



**OFFICE OF ENVIRONMENTAL
SUSTAINABILITY**

INSPECTOR'S ADDENDUM REPORT ON A LICENCE APPLICATION

To:	Directors	
From:	Orla Harrington	-ENVIRONMENTAL LICENSING PROGRAMME
Date:	12 December 2019	
RE:	Application for an Industrial Emission Licence from Dairygold Co-Operative Society Ltd and TINE Ireland Ltd, Mogeely, Cork.	

A late submission was received from Mr. David Hugh-Jones (Atlantic Shellfish Ltd) on the 11 December 2019 in relation to Dairygold Co-Operative Society Ltd and TINE Ireland Ltd, IE licence application (Licence Register P1103-01) and should be read in conjunction with my original inspector's report, dated 12 December 2019.

The main issues raised in the submission received is summarised below; however, the original submission should be referred to at all times for greater detail and expansion of particular points.

The submission references the consideration of alternatives and the amendments made to the EIA Directive 2011/92/EU by Directive 2014/52/EU. An alternative location for discharge was the main point of concern in the submission particularly in regard to tidal influences, excess nutrients and the lack of dilution. The submission considers that by the addition of the applicant's discharge to the Rathcoursey outfall, an unacceptable situation is being compounded. The submission considers that there will be an accumulation of nutrients in the North Channel and it will be a threat to oyster farming. Reference is also made to the Middleton waste water treatment plant and its storm water overflows. The submission considers the volume and number of overflows to be underestimated in the applicant's assessment. The lack of mitigation measures in the NIS was also highlighted.

Response:

The Agency published its screening determination on 15 November 2019. In accordance with the EIA Screening Determination, the Agency has determined that the activity is likely to have a significant effect on the environment, and accordingly carried out an assessment for the purposes of EIA. An EIS was submitted to the planning authority prior to 16 May 2017; therefore, the EIA was carried out in line with 2011 EIA Directive requirements, amendments made to the 2014 Directive are not applicable to this assessment. The matter of alternatives is addressed in Chapter 3 (Alternative Considered) of the EIS, as discussed in section 15 of the inspector's report.

Irish Water, under Section 99E of the EPA Act, as amended, gave its consent for this discharge, specifying ELVs and certain other conditions and restricted periods of emission. Where a discharge is to sewer, it can be taken that, as the waste water

discharge has been subject to authorisation by the Agency, that the relevant environmental quality standards have been met through the ELVs and conditions associated with that authorisation and has regard to the water quality standards and objectives for the receiving water and protected areas (including shellfish). It is Irish Water's responsibility to ensure that the combined discharge meets the limits and satisfies the conditions set in the WWDL. Compliance is subject to enforcement by the Agency's Office of Environmental Enforcement. This is further detailed, along with my assessment, in Section 8 (Discharges to Water and Ground) of the inspector's report.

The potential impacts on Cork Harbour were assessed using calculations and hydraulic modelling methods. The results of this study state that the neap tide volume upstream of the outfall is approximately 10,490,455m³ indicating adequate dilution available in the vicinity of the outfall. This is discussed further in section 8 of the inspector's report.

Following consultation with the Agency's Office of Evidence & Assessment (OEA), they are satisfied that flushing out to the open sea of the treated effluent will occur provided certain criteria were met. These are conditioned in the RD and discussed in section 8 of the inspector's report.

In the original application section 7.8 of the NIS, which dealt with the mitigation measures, were not included in the document. This was requested as part of a regulation 10 request for further information and an updated NIS submitted on 07 June 2019. Mitigation measures were included as part of the NIS and considered as part of the Agency's appropriate assessment. This is discussed further in section 16 of the inspector's report.

I am satisfied that the observations raised do not significantly alter or change my recommendation dated 12 December 2019 to grant the licence subject to the conditions set out in the RD. The inspector's report as submitted to the Board of the Agency has addressed all likely significant direct and indirect effects of the activity on the environment.



Orla Harrington
Inspector

Signed: 

Date: 17/12/2019

 Environmental Protection Agency An Ghníomhaireacht um Chaomhnú Comhshaoil	OFFICE OF ENVIRONMENTAL SUSTAINABILITY
INSPECTOR'S ADDENDUM REPORT ON A LICENCE APPLICATION	
To:	Directors
From:	Orla Harrington -ENVIRONMENTAL LICENSING PROGRAMME
Date:	17 December 2019
RE:	Application for an Industrial Emission Licence from Dairygold Co-Operative Society Ltd and TINE Ireland Ltd, Mogeely, Cork.

A late submission was received from Deirdre O'Shaughnessy on the 16 December 2019 in relation to Dairygold Co-Operative Society Ltd and TINE Ireland Ltd, IE licence application (Licence Register P1103-01) and should be read in conjunction with my original Inspector's Report, dated 12 December 2019 and addendum memo, dated 12 December 2019.

The main issues raised in the submission received are summarised below; however, the original submission should be referred to at all times for greater detail and expansion of particular points.

Ms O'Shaughnessy is concerned about the impact statement and associated documents accompanying the present application from Dairygold Co-Operative Society Ltd and TINE Ireland Ltd and wishes to object for the following reasons:

- Lack of acknowledgement in the Natura Impact Statement (NIS) that upstream pollution would cause adverse effects on the water quality and thereby impact the protected species and habitats upstream and downstream of the Rathcoursey outfall.
- Lack of analysis in the NIS of the possible effects of fats, oils and grease (FOG) deposition on feeding birds
- Concern that the discharge will circulate and remain around the east ferry for up to 2 months before exiting the harbour.
- The applicants must demonstrate beyond a reasonable doubt that long term exposure to FOG will not impact on European Sites.
- Ms O'Shaughnessy asks to see all four stages of appropriate assessment (AA) and lists the four stages in the submission.
- Concern over the fact that Dairygold/TINE have not sought alternative solutions nor offered 'imperative reasons of overriding public interest' as is required by European law.
- Concern over the possible smell, residue, scum when FOG is discharged on a daily basis.
- It is the submitters understanding that AA should take account of 'any written submissions or observations made to the public authority in relation to the

Signed: 

Date: 17/12/2019

application for consent for a proposed plan or project'. This implies that formal submissions should be given consideration during the process.

- Some alternatives for treating wastewater are listed in the submission.

Response:

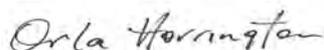
All these concerns have been dealt with largely in the IR.

Irish Water, under Section 99E of the EPA Act, as amended, gave its consent for this discharge, specifying ELVs and certain other conditions and restricted periods of emission. Where a discharge is to sewer, it can be taken that, as the waste water discharge has been subject to authorisation by the Agency, that the relevant environmental quality standards have been met through the ELVs and conditions associated with that authorisation and has regard to the water quality standards and objectives for the receiving water and protected areas. It is Irish Water's responsibility to ensure that the combined discharge meets the limits and satisfies the conditions set in the WWDL. Compliance is subject to enforcement by the Agency's Office of Environmental Enforcement. This is further detailed, along with my assessment, in section 8 (Discharges to Water and Ground) of the inspector's report.

Following consultation with the Agency's Office of Evidence & Assessment (OEA), they are satisfied that flushing out to the open sea of the treated effluent will occur provided certain criteria were met. These are conditioned in the recommended determination and also discussed in section 8 of the inspector's report.

An Appropriate Assessment Screening was undertaken on the 01 March 2019, an NIS was submitted with the licence application and a revised NIS on the 07 June 2019. I have determined that in light of the reasons set out in the inspector's report that the activity, individually or in combination with other plans or projects, will not adversely affect the integrity of any European site, if carried out in accordance with this licence and the conditions attached. Stages 3 and 4 of AA relates to situations where no alternative exists and where adverse impacts remain. These stages are not considered relevant for this AA.

I am satisfied that the observations raised do not significantly alter or change my recommendation dated 12 December 2019 to grant the licence subject to the conditions set out in the RD. The Inspector's Report as submitted to the Board of the Agency has addressed all likely significant direct and indirect effects of the activity on the environment.



Orla Harrington
Inspector

This document has been cleared for submission to the Board by the Programme Manager, Marie O'Connor

Signed: Gráinne Dylesky Date: 13th February 2020

 epa Environmental Protection Agency <i>An Ghníomhaireacht um Chaomhnú Comhshaoil</i>	OFFICE OF ENVIRONMENTAL SUSTAINABILITY
INSPECTOR'S ADDENDUM REPORT NO. 3 ON A LICENCE APPLICATION	
To:	Directors
From:	Orla Harrington & Philip Stack -ENVIRONMENTAL LICENSING PROGRAMME
Date:	13 TH February 2020
RE:	Application for an Industrial Emission Licence from Dairygold Co-Operative Society Ltd and TINE Ireland Ltd, Mogeely, Cork (Licence Registration Number P1103-01).

Background

This report (Addendum No. 3) is an addendum to the Inspector's Report that was submitted to the Board of the Agency on the 17th December 2019 in relation to Dairygold Co-Operative Society Ltd and TINE Ireland Ltd (hereafter Dairygold/TINE), IE licence application (Licence Register P1103-01). It should be read in conjunction with the original Inspector's Report, dated 12th December 2019 and the two addendum memos, dated 12th December 2019 and 17th December 2019.

This addendum deals with 25 submissions (including Irish Water's response) and one applicant response received by the Agency since completion of the above referenced reports on the licence application. These submissions must be given due consideration before the Agency decides on the licence application.

The Agency requested, in letters dated 24th December 2019, that Dairygold/TINE and Irish Water (IW) examine all additional submissions received by the Agency since the most recent addendum was submitted to the Board. In particular, any submissions relating to the study carried out by Irish Hydrodata Limited (IH) on behalf of Irish Water (IW), titled '*Rathcoursey Outfall Investigation of the Impact of Treated Wastewater Discharges arising from the Dairygold Mogeely Plant to Cork Harbour*'. A response was received from the applicant on the 23rd January 2020 and from IW on the 29th January 2020.

This report considers the applicant's response, IW's response and third-party submissions. The main issues raised in the applicant's response and third-party submissions are summarised below, however, the original documents should be referred to at all times for greater detail and expansion of particular points. For clarity, the points raised in the submissions (including IW's response) and the applicant's

responses to them are dealt with under topic headings. A brief overview of all submissions are listed in Appendix 1.

Modelling

Third-Party Submission Summary

Mr. David Hugh-Jones made four substantial submissions after the Inspector's Report Addendum No. 2 (dated 17th December 2019) was presented to the Board.

To inform these submissions Mr. Hugh-Jones:

- Conducted a two-day drogue survey in the harbour to acquire further information on water movements in October/November of 2019
- Commissioned Mr Mark Bentley of JBA Consulting, to review the modelling report submitted in the Dairygold/TINE application; and
- Conducted analysis of current-meter measurements, made over a full spring/neap tidal cycle of 14 days in January 2020.

In his submission, Mr. Hugh-Jones outlined his concerns in relation to the modelling undertaken by IH, which include:

1. Inaccuracies in relation to the water exchange rate on each tide provided in the original IH report;
2. The large variation in the estimated flushing time;
3. The use of a 22-year old 2-Dimensional flow model when more advanced computer modelling is now available;
4. Rathcoursey is not a suitable outfall location for this discharge due to poor tidal flushing; and
5. Information from drogue runs and current-meters, which indicated that a discharge at Rathcoursey, does not always reach the open sea, even on a spring tide. It also called into question the conclusions in relation to the direction of the currents.

Mr. Mark Bentley (JBA Consulting)

Mr. Bentley prepared a technical note in response to a request by Mr. Hugh-Jones concerning the report prepared by IH, titled '*Rathcoursey Outfall. Investigation of the Impact of Treated Wastewater Discharges arising from the Dairygold Mogeely Plant to Cork Harbour*' which was submitted as part of the application form. Mr. Bentley was asked to provide comment on aspects of this report that deal with tidal flushing (section 4.9: Estuary Tidal Flushing).

In the conclusion of the technical note Mr. Bentley makes the following points:

1. Tidal prism models tend to underestimate flushing times for estuarial waters;
2. The use of hydrodynamic models enables a better calculation of flushing times as they take account of harbour topography;
3. The North Channel is one of the least flushed areas of water in Cork Harbour;
4. Residence times at Rathcoursey are considerably larger than those estimated by the IH report; and
5. Long term measurements of tidal currents indicated that there was a residual current along the North Channel from east to west, which tends to increase residence times by holding water in the North Channel.

Other Third-Party Submissions

A number of other submissions (refer to Appendix 1) raised concerns over the appropriateness or quality of modelling employed by IH on behalf of the applicant. The concerns raised in these submissions are captured in the submissions made by Mr. Hugh Jones which have been outlined above.

Dairygold/TINE's Response

The applicant responded to the points raised in the submission by Mr. Hugh Jones as follows:

1. The inaccuracies in the original report were not considered in the calculations for the impact assessment;
2. The estimated flushing rates vary from 3-8 days, depending on whether it is a spring or neap tide. Mr. Mark Bentley's report references a residence time of 'up to 9 days' which does not vary significantly from that quoted in the IH report;
3. Dairygold/TINE consider the modelling used is appropriate and note that mathematical computer modelling of Cork Harbour carried out by Prof. P. O'Kane, NUI Cork, NUIG team, MAREI, UCC and IH are agreed that a 2D model is appropriate to the North Channel due to its relatively shallow waters;
4. The applicant considers that the model and data used were appropriate, as outlined above: therefore, the conclusions drawn in the various documents, based on these calculations remain valid;
5. The applicant states '*extensive drogue studies were carried out as part of the M.C. O' Sullivan 1977 Cork Harbour Study as well as subsequent studies and these studies show much the same drogue behaviour as is now found by Mr. Hugh-Jones*';
6. The applicant highlights that the submission by Mr. Hugh Jones admits that errors were made in carrying out his current-metering and the conclusions do not appear significantly different from those recorded in the original 1977 Cork Harbour Pollution Report (M.C. O'Sullivan, 1977) data for the same location, which was used to calibrate both the IH model and Prof. P. O'Kane's model. The applicant references a submission made by JBA Consulting which was subsequently withdrawn. This submission was not available to the Agency to review.
7. According to the applicant, the point Mr Hugh-Jones appears to make is that there is a net tidal flow from east to west in the North Channel, with the excess water exiting into the West Passage through Belvelly Bridge. However, other studies of Cork Harbour for example that of Prof. P. O'Kane for Cork County Council state the opposite.

In conclusion, Dairygold/TINE are satisfied with the quality of the IH model, with the robustness of the input data and results and that the proposed discharge will not have a significant impact on the receiving waters, as stated by the NIS and EIA.

Irish Water Response:

Irish Water were asked to confirm to the EPA whether or not the issues raised in the submissions would alter their assessment and consent granted to the proposed discharge to sewer under Section 99E of the EPA Act, as amended. A response was received from Irish Water on 29th January 2020, stating *'Further to the review of relevant submissions, I can confirm Irish Water's consent granted under Section 99E of the EPA Act, as amended shall remain unchanged'*.

Agency's Response:

The concerns raised in this submission have been substantially dealt with in the Inspector's Report dated 12th December 2019 and addenda to that report dated 12th December 2019 and 17th December 2019. It should be noted that BAT for the installation was assessed against the requirements of the *'Commission Implementing Decision (EU) 2019/2031 of 12 November 2019 establishing best available techniques (BAT) conclusions for the food, drink and milk industries, under Directive 2010/75/EU of the European Parliament and of the Council'*. All relevant BAT-AELs specified in the licence, are in accordance with the CID and are detailed in the emissions sections of the Inspectors Report.

The emission associated with the Dairygold/TINE application is for a discharge to sewer and there is no direct emission to water from the installation. The control of the combined emissions at the Rathcoursey outfall does not fall within the remit of this application. For IED licence applications with discharges to sewer the Agency must obtain the consent of the sanitary authority in which the sewer is vested or by which the sewer is controlled, in accordance with Section 99E of the EPA Act, as amended. This consent was received from Irish Water. In accordance with the Waste Water Discharge (Authorisation) Regulations, 2007 as amended, the final combined effluent discharge at Rathcoursey is regulated by a WWDL (Ref. No. D0056-01) granted by the EPA to Irish Water for the Midleton agglomeration. The above response from Irish Water indicates they remain satisfied that the consent granted under S99E may remain unchanged.

Where a discharge is to sewer, it can be taken that, as the waste water discharge has been subject to authorisation by the Agency, the relevant environmental quality standards have been met through the emission limit values (ELVs) and conditions associated with that authorisation. It is Irish Water's responsibility to ensure that it meets the limits and satisfies the conditions set in their waste water discharge licence. Compliance is subject to enforcement by the Office of Environmental Enforcement.

Appropriate Assessment (AA) & Environmental Impact Assessment (EIA)

Concerns regarding the AA and EIA processes were expressed in a number of submissions. Specific concerns include the following:

- The screening out of several SACs and SPAs within 15km of the site;
- A lack of a discussion of alternative solutions (Stage 3 of Appropriate Assessment);
- The NIS which was produced as part of the original Planning Application (Ref. 16/07031) to Cork County Council, contained a number of incorrect references to an "*~80% exchange*".

Applicant's Response:

The applicant wishes to emphasise that this exchange factor was not used in any calculations of nutrient increase put forward by the company. The incorrect reference to an 80% exchange was amended in an updated NIS to correct the original error. It concludes that no significant change in water quality, habitats or species is predicted to occur.

Agency's Response

Concerns regarding the appropriate assessment screening stage, the discussion of alternatives to the current proposal (i.e. different discharge locations, constructed wetlands), and general concerns about the EIA process have previously been addressed in Sections 15 and 16 of the Inspector's Report, dated 12th December 2019, and its addenda of 12th December 2019 and 17th December 2019.

Water Quality

A number of submissions expressed concern over the impact that the wastewater discharge from the installation may have on the water quality of the North Channel of Great Island in Cork Harbour. In particular the impact of fats, oils, and greases (FOGs), excess nutrients, suspended solids and '*chemicals*' on the status of this waterbody and the retention time of water within this section of Cork Harbour.

Agency Response

These concerns have previously been addressed in the Inspector's Report, and addendum memo dated 12th December 2019. There is no direct discharge from the installation to surface water and the final discharge via the Rathcoursey combined outfall is regulated under WWDL D0056-01 as outlined earlier in this report.

Flooding and Health and Safety

A submission from Ms. Jennifer Hayes expressed concerns in relation to the impact of the proposed discharge on flooding of "*Rathcoursey, the pier in East Ferry and the Ferry Road en route to Saleen*" and the potential health and safety implications of FOG accumulation on pier infrastructure.

Agency Response

The maximum daily discharge (4000m³) is less than 0.05% of the calculated volume of water upstream of the discharge point during a neap tide (approximately 10,490,000m³) and would therefore would not contribute to any flooding issues currently being experienced in this area.

The FOGs associated with this process are of dairy origin and readily biodegradable. They will therefore not persist in the environment, nor will they pose a health and safety risk to the public through accumulation on pier infrastructure.

Environmental Performance of the existing Dairygold Installation's WWTP and impacts on the R. Kiltha

Concerns were raised in relation to the environmental performance of the wastewater treatment plant at the existing licensed Dairygold installation at Mogeely (Ref. No. P0817-02) and the impacts of the installation on the R. Kiltha.

Agency Response

These concerns have already been addressed in Section 8 of the Inspector's Report, dated 12th December 2019.

Midleton WWTP and Stormwater Overflows

Mr. Hugh Jones additionally raised the performance of Midleton WWTP in his submission dated 18th of December 2019. He notes that the Midleton WWTP is operating at above its design capacity and is responsible for a large number of stormwater overflows to the Owenacurra estuary each year. Mr. Hugh Jones links the frequent stormwater overflows to the poor water quality and very high concentrations of dissolved inorganic nitrogen routinely measured in the Owenacurra estuary. The submission reiterates concerns regarding the cumulative effect of an additional discharge of nutrients from the Dairygold/TINE installation at Mogeely on the water quality of the North Channel of Cork Harbour.

Agency Response

The concerns raised in this submission have been substantially dealt with in the Inspector's Report dated 12th December 2019 and addenda to this report dated 12th December 2019 and 17th December 2019.

It is noted however, that since this WWDL was initially assessed, for a population equivalent (p.e.) of 15,000, the peak loading has increased to 16,724 p.e. The addition of the proposed discharge from the Dairygold/TINE installation at Mogeely, will further increase the emission of BOD, suspended solids, phosphorus, and dissolved inorganic nitrogen from the Rathcoursey combined outfall by 26% (as estimated by the IH report). The WWDA Licence does not specify a limitation on the mass loading or volume of the discharge; however, due to the substantial increase in the mass load of nutrients emitted to this water body, it indicates that a review of WWDL Ref. No. D0056-01 may be required under Regulation 14 of the Waste Water Discharge (Authorisation) Regulation 2007.



Orla Harrington
Inspector

APPENDIX 1: Summary of Submissions (excluding Irish Water and Dairygold/TINE)

Name	Organisation	Date received	Key points
1. Mr. David Hugh Jones	Atlantic Shellfish Ltd.	31/01/20	Continuation of submissions dated 31/01/20 & 18/12/2019 covering: <ul style="list-style-type: none"> • Suitability of Rathcoursey as a discharge point; • The hydromorphology of Cork Harbour; • Data collected by the submitter on current speeds and directions.
2. Mr. David Hugh Jones	Atlantic Shellfish Ltd.	31/01/20	Response to applicant's views/comments on a previous submission by Mr. Hugh Jones.
3. Mr. David Hugh Jones	Atlantic Shellfish Ltd.	24/01/20	Email correspondence with Agency re. measurement of current speeds.
4. Ms. Olivia Simonin	NA	27/01/20	General concerns re. SAC
5. Ms. Sabrina Joyce-Kemper	NA	24/01/20	Letter expressing concerns re. following: <ul style="list-style-type: none"> • EIA and AA; • Modelling; • "Wesser" Judgment Case C461/13 • Need for 'dual assessment' with An Bord Pleanála as per Sec. 43 & 44 of the WWD Regulations
6. Mr. Colm Damery	NA	23/01/20	Concerns re. nutrient load and long retention time of water within north channel.
7. Cllr. Danielle Twomey	Sinn Fein	22/01/20	General concerns re. environmental impact.
8. Ms. Sally Waterman	NA	15/01/20	Expresses support for other submissions.
9. Ms. Sophie Brazil	NA	13/01/20	General concerns re. environmental impact of discharge. Reiterates points made in other submissions re. retention time of water within the North Channel.
10. Ms. Collette Mould	NA	10/01/20	Expresses support for other submissions.
11. Ms. Eleanor Fitzgerald	NA	10/01/20	General concerns re. SAC
12. Mr. Thomas O'Sullivan	NA	09/01/20	General concerns re. environmental impact.
13. Mr. Allan J. Navratil	East Cork Harbour for a Safe Environment	07/01/20	Reiteration and statement in support of previous submissions.
14. Mr. Simon Mould	NA	03/01/20	General concerns re. increase in nutrient load to the harbour.
15. Mr. Jerry O'Brien	Saleen and District	03/01/20	Raises concerns re.

	Residents Association		<ul style="list-style-type: none"> • Poor maintenance/performance of existing Dairygold WWTP and implications for water quality; • Hydrodynamic modelling and salinity profiles • Issues with AA and EIA. • R. Kiltla – impacts of current wastewater discharge • Lack of consultation with communities/stakeholders
16. Mr. Tony Power	NA	05/01/20	General concerns re. water quality.
17. Mr. Mark Bentley	JBA Consulting, on behalf of Atlantic Shellfish Ltd.	03/01/20	Technical note in response to Irish Hydrodata report (July 2019). Covers <ul style="list-style-type: none"> • Appropriateness of modelling employed by IH; • Residence times and mixing conditions within the North Channel; • North Channel currents and effect on water movement to the west.
18. Ms. Deborah Hayes	Protect East Ferry Waters	03/01/20	Letter objecting to the application on the grounds of: <ul style="list-style-type: none"> • Potential impact on Natura sites; • Potential for eutrophication; • Discussion of alternatives to the current proposal.
19. Mr. Liam Quaide	Green Party	02/01/20	Letter reiterating elements of a submission by Dr. Gordon Reid/Ms. Catriona Reid alleging poor quality of modelling, flawed NIS, potential for eutrophication, potential for impact on SAC/SPA, lack of Stage 3 AA screening.
20. Ms. Jennifer Hayes	NA	02/01/20	Letter expressing concerns re. following: <ul style="list-style-type: none"> • Modelling used by Dairygold and low water exchange at discharge site; • Quality of EIS; • Nutrient load; • Other concerns are risk of flooding, FOGs, discharge of chemicals.
21. Mr. Daithi O'Mahony	NA	02/01/20	General objection re. "grey water standard" of effluent treatment.
22. Ms. Sheana O'Mahony	NA	02/01/20	General objection re. "grey water standard" of effluent treatment.
23. Mr. Feidhlim Harty	FH Wetland Systems	19/12/19	Proposes that a constructed wetland be incorporated as an additional stage of treatment.
24. Mr. David Hugh Jones	Atlantic Shellfish Ltd.	18/12/19	Substantial report covering the following: <ul style="list-style-type: none"> • Criticisms re. the relevance of modelling applied by IH, given alleged advances in coastal modelling; • Monitoring information gathered by the submitter; • Performance of the Middleton WWTP.