

Appendix K

INTEGRATED CONTINGENCY PLAN

Kelly Cove Salmon Ltd.
Oak Bay Hatchery

93 Oak Haven Road
Oak Haven, NB E3L 2S7

Oil Spill Prevention Control and Countermeasures (SPCC) Plan

Hazardous Matter Spill Prevention Control and Cleanup Plan

Facility Emergency Response Plan

February 2008
Reviewed February 12, 2016

Oil SPCC, Hazardous Matter SPCC and Emergency Response
Integrated Contingency Plan

Kelly Cove Salmon Ltd.
Oak Bay Hatchery

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PROMULGATION STATEMENT

To All Recipients:

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Transmitted herewith is the Hazardous Materials Emergency Plan and Integrated Contingency Plan for Oak Bay Hatchery. It provides a framework to use in the performing of emergency functions during a hazardous materials incident and/or oil spill.

This Hazardous Materials Emergency Plan includes the four phases of emergency management: (1) **Mitigation** - those activities which eliminate or reduce the probability of an incident; (2) **Preparedness** - those activities developed to save lives and minimize damage; and (3) **Response** - immediate activities which prevent loss of lives and property and provide emergency assistance.

This plan is in accord with existing Federal and Provincial statutes. It will be tested, revised and updated as required. All recipients of this plan are requested to advise Brian Donnelly of Oak Bay Hatchery regarding recommendations for improvements.

Brian Donnelly, Hatchery Manager

(Date)

MANAGEMENT APPROVAL

I, the undersigned, having the necessary authority to commit Oak Bay Hatchery personnel to the implementation of this Plan, hereby certify that this Spill Prevention, Control, and Countermeasures (SPCC) Plan will be implemented as herein described. A copy of this Plan shall be kept at the facility and will be made available upon request.

Name and Address of Owner/Operator: Kelly Cove Salmon FW
Address: Oak Bay Hatchery
93 Oak Haven Road, NB E3L 2S7

Authorized Signature

Name (Print): Dr. J.A.K. Elliott.

Title: Vice President of Freshwater Operations.

Date:

Emergency Coordinators

Name/Title	Telephone #
Brian Donnelly, Hatchery Manager	(w) (506)755-5291 Mobile: (506) 467-1866
Cory Taylor, Fresh Water Production Manager	(w) (506) 755-5285 Mobile: (506)754-5527
Mitchell Dickie, Freshwater Maintenance Manager	(w) (506) 755-5282 Mobile: (506) 754-2109

1.0 PURPOSE

The purpose of this Oil Spill Prevention Control and Countermeasures (SPCC), Hazardous Matter Spill Prevention Control and Cleanup, and Facility Emergency Response Plan (“the Plan”) is to prevent oil spills and/or releases of hazardous matter from occurring, and to perform safe, efficient and timely response in the event of a spill or leak (both referred to as “spills” herein).

This Integrated Contingency Plan also addresses the proper procedures for prevention and response to releases of hazardous matter in accordance with Water Quality Regulations under the Clean Environment Act and the current Approval to Operate as issued by the New Brunswick Department of Environment.

One purpose of this plan is to identify the chemical hazards that pose a threat to the employees and property at the Oak Bay Hatchery, and to the citizens and property of the surrounding community. This plan develops mitigation efforts, lessens the potential effects of a hazardous materials incident, coordinates response and necessary assistance during emergencies, and establishes a recovery system to return the facility to its normal condition.

Reference should also be made to Environmental Management System.

This plan will be reviewed every two years and amended within six months of the review to include more effective prevention and control technology if;

- ✦ Such technology will significantly reduce the likelihood of a spill event from the facility
- ✦ If such technology has been field-proven at the time of the review.

1.1 Using the Plan

In addition to satisfying regulatory requirements, this Plan is a working document at the hatchery. The plan will be used in the following ways:

- ✦ As a reference for oil storage and containment system information
- ✦ As a reference for storage of hazardous materials
- ✦ As a procedure for emergency response
- ✦ As a tool for informing new employees (and refreshing existing employees) on practices for preventing and responding to spills and emergencies
- ✦ As a guide to periodic training programs for employees
- ✦ As a guide to facility environmental inspections

The Emergency Coordinator and the Alternate Emergency Coordinator will be trained in the safe and effective implementation of this Plan. In addition, they will train all hatchery personnel in these procedures for spill prevention and control, and emergency evacuation.

During a chemical emergency or oil spill at the Oak Bay Hatchery, response is coordinated by the Emergency Coordinator, Mr. Brian Donnelly, or the Alternate, Mr. Cory Taylor.

The Emergency Coordinator identifies the character, exact source, amount and extent of any released material. With the assistance of other personnel as needed, the Emergency Coordinator assesses the possible hazards to human health and the environment that may result from the release. This assessment must consider both direct and indirect effects of the incident (e.g., the effects of any toxic, irritating, or asphyxiating gases that are released or generated by fire or the effects of any hazardous surface runoffs from water or chemical agents used to control the release or fire).

The Emergency Coordinator notifies hatchery employees regarding the release and provides emergency notification to the proper local, Provincial, and Federal officials and agencies, when necessary.

1.2 SPCC Plan Revisions

Oak Bay Hatchery will revise this Plan for any change in the facility design, construction, operation or maintenance that affects the facility's potential for discharging oil or hazardous matter. Revisions must occur as soon as possible, but no later than six months after the change occurs. The Freshwater Production Manager is responsible for initiating and coordinating such revisions. Additional requirements for the Plan's development and maintenance in accordance with the emergency management rules are described in the following section.

1.3 Development and Maintenance

Oak Bay Hatchery has the responsibility for the development and maintenance of this Integrated Contingency Plan and its specific emergency response procedures.

Mock drills for evacuation and other pertinent emergency/spill response activities will be exercised annually at our hatchery. It is assumed that there may be deficiencies in the plan that will become evident when the plan is activated or exercised. If these are discovered, corrective actions will be implemented and the Plan will be revised accordingly.

An ongoing file of recommended changes of improvements is maintained. An annual review of the plan by Oak Bay Hatchery ensures that all procedures, policies, data, and responsibilities are current and reflect actual assignments.

1.4 Facility Description

Oak Bay Hatchery operates a freshwater salmon hatchery in Oak Bay, New Brunswick. The Hatchery is located along the shore of the St. Croix River in Oak Bay NB. The facility consists

of a number of steel and greenhouse buildings. These consist of Tech-room building, Main Office, A-Line, B-Line, C-Line, D-Line, E-Line, F-Line and G-Line, as well as a belt filter building, saltwater intake building and a spring water building.

2.0 PREPAREDNESS AND PREVENTION

Training will be provided for employees to recognize potentially hazardous situations and to initiate appropriate responses to minimize employee injury, property damage, and environmental impact. Designated personnel will be trained in the proper and safe use of emergency response equipment, other respiratory protection, personal protective equipment (PPE), and will be fit-tested for respirator use.

Further, the following conditions are met:

- A. Engineering controls are in place to minimize the risk of fire, explosion, or release of hazardous waste.
 - 1. Hazardous materials are labeled and stored appropriately.
 - 2. Signs mark areas containing risks that note the danger and cautions necessary.
 - 3. All chemical processes introduced to the facility are approved for use by the Hatchery Manager.

- B. Emergency equipment is maintained as follows:
 - 1. Telephones are readily available throughout the facility.
 - 2. Fire extinguishers are situated throughout the facility and are inspected on an annual basis.
 - 3. Spill control equipment is available in appropriate areas.

2.1 Hazard Identification

Oak Bay Hatchery is committed to the safety of its employees and the surrounding community. Due to the storage of formaldehyde and liquid oxygen, the Oak Bay Hatchery has developed this Emergency Response Plan to provide safeguards and an incident response system to implement in the event of a release of hazardous materials.

Knowing what could happen, the likelihood of it happening, and having some idea of the magnitude of the problem(s) that could arise are essential ingredients for emergency planning. Therefore the first step in this process is the identification and analysis of potential hazardous materials incidents.

Oak Bay Hatchery will develop a hazard recognition process, warning systems, emergency response, evacuation procedures, first aid, mitigation and notification requirements to implement in the event of a release of hazardous substances.

Summary of Internal Chemical Hazards

Oak Bay Hatchery has evaluated its chemical inventories and identified the following extremely hazardous substances at our facility which require emergency planning:

MAXIMUM Quantity Stored

Formaldehyde	1600 liters
Liquid Oxygen	6,000 gallons

Other chemicals that we have in our possession at this facility that are not extremely hazardous chemicals are:

Sodium Hypochlorite	40 liters.
No. 2 Fuel Oil	4200 gallons (3 tanks)
Calcium Chloride	10 ton
Caustic Soda	1600 liters
Caustic Soda beads	3 tons
Chloramine T	10 kg
Diesel	500 Gal
Hydrochloric Acid	40 liters
Magnesium Chloride	5 ton
Ovaplant	200 pellets
Ozone	3 kg/day not stored
Virkon	40 kg
Ovadine	100 liters
TMS	10 kg

All chemicals and petroleum products will be replaced with biodegradable alternatives when possible. In addition Oak Bay Hatchery will strive to minimize usage of chemical and petroleum products.

Hazardous materials will be stored in secure areas to prevent entry by unauthorized personnel. Storage areas will be inspected periodically to verify that no storage containers are rusting, bulging or leaking, and that there is sufficient aisle space between containers to allow for

inspection and, if necessary, remediation and clean-up. All chemicals will be stored according to manufacturer's specifications and MSDS sheets for all products will be available close to the point of use and in the office. All necessary protective equipment will be available as described in the MSDS sheets and in compliance with WHSCC and Cooke Aquaculture's health and safety policy.

All sources of oil and hazardous materials are located inside the facilities or within locking containment buildings. During non-operational hours, the facilities are locked, preventing unauthorized access to the oil storage areas at the facility. Adequate lighting has been provided such that any person unauthorized to access the facility could be spotted.

All bulk fuel tanks at the hatchery are double walled tanks and have been placed in a containment pit.

2.2 SPCC Compliance

Employees will be trained to contact the Emergency Coordinator in the event of a potentially significant spill or leak. The Emergency Coordinator is responsible for evaluating the spill or emergency and taking appropriate action to address the situation (such as notifying the appropriate authorities and/or contacting a clean-up contractor(s), if necessary).

If a spill, leak or other condition is discovered that may result in the release of oil, action to contain or eliminate the release or otherwise prevent the release will be taken immediately. In the event of an incidental spill or leak, when the substance and its hazards are known and they do not pose a threat, then appropriate absorbent material will be applied by the person who discovered the release in order to contain or control the spill.

Following any spill event, the team will evaluate the success of the spill response, and offer recommendations necessary to improve the effectiveness of the hatchery's spill response procedures, equipment or construction. If the release and corrective actions result in changes to the hatchery's operation or maintenance, revision of this Plan is required within six months.

Spill notification forms in **Attachment 5.2 and 5.3** of this Plan will be completed and copies will be kept on file in the main office.

2.3 Oil and Hazardous Material Storage Tables

ABOVEGROUND OIL STORAGE TANKS

LOCATION	CAPACITY (liters)	PRODUCT	ESTIMATED SPILL DIRECTION AND RATE	CONTAINMENT & SPILL CONTROL FEATURES
Outside Tech Building	4,745	No. 2 Fuel	Fully contained	Located outside on impervious surface, no floor drains, spill kit immediately available
Outside Tech Building	13,600	Diesel	Fully contained	Located inside on impervious surface, no floor drains, spill kit on-hand
Inside Tech Building	2,300	Diesel	Fully Contained	Located inside on impervious surface, no floor drains, spill kit on-hand
Outside G-Line	910	No. 2 Fuel	Within secondary containment	Secondary containment fiberglass tank with drain

CHEMICAL STORAGE

BLDG. or LOCATION	Container / Tank	PRODUCT	NEAREST DRAIN	ESTIMATED SPILL DIRECTION AND RATE	CONTAINMENT & SPILL CONTROL FEATURES
Chemical storage area B-Line	Four (4) barrels	Formaldehyde 37%	<10 feet from drain that leads directly to pretreatment system	Containment Pallet	On concrete surface of acceptable integrity Spill kit immediately available
Chemical storage area E/F-Line	Four (4) barrels	Formaldehyde 37%	<10 feet from drain that leads directly to pretreatment system	Containment Pallet	On concrete surface of acceptable integrity Spill kit immediately available
Chemical storage area E/F-Line	Two (2) Pallets	Caustic Soda	<10 feet from drain that leads directly to pretreatment system	n/a Dry beads in plastic bags.	On concrete surface of acceptable integrity Broom and dust pan available

3.0 SPILL PREVENTION

3.1 SPCC Features and Operating Procedures

Hatchery employees will be trained to implement spill prevention practices for work with and around oil sources. Hatchery personnel shall use common sense and rely on spill prevention practices at all times to minimize the potential for a release of oil.

For example, the following “common sense” practices are recommended:

- ✦ keep container lids securely fastened at all times;
- ✦ do not leave portable sources unattended (outside);
- ✦ return portable sources to their storage location after use;
- ✦ use pads, drip pans, and funnels when transferring product from a portable container;
- ✦ protect oil and hazardous material storage from damage by moving equipment;
- ✦ any contaminated water within the diked area shall be removed and disposed of by a licensed spill response contractor;
- ✦ do not store oil/hazardous matter sources near catch basins or floor drains; and
- ✦ loading and unloading of petroleum products shall be attended at all times.

Spill prevention during oil deliveries (offloading) is the primary responsibility of the supplier until the product is safely in the tank or vessel. Dispensing fuel to Oak Bay Hatchery equipment is the responsibility of hatchery personnel. Oak Bay Hatchery implements spill prevention measures for equipment filling and truck unloading operations.

Supplier Approval

The supplier approval process endeavors to ensure that the vendor meets the minimum requirements and regulations for tank truck unloading as established by the Department of Transportation. These supplier approval procedures also ensure that the vendor understands the site layout, knows the protocols for entering the site and unloading product, and has the necessary spill equipment on board to respond to a spill from the vehicle or fuel delivery hose.

Observation of Deliveries

The Hatchery Manager (or his designee) will supervise deliveries for all new suppliers and will periodically observe deliveries for existing, approved suppliers. Delivery observations include:

- ✦ vehicle inspection prior to delivery and departure
- ✦ inquiry to ensure the truck contains the right product for the tank
- ✦ assurance that the tank can hold what the supplier intends to deliver
- ✦ adequate spill response equipment is present
- ✦ Facility personnel will monitor the fueling area for safe and proper operation, and will take immediate action to correct any deficiencies

3.2 Tests and Inspections

The personnel at the facility shall perform testing, inspection, and maintenance of all petroleum equipment to keep it performing in an efficient and environmentally sound manner. The tests and inspections shall be performed as discussed in the following subsections.

Inspecting Aboveground Storage Tanks (ASTs)

The AST shall be inspected monthly, and the results shall be recorded on the *Monthly AST Inspection Report (Attachment 5.4)*. Spill response kits kept on site shall also be checked during the monthly AST inspection, and restocked as necessary. The monthly inspection reports shall be kept for at least three years in a file maintained by the Freshwater Production Manager. Inspections include observations of the exterior of the tank for signs of deterioration or spills (leaks), observations of the tank foundation and supports for signs of instability, and observations of the vent, fill and discharge pipes for signs of poor connection, that could cause a spill. In addition to these monthly inspections, the facility will periodically verify the integrity of each tank every ten years, or more often as deemed necessary by the inspection results.

Tank Maintenance

All petroleum tank and piping problems shall be immediately reported to the Environmental Manager and Operations Manager. Visible oil spills/leaks from tank walls, piping or other components shall be repaired or replaced immediately to prevent the potential for a major spill from the source, or any discharge to the environment.

3.3 Training

Oak Bay Hatchery will provide SPCC spill training, Annual Emergency Response training and mock drills for personnel involved with handling petroleum products and hazardous matter. The Freshwater Production Manager arranges for annual training, which includes the following training topics:

- ✦ an introduction to pollution control laws;

- ✦ rules and regulations pertaining to the use and storage of petroleum products;
- ✦ inspection, operation and maintenance of spill equipment, and petroleum storage and dispensing equipment;
- ✦ emergency and spill response / cleanup;
- ✦ spill notification and record keeping;
- ✦ spill prevention practices; and
- ✦ storm water pollution prevention plan compliance.

The annual Emergency Response and SPCC training will be documented to include the instructor's name, course outline, date and duration of training, attendant's names and signatures, and corrective action list for areas in need of improvement, if any. This information is filed and maintained for at least 3 years at the main office. A Certificate of Training will be presented to each employee that has completed the training. The Human Resources Department maintains a copy of training certificates in each employee's personnel file.

3.4 Security

Site security includes fencing, warning signs and security lighting around the property. All visitors and contractors at the site must check-in with hatchery personnel; and personnel are trained to challenge anyone who is not on a scheduled visit of the property.

4.0 SPILL RESPONSE

This section describes the cleanup response and protocols to follow in the event of oil/hazardous matter spill or other emergency. The uncontrolled discharge of oil to groundwater, surface water or soil is prohibited. It is imperative that action be taken to respond to a spill once it has occurred, and to have a systematic response to any other types of emergencies. In the event of a spill, depending on the volume and characteristics of the material released, Oak Bay Hatchery has defined spill response as either a "Minor Spill Response" or "Major Spill Response" ("Spill Emergency"). A list of Emergency Contacts is included in **Attachment 5.1**.

4.1 Discovery

Every employee working within areas of hazardous substances shall be trained in recognizing spills. Upon discovery of a discharge, or imminent discharge, of any oil or hazardous substance, the discoverer shall immediately notify the Emergency Response Coordinator as to the nature and extent of the emergency.

4.2 Minor Spill Response

A “Minor Spill Response” is defined as one that poses no significant harm to human health or the environment. These spills involve generally less than 5 gallons and can usually be cleaned up by Hatchery personnel. Other characteristics of a minor spill include the following:

- ✦ the spilled material is easily stopped or controlled at the time of the spill;
- ✦ the spill is localized;
- ✦ the spilled material is not likely to reach surface water or groundwater;
- ✦ there is little danger to human health; and
- ✦ there is little danger of fire or explosion.

In the event of a minor spill the following guidelines shall apply:

1. Immediately notify the senior on-site person (i.e. Hatchery Manager).
2. The Hatchery Manager will notify the New Brunswick Department of Environment.
3. Identify the contents of the spill and refer to the MSDS for chemical hazard information, clean-up tips and special handling procedures.
4. Trained personnel will contain the spill with spill response materials and equipment.
5. Place spill debris in properly labeled waste containers.
6. Complete the *Minor Hazardous Material spill/leak Form (Attachment 5.2)* and file.

4.3 Major Spill Response

A “major spill” is defined as one involving a spill that cannot be safely controlled or cleaned up. Characteristics include the following:

- ✦ the spill is large enough to spread beyond the immediate spill area;
- ✦ the spilled material enters surface water or groundwater (regardless of spill size);
- ✦ the spill requires special training and equipment to cleanup;
- ✦ the spilled material is dangerous to human health; and
- ✦ there is a danger of fire or explosion.

In the event of a spill emergency, the following guidelines shall apply:

1. All workers shall immediately evacuate the spill site and move upwind/upgrade to a safe distance away from the spill.
2. The Emergency Coordinator (or his alternate) will call for medical assistance if workers are injured (no worker shall engage in rescue operations unless they have been properly trained and equipped).
3. The Emergency Coordinator shall immediately contact the Department of Environment.
4. Notify the local Fire Department and/or Police Department.
5. The Emergency Coordinator shall contact the Freshwater (FW) Production Manager and provide details regarding the spill.
6. The Emergency Coordinator and FW Production Manager will coordinate cleanup and seek assistance from a cleanup contractor as necessary.
7. Complete the *Spill Notification Form (Attachment 5.3)*
8. In the event of a worker is injured during an accidental spill The Emergency Coordinator shall contact the Company Health and Safety Coordinator.

4.4 Evacuation Information

All employees except those designated are to exit the facility. Emergency Escape Route diagrams will be developed and placed in a prominent place inside each building. An Evacuation Plan will be developed and posted with the Escape Route Diagrams.

The Emergency Coordinator, or his designee, is responsible for a head count once employees are evacuated. If persons are missing, the Emergency Coordinator must notify all personnel and make every effort.

Once the building is evacuated, no one can re-enter until the Emergency Response Coordinator confirms the facility is safe and authorized return to work.

4.5 Waste Disposal

Wastes resulting from a minor spill response will be containerized in impervious bags, drums or buckets. The waste will be removed from the site by a licensed waste hauler and taken to an approved facility.

Wastes resulting from a major spill response will be removed and disposed by a licensed cleanup contractor under the direction of the Department of the Environment.

ATTACHMENTS

ATTACHMENT 5.1

EMERGENCY CONTACTS

ORGANIZATION	PHONE
Fire Department	Emergency – 911
Ambulance Service	911
RCMP	911
Charlotte County Hospital	262-5000
Poison Control Center	911
Department of Environment Report a spill during normal business hours	1-506-658-2558
Canadian Coast Guard Report a spill after hours	1-800-565-1633

EMERGENCY COORDINATORS		
Primary Emergency Response Coordinator	Brian Donnelly	Office: 506-755-5291 Mobile: 506-467-1866
First Alternate Emergency Response Coordinator	Cory Taylor	Office: 506-755-5285 Mobile: 506-754-5527