Submission	
Submitter:	AJ Navratil
Submission Title:	Submission
Submission Reference No.:	S005613
Submission Received:	11 July 2019
Application	
Applicant:	Dairygold Co-Operative Society Ltd and TINE Ireland Ltd
Reg. No.:	P1103-01
See below for Submission details. Attachments are displayed on the following page(s).	

East Cork Harbour for a Safe Environment

Dr. Darina Allen, Martin Edwardes BSc. Roma Fulton BSc., Natasha Harty BSc. Joan Hayes MA, Allan J Navratil BSc., Anna O'Connor, Anne Marie Russell, William Russell & Others

Please reply to;
AJ Navratil,
Ballinacurra House,
Midleton,
Co. Cork.

Dr. Laura Burke,
Director,
Environmental Protection Agency,
Johnstown Castle,
County Wexford.

10-7-2019

Ref: Cork County Council Planning reference 16/07031
in respect of Cheese Plant for Dairygold Co-Operative Society at
Mogeely with **outfall to East Ferry**

Dear Dr. Burke,

Introduction
This letter is with most particular reference to the Planning requirement that the EPA licence the discharge of circa 4000 tons of aqueous effluent daily at East Ferry. In our considered judgment, that would result in the inevitable degradation of the Harbour receiving waters to an unacceptable and perhaps even unlawful level and should accordingly be denied.

Planning Objections to Cork County Council
It is a matter of record that several objections to the outfall proposals were made to the Planning Authority by concerned groups and persons which included economically viable alternatives. It is disturbing and unsatisfactory that we have seen no evidence that any of these proposals have received due consideration notwithstanding which Planning Consent was issued. In synopsis, it appears that virtually all objections were ignored or dealt with superficially or perfunctorily.

Submissions to the EPA
It is noted that the EPA have received a number of submissions in respect of the above which are against the issuance of an EPA licence as proposed which, we believe, would further damage the estuarine waters. As these submissions can be 'downloaded' and are a matter of EPA and public record there is accordingly no need to repeat them in this letter. Please note, however, that we herewith confirm our opposition to granting such licence as it would amount to the wholly avoidable further degradation of the Harbour.

Particular
We would however draw your particular attention to paragraphs 7.9 to 7.11 inclusive of the submission of Mr. David Hugh-Jones of Atlantic Shell Fish. From these references alone it can be noted that;

(i) the European Courts of Justice [ECJ] judged the Midleton Waste Water Treatment Plant [WWTP] to have failed under Articles 3,4 & 5 of the Urban Waste Water Treatment Directive.

(ii) It appears curious to us how Irish Water could conspire to make such a proven bad situation worse.

(iii) The Planning Appeals Board [ABP] refused further housing development in Midleton owing to infrastructural deficits which included the limitations to waste water treatment and the prejudicing of public health.

(iv) Discharges made at Rathcoursey are subject to accumulation because of unusually high residence times in and of the estuarine waters. It should be noted that this point has also been made in a number of the earlier objections to the CCC.

Summary
A long expensive pipe to-gether with pumping costs has clearly been considered a somewhat cheaper alternative to proper on-site treatment or internalised disposal methodologies.
In other words saving money was achieved by dispersing the problem to Cork Harbour.
By definition that is a **negative externality** (*many paying while more profit*). It is not sustainable and is environmentally and ethically quite un-acceptable.

Conclusion
For the avoidance of doubt, please note that we are opposed to the EPA granting any licence to Dairygold for their current unclean and unsustainable discharge proposals

Yours truly,

Allan J Navratil

Encl/ Our submission to CCC of 17-1-2017

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Please reply to:
AJ Navratil,
Ballinacurra House,
Midleton
Co. Cork.

The Secretary,
The Planning Department,
Cork County Council,
County Hall,
Cork.

17-1-2017

Objections and Representations in respect of "Tine" and Dairygold's Mogeely Cheese factory proposals as per Planning Application Number: 16/7031 per Malachy Walsh & partners.

Submitted on behalf of East Cork Harbour for a Safe Environment (ECHSE) and fee of Twenty Euros (€20)is enclosed herewith.

Dear Sir/Madam,

1.01 This concerns the proposals of the Norwegian Company "*Tine*" who are proposing to move production of their "*Jarlsberg*" brand from Norway to a new 14,000 ton cheese plant at Mogeely in collaboration with Dairygold.

1.02 Whilst the development of an extention to an existing industrial facility at Mogeely based on agriculture is to be generally welcomed a visionary pro-active and holistic plan is essential. To be sustainable, it also needs to properly espouse and address the legitimate interests of the local and proximate communities by avoiding all undesirable ***negative externalities*** to safeguard the future.

1.03 It is incontrovertible that further environmental degradation is unacceptable and would also be regressive.

1.04 Consideration of the Planning Application revealed serious concerns regarding a major ***negative externality*** and **trans-generational inequity** pursuant to which this letter respectfully advances Objections and Representations which centre on inappropriate Harbour outfall.

1.05 Dairygold's Planning Application No. 16/7031 dated 8-12-2016 (and earlier incomplete PA 16/ 6979) met with serious concerns by residents of the East Ferry Area, the general Harbour area and also by those using the roadways adjacent to the proposed outfall pipeline route. Well reasoned concerns were comprehensively voiced at a capacity public meeting at Saleen School on the 4th of January 2017.

1.06 That there was no evidence of material engagements with the community in advance of Dairygold's submission of a Planning Application to the County Council is noteworthy particularly as the territorial and geographical reach of the proposals are quite considerable and also of a long term nature. It is axiomatic that the absence of primary open dialogue to address public concerns and sensitivities was surprising and can hardly be considered to be an oversight.

1.07 Furthermore, and we request our view be so noted, that not engaging fully and transparently in advance with local communities in a structured manner is not what might reasonably have been expected from an otherwise august and respected commercial organisation.

2.01 We contend that discharging a further burden into an amenity harbour area is inappropriate, ill-conceived and primitive. It proposes a ***linear system*** which de facto is a ***negative externality*** and by the long term nature of the plan clearly involves ***trans-generational inequity.*** This is regressive and unacceptable. Please particularly also see **6.09 & 6.10** below.

2.02 Handout entitled: "Memo on Dairygold Wastewater Treatment"

2.03 Description of Proposed Development. This paper gives a brief description and refers, inter alia, to Chapter 2 of Main EIS. (That document was apparently prepared without the benefit of any community inputs and consultation).

2.03 The description states that the daily outflow will be 2,700m3/day and has a design capacity of 4,000m3/day. In perhaps more palpable terms that is 2,700 tons and 4,000 tons of aqueous waste which is the equivalent of 117 and 174 milk tanker truck loads of 23 tons each per day respectively or about equivalent to the volume of Loughaderry Lake every month.

2.04 Reference is made to 1000 m3 of Permeate. The details of plant used to produce it do not appear to be in ready evidence.

2.05 The Waste water treatment plant (WWTP) is broadly described in Dairygold's summary paper. Also with reference to the flow chart at 4.02 below (ex Internet) in comparison with the Dairygold proposals it is not clear if reverse osmosis or microfiltration is contemplated. Also the proposals appear to be generally silent or incomplete about "waste water" in the following contexts;

- That it has an economic use as animal feed,
- The subject of total fat removal

- That of centrifugal separation,
- That Lime or Caustic Soda (NaOH) precipitation is understood to produce nutrient rich sludge which can be spread on agricultural land.
- The option of use of Constructed Wetlands or natural Wetlands to deal with fluid arisings for structured, managed discharge.
- The use of wastewater for irrigation of e.g. agricultural crops, forestry or willow or all three.
- Other methodologies.

2.06 The proposals clearly require careful examination by an independent un-conflicted body fully qualified and experienced with Dairy-science technology and 'state of the art' up to date methodologies to deal with all aspects of the industry and to furnish a written report to concerned residents well in advance of any Planning Decisions or as part of the Planning process.

3.01 The Base line study, regrettably, appears perfunctory and thus seriously inadequate.

3.02 To conduct a proper appraisal the following data would, we respectfully submit, need to be included as a basic minimum;

a). The historic performance over the last five years of the existing cheese making facility facility to include full EPA licence requirements and record of all breaches and remediation response in order to verify the credibility of the claimed 100% compliance. It is also noted that past Press reports showed this to be otherwise (qv).

b). A base line study spanning at least three years of the fauna (and flora as may be applicable) in the benthic zones of the receiving waters in Cork Harbour and a record of transient populations of fish such as sea bass and any migratory populations of aquatic/marine life and potential effect on birds. These are elementary essentials vital to the future validation of the biological status of the subject area. Meaningful comparisons can then be made with reliable records of the pre-existing natural conditions and populations and indeed residence times of water in various zones and the harbour in general. This is essential in the context of sentinel (or indicator) species.

c). Fully qualified professional independent un-conflicted consideration and transparently publicised results is essential of the potential impact of chemicals used in the treatment process which will invariably be discharged with the 'waste water'. This, it cannot be denied, is an essential element of a properly structured consideration procedure.

3.03 Furthermore, the above and any other data required would be needed from a fully independent technically qualified body competent and able to furnish a comprehensive and meaningful unbiased written report to determine and quantify the ***negative***

externalities of the proposals as a pre-requisite to further consideration by the local authority in consideration of planning consents or conditions.

3.04 For the absolute avoidance of doubt a ***negative externality*** can be identified where "*an entity profits by inappropriate or incomplete in-house methodologies (or none) to the ultimate detriment of the external community*". That equates to dumping rubbish over the fence with a neighbour which is obviously unacceptable. To attempt to do similarly with massive quantities of polluted water over a long period by seeking the imprimatur of a Planning Authority is tantamount to an ***abuse of process***.

3.05 Simply stated society ultimately pays a price for everything. In general;

3.06 It is a sine qua non that the lowest societal cost and highest level of sustainability is best achieved when the consequences of an activity are optimally internalised by the espousal of a ***circular system*** to deal with resources and by-products. This methodology is consistent with nature.

3.07 Similarly, the highest societal cost is a ***linear system*** in which the failure to internalise the consequences of an activity are foisted on others and/or environmental degradation is involved.

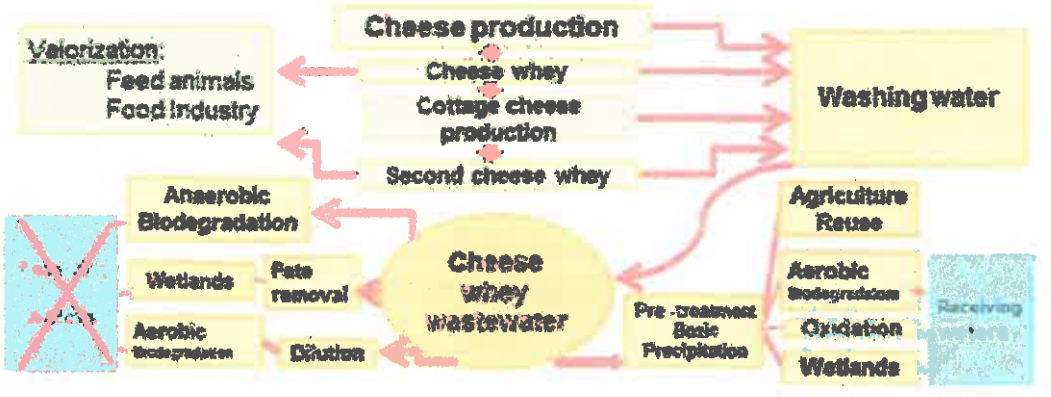
3.08 The late Mr. MC O'Sullivan, Consulting Engineer over 40 years ago publicly stated that "*future more sophisticated and better informed societies will likely demand higher standards*" and referred to lead pipes and open sewers of Roman times and asbestos as examples of what clearly became unacceptable. His observations were prescient as more advanced and better informed communities, albeit slowly, are now progressing to waste reduction and re-cycling whilst rejecting landfill and incineration as unsustainable linear methodologies both of which result in ***trans-generational inequity*** and ***negative externalities***. Those factors are now well recognised by more informed communities.

4.01 It appears that several feasible alternatives to a long pipe ***linear system*** were either not considered or summarily dismissed. Such poor process would inexorably lead to ill informed decisions.

4.02 The proposals appear silent on different methods of precipitation, and use of the precipitate, to recover most if not all of the values contained in the wastewater and lead to a zero discharge system. Again, subject to no conflicts of interest arising, UCC, for example, may be able to offer advice on this matter in conjunction with Teagasc, on, for example,

a). US patent 5338553A and others too numerous to mention here.

(b) Graphical abstract (Cheese Whey Waste)



c). Methods of dealing with whey waste?

An alternative view from New Zealand (University of Waikato)

Casein ('curds') is a protein extracted from milk and is used to make cheese, as well a range of other products. The liquid left over after the casein is removed is called whey.

Whey, a by-product, is sometimes dumped, or else sprayed on arable land. This causes problems with runoff as it increases the growth of aquatic plants and the biological oxygen demand (BOD) of waterways. This is because whey contains a wide range of compounds (proteins, lactose, calcium, phosphorus, vitamins, and many other nutrients). Instead, whey can be processed to produce a wide range of commercial products. For example, the whey can be developed into high protein products (e.g. whey butter, whey cheese, protein powders for food manufacture) and whey-based food additives with particular properties (e.g. gels that bind fat to water in canned products, meats, pates and sausages as well as in desserts). The lactose can be separated and used in alcoholic fermentation (using micro-organisms) to produce gin and fortified wines, or converted (via enzyme reactions) to make glucose/galactose syrups for sweeteners."

5.01 Ireland by virtue of low population density with few dirty industries has a low level of pollution. That is a major National Asset which is generally undervalued. ECHSE believe that our standards need to be cherished, protected and ultimately remediated where damaged. Degradation, which we believe Dairygold's current proposals would involve, is unacceptable.

5.02 Untreated sewage from other coastal fringe towns entering the harbour is a legacy of past failures which need to be addressed for manifold reasons including health and safety. The per capita cost of treatment is relatively tiny (circa one drink a week per capita) and reference to lack of infrastructural upgrading is no justification whatsoever for adding a further BOD or COD burden from any source.

5.03 Reliance on historically tolerant and/or arbitrary norms to determine some notional "*assimilative capacity*" of the waters of Cork Harbour renders the area, de facto, 'hostage to fortune'. Such outdated mindset we believe to be utterly unacceptable.

5.04 The potential consequence therefore is a dilemma arising at some time in the future when the aggregation of filth discharged to the estuary will have caused the waters to deteriorate to a critical level. At that point a determination would be required as to who is responsible for remediation. Bitter experience has shown such situations to be far more expensive than prevention. Simply stated; prevention is better than cure.

5.05 The well established principle that **"the polluter pays"** needs to be robustly upheld and not fudged as future remediation would come at a cost but the perpetrator may have absconded!

In such circumstances who would pay? Will it be Cork city, Monkstown , Cobh, Carrigaline, Crosshaven, Midleton, Midleton Distillery, Dairygold, Aghada, Whitegate, The Refinery, Haulbowline Steel Works (wherever they now are), or others or all of the above and how will that be arranged?

5.06 Before that can be decided, blame will no doubt be attributed to changes in weather patterns, accidental or chance events, agricultural run-offs and a myriad of other excuses for inaction including precedent. All are counterfeit justification for continuance and inaction. That is simply not the Hallmark of a sophisticated and civilised society to which most would aspire.

5.07 Eventually all taxpayers stand to be fixed with burdens avoided by others as the Haulbowline experience clearly demonstrates. That is a prime example of both ***negative externality*** and ***trans-generational inequity***.

5.08 It is an incontrovertible fact; ***"if we fail to plan (properly) - we plan to fail (ultimately)"***

5.09 Dairygold's Memo states that the grey water is ideal for irrigation but makes no specific proposals in that regard.

a) Crop Irrigation may well be a viable mechanism also
b) Irrigation of Forestry and or willow plantations for biomass.
c) Natural Wetlands may also be an option as indeed
d) Constructed wetlands would seem to be an alternative.....otherwise;
e) Raised standards of water treatment with discharge to the Kiltha river should be considered before dumping to estuarine waters in an amenity area and/or.
f) Chemical precipitation and sludge removal for agricultural use
g) A shared outfall to Garryvoe/Ballycotton intercepting sewage works outfall on the way.

5.10 It may well be, therefore, that a combination of several methodologies may prove to have greater merit than the rather simplistic, problematic and inappropriate proposal in the Planning Application. The following optional methodologies are brief outline but greater study is required.

5.11

a) Irrigation

General irrigation appears to offer a framework for a possible economic option or to-wards a part solution.

b). Forestry and or willow plantations for biomass,

This requires an economic exercise which could perhaps be best guided by Teagasc and/or the Dept. of Forestry at UCD. In terms of magnitude, however, it should be within the scope of existing Forestry areas north of Mogeely to absorb the planned quantity of aqueous effluent to-gether with a further circa <2500 acres (1,000 h/a) of Willow plantations in low lying land within a 5-8 mile (13km) radius of Mogeely. (e.g. the Ballymacoda level lands)

c). Natural Wetlands,

This aspect should be explored with the owners of the Ballymacoda levels and the area adjacent to Loughaderry. There are likely to be other areas within reasonable proximity and as a viable alternative to a 13.6km pipe.

d). Constructed wetlands,

This technology is established nationally and internationally and the economics of its applicability to the Mogeely proposals deserve professional consideration. There are professional environmental consultants available with in depth knowledge and experience of this methodology.

e). Improved standards of water treatment and some discharge to the Kiltha river.

Dairygold's paper is silent on this aspect and simply changes focus to 100% outfall to East Ferry which also deserves professional re-consideration. UCC have the requisite disciplines and could be asked to advise on fluvial biology. Whilst the river is small, better methods of water treatment and re-cycling should first be considered before summarily promoting a long expensive pipe!

f). Chemical precipitation and sludge removal for agricultural use.

g). As discussed in 6.09 below.

6.01 The first paragraph of this segment in the Dairygold '*information document*' includes the following reference "The River Kiltha does not have the assimilative capacity to accept larger volumes of discharge '*no matter how well treated*'" The part of that statement in *Italics* is quite misleading in that it is technically feasible to treat contaminated water to make it potable! If on the other hand the writer of that text was attempting to convey that it is uneconomic to treat the water to an acceptable standard then it (a) calls to question the viability of the whole project or indeed (b) suggesting that the site is fundamentally and geographically unsuitable. Why not locate it nearer the ocean? In Ballymacoda for example?

NB A delegation from Midleton visited Picketts Lock Sewage Works in London in 1972. The outfall from that works was actually potable water and was discharged into a small river called (co-incidentally) the "River Lee". About a mile downstream there was a waterworks which sourced it's water from the Lee for distribution to the London domestic piped water network. This is raised here simply to record the fact that water can be cleaned to a high standard. There are of course alternatives which first need to be considered.

6.02 Dairygold's executives and consultants maintain that they were obliged to do the bidding of Irish Water and provide for dumping through a long and costly pipe to a 'designated' dump point in an amenity area. In the context of **6.09 & 6.10** below that is difficult to understand. *It has been posited that this could be analogous to the Serpent in the Garden of Eden!*

6.03 Discharging a further burden into an amenity harbour area is, by any civilised standard, crude and quite ill-conceived. It is a primitive and regressive ***linear system*** which also incurs ***negative externalities*** and ***trans-generational inequity***. Those constitute at least three strong grounds for **objections** and three strong reasons for **representations** herewith to require Dairygold and their cohorts at Irish Water to first examine all alternatives and share their findings publicly and transparently before re-submitting any application.

6.04 The outfall pipe is a significant civil engineering project along mainly narrow roads estimated to take nearly half a year and will involve significant public nuisance through road delays, hazard, noise, rock breaking, re-instatement and ongoing maintenance. This aspect certainly requires careful further community scrutiny and consideration by those living along the entire length of the proposed route.

6.05 If dilution and dispersal is such a marvellous method then it is reasonable to ask; why not Garryvoe/Ballycotton which has significant merits?

6.06 Garryvoe involves a considerably shorter linear distance 9.4km c/w 13.6 km. of land pipe and the capital savings involved (4.1km less) could be applied to a submarine pipe with multiple and therefore diffuse outlets which could discharge into a far larger body of water than East Ferry which is also subject to dispersal by oceanic currents.

6.07 There is, however, no evidence that a shorter pipeline to Garryvoe with diffuse oceanic discharge several km's offshore has been objectively by Dairygold or its consultants. It is noteworthy that Dairygold maintain that Garryvoe was summarily dismissed by Irish Water. This seems singular in view of the WYG report (see **6.09** below)

6.08 It should be noted that this document does not specifically propose Garryvoe over objective consideration of other methodologies. That said, where marine discharge is contemplated Garryvoe appears to have significant merits relative to the enclosed waters of Cork Harbour and summary dismissal by reference to **6.09 & 6.10** below thus seems quite unjustified.

6.09 Appendix E of the EPA's Urban Waste Water Treatment in 2015 (2016) says that treatment at Ballycotton is to be provided by 2019 (Dates provided to the EPA by Irish Water in July 2016). In that context it is herewith suggested to join the treated cheese effluent and the treated Castlemartyr & Ladysbridge sewage effluents and pipe them all to a diffuse marine outfall off Garryvoe/Ballycotton. That would fit into an holistic plan and also is a shorter route than East Ferry and so could have significant cost sharing merits for Dairygold and the County Council and/or Irish Water and be of enormous benefit to the area. Reference: "*Upgrading of Wastewater Treatment Facilities at Midleton, Castlemartyr, Cloyne, Saleen and Ballycotton: Cost Benefit Analysis for Alternative Outfall for Midleton WWTP*" produced by WYG, Engineering Consultants, (Ireland) Ltd in July 2009.

ECHSA Caveat: Any discharge in the Garryvoe/Ballycotton zone would have to be in full compliance with all the National and EU requirements relating to protection of fisheries and safe bathing waters.

The WYG report confirms that all the above towns require sewage treatment upgrades, including Midleton whose recent increase to 15,000PE they state would be overloaded by 2011 as the receiving rivers cannot absorb further treated effluent and Cork Harbour is soon to be cleaned up. It would therefore make perfect sense to put the cost of this creamery outfall towards creating a joint pipeline with Castlemartyr and Ladysbridge to the new sewage works required at Ballycotton, with a new marine outfall.

6.10

Furthermore, Cloyne requires an upgrade from 1,200PE to 4,000PE and Saleen's old septic tank has to be dealt with. Currently both discharge into Cork Harbour into the area of highest water retention in the Lower Harbour which was the site of the Rostellan oyster beds. It was proposed by WYG that these discharges could therefore also be taken to join the marine outfall at Ballycotton. The other purpose of this study was to review the viability of re-routing the treated effluent from Midleton WWTP from its current discharge point at Rathcoursey to the same proposed marine outfall at Ballycotton.

6.11 Discharge by lunar clock mechanism of itself is further evidence of the polluting potential of the waste-water, *i.e. if it was biologically or biochemically benign then the time of discharge would make little or no difference.*

6.12 One is reminded of the designation of Midleton by the relevant powers (DOE etc.) prior to the establishment of the Midleton sewage works. It was deemed to be a coastal town by virtue of the fact that it is partly tidal although having only about half the rise and fall of that at Cobh. In those circumstances, although involving large and arguably avoidable capital cost, tertiary treatment was dismissed and marine discharge of inadequately treated water by lunar clock mechanism was selected. That this involved an annual burden of pumping and maintenance costs comparable to the cost of full (tertiary) treatment was, it appears, simply dismissed at the time.

6.13 The continuing bacterial and viral load was later followed by the discontinuance of an established oyster and mussel farm in the harbour the consequences of which are still in dispute and the subject of litigation. Clearly this merits classification as a ***negative externality*** and any further burden into the Harbour may also have other unintended consequences.

6.14 It would be fanciful, indeed absurd, to infer that by virtue of the assertion that the proposals do not include bacterial and viral loads that ipso facto there might be no effect on the receiving waters. Without offering the re-assurance of valid empirical evidence it is noteworthy that Dairygold's engineering consultants, at least at the information meetings in Midleton, have dismissed the effects of fats, oils and greases. If the material is so benign then it does raise the serious question of; "why is such reliance placed on whatever limited scouring potential there might be of tidal flows to flush as much as possible into the ocean?"

6.15 At times of very still air when the surface of the water is 'smooth as glass' there is already a visible film on the surface. Notwithstanding the oral assurances of Dairygold's engineering consultant, it is difficult to see how further discharge of lighter than water Fats Oils and Greases (FOG's) will not exacerbate the existing situation. Attention is drawn to several hydrodynamic studies the latest of which to be published comes from the UCG, "*Modelling phytoplankton dynamics in a complex estuarine system"* Nash S. and Hartnett M. (2011). This very advanced work was done by one of Ireland's most experienced hydrodynamic teams. Their findings confirm, inter alia, that, for example,. the residence time of waters in Cork Harbour is very much longer than the representations made by Dairygold in their Information Memo and at information meetings in Midleton before Christmas.

6.16 For the avoidance of all doubt, ECHSE consider it reasonable to ask the Planning Authority to require qualified and un-conflicted written evidence in support of Dairygold's

various assertions of minimal environmental impact and that such report becomes a public and transparent document well in advance of any consideration of the Planning Application.

7.01 At their information sessions in Midleton, Dairygold's representatives were understood to say that the EPA is to determine discharge water quality standards after PP may be obtained. This seems quite inconsistent with pro-active forward planning and can perhaps best be described as unusual and surprising. Should such strange 'protocol' indeed apply then it offers further ground for **objection.**

7.02 Past experience has demonstrated that reliance on obtaining an EPA licence offers minimal if any real protection to the community involved and thus may be regarded as insufficient. It follows that independent evaluation by unbiased, qualified and non conflicted parties is required as a precursor to any further decisions.

8.01 Technical claims in the circulated text of Dairygold have been offered without independent attribution or verification and thus lack credibility. That is a further ground for **objection.**

9.01 **Environmental Assessment** The figures in Section 6 of the paper under the heading of "Total BOD" confirm that about half as much again will be added to the existing BOD burden to Cork Harbour as the combined burden of Midleton town and the Distillery. In other words increasing the discharge at East Ferry by a further 100kg BOD/day plus the current stated figure of 211.25kgs BOD/day will result in a total discharge of 311.25kgs BOD/day. Similar proportions are mentioned for N & P. Cumulatively that is significant and not negligible as claimed in the text.

Please also see the text of **6.09** above which refers to the WUG report which says that by 2011 the Midleton system will be overloaded.

10.01 What if?

Unless secured by a bond of a significant magnitude which somehow legally secures the interests of the entire Harbour Area the assurances in this section are simply worthless.

11.01 Similar Effluent producing plants.

Independent evaluation by a qualified and not conflicted party is required

Conclusions

- It is self evident to infer from the Application that the contemplation of a long discharge pipe, de facto, demonstrates that whatever on-site treatment is proposed is minimal. There is no evidence of consideration of the findings of WYG report.

- It is axiomatic therefore that a long and expensive pipe to-gether with pumping costs has been selected as a cheaper option than proper on-site treatment and/or alternative local and/or internalised disposal methodologies as a seemingly 'easy fix' for the promoters.

- In other words, saving money at Mogeely is achieved by shifting the problem to Cork Harbour. That by definition is a ***negative externality*** and accordingly is totally unacceptable.

E&OE

Yours faithfully,

Joan Hayes Ann Marie Russell Allan J Navratil Darina Allen

i Irish Examiner report downloaded from Internet.

ii University of Waikato