

Attachment B6

CORK COUNTY COUNCIL

LOCAL GOVERNMENT (PLANNING & DEVELOPMENT) ACTS, 1963-1999

NOTIFICATION OF DECISION TO GRANT  
PERMISSION  
(with conditions)

Reference No. in Planning Register  
S/01/4677

GABLE HOLDINGS LTD  
c/o Dennehy Designs,  
Watercourse Road,  
Blackpool,  
Cork

In pursuance of the powers conferred upon them by the above mentioned Act  
the Council of the County of Cork have by Order dated 29/08/02  
decided to GRANT PERMISSION  
for the development of land namely;

Residential development - 34 no. dwellinghouses,  
23 no. apartments & 2 no. duplex units, treatment plant  
& ancillary site works  
AT: FRIEST'S BRIDGE, HALFWAY,  
BALLYHOOLEEN, BALLINHASSIG

in accordance with the plans and particulars submitted by the applicant

On: 17/08/01  
& as amended by drawings & revised documentation on 21/08/01  
and 03/09/01 and 27/09/01 and 20/12/01 and 08/01/02 and 16/04/02  
and 03/07/02

and subject to the conditions (39 No.) set out in column 1 of the  
Schedule attached hereto. The reasons for the imposition  
of the said conditions are set out in column 2 of the Schedule.

An appeal against a decision of the Planning Authority may be made to  
An Bord Pleanala by any person before the EXPIRATION of the period of  
ONE MONTH beginning on the day of the giving (i.e. Date of Order) of  
the decision of the Planning Authority. (SEE NOTES ATTACHED)

If there is no appeal against the said decision,  
a grant of PERMISSION  
in accordance with the decision will be issued after the expiration of  
the period within which an appeal may be made to An Bord Pleanala.

It should be noted that until a grant of  
PERMISSION  
has been issued the development in question is NOT AUTHORISED.

Planning Department, Signed on behalf of the said Council

County Hall,

Cork.

DATE:

CORK COUNTY COUNCIL

Local Government (Planning & Development) Acts, 1963 - 1999

TO: GABLE HOLDINGS LTD  
c/o Dennehy Designs,  
Watercourse Road,  
Blackpool,  
Cork

Planning  
Register No: S/01/4677

Application by GABLE HOLDINGS LTD

Of c/o Dennehy Designs, Watercourse Road,  
Blackpool, Cork

On 17/08/01  
& as amended by drawings & revised documentation on 21/08/01  
and 03/09/01 and 27/09/01 and 20/12/01 and 08/01/02 and 16/04/02  
and 03/07/02

for Residential development - 34 no. dwellinghouses,  
23 no. apartments & 2 no. duplex units, treatment plant  
& ancillary site works

at PRIEST'S BRIDGE, HALFWAY,  
BALLYHOOLEEN, BALLINHASSIG

Further to Notice dated 30/08/02 the Cork County Council hereby conveys  
a grant of PERMISSION  
for the application described above subject to the conditions  
set out in the schedule (if any) attached to the said Notice  
dated 30/08/02 of its intention to  
grant PERMISSION

Signed on behalf of Cork County Council

Planning Dept.,  
Model Business Park,  
Model Farm Road, Cork.

Date: 07/10/02

NOTE FOR GUIDANCE OF DEVELOPERS

A grant of Planning Permission or Approval does NOT of itself empower  
a person to carry out a development unless that person is otherwise  
legally entitled to do so. Unless otherwise stated or unless it is  
revoked a Permission is valid for a period of five years.  
Approval is valid only for the period of the Outline Permission to  
which it relates.

Any development which takes place prior to the payment of a financial  
contribution required by any of the conditions attached to a permission  
or approval will be unauthorised until compliance with the condition or  
conditions.

Please note that there is an onus on developers to ensure that there is  
no danger to the public as a result of the proposed development.

SCHEDULE

Reference No. in Planning  
Register: 01/4677

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Column 1 - Conditions  
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Column 2 - Reason  
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(1)  
Permission is hereby granted for the construction of 59 no. residential units consisting of 34 no. townhouses, 23 no. apartments and 2 no. duplex units, as submitted to the Planning Authority 03/07/02.

In the interests of orderly development.

(2)  
The proposed development shall be carried out in accordance with plans and particulars lodged with the Planning Authority on 17/08/02 and as amended by revised details submitted on 20/12/01, 16/04/02 and 03/07/02 save where amended by the conditions herein.

In the interests of the proper development of the site.

(3)  
Roof covering shall be slate coloured dark grey.

In the interests of visual amenity.

(4)  
All external walls of proposed structure shall be finished in smooth plaster.

In the interests of visual amenity.

Brick trim shall be as indicated in the plans and particulars submitted to the Planning Authority 03/07/02.

(5)  
The site shall be landscaped in accordance with the scheme of hard and soft landscaping submitted to the Planning Authority on 03/07/02.

In the interests of visual amenity.

(6)  
All planting to comply with the specifications of the landscaping scheme agreed shall be maintained by the developer and if any plant

In the interests of visual amenity.

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SCHEDULE

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Column 1 - Conditions

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should die it shall be  
replaced within the next  
planting season.

(7)  
The developer shall lodge with  
the Planning Authority within  
one month of the date of grant  
of Permission/Approval, a sum  
of Euro 19470 to guarantee  
the satisfactory completion of  
tree and shrub planting and  
all other landscaping  
proposals for the site as  
required by condition no. 5.  
The sum lodged pursuant to  
this condition shall be  
refunded only when it is  
certified by the Council's  
Planning Officer that the  
planting and landscaping has  
been completed to the  
Council's satisfaction.

To ensure the satisfactory  
completion of landscaping works  
in the interests of visual  
amenity.

(8)  
Roads, paths, kerbs, turning  
spaces, junctions, etc. shall  
be designed, constructed and  
completed in accordance with  
the Council's Guidelines for  
Housing Estates 1986 unless  
otherwise superceded by the  
Conditions of this Schedule

To ensure that estate roads,  
paths, etc. are completed to a  
satisfactory standard.

(9)  
Public lighting shall be  
installed to the E.S.B.'s  
specification and shall be  
switched on and kept  
activated to serve occupied  
houses until taken in charge  
by the Council.

In the interests of public  
safety.

(10)  
All public services required  
for the development including  
electrical, communal  
television and telephone  
cables shall be laid  
underground in accordance

In the interests of visual  
amenity and safety.

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Column 1 - Conditions

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with the Council's Guidelines  
for Housing Estates (1986).

(11)

Boundary walls and  
screen/fences shall be the  
same design, construction and  
finish throughout the  
development.

In the interests of orderly  
development and visual  
amenity.

(12)

Screen walls, in agreed  
durable material, 2m in height  
and suitably capped and  
rendered, plastered or dashed  
shall be provided as per the  
site plan submitted to the  
Planning Authority  
03/07/02.

In the interests of residential  
amenity.

(13)

Footpaths shall be dished to  
the Council's Estate  
Engineer's satisfaction.

In the interests of orderly  
development.

(14)

The developer shall provide  
built in connections to the  
foul sewer to facilitate the  
installation of washing  
machines and dishwashers.  
Additional gullies  
discharging to the foul sewer  
shall be provided where  
directed by the Council.

To avoid contamination of the  
storm system and facilitate  
satisfactory discharge of  
waste from these appliances.

(15)

A fire hydrant shall be  
provided at the end of each  
road and otherwise no house  
should be more than 50 metres  
from a hydrant.

In the interests of orderly  
development.

(16)

A water service control box  
(W.S.C.R.) which shall  
include a non-return valve,  
shall be fitted to each water

In the interests of orderly  
development.

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SCHEDULE

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Column 1 - Conditions

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service pipe.

(17)  
Road gullies shall have grit  
sumps of at least 1/30 cu.m  
capacity.

To prevent obstruction of road  
gullies.

(18)  
The footpath and  
onstreet car parking  
shall be constructed to  
the satisfaction of the  
Council's Engineer.

In the interests of orderly  
development and safety.

(19)  
The proposed MBR treatment  
plant shall be totally  
enclosed and have a capacity  
of 450 population equivalent.

In the interests of orderly  
development and to provide  
satisfactory foul sewage  
treatment facilities.

The extra capacity over the  
development permitted under  
this order shall be made  
available, by agreement, to  
Cork County Council.

A detailed design for the  
proposed membrane (MBR)  
bioreactor type treatment  
plant, with provision for  
phosphorous removal  
facilities, capable of  
providing an effluent quality  
of at least 5 mg/l BOD, 5 mg/l  
SS, and .5 mg/l orthophosphate  
or better shall be submitted  
to and agreed with the  
Planning Authority prior to  
the commencement of  
development.

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(20)  
A layout plan indicating  
invert levels of foul and  
surface water sewers shall be  
submitted to and agreed with  
the Council's Estate Engineer  
prior to the commencement of  
development.

In the interests of orderly  
development.

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Column 1 - Conditions

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The layout and levels shall be such as to facilitate future extension to service the village.

(21)

The treatment plant shall be operated and maintained in accordance with the designers recommendations.

In the interests of orderly development and public health.

(22)

A maintenance contract for the treatment plant shall be entered into and written evidence of a maintenance contract to ensure the continuous operation of the treatment plant shall be submitted and agreed with the Planning Authority prior to the commencement of development.

In the interests of public health.

(23)

The water supply connection shall be in accordance with the requirements of the Council's Area Engineer.

To ensure satisfactory water supply to serve the development.

(24)

A 1.5 m. high palisade fence shall be erected along the boundary of this site with the riverbank.

In the interests of orderly development and residential amenities.

A 1.5 m. high palisade fence shall be erected around the proposed treatment plant.

And prior to the commencement of development a revised site plan making provision for the above shall be submitted to and agreed with the Planning Authority.

(25)

A 2 meter high screen wall

In the interests of orderly

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Column 1 - Conditions

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suitable capped and dashed shall be erected along the western and southern boundaries of the existing private sites where they directly adjoin the proposed development and prior to the commencement of development a revised site plan indicating same shall be submitted to and agreed with the Planning Authority prior to the commencement of development.

development and residential amenities.

(26)

A berm and solid screen shall be provided along the southern boundary of the site which does not run along the river bank. Additional landscaping, in addition to the submitted landscaping plan, shall be planted along this boundary and prior to the commencement of development a revised site plan making provision for the above shall be submitted to and agreed with the Planning Authority.

In the interests of visual and residential amenities.

(27)

All solid wastes arising on the site shall be recycled as far as possible. Materials exported from the site for recovery, recycling or disposal shall be managed at an approved facility and in such a manner as is agreed with the Planning Authority. In any case no such wastes shall be stored on the site except within the confines of the buildings on site. Adequate on site arrangements shall be made to the satisfaction of the Planning Authority for the storage of recyclable materials prior to collection.

To safeguard the amenities of the area.

(28)

Construction activities

To safeguard the amenities of

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shall be carried out such  
that no noise nuisance is  
caused to adjoining  
residences.

the area.

(29)

All surface water drainage  
shall be discharged via a grit  
trap and 3 chambered  
hydrocarbon interceptor before  
being discharged to the public  
surface water sewer to the  
River Owneboy.

In the interests of orderly  
development.

(30)

Inspection chamber with sump  
shall be provided between the  
hydrocarbon interceptor and  
discharge to public sewer or  
River Owneboy. The sump shall

In the interests of orderly  
development.

be of a minimum size of 500 mm  
by 500 mm and 400 mm deep and  
shall be of watertight  
construction. The interceptor  
and sump shall be installed  
and operated to the  
satisfaction of the Planning  
Authority.

(31)

The applicant shall be  
required to apply for a  
discharge license under the  
Water Pollution Act (1977,  
amended 1990).

In the interests of orderly  
development.

(32)

Construction activities and  
operations on site shall be  
carried out in such a manner  
that no polluting material,  
silt, solids or contaminated  
surface water enters the  
Owenboy River, any  
watercourse, storm sewer or  
public roadway.

To safeguard the amenities of  
the area and to prevent  
pollution of the Owenboy  
River.

(33)

All over ground tanks

To provide safe storage of

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containing liquids other than water shall be contained in a waterproof bunded area of sufficient volume to hold 110% of the value of the largest tank within the bund. All valves on the tank shall be contained within the bunded area. The bunded area shall be fitted with a pentstock valve which shall be opened only to discharge storm water to the interceptor. The developer shall ensure that this valve is locked at all times.

liquids other than water and to ensure that no water pollution occurs.

(34)

The developer shall submit a programme of brushing of roads to remove any deposited soil from site activities to the Planning Authority prior to the commencement of development.

In the interests of orderly development and to safeguard the amenities of the area.

(35)

A bilingual name for the proposed housing development shall be submitted for the agreement of the Planning Authority and the proposed development shall not be named until such agreement has been obtained nor shall any publicity material or public hoardings be erected containing the name until same has been agreed with the Planning Authority.

In the interests of orderly development.

(36)

Within a period of one month prior to the date of commencement of the development, but no later than such date, the developer shall pay to Cork County Council a sum of Euro 19470 updated in accordance with the Consumer Price Index from the

It is considered appropriate that the developer should contribute towards the expenditure incurred by the Council in respect of these works which have facilitated the proposed development.

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date of Grant of  
Permission/Approval, to the  
value pertaining at the time  
of payment, as a contribution  
towards the expenditure  
incurred by the Council in the  
provision of public water  
facilities which have  
facilitated the proposed  
development.

No development shall take  
place until the monies have  
been paid to the Council.

(37)

Within a period of one month  
prior to the date of  
commencement of the  
development, but no later than  
such date, the developer shall  
pay to Cork County Council a  
sum of Euro 37465 updated in  
accordance with the Consumer  
Price Index from the date of  
grant of Permission/Approval  
to the value pertaining at the  
time of payment, as a  
contribution towards the  
expenditure proposed to be  
incurred by the Council in the  
provision of road improvement  
works which will  
facilitate the proposed  
development. The payment of  
the said contribution shall be  
subject to the following:-  
(a) Where the proposed works  
are, within a period of 7  
years from the date of payment  
of the full contribution or  
final instalment payment  
thereof, not commenced, the  
return of the contribution or  
the instalments thereof, paid  
during that period. (b) Where  
the proposed works are, within  
a period of 7 years from the  
date of payment of the full  
contribution or final  
instalment payment thereof,  
carried out in part only, or  
in such a manner as to

It is considered appropriate  
that the developer should  
contribute towards the  
expenditure to be incurred by  
the Council in respect of  
these works which will  
facilitate the proposed  
development.

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facilitate the proposed development to a lesser extent, the return of a proportionate part of the contribution or the instalments thereof paid during that period. (c) Payment of interest at the prevailing interest rate payable by the Council's Treasurer on the Council's General Account on the contribution or any instalments thereof that have been paid, so long as and in so far as it is or they are retained unexpended by the Council.

No development shall take place until the monies have been paid to the Council.

(38)

Before commencing any individual house construction the developer shall provide, to the satisfaction of the Planning Authority, security for the provision and satisfactory completion, including maintenance until taken in charge by that Authority, at its discretion, of roads, footpaths, sewers, watermains, road lighting, open spaces and other services required in connection with the development, coupled with an agreement empowering the Planning Authority to apply such security or part thereof to the satisfactory reinstatement of any part of the development or the completion of landscaping works. The security shall be a Bond in a form and amount approved by the Planning Authority and provided by a Bank or Insurance Company, acceptable to the Planning Authority.

To ensure that these parts of the development are constructed and completed to a satisfactory standard.

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(39)

Within a period of one month prior to the date of commencement of the development, but no later than such date, the developer shall pay to Cork County Council a sum of 12,065 Euro updated in accordance with the Consumer Price Index from the date of grant of Permission/Approval to the value pertaining at the time of payment, as a contribution towards the expenditure proposed to be incurred by the Council in the provision of footpaths and public lighting which will facilitate the proposed development. The payment of the said contribution shall be subject to the following:-  
 (a) Where the proposed works are, within a period of 7 years from the date of payment of the full contribution or final instalment payment thereof, not commenced, the return of the contribution or the instalments thereof, paid during that period. (b) Where the proposed works are, within a period of 7 years from the date of payment of the full contribution or final instalment payment thereof, carried out in part only, or in such a manner as to facilitate the proposed development to a lesser extent, the return of a proportionate part of the contribution or the instalments thereof paid during that period. (c) Payment of interest at the prevailing interest rate payable by the Council's Treasurer on the Council's General Account on the contribution or any instalments thereof that have been paid, as long as and in so far as it is or they are

It is considered appropriate that the developer should contribute towards the expenditure to be incurred by the Council in respect of these works which will facilitate the proposed development.

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retained unexpended by the  
Council.

No development shall take  
place until the monies have  
been paid to the Council.

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# Comhairle Chontae Chorcaí Cork County Council

County Hall,  
Cork, Ireland.

Tel. No: (021) 4276891

Fax No: (021) 4276821

Web: <http://www.corkcoco.com/>



Dr. Mary Stack,  
Senior Executive Scientist,  
Cork County Council,  
Inniscarra,  
Co. Cork.

412

Re: Local Government (Water Pollution) Acts, 1977 1990  
Application Register No: W.P. (W) 7/03

A Chara,

I enclose copy of Licence granted to Gable Holdings Ltd  
the 30/5/03 for your attention.

For inspection purposes only.  
Consent of copyright owner required for any other use.

Mise le meas,

*Helen Conrick*  
Helen Conrick  
Environment Department

TRANSMISSION VERIFICATION REPORT

TIME : 12/05/2008 13: 2  
NAME : CCC  
FAX : 0214532777  
TEL :

DATE, TIME	12/05 13:02
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DURATION	00:00:55
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RESULT	OK
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MODE	STANDARD

F.A.O.

Mick



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*Environment dept*

**CORK COUNTY COUNCIL  
ENVIRONMENT SECTION  
26 MAY 2005  
ROOM 7.08  
COUNTY HALL, CORK**

**CORK COUNTY COUNCIL  
Environment Dept.**

**Local Government Water Pollution Act 1977/1990**

**Licence under Section 4**

Gable Holdings Ltd

Tramore House

Reeveswood, Douglas Road

Cork

*Environment dept*

Schedule

Effluent Discharges shall take place only as specified in the licence application. W.P.(W) 07/03 as modified and/or controlled by this licence and subject to the requirements of law . Any changes in the nature or quantity of any emission shall require the licensee to notify the Licensing Authority and in the case of any material change for the licensee to request a review or obtain a new licence as may be determined by the Licensing Authority prior to any such change being made. The Licensing Authority shall interpret whether any change is material or not .

This licence supersedes all previous licences and correspondence issued in respect of the facility under the terms of the Local Government Water Pollution Act 1977 and 1990.

**1. EFFLUENT MANAGEMENT**

1.1 The Licensee shall employ the best available technology not entailing excessive cost in the avoidance, minimisation, treatment and disposal of effluent produced on site.

1.2 Comprehensive written operating instructions and procedures shall be prepared in respect of effluent control and treatment systems to assist personnel with responsibilities for the operations of such systems and plant. These procedures shall be made available to the Licensing Authority on request.

1.3 Employees with responsibilities in the effluent control and treatment area shall receive training adequate to enable them to execute their tasks in relation to pollution control.

## 2. CONTAMINATED WASTE WATERS.

2.1 All contaminated wastewater arising from the operation of a residential development at Halfway, Ballinhassig, Co. Cork shall be treated on site.

2.2 Contaminated waste water shall comprise of domestic effluent only.

2.3 All treated effluent shall be pumped to the River Owenboy, at Priests Bridge Halfway, as indicated on drawings which accompanied the application. The effluent outflow pipe shall be fitted with a diffuser on the outlet, in order to maximize the mixing of effluent with the receiving river water. The effluent outflow pipe shall be fitted with a flow meter and composite sampler located upstream of the surface water discharge at locations agreed with the Licensing Authority. The flow meter shall be of the continuous recording and integrating type and composite sampler shall be flow proportionate. The sampler shall be operated so as to take samples at a frequency to be agreed with the Licensing Authority making up to a composite sample once every 24 hours. This sampling and monitoring system shall be fully operational and in use at all times during which effluent is being discharged.

This composite samples shall be collected at 12:00 noon each day or as otherwise agreed with the licensing authority. A composite sample for testing purposes shall be defined as any sample extracted from the sampling apparatus between 8.00 am and 12.00 noon.

2.4 The total volume of treated effluent shall not exceed 90 cubic metres/day or 10 cubic metres/hour.

2.5 Samples obtained in accordance with condition 2.3 above shall be tested by the licensee for the parameters indicated in the following table and no such taken at the point of sampling in the effluent discharge line shall exceed the following condition limits :-

Environment dept

## 5 SOLID WASTES

5.1 All treatment plant sludges shall be stabilised and mechanically thickened prior to disposal off-site. Any liquid extracted shall be pumped back to the effluent treatment unit.

5.2 All solid waste which can be regarded as neither toxic nor dangerous including treatment plant sludges and general refuse shall be disposed to landfill or by other means as may be agreed with the Licensing Authority.

5.3 While awaiting disposal, all wastes and by-products shall be collected and stored in designated areas protected against spillage and leachate run-off.

5.4 The licensee shall keep records of all wastes disposed of off-site and shall retain such records for a minimum period of ten years. These records shall be submitted to the Licensing Authority quarterly.

5.5 Within two months of issue of this licence, the licensee shall submit results of soil analysis carried out on the lands into which it is proposed to inject sludge (prior to any disposal taking place). These tests shall be undertaken by a competent independent technical body approved by Cork County Council. Nutrient levels and heavy metals concentrations shall be measured. The number of tests required shall be determined by the Licensing Authority (one per 5 hectares unless otherwise determined). A representative sample of the sludge shall be similarly tested and the results submitted to the Licensing Authority. These tests shall be repeated annually. The Testing Body shall recommend the maximum rate of spread of sludge. Upon receipt of these results, the Licensing Authority shall determine the maximum rate of spread of sludge allowable (as recommended by the Testing body unless otherwise determined).

The rate thus determined shall be based on the nutrient requirements of the soil and the prevention of runoff to waters, used for the disposal of sludge. If it appears to the Licensing Authority that the concentrations of certain substances is increasing to undesirable levels as a result of landspreading, then alternative arrangements for sludge disposal shall be agreed with the Licensing Authority. The Licensee shall indicate whether the designated lands will be

The preferred method of sludge disposal on land is soil injection. The Licensing Authority may insist that only this method be used.

Environment dept

pH	6.0-8.5
B.O.D.	5 mg/l
Total Suspended Solids	5 mg/l
Oils, fats and greases	1 mg/l
Total Nitrogen (as N)	5 mg/l
Total Phosphorus (as P)	1.0 mg/l
Detergents (MBAS)	1 mg/l

Dangerous substances. This licence does not permit the discharge of compounds listed (appendix 1) on Water Quality (Dangerous Substances Regulations) S.I. 12, 2001 from any operation arising on this site.

The frequency of testing for the above parameters shall be as follows:

Monthly for all parameters for the first twelve months from the date of issue of this licence. Six times a year thereafter, if the previous twelve months monitoring data demonstrates 100% compliance with the above limits. The Licensing Authority may review the frequency of sampling at any time.

2.6 All test methods used by the Licensee for the monitoring of the nature of the discharge shall be agreed with the Licensing Authority. All laboratory equipment used for effluent monitoring shall be calibrated in accordance with the manufacturers' recommendations and records of such calibrations shall be held by the Licensee for inspection by the Licensing Authority on request.

2.7 In the event of malfunction or breakdown of the effluent treatment, or, any other incident on site which may be rise to water pollution, the Licensee shall immediately report the incident to the Licensing Authority by telephone or telefax and shall confirm the communication in writing within twenty four hours. The Licensee shall take all possible steps to ensure that discharges not in accordance with the provisions of this licence do not

*Environment dept*

occur and shall consult with the Licensing Authority on the best practicable means of restoring the treatment process to its full operational capacity.

2.8 An assessment of the river up and down stream of the discharge point shall be conducted within twelve months of the date of issue of this licence. Fortnightly samples shall be taken between May to September inclusive, at sites agreed with the Licensing Authority for the following parameters, temperature, flowrate, dissolved oxygen, biochemical oxygen demand, suspended solids, ortho phosphorus and ammonia. The Licensing Authority may alter the frequency of sampling at any time.

### 3 STORM WATER

3.1 All uncontaminated storm water shall be directed to the River Owenaboy as indicated on drawing number which accompanied the application.

### 4 STORAGE FACILITIES

4.1 All chemical storage tanks areas shall be rendered impervious to the materials stored therein. In addition, storage tank areas shall be bunded, either locally or remotely, to a volume of 110% of the largest tank within each individual bunded area.

4.2 The integrity and watertightness of all the bunded structures and their resistance to penetration by water or other materials stored therein shall be tested and demonstrated by the licensee to the satisfaction of the Licensing Authority. The results of these tests shall be certified by a Chartered Engineer.

*Environment dept*

A sludge holding tank of capacity to accommodate 12 days production of excess sludge shall be available for storage prior to landspreading.

The lands designated for landspreading shall be indicated on a map to a scale of not less than 1/10,560 and submitted to the Licensing Authority prior to any disposal taking place. The Licensee shall maintain a record of the quantities of sludge deposited and the approximate locations of applications on a grid map.

Landspreading shall not be carried out following periods of heavy rain or when the ground is saturated or frozen. Landspreading shall not be carried out within 10 metres of any watercourse, stream or river or in any circumstances when water pollution might occur.

## 6 MONITORING

6.1 The licensee shall grant immediate and unhindered access to the site and any portion of the effluent treatment plant, including sewers and pipes, to any authorised personnel representing any body having statutory responsibility for water pollution control, at all times to carry out such inspections, monitoring and investigations as the body deems necessary.

6.2 The Licensing Authority reserve the right to carry out monitoring works on the Licensee's site in relation to the nature or quantity of discharges from the licensee's premises. The Licensing Authority may install such equipment as may be necessary to collect this information at the Licensee's premises. The cost of this work will be borne by the Licensee.

6.3 The licensee shall keep records of all monitoring carried out and shall retain such records for a minimum period of five years. These records shall be available for inspection by authorised personnel representing any statutory body involved in water pollution at all reasonable times. The licensee shall submit to the Licensing Authority before the tenth day of each quarter period the results of all monitoring relating to the previous quarter, together with any other records relating to pollution control which may be required by the Licensing Authority. The format of these results shall include minimum, maximum and average values

*Environment dept*

for each of the parameters tested. Any non-compliance with the terms of the licence shall be highlighted and the reason why this occurred shall be stated.

The measures taken to ensure non-recurrence shall also be outlined. The percentage compliance with licence values for each parameter shall also be indicated.

Before January 15th. of each calendar year, the Licensee shall submit a summary report of all monitoring carried out in the previous year. This report shall evaluate the operation of the facilities available on site to treat the effluent produced in the light of the results achieved in the previous year. The report shall also outline the intentions of the Licensee with regard to the upgrading of treatment plant or operations should these results not fully comply with the terms of this licence.

All monthly and annual reports shall be signed by the Licensee's plant manager or other senior officer designated by him.

6.4 The Licensee shall carry out a visual inspection of the effluent and surface water discharge points weekly and any abnormalities in water quality shall be noted. If it appears that the abnormalities may be occurring as a result of the Licensee's discharges then the Licensee shall immediately notify the Licensing Authority and initiate an investigation into the possible cause of the abnormalities.

## 7 RESPONSIBLE PERSON

7.1 The licensee shall ensure that a person or persons is/are available at all times to give relevant information on emissions to the Licensing Authority. The licensee shall identify to the Licensing Authority each such person.

## 8. TREATMENT PLANT

8.1 The Licensee shall identify those items of effluent treatment facility which are central to the proper operation of the effluent treatment system on site.



*Environment dept*

8.2 The Licensee shall initiate an approved maintenance programme for all such plant in use in the treatment process or in pollution control. The name of the company contracted to operate and maintain the treatment plant shall be forwarded to the Licensing Authority within one month of the issuing of this licence along with a copy of the contract. A register shall be kept of all maintenance work carried out on such units and this information shall be made available to the Licensing Authority at the site, or, on request. The Licensee shall immediately notify the Licensing Authority of any change in either the contract agreements, or, any change of contracting company.

8.3 All pump sumps or other treatment plant chambers from which spillages might occur shall be fitted with high liquid level alarms. The alarm condition shall be signified by a signal on site and also, by modem, to the responsible person for the site. Duty and standby pumps and other duplicate plant equipment shall be interchanged weekly in order to allow each unit equal running time on duty mode. Control panels shall incorporate hours run meters for each individual unit. Containment areas around pump sumps shall be put in place and any spillages diverted to the effluent treatment plant.

An alternative energy power supply shall be installed to augment the main power source in the event of a power failure on site. Alternative arrangements may be agreed with the Licensing Authority.

8.4 Standby storage facility for the storage of untreated effluent shall be installed to accommodate untreated wastewater in the event of a malfunction, or, breakdown of the effluent treatment. Details of this facility shall be agreed with the Licensing Authority. Details of alternative arrangements made for the treatment of effluent, in event that effluent cannot be treated on site, are to be submitted for approval to the Licensing Authority within three months of the date of issue of this licence.

*Environment dept*

## 9 CONTRIBUTIONS

9.1 The licensee shall pay to the Licensing Authority such annual contributions toward the cost of monitoring the discharge as the Licensing Authority considers necessary for the performance of its duties under this Act as follows:-

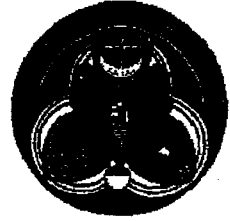
(a) Not later than September 30th., 2003 the licensee shall pay to the Licensing Authority a contribution of not less than ( € 2500)

(b) In subsequent years the licensee shall pay to the Licensing Authority an annual amount of not less than ( € 2500) updated in accordance with the Consumer Price Index from the date of the grant of this licence to the value pertaining at the time of payment of each annual contribution.

(c) Notwithstanding the foregoing, the rate of contribution each year shall take account of the actual costs of monitoring as incurred by the Licensing Authority in the previous year and as estimated for the next year.

Comhairle Contae Chorcaí  
Cork County Council

Environmental Directorate,  
Inniscarra, Co. Cork.  
Tel. No. (021) 4532700 • Fax No. (021) 4532727  
Web: www.corkcoco.ie  
An Stiúrthóireacht Comhshaoil,  
Inis Cara, Co. Corcaigh.  
Fón: (021) 4532700 • Faisc: (021) 4532727  
Suíomh Gréasáin: www.corkcoco.ie



Mr. Frank Clinton,  
Program Manager,  
Office of Climate, Licensing & Resource Use,  
Environment Protection Agency,  
Headquarters,  
PO Box 3000,  
Johnstown Castle Estate,  
County Wexford.

16<sup>th</sup> December, 2009

**Re: Waste Water Discharge (Authorisation) Regulations 2007 – fees payable in respect of applications to be submitted by 22<sup>nd</sup> December, 2009.**

Dear Mr. Clinton,

I refer to the 72 certificate applications and 3 discharge authorisation licence applications which will be submitted by the council under the above regulations before the 22<sup>nd</sup> December next.

I note that the fees payable in respect of these applications amount to €246,000 and refer you to our letter of 7<sup>th</sup> November 2008 (sent by Ted O'Leary, Senior Executive Officer) seeking a rebate/reduction, as is provided for under Art 38 (3) of the regulations. I note that since that letter the council has paid a further € 570,000 in applications fees meaning that the total amount paid by the council to date amounts to € 1,245,000.

As you will appreciate, in the current economic climate, the amount payable in respect of this final batch of applications is a significant sum that was not budgeted for in 2009. Moreover we have paid a substantial amount in fees already and have made our case for a reduction/rebate. Accordingly, I must advise that we are not submitting payment in respect of these applications as we anticipate the rebate due to the council exceeds the fees payable.

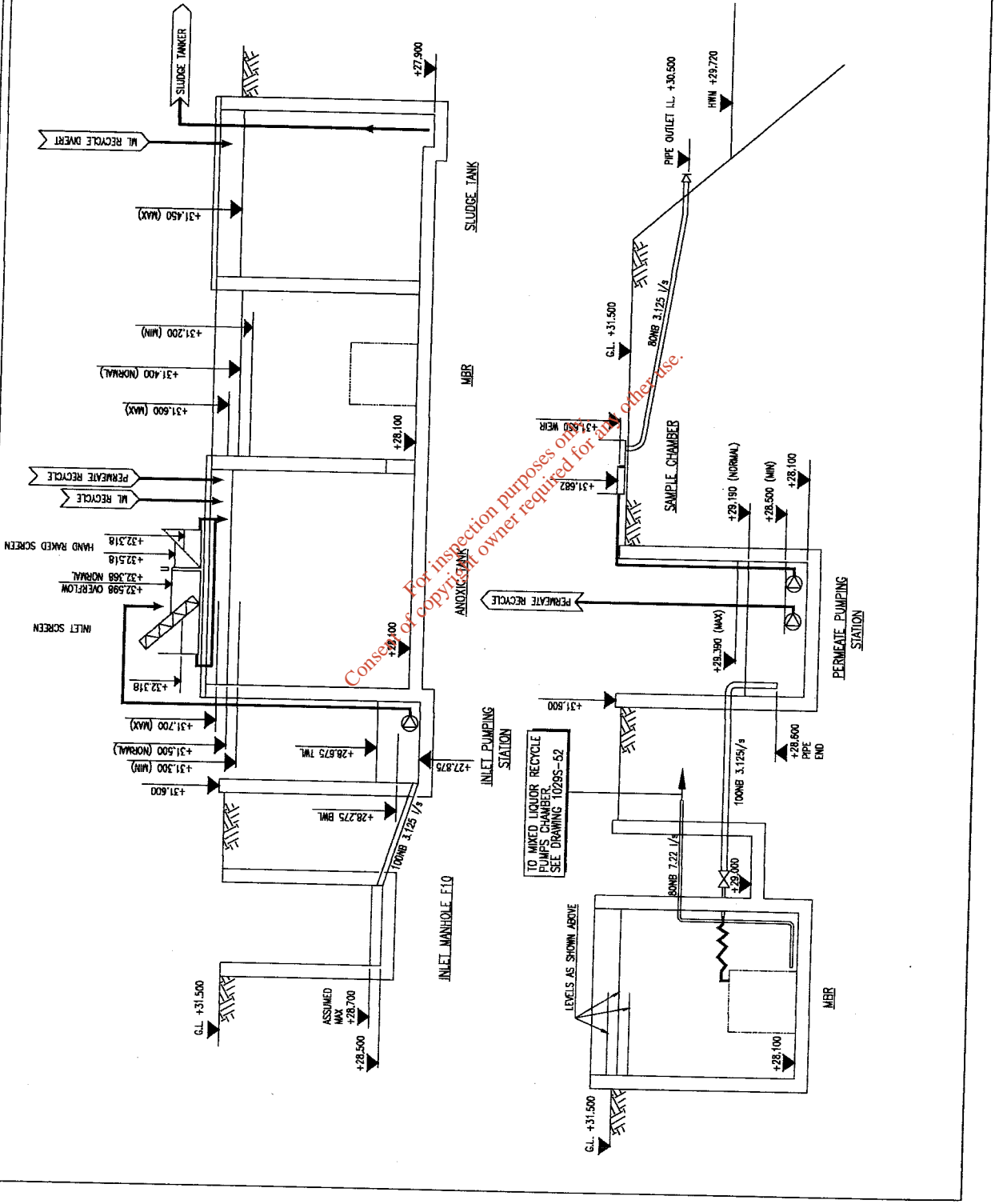
Yours faithfully,

Louis Duffy,  
Director of Service,  
Environment & Emergency Services Directorate



1. ALL DIMENSIONS IN MM.
2. ALL LEVELS ARE RELATIVE TO ORDINANCE DATUM.
3. FOR DETAILS OF MAIN CIVILS STRUCTURE REFER TO DRAWING 10295-06A.

AS BUILT	M.A. 20/07/05	PC	BM	C
AS BUILT	M.A. 16/7/05	WRP	SD	B
AS BUILT	SS 20/11/04	PC	WRP	A
REVISED	P.L.S. 10/09/04	WRP	WRP	2P
FIRST DRAWN	M.A. 20/06/04	PC	WRP	1P
DESCRIPTION				
CLIENT	BMVIC			
SCHM	BALLINAHASSIG WWTP			
TITLE	HYDRAULIC PROFILE			
UNLESS NOTED OTHERWISE THIS DRAWING IS TO BE USED FOR INFORMATION PURPOSES ONLY				
MAN SCALE	N/T			
SET NO.	A.1			
DRAWING NO.	10295			
SHEET NO.	51			
ISSUE	C			
CLEN				
DATE				



**NOTES**

1. ALL DIMENSIONS IN mm.
2. ALL LEVELS ARE RELATIVE TO ORDNANCE DATUM.
3. FOR DETAILS OF MAIN CHAM'S STRUCTURE REFER TO DRAWING 10295-06B.
4. FOR DETAILS OF BLOWER ROOM REFER TO DRAWING 10295-63
5. SUMP/CHAMBER COVERS NOT SHOWN FOR CLARITY.
6. REFER TO SEPARATE DRAWINGS FOR INSTRUMENT AND LIFTING DAMT POSITIONS.
7. OVERALL SITE DIMENSIONS HAVE BEEN TAKEN FROM B.M. DRAWING NO. F371.104B, AS MODIFIED BY B.M.A.
8. CABLE DUCT QUANTITIES AND SIZE ARE PROVISIONAL ESTIMATES SUBJECT TO CONFIRMATION OF ELECTRICAL DETAILS.

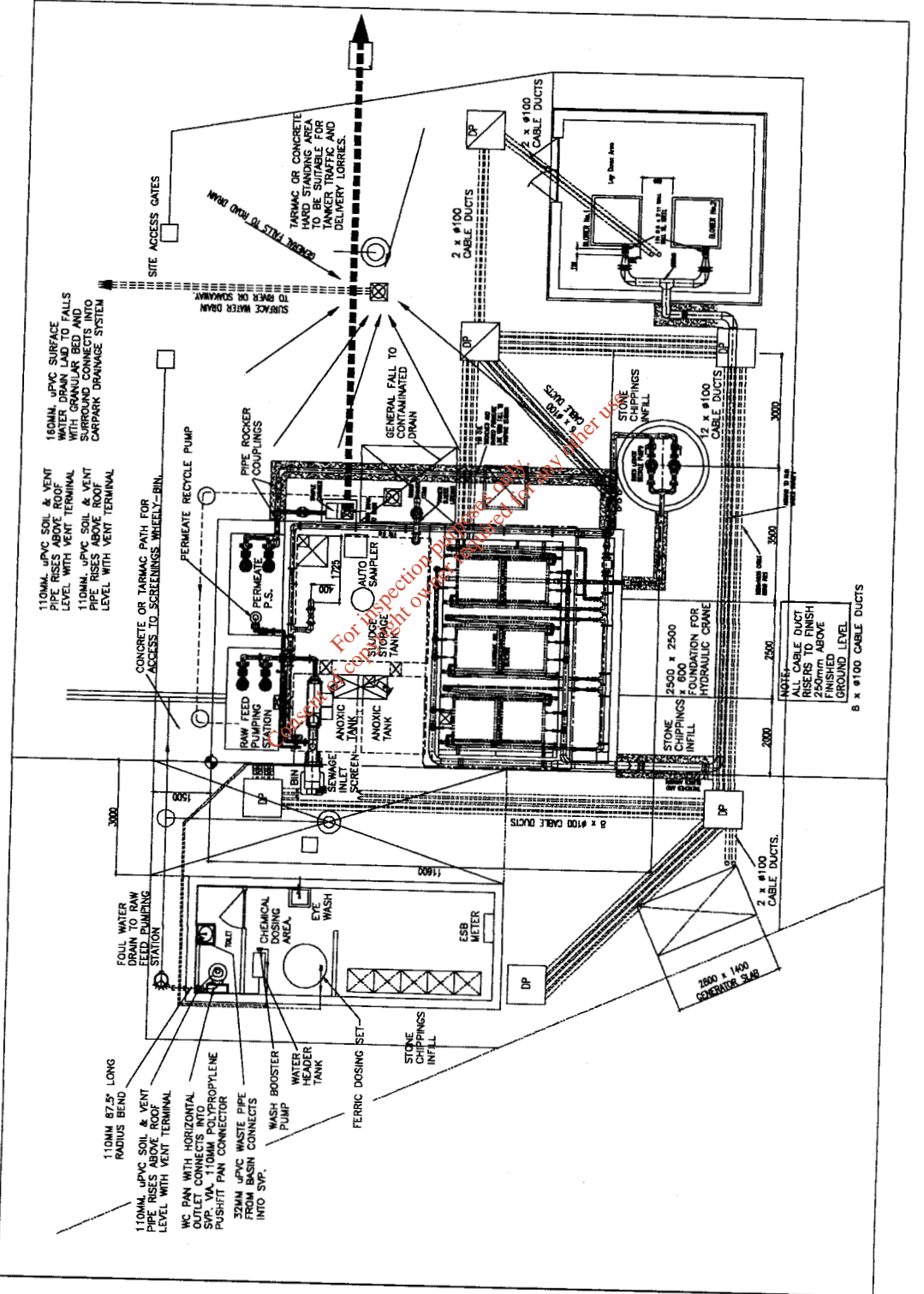
DESCRIPTION	DATE	BY	CHECKED	ISSUED
AS BUILT	M.A. 11/7/05	WRP	SD	E
AS CLOUED	M.A. 6/7/05	WRP	SD	D
REDRAWN	RB 10/10/06			C
AS CLOUED	RS 10/17/06	FG	WRP	B
REDRAWN	RJ 29-10-06	WRP	WRP	A
FIRST DRAWN	PL 14-1-06	FC	WRP	1P

CLIENT	ENRMC
SHEME BALLINAHASSIG WWTW	
TITLE GENERAL ARRANGEMENT OF MEMBRANE BIO REACTOR PLANT	

UNITS IN mm	SCALE	SHEET NO.	SHEET TOTAL
1 : 50	A1	10295	60 E



## 1.0 ANALYTICAL DATA

Samples of mixed liquors and permeate were taken on the 15<sup>th</sup> January 2009.

Date	Mixed Liquor Suspended Solids (mg/l)
15/01/2009	17327

- MLSS is outside target value of 10,000- 12,000 mg/l on 15<sup>th</sup> January 2009.

Parameter	Licence Limits	15/01/2009
pH (units)	6.0 – 8.5	5.44
Ammonia (NH <sub>3</sub> -N) mg/l	<5	0.78
BOD mg/l	<5	2
COD mg/l	-	<1
Nitrate-N mg/l	-	10.6
Nitrite-N mg/l	-	0.012
Kjeldahl Nitrogen mg/l	-	9.9
Total Nitrogen mg/l	<5	21.29
Suspended Solids mg/l	<5	7.7
Total Phosphorous mg/l	<1.0	1.45
Oils, fats and greases mg/l	<1.0	<1
Detergents (MBAS) mg/l	1	0.11

- The effluent is compliant on all parameters with the exception of:
  - pH, Total Nitrogen, Suspended solids and Total Phosphorus

	Parameter	pH (units)	Ammonia (NH <sub>3</sub> -N) mg/l	BOD mg/l	COD mg/l	Nitrate-N mg/l	Nitrite-N mg/l	Kjeldahl Nitrogen mg/l	Total Nitrogen mg/l	Suspended Solids mg/l	Total Phosphate mg/l	Oils, fats and greases mg/l	Detergents (MBAS) mg/l
inlet	15/01/2009	7.17	13	164	319	5.9	0.185	23.7	42.78	42.5	7.35	17.3	1.16
outlet	15/01/2009	5.44	0.78	2	<1	10.6	0.012	9.9	21.29	7.7	1.45	<1	0.11

## 2.0 ANALYTICAL DATA

Samples of mixed liquors and permeate were taken on the 19<sup>th</sup> March 2009.

TABLE 5.1: MIXED LIQUORS	
Date	Mixed Liquor Suspended Solids (mg/l)
19/03/2009	12477

- MLSS is outside target value of 10,000- 12,000 mg/l on 19<sup>th</sup> March 2009.

TABLE 5.2: PERMEATE RESULTS		
Parameter	Licence Limits	19/03/2009
pH (units)	6.0 – 8.5	7.72
Ammonia (NH <sub>3</sub> -N) mg/l	<5	47.5
BOD mg/l	<5	4
COD mg/l	-	48
Nitrate-N mg/l	-	2.9
Nitrite-N mg/l	-	0.209
Kjeldahl Nitrogen mg/l	-	49.28
Total Nitrogen mg/l	<5	99.89
Suspended Solids mg/l	<5	<1
Total Phosphorous mg/l	<1.0	4.99
Oils, fats and greases mg/l	<1.0	<1
Detergents (MBAS) mg/l	1	0.39

- The effluent is compliant on all parameters with the exception of:
  - Ammonia, Total Nitrogen, and Total Phosphorus

TABLE 5.3: INFLUENT RESULTS													
	Parameter	pH	Ammonia (NH <sub>3</sub> -N)	BOD	COD	Nitrate-N	Nitrite-N	Kjeldahl Nitrogen	Total Nitrogen	Suspended Solids	Total Phosphate	OFG	Detergents (MBAS)
inlet	19/03/2009	7.04	74	410	787	1.5	0.022	94.9	170.42	75	12.15	27.3	2.21
outlet	19/03/2009	7.72	47.5	4	48	2.9	0.209	49.28	99.89	<1	4.99	<1	0.39

## 3.0 COMPLAINTS

There were no complaints made to the operator during March 2009.

#### 4.0 ANALYTICAL DATA

Samples of mixed liquors and permeate were taken on the 9<sup>th</sup> April 2009.

TABLE 5.1: MIXED LIQUORS	
Date	Mixed Liquor Suspended Solids (mg/l)
09/04/2009	24494

- MLSS is outside target value of 10,000- 12,000 mg/l on 9<sup>th</sup> April 2009.

TABLE 5.2: PERMEATE RESULTS		
Parameter	Licence Limits	09/04/2009
pH (units)	6.0 – 8.5	6.40
Ammonia (NH <sub>3</sub> -N) mg/l	<5	3.0
BOD mg/l	<5	<1
COD mg/l	-	<1
Nitrate-N mg/l	-	2.9
Nitrite-N mg/l	-	0.164
Kjeldahl Nitrogen mg/l	-	<5
Total Nitrogen mg/l	<5	19.16
Suspended Solids mg/l	<5	<9.0
Total Phosphorous mg/l	<1.0	0.27
Oils, fats and greases mg/l	<1.0	<4.0
Detergents (MBAS) mg/l	1	0.60

- The effluent is compliant on all parameters with the exception of:
  - Total Nitrogen, Suspended Solids and O.F.G.

TABLE 5.3: INFLUENT RESULTS													
	Parameter	pH	Ammonia (NH <sub>3</sub> -N)	BOD	COD	Nitrate-N	Nitrite-N	Kjeldahl Nitrogen	Total Nitrogen	Suspended Solids	Total Phosphate	OFG	Detergents (MBAS)
inlet	09/04/2009	7.56	22.5	116	230	2.1	0.207	38.99	63.80	61.0	4.67	7.0	2.10
outlet	09/04/2009	6.40	3.0	<1	<1	2.9	0.164	<5	19.16	<9.0	0.27	<4.0	0.60

#### 5.0 COMPLAINTS

There were no complaints made to the operator during April 2009.



## 5.0 ANALYTICAL DATA

Samples of mixed liquors and permeate were taken on the 14<sup>th</sup> May 2009.

TABLE 5.1: MIXED LIQUORS	
Date	Mixed Liquor Suspended Solids (mg/l)
14/05/2009	32057

- MLSS is outside target value of 10,000- 12,000 mg/l on 14<sup>th</sup> May 2009.

TABLE 5.2: PERMEATE RESULTS		
Parameter	Licence Limits	14/05/2009
pH (units)	6.0 – 8.5	5.40
Ammonia (NH <sub>3</sub> -N) mg/l	<5	2.6
BOD mg/l	<5	14
COD mg/l	-	59
Nitrate-N mg/l	-	27.1
Nitrite-N mg/l	-	0.009
Kjeldahl Nitrogen mg/l	-	<5
Total Nitrogen mg/l	<5	29.71
Suspended Solids mg/l	<5	16
Total Phosphorous mg/l	<1.0	2.76
Oils, fats and greases mg/l	<1.0	<4.0
Detergents (MBAS) mg/l	1	1.20

- The effluent is compliant on all parameters with the exception of:
  - Total Nitrogen, BOD, Suspended Solids and O.F.G.

TABLE 5.3: INFLUENT RESULTS													
	Parameter	pH	Ammonia (NH <sub>3</sub> -N)	BOD	COD	Nitrate-N	Nitrite-N	Kjeldahl Nitrogen	Total Nitrogen	Suspended Solids	Total Phosphate	OFG	Detergents (MBAS)
inlet	14/05/2009	7.40	103.5	340	641	2.9	0.026	82.82	189.25	116	9.46	11.0	12.20
outlet	14/05/2009	5.40	2.6	14	59	27.1	0.009	<5	29.71	16	2.76	<4.0	1.20

## 6.0 COMPLAINTS

There were no complaints made to the operator during April 2009.

## 5.0 ANALYTICAL DATA

Samples of mixed liquors and permeate were taken on the 12<sup>th</sup> June 2009.

Date	Mixed Liquor Suspended Solids (mg/l)
12/06/2009	36254

- MLSS is outside target value of 10,000- 12,000 mg/l on 12<sup>th</sup> June 2009.

Parameter	Licence Limits	12/06/2009
pH (units)	6.0 – 8.5	4.03
Ammonia (NH <sub>3</sub> -N) mg/l	<5	4.1
BOD mg/l	<5	4.0
COD mg/l	-	7
Nitrate-N mg/l	-	1.9
Nitrite-N mg/l	-	0.005
Kjeldahl Nitrogen mg/l	-	<5
Total Nitrogen mg/l	5	6.005
Suspended Solids mg/l	5	6.7
Total Phosphorous mg/l	<1.0	2.37
Oils, fats and greases mg/l	<1.0	<4.0
Detergents (MBAS) mg/l	1	1.4

- The effluent is compliant on all parameters with the exception of:
  - Total Nitrogen, Suspended Solids, Total Phosphorous, O.F.G. and Detergents

	Parameter	pH	Ammonia (NH <sub>3</sub> -N)	BOD	COD	Nitrate-N	Nitrite-N	Kjeldahl Nitrogen	Total Nitrogen	Suspended Solids	Total Phosphate	OFG	Detergents (MBAS)
inlet	12/06/2009	8.21	37.5	220	348	1.0	0.241	59.47	98.211	131.5	9.79	9.0	4.40
outlet	12/06/2009	4.03	4.1	4.0	7	1.9	0.005	<5	6.005	6.7	2.37	<4	1.4

## 6.0 COMPLAINTS

There were no complaints made to the operator during June 2009.

## 5.0 ANALYTICAL DATA

Samples of mixed liquors and permeate were taken on the 9<sup>th</sup> July 2009.

Date	Mixed Liquor Suspended Solids (mg/l)
09/07/2009	31,788

- MLSS is outside target value of 10,000- 12,000 mg/l on 9<sup>th</sup> July 2009.

Parameter	Licence Limits	09/07/2009
pH (units)	6.0 – 8.5	8.22
Ammonia (NH <sub>3</sub> -N) mg/l	<5	0.74
BOD mg/l	<5	7
COD mg/l	-	15
Nitrate-N mg/l	-	9.5
Nitrite-N mg/l	-	0.006
Kjeldahl Nitrogen mg/l	-	<5
Total Nitrogen mg/l	<5	14.5
Suspended Solids mg/l	<5	7.5
Total Phosphorous mg/l	<1.0	1.33
Oils, fats and greases mg/l	<1.0	<4.0
Detergents (MBAS) mg/l	1	1.30

- The effluent is compliant on all parameters with the exception of:
  - Total Nitrogen, BOD, Suspended Solids, Total Phosphorous, O.F.G. and Detergents.

	Parameter	pH	Ammonia (NH <sub>3</sub> -N)	BOD	COD	Nitrate-N	Nitrite-N	Kjeldahl Nitrogen	Total Nitrogen	Suspended Solids	Total Phosphate	OFG	Detergents (MBAS)
inlet	09/07/2009	5.75	70.0	280	559	<1	0.116	69.69	69.80	136.0	12.25	8.0	7.10
outlet	09/07/2009	8.22	0.74	7	15	9.5	0.006	<5	14.5	7.5	1.33	<4.0	1.30

## 6.0 COMPLAINTS

There were no complaints made to the operator during July 2009.

## 5.0 ANALYTICAL DATA

Samples of mixed liquors and permeate were taken on the 14<sup>th</sup> August 2009.

Date	Mixed Liquor Suspended Solids (mg/l)
14/08/2009	19790.0

- MLSS is outside target value of 10,000- 12,000 mg/l on 14<sup>th</sup> August 2009.

Parameter	Licence Limits	14/08/2009
pH (units)	6.0 – 8.5	3.42
Ammonia (NH <sub>3</sub> -N) mg/l	<5	42.0
BOD mg/l	<5	<2
COD mg/l	-	<1
Nitrate-N mg/l	-	8.6
Nitrite-N mg/l	-	0.014
Kjeldahl Nitrogen mg/l	-	39.93
Total Nitrogen mg/l	<5	48.54
Suspended Solids mg/l	<5	12.0
Total Phosphorous mg/l	<1.0	1.95
Oils, fats and greases mg/l	<1.0	<4.0
Detergents (MBAS) mg/l	1	0.70

- The effluent is compliant on all parameters with the exception of:
  - Total Nitrogen, Ammonia, Suspended Solids, Total Phosphate and O.F.G.

	Parameter	pH	Ammonia (NH <sub>3</sub> -N)	BOD	COD	Nitrate-N	Nitrite-N	Kjeldahl Nitrogen	Total Nitrogen	Suspended Solids	Total Phosphate	OFG	Detergents (MBAS)
inlet	14/08/2009	8.70	60.0	510	913	<1	0.164	131.41	131.57	278.0	28.3	59.0	7.10
outlet	14/08/2009	3.42	42.0	<2	<1	8.6	0.014	39.93	48.54	12.0	1.95	<4.0	0.70

## 6.0 COMPLAINTS

There were no complaints made to the operator during August 2009.



## 1.0 ANALYTICAL DATA

Samples of mixed liquors and permeate were taken on the 15<sup>th</sup> January 2009.

Date	Mixed Liquor Suspended Solids (mg/l)
15/01/2009	17327

- MLSS is outside target value of 10,000- 12,000 mg/l on 15<sup>th</sup> January 2009.

Parameter	Licence Limits	15/01/2009
pH (units)	6.0 – 8.5	5.44
Ammonia (NH <sub>3</sub> -N) mg/l	<5	0.78
BOD mg/l	<5	2
COD mg/l		<1
Nitrate-N mg/l		10.6
Nitrite-N mg/l	-	0.012
Kjeldahl Nitrogen mg/l	-	9.9
Total Nitrogen mg/l	<5	21.29
Suspended Solids mg/l	<5	7.7
Total Phosphorous mg/l	<1.0	1.45
Oils, fats and greases mg/l	<1.0	<1
Detergents (MBAS) mg/l	1	0.11

- The effluent is compliant on all parameters with the exception of:
  - pH, Total Nitrogen, Suspended solids and Total Phosphorus

	Parameter	pH (units)	Ammonia (NH <sub>3</sub> -N) mg/l	BOD mg/l	COD mg/l	Nitrate-N mg/l	Nitrite-N mg/l	Kjeldahl Nitrogen mg/l	Total Nitrogen mg/l	Suspended Solids mg/l	Total Phosphate mg/l	Oils, fats and greases mg/l	Detergents (MBAS) mg/l
inlet	15/01/2009	7.17	13	164	319	5.9	0.185	23.7	42.78	42.5	7.35	17.3	1.16
outlet	15/01/2009	5.44	0.78	2	<1	10.6	0.012	9.9	21.29	7.7	1.45	<1	0.11

## 2.0 ANALYTICAL DATA

Samples of mixed liquors and permeate were taken on the 19<sup>th</sup> March 2009.

Date	Mixed Liquor Suspended Solids (mg/l)
19/03/2009	12477

- MLSS is outside target value of 10,000- 12,000 mg/l on 19<sup>th</sup> March 2009.

Parameter	Licence Limits	19/03/2009
pH (units)	6.0 – 8.5	7.72
Ammonia (NH <sub>3</sub> -N) mg/l	<5	47.5
BOD mg/l	<5	4
COD mg/l	-	48
Nitrate-N mg/l	-	2.9
Nitrite-N mg/l	-	0.209
Kjeldahl Nitrogen mg/l	-	49.28
Total Nitrogen mg/l	-	99.89
Suspended Solids mg/l	<5	<1
Total Phosphorous mg/l	<1.0	4.99
Oils, fats and greases mg/l	<1.0	<1
Detergents (MBAS) mg/l	1	0.39

- The effluent is compliant on all parameters with the exception of:
  - Ammonia, Total Nitrogen, and Total Phosphorus

	Parameter	pH	Ammonia (NH <sub>3</sub> -N)	BOD	COD	Nitrate-N	Nitrite-N	Kjeldahl Nitrogen	Total Nitrogen	Suspended Solids	Total Phosphate	OFG	Detergents (MBAS)
inlet	19/03/2009	7.04	74	410	787	1.5	0.022	94.9	170.42	75	12.15	27.3	2.21
outlet	19/03/2009	7.72	47.5	4	48	2.9	0.209	49.28	99.89	<1	4.99	<1	0.39

## 3.0 COMPLAINTS

There were no complaints made to the operator during March 2009.

#### 4.0 ANALYTICAL DATA

Samples of mixed liquors and permeate were taken on the 9<sup>th</sup> April 2009.

TABLE 5.1: MIXED LIQUORS	
Date	Mixed Liquor Suspended Solids (mg/l)
09/04/2009	24494

- MLSS is outside target value of 10,000- 12,000 mg/l on 9<sup>th</sup> April 2009.

TABLE 5.2: PERMEATE RESULTS		
Parameter	Licence Limits	09/04/2009
pH (units)	6.0 – 8.5	6.40
Ammonia (NH <sub>3</sub> -N) mg/l	<5	3.0
BOD mg/l	<5	<1
COD mg/l	-	<5
Nitrate-N mg/l	-	2.9
Nitrite-N mg/l	-	0.164
Kjeldahl Nitrogen mg/l	-	<5
Total Nitrogen mg/l	<5	19.16
Suspended Solids mg/l	<5	<9.0
Total Phosphorous mg/l	<1.0	0.27
Oils, fats and greases mg/l	<1.0	<4.0
Detergents (MBAS) mg/l	1	0.60

- The effluent is compliant on all parameters with the exception of:
  - Total Nitrogen, Suspended Solids and O.F.G.

TABLE 5.3: INFLUENT RESULTS													
	Parameter	pH	Ammonia (NH <sub>3</sub> -N)	BOD	COD	Nitrate-N	Nitrite-N	Kjeldahl Nitrogen	Total Nitrogen	Suspended Solids	Total Phosphate	OFG	Detergents (MBAS)
inlet	09/04/2009	7.56	22.5	116	230	2.1	0.207	38.99	63.80	61.0	4.67	7.0	2.10
outlet	09/04/2009	6.40	3.0	<1	<1	2.9	0.164	<5	19.16	<9.0	0.27	<4.0	0.60

#### 5.0 COMPLAINTS

There were no complaints made to the operator during April 2009.



## 5.0 ANALYTICAL DATA

Samples of mixed liquors and permeate were taken on the 14<sup>th</sup> May 2009.

Date	Mixed Liquor Suspended Solids (mg/l)
14/05/2009	32057

- MLSS is outside target value of 10,000- 12,000 mg/l on 14<sup>th</sup> May 2009.

Parameter	Licence Limits	14/05/2009
pH (units)	6.0 – 8.5	5.40
Ammonia (NH <sub>3</sub> -N) mg/l	<5	2.6
BOD mg/l	<5	14
COD mg/l	-	59
Nitrate-N mg/l	-	27.1
Nitrite-N mg/l	-	0.009
Kjeldahl Nitrogen mg/l		<5
Total Nitrogen mg/l		29.71
Suspended Solids mg/l	<5	16
Total Phosphorous mg/l	<1.0	2.76
Oils, fats and greases mg/l	<1.0	<4.0
Detergents (MBAS) mg/l	1	1.20

- The effluent is compliant on all parameters with the exception of:
  - Total Nitrogen, BOD, Suspended Solids and O.F.G.

	Parameter	pH	Ammonia (NH <sub>3</sub> -N)	BOD	COD	Nitrate-N	Nitrite-N	Kjeldahl Nitrogen	Total Nitrogen	Suspended Solids	Total Phosphate	OFG	Detergents (MBAS)
inlet	14/05/2009	7.40	103.5	340	641	2.9	0.026	82.82	189.25	116	9.46	11.0	12.20
outlet	14/05/2009	5.40	2.6	14	59	27.1	0.009	<5	29.71	16	2.76	<4.0	1.20

## 6.0 COMPLAINTS

There were no complaints made to the operator during April 2009.

## 5.0 ANALYTICAL DATA

Samples of mixed liquors and permeate were taken on the 12<sup>th</sup> June 2009.

TABLE 5.1: MIXED LIQUORS	
Date	Mixed Liquor Suspended Solids (mg/l)
12/06/2009	36254

- MLSS is outside target value of 10,000- 12,000 mg/l on 12<sup>th</sup> June 2009.

TABLE 5.2: PERMEATE RESULTS		
Parameter	Licence Limits	12/06/2009
pH (units)	6.0 – 8.5	4.03
Ammonia (NH <sub>3</sub> -N) mg/l	<5	4.1
BOD mg/l	<5	4.0
COD mg/l	-	7
Nitrate-N mg/l	-	1.9
Nitrite-N mg/l	-	0.005
Kjeldahl Nitrogen mg/l	-	<5
Total Nitrogen mg/l	<5	6.005
Suspended Solids mg/l	<5	6.7
Total Phosphorous mg/l	<1.0	2.37
Oils, fats and greases mg/l	<1.0	<4.0
Detergents (MBAS) mg/l	1	1.4

- The effluent is compliant on all parameters with the exception of:
  - Total Nitrogen, Suspended Solids, Total Phosphorous, O.F.G. and Detergents

TABLE 5.3: INFLUENT RESULTS													
	Parameter	pH	Ammonia (NH <sub>3</sub> -N)	BOD	COD	Nitrate-N	Nitrite-N	Kjeldahl Nitrogen	Total Nitrogen	Suspended Solids	Total Phosphate	OFG	Detergents (MBAS)
inlet	12/06/2009	8.21	37.5	220	348	1.0	0.241	59.47	98.211	131.5	9.79	9.0	4.40
outlet	12/06/2009	4.03	4.1	4.0	7	1.9	0.005	<5	6.005	6.7	2.37	<4	1.4

## 6.0 COMPLAINTS

There were no complaints made to the operator during June 2009.

## 5.0 ANALYTICAL DATA

Samples of mixed liquors and permeate were taken on the 9<sup>th</sup> July 2009.

**TABLE 5.1: MIXED LIQUORS**

Date	Mixed Liquor Suspended Solids (mg/l)
09/07/2009	31,788

- MLSS is outside target value of 10,000- 12,000 mg/l on 9<sup>th</sup> July 2009.

**TABLE 5.2: PERMEATE RESULTS**

Parameter	Licence Limits	09/07/2009
pH (units)	6.0 – 8.5	8.22
Ammonia (NH <sub>3</sub> -N) mg/l	<5	0.74
BOD mg/l	<5	7
COD mg/l	-	15
Nitrate-N mg/l	-	9.5
Nitrite-N mg/l	-	0.006
Kjeldahl Nitrogen mg/l	-	<5
Total Nitrogen mg/l	-	14.5
Suspended Solids mg/l	-	7.5
Total Phosphorous mg/l	<1.0	1.33
Oils, fats and greases mg/l	<1.0	<4.0
Detergents (MBAS) mg/l	1	1.30

- The effluent is compliant on all parameters with the exception of:
  - Total Nitrogen, BOD, Suspended Solids, Total Phosphorous, O.F.G. and Detergents.

**TABLE 5.3: INFLUENT RESULTS**

	Parameter	pH	Ammonia (NH <sub>3</sub> -N)	BOD	COD	Nitrate-N	Nitrite-N	Kjeldahl Nitrogen	Total Nitrogen	Suspended Solids	Total Phosphate	OFG	Detergents (MBAS)
inlet	09/07/2009	5.75	70.0	280	559	<1	0.116	69.69	69.80	136.0	12.25	8.0	7.10
outlet	09/07/2009	8.22	0.74	7	15	9.5	0.006	<5	14.5	7.5	1.33	<4.0	1.30

## 6.0 COMPLAINTS

There were no complaints made to the operator during July 2009.

## 5.0 ANALYTICAL DATA

Samples of mixed liquors and permeate were taken on the 14<sup>th</sup> August 2009.

Date	Mixed Liquor Suspended Solids (mg/l)
14/08/2009	19790.0

- MLSS is outside target value of 10,000- 12,000 mg/l on 14<sup>th</sup> August 2009.

Parameter	Licence Limits	14/08/2009
pH (units)	6.0 – 8.5	3.42
Ammonia (NH <sub>3</sub> -N) mg/l	<5	42.0
BOD mg/l	<5	<2
COD mg/l	-	<5
Nitrate-N mg/l	-	8.6
Nitrite-N mg/l	-	0.014
Kjeldahl Nitrogen mg/l	-	39.93
Total Nitrogen mg/l	-	48.54
Suspended Solids mg/l	5	12.0
Total Phosphorous mg/l	<1.0	1.95
Oils, fats and greases mg/l	<1.0	<4.0
Detergents (MBAS) mg/l	1	0.70

- The effluent is compliant on all parameters with the exception of:
  - Total Nitrogen, Ammonia, Suspended Solids, Total Phosphate and O.F.G.

	Parameter	pH	Ammonia (NH <sub>3</sub> -N)	BOD	COD	Nitrate-N	Nitrite-N	Kjeldahl Nitrogen	Total Nitrogen	Suspended Solids	Total Phosphate	OFG	Detergents (MBAS)
inlet	14/08/2009	8.70	60.0	510	913	<1	0.164	131.41	131.57	278.0	28.3	59.0	7.10
outlet	14/08/2009	3.42	42.0	<2	<1	8.6	0.014	39.93	48.54	12.0	1.95	<4.0	0.70

## 6.0 COMPLAINTS

There were no complaints made to the operator during August 2009.

# Accreditation Certificate

## Cork County Council

Wastewater Testing Laboratory, Inniscarra, Co. Cork

Testing Laboratory

Registration number: 016T

is accredited by the Irish National Accreditation Board (INAB) to undertake testing as detailed in the Schedule bearing the Registration Number detailed above, in compliance with the International Standard ISO/IEC 17025:2005 2<sup>nd</sup> Edition "General Requirements for the Competence of Testing and Calibration Laboratories" (This Certificate must be read in conjunction with the Annexed Schedule of Accreditation)

---

Date of award of accreditation: 01:10:2002

Date of last renewal of accreditation: 20:09:2007


Expiry date of this certificate of accreditation: 20:09:2012

---

This Accreditation shall remain in force until further notice subject to continuing compliance with INAB accreditation criteria, ISO/IEC 17025 and any further requirements specified by the Irish National Accreditation Board.

Manager: 

Mr Tom Dempsey

Chairperson: 

Dr Máire Walsh

Issued on 20th September 2007

Organisations are subject to annual surveillance and are re-assessed every five years. The renewal date on this Certificate confirms the latest date of renewal of accreditation. To confirm the validity of this Certificate, please contact the Irish National Accreditation Board.

The INAB is a signatory of the European co-operation for Accreditation (EA) Testing Multilateral Agreement (MLA) and the International Laboratory Accreditation Cooperation (ILAC) Mutual Recognition Arrangement.

# Schedule of Accreditation



(Annex to Accreditation Certificate)

Permanent Laboratory:  
Category A

## CORK COUNTY COUNCIL

### Chemistry Testing Laboratory

**Initial Registration Date :** 25-April-1991  
**Postal Address:** Waste Water Laboratory  
**(Address of other locations as they apply)** Inniscarra  
Co. Cork  
**Telephone:** +353 (21) 4532700  
**Fax:** +353 (21) 4532777  
**E-mail:**  
**Contact Name:** Ms M Cherry  
**Facilities:** Normally not available for Public testing

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# Schedule of Accreditation



## Permanent Laboratory: Category A

THE IRISH NATIONAL ACCREDITATION BOARD (INAB) is the Irish body for the accreditation of organisations including laboratories.

Laboratory accreditation is available to testing and calibration facilities operated by manufacturing organisations, government departments, educational institutions and commercial testing/calibration services. Indeed, any organisation involved in testing, measurement or calibration in any area of technology can seek accreditation for the work it is undertaking.

Each accredited laboratory has been assessed by skilled specialist assessors and found to meet criteria which are in compliance with ISO/IEC 17025 or ISO/IEC 15189 (medical laboratories). Frequent audits, together with periodic inter-laboratory test programmes, ensure that these standards of operation are maintained.

### Testing and Calibration Categories:

- Category A:** Permanent laboratory calibration and testing where the laboratory is erected on a fixed location for a period expected to be greater than three years.
- Category B:** Site calibration and testing that is performed by staff sent out on site by a permanent laboratory that is accredited by the Irish National Accreditation Board.
- Category C:** Site calibration and testing that is performed in a site/mobile laboratory or by staff sent out by such a laboratory, the operation of which is the responsibility of a permanent laboratory accredited by the Irish National Accreditation Board.
- Category D:** Site calibration and testing that is performed on site by individuals and organisations that do not have a permanent calibration/testing laboratory. Testing may be performed using
- (a) portable test equipment
  - (b) a site laboratory
  - (c) a mobile laboratory or
  - (d) equipment from a mobile or site laboratory

### Standard Specification or Test Procedure Used:

The standard specification or test procedure that is accredited is the issue that is current on the date of the most recent visit, unless otherwise stated.

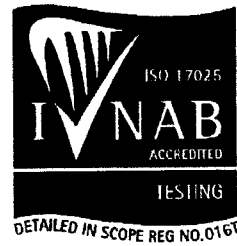
### Glossary of Terms

#### Facilities:

- Public calibration/testing service:** Commercial operations which actively seek work from others.
- Conditionally available for public calibration/testing:** Established for another primary purpose but, more commonly than not, is available for outside work.
- Normally not available for public calibration/testing:** Unavailable for public calibration/testing more often than not.

**Laboratory users wishing to obtain assurance that calibration or test results are reliable and carried out to the Irish National Accreditation Board criteria should insist on receiving an accredited calibration certificate or test report. Users should contact the laboratory directly to ensure that this scope of accreditation is current. INAB will, on request, verify the status and scope.**

# Scope of Accreditation



Cork County Council  
Chemical Testing Laboratory

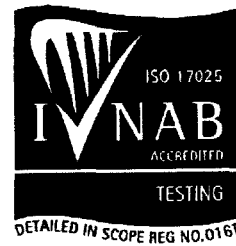
Permanent Laboratory:  
Category A

INAB Classification number (P9) Materials/products tested	Type of test/properties measured Range of measurement	Standard specifications Equipment/techniques used
766 Waters  .01 Waters for domestic purposes <i>Surface and ground waters</i>	<p>Chemical analysis:</p> <p>Biochemical Oxygen Demand 2 - 145,000 mg/l</p> <p>Chloride 5 - 1,000 mg/l</p> <p>ph 2 - 12</p> <p>Suspended Solids 0.5 - 17,500 mg/l</p> <p>Chemical Oxygen Demand 21 - 135 mg/l 120 - 670,000 mg/l</p> <p>Total phosphorus 0.2 - 5,300 mg/l</p> <p>Ammonia 0.1 - 1,000 mg/l NH<sub>3</sub> - N</p>	<p>Documented in-house methods based on Standard Methods for the Examination of Water &amp; Wastewater 21 st Edition APHA (See Note 1)</p> <p>CP No. 1 Membrane electrode</p> <p>CP No. 7 Argentometric method</p> <p>CP No. 5 Electrometry</p> <p>CP No. 3 Gravimetric</p> <p>CP No. 6 Reflux - colourmetric method</p> <p>US-EPA Approved method/HACH Method CP No.20</p> <p>Documented in-house method CP22 by Konelab based on Method for the Examination of Waters and Associated Material HMSO:1981</p>

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# Scope of Accreditation



Cork County Council  
Chemical Testing Laboratory

Permanent Laboratory:  
Category A

INAB Classification number (P9) Materials/products tested	Type of test/properties measured Range of measurement	Standard specifications Equipment/techniques used
<b>766 Waters</b> .01 Waters for domestic purposes <i>Surface and ground waters</i>	Orthophosphate as P (Konelab) Range: 0.005-1.00 mg O-PO4 P/L High Range: 1000 mg O-PO4 P/L Method Detection Limit: 0.02 mg O-PO4 P/L  Chloride (Konelab) Range: 25-250 mg/L Cl- High Range Conc.: 86,000 mg/L Cl- Method Detection Limit: 25 mg/L Cl-  Sulphate (Konelab) Range: 30-250 mg/L SO4/L High Range Conc.: 35,000 mg/L SO4/L Method Detection Limit: 30 mg SO4/L	CP No. 23 Ascorbic Acid Method  CP No. 24 Ferricyanide Method  CP No. 25 Documented in-house method by Konelab based on method for the examination of waters and waste waters and associated material HMSO: 1981

# Scope of Accreditation



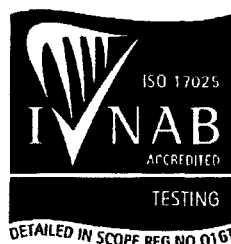
Cork County Council  
Chemical Testing Laboratory

Permanent Laboratory:  
Category A

INAB Classification number (P9)	Materials/products tested	Type of test/properties measured Range of measurement	Standard specifications Equipment/techniques used
766	Waters	Chemical analysis	Documented in-house methods based on Standard Methods for the Examination of Water & Wastewater 21 st Edition APHA (See Note 1)
.05	Trade Wastes <i>Industrial effluents</i> <i>Urban Wastewater</i> <i>Municipal Wastewater</i>	Biochemical Oxygen Demand 2 - 145,000 mg/l	CP No. 1 Membrane electrode
		Chloride 5 - 1,000 mg/l	CP No. 7 Argentometric method
		pH 2 - 12	CP No. 5 Electrometry
		Suspended Solids 0.5 - 17,500 mg/l	CP No. 3 Gravimetric
		Chemical Oxygen Demand 21 - 135 mg/l 120 - 670,000 mg/l	CP No. 6 Reflux - colourmetric method
		Total phosphorus 0.2 - 5,300 mg/l	US-EPA Approved method/HACH Method CP No.20
		Ammonia 0.1 - 1,000 mg/L NH3-N	Documented in-house method CP22 by Konelab based on Method for the Examination of Waters and Associated Material HMSO: 1981.

Notes  
1. APHA American Public Health Association, USA, 21<sup>st</sup> Edition

# Scope of Accreditation



Cork County Council  
Chemical Testing Laboratory

Permanent Laboratory:  
Category A

INAB Classification number (P9) Materials/products tested	Type of test/properties measured Range of measurement	Standard specifications Equipment/techniques used
766 Waters	Chemical analysis	Documented in-house methods based on Standard Methods for the Examination of Water & Wastewater 21 st Edition APHA (See Note 1)
.05 Trade Wastes Industrial effluents Urban Wastewater Municipal Wastewater	Orthophosphate as P (Konelab) Range: 0.005 - 1.00 mg O-PO4 P/L High Range: 1000 mg O-PO4 P/L Method Detection Limit: 0.02 mg O-PO4 P/L	CP No. 1 Membrane electrode CP No. 23 Ascorbic Acid Method
	Chloride (Konelab) Range: 25-250 mg/L Cl- High Range Conc.: 86,600 mg /L Cl- Method Detection Limit: 25mg / L Cl-	CP No. 24 Ferricyanide Method
	Sulphate (Konelab) Range: 30-250 mg/L SO4 /L High Range Conc.: 35,000 mg/L SO4 /L Method Detection Limit: 30 mg SO4 /L	CP No. 25 Documented in-house method by Konelab based on method for the examination of waters and waste waters and associated material HMSO: 1981

**Notes**

1. APHA American Public Health Association, USA, 21<sup>st</sup> Edition



Attachment E4 Highway analytical data for certification application				
Sample Date	18/11/2009	18/11/2009	18/11/2009	18/11/2009
Sample	GT1401	GT1402	GT1403	GT1404
Flow M <sup>3</sup> /Day	*	*	*	*
pH	7.5	7.9	7.3	7.3
Temperature °C	*	*	*	*
Conductivity uS/cm 20 °C	357	344	162	162
Suspended Solids mg/L	59	<2.5	28	25
Ammonia-N mg/L	6.4	<0.1	0.1	<0.1
BOD mg/L	8	<1	2	2
COD mg/L	25	<21	<21	<21
TN-N mg/L	12.57	8.07	4.14	4.2
Nitrite-N mg/L	0.575	<0.1	<0.1	<0.10
Nitrate-N mg/L	3.852	7.21	2.6	2.57
TP-P mg/L	0.775	0.183	0.104	0.145
O-PO4-P mg/L	0.61	0.17	0.11	0.09
SO4 mg/L	<30	35.3	<30	<30
Phenols µg/L	*	available 15th	*	available 15th
Atrazine µg/L	*	available 15th	*	available 15th
Dichloromethane µg/L	*	<1	*	<1
Simazine µg/L	*	available 15th	*	available 15th
Toluene µg/L	*	<0.28	*	<0.28
Tributyltin µg/L	Not required	Not required	Not required	Not required
Xylenes µg/L	*	<0.73	*	<1
Arsenic µg/L	*	0.3	*	0.4
Chromium µg/L	<20	<20	<20	<20
Copper µg/L	<20	<20	<20	<20
Cyanide µg/L	*	<5	*	<5
Fluoride µg/L	108	106	74	68
Lead µg/L	<20	<20	<20	<20
Nickel µg/L	<20	<20	<20	<20
Zinc µg/L	36.8	<20	<20	<20
Boron µg/L	<20	<20	<20	<20
Cadmium µg/L	*	<0.03	*	<0.03
Mercury µg/L	*	3.5	*	1
Selenium µg/L	<20	<20	<20	<20

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## Hydrometric Area 19

River and Code : **OWENBOY (CORK)** 19/O/01  
 Tributary of : Sea - Cork Harbour OS Catchment No: 230  
 OS Grid Ref : W 800 620 Date(s) Surveyed : 10/08/2005

Sampling Stations No.	Location	Biological Quality Ratings (Q Values)					
		1990	1994	1997	1999	2003	2005
0200	Br SE of Crushnalanauv	3	3	3	3	4	3
0400	Br nr Killeady	3	3	3-4	3	4	4
0600	Priest's Br	3-4	3*	3-4	3-4	3-4	3
0800	Paddy's Br	3-4	3-4	3-4	3	4	4
1000	Bealahareagh Br	3-4	3-4	4	3-4	4	4
1400	Ballea Br (Lower)	3-4	3-4	3-4	3-4	3-4	3-4

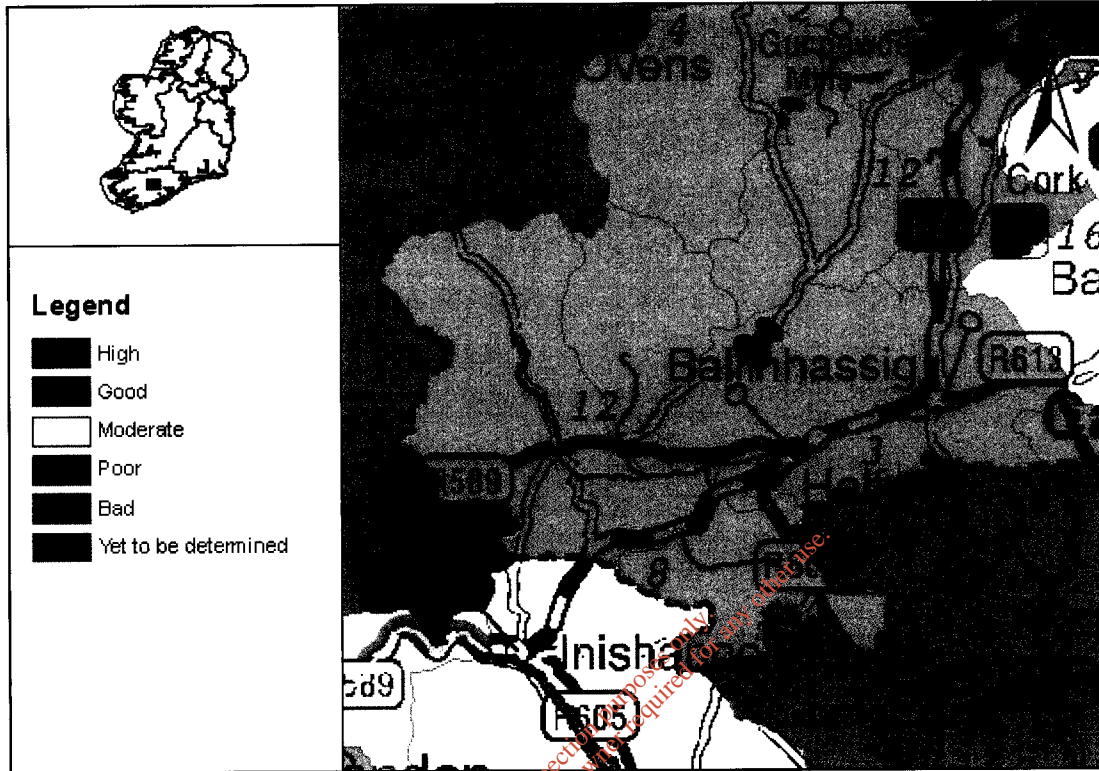
**Assessment:** Deterioration, to moderately polluted conditions, at two locations (0200, 0600) since previous survey in 2003. Continuing slightly polluted at lowermost location (1400).

Sampling Stations No.	Location	National Grid Ref.		Discovery Series No.	County Code
		X	Y		
0200	Br SE of Crushnalanauv	156885	63060	87	CK
0400	Br nr Killeady	156747	61378	87	CK
0600	Priest's Br	160484	61293	87	CK
0800	Paddy's Br	164269	62379	87	CK
1000	Bealahareagh Br	168419	63229	87	CK
1400	Ballea Br (Lower)	171238	62764	87	CK

Site Altitude and Upstream Catchment Characteristics (where available):											
No.	Alt	Area	Sil	Cal	Pasture	Forestry	Bogs	Urban	Misc Ag.	Water	Other
0200	76	8	100	0	75	6	0	0.0	19	0	0
0400	38	11	100	0	73	6	0	2.5	18	0	0
0600	25	55	89	11	66	2	0	1.0	30	0	1
0800	24	72	85	15	65	2	0	0.8	32	0	1
1000	20	90	83	17	65	2	0	2.4	31	0	1
1400	7	104	84	16	63	2	0	3.3	31	0	1

Alt is in metres Area is km<sup>2</sup> and Sil, Cal are % siliceous and calcareous bedrock and Pasture, Forestry, etc., are % of catchment area.

**Full Report for Waterbody Owenboy**



Date Reported to Europe: 22/12/2008

Date Report Created 12/08/2009



**Summary Information:**

**WaterBody Category:** Subbasin Waterbody

**WaterBody Name:** Owenboy

**WaterBody Code:** IE\_SW\_19\_1584



**Overall Status:** Poor

**Overall Objective:** [Redacted]

**Overall Risk:** 1a At Risk

**Applicable Supplementary Measures:** Unsewered; Urban & Industrial; Morphology; Forestry;  
Report data based upon Draft RBMP, 22/12/2008.

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Date Reported to Europe: 22/12/2008

Date Report Created 12/08/2009



**Status Report**

**WaterBody Category:** Subbasin Waterbody

**WaterBody Name:** Owenboy

**WaterBody Code:** IE\_SW\_19\_1584

**Overall Status Result:** Poor



	<b>Status Element Description</b>	<b>Result</b>
EX	Status from Monitored or Extrapolated Waterbody	
	<b>Biological Elements</b>	
Q	Macroinvertebrates (Q-Value)	Poor
F	Fish	n/a
DI	Phytobenthos (Diatoms)	n/a
FPM	Status value as determined by Margartifera	n/a
	<b>Supporting Elements</b>	
MOR	Hydromorphology	n/a
SP	Specific Pollutants	n/a
PC	General Physico-Chemical	Fail
	<b>Chemical Status</b>	
PAS	Chemical Status	n/a
	<b>Overall Ecological Status</b>	
O	Overall Ecological Status	Poor

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Date Reported to Europe: 22/12/2008

Date Report Created 12/08/2009

**Risk Report**

**WaterBody Category:** Subbasin Waterbody

**WaterBody Name:** Owenboy

**WaterBody Code:** IE\_SW\_19\_1584

**Overall Risk Result:** **1a** At Risk



<b>Risk Test Description</b>		<b>Risk</b>
<b>Point Risk Sources</b>		
RP1	WWTPs (2008)	1a At Risk
RP2	CSOs	2b Not At Risk
RP3	IPPCs (2008)	2b Not At Risk
RP4	Section 4s (2008)	1a At Risk
RPO	Overall Risk from Point Sources - Worst Case (2008)	1a At Risk
<b>Diffuse Risk Sources</b>		
RD1	EPA diffuse model (2008)	1b Probably At Risk
RD2a	Road Wash - Soluble Copper	2b Not At Risk
RD2b	Road Wash - Total Zinc	2b Not At Risk
RD2c	Road Wash - Total Hydrocarbons	2b Not At Risk
RD3	Railways	2b Not At Risk
RD4a	Forestry - Acidification (2008)	2b Not At Risk
RD4b	Forestry - Suspended Solids (2008)	2b Not At Risk
RD4c	Forestry - Eutrophication (2008)	2a Probably Not At Risk
RD5a	Unsewered Areas - Pathogens (2008)	2a Probably Not At Risk
RD5b	Unsewered Phosphorus (2008)	2b Not At Risk
RD5	Overall Unsewered (2008)	2b Not At Risk
RD6a	Arable	2a Probably Not At Risk
RD6b	Sheep Dip	2b Not At Risk
RD6c	Forestry - Dangerous Substances	2b Not At Risk
RDO	Diffuse Overall -Worst Case (2008)	1b Probably At Risk

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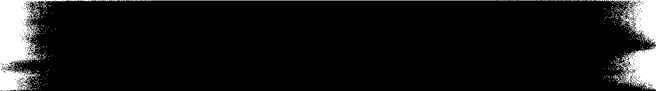
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<b>Morphological Risk Sources</b>		
RM1	Channelisation (2008)	2b Not At Risk
RM2	Embankments (2008)	2b Not At Risk
RM3	Impoundments	2b Not At Risk
RM4	Water Regulation	2b Not At Risk
RMO	Morphology Overall - Worst Case (2008)	2b Not At Risk
<b>Q/RDI or Point/Diffuse</b>		
QPD	Q class/EPA Diffuse Model or worst case of Point and Diffuse (2008)	1a At Risk
<b>Hydrology</b>		
RHY1	Water balance - Abstraction	2b Not At Risk
<b>Overall Risk</b>		
RA	Rivers Overall - Worst Case (2008)	1a At Risk

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**Objectives Report**

**WaterBody Category:** Subbasin Waterbody

**WaterBody Name:** Owenboy

**WaterBody Code:** IE\_SW\_19\_1584

**Overall Objective:** [REDACTED]



<b>Objectives Description</b>		<b>Result</b>
<b>Objectives</b>		
OB1	Objective 1 - Protected Areas	Not Applicable
OB2	Objective 2 - Protect High and Good Status	Not Applicable
OB3	Objective 3 - Restore Less Than Good Status	[REDACTED]
OB4	Objective 4 - Reduce Chemical Pollution	Not Applicable
OBO	Overall Objective	[REDACTED]
<b>Deadline</b>		
YR	Default Year by which the objective must be met	2015
EX	Revised Objective Deadline	2021
OBO	Overall Objective and Deadline	[REDACTED]

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**Basic Measures Report**

**WaterBody Category:** Subbasin Waterbody

**WaterBody Name:** Owenboy

**WaterBody Code:** IE\_SW\_19\_1584



	<b>Basic Measures Description</b>	<b>Applicable</b>
<b>Key Directives</b>		
BA	Bathing Waters Directive	No
BI	Birds Directive	No
HA	Habitats Directive	No
DW	Drinking Waters Directive	Yes
SEV	Major Accidents and Emergencies (Seveso) Directive	Yes
EIA	Environmental Impact Assessment Directive	Yes
SE	Sewage Sludge Directive	Yes
UW	Urban Waste Water Treatment Directive	Yes
PL	Plant Protection Products Directive	Yes
NI	Nitrates Directive	Yes
IP	Integrated Pollution Prevention Control Directive	Yes
<b>Other Stipulated Measures</b>		
CR	Cost recovery for water use	Yes
SU	Promotion of efficient and sustainable water use	Yes
DWS	Protection of drinking water sources	Yes
AB	Control of abstraction and impoundments	Yes
PT	Control of point source discharges	Yes
DI	Control of diffuse source discharges	Yes
GWD	Authorisation of discharges to groundwater	No
PS	Control of priority substances	Yes
MOR	Control of physical modifications to surface waters	Yes
OA	Controls on other activities impacting on water status	Yes
AP	Prevention or reduction of the impact of accidental pollution incidents	Yes

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**Urban and Industrial Discharges Supplementary Measures Report**

**WaterBody Category:** Subbasin Waterbody

**WaterBody Name:** Owenboy

**WaterBody Code:** IE\_SW\_19\_1584



	<b>Point discharges to waters from municipal and industrial sources</b>	<b>Result</b>
PINDDIS	Is there one or more industrial discharge (Section 4 licence issued by the local authority or IPPC licence issued by the EPA) contained within the water body?	Yes
PINDDISR	Are there industrial discharges (Section 4 licence issued by the local authority or IPPC licence issued by the EPA) that cause the receiving water to be 'At Risk' within the water body?	Yes
PB1	Basic Measure 1 - Measures for improved management.	Yes
PB2	Basic Measure 2 - Optimise the performance of the waste water treatment plant by the implementation of a performance management system.	Yes
PB3	Basic Measure 3 - Revise existing Section 4 license conditions and reduce allowable pollution load.	Yes
PB4	Basic Measure 4 - Review existing IPPC license conditions and reduce allowable pollution load.	Yes
PB5	Basic Measure 5 - Investigate contribution to the collection system from unlicensed discharges.	Yes
PB6	Basic Measure 6 - Investigate contributions to the collection system of specific substances known to impact ecological status.	Yes
PB7	Basic Measure 7 - Upgrade WWTP to increase capacity.	No
PB8	Basic Measure 8 - Upgrade WWTP to provide nutrient removal treatment.	No
PS1	Supplementary Measure 1 - Measures intended to reduce loading to the treatment plant.	No
PS2	Supplementary Measure 2 - Impose development controls where there is, or is likely to be in the future, insufficient capacity at treatment plants.	No
PS3	Supplementary Measure 3 - Initiate investigations into characteristics of treated wastewater for parameters not presently required to be monitored under the urban wastewater treatment directive.	Yes
PS4	Supplementary Measure 4 - Initiate research to verify risk assessment results and determine the impact of the discharge.	Yes
PS5	Supplementary Measure 5 - Use decision making tools in point source discharge management.	No
PS6	Supplementary Measure 6 - Install secondary treatment at plants where this level of treatment is not required under the urban wastewater treatment directive.	No
PS7	Supplementary Measure 7 - Apply a higher standard of treatment (stricter emission controls) where necessary.	No

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PS8	Supplementary Measure 8 - Upgrade the plant to remove specific substances known to impact on water quality status.	Yes
PS9	Supplementary Measure 9 - Install ultra-violet or similar type treatment.	No
PS10	Supplementary Measure 10 - Relocate the point of discharge.	No

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**Physical Modifications Supplementary Measures Report**

**WaterBody Category:** Subbasin Waterbody

**WaterBody Name:** Owenboy

**WaterBody Code:** IE\_SW\_19\_1584



<b>Physical Modifications Supplementary Measures</b>		<b>Applicable</b>
<b>Reduce</b>		
SM1	Codes of Practice	Yes
SM2	Support for voluntary initiatives	Yes
<b>Remediate</b>		
SM3	Channelisation impact remediation schemes	No
SM4	Channelisation investigation	No
SM5	Overgrazing remediation	No
SM6	Impassable barriers, impact confirmed, investigation into feasibility of remediation required	No
SM7	Impassable barriers investigation	Yes

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**Unsewered Properties Supplementary Measures Report**

**WaterBody Category:** Subbasin Waterbody

**WaterBody Name:** Owenboy

**WaterBody Code:** IE\_SW\_19\_1584



	<b>Supplementary Measures for Unsewered Properties</b>	<b>Applicable</b>
SP1	Amend building regulations	Yes
SP2	Establish certified expert panels for site investigation and certification of installed systems	Yes
SP3	Assess applications for new unsewered systems by applying risk mapping/decision support systems and codes of practice	Yes
SP4	Carry out an inspection programme in prioritised locations for existing systems and record results in an action tracking system	No
SP5	Enforce requirements for percolation	No
SP6	Enforce requirements for de-sludging	Yes
SP7	Consider connection to municipal systems	No

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**Forestry Measures Report**

**WaterBody Category:** Subbasin Waterbody

**WaterBody Name:** Owenboy

**WaterBody Code:** IE\_SW\_19\_1584



	<b>Forestry Measures for</b>	<b>Applicable</b>
	Forestry	
SF1	Management Instruments - Ensure regulations and guidance are cross referenced and revised to incorporate proposed measures	No
SF2	Acidification - Avoid or limit afforestation on 1st and 2nd order stream catchments in acid sensitive areas	No
SF3	Acidification - Revise the Acidification Protocol to ensure actual minimum alkalinities are detected and revise boundary conditions for afforestation in acid sensitive areas	No
SF10	Pesticide Use - Pre-dip trees in nurseries prior to planting out	No
SF11	Pesticide Use - Maintain registers of pesticide use	No
SF12	Acidification - Restructure existing forests to include open space and structural diversity through age classes and species mix, including broadleaves	No
SF13	Acidification - Mitigate acid impacts symptomatically using basic material	No
SF14	Acidification - Manage catchment drainage to increase residence times and soil wetting	No
SF15	Acidification - Implement measures to increase stream production.	No
SF16	Eutrophication - Establish riparian zone management prior to clearfelling	No
SF17	Eutrophication and Sedimentation - Enhance sediment control	No
SF18	Eutrophication - Manage catchment drainage to increase residence times and soil wetting, including no drainage in some locations	No
SF19	Sedimentation - Establish riparian zone management prior to clearfelling	No
SF20	Sedimentation - Enhance sediment control	No
SF21	Sedimentation - Manage catchment drainage to increase residence times and soil wetting, including no drainage in some locations	No
SF22	Hydromorphology - Enhance drainage network management, minimise drainage in peat soils	No
SF23	Pesticide Use - Develop biological control methods	No

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SF4	Eutrophication and Sedimentation - Avoid or limit forest cover on peat sites	No
SF5	Eutrophication and Sedimentation - Change the tree species mix on replanting	No
SF6	Eutrophication and Sedimentation - Limiting felling coup size	No
SF7	Eutrophication and Sedimentation - Establish new forest structures on older plantation sites	No
SF8	Hydromorphology - Audit existing drainage networks in forest catchments	No
SF9	Pesticide Use - Reduce pesticide usage	No

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