

Canadian Shellfish Sanitation Program - Manual of Operations

CHAPTER 5

WET STORAGE

Temporary wet storage of live shellstock in nearshore floats, baskets, or sacks, and onshore in tanks is subject to the requirements of the *Fish Inspection Act* and *Regulations*. In order to provide reasonable assurance that shellfish are wholesome, the criteria which follow shall apply to wet storage facilities and operations. These requirements do not apply to transplant operations where shellfish are moved to new shellfish areas for conditioning or resource management.

5.1 Source of Shellfish

Shellfish for wet storage shall be harvested, identified and shipped in accordance with Chapter 7 of this Manual.

5.2 Storage Facilities

- a) Each new wet storage site or facility shall be evaluated and approved by the CFIA on the basis of an evaluation* of the nearshore site, or for an onshore operation, the facility's QMP plan and an inspection of the storage site or facility. Factors to be considered include but are not limited to the following:
 - i) the location of the nearshore storage site in an area classified as approved or conditionally approved (and in the open status);
 - ii) examination of the construction of shellstock containers (if used) and loading depth to ensure the free flow of water to all shellstock;
 - iii) a plan giving the design of the onshore storage facility, source of water to be used for wet storage, and details of any water treatment system.

* **NOTE** Environment Canada surveys may be used in the evaluation.

- b) Wet storage shall be practised only in compliance with

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the provisions described in each facility's QMP. Each registered facility must consider, and where applicable, incorporate the following components in the development and implementation of their Quality Management Program:

- i) Water from approved areas must not be used for onshore wet storage if there is a marine biotoxin closure in effect at the source unless an approved control system is implemented to filter the water supply. Further guidance on how shellfish in wet storage systems affected by biotoxin closures is assessed is found in chapter 11, section 11.6;
- ii) each onshore wet storage facility shall meet the applicable requirements of Schedules I and II of the *Fish Inspection Regulations* (FIR);
- iii) storage tanks and related plumbing are fabricated of safe material and are easily cleanable. Tanks are constructed so as to be easily accessible for cleaning and inspection, to be self-draining or equivalent, and to meet food-contact surface requirements. Plumbing is designed and installed so that cleaning and sanitizing will be effective;
- iv) unless the water to be used for tank storage and washing of shellfish meets the requirements of Section 14(3) of Schedule I of the FIR, and the storage tanks are set up and operated as a flow-through system, the holding/washing water shall be treated;
- v) the water treatment system shall provide an adequate quantity and quality of water to carry out the intended purpose of the wet storage operation and the treatment shall not leave residues that may interfere with the process. The treated water supplied to wet storage tanks shall have no detectable levels of coliform organisms as measured by the standard five tube MPN test. The quality of the water prior to final disinfection shall not exceed a median or geometric mean of 88 faecal coliform/100 mL ($\leq 10\%$ do not exceed 260 MPN/100 mL); and
- vi) for water receiving UV disinfection, turbidity

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does not exceed 20 Jackson Turbidity Units (or equivalent Nephelometric turbidity units).

- c) Shellfish shall be washed and culled to remove dead, broken, or cracked shellfish prior to wet storage in tanks. Due to the adverse effects of culling on mussel physiology, culling of mussels may be done after wet storage.
- d) Shellfish from different harvest lots shall not be commingled during wet storage in tanks.
- e) Bivalve molluscs shall not be commingled with other species in the same tank. Where multiple tank systems use a common water supply system for bivalve molluscs and other species, process water shall be effectively disinfected prior to being put into tanks containing the bivalve molluscs or, the water is supplied to the tanks containing the bivalve molluscs first.
- f) Tanks shall be cleaned and sanitized as necessary to prevent contamination of the tank and water.
- g) Disinfection units shall be cleaned, serviced, and tested as frequently as is necessary to assure effective disinfection. A water sampling schedule shall be included in the facility's QMP and the water shall be tested according to the schedule. If a water supply with faecal coliform median or geometric mean MPN of 88 per 100 mL ($\leq 10\%$ exceeding 260 per 100 mL) is used, the sampling schedule should require daily water testing by an approved laboratory. Records of UV light efficiency and replacement and records of all water sampling shall be kept by the facility and made available to CFIA inspectors for examination during QMP compliance verifications.
- h) Salt (food grade) added to increase salinity or produce synthetic seawater shall be free of any levels of poisonous or deleterious substances which may contaminate the shellfish.
- i) Water from approved areas must not be used for onshore wet storage if there is a marine biotoxin closure in effect at the source unless an approved control system is implemented to filter the water supply. Further guidance on how shellfish in wet storage system affected by biotoxin closures is assessed is found in chapter 11, section 11.6.

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http://www.inspection.gc.ca/english/fssa/fispoi/man/cs_sppccsm/chap11e.shtml

5.3 Labelling Requirements

- a) Product wet stored shall be labelled:
 - i) if wet stored for less than 14 days: the harvest site is the original harvest site prior to wet storage and the date of harvest is the date removed from the wet storage site;
 - ii) if wet stored for 14 days or greater: the harvest site is the wet storage site and the date of harvest is the date removed from the wet storage site.
- b) In all cases records shall be maintained that clearly indicate the harvest and wet storage history of the product.