

Objection	
Objector:	Miss Debby Hayes
Organisation Name:	PROTECT EAST FERRY WATERS
Objector Address:	East ferry, Midleton, Co. Cork.
Objection Title:	Objection #OS006003 - 3rd party objection for Reg No:[P1103-01]
Objection Reference No.:	OS006003
Objection Received:	17 March 2020
Objector Type:	3rd Party
Oral Hearing Requested?	Yes gruec.

Application, and the second se	
Applicant:	Dairygold Co-Operative Society Ltd and TINE Ireland Ltd
Reg. No.:	P1103-01 citon to real

See below for Objection details.

Attachments are displayed on the following page(s).

Dear Sir/Madam,

I write on behalf of 'Protect East Ferry Waters', an environmental conservation group, at East Ferry, Co. Cork.

Our organisation wishes to object to the proposed determination which is to grant the licence for Dairygold to emit waste water from its new cheese facility at Mogeely, Co Cork into Cork harbour at Rathcoursey West.

Our organisation has closely studied the inspectors report and the decision document in relation to this issue and quite frankly, we are both bewildered and alarmed at the proposed determination. Our concerns relate to the habitats directive and the potential breaching of same. There is an area of substantial doubt due to the fact that the outfall site is in extreme close proximity to a SAC and a SPA and is the home to a multitude of protected species as listed on the NPWS website. We remain clear on our point, that this is no place for the outfall pipe to release up to 4 million litres of industrial FOG (Fats, oils and grease) per day. Under the habitats directive, one must be certain that the upstream FOG pollution will not harm the multiple species residing in both the SPA and SAC or have an adverse effect on the environment.

Studies that have been carried out by NUI Galway in the North chamel show clearly that anything that is released at the north channel does not simply get brought out to sea, but rather, builds up in the region and accumulates. In fact only a fraction of the water in this area of the harbour goes out to sea with each tide. This is going to impact significantly on the multiple mid flat areas around the pipe thereby impacting on protected birds and their ability to feed. This is strong scientific evidence and not to be ignored.

We have already submitted strong scientific evidence to show that this emissions licence would be detrimental to both the natural habitats and the water quality. We are baffled that our concerns have been dismissed. With the information we have acquired from both East Ferry and Rathcoursey locals and Scientific and environmental experts, we are bewildered at this proposed determination. We are not satisfied and are therefore objecting and requesting an oral hearing where we can discuss these issues at length.

Please see attached, letters of from Dr. Patrick Collins of Queens University, Belfast and environmentalist Feidhlim Harty and Charles Hayes.

Please also see below letters from Dr Patrick Collins and Feidhlim Harty , Charles Hayes , all environmental experts.

Yours Sincerely,

Debby Hayes, on behalf of all members of Protect East Ferry Waters.

East Ferry, Midleton, Co. Cork 15th March 2020

I, Charles Hayes, wish to join those who are objecting to the Dairygold project that proposes to emit waste from a new cheese factory at Mogeely into the waters of Inner Cork Harbour at Rathcoursey West.

I too would welcome the right to address any oral hearing that might arise regarding this project. My objections centre on a number of issues. These issues include my insights and knowledge of the waters and foreshores of an area that has been my home for more than seven decades.

ers on ers on the for its period for an ers on the for its period for purposes only and the formal for the formal for the formal for the formal for the formal formal for the formal formal for the formal fo I look forward to cooperating with you and others on this important ecological matter.

Every Good Wish,

Charles Hayes. M.Ed., M.A., H.D.E.

East Ferry Midleton, Co Cork.

(end of letter)

FH WETLAND SYSTEMS Ltd. 30 Woodlawn, Lahinch Rd., Ennis, Co. Clare, V95 A8D3.

14th March 2020

Tel: 065 6797355 <u>www.wetlandsystems.ie</u>

e-mail: reeds@wetlandsystems.ie

Submission associated with the "Protect East Ferry Waters" group. In application for an Oral Hearing to be called by the EPA. Re. Alternative disposal options for Dairygold/TINE discharge at Rathcoursey Point.

This submission is made to request an Oral Hearing for a more complete appraisal of options for high quality treatment on site and discharge to adjacent waterways ather than piping to Cork Harbour. With over 20 years of experience working with constructed wetlands, reed beds and other natural treatment systems it is my opinion that high quality efficient treatment on site is a viable alternative to the proposed 14km pipe to Rathcoursey Point.

The size of a constructed wetland system need not be overly arduous. If the majority of treatment is carried out by a standard mechanical aeration unit with additional phosphate removal, a constructed wetland system of c.5.5ha would be sufficient to provide tertiary polishing of effluent prior to discharge into the river at the site.

Another option worthy of greater consideration is irrigate a willow crop using the effluent. Willows are well known for their usefulness in mopping up liquid, nitrates and phosphates and have been used in Denmark over the past 20 years for sewage treatment applications. If Dairygold were to utilise the effluent as a nutrient source for a biomass crop this would eliminate any pollution source and would create a viable crop for sale. Bord na Mona are looking for biomass to augment their cofiring plant in Edenderry and elsewhere. This will become more important in coming years as Moneypoint either closes or converts from coal to biomass, helping to guarantee a market.

The land area that could be irrigated with willows is c.385ha, based on previous experience with zero discharge willow systems in Ireland. Diversification of landuse will become increasingly important in Ireland as CAP reform puts ever greater pressure on our farmers to become more financially viable with ever more limited subsidies.

Conversely if the aim is to dispose of the effluent rather than irrigation per se, then discharge via percolation through a willow filter system may also be a viable option. An area of 22170ha (depending on infiltration rates) would be suitable, as long as the effluent was treated to a suitable standard prior to the willow system. This would also provide nutrient uptake, and a biomass willow crop. Recent forestry grants for short rotation coppice plantation establishment would offset implementation costs. Flooding in the area may reduce the effectiveness of the percolation

treatment on an occasional basis, but for the majority of the time, this would not be an issue, and the dilution rates would be high enough during a flood event to offset the reduced soil treatment.

Please do not hesitate to call or email with any questions on any of the above information.

Yours sincerely,

Féidhlim Harty

Directors: F. Harty, Dr. E Hitching Co. Reg. No. 383998 VAT No. IE 6403998I (end of letter)



Dr Patrick C. Collins

Lecturer in Marine Biology School of Biological Science 19 Chlorine Gardens (Rm 02.007) Queen's University Belfast Belfast, Co. Antrim BT9 5DL Northern Ireland

Tel (office) +44 28 90972685 Tel (mobile) +44 7493 034338 Email: patrick.collins@qub.ac.uk

To Whom it may concern,

Putposes of the for any other use this I am a lecturer in marine biology at Queen whiversity Belfast. My background is in benthic ecology and marine environmental survey.

I have been contacted by both the Protect East Ferry Waters citizens group and Atlantic Shellfish Ltd. to comment on their concerns relating to the proposed Dairygold Ltd. effluent release in Cork Harbour. I am m broad agreement with both stakeholder groups and share their concerns that a precautionary approach has not been fully implemented.

The flushing rate of the Great Island Channel SAC has not been demonstrated as sufficient to adequately dissipate/dissolve the effluent. Without such a study, any risks to the integrity of both the SAC and SPA from increased organic enrichment cannot be addressed. Furthermore, the effects of increased organic enrichment in the North Channel on the toxic Alexandrium minutum have not been modelled.

Given the relatively low cost of such studies and their capacity to allay stakeholder concerns, I suggest these are implemented prior to any effluent release.

Yours sincerely

Dr Patrick Collins

Consent of copyright owner required for any other use.

Dear Sir/Madam,

I write on behalf of 'Protect East Ferry Waters', an environmental conservation group, at East Ferry, Co. Cork.

Our organisation wishes to object to the proposed determination which is to grant the licence for Dairygold to emit waste water from its new cheese facility at Mogeely, Co Cork into Cork harbour at Rathcoursey West.

Our organisation has closely studied the inspectors report and the decision document in relation to this issue and quite frankly, we are both bewildered and alarmed at the proposed determination. Our concerns relate to the habitats directive and the potential breaching of same. There is an area of substantial doubt due to the fact that the outfall site is in extreme close proximity to a SAC and a SPA and is the home to a multitude of protected species as listed on the NPWS website. We remain clear on our point, that this is no place for the outfall pipe to release up to 4 million litres of industrial FOG (Fats, oils and grease) per day. Under the habitats directive, one must be certain that the upstream FOG pollution will not harm the multiple species residing in both the SPA and SAC or have an adverse effect on the environment.

Studies that have been carried out by NUI Galway in the North charmel show clearly that anything that is released at the north channel does not simply get brought out to sea, but rather, builds up in the region and accumulates. In fact only a fraction of the water in this area of the harbour goes out to sea with each tide. This is going to impact significantly on the multiple mid flat areas around the pipe thereby impacting on protected birds and their ability to feed. This is strong scientific evidence and not to be ignored.

We have already submitted strong scientific evidence to show that this emissions licence would be detrimental to both the natural habitats and the water quality. We are baffled that our concerns have been dismissed. With the information we have acquired from both East Ferry and Rathcoursey locals and Scientific and environmental experts, we are bewildered at this proposed determination. We are not satisfied and are therefore objecting and requesting an oral hearing where we can discuss these issues at length.

Please see attached, letters of from Dr. Patrick Collins of Queens University, Belfast and environmentalist Feidhlim Harty and Charles Hayes.

Please also see below letters from Dr Patrick Collins and Feidhlim Harty , Charles Hayes , all environmental experts.

Yours Sincerely,

Debby Hayes, on behalf of all members of Protect East Ferry Waters.

East Ferry, Midleton, Co. Cork 15th March 2020

I, Charles Hayes, wish to join those who are objecting to the Dairygold project that proposes to emit waste from a new cheese factory at Mogeely into the waters of Inner Cork Harbour at Rathcoursey West.

I too would welcome the right to address any oral hearing that might arise regarding this project. My objections centre on a number of issues. These issues include my insights and knowledge of the waters and foreshores of an area that has been my home for more than seven decades.

ers on ers on the for its period for an ers on the for its period for purposes only and the formal for the formal for the formal for the formal for the formal formal for the formal formal for the formal fo I look forward to cooperating with you and others on this important ecological matter.

Every Good Wish,

Charles Hayes. M.Ed., M.A., H.D.E.

East Ferry Midleton, Co Cork.

(end of letter)

FH WETLAND SYSTEMS Ltd. 30 Woodlawn, Lahinch Rd., Ennis, Co. Clare, V95 A8D3.

14th March 2020

Tel: 065 6797355 www.wetlandsystems.ie

e-mail: reeds@wetlandsystems.ie

Submission associated with the "Protect East Ferry Waters" group. In application for an Oral Hearing to be called by the EPA. Re. Alternative disposal options for Dairygold/TINE discharge at Rathcoursey Point.

This submission is made to request an Oral Hearing for a more complete appraisal of options for high quality treatment on site and discharge to adjacent waterways ather than piping to Cork Harbour. With over 20 years of experience working with constructed wetlands, reed beds and other natural treatment systems it is my opinion that high quality efficient treatment on site is a viable alternative to the proposed 14km pipe to Rathcoursey Point.

The size of a constructed wetland system need not be overly arduous. If the majority of treatment is carried out by a standard mechanical aeration unit with additional phosphate removal, a constructed wetland system of c.5.5ha would be sufficient to provide tertiary polishing of effluent prior to discharge into the river at the site.

Another option worthy of greater consideration is irrigate a willow crop using the effluent. Willows are well known for their usefulness in mopping up liquid, nitrates and phosphates and have been used in Denmark over the past 20 years for sewage treatment applications. If Dairygold were to utilise the effluent as a nutrient source for a biomass crop this would eliminate any pollution source and would create a viable crop for sale. Bord na Mona are looking for biomass to augment their cofiring plant in Edenderry and elsewhere. This will become more important in coming years as Moneypoint either closes or converts from coal to biomass, helping to guarantee a market.

The land area that could be irrigated with willows is c.385ha, based on previous experience with zero discharge willow systems in Ireland. Diversification of landuse will become increasingly important in Ireland as CAP reform puts ever greater pressure on our farmers to become more financially viable with ever more limited subsidies.

Conversely if the aim is to dispose of the effluent rather than irrigation per se, then discharge via percolation through a willow filter system may also be a viable option. An area of 22170ha (depending on infiltration rates) would be suitable, as long as the effluent was treated to a suitable standard prior to the willow system. This would also provide nutrient uptake, and a biomass willow crop. Recent forestry grants for short rotation coppice plantation establishment would offset implementation costs. Flooding in the area may reduce the effectiveness of the percolation

treatment on an occasional basis, but for the majority of the time, this would not be an issue, and the dilution rates would be high enough during a flood event to offset the reduced soil treatment.

Please do not hesitate to call or email with any questions on any of the above information.

Yours sincerely,

Féidhlim Harty

Directors: F. Harty, Dr. E Hitching Co. Reg. No. 383998 VAT No. IE 6403998I (end of letter)



Dr Patrick C. Collins

Lecturer in Marine Biology School of Biological Science 19 Chlorine Gardens (Rm 02.007) Queen's University Belfast Belfast, Co. Antrim BT9 5DL Northern Ireland

Tel (office) +44 28 90972685 Tel (mobile) +44 7493 034338 Email: patrick.collins@qub.ac.uk

To Whom it may concern,

Putposes of the for any other use this I am a lecturer in marine biology at Queen whiversity Belfast. My background is in benthic ecology and marine environmental survey.

I have been contacted by both the Protect East Ferry Waters citizens group and Atlantic Shellfish Ltd. to comment on their concerns relating to the proposed Dairygold Ltd. effluent release in Cork Harbour. I am m broad agreement with both stakeholder groups and share their concerns that a precautionary approach has not been fully implemented.

The flushing rate of the Great Island Channel SAC has not been demonstrated as sufficient to adequately dissipate/dissolve the effluent. Without such a study, any risks to the integrity of both the SAC and SPA from increased organic enrichment cannot be addressed. Furthermore, the effects of increased organic enrichment in the North Channel on the toxic Alexandrium minutum have not been modelled.

Given the relatively low cost of such studies and their capacity to allay stakeholder concerns, I suggest these are implemented prior to any effluent release.

Yours sincerely

Dr Patrick Collins

Consent of copyright owner required for any other use.