REPORT OF THE MARINE LICENCE VETTING COMMITTEE (MLVC)

on

FORESHORE LICENCE APPLICATION BY CORK COUNTY COUNCIL TO FACILITATE REMOVAL OF ACCUMULATIONS OF SEA LETTUCE FROM SEVERAL IDENTIFIED BEACHES IN COUNTY CORK

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Foreshore Licence Application for removal of sea lettuce accumulations from identified beaches in County Cork (MS51/8/1369 Vol. 2)

Background

Opportunistic green seaweeds occur naturally in all coastal and estuarine waters around the world, including Ireland. In some locations, when conditions are favourable, these seaweeds, particularly sea lettuce belonging to the genus *Ulva,* can multiply and reach very high volumes. High volumes of sea lettuce generally occur in areas subject to excess inputs of nutrients, principally nitrogen, derived from domestic, industrial and agricultural sources.

In areas where high concentrations of sea lettuce occurs, sunlight is unable to reach the sediments below, preventing photosynthesis and often killing the natural flora and fauna. Masses of sea lettuce can hamper swimmers, foul fishing gear and get entangled in the propellers of fishing and recreational vessels. Additionally large masses of sea lettuce can accumulate on beaches. These accumulations can decompose rapidly and impact on amenity use and give rise to public health concerns due the release of Hydrogen sulphide (H_2S) gas which also gives rise to significant odour issues (smell of rotten eggs).

In the west Cork region the problem of accumulations of sea lettuce on beaches has been escalating and in 2009, 2010 and also in 2011 large accumulations occurred on Inchydoney (Blue Flag Beach), Harbour View, Coolmaine and Courtmacsherry. There is also evidence that the problem is also occurring at Garrettstown and Roberts Cove.

In October 2009 a Task Force, which included representatives from the Marine Institute, Department of Environment, Heritage and Local Government, Department of Agriculture, Fisheries and Food, National Parks and Wildlife Service, Health Services Executive, Environmental Protection Agency and Cork County Council was established to investigate and advise on the scientific, engineering, public safety and policy aspects relevant to the management and control of the sea lettuce problems on beaches in west Cork. The April 2010 report of the Task Force noted that excess nutrient inputs were the cause of the problem but that while reduction in nutrient inputs to the receiving waters is the key management action necessary to control excessive growth of sea lettuce, experience in other areas has shown that significant reduction in algal biomass and accumulations may not occur for many years after nutrient input reduction programmes have been initiated. More immediate and urgent management actions are therefore required to deal with the problem and the removal of accumulations on an "as required" basis and the spreading of the material on agricultural land as a fertiliser was one of the key management actions that Task Force identified. This management action was successfully implemented by Cork County Council in 2010 and 2011 with grant assistance provided by the Minister for Environment, Heritage and Local Government. The removal of material was done in consultation with the local NPWS Ranger, with whom access and egress routes to/ from the beaches was agreed.

In May 2011 Cork County Council made an application for a multi-annual foreshore licence to facilitate the removal of sea lettuce accumulations on an "as required" basis from effected beaches in Clonakilty and Courtmacsherry Bays. In early August 2011 the Council requested that Roberts Cove be included in areas from where accumulations could be removed and subsequently in December 2011 requested that Rocky Bay also be included in areas from where accumulations could be removed.

Public Consultation

The application was advertised in the *"Irish Examiner"* on 8th July 2011 and in the *"Southern Star"* on 9th July 2011. The public display documents were made available for inspection at Clonakilty Garda Station during the period of 6th July – 2 August 2011. No submissions were received.

Documents Considered

The following documents were considered:

- Foreshore Licence Application submitted by Cork County Council, with copy of the April 2010 Sea Lettuce Task Force Report and a Habitats Directive Assessment Report submitted as supporting documentation.
- Written submissions from DECLG (Engineering Division), DAFM, Inland Fisheries Ireland, Marine Institute, Marine Survey Office, Sea Fisheries Protection Authority and Department of Arts, Heritage and the Gaeltacht (nature conservation and underwater archaeology.) No objections to a permit being issued were raised but an archaeological assessment was requested by the Department of Arts, Heritage and the Gaeltacht

The beaches from where it is proposed to remove sea lettuce accumulations in Inchydoney are located within the Clonakilty Bay SAC (Site Code 000091), the Clonakilty Bay SPA (Site Code 004081), the Courtmacsherry Estuary SAC (Site Code 001230) and the Courtmacsherry Bay SPA (Site Code 004219). An Appropriate Assessment was carried out and it was concluded that subject to the implementation of a number of mitigation measures the removal of sea lettuce accumulations as proposed would not adversely affect the integrity of the Natura 2000/European sites. An Appropriate Assessment Conclusion Statement and an EIA Screening Report have been completed and accompany this report.

Conclusions and Recommendations

On the basis of the above and considering the potential negative impacts on public health, tourism, recreation and the natural environment in the area of the affected beaches if the accumulations are not removed it is recommended that a permit be issued subject to a number of conditions which are set out below. Furthermore, even when reductions in

nutrient inputs to Clonakilty Bay and Courtmacsherry Bay are put in place e.g. by way of improved nutrient management on land and improved waste water treatment facilities, it is likely that accumulations will continue to occur in these areas for at least a decade to come. Consequently it will still be necessary to manage the accumulations by removal of the material and it is therefore recommended that a 10-year licence be issued which should be reviewed after 5-years. The beaches from where accumulations may be removed include beaches at Inchydoney Island, Harbour View and Coolmaine, Garrettstown, Roberts Cove and Rocky Bay.

Proposed Licence Conditions

1. The Licensee shall use that part of the Foreshore the subject matter of this licence for the purposes as outlined in the application and for no other purposes whatsoever.

2. The beaches from where sea lettuce accumulations may be removed shall include beaches at Inchydoney Island, Harbour View and Coolmaine, Garrettstown, Roberts Cove and Rocky Bay

3. The Licensee shall implement the mitigation measures set out in Section 5 of the Habitats Directive Assessment Report.

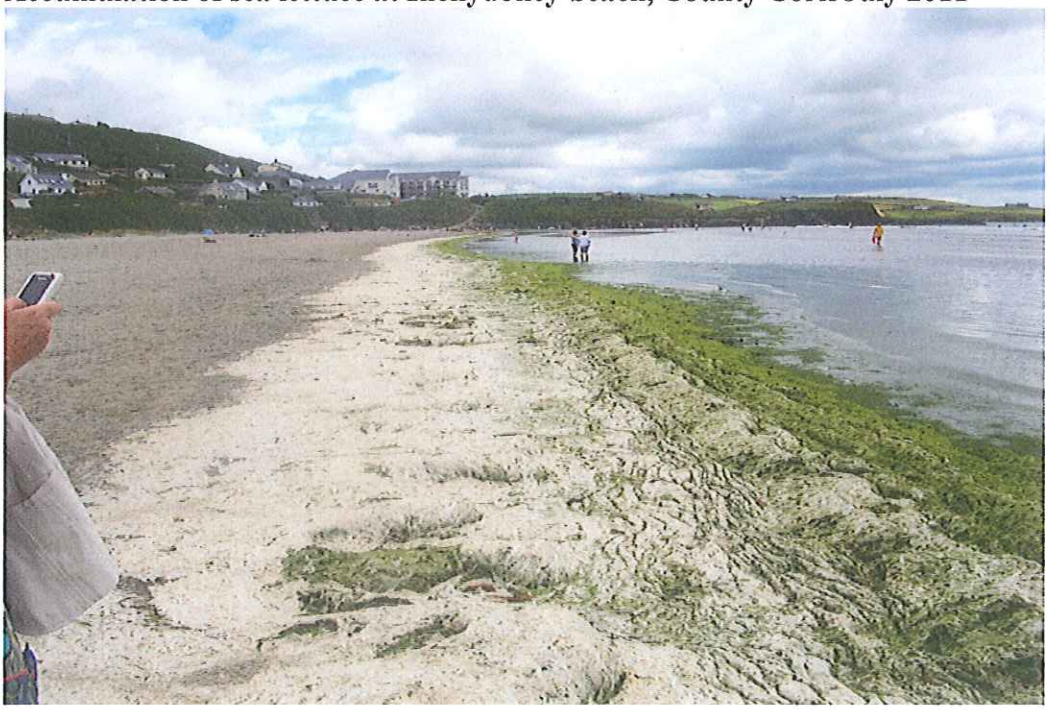
4. The Licensee shall submit a report to the Foreshore Unit of the Department of Environment, Community and Local Government at the end of each year detailing the removal activities carried out during that year. The report shall include information on where the removals occurred, the number of removals and the estimated quantities removed.

5. The Licensee shall ensure that appropriate methods of operation are adopted in order to ensure that no spillages of hydrocarbons other hazardous substance occur to the marine environment during the works.

6. During the course of the works the Licensee shall ensure that all necessary precautions are taken to protect the public in accordance with relevant Health and Safety legislation.

7. The Licensee shall engage the services of a suitably qualified archaeologist with underwater/marine/intertidal experience to carry out the following:
    - Pre-clearing archaeological walkover visual survey of the area to be worked on in Rocky Bay, or in any other area not listed in Condition 2 above.
    - Spot checks of all areas being cleared during the course of the works.

    Where archaeological material is shown to be present, preservation *in situ* by way of avoidance and non-disturbance shall be implemented.

Accumulation of sea lettuce at Courtmacsherry, County Cork, July 2011

Accumulation of sea lettuce at Inchydoney beach, County Cork July 2011