



Monitoring Protocol No. 2

for

Offshore Finfish Farms- Water Column Monitoring

(subject to revision from time to time)

11 May, 2000

Monitoring Protocol No. 2.
For
Offshore Finfish Farms
Water Column Monitoring

1. Monitoring Regime Required

All finfish farms shall carry out water column nutrient monitoring surveys in accordance with the protocol set out below.

2. Timing of surveys

Nutrient monitoring surveys shall be carried out **monthly** during the period December - March each year. The surveys shall be carried out on behalf of the farmers by any consultant drawn from a pool of approved consultants.

3. Consultant Selection

A consultant, at the expense of the licensee, will undertake these surveys. The Marine Institute, on behalf of the Department of the Marine and Natural Resources, will set up an approved list of consultants to carry out these environmental surveys. The Marine Institute will periodically advertise for consultants to be assessed for inclusion in the list. The consultants must demonstrate that they have the necessary skills base and technical capability available to them to carry out such surveys. All consultants will be subject to random verification auditing by the Marine Institute.

4. Transect selection

The location of the transect and number of stations on the transect shall be agreed following consultation with the Marine Environment and Health Services Division of the Marine Institute. Existing and proposed Single Bay Management (SBM) and Co-ordinated Local Aquaculture Management Systems (CLAMS) plans will be considered in the transect selection process.

5. Position Fixing

AJA station positions should be logged using a Differential Geographic Positioning System (DGPS) with an accuracy of +/- 0.5m. This information must be stated in the report.

6. Sample Collection and Analysis

Water samples for nutrient analysis shall be taken at each station on the agreed transect. Samples shall be taken at the surface, mid-depth and 1m above the bottom. Analysis should include ammonia, nitrite, nitrate and phosphate. Water temperature and salinity shall also be measured. The Department of the Marine and Natural Resources reserves the right to specify other nutrients to be covered by monitoring.

7. Reports

A report containing the results of the nutrient monitoring surveys accompanied by a location plan showing the transect in relation to the cages shall be prepared by the consultant. The report shall include a commentary on the concentrations observed.

8. Submission of Report

The completed nutrient monitoring reports must be submitted to the Coastal Zone Administration Division of the Department of the Marine and Natural Resources by registered post no later than 30 April in any given year.

In addition all raw data must be retained by the consultants and be available, in digital format if appropriate on request for detailed examination by agents for the Department of Marine and Natural Resources.