CHAPTER 12

SHELLFISH AQUACULTURE

Shellfish aquaculture is fast becoming a very important part of the shellfish fishing industry. The granting of shellfish aquaculture leases is the mandate of provincial governments; however, both DFO and Environment Canada can provide advice to provincial authorities during both the site approval and lease granting processes.

12.1 Aquaculture Sites

The aquaculture of shellfish may be conducted in areas where:

a) the water quality complies with the approved area classification and is free from point and non-point pollution sources (see Sections 2.3.1 and 2.3.3.3) and only when chemical or toxin levels do not reach or exceed the tolerances and/or action levels outlined in Appendix II;

b) the water quality complies with the requirements of Section 2.3.3 Administrative Requirements b) i) and the shellfish are subjected to a depuration protocol as outlined in Sections 10.2. - 10.2.11;

c) the site is not within any prohibited area as described in Section 2.3.3.3 and the shellfish are subjected to a natural or container relaying to approved areas for sufficient time and under adequate environmental conditions to allow purification to occur (see also Section 2.3.3 Administrative Requirements b) ii)); and

d) all requirements of Annex 12A - Criteria for Shellfish Aquaculture Leases in Bacteriologically Contaminated Areas are met.

12.2 Polyculture

Shellfish and finfish should not be raised in close proximity as netpens have the potential to be point-sources of pollution due to human activity and poor husbandry practices. There should be a minimum of a 125m prohibited area surrounding netpens. The size of this area will be dependent on the size of the finfish site and on the hydrography surrounding the site (see Section

2.3.3.3 b) ii)).

Note: This does not preclude the use of netpens as sources of shellstock spat or seed (see 12.3 below).

12.3 Other Aquaculture Activities

Although aquaculture-raised shellfish are destined for human consumption there are a number of activities that may be carried out in advance of final harvesting, processing and sale. These activities can include spat and seed collection. Shellstock spat and seed may be collected, for grow-out, from bacteriologically contaminated areas providing that they are moved to approved growing areas for an acceptable period of time prior to their final harvest and sale for human consumption. This grow-out period must be a minimum of six months or longer.

ANNEX 12A

CRITERIA FOR SHELLFISH AQUACULTURE LEASES IN BACTERIOLOGICALLY CONTAMINATED AREAS

1. All bivalve molluscan shellfish raised in bacteriologically contaminated areas must go through an approved depuration (controlled purification) or relay process before being marketed.

   In the case of "conditionally approved" areas, shellfish may be harvested for direct marketing only when the area meets the "approved-area" status and provided that a management plan is in place. Product harvested from these areas during periods when the area does not meet "approved-area" status must be depurated or relayed.

2. No lease shall be issued within the boundaries of any closure zone around point sources of pollution (eg. pipes, streams, wharves, sewage treatment plants, marinas etc.).

3. All new lease holders in previously unused areas must go through a species-specific verification process, acceptable to DFO and DOE, for whichever purification process (depuration or relaying) is intended.

4. All lease holders must, subject to DOE and/or DFO approval, have analyses of overlay waters and/or shellstock performed by third-party laboratories in order to demonstrate that the bacteriological quality of the lease site overlay water and shellstock have not deteriorated.

   Third-party laboratories performing the analyses will be subject to a DOE or DFO verification process.

5. All activities related to the harvesting and transportation of bacteriologically contaminated shellstock destined for depuration and/or relaying must be supervised and verified and carried out under conditions detailed in a management plan or Memorandum of Understanding (MOU).