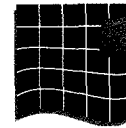


The Environmental Protection Agency
20 AUG 2009
CORK

ENVIRONMENTAL PROTECTION
AGENCY
19 AUG 2009

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Administration
Environmental Licensing Programme
Office of Climate, Licensing & Resource Use
PO BOX 3000
Johnstown Castle Estate
County Wexford



Marine Institute
Foras na Mara

14/08/2009

Re: **Application for Waste Water Discharge Licence – Agglomerations of
Kilrush, Bantry and ~~xxxxxxxxxx~~**

Marine Institute
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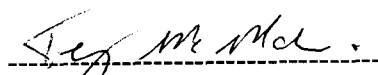
Dear Sir / Madam

Please find enclosed submission form the Marine Institute in relation to the above waste water discharge licence applications.

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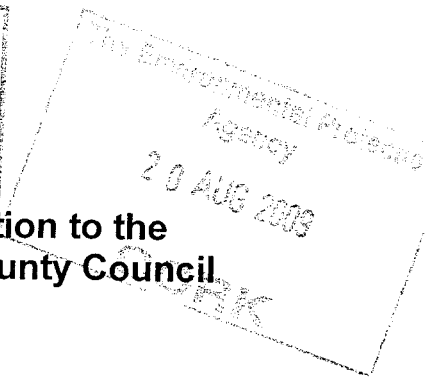
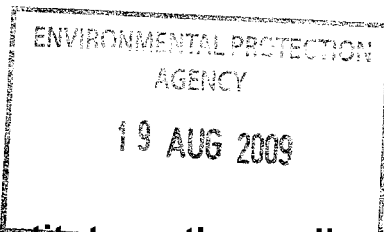
Yours sincerely

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Submission from the Marine Institute on the application to the EPA for a waste water discharge licence by Cork County Council (Castletownbere -Register Number D0297-01)

General considerations

The Marine Institute makes the following submission with regard to the waste water discharge licence application from Cork County Council, Western Division for the agglomeration of Castletownbere. In making this submission the primary concerns for the Marine Institute is to have regard to any potential impact on shellfish production and harvesting, principally by aquaculture

The waste water discharge for the Castletownbere agglomeration discharges directly into Castletownbere Harbour. Castletownbere is a designated shellfish water under the European Communities (Quality of Shellfish Waters) Regulations 2006 (S.I. 268 of 2006 as amended). The discharge is not directly into the designated shellfish water but, given its proximity to it, it is likely to have an impact on the water quality in the designated area.

It is the view of the Marine Institute that appropriate licence conditions must be set that ensure no deterioration of water quality as judged by the parameters and standards laid down in S.I. 268 of 2006, as amended, in any shellfisheries impacted by the discharge. In addition where practical, conditions should be set that require the applicant to endeavour to meet the guidelines values set for parameters in regulations.

Waste water discharges that impact on shellfisheries may cause seafood safety issues when such shellfish are consumed. The major risk arises from contamination of the shellfish by human viruses. Therefore the Marine Institute further believes that licence conditions for waste water discharges must take account of the impact on shellfisheries which may have implication for public health when such shellfish are harvested for consumption. Any discharge must not increase, and should preferably decrease, the public health risk associated with the consumption of impacted shellfish.

The Marine Institute considers that licence conditions for the discharge must allow for compliance for the whole fishery rather than the designated sampling point.

The Marine Institute notes the Government's policy as laid out in the Programme for Government 2007 - 2012. In particular the commitment that "Over the next 5 years this Government will work to ensure that Ireland's waters are the most pristine in Europe" and that the Government will "Continue to invest in waste water schemes to ensure that discharges into our rivers, lakes and coastal waters meet the highest international standards".

Specific Comments

Shellfish production and classification

Bivalve shellfish produced and harvested in Castletownbere include mussels and oysters. Abalone are also produced in land based facilities which use circulated seawater pumped from the area.

Both mussels and oysters produced in the Castletownbere area are currently (July 2009) classified as category B under the shellfish hygiene regulations (see <http://www.sfpa.ie/>) This represents a downgrade on previous A Classifications and indicates a deterioration in the microbiological water quality in the production area.

Current arrangements

The current arrangements for Waste water discharges in Castletownbere include 5 septic tanks and a collection system which discharges directly into Castletownbere Harbour. The Marine Institute believes this arrangement is likely to be insufficient to fully protect the designated shellfishery.

It is noted that no composite sampling or continuous flow monitoring is in place at present on any of the discharge points. The Marine Institute believes that the discharge should be monitored for bacteria (*E. coli* / Faecal coliforms) and an assessment made of the impact on the shellfishery.

The Marine Institute acknowledges and welcomes the fact that waste water treatment infrastructure upgrades are planned for the agglomeration and should be completed by 2014. Although little detail is available regarding the planned upgrade it should provide improved protection of the designated shellfish water. However, given the deterioration in water quality, as indicated by the recent B Classifications for mussels and oyster in Castetownbere mentioned above, it is the Marine Institute view that the current waste water treatment infrastructure needs to be examined with view to determining what, if any, practical interim arrangements can be put in place to ensure that further deterioration in water quality does not occur prior to the commissioning of the new proposed WWTP.

Future Arrangements

When considering the future waste water treatment plans for the Castletownbere agglomeration the Marine Institute believes the following points should be considered.

Shellfish waters designation

The Marine Institute believes that;

- The standards for the proposed WWT discharge must be set on the basis of the receiving water being a designated shellfish water and a requirement to comply with all the standards in the European Communities (Quality of Shellfish Waters) Regulations 2006 (S.I. 268 of 2006).
- The impact of the continuous discharge on the designated shellfish waters should be determined in conjunction with existing discharges and contamination sources that may impact the shellfishery and the overall impact aggregated. Failure to do so could lead non compliance with environmental standards.
- The licence conditions should be set that ensure that water quality standards in the designated shellfish water must not cause deterioration as judged by the water quality parameters and standards set out in the European Communities (Quality of Shellfish Waters) Regulations 2006 (S.I. 268 of 2006).
- The applicant should identify efforts to endeavour to meet guideline standards as required by the regulations. An evaluation of requirements to meet the guideline values should be laid out and built into the design for future improvements to the waste water works. Where an assessment is made that it is not possible to meet the required guideline values the reasons should be clearly identified. To achieve this, disinfection of the final effluent may be required. A cost benefit analysis of fitting UV disinfection should be presented.
- When considering compliance with standards in the European Communities (Quality of Shellfish Waters) Regulations 2006 (S.I. 268 of 2006) the whole shellfishery should be considered rather than compliance at one monitoring point.

Storm overflow discharges

The Marine Institute believes that;

- The proposed WWTP should be operated such that discharge of untreated effluent due to storm events is kept to a minimum. Information should be presented on the expected number of spills per annum and the impact on compliance with regulations considered.

- The impact of the proposed number of storm overflow events should be considered in conjunction with existing discharges and contamination sources that may impact the designated shellfishery and the overall impact aggregated.
- The frequency, duration and volume of significant overflow events must be recorded and reported as soon as practical to relevant bodies (Sea-Fisheries Protection Authority, Marine Institute, Food Safety Authority of Ireland and the Irish Shellfish Association) and on an annual basis.
- A programme of ongoing improvements to the network should be developed with the aim of reducing, and if practical eliminating, the frequency and volume of untreated discharges to the receiving environment.

Emergency Overflows

The Marine Institute believes that;

- A system for detecting and recording the duration and volume of any emergency overflows must be in place. Such overflows must be reported immediately to the Sea-Fisheries Protection Authority, Marine Institute and Food Safety Authority of Ireland.

Microbiological Monitoring

The Marine Institute believes that;

- As a minimum, regular (fortnightly) monitoring of faecal coliform and *E. coli* levels in the influent and final effluent should be undertaken. Once a body of data showing compliance with the design standard criteria is in place there is scope to reduce the frequency of testing.

Public health

The consumption of sewage contaminated shellfish can represent a significant public health risk. The principle risk associated with consumption of such shellfish arising from contamination with human viruses.

The Marine Institute believes that;

- The proposed WWTP discharge must not cause an increased risk to public health by causing further contamination of bivalve shellfish harvested for consumption.

- specific consideration should be given as to whether the discharge may cause an increased risk of viral contamination of shellfish in the designated shellfish water.
- If a risk of virus contamination in commercial shellfisheries is demonstrated consideration should be given to disinfection of the final effluent to reduce the viral load.

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