 Navigation marker buoys shall be deployed as required by Transport Canada.

2. Containment Structure Design, Installation and Maintenance

2.1 Primary net mesh shall meet or exceed 30 lb breaking strength.

2.2 Net mesh size shall be of a size to contain smallest fish in each pen.

2.3 Net pens shall be weighted at sufficient number of points to ensure the tension or weight is distributed evenly.

2.4 Sufficient weight or pressure shall be used to keep net panels taut.

2.5 Containment structures shall be stored in a manner that minimizes deterioration of the containment structure material.

2.6 Facility operators shall ensure that all tears found while handling or inspecting net pens in use or intended for use at any time are repaired immediately.

2.7 A complete visual inspection of the entire containment structure shall be completed for signs of abrasions, tears, or holes fish prior to the initial introduction of a new group of fish.

2.8 Any damage to the containment structure shall be repaired as needed.

2.9 After fish are released, nets must be washed, repaired and stored. Records of net use and servicing must be maintained for each net.

2.10 Net washing must be done in a manner that the activity does not damage fish habitat or shed fish pathogens and deleterious substances into fish habitat.

3. Predator Control

3.1 Net pens shall be installed and maintained such that the upper edges are secured high enough out of the water to prevent mammalian predators such as seals or otters from coming in over the top edge.

3.2 Avian predator nets (bird netting) should be stretched over the net pens to prevent fish from being taken by birds.

4. Fish Health

4.1 No fish shall be introduced to the net pens except in accordance with the fish Health Management Plan (FHMP).

4.2 The FHMP of the enhancement facility shall be followed for the fish reared in net pens. Measures to control and monitor the presence of pathogens and pests in the net pens must be included in the plan

4.3 Mortalities must be collected on a regular basis to ensure conditions set out in Section 5.5 to 5.7 of Part C of this licence are met.

4.4 Water quality in the area of the nets must be monitored before fish are transferred to the net pens and while the fish are reared in the pens to ensure the biological requirements of the fish are met.

5. Antifouling

5.1 All anti-fouling coatings on net pens must be in compliance with accepted industry standards.