

This report has been cleared for submission to the Board by the Karen Creed.

Signed Karen Creed

Date 19/10/11



OFFICE OF CLIMATE,
LICENSING & RESOURCE USE.

INSPECTORS REPORT ON A WASTE WATER DISCHARGE LICENCE APPLICATION

To:	DIRECTORS		
From:	Orla Harrington	Environmental Programme	Licensing
Date:	19 th October 2011		
RE:	Application for a Waste Water Discharge Licence from Cork County Northern Division, for the agglomeration named Fermoy Town & Environs, Reg. No. D0058-01		

Application Details	
Schedule of discharge licensed:	Discharges from agglomerations with a population equivalent (p.e.) of more than 10,000.
Licence application received:	14 December 2007
Notices under Regulation 18(3)(b) issued:	4 th April 2008, 22 nd December 2009, 30 th April 2010, 6 th July 2011, 27 th July 2011
Information under Regulation 18(3)(b) received:	30 th June 2008, 4 th July 2011, 20 th July 2011, 24 th August 2011.
Site notice check:	7 th January 2008
Site visit:	16 th June 2011
Submission(s) Received:	None

1. Agglomeration

This licence application relates to the agglomeration of Fermoy town and Environs. Fermoy town is situated on the River Blackwater in North Cork. The wastewater treatment plant (WWTP) is located approximately 600m east of Fermoy town and on the south bank of the river. The town of Fermoy has a long history of flooding from the River Blackwater; however, the WWTP was raised above flood levels before the original contract in 1986.

The plant was fully upgraded under the Water Services Investment Programme (WSIP) at a cost of €3.5 million in April 2005 to the design capacity of 20,000 population equivalents (p.e.) with a BOD loading of 1,200kg/day. No further upgrades are envisaged at present for this plant.

The design dry weather flow (DWF) for 20,000p.e. at the Fermoy plant is 115m³/h. The current load to the plant (comprising of both domestic and non domestic wastewater sources) is estimated to be 13,200 p.e., with a projected p.e. in 2020 of approximately 20,000 p.e. A breakdown of the current wastewater contributions to the loading on the plant are shown below:

Populations Equivalent Contribution

Source	Equivalent p.e
Domestic	10,870
Commercial	1,000
Trade	1,330
Total	13,200 ^{Note 1}

Note 1: This is the existing p.e loading on the plant – design capacity is 20,000 p.e.

No leachate or industrial sludge is treated in the plant.

The treatment is an activated sludge process comprising of screening, grit removal, storm water holding tanks, biological treatment, final settlement, phosphorus removal, denitrification/nitrification, sludge thickening and storage. The plant is also equipped with both inlet and outlet sampling units, which are used for monitoring and compliance. The treated primary effluent (SW1) from the plant gravitates through an outfall pipe to the River Blackwater.

An enhanced level of treatment is required in Fermoy as the primary discharge point (SW1) is located within the Blackwater River (Cork/Waterford) cSAC (site code: 2170) and 0.5Km upstream of the Blackwater callows SPA (site code: 4094). The River Blackwater is a designated sensitive area under the *Urban Waste Water Treatment Regulations (S.I No. 254 of 2001 as amended)* (UWWT Regulations) and a designated Freshwater Pearl Mussel *Margaritifera margaritifera* site. The first Schedule of the *European Communities Environmental Objectives (Freshwater Pearl Mussel) Regulations S.I No. 296 of 2009 (Pearl Mussel Regulations 2009)* lists the 27 designated Freshwater Pearl Mussel sites. The Munster Blackwater catchment is the largest pearl mussel catchment in the south western river basin district, however, information from surveys outlined in the Freshwater Pearl Mussel (*Second Draft March 2010*) Munster Blackwater Sub Basin Management Plan suggests that the current populations are composed entirely of aged adults with no evidence of recruitment for at least 20 years.

The wastewater in Fermoy is collected in a partially combined and separated sewage collection system prior to treatment at the WWTP. There are eight discharges from the waste water works, i.e. the primary discharge point (SW1), secondary discharge point (SW4) and six storm water overflows (SWO).

Site visit

As part of the assessment of this application, a site visit was conducted on the 16th June 2011. I met with both the executive engineer and the technical advisor to the plant. The inspection focused on the stormwater overflows, pumping stations and treatment plant. No significant issues were noted during the visit.

2. Discharges to waters

The treated effluent from Fermoy WWTP discharges through an open pipe to the River Blackwater (SW1 primary discharge). Treated effluent is discharged through SW1 at a normal rate of approximately 4097m³/day and a maximum rate of approximately 7,140m³/day. It is reported in the application that the plant operates to a 25:125:35 (BOD, COD, SS) specification, however, discharge monitoring data submitted to the Agency as part of the application process indicates that the average BOD and SS readings for 2010 were 2.64mg/l and 7.6mg/l respectively, which exceeds these specifications. The EPA's report on *Urban Waste Water Discharges in Ireland for Population Equivalents Greater than 500 Persons – A report for the Years 2008 and 2009* indicates that Fermoy WWTP was in compliance with the UWWT Regulations in 2008 and 2009.

The River Blackwater is the receiving water for all six SWOs. These are located at Fermoy Bridge, Fitzgerald Place, Waterloo Lane and the WWTP, which are all within the Fermoy agglomeration. Prolonged storm conditions of 2.3DWF or over, will result in the use of the storm water holding tanks at the plant. The storm water storage capacity at the WWTP is approximately 1,126m³. In the event that the tanks are full, the storm water tanks are operated as a pre-clarification tank without sludge removal. The overflow from the storm water storage tank is connected to the final effluent outlet pipe (SW1). Two of the SWOs are associated with pumping stations. Emergency overflows of which there are two are only triggered due to pump failure or other unforeseen events and are alarmed back to the control room in Fermoy where they are acted on by the call out staff. The recommended licence (RL) requires the licensee to assess the SWO's for compliance against the Department of Environment, Heritage and Local Government (DoECLG) publication '*Procedures and Criteria in Relation to Storm Water Overflows*' as per Condition 4.

There is one secondary discharge point (SW4) in the agglomeration located 0.9km upstream of the primary discharge point (SW1). This discharge point releases the combined trade effluent and cooling water discharges from Micro-Bio (Ireland) Ltd and Silver Pail Dairy (Fermoy) Ltd directly to the River Blackwater. Micro-Bio (Ireland) Ltd holds an Integrated Pollution Prevention and Control Licence (IPPC Reg.No.P0082-02) since 1998 for the manufacture of inorganic chemicals in a membrane cell electrolysis plant using sodium chloride or salt water brine. There is a WWTP on site which treats all process effluent arising with a combination of solids settling, neutralisation and final chemical dechlorination using sodium sulphite. Because of the high concentration of chloride in the effluent, it is not directed to the Fermoy WWTP. The Office of Environment Enforcement (OEE) has confirmed that Micro-Bio (Ireland) Ltd is compliant with emission limit values (ELVs) set for emission to sewer of its IPPC licence. The plant performance constantly meets ELVs set in its IPPC licence. Silver Pail Dairy (Fermoy) Ltd (Ref No. F-002) discharges cooling water to sewer arising from the manufacture of ice cream.

The Water Services Authority (WSA) of Cork County Council under Section 99E of the *Environmental Protection Agency Acts 1992-2007* and Section 16 (Discharges to sewers) of the *Water Pollution Act 1977* have permitted both Micro-Bio (Ireland) Ltd and Silver Pail Dairy (Fermoy) Ltd to discharge to this part of the sewer network. Refer to Appendix 2, Table 3.0: which outlines the current limits stipulated by the licences issued for both Micro-Bio Ireland Ltd and Silver Pail.

3. Receiving waters and impact

The Blackwater is one of the largest rivers in Ireland and is approximately 168 kilometres long. It rises in the Mullaghareirk Mountains in County Kerry and then flows in an easterly direction through County Cork, passing Mallow and Fermoy. It then enters County Waterford where it flows through Lismore, before abruptly turning south at Cappoquin, and finally draining into the sea at Youghal Harbour. The following table summarises the main considerations in relation to the River Blackwater downstream of the primary discharge (SW1).

Table 1.0 Receiving waters

Characteristic	Classification	Comment
Receiving water name and type	River Blackwater	WFD Code: IE_SW_18_2292_6
Resource use	None	No drinking water abstractions identified downstream of 1 ^o discharge point (SW1) and 2 ^o discharge point (SW4).
Amenity value	Angling, General amenity	
Applicable Regulations	Surface Water Regulations 2009 Note 1	Discussed below
	Pearl Mussel Regulations 2009 Note 2	Discussed below
	UWWT Note 3	Nutrient Sensitive River
Designations	Blackwater River SAC Blackwater Callows SPA	Site code 002170 Site Code 004094
	Munster Blackwater (main Channel) Containing <i>Margaritifera margaritifera</i>	Munster Blackwater Catchment
	Salmonid River	
EPA monitoring stations	18B022210	3km upstream of 1 ^o discharge point (SW1)
	18B022500	3km downstream of 1 ^o discharge point (SW1)
	18B022450	5.5km downstream of 1 ^o discharge point (SW1)
Biological quality rating (Q value)	18B022210 upstream Q4	2009
	18B022450 downstream Q4	2009
WFD status	Poor	South Western River Basin Plan Note 4
WFD Risk Category	1a at risk of not achieving good status Objective: Restore by 2021	Extended timescale due to delayed recovery of highly impacted sites.

- Note 1: European Communities Environmental Objectives (Surface Water) Regulations 2009, S.I. No. 272 of 2009.
- Note 2: The European Communities Environmental Objectives (Freshwater Pearl Mussel) Regulations 2009, S.I. No.296 of 2009.
- Note 3: Urban Waste Water Treatment Regulations (S.I No. 254 of 2001) (S.I No. 440 of 2004) (S.I No. 48 of 2010)
- Note 4: South Western River Basin Management Plan (2009-2015) and www.wfdireland.ie

The River Blackwater has a water quality status rating of poor due to poor macroinvertebrate status. The South Western River Basin District (SWRBD) has set the water quality objective as 'restore to good status by 2021'. The Blackwater is a large river with high assimilative capacity to accept pollutant load but its ability to assimilate has been significantly reduced due to increased pressures acting on the waterbody. Sources of diffuse pollution include agriculture, forestry and urban landuses. These pressures are identified in the SWRBD plan and the objectives report states that the extended timescale provided was due to 'delayed recovery of highly impacted sites in the South Western RBD'.

Monitoring undertaken by the Agency indicates that the River Blackwater has Q4 status both upstream and downstream of the primary discharge point (SW1) which indicates that there is no deterioration in the river downstream of SW1.

The Fermoy WWTP is not listed among the 18 WWTP's deemed to have a significant adverse effect on the Pearl Mussel or its habitat in the Freshwater Pearl Mussel (*Second Draft March 2010*) Munster Blackwater Sub Basin Management Plan. The Fermoy WWTP is not listed as a point source discharge in the Blackwater Water Management Unit Action Plan under the Water Framework directive (WFD). The Blackwater is required under this plan to support the Freshwater Pearl Mussel (*Margaritifera margaritifera*) and the proposed ELVs are based on the high status standards required to achieve this objective, as laid down in the *Surface Water Regulations 2009*.

Impact of Discharge:

Primary Discharge (SW1)

The assessment of the impact of the wastewater discharge, as described below, considered the design specification of the WWTP, wastewater composition, quality and assimilative capacity calculations. However, ambient monitoring results for total Phosphorous and Ammonia submitted were not sufficiently low to indicate compliance the *Surface Water Regulations 2009*. The nearest river monitoring data generated by the EPA for chemical data is at Ballyduff Bridge (RS18B022500) 3km downstream of the primary discharge point (SW1) so notional clean river values were used instead.

The dilution factor at the point of discharge is approximately 200 on the basis of WWTP discharge volume (Dry weather flow of 0.032m³/sec) and 95%ile flow in the River Blackwater, which is 6.8m³/sec at the point of discharge. Assimilative capacity calculations for the primary discharge (SW1) in Table 2.0 are presented using, for the purpose of this assessment, the 'notional clean river' approach (as formulated by the Office of Environmental Assessment). This is where the discharge is mass balanced into a hypothetically (notionally) clean stretch of river in order to gauge the theoretical impact of the discharge, and excludes all other sources of pollution impacting the river, which are outside the control of this licence.

Table 2.0 Assimilative Capacity Primary Discharge (SW1)

Parameter	Notional Clean River Values for A/C	Proposed ELVs for discharge from SW-1 (mg/l)	Contribution from primary discharge (mg/l)	Predicted downstream concentration (mg/l) ^{Note 1}	Relevant standard (mg/l) ^{Note 2} (High Status Values)
BOD	0.26	25	0.11	0.37	≤2.2
Ortho-P	0.005	1.5	0.007	0.012	≤0.045
Total Ammonia - N	0.008	3	0.014	0.022	≤0.090

Note 1: Based on proposed emission limit values and notional clean river values.

Note 2: 'High Status' (95%ile values) as per European Communities Environmental Objectives (Surface Waters) Regulations, S.I. No. 272 of 2009

The assimilative capacity calculations, based on the predicted volumetric discharges (at 20,000 p.e) ELV's as set in the RL for a range of substances (BOD, orthophosphate, total ammonia), suggest that the receiving waterbody is capable of accommodating the proposed discharge without causing or exacerbating a breach in the relevant standards as outlined in National and European legislation. The plant is designed to achieve a 25mg/l BOD, 2mg/l TP and 3mg/l Ammonia when referring to full design capacity of the plant which is 20,000 p.e. Table 2.0 above shows the contribution from the discharge compares favourably with the high status values in the *Surface Water Regulations 2009*.

The River Blackwater is designated a sensitive area under the UWWT Regulations, 2001 as amended. The UWWT Regulation limits for nutrients in discharges into nutrient sensitive areas (for agglomerations of 10,000 to 100,000 p.e) are 2mg/l for total phosphorus (TP) and 15mg/l for total nitrogen (TN). The RL specifies ELVs of 2mg/l for TP, 15mg/l for TN (as per UWWT Regulation limits), 1.5mg/l for orthophosphate, 3mg/l for total ammonia and 25mg/l for suspended solids. Monitoring data collected in 2010/2011 and submitted with the application shows average readings of TP (0.12mg/l), BOD (2.64mg/l), SS (7.6mg/l) and total ammonia (0.25mg/l) which indicates that these limits can be achieved.

The ELVs are aimed at providing a high degree of protection to the receiving water body, and are based on data supplied in the application concerning the performance and specification of the WWTP. The plant is designed to serve 20,000 p.e. but the agglomeration currently has a p.e. of only 13,200 approximately. Therefore the plant is operating at only 60% of its capacity. It is unlikely that the plant will reach maximum capacity in the medium term. However, as the ELVs are based on design levels, the plant should be able to meet these ELVs when full capacity is reached.

The South Western River Basin Management Plan (2009-2015) included a proposed extended timeframe to 2021 for the Blackwater to achieve good quality status. The extended deadline has been set considering 'the recent EPA surveys suggest that recovery is slower for waters where status is more than one band below good (i.e. poor)'. These ELV's will contribute to achieving good status by 2021.

Secondary Discharge (SW4)

The dilution factor at the point of secondary discharge (SW4) is over 1000 on the basis of trade effluent discharge volume (DWF of 0.0048m³/sec).

The current IPPC licence permits Micro-Bio (Ireland) Ltd to an ELV of 50,000mg/l /16,000kg/day chloride to the River Blackwater. The kg/day limits are set to guarantee a limitation on chloride mass emission in the secondary discharge and are based on existing limits set under Section 99E for Micro Bio. There is no flow meter at the point of discharge (SW4) and no flow limits set under Section 16 (Discharges to sewers) on the cooling water discharging from Silver Pail Dairy.

The additional increase in chloride concentration to the river resulting from the current maximum discharge is therefore 7.6mg/l with a resultant concentration of 44.45mg/l in the receiving waters. Natural levels in the rivers and freshwaters are usually in the range 15-35mg/l Cl (Ref.EPA report: *Parameters of Water Quality Interpretation and Standards*). Drinking water is considered potable at levels of chloride up to 250mg/l (*European Communities (Drinking Water) (No. 2) Regulations 2007 - a handbook on the implementation of the regulations for water services authorities for public water supplies*). The resultant concentration in the receiving water is not considered to be environmentally significant. Micro-Bio (Ireland) Ltd is compliant with ELVs set for emission to sewer of its IPPC licence with monitoring results for 2011 showing an average chloride concentration in the discharge of 13,900mg/l, with a maximum discharge concentration of 35,200mg/l. The ELVs for emissions to sewer in the RL are as per the Sanitary Authority specifications in their response to the Section 99E notice. However a limit of 25mg/l has been set for suspended solids as SW4, discharges into a designated salmonid river. The secondary discharge will not cause a breach in any of the salmonid standards. In the EPA report *Water Quality in Ireland 2007-2009* the mean concentration of chloride 3Km downstream of Fermoy WWTP is recorded as 22.4mg/l (Appendix 3-3 River Chemistry Summary- Blackwater (Munster) RS18B022500 (Ballyduff Bridge)).

As previously discussed, Silver Pail Dairy (Fermoy) Ltd discharges cooling water which combines with the trade effluent from Micro Bio and is discharged less than 1km upstream of the primary discharge (SW1). Although the temperature effects are likely to be minimal at the secondary discharge, the Section 16 discharge to sewer has a temperature limit of 35^oC. The RL requires that the secondary discharge (SW4) will not result in a temperature increase at the edge of the mixing zone of greater than 1.5 ^oC in the receiving system to ensure compliance with the EO regulations and that the mixing zone shall not exceed 25% of the cross sectional area of the river at any point (Condition 3.4). *Schedule A and B* of the RL sets ELVs and monitoring requirements for the discharge.

4. Ambient Monitoring

Schedule B.4: Ambient Monitoring of the RL specifies the parameters, analysis method and frequency for which ambient monitoring upstream and downstream of the primary discharge point (SW1) and secondary discharge point (SW4) must be carried out. The requirements for ambient monitoring in *Schedule B.4: Ambient Monitoring* are sufficient to verify that there is no deterioration of the receiving water quality due to the discharge. A footnote to *Schedule B.4* allows monitoring locations to be agreed by the Agency.

5. Combined Approach

The Waste Water Discharge Authorisation Regulations, 2007 (S.I. No. 684 of 2007) specify that a 'combined approach' in relation to licensing of waste water works must be taken, whereby the emission limits for the discharge are established on the basis of the stricter of either or both, the limits and controls required under the Urban Waste Water Treatment Regulations (S.I. No. 254 of 2001) and the limits determined under statute or Directive for the purpose of achieving the environmental objectives established for surface waters, groundwater or protected areas for the water body into which the discharge is made. The RL as drafted gives effect to the principle of the Combined Approach as defined in S.I. No. 684 of 2007(as amended).

6. Programme of Improvements

The plant was fully upgraded under the Water Services Investment Programme (WSIP) at a cost of €3.5 million in April 2005. No further improvements are planned.

7. Compliance with EU Directives

In considering the application, regard was had to the requirements of Regulation 6(2) of the Waste Water (Discharge) Authorisation, Regulations, 2007 (S.I. No. 684 of 2007) notably:

Drinking Water Abstraction Regulations

There is no drinking water abstraction downstream of the primary discharge from the Fermoy Town and Environs agglomeration.

Sensitive Waters

The River Blackwater downstream of Mallow Railway Bridge, to Ballyduff Bridge is designated as sensitive water under the UWWT Regulations 2001 as amended. The primary (SW1) and secondary (SW4) discharge points discharge directly into this stretch of the River Blackwater.

Water Framework Directive [2000/60/EC]

The RL, as drafted, transposes the requirements of the Water Framework Directive. In particular, *Condition 3 Discharges* provides conditions regulating discharges to waters while *Schedule A: Discharges* specifies limit values for those substances contained with the wastewater discharge. The limits specified in the RL are determined with the aim of achieving good status by 2021.

European Communities Environmental Objectives (Surface Water) Regulations 2009, S.I. No. 272 of 2009

The River Blackwater currently has 'Poor' ecological status due to poor status for macroinvertebrates. Fermoy WWTP complies with the requirements of the Surface Water Regulations. The RL as drafted has regard to the requirements of the Surface Water Regulations. In particular, *Condition 3: Discharges* provides conditions regulating discharges to waters while *Schedule A: Discharges* specifies limit values for those substances contained in the waste water discharge.

Urban Waste Water Treatment Directive [91/271/EEC]

The agglomeration of Fermoy town & Environs complies with the requirements of the Urban Waste Water Treatment Regulations in terms of the level of treatment provided and compliance with emission limit values. Tertiary treatment is provided at

the plant. The RL, as drafted, has regard to the requirements of the Urban Waste Water Treatment Directive.

Bathing Water Directive [2006/7/EC]

There are no bathing waters in the vicinity of the receiving water.

EC Freshwater Fish Directive [2006/44/EC]

The Munster Blackwater is a designated salmonid river both upstream and downstream of the discharges. Discharges permitted under the RL will not cause any breach of salmonid standards in the receiving water.

The European Communities Environmental Objectives (Freshwater Pearl Mussel) Regulations S.I. No. 296 of 2009.

The Blackwater is required to support the Freshwater Pearl Mussel (*Margaritifera margaritifera*) The ELVs specified in the RL are determined with the aim of not causing a breach in the standards. The Fermoy WWTP is not listed among the 18 WWTP's deemed to have a significant adverse effect on the Pearl Mussel or its habitat in the Freshwater Pearl Mussel (*Second Draft March 2010*) Munster Blackwater Sub Basin Management Plan. This plan has been prepared to act alongside the wider SWRBD to provide a programme of measures required to improve the habitat of the Freshwater Pearl Mussel so that it can attain favourable conservation status.

The Pearl Mussel population is at unfavourable conservation status in the Munster Blackwater. The catchment fails all of the five Environmental Quality Objectives (EQOs) ¹as specified in Schedule 4 of the *Pearl Mussel Regulations 2009*. Heavy siltation has been observed at all locations investigated to date (both upstream and downstream of Mallow), indicating that conditions are unsuitable for the survival of juvenile mussels in the Munster Blackwater system. Populations of mussels are located in Fermoy and Careysville (5km downstream of primary discharge point (SW1)); both sites downstream of the Fermoy WWTP discharges. The RL will not cause any breach of the *Surface Water Regulations 2009*. The licensee shall review the finalised version of the Freshwater Pearl Mussel Munster Blackwater Sub Basin Management Plan for the Munster Blackwater Catchment on an annual basis and incorporate measures they deem appropriate for agreement with the Agency as part of the Annual Environmental Report (AER).

Dangerous Substances Directive [2006/11/EC]

The applicant has provided once off sampling results for only 18 of the 19 dangerous substances in the primary discharge (SW1) for the purposes of the licence application. These 18 parameters measured for the River Blackwater are not considered significant when compared to the *Surface Waters Regulations 2009*. The RL requires the licensee to identify relevant priority substances or pollutants for monitoring by undertaking a risk based assessment in accordance with 'Guidance on the screening for priority substances for waste water discharge licences' issued by the Agency. The monitoring identified shall be carried out at least annually, unless a case for less frequent monitoring is agreed by the Agency.

¹ Freshwater Pearl Munster Blackwater Sub Basin Management Plan

Birds Directive [79/409/EEC] & Habitats Directive [92/43/EEC]

The applicant was required to complete a screening of the potential impact of the discharges from the agglomeration on the designated European sites within the agglomeration. The screening process identified that the discharges may be likely to have a significant impact on the European sites and therefore it was necessary to complete an appropriate assessment (AA). Fermoy discharges directly to the River Blackwater, which is designated a Special Area of Conservation (Blackwater River (Cork/Waterford)): site code: 2170) and a Special Protection Area (Blackwater Callows: site code 4094) The Blackwater is also a designated salmonid river.

The AA indicated that the contribution of the discharge from the WWTP, in combination with other activities within the catchment, to nutrient enrichment of the Munster Blackwater catchment may have implications for the qualifying species: River Lamprey (*Lampetra fluviatilis*), Brook Lamprey (*Lampetra planeri*), Atlantic salmon (*Salmo salar*), Freshwater Pearl Mussel (*Margaritifera margaritifera*) and Otter (*Lutra lutra*). The Munster Blackwater is the largest freshwater pearl mussel catchment in Ireland and populations of mussels are located in Fermoy and Careysville (5km downstream of primary discharge point (SW1)); both sites downstream of the Fermoy WWTP discharges.

Initial consultation with National Parks and Wildlife Services by Cork County Council at the time of application raised an issue relating to the potential impact of endocrine disruptors on fish populations. The applicant proposes to initiate a monitoring programme on a selected species of fish (ideally minnow) in the environs of Fermoy to establish a baseline from where any future evidence of such impacts can be assessed. Condition 4.18 requires the licensee to submit a report as part of the second AER on the monitoring programme proposed in the AA in relation to endocrine disruptors to the Agency for agreement.

Fermoy WWTP is operating within design capacity, has been recently upgraded (2006) and provides tertiary treatment. The WFD status of the Blackwater is 'Poor' at this location due to macroinvertebrate status. EPA monitoring of the Blackwater shows consistent 'Good' ecological quality (Q4) at all monitoring locations downstream of the discharge points in 2009.

The AA concludes 'The main aspects (BOD, SS, COD, P & N) of the discharge are not considered to be a significant risk to the cSAC/SPA'. It is considered that the RL as drafted will provide a high level of protection to the River Blackwater, as it will ensure that all discharges from the agglomeration will be provided with an appropriate level of treatment, as per Condition 3: *Discharges*. By ensuring that all waste water is treated to a high standard the RL will act to ensure no deterioration of the receiving water quality and contribute to the Directive's objective of safeguarding protected areas.

Environment Impact Assessment Directive [85/337/EEC]

An Environmental Impact Statement (EIS) was submitted in accordance with the Wastewater Discharge (Authorisation) Regulations 2007. In assessing the application regard was had to the matters mentioned therein in so far as they related to the risk of environmental pollution of the River Blackwater from the waste water discharge associated with the agglomeration. Should any further EIS be required as part of any programme of improvements, it will be dealt with as per Condition 1.8 of the RL.

Cross Office Liaison

Advice and guidance issued by the Technical Working Group (TWG) was followed in my assessment of this application.

Advice and guidance issued by the TWG is prepared through a detailed cross-office co-operative process, with the concerns of all sides taken into account. The Board of the Agency has endorsed the advice and guidance issued by the TWG for use by licensing Inspectors in the assessment of wastewater discharge licence applications.

Submissions

No submissions were received in relation to this application.

Charges

The RL sets an annual charge for the agglomeration at € 3,040.72 and is reflective of the monitoring and enforcement regime being proposed for the agglomeration.

Recommendation

I recommend that a Final Licence be issued subject to the conditions and for the reasons as set out in the attached Recommended Licence.

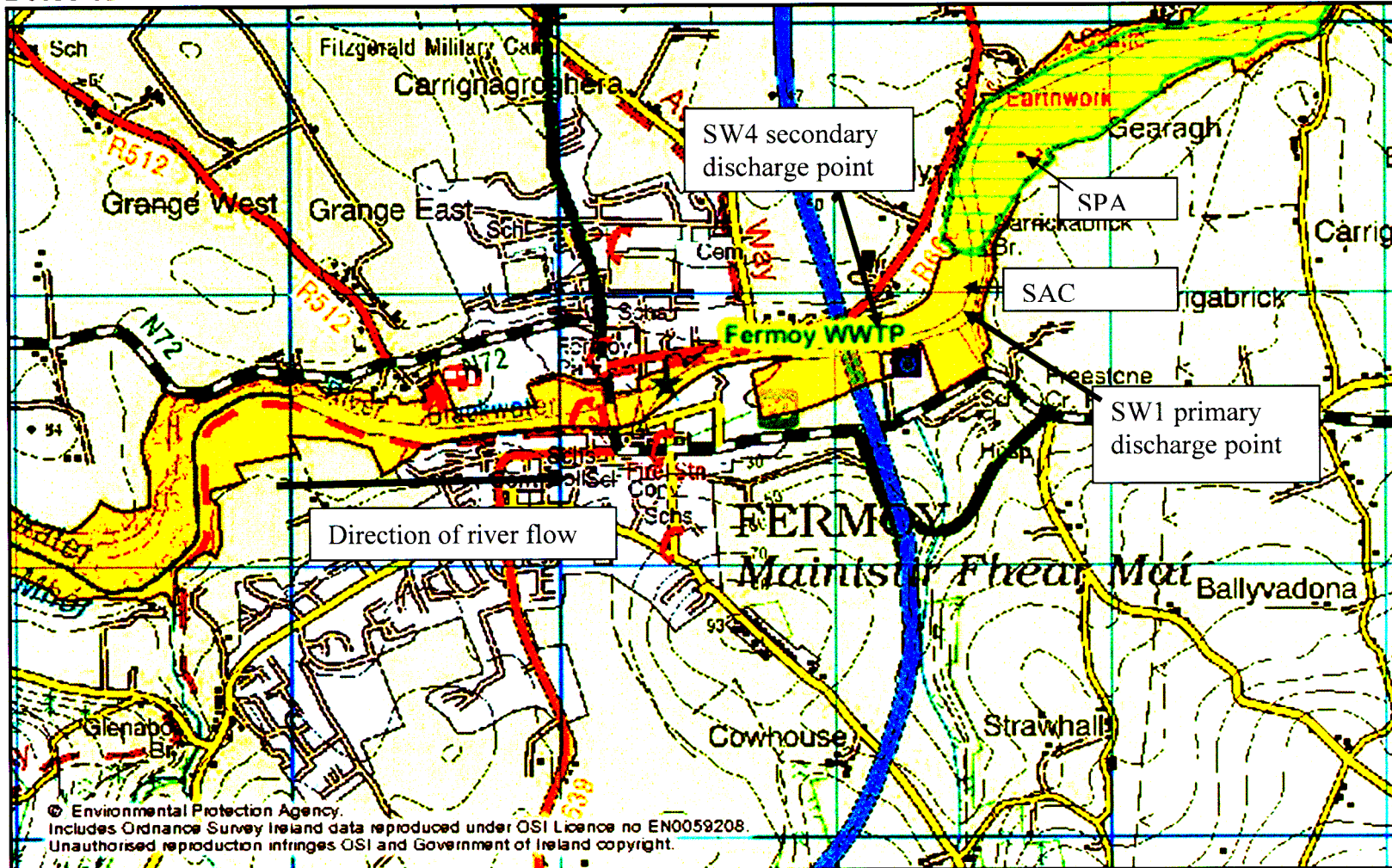
Signed



Orla Harrington

Office of Climate, Licensing and Resource Use

Fermoy Town and Environs WWTP
D0058-01



Appendix 2:

The following table below outlines the limits stipulated by the licences issued for both Micro-Bio Ireland Ltd and Silver Pail:

Table 3.0

Parameter	Flows	BOD	pH	Temp	Conductivity	Total Chlorine residual	SS	Sulphate	Chloride	Metals	VOC	TOC	TPO4-P
Silver Pail	n/a	10mg/l	6-10	35°C	150% of average level	0.1ppm	n/a	n/a	n/a	n/a	n/a	n/a	n/a
Micro- Bio Ireland Ltd (P0082-02)	320m ³ /day	n/a	n/a	20°C	n/a	n/a	35 mg/l	3,000mg/l	50,000mg/l	1mg/l	1mg/l	20mg/l	0.5mg/l