



Aquaculture Operator
**Incident
Reporting
Guidelines**

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Acronyms and Definitions

AAHD: Aquatic Animal Health Division

ADM: Assistant Deputy Minister, Fisheries and Aquaculture Branch

BMA: Bay Management Area

CAV: Chief Aquaculture Veterinarian

CFIA: Canadian Food Inspection Agency

DAD: Director of Aquaculture Development

FFA: Fisheries, Forestry and Agriculture

SOP: Standard Operating Procedure

Abnormal Mortality: Mortality equivalent to three per cent or higher of the current aquaculture inventory within a marine and freshwater site, vessel or other method of transport and/or transfer for salmonid and cleaner fish aquaculture licensed sites; or any incident at an on-land salmonid and/or cleaner fish aquaculture licensed site, where an incident is encountered, which requires additional resources for the on-land facility to address and mitigate the incident.

Acute: Short duration, sudden onset of an incident or mortality event.

Adverse Environmental Condition: Any environmental effect that impacts the life or health of farmed finfish or shellfish such as, but not limited to, temperature fluctuations, increased or decreased precipitation, wind, ice, exposure to hazardous substances in the air or water or algae bloom.

Danger: A situation where multiple farmed aquatic animals are at risk or are susceptible to a possible hazard.

Depopulation Order: An official order issued by Fisheries, Forestry and Agriculture which requires a licensee to remove finfish and shellfish from a defined area.

Escape: Escapement of salmonid from a marine or freshwater site, vessel, vehicle, or other method of transport/transfer, on-land facility or other holding unit that contains cultured animals into the wider marine or freshwater environment.

FFA Reportable Mortality Incident: Mortality equivalent to three per cent or higher than the current aquaculture inventory within a marine or freshwater site, vessel or other method of transport and/or transfer for salmonid and cleaner fish aquaculture licensed sites; any event at an on-land salmonid and cleaner fish aquaculture licensed site, where an incident caused or under slightly different circumstances, would have caused abnormal mortality, harm or an imminent threat to cultured fish, installation or structure at a licensed on-land aquaculture site, or any event that impairs the function of any equipment that sustains fish health and prevents escape; detection or confirmation of a Reportable Disease; suspected or confirmed escape; or a moderate outcome as determined by the Incident Management Risk Assessment Matrix.

For shellfish mortality levels of over 75 per cent mortality of the current aquaculture inventory within a marine or freshwater site, vessel or other method of transport and/or transfer for shellfish aquaculture licensed sites; any event on land at an aquaculture licensed site where an incident caused or under slightly different circumstances would have caused abnormal mortality, harm or an imminent threat to cultured shellfish, installation or structure or any event that impairs the function of any equipment that sustains shellfish health; detection or confirmation of a Reportable Disease; or a moderate outcome as determined by the Incident Management Risk Assessment Matrix.

FFA and Public Reportable Mortality Incident: Mortality equivalent to 10 per cent or higher of the current aquaculture inventory within a marine and freshwater site, vessel or other method of transport and/or transfer for salmonid and cleaner fish aquaculture licensed sites; any event at an on-land salmonid and cleaner fish aquaculture licensed site, where an incident occurs which requires additional resources for the on-land facility to handle and mitigate the event; detection or confirmation of a Reportable Disease; suspected or confirmed escape; or a high outcome as determined by the Incident Management Risk Assessment Matrix.

Harm: Any event that causes injury, damage or has a negative effect on farmed finfish or shellfish, marine installation, hatchery or structure or vessel on a licensed finfish or shellfish aquaculture site that affects the health or life of farmed finfish or shellfish.

Hazard: Any issue or element associated with an incident that, if corrected, could have prevented the incident from occurring or would have significantly mitigated its consequences.

Imminent Threat: Any event that poses a certain or probable risk, hazard or danger to farmed finfish or shellfish, marine installation, hatchery, structure or vessel on a licensed finfish or shellfish aquaculture site that poses certain or probable threat to the health or life of farmed finfish or shellfish.

Impairment or Damage to Critical Equipment: Critical equipment or system that has degraded or cannot meet the performance requirement for its functionality, availability or reliability to provide the life support system necessary for maintaining the health or life of farmed finfish or shellfish.

Incident: Any event that caused or under slightly different circumstances would have caused abnormal mortality, harm or an imminent threat to farmed finfish or shellfish, marine, freshwater or on-land installation or structure or vessel on a licensed finfish or shellfish aquaculture site. It also includes any event that impairs the function of any equipment required to sustain aquatic fish health and prevent escape, and any other event deemed reportable by the department.

ISAv: Infectious Salmon Anaemia virus

Leak of a Hazardous Substance: An accidental accumulation, spill or leak of a hazardous substance that affects the health or life of farmed finfish or shellfish.

Life Support System: Any and all artificial or natural systems that provide all or some of the items (such as oxygen, food, water, control of temperature and pressure, control of carbon dioxide and wastes) necessary for maintaining the health or life of farmed finfish or shellfish.

Mitigation Measure: An action taken to prevent or correct the cause of a system deficiency, hazard or risk that will immediately prevent that particular incident from occurring or an action taken to reduce the likelihood that an underlying system deficiency or hazard will cause a similar incident to occur. Corrective and preventive actions should be specific, measurable, achievable, reasonable, and timely (SMART), and must be effective in preventing or reducing the likelihood of recurrence of incidents.

Non-Reportable Incident: Mortality below three per cent or an incident that is determined to be a low outcome as determined by the Incident Management Risk Assessment Matrix.

Near Miss: Any event that, under slightly different circumstances, would likely have caused harm to farmed finfish or shellfish, marine or on-land installation or structure or vessel on a licensed finfish or shellfish aquaculture site.

Quarantine Order: An official containment measure, issued by the CAV, taken to prevent the introduction or spread of a disease by controlling or prohibiting movement of fish, fish products, feed, equipment or any other thing to or from the site.

Reportable Disease: A disease/pathogen identified by FFA which must be reported to the CAV.

Root Cause: Initiating cause of either a condition or a causal chain that leads to an outcome.

Root Cause Analysis: Analysis performed to determine the root cause of the incident.

Background

Aquaculture Policy and Procedures Manual: www.gov.nl.ca/ffa/files/licensing-pdf-aquaculture-policy-procedures-manual.pdf

For incident management and public reporting, all aquaculture licensees must follow policy AP 17 of the Aquaculture Policy and Procedures Manual.

For Reportable Disease events, all licensed aquaculture licensees must follow policies AP 17, AP 32 and AP 33 of the Aquaculture Policy and Procedures Manual.

For suspected or confirmed escapes, all licensed finfish aquaculture licensees must follow the procedures and reporting requirements stipulated in the Code of Containment and policies AP 17 and AP 32 of the Aquaculture Policy and Procedures Manual.

Approach

FFA has established a four-pronged approach to incident reporting:

Incidents resulting in Abnormal Mortality

Licensed shellfish, salmonid and cleaner fish licensees are required to report abnormal mortality of shellfish, salmonid and cleaner fish experienced above a set threshold level to FFA and to the public for marine or freshwater aquaculture licensed sites and during the transport/transfer of fish. For on-land licensed aquaculture sites, abnormal mortality must be reported when increased resources are required to address and mitigate the incident.

Incidents without Abnormal Mortality

Finfish and shellfish licensees are required to utilize an incident management risk assessment matrix to assist in reporting decision-making. The matrix helps to determine the level of risk an incident poses to farmed finfish or shellfish by considering the category of degree of hazard (the probability or likelihood of occurrence) against the category of impact (consequence severity). The calculation of these two categories would determine a score which identifies a low, moderate or high level of risk outcome determining the reporting requirement.

Reportable Disease Events

Finfish and shellfish licensees are required to report the detection and confirmation of federally Reportable Diseases to FFA and the public. Quarantine, Depopulation orders or directives issued by the CAV or the Minister of FFA for a licensed aquaculture site must also be reported to the public.

Suspected and Confirmed Escapes

Finfish licensees are required to report all suspected and confirmed escapes from a licensed finfish aquaculture site to FFA, the Department of Fisheries and Oceans Canada, and the public.

Approach Description

Incidents resulting in Abnormal Mortality

- **Mortality Threshold Reporting Requirement (Salmonid, Cleaner Fish, Shellfish)**
 - » Finfish licensees are required to report mortalities for salmonid and cleaner fish for marine or freshwater aquaculture licensed sites and during the transport or transfer of fish as follows:
 - A mortality event equivalent to three per cent or higher of the current aquaculture inventory within a marine or freshwater site, vessel or other method of transport/transfer, must be reported to the ADM, CAV and the DAD of FFA within 24 hours of the licensee becoming aware of the event.
 - A mortality event equivalent to ten per cent or higher of the current aquaculture inventory within a marine or freshwater site, vessel or other method of transport/transfer, must be reported to the ADM, CAV and the DAD of FFA and the public within 24 hours of the licensee becoming aware of the event.
 - » Finfish licensees for on-land salmonid and cleaner fish aquaculture licensed sites are required to report as follows:
 - Any incident which causes harm or an imminent threat to cultured fish, installation or structure at a licensed on-land aquaculture site; any event that impairs the function of any equipment required to sustain fish health and prevent escape must be reported to the ADM, CAV and the DAD of FFA within 24 hours of the licensee becoming aware of the event.
 - On-land facilities are required to report to the ADM, CAV and the DAD of FFA and the public any incidents requiring additional resources to address and mitigate the incident within 24 hours of the licensee becoming aware of the event.
 - » Public reporting for shellfish - Mortality levels of over 75 per cent mortality of the current aquaculture inventory within a marine or freshwater site, vessel or other method of transport and/or transfer for shellfish aquaculture licensed sites; any event on land at an aquaculture licensed site, where an incident caused or under slightly different circumstances would have caused abnormal mortality, harm or an imminent threat to cultured shellfish, installation or structure or any event that impairs the function of any equipment that sustains shellfish health; detection or confirmation of a Reportable Disease; or a moderate outcome as determined by the Incident Management Risk Assessment Matrix.

- » As per AP 17, the Minister of FFA shall have the discretion to request further information to be publicly reportable, including mortality events less than 10 per cent.

- **Reporting Procedure**

- » Following immediate actions taken to ensure the safety of farmed finfish, shellfish, or marine or on-land installation or structure or vessel on a licensed aquaculture site, all finfish licensees are required to provide immediate verbal notification of incidents causing mortalities above licensee thresholds to the ADM of Fisheries and Aquaculture, CAV and DAD of FFA.
- » All finfish licensees must provide a written notification to the ADM, CAV and the DAD of FFA, as soon as reasonably practicable but no later than 24 hours, after the licensee becomes aware of any incident causing mortalities above threshold. Written notification must contain:
 - date and time of the incident or event;
 - aquaculture licensee name and licence number;
 - contact name and telephone number;
 - location of site(s) impacted;
 - finfish species stocked on site;
 - estimated number of finfish species affected;
 - list of other agencies notified;
 - description of the incident;
 - description of site operations and relevant environmental conditions at the time of the incident;
 - immediate response action(s) taken including implemented emergency measures; and
 - planned response action to be taken; and any other information deemed by the department to be reportable.
- » Planned responses to incidents causing mortality at or above the reportable thresholds must be reviewed and approved by the CAV and DAD of FFA. Should planned responses vary from those outlined in the written report, all finfish licensees must provide the department with an immediate verbal update in advance of implementation of the response measure followed by submission of an updated response plan for approval in writing within 24 hours.

- » Planned responses must be submitted for approval to applicable agencies with jurisdictional authority, as required.
- » Licensees must publicly report incidents causing mortality at reportable thresholds through communication acceptable to FFA within 24 hours of the event on their corporate or industry association websites.
- » All statements should be submitted to the Director of Communications, CAV and the DAD of FFA for final approval in advance of public communication release.
- » Licensees must report to FFA the immediate response plan to secure the site infrastructure and fish resulting from the incident within 24 hours.
- » Licensees must submit a written mitigation plan to the CAV and the DAD of FFA, as soon as reasonably practicable for any incident.
- » Licensees will continue to update publicly reported mortality numbers every ten days with the total number of affected fish until the incident meets the conditions required to end mortality event reporting.
- » Final numbers of salmonid and cleaner fish removed, as a result of an incident causing mortality must be reported publicly. A final report must identify biomass and or total numbers of fish removed through harvest and mortalities.

- **Conditions Required to End Mortality Event Reporting**

- » The reporting for a specific mortality event will end once the following conditions have been met:
 - The probable cause of the event has been determined by the company and reported to the department;
 - Mitigation measures have been implemented to prevent further mortality at the site, if required;
 - The underlying cause has resolved;
 - The affected fish have been removed;
 - Every 10 days, companies are required to update mortality numbers to FFA. Reporting to FFA can stop once the company has two consecutive mortality updates that are less than 10 per cent threshold or all fish are removed; and
 - The company has submitted a final report to FFA containing the total number of fish affected by the event, the mitigation measures to prevent the event from recurring, any other information required by the department and has publicly reported the total number of fish affected.

- » Once the mortality event has ended, a new mortality event for the same population of fish can be triggered by reaching the mortality threshold again.
- **Fish Disposal Plans and SOPs**
 - » Licensees are required to submit to the CAV and the DAD of FFA, SOPs for abnormal mortality removal for FFA review and approval.
 - » If required, licensees must submit SOPs for approval to other agencies with jurisdictional responsibilities.
 - » Written updates submitted by email must be submitted to the CAV and the DAD every 10 days following the initial mortality report until the incident meets the conditions required to end mortality event reporting.
 - » When the mortality removal operations are complete, the final numbers of salmonid and cleaner fish removed must be reported in writing to the CAV and the DAD of FFA along with any other information deemed by the department to be reportable.

Incidents without Abnormal Mortality

- These incidents are noted because under slightly different circumstances the incident would have caused abnormal mortality.
- **Incident Management Risk Assessment Matrix**
 - » The Incident Management Risk Assessment Matrix must be applied by all finfish or shellfish licensees to determine if reporting is required.
 - » The risk assessment matrix involves the calculation of the magnitude of impact to the health and welfare of farmed finfish or shellfish, marine or on-land installation or structure or vessel on a licensed aquaculture site and the degree of hazard or harm to farmed fish or shellfish or the containment of farmed fish or shellfish. The higher the probability of a ‘worse’ outcome occurring, the greater the level of risk.
- **Determining Impact and Degree of Hazard**
 - » Should an incident occur, licensees will assess the following:
 - ▶ **Impact**
 - High**
 - Are there multiple sites or licensed aquaculture operators involved?
 - If the licensee answers yes to this question a **high impact category** is assigned.

Moderate

- Are multiple fish and shellfish holding units on site involved?
- If the licensee answers yes to this question a **moderate impact category** is assigned.

Low

- Is a single holding unit involved or was the incident a near miss (under slightly different circumstances, would likely have caused harm to farmed finfish or shellfish, marine or on-land installation or structure or vessel on a licensed finfish or shellfish aquaculture site)?
- If the licensee answers yes to this question a **low impact category** is assigned.

► Degree of Hazard

High

- Is the hazard known to cause abnormal mortality or morbidity to farmed finfish or shellfish?
- Is the hazard known to cause damage to an aquaculture marine or on- land installation, structure or vessel that is required to sustain life supports for farmed finfish or shellfish?
- Is the hazard known to cause enough damage to an aquaculture marine installation, hatchery, structure or vessel that would result in a reportable escape?
 - If the licensee answers yes to any of these questions a **high degree of hazard** is assigned.

Moderate

- Is there a greater than 50 per cent chance that the hazard may cause abnormal mortality or morbidity to farmed finfish or shellfish?
- Is there a greater than 50 per cent chance that the hazard may cause damage to an aquaculture marine installation, on-land installation, structure or vessel that is required to sustain life supports for farmed finfish or shellfish?
- Is there a greater than 50 per cent chance that the hazard may cause enough damage to an aquaculture marine or on-land installation, structure or vessel that would result in a reportable escape?
 - If the licensee answers yes to any of these questions a **moderate degree of hazard** is assigned.

Low

- Is the hazard known to not cause abnormal mortality or morbidity to farmed finfish or shellfish?
- Is the hazard known to not result in damage to an aquaculture marine or on-land installation, structure or vessel that is required to sustain life supports for farmed finfish or shellfish?
- Is the hazard known to not cause enough damage to an aquaculture marine or on-land installation, structure or vessel that would result in a reportable escape?
 - If the licensee answers yes to any of these questions a **low degree of hazard** is assigned.

● Use of the Incident Management Risk Assessment Matrix

- » The licensee would utilize the matrix provided to determine the incident management risk assessment score.
- » The score is determined by:
 - Selecting the impact score (low, moderate or high score as identified by answering the questions noted above) that corresponds with the impact score across the bottom of the matrix table;
 - Selecting the degree of hazard score (low, moderate or high score as identified by answering the questions noted above) that corresponds with the degree of hazard score listed in the left column;
 - Where the two scores intersect on the matrix determines the final score;
 - Each number score is colour coded:
 - Red indicates the incident is a **FFA and Publicly Reportable Incident**.
 - Yellow indicates the incident is a **FFA Reportable Incident**.
 - Green indicates the incident is a **Non-Reportable Incident**.

Incident Management Risk Assessment Matrix

| | | | | |
|---------------------------|--------------|-----|----------|------|
| Degree of Hazard Category | High | 3 | 4 | 5 |
| | Moderate | 3 | 3 | 4 |
| | Low | 1 | 2 | 3 |
| | | Low | Moderate | High |
| | Impact Score | | | |

Non-Reportable Incident
 FFA Reportable Incident
 FFA and Publicly Reportable Incident

Non-Reportable Incident: Licensee is not required to report the incident to FFA.

FFA Reportable Incident: Licensee is required to report the incident to FFA. This type of incident may result in further investigation by FFA. Licensees would be required to provide further information as requested by FFA and to develop mitigation measures. A licensee may be required to publicly report in the future as information is gathered. This type of incident may be an evolving incident occurring over a period of time in which FFA will require the licensee to publicly report.

FFA and Publicly Reportable Incident: Licensee is required to report to FFA and to also publicly report. The licensee is required to publicly report a response plan within 24 hours of approval being granted by the required agencies and provide a mitigation plan, if required.

- **Reporting Procedure (if required to report to FFA or FFA and the Public)**
 - » Following immediate actions taken to ensure the safety of farmed finfish or shellfish, marine or on-land installation or structure or vessel on a licensed aquaculture site, all finfish and shellfish licensees are required to provide **immediate** verbal notification of incidents requiring reporting to the ADM, CAV and DAD of FFA.
 - » All finfish and shellfish licensees must provide a written notification to the ADM, CAV and the DAD of FFA, as soon as reasonably practicable but **no later than 24 hours**, after the licensee becomes aware of any incident requiring reporting. Written notification must contain:
 - date and time of the incident;
 - licensed aquaculture operator name and licence number;
 - contact name and telephone number;
 - location of site(s) impacted;
 - finfish or shellfish species stocked on site;

- estimated number of finfish or shellfish species affected;
 - list of other agencies notified;
 - description of the incident;
 - description of site operations and relevant environmental conditions at the time of the incident;
 - immediate response action(s) taken including implemented emergency measures;
 - planned response action to be taken; and
 - any other information deemed by the department to be reportable.
- » Planned responses to incidents requiring reporting, must be submitted for approval (if not already previously submitted as part of the initial licensing and validation process) by applicable agencies with jurisdictional authority (if required) and FFA.
 - » Should planned responses vary from those outlined in submitted written plans within the licensing and validation process, all finfish and shellfish licensees must provide FFA with an immediate verbal update in advance of implementation of the response measure followed by submission of an updated response plan for approval in writing within 24 hours.
 - » Licensees must publicly report incidents that require public reporting within 24 hours through communication acceptable to FFA on the corporate or industry association website.
 - » All statements must be submitted to the Director of Communications, CAV and the DAD of FFA for final approval in advance of public communication release.
 - » Licensees must publicly report a response plan to incidents requiring public reporting to FFA within 24 hours of approval by the required agencies (if required). Response plans may be required to be publicly reported.
 - » Licensees must submit a written mitigation plan for incidents requiring reporting to the CAV and the DAD of FFA, as soon as reasonably practicable. Public reporting of mitigation plans may be required.

Reportable Disease Events

- **Reporting Requirement**
 - » Licensees are required to report diseases listed as Reportable by the Federal or Provincial governments, to the appropriate regulatory bodies as identified in the Aquatic Animal Health Reporting policy.

- » Zoonotic diseases must be reported to the CAV, processing plant (if applicable), Health Canada and local medical practitioners.
- » Licensees must report verbally to the CAV followed by a written report within 24 hours any suspicion or confirmation that a cultured finfish or shellfish may have a Reportable Disease.
- » Licensees must publicly report the detection or confirmation of Reportable Disease, or quarantine or depopulation orders or directives on their corporate or industry association website within 24 hours of the detection, order or directive being given.

- **Reporting Procedure**

- » Licensees must report verbally to the CAV as soon as reasonably practicable any suspicion or confirmation that a cultured finfish or shellfish may have a Reportable Disease.
- » A written report must be submitted no later than 24 hours after the verbal report. The written report must include the following:
 - Name of licence holder;
 - AQ number;
 - Location of site (address);
 - Contact information (both email and telephone);
 - Species;
 - Age or year class;
 - Average weight of the animals;
 - Total number of animals on the aquaculture site/facility;
 - Total number of cages/tanks/holding units on site;
 - Number of animals suspected affected and the associated cages/tanks/holding units;
 - Any recent movements off the aquaculture site/facility;
 - Presumptive diagnosis;
 - Recent mortality numbers;
 - Clinical signs; and
 - Diagnostic testing results (if applicable).

- » Detection and/or confirmation of federally Reportable Diseases, quarantine or depopulation orders or directives, issued by the Provincial Government for a licensed aquaculture site, must be reported to by the licensee to the public on their corporate or industry association website within 24 hours of FFA notification of the detection or order or directive being given.
- » All statements must be submitted to the Director of Communications, CAV and the DAD of FFA for final approval in advance of public communication release.
- » For all detection and confirmation of federally Reportable Diseases or quarantine or depopulation orders or directives, the licensee is required to publicly report on:
 - site(s) impacted;
 - species stocked on that site;
 - estimated number of finfish or shellfish species affected;
 - any orders and directives issued in relation to the action initiated;
 - information related to disease detected;
 - underlying reason for order, directive and/or action;
 - method of depopulation or other mitigations; and
 - any other information deemed by the department to be reportable.
- » Licensees must keep health records for the current stock at the aquaculture site/facility and must give the CAV access to these records upon request.
- » Licensees will follow the AAHD Contingency Plan during a provincial Reportable Disease event or outbreak.
- » Licensees will follow the AAHD Viral Management of ISAv (ISAv) - Contingency Plan Guidelines during an ISAv event or outbreak.
- » Where a disease event or outbreak is under the care and control of the CFIA, the licensee must also adhere to any applicable federal regulations.
- » The CAV may issue a Quarantine Order when a Reportable Disease is suspected, designating any aquaculture site/facility, growing region (i.e. BMA), equipment, vessel or vehicle as a quarantined area.
- » Upon receipt of the Quarantine Order, the licensee must submit SOPs to the Aquatic Animal Health Division (AAHD) for review. The licensee is responsible for submitting the same SOPs for approval from agencies with regulatory authority of the practices outlined in the SOPs. SOPs are approved by the CAV.

- » SOPs to be submitted:
 - General site biosecurity
 - Personnel movement to and from the site
 - Cleaning and Disinfection protocols
 - Mortality Removal
 - Mortality Disposal
 - Other as deemed necessary by the Designated Veterinarian or the CAV.
- » The licensee is provided with the AAHD Reportable Disease Questionnaire from the CAV or their designate. This must be completed and returned to the CAV **within 72 hours** after receipt.
- » Prior to any animal, animal by-product (including mortalities), object or thing being removed from a quarantined area, an SOP must be submitted to the AAHD. SOPs are reviewed by the AAHD and approved by the CAV. Nothing can move out of a quarantined area without a Licence To Move issued by the CAV. A Licence To Move **requires 72 hours** notice to the CAV of the movement. The CAV has the discretion to alter these timelines under special circumstances. The CAV may list on the Licence To Move the approved wharf and any other restrictions/requirements.
- » AAHD staff, or a designated representative, must be granted permission to audit the facilities/activities.
- » Licensees must participate in the AAHD enhanced surveillance plan.

Suspected or Confirmed Escapes

- **Reporting Requirement**
 - » All suspected and confirmed escapes from a licensed finfish aquaculture site must be reported verbally to the DAD of FFA and the Department of Fisheries and Oceans Canada as **soon as reasonably practicable**, not later than **24 hours**.
 - » The licensee is required to investigate escapement immediately upon suspect of escapement and **within 24 hours** seek direction from the Department of Fisheries and Oceans Canada on recapture efforts.
 - » All suspected and confirmed escapes must be publicly reported **within 24 hours** after FFA notification of the suspected escape and/or confirmation of the escape.

- **Reporting Procedure**

- » For all suspected and confirmed escapes, the licensee is required to verbally report to the DAD of FFA and the Department of Fisheries and Oceans Canada, as soon as reasonably practicable, followed in writing within 24 hours, the following:
 - Date and time reported to FFA;
 - Name of licence holder;
 - Site affected (AQ # and name);
 - Contact information (both email and telephone);
 - Species;
 - Age or year class;
 - Average weight of the animals;
 - Total number of animals on the aquaculture site/facility; and
 - Total number of cages/tanks/holding units on site.
- » Treatment and health records for any escapes must be made available to the CAV.
- » For all suspected escapes, the licensee is required to publicly report on their corporate or industry association website:
 - site(s) of the suspected escape;
 - species escaped; and
 - any other information deemed by the department to be reportable.
- » For all confirmed escapes, the licensee is required to publicly report on their corporate or industry association website:
 - site(s) of the escape;
 - species escaped;
 - cause of the escape;
 - estimated number of fish escaped;
 - recapture plan for escaped animals; and
 - any other information deemed by the department to be reportable.

- » All statements must be submitted to the Director of Communications, CAV and the DAD of FFA for final approval in advance of public communication release.

Required Operator Written Documentation for All Reportable Incidents

1. Licensed Operator Written Incident Notification (Annex A)

- » To be completed by the licensee after verbal report is provided to FFA.
- » The Incident notification must be emailed to the ADM, and copied to the CAV and the DAD, as soon as reasonably practicable, but no later than 24 hours, after the licensee becomes aware of any FFA and/or publicly reportable incidents including those causing mortalities above reportable threshold.

2. Licensed Operator Written Response Plan (Annex B)

- » To be completed by the licensee and emailed to the ADM, and copied to the CAV and the DAD for review and approval.
- » The response plan should outline measures the licensee is currently taking to address any FFA and/or publicly reportable incident including incidents causing mortalities above reportable threshold.
- » In the event that the incident caused mortalities above reportable threshold, licensees must include a plan to update the public on the total number of mortalities associated with the incident.
- » If the incident is not identified as publicly reportable, the response plan does not need to be reported publicly. If the incident is identified as publicly reportable, the response plan must be publicly reported within 24 hours of approval being granted by the required agencies through communication acceptable to FFA, in addition to the corporate or industry association website.

3. Licensed Operator Written Mitigation Plan

- » To be submitted by the licensee and emailed to the ADM, and copied to the CAV and the DAD, FFA, for review and verification.
- » The mitigation plan should outline measures the licensee will implement to mitigate the risk of an incident occurring in the future including those incidents that result in abnormal mortalities above reportable threshold.
- » If the incident is identified as publicly reportable, FFA may request that the mitigation plan be reported through communication acceptable to FFA, in addition to the corporate or industry association website.

Annex A: Aquaculture Incident Written Notification

Aquaculture Incident Written Notification

Reportable Disease Abnormal Mortality Suspect Escape
 Confirmed Escape Other
 Please explain: _____

Initial Date Reported to AAHD/ADD: _____

Initial Time Reported to AAHD/ADD: _____

Initial Communication Method: Email _____ Telephone _____

Company Name: _____

Company Contact Information: _____

Site Affected (AQ # and Name): _____

Species Affected: _____

Estimated Number of Species Affected: _____

Other Agencies Notified: _____

Risk Assessment:

| Reportable Disease Event | | Abnormal Mortality Event | |
|---------------------------------|--|---------------------------------|--|
| Reportable Disease | | Probable Cause | |
| Number of Fish Tested | | Suspected Number of Mortalities | |
| Number of Fish Tested Positive | | Identified Threshold | |
| Number of Cages Tested Positive | | Action Required | |

| Suspect Escape | | Confirmed Escape | |
|--------------------------|--|--------------------------|--|
| Estimated Number of Fish | | Estimated Number of Fish | |

| Other | |
|---|--|
| Estimated Number of Fish | |
| Estimated Number of Fish Holding Units Involved | |
| Estimated Number of Sites Involved | |

Description Provided by the Licensee:

Immediate Response Measures Taken:

For Internal Use Only:

FFA Review and Determination:

| | | |
|---|-----|----|
| Additional information required by the company? | Yes | No |
| Public reporting required by the company? | Yes | No |

Annex B: Aquaculture Operator Incident Response Plan

Annex C: Incidents without Abnormal Mortality – Examples

- **Examples:**

- » Predator sighted around marine cage sites

- a. Low Impact Score assigned as the predator is outside the cages.
- b. Low Degree of Hazard Score assigned as a single predator outside properly designed and installed cages are not known to cause abnormal mortalities or risks to installation.
- c. The Matrix Category is Low.

Outcome: The incident is not reported to FFA or the Public. The licensee should follow established SOPs and maintain gear according to standards.

- » Recreational or commercial vessel getting entangled in gear

- a. Low Impact Score assigned.
- b. Low Degree of Hazard Score assigned as recreational or commercial vessel entangled in gear poses minimal hazard or danger to farmed finfish or shellfish.
- c. The Matrix Category is 1.

Outcome: The incident is not reported to FFA or the Public. The licensee should follow established SOPs and maintain gear according to standards.

- » Entangled gear - possible navigational concern

- a. Low Impact Score assigned.
- b. Low Degree of Hazard Score assigned as recreational or commercial vessel entangled in gear poses minimal hazard or danger to farmed finfish or shellfish.
- c. The Matrix Category is 1.

Outcome: The incident is not reported to FFA or the Public. The licensee should follow established SOPs and maintain gear according to standards.

- » Power failure at a hatchery with no abnormal mortalities

- a. Low Impact Score assigned.
- b. Moderate Degree of Hazard Score assigned as the hazard has a greater than fifty per cent chance to damage aquaculture equipment within a hatchery that is required to sustain life supports for finfish.
- c. The Matrix Category is 2.

Outcome: The incident is not reported to FFA or the Public. The licensee mitigation strategies (such as a backup generator) prevented the incident. Company should review internal policies, SOPs and other internal documents to learn from the event.

» Broken main line – single line

- a. Low Impact assigned as it would be considered a near miss.
- b. Moderate Degree of Hazard assigned as the broken single main line hazard has a greater than 50 per cent chance to cause abnormal mortality to shellfish.
- c. The Matrix Category is 2.

Outcome: The incident is not reported to FFA or the Public. Licensee should follow established SOPs and maintain gear according to standards. Company is required to report to Transport Canada.

» Harmful Algal Bloom in a region with multiple sites

- a. High Impact Score assigned due to multiple sites or companies involved
- b. Moderate Degree of Hazard Score assigned as the hazard has a greater than 50 per cent chance to cause abnormal mortality to farmed finfish or shellfish.
- c. The Matrix Category is 4.

Outcome: The incident is reported to FFA and the Public. The licensee is required to publicly report a response and submit a mitigation plan within 24 hours of approval being granted by the required agencies.

