Cooley Distillery PLC
Riverstown, Dundalk, Co. Louth

Ms. Ann Kehoe,
Administration Officer,
Office of Climate Change, Licensing and Resource Use,
EPA,
Johnstown Castle,
Co. Wexford

3rd October 2007

Re: Response to IPPC Application Queries (Reg No. P0826-01)

Dear Ms. Kehoe,
Please find enclosed our response to the queries raised by EPA dated the 9th August 2007 in respect of our application for an IPPC licence.

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_____
David Hynes,
Managing Director

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Response EPA IPPC Licence Application Queries

Q 1.

Please submit a revised Site Plan, appropriately captioned and uniquely numbered, which clearly identifies the boundary of the activity highlighted in red. It should be noted that the Site Plan will legally define the area to which the IPPC licence relates. Accordingly, you are advised to include all associated services, such as the domestic sewage treatment plant and any lands proposed for future warehouse development.

See attached revised Site Plan Drawing No.1a amending original drawing No. 1 and Site Plan Drawing No 2a amending original drawing No. 2

Q 2.

Confirm the location and extent (size, length, etc.) of the long sea outfall pipe for the discharge of treated effluent relative to the designated area of Dundalk Bay Special Area of Conservation (SAC).

The sea outfall point, page 60 of the application, Table E.2.(i) Emissions to Surface Waters-reference point SW3 is now amended to 316101E, 304881 N

The pipeline discharge to sea is by gravity flow and was designed by PJ Tobin, Consulting Engineers. The pipeline details are as follows:

Onshore section:	225mm diameter PVC for 1km 150mm diameter uPVC for 550m.
Sea section:	125mm diameter HDPE buried pipeline for 280m narrowing to 100mm diameter and terminating in a single diffuser port of 50mm diameter.

Provide an assessment of the likely impact of the proposed discharge on the designated area. The assessment shall include reference to the presence of any biological species sensitive to any substance in the emission. The assessment shall be carried out in consultation with the National Parks and Wildlife Service (NPWS), as necessary.

The discharge from Cooley Distillery is an existing discharge rather than a proposed discharge and has been taking place for many years without any recorded adverse effects. A biological assessment of the marine environment was carried out by Aqua-Fact as part of the Cooley Distillery commissioned assimilative capacity study of Dundalk Bay. This biological assessment examined the biological diversity in the surface sea-bed sediments

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at, and in the immediate vicinity of, the outfall. As this bentic fauna is essentially non-mobile it represents an ideal indicator of long-term exposure to the Cooley Distillery effluent which has been discharged at this location for many years. The findings of the Aqua-Fact study clearly show that a healthy fauna is established in the area and is shown to have a comparatively high biodiversity with some 122 taxa represented. In the expert opinion of Aqua-Fact they conclude that it can be stated "quite categorically that the effluent from Cooley Distillery is not having any noticeable negative impacts on the benthic assemblages of Dundalk Bay".

The outfall and the associated mixing zone are outside any designated areas for conservation. The nearest designated area, a Special Protected Area (SPA), is located to the west of the outfall. (The eastern boundary of this SPA approximates to a line drawn in a south-south westerly direction from Giles Quay. See map provided). SPAs are designated areas for the protection of birds (primarily wading birds and wildfowl in this instance) as required under the EU Birds Directive (79/409/EEC). The nearest Special Area of Conservation (SAC), as designated under the EU Habitats Directive, is represented by the extensive mudflat/shallows that lie some 5km to the west of the outfall and includes a narrow band shoreline area of the Cooley Peninsula.

It is self evident that the discharge from Cooley Distillery, which has been shown in the Aqua-Fact study to quickly disperse to non detectable levels, could have no potential to adversely impact on bird populations of the SPA either directly or on their food (as supported by the presence of a healthy marine fauna within the immediate vicinity of the outfall) or on the SAC habitats.

The nearest point where both SPA and SAC overlap is at Giles Quay and as such could be regarded as the nearest sensitive location. The Aqua-Fact modeling clearly shows the effluent to have dispersed under all tidal conditions to well below the level of detection at this point.

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Q 3.

In relation to the effluent treatment plant, please provide the following details:

(i) capacity, design details including operational controls of the pH adjustment tank and balance tank;

pH Correction

The pH correction tank is located downstream of the balance tank and upstream of the biotowers. Effluent enters this 900mm diameter x 1,100mm (liquid level) pH correction tank tangentially. pH correction is achieved using a lime dosing pump under the automated control of a pH probe to achieve a target value of between pH 6 and 8.

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Balance tank
The balance tank has a capacity of 250m^3. The tank is fitted with a high level alarm which also shuts off the forward feed valve.

(ii) technical design specifications and operational controls of the four stage biotower, deep cane clarification and sludge removal process

Four stage biotower and clarifier details:

Stage 1 biotower	8.4Lx6Wx6D (metres) "Flocor" medium
Intermediate clarifier	3.35m diam. 2m straight shell, 60° cone bottom
Stage 2 biotower	9.6Lx6Wx6D (metres) "Flocor" medium
Intermediate clarifier	3.35m diam. 2m straight shell, 60° cone bottom.
Stage 3 biotower	7.2Lx6Wx6D (metres) Munter's "Biodeck" medium
Stage 4 biotower	7.8Lx6Wx6D (metres) Munter's "Biodeck" medium
Final clarifier	3.35m diam. 2m straight shell, 60° cone bottom.

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The rate of forward feed from the balance tank to the biotower sequence is controlled by manual adjustment of the forward feed valve.

Sludge removal:
Sludge removal is based on an established timed cycle or manually where required.

Q 4.

In relation to the reed bed system ("constructed wetland'[1]}, submit design details, including sizing calculations, specifications of the liner installed, site suitability assessment, groundwater classification and vulnerability, management and monitoring.

The constructed wetland consists of two parallel beds of reeds (Phragmites sp.). The details of each bed are as follows:

Volume: 230m^3
Depth : 0.6m
Cross sectional area: 12.8m^2
Length: 18 m

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Liner: “Monaflex” 0.75mm low density polyethylene laid on 50mm sand. Four layers of graded gravel are laid on the liner (i.e. within the beds)

The design flow velocity is 0.5m/hr. and the system has a combined retention time of 2 days.

The groundwater classification was determined using the Geological Survey of Ireland maps. On the basis of their data the underlying groundwater at the site is classed as Lm (Locally important aquifer that is Moderately productive). Vulnerability is given as HL (High to Low) based on an “interim study”. The nearest “High vulnerability” area is located about 1km to the north of the site and is on higher ground.

Management of the reed bed system is based on cropping of reeds and similar scheduled maintenance. Monitoring is based on visual inspection particularly for any undue drop in water level during extended periods when no effluent is discharge to the bed. (e.g. during production plant shutdown)

Q 5.

Clarify, and update Table E.2 (i) as necessary, in relation to the proposed rate of discharge of treated process effluent from the reed bed system, prior to mixing with cooling water, having regard to the limit in the current discharge licence from Louth County Council, (Ref. in Register: 34) and the maximum effluent discharge rate of 5 l/sec used in modeling scenarios presented in *'A report on the assimilative capacity of Dundalk Bay',* (Aqua-Fact 2004).

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In order to prevent undue seawater ingress to the pipeline system the designers, PJ Tobins, determined that a minimum flow be maintained. Based on this requirement the minimum flow is maintained by mixing treated effluent with non-contact cooling water and consequently the ratios of treated effluent to cooling water can vary.

The current licensed position is as follows;

<u>Maximum permitted discharge of treated effluent:</u>

3.3 l/sec, 12m^3/hr.

<u>Maximum permitted discharge inclusive of cooling water:</u>

5 l/sec, 18m^3/hr.

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Q 6.

Provide details of the range of dilution factors, used in the modeling of marine discharges, that would be expected at the various stages of the tides as reported in the *'Report on the. Assimilative Capacity of Dundalk Bay, Co. Louth,'* prepared by Aqua-Fact, 2004.

The following BOD and flow rates were used in the modeling excercise

BOD 15 mg/l at 5l/sec.	*Figures 9a & 9.1 to 9.8*
BOD 25mg/l at 2.5l/sec	*Figures 9b & 9.9 to 9.16*
BOD 25mg/l at 5l/sec	*Figures 9c & 9.19 to 9.24*
BOD 50mg/l at 5l/sec	*Figures 9d & 9.28 to 9.32*
BOD100mg/l at 5l/sec	*Figures 9e & 9.33 to 9.40*

These flows were introduced into the receiving waters of Dundalk Bay in which the stream is diluted through tidal action and atmospheric forcing and the output is presented for four periods of the tidal cycle i.e. High water, High water + 3 hours, Low water and Low water + 3 hours in Figures 9.1 to 9.40 of the report.

Diagrams 9a to 9d show the BOD concentrations over a 29 day period covering spring and neap tides at Giles Quay which is the nearest SAC/SPA location. (The Aqua-Fact modeling clearly shows the effluent to have dispersed to well below the level of detection at this point.)

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Q7.

Calculate the predicted maximum and 95%ile concentrations of BOD and copper at the various stages of the tide, taking background concentration into account and provide details of background concentrations used.

The maximum BOD levels will occur at the end of the pipe and the predicted concentrations are shown in Figures 9a to 9e and 9.1 to 9.40. No background BOD concentration was used in the model. Measured values of BOD in Dundalk Bay are < 2 mg/l and in the discussion at the end of the report, this is referred to. As the model predicted low levels of BOD, it was concluded that the background BOD levels would not be significantly changed.

Copper levels in the effluent stream range from 36 to 54.6 µg/l. Taking a conservative position, the maximum end of pipe concentration is assumed to be 54.6 µg/l.

Fig 9e shows maximum BOD concentrations at the nearest sensitive location, Giles Quay. The same dilution factors will apply to copper. The following maximum and 95%ile increases in BOD and copper is presented below.

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	Increase in BOD (mg/l)	Increase in Cu (µg/l)
Maximum	0.0064	0.0035
95% ile	0.0062	0.0034

Q 8.

Review the standard of treated effluent discharged from the effluent treatment plain to Dundalk Bay, with reference to the BAT-associated emission levels for Discharges to Water as specified in the Agency's *Draft BAT Guidance Note on Best Available Techniques for the Brewing, Mulling & Distilling Sector ('Final Draft Oct 2006)* and emission levels for waste water given in the *IPPC Reference Document on Best Available. Techniques in the Food, Drink and Milk Industries {August 2006).* Note that in the case of emissions outside the BAT guidance level a full evaluation of the existing abatement/treatment system must be provided and a planned programme of improvement towards meeting upgraded standards is required.

The "*Draft Guidance Note on Best Available Techniques for the Brewing, Malting and Distilling Industry*" (EPA Final Draft Oct. 2006) sets out the BAT Associated Emission Levels for Discharge to Water (Ref: Section 6.2,Table 6.2., page 17 of that document). The emissions from Cooley Distillery are, with the exception of suspended solids, in compliance with that Table as follows:

The BOD values before and after treatment as set out in Table E2. (i) of the Licence Application are 3,000 mg/l (max daily average) prior to treatment and 100mg/l after treatment. This represents a BOD removal of greater than 90%. At the lowest range of untreated BOD concentrations (1,500mg/l) the treated value of 100mg/l still represents greater than 90% removal. The emission level specified in the EPA BAT Guidance Note is for removal "greater than 90% **or** 20-40 mg/l".

The EU "*IPPC Reference Document on Best Available Techniques in the Food, Drink and Milk Industries*" (August 2006) predates the EPA BAT Guidance Notes and is a far broader document in that it attempts to deal with a very wide range or food/drink related activities including fish processing, dairy, wine making as well as brewing/distilling. That EU document concludes that BAT for the food/drinks sector, when taken collectively, could be <25mg/l BOD. However as previously noted the more industry specific (brewing/distilling) EPA document allows for the alternative of >90% BOD removal as BAT and as this document post dates that of the EU the EPA took account of the EU document (and is included in the EPA's references in their BAT document) when it established the alternative limit of >90% BOD removal.

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Suspended Solids (SS)

From the monitoring reports submitted to Louth Co.Co., (Louth County Council Reports, copies enclosed) it is apparent that the BAT value of 50mg/l for suspended solids has, on occasion, been exceeded (EPA Draft BAT Guidance Note Ref: Table 6.2.) This is due to the formation of filamentous sludge (a known feature of distillery effluents) in the final clarifier and this carries through the reed bed.

In order to remove this SS source Cooley Distillery are in the process of finalizing the design for installing a sand pressure filter complete with a backwash facility. Much of the hardware for this installation is already on site. Following installation of this equipment it can be confidently expected that the BAT SS values will be complied with.

Q 9.

Provide a summary of the results of monitoring and their compliance with existing emission limit values (HLVs) of (1) the treated effluent prior 10 mixing with cooling water and (2) combined effluent as discharged to Dundalk Bay for the last twelve months. The relevant parameters shall include pH and temperature, BOD, suspended solids, total ammonia, total coliforms, faecal coliforms, copper, zinc and lead and toxicity to two aquatic species.

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Copies of the effluent monitoring data for a range of parameters, as regularly reported to Louth County Council, are attached.

No routine toxicity test data is available. Earlier toxicity tests on untreated distillery effluent indicated that no toxicity problems should arise. This view is further supported by the following:

The concentrated, i.e. untreated, effluent is clearly not impairing the performance of the biological treatment process which, at a proven performance of >90% BOD removal, is demonstrated to operate effectively and efficiently. For biological treatment to proceed uninhibited, as in this case, an effluent must be inherently non-toxic to the very wide range of micro flora and fauna that form the basis of the treatment mechanism.

The biological survey of the receiving area, which has received inputs of the treated effluent for many years, shows no evidence of any toxic effects such as would be indicated by a reduced biodiversity either at or in the vicinity of the outfall.

Q 10.

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Provide a summary of the results of monitoring of (l) effluent discharge (non-contact cooling water) and (2) the river water upstream of cooling water abstraction point on the River Big for the last twelve months. The relevant parameters shall include pH, BOD, suspended solids, total ammonia, COD and metals.

These monitoring results are presented in the attached effluent monitoring reports as submitted to Louth County Council.

Q 11.

Provide- a summary of the results of daily continuous temperature monitoring of (i) river water upstream of abstraction point, (ii) effluent discharge (non-contact cooling water), and (iii) downstream monitoring point, for the last, twelve mouths. Please provide a map/drawing lo show the location of each of monitoring points (i), (ii) and (iii).

These monitoring results are included in the attached effluent monitoring reports as submitted to Louth County Council.

Give details of the extent of the mixing zone and the method used to determine the "edge of the mixing zone".

A field survey was conducted to establish the nearest point to the discharge where water temperatures reach a uniform value across the width of the river. This represents the downstream limit of the mixing zone. The location is shown in Drawing 7a.

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Q 12.

Provide a copy of the most recent chemical/bacteriological survey of the water, and biological survey of the sea bed, together with an analysis of sediments for copper, lead and zinc, in the vicinity of the discharge point.

The chemical analyses are provided in the Attachment “Dundalk Bay Samples”

Note: *During the course of seawater sampling copper analysis was overlooked. New water samples have been collected and are currently being retested.*

Q13.

Provide a uniquely numbered drawing which clearly shows the following using the labelling convention prescribed:

(i) sampling, and monitoring point SWl for surface water discharge to River Big;

(ii) sampling and monitoring point SE 1 for effluent discharge (non-contact cooling water) to River Big;

{iii} sampling and monitoring point SE 2 for treated effluent discharge to sea. prior to any dilution with cooling water (i.e., discharge from reed

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bed system); (iv) sampling and monitoring point SE 3 for combined effluent as discharged to Dundalk Bay.

See Drawing 8a, attached

Identify on the drawing the location at which the mixing referred to in (iii) occurs and describe what controls are in place for such mixing.

Mixing occurs in the mixing chamber after SE2. The flow inlets and mixing chamber are designed to maximize water turbulence thereby promoting mixing. Further mixing occurs in the flow measurement flume and in the 145 metre pipe that leads to the effluent sampling point SE3. (Drawing 8a attached)

Also, please show the location of any oil and grit interceptors within the surface water drainage system and give details of the type of interceptor installed (i.e. Class I/Class II, full retention/by-pass).

There are no oil or grit interceptors installed on the surface water drains.

Q 14.

In relation to the- proposed landspreading of sludge from the effluent, treatment plant provide details of the nature and quality of sludge generated and the total sludge storage capacity on-site.

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Calculation of the quantities of sludge generated is based on the following:

Max effluent flow rate;	12m^3/hr
Raw effluent BOD (range 2,000-3,000)	2,500mg/l
Treated effluent BOD	100mg/l
Sludge Solids/BOD: (range 30-40%)	40%
Sludge Solids Content: (range 4-6%)	5%
Resultant Sludge Generated:	5.53m^3/day

Five storage tanks (See Attachment No. D of original IPPC application) with a combined capacity of 245m^3 are currently used for holding sludge for the duration of the land spreading restriction period (15th Oct. to 15th January). This storage capacity is adequate as the distillery is working at 50%capacity which results in a corresponding reduction in sludge generation. An additional tank of 370m^3 capacity is available which can be brought into service as increases in production take place.

A copy of the Sludge Analysis is attached.

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Demonstrate that there is adequate capacity for sludge recovery by completion of a nutrient management plan, as per guidelines attached *(Preparation of an NMP).* Give details of the proposed application rates, periods of application and mode of application. Complete Table IIB (ii) for each farm and submit completed sign-off form.

Teagasc has been commissioned to prepare NMPs for each of the local farms used for the application of the treatment plant sludges generated. Once completed these plans will be submitted to EPA.

Q 15.

Provide details of the operation of the MVR evaporator fan and air compressors, (i.e., periods of operation, daytime/night-time operation).

The plant and associated equipment such as the MVR evaporator and compressors operate over 24 hours, 5 days per week.

Clarify the current level of night-time noise emissions.

Night-time generated noise levels are similar to daytime levels. (Attachment No. E.5 of original Application)

Provide details of completed and proposed upgrading of the acoustic panel enclosure on the evaporator fan. including a time scale for completion of works.

The performance of the current acoustic housing is compromised due to being open in parts and being fitted with a grade of fiberglass insulation that is less than ideal. It is proposed to undertake work to ensure that the unit is more fully enclosed and to replace the present insulation with a grade of Rockwool (RW 5) which is more suited for acoustic dampening purposes. To allow access and room for fitting this increased acoustic insulation the unit has to be moved slightly. This work is currently in hand.

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Q 16.

Please confirm the thermal input (MW) for the Process Steam Boiler Al-1 , the domestic boilers A3-I, A3 -2 and any back-up boilers used oil-site. Assess the impact of emissions to air from main emission points, (i.e., Al-1 and any back-up boiler), with particular reference to ambient air quality standards, by means of an appropriate model. Full details should be provided of any dispersion modeling undertaken.

Process Steam Boiler Al-1:	9.982 MW
Domestic (office) boiler A3-1:	0.139 MW

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Domestic (canteen) boiler A3 –2: 0.040 MW

No dispersion modeling has been undertaken. In the context of the setting and the scale of the emission it was considered that a simple screening exercise would be adequate. However following an initial investigation for the use of such a simple model these proved to be unsuitable for a number of reasons. A more suitable dispersion model is now in being undertaken.

Q 17.

Provide details of abatement equipment, if any, at dust emission points A3-6, A3-7, A3-8 and A3-9 and A3-1 1 (Malt Grist Bin**),** including details of control and monitoring systems, Submit a summary of the results of any ambient dust monitoring undertaken on-site, including a drawing showing the location of monitoring points used.

No equipment is used, or is necessary, specifically to reduce dust. Bag filters are used within the process building (A3-6) and may be more properly described as part of the process equipment. The bag filter system consists of the following:

Airmaster RJX Filter
Filter type RJX22
30 bags each 5" diameter, 6' long

No visible dust plumes occur and regular visual inspection in the immediate vicinity of the emission points shows no dust deposition that would indicate a necessity for further dust control measures.

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Q 18.

Provide information to show that, the applicant is likely to be in a position to meet any financial commitments or liabilities that may have been *or* will be entered into or incurred in carrying on the activity to which the application relates or in consequence of ceasing to carry out that activity.

See Attachment "Balance Sheet" which shows the good financial standing of the company necessary in meeting any such commitments.

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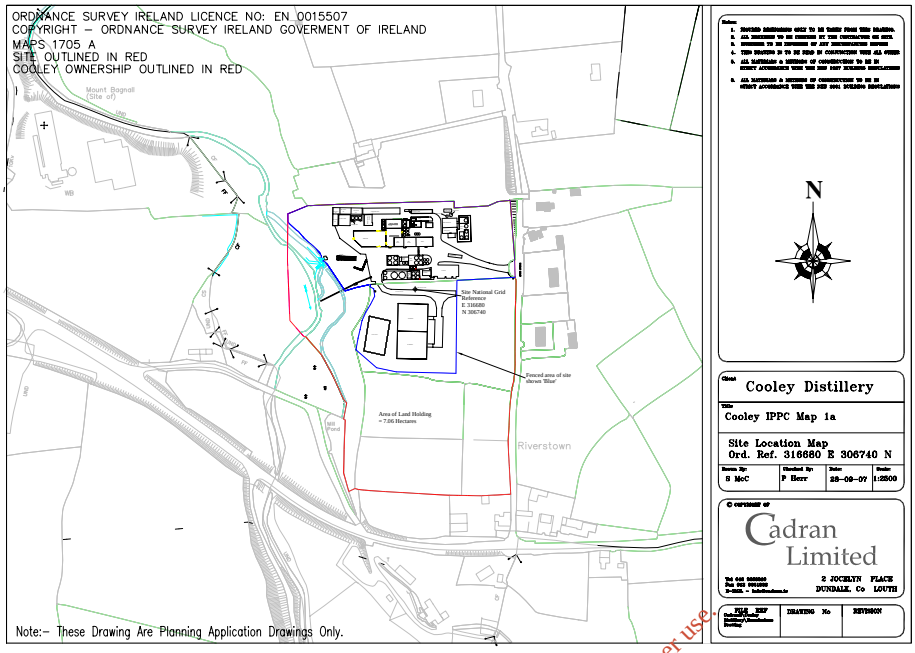

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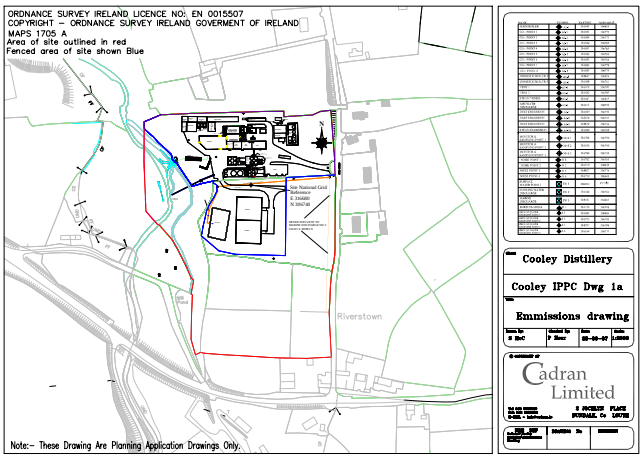

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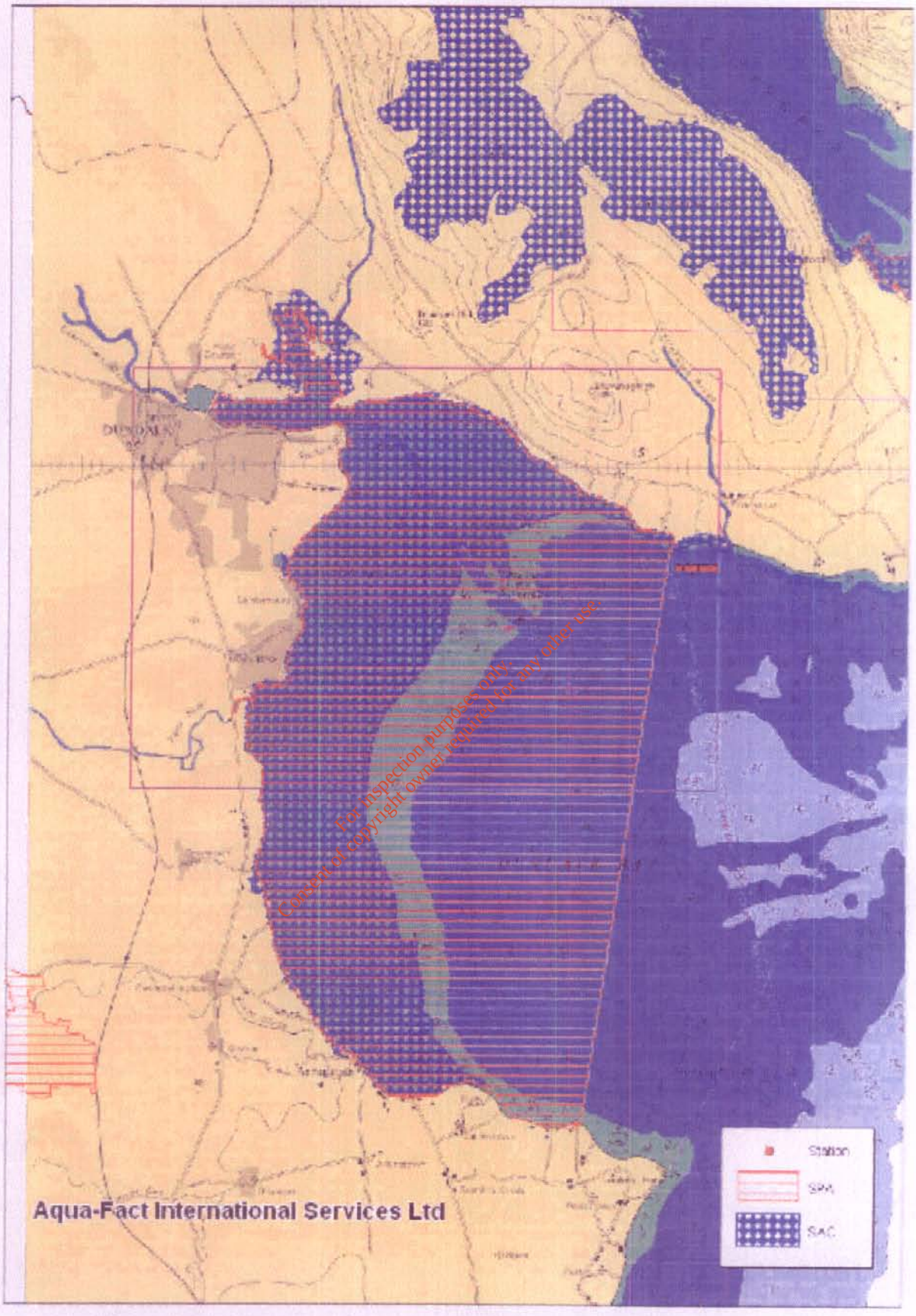

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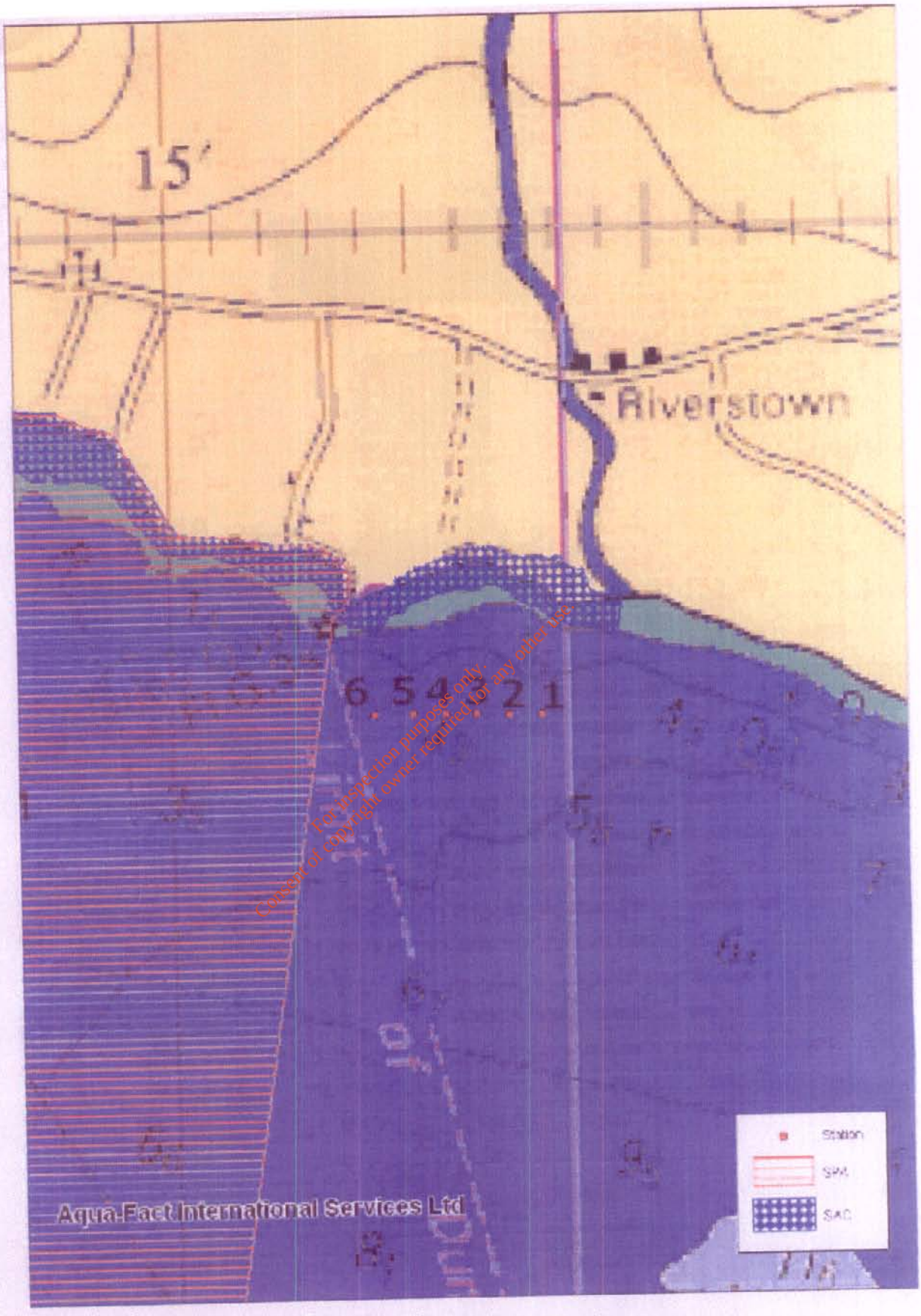

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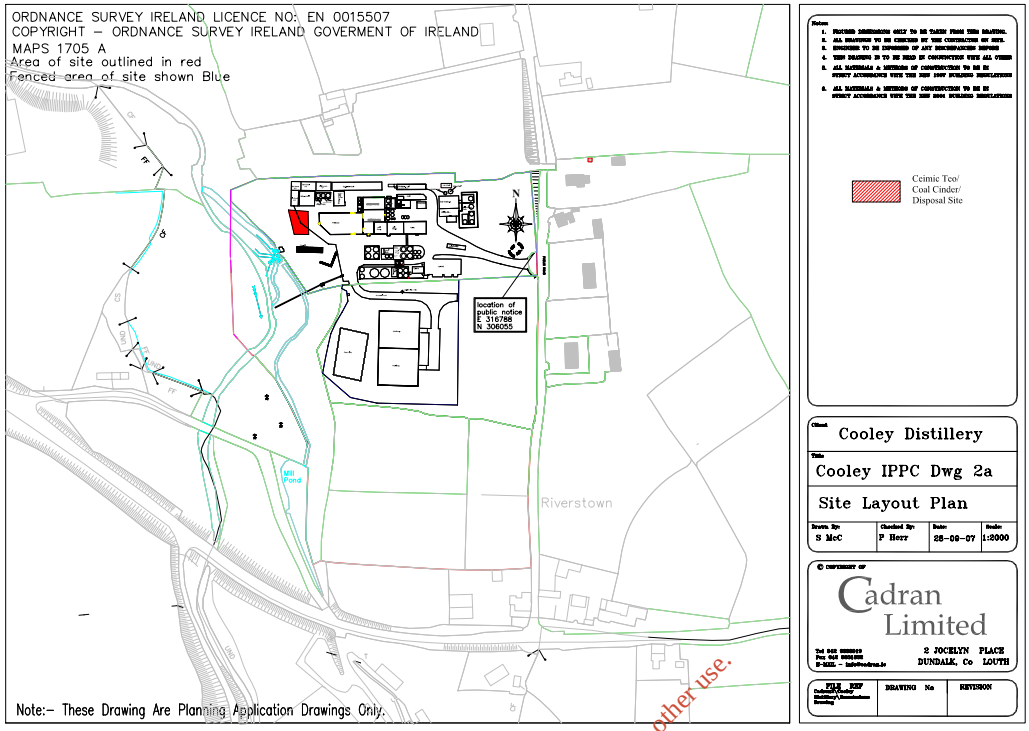

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LOUTH COUNTY COUNCIL REPORT

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Mr Damien O'Neill
Senior Engineer,
Environment,
Louth County Council,
County Hall, Millennium Centre
St Alphonsus Road,
Dundalk, Co. Louth.

27th August 2007

re: **Trade Effluent Discharge Licences 34 and 37**
Cooley Distillery, Riverstown, Dundalk, Co. Louth.
For July 2007

Dear Mr. O'Neill,

I enclose herewith reports on discharges under the above licences for the month of July 2007.

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Total and Faecal Coliforms

Total and Faecal Coliforms (laboratory reports attached) were as follows:

Date			Reed Bed Effluent	Final Effluent
3rd July	Presumptive coliforms	cfu/100ml	60	50
	Presumptive E.coli	cfu/100ml	60	50

Copper, Lead and Zinc

Copper Lead and Zinc (laboratory reports attached) were as follows:

		Final Effluent	Reed Bed	Cooling Water	River Water
3rd July	Copper mg/l	0.300	0.078	0.014	0.007
	Lead mg/l	0.005	0.009	<0.005	<0.005
	Zinc mg/l	0.096	0.020	0.007	0.007

Yours faithfully,

David F. Hynes,
Managing Director

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TRADE EFFLUENT DISCHARGE LICENCE 34 COOLEY DISTILLERY PLC,

REPORT FOR JULY 2007

		TREATED EFFLUENT PRIOR TO MIXING						MIXED EFFLUENT AS DISCHARGED TO IRISH SEA					
Day	Date	Temp C	pH	BOD mg/l	S.S. mg/l	pH	NH3 mg/l	Temp C	pH	BOD mg/l	S.S. mg/l	pH	NH3 mg/l
Sun	1	8.1	7.6						7.3				
Mon	2	8.1	7.7						7.4				
Tue	3	7.7	7.6	6	80	6.6	11.33		7.5	47	56	7.4	3.88
Wed	4	7.7	7.6						7.5				
Thu	5	7.5	7.6						7.7				
Fri	6	7.5	7.6	16	74	6.6	18.12		7.7	12	54	7.7	10.55
Sat	7	7.4	7.6						0.8				
Sun	8	7.3	7.6						7.7				
Mon	9	7.2	7.6						7.6				
Tue	10	7.2	7.6						7.5	<2	32	7.9	7.85
Wed	11	7.1	7.7						7.6				
Thu	12	7.3	7.8						7.6				
Fri	13	7.2	7.7						7.4				
Sat	14	7.2	7.7						7.0				
Sun	15	7.3	7.8						6.9				
Mon	16	7.5	8.0						7.0				
Tue	17	7.5	8.0						6.9				
Wed	18	7.6	8.0						7.0				
Thu	19	7.6	8.0						7.1				
Fri	20	7.6	7.9						7.1				
Sat	21	7.4	7.9						6.9				
Sun	22	7.5	8.0						6.8				
Mon	23	7.3	7.9						7.4				
Tue	24	7.2	7.8						7.3				
Wed	25	7.2	7.9						6.8				
Thu	26	7.2	7.8						6.5				
Fri	27	7.1	7.8						6.4				
Sat	28	7.1	7.8						6.3				
Sun	29	7.1	7.8						6.6				
Mon	30	7.1	7.8						6.5				
Tue	31	6.8	7.8						6.5				

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TRADE EFFLUENT DISCHARGE LICENCE 37 COOLEY DISTILLERY PLC,

REPORT FOR JULY 2007

Day	Date	COOLING WATER PRIOR TO DISCHARGE Temp C	BOD mg/l	S.S. mg/l	NH3 mg/l	COD mg/l	UPSTREAM RIVER WATER BOD mg/l	S.S. mg/l	NH3 mg/l	COD mg/l	RIVER TEMPERATURE Upstream C	Downstream C
Sun	1	15.8									14.5	15.0
Mon	2	14.9									14.8	15.3
Tue	3	13.5	<2	10	<0.09	9	<2	6	<0.09	10	14.4	15.0
Wed	4	13.4									14.1	14.8
Thu	5	13.5									14.0	14.6
Fri	6	13.6	<2	16	<0.09	16	<2	18	0.09	15	14.1	14.7
Sat	7	14.3									14.2	14.9
Sun	8	12.2									13.5	14.4
Mon	9	11.2									13.2	14.2
Tue	10	12.9									13.4	14.4
Wed	11	13.2									13.4	14.2
Thu	12	16.1									15.1	15.9
Fri	13	14.3									14.5	15.3
Sat	14	15.2									14.8	15.8
Sun	15	15.4									14.7	15.6
Mon	16	15.8									15.2	16.0
Tue	17	15.1									14.8	15.6
Wed	18	14.9									14.7	7.0
Thu	19	16.6									15.6	16.4
Fri	20	13.9									14.5	15.3
Sat	21	13.4									14.0	14.8
Sun	22	13.6									14.3	15.1
Mon	23	14.3									14.7	15.4
Tue	24	14.0									14.3	15.1
Wed	25	15.4									15.4	16.3
Thu	26	13.8									15.1	15.9
Fri	27	14.0									14.7	15.5
Sat	28	13.2									14.2	14.9
Sun	29	12.1									13.6	14.3
Mon	30	12.6									13.5	14.1
Tue	31	14.3									14.4	15.1

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Cooley Distillery Plc
Riverstown
Dundalk
Co. Louth

For the attention of: NOEL SWEENEY

Certificate of Analysis

Samples of: Effluent

Certificate No: C200707M0038-F1
Date Received: 03/07/2007
Date Tested: See Below

Sample No:	Client Ref	Test Date
707M20056	Effluent from Reed Bed	03/07/2007

Method	Location	Description	Result	Unit
EUMM4.01	EUIRDU	Presumptive coliforms	60	cfu/100ml
EUMM4.01	EUIRDU	Presumptive E coli	60	cfu/100ml

Authorised Signatures:

K Brady

Kellie Brady
Senior Microbiologist

Padraig Larkin
Microbiologist

On behalf of Eurofins Scientific (Ireland) Ltd

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Cooley Distillery Plc
Riverstown
Dundalk
Co. Louth

For the attention of: NOEL SWEENEY

Certificate of Analysis

Samples of: Effluent

Certificate No: C200707M0037-F1
Date Received: 03/07/2007
Date Tested: See Below

Sample No:	Client Ref	Test Date
707M20055	Final effluent	03/07/2007

Method	Location	Description	Result	Unit
EUMM4.01	EUIRDU	Presumptive coliforms	50	cfu/100ml
EUMM4.01	EUIRDU	Presumptive E coli	50	cfu/100ml

Authorised Signatures:

K Brady

Kellie Brady
Senior Microbiologist

Padraig Larkin
Microbiologist

On behalf of Eurofins Scientific (Ireland) Ltd

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20/07/2007

Cooley Distillery Plc
Riverstown
Dundalk
Co. Louth
Ireland

For the attention of: NOEL SWEENEY

Certificate of Analysis

Sample of: **Effluent/Riverwater**

Certificate No: **C200707E0005-F1**
Date Received: **03/07/2007**

Sample No:	Client Ref	Date Tested
707E20009	Final Effluent	03/07/2007

Location	Method	Analyte	Result	Unit
EUIRDU	SC2	Copper*	0.300	mg/l
EUIRDU	SC14	Lead*	0.005	mg/l
EUIRDU	SC1	Zinc*	0.096	mg/l

Sample No:	Client Ref	Date Tested
707E20010	Reed Bed Effluent	03/07/2007

Location	Method	Analyte	Result	Unit
EUIRDU	SC2	Copper*	0.078	mg/l
EUIRDU	SC14	Lead*	0.009	mg/l
EUIRDU	SC1	Zinc*	0.020	mg/l

Sample No:	Client Ref	Date Tested
707E20011	Riverwater	03/07/2007

Location	Method	Analyte	Result	Unit
EUIRDU	SC2	Copper*	0.007	mg/l
EUIRDU	SC14	Lead*	< 0.005	mg/l
EUIRDU	SC1	Zinc*	0.007	mg/l

Sample No:	Client Ref	Date Tested
707E20012	Cooling water prior to discharge	03/07/2007

Location	Method	Analyte	Result	Unit
EUIRDU	SC2	Copper*	0.014	mg/l
EUIRDU	SC14	Lead*	< 0.005	mg/l
EUIRDU	SC1	Zinc*	0.007	mg/l

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www.cooleywhiskey.com

Mr Damien O'Neill
Senior Engineer,
Environment,
Louth County Council,
County Hall, Millennium Centre
St Alphonsus Road,
Dundalk, Co. Louth.

27th August 2007

re: **Trade Effluent Discharge Licences 34 and 37**
Cooley Distillery, Riverstown, Dundalk, Co. Louth.
For June 2007

Dear Mr. O'Neill,

I enclose herewith reports on discharges under the above licences for the month of June 2007.

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Total and Faecal Coliforms

Total and Faecal Coliforms (laboratory reports attached) were as follows:

Date			Reed Bed Effluent	Final Effluent
12th June	Presumptive coliforms	cfu/100ml	600	300
	Presumptive E coli	cfu/100ml	600	300

Yours faithfully,

David F. Hynes,
Managing Director

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TRADE EFFLUENT DISCHARGE LICENCE 34 COOLEY DISTILLERY PLC,

REPORT FOR JUNE 2007

		TREATED EFFLUENT PRIOR TO MIXING						MIXED EFFLUENT AS DISCHARGED TO IRISH SEA					
Day	Date	Temp C	pH	BOD mg/l	S.S. mg/l	pH	NH3 mg/l	Temp C	pH	BOD mg/l	S.S. mg/l	pH	NH3 mg/l
Fri	1	7.3	7.4	<2	32	7.0	2.81		7.2	<2	<5	7.5	0.01
Sat	2	7.7	7.5						7.1				
Sun	3												
Mon	4												
Tue	5			5	40	6.7	4.28			<2	16	7.1	0.59
Wed	6												
Thu	7		6.6										
Fri	8	7.1	6.6	18	42	6.9	3.20		6.3	7	16	7.4	0.19
Sat	9	7.8	7.6						7.2				
Sun	10	8.1	7.6						7.2				
Mon	11	8.3	7.6						7.3				
Tue	12	8.8	7.5	2	64	6.8	4.89		7.3	<2	24	7.3	2.02
Wed	13	9.0	7.6						7.6				
Thu	14	8.6	7.5						7.3				
Fri	15	7.7	7.4	46	44	6.8	3.50		7.2	7	24	7.3	0.16
Sat	16	7.6	7.5						7.2				
Sun	17	7.7	7.6						7.3				
Mon	18	7.5	7.5						7.2				
Tue	19	8.0	7.6	39	74	7.0	3.64		7.4	41	44	7.2	0.06
Wed	20	8.0	7.5						7.3				
Thu	21	8.0	7.5						7.2				
Fri	22	8.2	7.5	21	106	6.7	6.99		7.2	6	18	7.3	0.60
Sat	23	8.2	7.6						7.2				
Sun	24	7.7	7.6						7.2				
Mon	25	7.3	7.5						7.1				
Tue	26	6.9	7.4	33	110	6.9	6.12		7.3	<2	28	7.1	2.32
Wed	27	7.2	7.5						7.4				
Thu	28	7.5	7.4						7.2				
Fri	29	7.4	7.5	47	182	6.8	2.49		7.4	6	34	7.2	<0.09
Sat	30	7.6	7.6						7.3				

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TRADE EFFLUENT DISCHARGE LICENCE 37 COOLEY DISTILLERY PLC,

REPORT FOR JUNE 2007

		COOLING WATER PRIOR TO DISCHARGE					UPSTREAM RIVER WATER				RIVER TEMPERATURE	
Day	Date	Temp C	BOD mg/l	S.S. mg/l	NH3 mg/l	COD mg/l	BOD mg/l	S.S. mg/l	NH3 mg/l	COD mg/l	Upstream C	Downstream C
Fri	1	20.5	<2	<5	<0.015	<15	<2	<5	<0.015	<15	14.0	16.7
Sat	2	15.3									13.4	14.1
Sun	3	0.0									0.0	0.0
Mon	4	0.0									0.0	0.0
Tue	5	0.0	<2	<5	0.03	<15	<2	<5	0.02	<15	0.0	0.0
Wed	6	0.0									0.0	0.0
Thu	7	0.0									0.0	0.0
Fri	8	19.2	<2	<5	0.03	<15	<2	6	0.03	<15	13.8	14.8
Sat	9	19.3									16.2	16.4
Sun	10	18.0									17.0	17.0
Mon	11	18.7									17.5	18.2
Tue	12	23.3	<2	<5	0.02	<15	<2	8	0.03	<15	17.2	19.3
Wed	13	20.2									16.0	17.4
Thu	14	19.3									13.9	14.8
Fri	15	18.5	<2	6	0.22	<15	<2	24	0.06	36	12.3	13.1
Sat	16	17.7									11.8	12.4
Sun	17	16.9									12.9	13.3
Mon	18	17.1									13.4	14.0
Tue	19	19.0	<2	14	0.03	162	<2	<5	0.03	<15	14.3	15.1
Wed	20	18.0									14.8	15.5
Thu	21	19.8									14.3	15.1
Fri	22	20.3	4	<5	0.23	<15	<2	<5	0.03	<15	15.0	15.6
Sat	23	19.5									14.3	14.7
Sun	24	11.6									13.2	13.7
Mon	25	15.9									13.4	14.0
Tue	26	16.6	<2	<5	<0.09	7	<2	<5	<0.09	7	12.3	12.9
Wed	27	14.7									13.0	13.6
Thu	28	15.4									11.8	12.6
Fri	29	15.1	<2	<5	<0.09	8	<2	8	<0.09	13	12.6	13.2
Sat	30	14.9									13.3	13.9

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Cooley Distillery Plc
Riverstown
Dundalk
Co. Louth

For the attention of: NOEL SWEENEY

Certificate of Analysis

Samples of: Water - Final Effluent & Effluent from Reed Bed

22 JUN 2007

Certificate No: C200706M0465-F1
Date Received: 12/06/2007
Date Tested: See Below

Sample No:	Client Ref				Test Date
706M20987	Final Effluent				12/06/2007
Method	**Location**	**Description**	**Result**	**Unit**	
EUMM4.01	EUIRDU	Presumptive coliforms	300	cfu/100ml	
EUMM4.01	EUIRDU	Presumptive E coli	300	cfu/100ml	

Sample No:	Client Ref				Test Date
706M20988	Effluent from Reed Bed				12/06/2007
Method	**Location**	**Description**	**Result**	**Unit**	
EUMM4.01	EUIRDU	Presumptive coliforms	600	cfu/100ml	
EUMM4.01	EUIRDU	Presumptive E coli	600	cfu/100ml	

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Authorised Signatures:

K Brady

Kellie Brady
Senior Microbiologist

Padraig Larkin
Microbiologist

On behalf of Eurofins Scientific (Ireland) Ltd

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Mr Damien O'Neill
Senior Engineer,
Environment,
Louth County Council,
County Hall, Millennium Centre
St Alphonsus Road,
Dundalk, Co. Louth.

25th June 2007

re: **Trade Effluent Discharge Licences 34 and 37**
Cooley Distillery, Riverstown, Dundalk, Co. Louth.
For May 2007

Dear Mr. O'Neill,

I enclose herewith reports on discharges under the above licences for the month of May 2007.

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Total and Faecal Coliforms

Total and Faecal Coliforms (laboratory reports attached) were as follows:

Date			Reed Bed Effluent	Final Effluent
Ist May	Presumptive coliforms	cfu/100ml	690	110
	Presumptive E coli	cfu/100ml	520	90

Yours faithfully,

David F. Hynes,
Managing Director

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TRADE EFFLUENT DISCHARGE LICENCE 34 COOLEY DISTILLERY PLC,

REPORT FOR MAY 2007

		TREATED EFFLUENT PRIOR TO MIXING						MIXED EFFLUENT AS DISCHARGED TO IRISH SEA					
Day	Date	Temp C	pH	BOD mg/l	S.S. mg/l	pH	NH3 mg/l	Temp C	pH	BOD mg/l	S.S. mg/l	pH	NH3 mg/l
Tue	1	6.3	7.5	4	14	7.7	0.40	8.6	7.1	8	48	7.0	4.05
Wed	2	7.0	7.6					8.3	7.7				
Thu	3	7.7	7.7					8.4	7.5				
Fri	4	7.3	7.5	6	<5	7.9	0.11	8.6	7.4	8	30	7.2	1.89
Sat	5												
Sun	6												
Mon	7												
Tue	8			<2	22	7.6	0.36		2.3	<2	38	6.9	4.53
Wed	9	6.2	7.5						7.5				
Thu	10	7.0	7.5						7.4				
Fri	11	7.2	7.3	<2	18	7.7	0.04		7.2	53	50	7.1	1.85
Sat	12	7.2	7.7						7.2				
Sun	13	6.8	7.8						7.4				
Mon	14	6.5	7.6						7.3				
Tue	15	6.4	7.7	<2	18	7.6	0.39		7.4	11	62	7.3	3.11
Wed	16	6.8	7.7						7.5				
Thu	17	7.7	7.6					10.4	7.4				
Fri	18	7.6	7.5	11	16	7.6	0.21	11.3	7.2	24	66	7.0	4.34
Sat	19	7.0	7.6						7.4				
Sun	20	6.6	7.6						7.4				
Mon	21	6.7	7.5					9.9	7.4				
Tue	22	6.8	7.6	<2	34	7.5	0.28	11.4	7.5	3	54	7.3	4.45
Wed	23							12.1	7.0				
Thu	24	8.2	7.5					14.3	7.3				
Fri	25	7.5	7.5	6	32	7.1	0.24	13.0	7.3	11	44	7.0	4.08
Sat	26								6.0				
Sun	27	6.2	7.5						7.2				
Mon	28	6.0	7.5						7.2				
Tue	29	5.7	7.4	5	14	7.5	0.02		7.4	<2	36	7.3	2.89
Wed	30	5.9	7.4						7.4				
Thu	31	6.9	7.4					11.9	7.3				

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TRADE EFFLUENT DISCHARGE LICENCE 37 COOLEY DISTILLERY PLC,

REPORT FOR MAY 2007

		COOLING WATER PRIOR TO DISCHARGE					UPSTREAM RIVER WATER				RIVER TEMPERATURE	
Day	Date	Temp C	BOD mg/l	S.S. mg/l	NH3 mg/l	COD mg/l	BOD mg/l	S.S. mg/l	NH3 mg/l	COD mg/l	Upstream C	Downstream C
Tue	1	19.5	<2	<5	0.02	<15	<2	<5	0.02	<15	13.1	15.6
Wed	2	19.8									13.6	15.8
Thu	3	21.3									13.4	15.9
Fri	4		<2	<5	0.04	<15	<2	<5	0.04	<15	13.1	16.2
Sat	5											
Sun	6											
Mon	7											
Tue	8		<2	<5	0.03	8	<2	<5	0.02	<15		
Wed	9	16.7									11.5	13.8
Thu	10	15.5									11.5	12.3
Fri	11	19.2	<2	<5	0.02	<15	<2	<5	0.04	<15	11.4	13.3
Sat	12	15.3									11.4	11.8
Sun	13	12.7									11.9	12.1
Mon	14	15.0									11.4	12.5
Tue	15	18.8	<2	<5	<0.015	<15	<2	<5	0.03	<15	12.2	14.0
Wed	16	18.4									11.8	13.6
Thu	17	19.6									14.1	14.9
Fri	18	18.9	<2	<5	0.03	<15	<2	<5	0.06	<15	14.3	7.0
Sat	19	13.2									12.5	12.8
Sun	20	11.7									12.2	12.2
Mon	21	15.5									12.6	14.0
Tue	22	19.7	<2	<5	0.03	<15	<2	<5	0.03	22	14.0	16.2
Wed	23	20.2									13.3	15.1
Thu	24	19.3									14.4	17.0
Fri	25	19.3	<2	<5	0.05	32	<2	<5	0.05	<15	13.3	16.1
Sat	26	14.6									9.9	10.4
Sun	27	12.5									10.9	11.2
Mon	28	14.3									11.0	12.4
Tue	29	15.9	<2	<5	0.03	6	<2	<5	0.03	<15	11.0	13.2
Wed	30	15.4									11.2	13.2
Thu	31	20.0									13.5	16.5

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11/5/7

Cooley Distillery Plc
Riverstown
Dundalk
Co. Louth

For the attention of: NOEL SWEENEY

Certificate of Analysis

Samples of: Water - Final Effluent & Reed Bed

Certificate No: C200705M0020-F1
Date Received: 01/05/2007
Date Tested: See Below

Sample No:	Client Ref	Test Date
705M20063	Final Effluent	01/05/2007

Method	Location	Description	Result	Unit
EUMM4.01	EUIRDU	Presumptive coliforms	110	cfu/100ml
EUMM4.01	EUIRDU	Presumptive E coli	90	cfu/100ml

Sample No:	Client Ref	Test Date
705M20064	Effluent from Reed Bed	01/05/2007

Method	Location	Description	Result	Unit
EUMM4.01	EUIRDU	Presumptive coliforms	690	cfu/100ml
EUMM4.01	EUIRDU	Presumptive E coli	520	cfu/100ml

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Authorised Signatures:

Padraig Larkin

Kellie Brady
Senior Microbiologist

Padraig Larkin
Microbiologist

On behalf of Eurofins Scientific (Ireland) Ltd

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COOLEY DISTILLERY PLC

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Mr Damien O'Neill
Senior Engineer,
Environment,
Louth County Council,
County Hall, Millennium Centre
St Alphonsus Road,
Dundalk, Co. Louth.

1st June 2007

re: **Trade Effluent Discharge Licences 34 and 37**
Cooley Distillery, Riverstown, Dundalk, Co. Louth.
For April 2007

Dear Mr. O'Neill,

I enclose herewith reports on discharges under the above licences for the month of April 2007.

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Total and Faecal Coliforms

Total and Faecal Coliforms (laboratory reports attached) were as follows:

Date			Reed Bed Effluent	Final Effluent
4th April	Presumptive coliforms	cfu/100ml	2,900	5,700
	Presumptive E coli	cfu/100ml	2,400	3,100

Copper, Lead and Zinc

Copper Lead and Zinc (laboratory reports attached) were as follows:

			Final Effluent	Reed Bed	Cooling Water	River Water
3rd April	Copper	mg/l	0.047	0.170	<0.005	<0.005
	Lead	mg/l	<0.005	<0.005	<0.005	<0.005
	Zinc	mg/l	0.017	0.014	<0.005	0.016

Yours faithfully,

David F. Hynes,
Managing Director

EPA Export 25-07-2013:22:17:20

TRADE EFFLUENT DISCHARGE LICENCE 34 COOLEY DISTILLERY PLC,

REPORT FOR APRIL 2007

		TREATED EFFLUENT PRIOR TO MIXING						MIXED EFFLUENT AS DISCHARGED TO IRISH SEA					
Day	Date	Temp C	pH	BOD mg/l	S.S. mg/l	pH	NH3 mg/l	Temp C	pH	BOD mg/l	S.S. mg/l	pH	NH3 mg/l
Sun	1	4.0	7.9					4.1	7.2				
Mon	2	3.9	8.0					4.1	7.5				
Tue	3	3.9	7.5	6	74	7..3	4.30	4.1	7.6	4	40	8.0	2.91
Wed	4	3.9	7.1					4.1	7.4				
Thu	5	3.7	7.0					3.9	7.6				
Fri	6	3.5	7.0	9	54	7.4	3.97	3.7	7.6	4	10	7.7	0.89
Sat	7	3.6	7.1					3.9	7.6				
Sun	8	3.6	7.1					3.8	7.6				
Mon	9	3.6	7.1					3.8	7.7				
Tue	10	3.6	7.2	7	56	7.3	4.73	3.8	7.8	4	22	7.8	0.70
Wed	11	3.6	7.1					3.9	7.8				
Thu	12	3.9	7.1					4.1	7.8				
Fri	13	4.0	7.1	27	96	7.5	4.73	4.3	7.7	5	26	7.8	0.25
Sat	14	4.1	7.1					4.3	7.7				
Sun	15	4.4	7.1					4.6	7.8				
Mon	16	4.6	7.0					4.8	7.9				
Tue	17	4.6	7.0	50	966	7.5	6.34	4.7	7.8	5	22	7.9	0.19
Wed	18	4.7	7.0					4.8	7.8				
Thu	19	4.6	7.2					4.7	8.1				
Fri	20	4.5	7.5	63	126	7.5	1.29	5.0	8.5	14	28	7.8	0.28
Sat	21	4.6	7.5					8.6	8.0				
Sun	22	4.8	7.6					7.4	8.5				
Mon	23	4.8	7.7					5.6	9.2				
Tue	24	4.7	7.5	10	48	7.1	5.81	6.0	7.9	5	12	7.5	0.26
Wed	25	5.4	7.4					8.5	7.4				
Thu	26	5.8	7.5					6.5	8.0				
Fri	27	5.4	7.6	5	62	7.5	1.23	9.7	7.9	4	14	7.7	0.12
Sat	28	5.6	7.6					11.1	7.5				
Sun	29	5.4	7.5					6.0	8.3				
Mon	30	5.4	7.5					5.1	8.4				

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TRADE EFFLUENT DISCHARGE LICENCE 37 COOLEY DISTILLERY PLC,

REPORT FOR APRIL 2007

		COOLING WATER PRIOR TO DISCHARGE					UPSTREAM RIVER WATER				RIVER TEMPERATURE	
Day	Date	Temp C	BOD mg/l	S.S. mg/l	NH3 mg/l	COD mg/l	BOD mg/l	S.S. mg/l	NH3 mg/l	COD mg/l	Upstream C	Downstream C
Sun	1	7.4									7.1	8.2
Mon	2	7.8									7.3	8.6
Tue	3	4.7	<1.5	12	0.02	<15	<1.5	<5	0.03	<15	6.9	7.4
Wed	4	5.0									6.5	6.3
Thu	5	5.0									6.2	6.0
Fri	6	7.7	<1.5	<5	<0.015	<15	<1.5	<5	0.02	<15	7.7	7.7
Sat	7	5.8									7.1	7.0
Sun	8	5.0									6.5	6.3
Mon	9	4.8									6.4	6.2
Tue	10	4.9	<1.5	<5	<0.015	<15	<1.5	<5	0.03	<15	6.2	6.0
Wed	11	8.6									8.2	8.2
Thu	12	8.5									7.9	7.9
Fri	13	9.2	<1.5	<5	0.02	<15	<1.5	<5	0.06	<15	9.0	9.1
Sat	14	7.9									8.5	8.5
Sun	15	9.8									9.4	9.5
Mon	16	10.2									9.8	9.9
Tue	17	9.5	1.5	6	0.015	<15	1.5	<5	0.03	<15	9.5	9.6
Wed	18	8.8									9.4	7.0
Thu	19	8.5									6.6	9.6
Fri	20	10.2	<1.5	22	0.02	<15	<1.5	<5	0.04	<15	8.2	9.8
Sat	21	18.7									10.0	10.4
Sun	22	15.8									9.6	9.9
Mon	23	12.3									10.1	10.3
Tue	24	13.5	<1.5	<5	0.02	<15	<1.5	<5	0.02	<15	8.9	9.5
Wed	25	22.2									11.6	12.6
Thu	26	13.0									12.2	11.0
Fri	27	20.9	<1.5	<5	<0.015	<15	<1.5	<5	0.02	<15	11.9	12.1
Sat	28	22.7									13.0	13.9
Sun	29	12.1									12.0	10.7
Mon	30	9.1									11.4	9.7

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13 APR 2007

Cooley Distillery Plc
Riverstown
Dundalk
Co. Louth

For the attention of: NOEL SWEENEY

Certificate of Analysis

Samples of: Water - Reed Bed & Final Effluent

Certificate No: C200704M0151-F1
Date Received: 04/04/2007
Date Tested: See Below

Sample No:	Client Ref				Test Date
704M20233	Final Effluent				04/04/2007
Method	**Location**	**Description**	**Result**	**Unit**	
EUMM4.01	EUIRDU	Presumptive coliforms	5,700	cfu/100ml	
EUMM4.01	EUIRDU	Presumptive E coli	3,100	cfu/100ml	

Sample No:	Client Ref				Test Date
704M20234	Effluent from Reed Bed				04/04/2007
Method	**Location**	**Description**	**Result**	**Unit**	
EUMM4.01	EUIRDU	Presumptive coliforms	2,900	cfu/100ml	
EUMM4.01	EUIRDU	Presumptive E coli	2,400	cfu/100ml	

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Authorised Signatures:

Kellie Brady
Senior Microbiologist

Padraig Larkin
Microbiologist

On behalf of Eurofins Scientific (Ireland) Ltd

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Group
Directors: Wicher Wichers (Netherlands) Alice Mills Seamus McQuaid

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27 APR 2007

24/04/2007

Cooley Distillery Plc
Riverstown
Dundalk
Co. Louth
Ireland

For the attention of: NOEL SWEENEY

Certificate of Analysis

Sample of: **Effluent/Riverwater**

Certificate No: **C200704E0019-F1**
Date Received: **03/04/2007**

Sample No:	Client Ref	Date Tested
704E20043	Final Effluent	03/04/2007

Location	Method	Analyte	Result	Unit
EUIRDU	SC2	Copper*	0.047	mg/l
EUIRDU	SC14	Lead*	< 0.005	mg/l
EUIRDU	SC1	Zinc*	0.017	mg/l

Sample No:	Client Ref	Date Tested
704E20044	Reed Bed Effluent	03/04/2007

Location	Method	Analyte	Result	Unit
EUIRDU	SC2	Copper*	0.170	mg/l
EUIRDU	SC14	Lead*	< 0.005	mg/l
EUIRDU	SC1	Zinc*	0.014	mg/l

Sample No:	Client Ref	Date Tested
704E20045	Riverwater	03/04/2007

Location	Method	Analyte	Result	Unit
EUIRDU	SC2	Copper*	<0.005	mg/l
EUIRDU	SC14	Lead*	< 0.005	mg/l
EUIRDU	SC1	Zinc*	0.016	mg/l

Sample No:	Client Ref	Date Tested
704E20046	Cooling water prior to discharge	03/04/2007

Location	Method	Analyte	Result	Unit
EUIRDU	SC2	Copper*	<0.005	mg/l
EUIRDU	SC14	Lead*	< 0.005	mg/l
EUIRDU	SC1	Zinc*	<0.005	mg/l

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27 APR 2007

Certificate No: C200704E0019-F1

Authorised Signatures:

Nicola Halpenny

Nicola Halpenny	**Kellie Brady**
Laboratory Manager	**Senior Analyst**

On behalf of Eurofins Scientific (Ireland) Ltd

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Cooley, Co. Louth
Ireland.
Tel: 353 42 937 6102
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Email: email@cooleydistillery.ie
www.cooleywhiskey.com

Mr Damien O'Neill
Senior Engineer,
Environment,
Louth County Council,
County Hall, Millennium Centre
St Alphonsus Road,
Dundalk, Co. Louth.

28th April 2007

re: **Trade Effluent Discharge Licences 34 and 37**
Cooley Distillery, Riverstown, Dundalk, Co. Louth.
For March 2007

Dear Mr. O'Neill,

The report sent to you on the 24th inst included Total and Faecal Coliforms, which were stated to be those for the 6th February 2007 but were actually those of the 4th April 2007.
I attach herewith the correct results, which are for the 6th March 2007.
My apologies for the error.

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Total and Faecal Coliforms

Total and Faecal Coliforms (laboratory reports attached) were as follows:

Date			Reed Bed Effluent	Final Effluent
6th March	Presumptive coliforms	cfu/100ml	<1	<1
	Presumptive E coli	cfu/100ml	960	460

Yours faithfully,

David F. Hynes,
Managing Director

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16 MAR 2007

Cooley Distillery Plc
Riverstown
Dundalk
Co. Louth

For the attention of: NOEL SWEENEY

Certificate of Analysis

Samples of: Effluent

Certificate No: C200703M0195-F1
Date Received: 06/03/2007
Date Tested: See Below

Sample No:	Client Ref	Test Date
703M20633	Effluent from Reed Bed	06/03/2007

Method	Location	Description	Result	Unit
EUMM4.01	EUIRDU	Presumptive coliforms	<1	cfu/100ml
EUMM4.01	EUIRDU	Presumptive E coli	960	cfu/100ml

Sample No:	Client Ref	Test Date
703M20634	Effluent Final	06/03/2007

Method	Location	Description	Result	Unit
EUMM4.01	EUIRDU	Presumptive coliforms	<1	cfu/100ml
EUMM4.01	EUIRDU	Presumptive E coli	460	cfu/100ml

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Authorised Signatures:

K Brady

Kellie Brady
Senior Microbiologist

Padraig Larkin
Microbiologist

On behalf of Eurofins Scientific (Ireland) Ltd

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Mr Damien O'Neill
Senior Engineer,
Environment,
Louth County Council,
County Hall, Millennium Centre
St Alphonsus Road,
Dundalk, Co. Louth.

24th April 2007

re: **Trade Effluent Discharge Licences 34 and 37**
Cooley Distillery, Riverstown, Dundalk, Co. Louth.
For March 2007

Dear Mr. O'Neill,

I enclose herewith reports on discharges under the above licences for the month of March 2007.

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Consent of copyright owner required for any other use.

Total and Faecal Coliforms

Total and Faecal Coliforms (laboratory reports attached) were as follows:

Date			Reed Bed Effluent	Final Effluent
6th February	Presumptive coliforms	cfu/100ml	2,900	5,700
	Presumptive E coli	cfu/100ml	2,400	3,100

Yours faithfully,

David F. Hynes,
Managing Director

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TRADE EFFLUENT DISCHARGE LICENCE 34 COOLEY DISTILLERY PLC,

REPORT FOR JANUARY 2007

		TREATED EFFLUENT PRIOR TO MIXING						MIXED EFFLUENT AS DISCHARGED TO IRISH SEA					
Day	Date	Temp C	pH	BOD mg/l	S.S. mg/l	pH	NH3 mg/l	Temp C	pH	BOD mg/l	S.S. mg/l	pH	NH3 mg/l
Thu	1	4.5	7.5					5.3	7.2				
Fri	2	3.8	7.4	6	40	7.3	1.80	5.0	7.1	4	10	7.4	0.78
Sat	3	4.5	7.6					4.6	7.4				
Sun	4	4.4	7.6					4.6	7.3				
Mon	5	4.1	7.5					5.0	7.1				
Tue	6	4.3	7.5	4	24	7.5	2.56	5.9	7.2	6	8	7.5	1.01
Wed	7	4.5	7.5					5.8	7.3				
Thu	8	4.6	7.5					6.1	7.1				
Fri	9	4.7	7.5	17	40	7.1	2.59	6.2	6.9	7	16	7.1	0.93
Sat	10	4.9	7.3					5.0	7.0				
Sun	11	5.3	7.6					5.4	7.1				
Mon	12	4.9	7.5					5.5	7.1				
Tue	13	4.6	7.5	12	38	7.1	4.05	6.7	7.0	3	22	7.0	1.17
Wed	14	4.5	7.5					6.8	7.0				
Thu	15	4.6	7.5					7.4	7.1				
Fri	16	3.8	6.9	9	68	7.2	6.98	5.5	6.7	4	20	7.1	2.30
Sat	17	2.1	3.7					2.4	3.6				
Sun	18	2.1	3.7					2.2	3.8				
Mon	19	1.9	3.7					2.0	3.8				
Tue	20	1.9	3.7	8	30	6.9	8.36	2.4	3.7	6	22	7.2	0.26
Wed	21	2.4	5.6					3.7	5.4				
Thu	22	2.4	4.9					4.4	4.6				
Fri	23	1.6	3.2	18	32	7.2	7.00	3.2	3.0	6	<5	7.3	1.89
Sat	24	4.0	7.5					4.4	7.5				
Sun	25	3.9	7.6					4.1	7.4				
Mon	26	3.9	7.2					6.4	6.8				
Tue	27	4.2	7.5	4	38	7.1	6.25	6.7	7.0	3	22	7.2	1.54
Wed	28	4.2	7.5					6.7	7.1				
Thu	29	3.6	7.4					6.2	7.2				
Fri	30	3.8	7.5	48	104	7.3	4.99	6.5	7.1	8	18	7.7	1.32
Sat	31	4.0	7.5					4.7	7.6				

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TRADE EFFLUENT DISCHARGE LICENCE 37 COOLEY DISTILLERY PLC,

REPORT FOR JANUARY 2007

Day	Date	COOLING WATER PRIOR TO DISCHARGE Temp C	BOD mg/l	S.S. mg/l	NH3 mg/l	COD mg/l	UPSTREAM RIVER WATER BOD mg/l	S.S. mg/l	NH3 mg/l	COD mg/l	RIVER TEMPERATURE Upstream C	Downstream C
Thu	1	10.2									6.3	6.0
Fri	2	11.4	<1.5	<5	0.02	<15	2	<5	0.02	<15	5.5	5.4
Sat	3	5.8									6.6	6.2
Sun	4	9.2									6.5	6.2
Mon	5	9.2									6.2	6.0
Tue	6	13.6	<1.5	<5	0.03	<15	<1.5	24	0.03	<15	7.0	6.9
Wed	7	13.2									6.9	6.8
Thu	8	14.4									6.8	6.7
Fri	9	14.4	<1.5	6	0.02	<15	<1.5	6	0.02	<15	6.7	6.6
Sat	10	8.5									8.0	7.6
Sun	11	7.7									8.4	8.0
Mon	12	8.8									7.6	7.3
Tue	13	16.5	<1.5	<5	0.12	<15	<1.5	<5	0.04	<15	7.3	7.2
Wed	14	15.4									7.7	8.2
Thu	15	17.7									8.0	7.5
Fri	16	12.0	<1.5	28	0.04	<15	2	16	0.24	<15	5.7	5.0
Sat	17	4.7									4.2	4.4
Sun	18	1.0									3.0	7.0
Mon	19	1.0									2.1	1.9
Tue	20	3.9	<1.5	<5	0.02	<15	<1.5	<5	0.06	<15	2.1	2.0
Wed	21	8.0									3.7	3.5
Thu	22	10.9									5.1	5.1
Fri	23	7.6	<1.5	<5	<0.015	<15	<1.5	<5	0.02	<15	3.6	3.1
Sat	24	7.8									7.5	6.8
Sun	25	6.9									7.3	7.3
Mon	26	13.5									7.9	7.8
Tue	27	14.8	<1.5	<5	0.02	<15	<1.5	<5	0.03	<15	8.2	7.8
Wed	28	15.0									7.7	6.6
Thu	29	14.5									6.4	4.0
Fri	30	15.3	<1.5	44	<0.015	<15	<1.5	6	0.03	<15	7.2	7.9
Sat	31	9.9									8.5	9.4

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13 APR 20

Cooley Distillery Plc
Riverstown
Dundalk
Co. Louth

For the attention of: NOEL SWEENEY

Certificate of Analysis

Samples of: Water - Reed Bed & Final Effluent

Certificate No: C200704M0151-F1
Date Received: 04/04/2007
Date Tested: See Below

Sample No:	Client Ref				Test Date
704M20233	Final Effluent				04/04/2007
Method	**Location**	**Description**	**Result**	**Unit**	
EUMM4.01	EUIRDU	Presumptive coliforms	5,700	cfu/100ml	
EUMM4.01	EUIRDU	Presumptive E coli	3,100	cfu/100ml	

Sample No:	Client Ref				Test Date
704M20234	Effluent from Reed Bed				04/04/2007
Method	**Location**	**Description**	**Result**	**Unit**	
EUMM4.01	EUIRDU	Presumptive coliforms	2,900	cfu/100ml	
EUMM4.01	EUIRDU	Presumptive E coli	2,400	cfu/100ml	

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Authorised Signatures:

Kellie Brady
Senior Microbiologist

Padraig Larkin
Microbiologist

On behalf of Eurofins Scientific (Ireland) Ltd

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Regd in Republic of Ireland No: 37
VAT No: IE6390511J

EPA Export 25-07-2013:22:17:20

Cooley, Co. Louth
Ireland.
Tel: 353 42 937 6102
Fax: 353 42 937 6484
Email: email@cooleydistillery.ie
www.cooleywhiskey.com

Mr Damien O'Neill
Senior Engineer,
Environment,
Louth County Council,
County Hall, Millennium Centre
St Alphonsus Road,
Dundalk, Co. Louth.

27th March 2007

re: **Trade Effluent Discharge Licences 34 and 37**
Cooley Distillery, Riverstown, Dundalk, Co. Louth.
For February 2007

Dear Mr. O'Neill,

I enclose herewith reports on discharges under the above licences for the month of February 2007.

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

Total and Faecal Coliforms

Total and Faecal Coliforms (laboratory reports attached) were as follows:

Date			Reed Bed Effluent	Final Effluent
6th February	Presumptive coliforms	cfu/100ml	<1	<1
	Presumptive E coli	cfu/100ml	<1	<1

Yours faithfully,

David F. Hynes,
Managing Director

EPA Export 25-07-2013:22:17:20

TRADE EFFLUENT DISCHARGE LICENCE 34 COOLEY DISTILLERY PLC,

REPORT FOR FEBRUARY 2007

		TREATED EFFLUENT PRIOR TO MIXING						MIXED EFFLUENT AS DISCHARGED TO IRISH SEA					
Day	Date	Temp C	pH	BOD mg/l	S.S. mg/l	pH	NH3 mg/l	Temp C	pH	BOD mg/l	S.S. mg/l	pH	NH3 mg/l
Thu	1												
Fri	2	3.2		60	32	6.6	0.67	3.1		5	12	6.7	0.03
Sat	3	2.6						2.7					
Sun	4	2.3						2.4					
Mon	5	2.3						2.4					
Tue	6	3.2	6.6	<1.5	22	7.1	0.77	3.9	6.3	6	14	7.1	0.42
Wed	7	3.6	7.2					4.2	6.8				
Thu	8	3.5	7.4					4.0	7.0				
Fri	9	4.2	7.4	6	22	7.0	0.53	4.7	6.9	13	10	7.0	0.29
Sat	10	4.1	7.5					5.0	6.9				
Sun	11	4.6	7.5					4.9	7.0				
Mon	12	4.6	7.5					5.5	6.9				
Tue	13	4.3	7.4	15	18	6.9	2.15	5.8	6.9	3	14	7.0	0.70
Wed	14	4.4	7.5					4.8	7.2				
Thu	15	5.2	7.6					5.6	7.1				
Fri	16	5.8	7.6	13	36	7.2	1.46	5.8	7.1	<1.5	14	7.3	0.75
Sat	17	5.7	7.5					5.7	7.0				
Sun	18	4.8	7.5					5.0	7.0				
Mon	19	4.8	7.4					5.5	7.0				
Tue	20	4.8	7.5	9	18	7.1	3.41	6.1	7.0	<1.5	<5	7.4	0.24
Wed	21	5.1	7.5					5.8	7.1				
Thu	22	5.6	7.5					6.2	7.0				
Fri	23	6.1	7.5	12	48	7.2	4.50	6.6	7.0	4	32	7.2	1.02
Sat	24	5.9	7.6					6.4	7.0				
Sun	25	5.5	7.6					5.9	7.1				
Mon	26	4.9	7.6					5.5	7.2				
Tue	27	5.5	7.6	31	96	7.4	1.36	6.1	7.3	13	74	7.4	0.52
Wed	28	5.1	7.6					5.9	7.1				

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TRADE EFFLUENT DISCHARGE LICENCE 37 COOLEY DISTILLERY PLC,

REPORT FOR FEBRUARY 2007

Day	Date	COOLING WATER PRIOR TO DISCHARGE Temp C	BOD mg/l	S.S. mg/l	NH3 mg/l	COD mg/l	UPSTREAM RIVER WATER BOD mg/l	S.S. mg/l	NH3 mg/l	COD mg/l	RIVER TEMPERATURE Upstream C	Downstream C
Thu	1	0.0										
Fri	2	5.4	<1.5	<5	<0.015	<15	<1.5	<5	0.02	<15	3.5	2.8
Sat	3	1.2									2.4	1.5
Sun	4	2.9									2.4	1.3
Mon	5	2.9									2.2	1.5
Tue	6	8.3	<1.5	36	<0.015	<15	<1.5	<5	0.03	<15	2.6	1.5
Wed	7	8.0									2.3	1.9
Thu	8	7.3									3.0	2.2
Fri	9	9.4	<1.5	<5	0.02	<15	<1.5	<5	0.04	<15	4.0	4.0
Sat	10	13.6									4.5	4.3
Sun	11	9.1									5.6	5.4
Mon	12	10.0									6.2	6.0
Tue	13	13.7	<1.5	<5	0.02	<15	<1.5	<5	0.03	<15	6.0	6.0
Wed	14	8.9									5.4	5.3
Thu	15	11.3									6.9	7.8
Fri	16	10.3	<1.5	<5	<0.015	<15	<1.5	<5	0.02	<15	6.7	6.6
Sat	17	6.0									6.5	5.5
Sun	18	3.9									5.4	4.2
Mon	19	9.6									7.1	7.3
Tue	20	13.4	<1.5	<5	<0.015	<15	<1.5	<5	<0.015	<15	7.2	7.2
Wed	21	11.9									7.0	6.9
Thu	22	12.8									8.1	8.0
Fri	23	13.3	<1.5	<5	0.02	<15	<1.5	<5	0.04	<15	8.2	8.1
Sat	24	12.6									7.9	7.6
Sun	25	10.6									7.9	7.5
Mon	26	9.6									7.2	6.9
Tue	27	12.6	<1.5	<5	0.03	<15	<1.5	14	0.05	19	8.3	8.1
Wed	28	11.9									7.5	7.4

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the bioanalytical company

14 FEB 2007

Cooley Distillery Plc
Riverstown
Dundalk
Co. Louth

For the attention of: NOEL SWEENEY

Certificate of Analysis

Samples of: Water

Certificate No: C200702M0108-F1
Date Received: 06/02/2007
Date Tested: See Below

Sample No:	Client Ref	Test Date
702M20241	Effluent from Reed Bed	06/02/2007

Method	Location	Description	Result	Unit
EUMM4.01	EUIRDU	Presumptive coliforms	<1	cfu/100ml
EUMM4.01	EUIRDU	Presumptive E coli	<1	cfu/100ml

Sample No:	Client Ref	Test Date
702M20242	Final Effluent	06/02/2007

Method	Location	Description	Result	Unit
EUMM4.01	EUIRDU	Presumptive coliforms	<1	cfu/100ml
EUMM4.01	EUIRDU	Presumptive E coli	<1	cfu/100ml

Authorised Signatures:

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

Sunnibha Corcoran
Local Quality/
Technical Manager
On behalf of Eurofins Scientific (Ireland) Ltd

Kellie Brady
Senior Microbiologist

Padraig Larkin
Microbiologist

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VAT No: IE6390511J

Directors: Wicher Wichers (Netherlands) Alice Mills Seamus McQuaid

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Cooley, Co. Louth
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Tel: 353 42 937 6102
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www.cooleywhiskey.com

Mr Damien O'Neill
Senior Engineer,
Environment,
Louth County Council,
County Hall, Millennium Centre
St Alphonsus Road,
Dundalk, Co. Louth.

17th February 2007

re: **Trade Effluent Discharge Licences 34 and 37**
Cooley Distillery, Riverstown, Dundalk, Co. Louth.
For January 2007

Dear Mr. O'Neill,

I enclose herewith reports on discharges under the above licences for the months of January 2007.

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

Total and Faecal Coliforms

Total and Faecal Coliforms (laboratory reports attached) were as follows:

Date			Reed Bed Effluent	Final Effluent
10th January	Presumptive coliforms	cfu/100ml	760	2500
	Presumptive E coli	cfu/100ml	520	1900

Copper, Lead and Zinc

Copper Lead and Zinc (laboratory reports attached) were as follows:

		Final Effluent	Reed Bed	Cooling Water	River Water
9th January	Copper mg/l	0.090	0.160	<0.005	<0.005
	Lead mg/l	<0.005	<0.005	<0.005	<0.005
	Zinc mg/l	0.019	0.019	0.009	<0.005

Yours faithfully,

David F. Hynes,
Managing Director

EPA Export 25-07-2013:22:17:20

REPORT FOR JANUARY 2007

Day	Date	TREATED EFFLUENT PRIOR TO MIXING Temp C	pH	BOD mg/l	S.S. mg/l	pH	NH3 mg/l	MIXED EFFLUENT AS DISCHARGED TO IRISH SEA Temp C	pH	BOD mg/l	S.S. mg/l	pH	NH3 mg/l
Mon	1	2.8	7.5					4.4	7.3				
Tue	2	2.2	7.4					3.5	7.4				
Wed	3	2.1	7.5					3.5	7.4				
Thu	4	2.1	7.5					2.2	8.1				
Fri	5	2.3	7.5	14	42	7.0	3.82	2.3	7.9	8	12	7.0	1.82
Sat	6	2.5	7.5					3.7	7.8				
Sun	7	3.2	7.5					4.4	7.6				
Mon	8	4.4	7.6					5.2	7.5				
Tue	9	4.5	7.5	20	32	7.3	2.31	5.2	7.4	12	14	7.3	1.13
Wed	10	4.4	7.5					5.1	7.4				
Thu	11	4.1	7.5					3.8	7.7				
Fri	12	3.6	7.4	19	40	7.0	1.80	3.4	7.7	6	18	7.0	0.74
Sat	13	3.5	7.5					4.9	7.4				
Sun	14	3.7	7.5					5.1	7.4				
Mon	15	4.1	7.5					4.8	7.5				
Tue	16	3.6	7.5	13	30	7.2	1.88	4.8	7.4	7	10	7.3	0.59
Wed	17	3.2	7.5					3.4	7.8				
Thu	18	3.2	7.4					3.6	8.4				
Fri	19	3.4	7.5	9	22	7.2	0.97	3.8	8.4	3	8	7.3	0.49
Sat	20	3.4	7.5					4.7	7.7				
Sun	21	3.3	7.5					3.5	7.6				
Mon	22	3.2	7.6					3.5	8.1				
Tue	23	3.1	7.7	<1.5	12	7.1	1.35	3.3	8.3	<1.5	<5	7.2	0.43
Wed	24	3.0	7.8					3.2	8.4				
Thu	25	3.1	7.8					3.3	8.4				
Fri	26	3.3	7.8	6	10	7.1	0.64	3.5	8.4	<1.5	<5	7.2	0.24
Sat	27	3.4	7.5					3.6	7.4				
Sun	28	3.8	7.8					4.0	7.1				
Mon	29	3.9	7.8					4.1	7.1				
Tue	30	3.8	7.9	5	24	6.9	1.74	4.1	7.3	2	<5	7.1	0.29
Wed	31	3.9	7.9					4.1	7.1				

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TRADE EFFLUENT DISCHARGE LICENCE 37 COOLEY DISTILLERY PLC,

REPORT FOR JANUARY 2007

Day	Date	COOLING WATER PRIOR TO DISCHARGE Temp C	BOD mg/l	S.S. mg/l	NH3 mg/l	COD mg/l	UPSTREAM RIVER WATER BOD mg/l	S.S. mg/l	NH3 mg/l	COD mg/l	RIVER TEMPERATURE Upstream C	Downstream C
Mon	1	12.5									2.7	3.2
Tue	2	10.1									1.0	1.6
Wed	3	2.4									0.9	1.1
Thu	4	2.7									1.2	1.1
Fri	5	2.7	<1.5	<5	<0.015	<15	<1.5	<5	0.04	<15	2.5	2.4
Sat	6	7.8									3.4	3.7
Sun	7	14.4									5.4	5.8
Mon	8	13.7									7.0	7.2
Tue	9	13.1	<1.5	<5	0.04	<15	<1.5	<5	0.05	<15	6.0	16.3
Wed	10	12.7									5.3	14.1
Thu	11	6.3									4.8	15.6
Fri	12	5.9	<1.5	<5	<0.015	<15	<1.5	<5	0.02	<15	5.3	18.8
Sat	13	12.2									5.7	3.6
Sun	14	15.1									6.8	13.4
Mon	15	11.0									6.1	11.2
Tue	16	11.1	<1.5	<5	<0.015	<15	<1.5	<5	<0.015	<15	4.4	
Wed	17	5.0									4.2	
Thu	18	5.7									4.7	
Fri	19	7.0	<1.5	6	0.02	<15	<1.5	<5	0.03	<15	5.5	
Sat	20	8.6									5.5	
Sun	21	5.7									4.6	3.1
Mon	22	3.8									4.1	5.0
Tue	23	4.9	<1.5	<5	<0.015	<15	<1.5	<5	<0.015	<15	4.3	5.3
Wed	24	5.6									5.1	6.2
Thu	25	7.9									6.6	7.9
Fri	26	9.0	<1.5	<5	<0.015	<15	<1.5	<5	0.02	<15	7.5	8.9
Sat	27	9.6									7.6	9.1
Sun	28	7.9									7.4	8.6
Mon	29	5.3									6.0	6.8
Tue	30	8.8	<1.5	<5	<0.015	<15	<1.5	<5	0.02	<15	7.5	8.5
Wed	31	8.4									7.7	8.8

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the bioanalytical company

23/01/2007

Cooley Distillery Plc
Riverstown
Dundalk
Co. Louth
Ireland

25 JAN 2007

For the attention of: NOEL SWEENEY

Certificate of Analysis

Sample of: **Effluent/riverwater**

Certificate No: **C200701E0019-F1**
Date Received: **09/01/2007**

Sample No:	Client Ref	Date Tested
701E20038	Final Effluent	09/01/2007

Location	Method	Analyte	Result	Unit
EUIRDU	SC2	Copper*	0.090	mg/l
EUIRDU	SC14	Lead*	< 0.005	mg/l
EUIRDU	SC1	Zinc*	0.019	mg/l

Sample No:	Client Ref	Date Tested
701E20039	Reed Bed Effluent	09/01/2007

Location	Method	Analyte	Result	Unit
EUIRDU	SC2	Copper*	0.160	mg/l
EUIRDU	SC14	Lead*	< 0.005	mg/l
EUIRDU	SC1	Zinc*	0.019	mg/l

Sample No:	Client Ref	Date Tested
701E20040	Riverwater	09/01/2007

Location	Method	Analyte	Result	Unit
EUIRDU	SC2	Copper*	<0.005	mg/l
EUIRDU	SC14	Lead*	< 0.005	mg/l
EUIRDU	SC1	Zinc*	<0.005	mg/l

Sample No:	Client Ref	Date Tested
701E20041	Cooling water prior to discharge	09/01/2007

Location	Method	Analyte	Result	Unit
EUIRDU	SC2	Copper*	<0.005	mg/l
EUIRDU	SC14	Lead*	< 0.005	mg/l
EUIRDU	SC1	Zinc*	0.009	mg/l

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VAT No: IE6390511J

Directors: Wicher Wichers (Netherlands) Alice Mills Seamus McQuaid

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Certificate No: C200701E0019-F1

Authorised Signatures:

Nicola Halpenny

Nicola Halpenny	**Kellie Brady**	**Sunnibha Corcoran**
Laboratory Manager	**Senior Analyst**	**Local Quality/Technical Manager**
On behalf of Eurofins Scientific (Ireland) Ltd		

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VAT No: IE6390511J

Directors: Wicher Wichers (Netherlands) Alice Mills Seamus McQuaid

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the bioanalytical company

18 JAN 2007

Cooley Distillery Plc
Riverstown
Dundalk
Co. Louth

For the attention of: NOEL SWEENEY

Certificate of Analysis

Samples of: Water

Certificate No: C200701M0276-F1
Date Received: 10/01/2007
Date Tested: See Below

Sample No:	Client Ref				Test Date
701M20402	Effluent from reed bed				10/01/2007
Method	**Location**	**Description**	**Result**	**Unit**	
EUMM4.01	EUIRDU	Presumptive coliforms	760	cfu/100ml	
EUMM4.01	EUIRDU	Presumptive E coli	520	cfu/100ml	

Sample No:	Client Ref				Test Date
701M20403	Final Effluent				10/01/2007
Method	**Location**	**Description**	**Result**	**Unit**	
EUMM4.01	EUIRDU	Presumptive coliforms	2,500	cfu/100ml	
EUMM4.01	EUIRDU	Presumptive E coli	1,900	cfu/100ml	

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Authorised Signatures:

Sunnibha Corcoran	Kellie Brady	Padraig Larkin
Local Quality/ Technical Manager	Senior Microbiologist	Microbiologist

On behalf of Eurofins Scientific (Ireland) Ltd

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Directors: Wicher Wichers (Netherlands) Alice Mills Seamus McQuaid

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Cooley, Co
Irelan
Tel: 353 42 9
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Email: email@cooley
www.cooleywhisl

Mr Damien O'Neill
Senior Engineer,
Environment,
Louth County Council,
County Hall, Millennium Centre
St Alphonsus Road,
Dundalk, Co. Louth.

20th January 2007

re: **Trade Effluent Discharge Licences 34 and 37**
Cooley Distillery, Riverstown, Dundalk, Co. Louth.
Report for December 2006

Dear Mr. O'Neill,

I enclose herewith reports on discharges under the above licences for the month of December 2006.

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Yours faithfully,

David F. Hynes,
Managing Director

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TRADE EFFLUENT DISCHARGE LICENCE 34 COOLEY DISTILLERY PLC,

REPORT FOR DECEMBER 2006

		TREATED EFFLUENT PRIOR TO MIXING						MIXED EFFLUENT AS DISCHARGED TO IRISH SEA					
Day	Date	Temp C	pH	BOD mg/l	S.S. mg/l	pH	NH3 mg/l	Temp C	pH	BOD mg/l	S.S. mg/l	pH	NH3 mg/l
Fri	1	6.0	7.5	24	26	7.0	0.26	6.2	6.8	14	12	7.1	0.06
Sat	2	5.6	7.5					5.5	7.0				
Sun	3	5.3	7.5					5.1	6.9				
Mon	4	5.1	7.5					5.4	6.9				
Tue	5	5.0	7.5	23	20	6.9	0.48	6.1	7.0	13	12	7.0	0.03
Wed	6	4.9	7.3					5.8	6.9				
Thu	7	5.2	7.5					6.3	7.0				
Fri	8	5.2	7.5	13	68	6.9	0.04	5.5	7.0	10	<5	6.8	0.05
Sat	9	4.9	7.5					5.0	7.1				
Sun	10	4.8	7.5					4.9	7.1				
Mon	11	5.0	7.5					5.7	6.9				
Tue	12	4.6	7.4	22	34	6.9	0.46	5.8	6.9	<1.5	<15	7.7	<0.015
Wed	13	5.1	7.5					5.9	7.2				
Thu	14	6.4	7.5					6.8	7.0				
Fri	15	5.9	7.3	170	48	6.7	0.55	6.1	6.8	80	28	6.8	0.01
Sat	16	5.2	7.4					5.2	7.0				
Sun	17	4.9	7.5					4.9	7.0				
Mon	18	4.8	7.4					4.9	6.9				
Tue	19	4.2	7.4	36	20	6.9	0.58	4.8	7.0	25	12	6.9	0.20
Wed	20	3.2	5.9					3.5	5.7				
Thu	21	4.0	7.4					5.2	6.9				
Fri	22	4.1	6.0	32	20	7.1	0.21	4.5	5.7	20	12	7.1	0.07
Sat	23	4.5	7.5					4.6	7.1				
Sun	24	4.8	7.4					4.8	6.8				
Mon	25	4.7	7.4					4.8	6.9				
Tue	26	4.6	7.4					4.8	7.1				
Wed	27	4.4	7.4					4.6	7.2				
Thu	28	4.6	7.4					4.7	7.1				
Fri	29	4.5	7.5					4.7	7.2				
Sat	30	4.4	7.5					4.6	7.3				
Sun	31	4.3	7.5					4.5	7.4				

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TRADE EFFLUENT DISCHARGE LICENCE 37 COOLEY DISTILLERY PLC,

REPORT FOR DECEMBER 2006

Day	Date	UPSTREAM RIVER WATER BOD mg/l	COD mg/l	S.S. mg/l	NH3 mg/l	COOLING WATER PRIOR TO DISCHARGE Temp C	BOD mg/l	COD mg/l	S.S. mg/l	NH3 mg/l	RIVER TEMPERATURE Upstream C	Downstream C
Fri	1	<1.5	17	<5	0.02	11.7	<1.5	<15	<5	<0.015	9.1	8.7
Sat	2					8.3					7.9	7.5
Sun	3					10.0					8.3	7.8
Mon	4					13.7					8.0	7.7
Tue	5	<1.5	<15	8	<0.015	13.7	<1.5	<15	8	0.02	8.6	8.3
Wed	6					12.7					7.6	7.3
Thu	7					14.7					7.9	7.7
Fri	8	<1.5	<15	<5	0.03	10.5	<1.5	<15	<5	<0.015	6.8	6.5
Sat	9					3.8					5.9	5.4
Sun	10					7.7					7.6	7.3
Mon	11					10.7					7.8	7.5
Tue	12	<1.5	<15	<5	<0.015	13.1	<1.5	<15	<5	<0.015	7.0	6.8
Wed	13					13.2					8.5	8.4
Thu	14					13.7					9.4	9.2
Fri	15	<1.5	<15	<5	0.02	11.7	<1.5	<15	<5	<0.015	7.7	7.4
Sat	16					6.0					6.2	5.7
Sun	17					4.5					6.2	5.8
Mon	18					7.5					6.7	6.3
Tue	19	<1.5	<15	<5	<0.015	9.8	<1.5	<15	<5	<0.015	5.8	5.6
Wed	20					6.0					3.5	3.3
Thu	21					12.3					4.9	4.9
Fri	22	<1.5	<15	<5	<0.015	9.3	<1.5	<15	<5	0.02	5.0	4.0
Sat	23					4.0					4.4	2.1
Sun	24					4.4					6.0	5.1
Mon	25					4.7					6.3	5.6
Tue	26					5.7					7.0	6.8
Wed	27					6.0					7.4	7.2
Thu	28					6.4					7.6	7.3
Fri	29					8.6					9.1	9.1
Sat	30					5.4					7.8	7.5
Sun	31					5.4					7.0	6.9

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	FINEL EFFLUENT	BOD	COD	SS	pH	NH3	REED BED	BOD	COD	SS	pH	NH3	BALANCE BOD	COD	SS	pH		CLARIFIER 2		CODS CLARIFIER 3	
21-Nov-06	611E20161	6	59	6	7.5	0.028	611E20162	10	192	18	7.1	0.237	1250	2670	284	4.1		611E20159	768	611E20160	256
24-Nov-06	611E20185	3	<15	<5	7.2	0.089	611E20186	12	121	24	7.0	0.576						611E20183	456	611E20184	121
28-Nov-06	611E20201	3	93	18	7.0	0.198	611E20202	28	254	36	6.9	0.521	5200	7060	1740	3.9		611E20206	1630	611E20207	494
01-Dec-06	612E20001	14	97	12	7.1	0.064	612E20002	24	228	26	7.0	0.261						612E20005	1260	612E20006	319
05-Dec-06	612E20041	13	82	12	7.0	0.032	612E20042	23	192	20	6.9	0.479	5700	5030	484	4.3		612E20039	1104	612E20040	307
08-Dec-06	612E20065	10	68	<5	6.8	0.052	612E20066	13	161	68	6.9	0.042						612E20063	687	612E20064	180
12-Dec-06	612E20092	<1.5	<15	<5	7.7	<0.015	612E20093	22	152	34	6.9	0.464	2400	5780	684	4.7		612E20090	808	612E20091	344
15-Dec-06	612E20134	80	400	28	6.8	0.130	612E20135	170	531	48	6.7	0.551						612E20132	1336	612E20133	411
19-Dec-06	612E20150	25	93	12	6.9	0.201	612E20151	36	225	20	6.9	0.580	1175	4710	352	3.9		612E21048	1538	612E20149	374
22-Dec-06	612E20170	20	97	12	7.1	0.068	612E20171	32	234	20	7.1	0.213							882		278

Gabriel - What happened on 28th Nov and lasted till the 5th December
with BOD in Balance tank above 5000
and consequente effect on COD in Clarifiers
and consequent effect on effluent on 15th December
I need to explain the 15th December to Council.

David

dumping of returned bottles
of alcohol for customer

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COOLEY DISTILLERY PLC

Riverstown, Dundalk,
Co. Louth.
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Email.: cooleydistillery@eircom.net
www.cooleywhiskey.com

Mr Damien O'Neill
Senior Engineer,
Environment,
Louth County Council,
County Hall, Millennium Centre
St Alphonsus Road,
Dundalk, Co. Louth.

16th December 2006

re: **Trade Effluent Discharge Licences 34 and 37**
Cooley Distillery, Riverstown, Dundalk, Co. Louth.
Report for November 2006

Dear Mr. O'Neill,

I enclose herewith reports on discharges under the above licences for the month of November 2006.

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Total and Faecal Coliforms

Total and Faecal Coliforms (laboratory reports attached) were as follows:

Date			Reed Bed Effluent	Final Effluent
21st November	Presumptive coliforms	cfu/100ml	>1000	>1000
	Presumptive E coli	cfu/100ml	>1000	>1000
5th December	Presumptive coliforms	cfu/100ml	100	100
	Presumptive E coli	cfu/100ml	100	200

Yours faithfully,

David F. Hynes,
Managing Director

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TRADE EFFLUENT DISCHARGE LICENCE 34 COOLEY DISTILLERY PLC,

REPORT FOR NOVEMBER 2006

		TREATED EFFLUENT PRIOR TO MIXING						MIXED EFFLUENT AS DISCHARGED TO IRISH SEA					
Day	Date	Temp C	pH	BOD mg/l	S.S. mg/l	pH	NH3 mg/l	Temp C	pH	BOD mg/l	S.S. mg/l	pH	NH3 mg/l
Wed	1	5.4	7.4					8.1	7.1				
Thu	2	5.2	7.4					8.0	7.2				
Fri	3	4.0	7.4	20	26	7.3	1.01	7.3	7.4	4	14	7.4	0.17
Sat	4	3.8	7.5					4.7	7.8				
Sun	5	4.6	7.6					4.8	7.9				
Mon	6	4.7	7.6					5.9	7.7				
Tue	7	4.8	7.5	<1.5	24	7.1	2.85	6.9	7.5	<1.5	16	7.1	0.48
Wed	8	5.1	7.5					8.1	7.3				
Thu	9	6.0	7.5					7.4	7.2				
Fri	10	6.7	7.5	43	24	6.9	0.33	7.6	7.2	17	12	7.0	0.05
Sat	11	6.6	7.5					6.2	7.2				
Sun	12	5.8	7.5					5.5	7.3				
Mon	13	5.8	7.5					6.5	7.3				
Tue	14	5.7	7.5	10	38	6.9	0.46	7.1	7.3	6	8	7.1	0.09
Wed	15	6.1	7.5					7.0	7.3				
Thu	16	6.1	7.4					7.0	7.6				
Fri	17	5.8	7.5	10	22	7.1	0.46	6.5	7.8	7	20	7.8	0.09
Sat	18	5.3	7.5					5.4	7.8				
Sun	19	4.9	7.5					4.7	7.8				
Mon	20	4.8	7.5					5.3	7.7				
Tue	21	4.5	7.5	10	18	7.1	0.24	5.7	7.8	6	6	7.5	0.03
Wed	22	5.0	7.6					6.3	7.5				
Thu	23	5.4	7.5					5.9	7.2				
Fri	24	5.2	7.5	12	24	7.0	0.58	5.9	7.2	3	<5	7.2	0.09
Sat	25	5.6	7.5					5.5	7.0				
Sun	26	5.4	7.5					5.4	7.0				
Mon	27	5.3	7.5					6.1	6.9				
Tue	28	5.3	7.4	28	36	6.9	0.52	6.6	6.9	3	18	7.0	0.20
Wed	29	5.4	7.5					6.4	7.0				
Thu	30	5.8	7.5					6.4	6.9				

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TRADE EFFLUENT DISCHARGE LICENCE 37 COOLEY DISTILLERY PLC,

REPORT FOR OCTOBER 2006

Day	Date	COOLING WATER PRIOR TO DISCHARGE Temp C	BOD mg/l	S.S. mg/l	NH3 mg/l	COD mg/l	UPSTREAM RIVER WATER BOD mg/l	S.S. mg/l	NH3 mg/l	COD mg/l	RIVER TEMPERATURE Upstream C	Downstream C
Wed	1	16.0									8.0	8.0
Thu	2	15.9									7.9	7.9
Fri	3	8.5	2	<5	0.02	<15	3	<5	0.23	19	7.0	7.0
Sat	4	7.8									7.9	7.6
Sun	5	7.8									9.2	8.8
Mon	6	10.8									8.7	8.3
Tue	7	14.0	<1.5	16	0.02	<15	2	14	0.09	<15	9.5	9.8
Wed	8	19.4									10.4	10.4
Thu	9	17.0									7.8	6.1
Fri	10	16.3	2	10	0.02	<15	2	<5	0.03	<15	8.7	9.7
Sat	11	8.7									8.7	8.4
Sun	12	7.6									8.8	8.5
Mon	13	12.9									10.0	9.9
Tue	14	15.8	<1.5	<5	0.02	<15	<1.5	<5	0.03	<15	9.0	8.6
Wed	15	15.9									8.7	8.7
Thu	16	15.2									8.4	8.2
Fri	17	13.6	<1.5	<5	0.05	<15	<1.5	<5	0.03	15	7.7	7.4
Sat	18	10.2									6.9	6.4
Sun	19	7.9									7.0	6.5
Mon	20	10.2									7.8	7.4
Tue	21	13.1	<1.5	<5	0.02	<15	4	<5	<0.015	24	6.6	6.4
Wed	22	15.7									7.2	7.1
Thu	23	12.5									8.1	7.8
Fri	24	13.0	<1.5	<5	0.02	<15	<1.5	<5	0.02	<15	7.3	7.0
Sat	25	6.5									7.4	6.9
Sun	26	6.3									7.3	6.7
Mon	27	12.3									9.0	8.7
Tue	28	14.6	<1.5	<5	0.02	<15	2	<5	0.04	<15	8.3	8.1
Wed	29	13.5									8.5	8.3
Thu	30	13.3									9.6	9.4

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the bioanalytical company

01 DEC 2006

Cooley Distillery Plc
Riverstown
Dundalk
Co. Louth

For the attention of: NOEL SWEENEY

Certificate of Analysis

Samples of: **Water**

Certificate No: **C200611M0685-F1**
Date Received: **21/11/2006**
Date Tested: **See Below**

Sample No:	Client Ref	Test Date
611M21089	Effluent Reed Bed	21/11/2006

Method	Location	Description	Result	Unit
EUMM4.01	EUIRDU	Presumptive coliforms	>1,000	cfu/100ml
EUMM4.01	EUIRDU	Presumptive E coli	>1,000	cfu/100ml

Sample No:	Client Ref	Test Date
611M21090	Final Effluent	21/11/2006

Method	Location	Description	Result	Unit
EUMM4.01	EUIRDU	Presumptive coliforms	>1,000	cfu/100ml
EUMM4.01	EUIRDU	Presumptive E coli	>1,000	cfu/100ml

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Authorised Signatures:

K Brady

Kellie Brady
Senior Microbiologist

Padraig Larkin
Microbiologist

On behalf of Eurofins Scientific (Ireland) Ltd

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UKAS TESTING 0342 Group

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eurofins
the bioanalytical company

15 DEC 2006

Cooley Distillery Plc
Riverstown
Dundalk
Co. Louth

For the attention of: NOEL SWEENEY

Certificate of Analysis

Samples of: **Water**

Certificate No: **C200612M0054-F1**
Date Received: **05/12/2006**
Date Tested: **See Below**

Sample No:	Client Ref	Test Date
612M20131	Final Effluent	05/12/2006

Method	Location	Description	Result	Unit
EUMM4.01	EUIRDU	Presumptive coliforms	100	cfu/100ml
EUMM4.01	EUIRDU	Presumptive E coli	200	cfu/100ml

Sample No:	Client Ref	Test Date
612M20132	Effluent from reed bed	05/12/2006

Method	Location	Description	Result	Unit
EUMM4.01	EUIRDU	Presumptive coliforms	100	cfu/100ml
EUMM4.01	EUIRDU	Presumptive E coli	100	cfu/100ml

Authorised Signatures:

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Sunnibha Corcoran	**Kellie Brady**	**Padraig Larkin**
Local Quality/	**Senior Microbiologist**	**Microbiologist**
Technical Manager		
On behalf of Eurofins Scientific (Ireland) Ltd		

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COOLEY DISTILLERY PLC

Riverstown, Dundalk,
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Tel.: 353 42 937 6102
Fax.: 353 42 937 6484
Email.: cooleydistillery@eircom.net
www.cooleywhiskey.com

Mr Damien O'Neill
Senior Engineer,
Environment,
Louth County Council,
County Hall, Millennium Centre
St Alphonsus Road,
Dundalk, Co. Louth.

4th December 2006

re: **Trade Effluent Discharge Licences 34 and 37**
Cooley Distillery, Riverstown, Dundalk, Co. Louth.
For the Period July to October 2006

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Dear Mr. O'Neill,

I enclose herewith reports on discharges under the above licences for the months of July and October 2006. Distillation ceased in mid July and resumed in October. There were no Treated Effluent Discharges (Licence 34) from the 25th July until the 10th October and no Cooling Water Discharges (Licence 37) from the 18th July until the 10th October.

Please note that the high BOD readings at 10th and 13th October seem questionable as the corresponding COD levels were, as shown below, much lower.

Final Effluent	10th October	Reported BOD	2650mg/l	Reported COD	168mg/l
Reed Bed Effluent	10th October	Reported BOD	2900mg/l	Reported COD	818mg/l
Reed Bed Effluent	13th October	Reported BOD	688mg/l	Reported COD	498mg/l

This occurred during startup, during which levels tend to be higher than are achieved (sometimes less than 1.5mg/l) during normal operation. Discharges were resumed slowly to allow the amount of biomass in the biotowers to recover after the shutdown and as shown in the results tables BOD did fall rapidly within a week of resuming operations.

Total and Faecal Coliforms

Total and Faecal Coliforms (laboratory reports attached) were as follows:

Date			Reed Bed Effluent	Final Effluent
4th July	Presumptive coliforms	cfu/100ml	50	130
	Presumptive E coli	cfu/100ml	50	150
17th October	Presumptive coliforms	cfu/100ml	01	70
	Presumptive E coli	cfu/100ml	<1	60

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Copper, Lead and Zinc

Copper Lead and Zinc (laboratory reports attached) were as follows:

			Final Effluent	Reed Bed	Cooling Water	River Water
4th July	Copper	mg/l	0.170	0.086	0.007	<0.005
	Lead	mg/l	<0.005	<0.005	<0.005	<0.005
	Zinc	mg/l	0.031	0.030	0.007	0.017
17th October	Copper	µg/l	30	130	4	3
	Lead	µg/l	3	4	5	5
	Zinc	µg/l	34.3	46.1	34.6	28.0

Yours faithfully,

David F. Hynes,
Managing Director

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TRADE EFFLUENT DISCHARGE LICENCE 34 COOLEY DISTILLERY PLC,

REPORT FOR JULY 2006

		TREATED EFFLUENT PRIOR TO MIXING						MIXED EFFLUENT AS DISCHARGED TO IRISH SEA					
Day	Date	Temp C	pH	BOD mg/l	S.S. mg/l	pH	NH3 mg/l	Temp C	pH	BOD mg/l	S.S. mg/l	pH	NH3 mg/l
Sat	1	4.1	3.8					4.4	3.6				
Sun	2	4.1	3.8					4.3	3.9				
Mon	3	4.5	4.1					4.8	4.2				
Tue	4	7.1	6.4	10	62	7.3	0.48	8.1	6.7	13	40	7.1	0.87
Wed	5	8.8	7.7					10.7	8.1				
Thu	6	8.8	7.6					11.2	7.9				
Fri	7	8.6	7.5	<1.5	24	7.6	0.99	10.7	7.9	5	22	7.2	1.20
Sat	8	8.2	7.6					9.0	7.9				
Sun	9	8.3	7.7					8.8	8.1				
Mon	10	8.0	7.6					10.0	7.9				
Tue	11	7.8	7.6	4	26	7.5	0.75	9.5	8.2	7	48	7.4	1.40
Wed	12	8.3	7.6					10.2	8.1				
Thu	13	7.8	7.6					10.1	7.8				
Fri	14	7.8	7.5	3	<5	7.5	1.09	9.2	7.9	8	10	7.1	1.06
Sat	15	8.0	7.6					8.7	8.1				
Sun	16	7.8	7.6					8.1	8.0				
Mon	17	8.3	7.7					9.5	8.0				
Tue	18	8.5	7.7	28	40	7.4	2.23	9.6	8.1	28	54	7.1	1.73
Wed	19	8.7	7.7					9.2	7.7				
Thu	20	8.5	7.7					9.2	7.3				
Fri	21	8.6	7.7	25	44	7.4	3.07	9.3	7.4	15	42	7.0	5.94
Sat	22	8.4	7.6					9.0	7.3				
Sun	23	8.3	7.7					8.9	7.8				
Mon	24	8.3	7.8					9.2	8.4				
Tue	25	8.4	8.1	13	32	7.3	2.84	9.0	8.4	No Sample			
Wed	26	8.5	7.9					9.0	8.4				
Thu	27	8.6	7.9					9.1	8.2				
Fri	28	8.6	7.9					9.1	8.0				
Sat	29	8.4	7.8					8.9	7.8				
Sun	30	8.3	7.7					8.8	7.9				
Mon	31	8.0	7.8					8.6	7.8				

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TRADE EFFLUENT DISCHARGE LICENCE 37 COOLEY DISTILLERY PLC,

REPORT FOR JULY 2006

Day	Date	COOLING WATER PRIOR TO DISCHARGE Temp C	BOD mg/l	S.S. mg/l	NH3 mg/l	COD mg/l	UPSTREAM RIVER WATER BOD mg/l	S.S. mg/l	NH3 mg/l	COD mg/l	RIVER TEMPERATURE Upstream C	Downstream C
Sat	1	11.0									8.5	8.0
Sun	2	9.7									7.9	7.9
Mon	3	18.4										12.0
Tue	4	24.9	<1.5	<5	0.04	<15	<1.5	8	0.03	<15	19.1	16.3
Wed	5	24.9									20.7	20.5
Thu	6	24.0									15.9	20.3
Fri	7	24.0	<1.5	18	0.06	<15	<1.5	10	<0.015	<15	15.2	19.4
Sat	8	20.3									13.4	14.9
Sun	9	16.2									14.2	14.5
Mon	10	19.3									14.1	16.5
Tue	11	21.8	2	<5	0.03	<15	3	<5	0.09	<15	13.9	16.3
Wed	12	22.5									13.7	17.6
Thu	13	22.1									13.0	16.9
Fri	14	19.9	<1.5	<5	0.04	<15	3	<5	0.04	<15	14.4	16.5
Sat	15	17.1									15.0	15.1
Sun	16	14.2									14.7	14.6
Mon	17	18.7									16.6	17.8
Tue	18	20.7	<1.5	<5	0.03	<15	<1.5	6	0.03	<15	17.5	17.5
Wed	19	18.7									18.6	17.7
Thu	20	19.3									18.7	18.2
Fri	21	19.3					<1.5	<5	0.03	<15	18.5	18.0
Sat	22	18.5									17.3	17.2
Sun	23	17.4									16.4	16.3
Mon	24	17.2									16.9	16.7
Tue	25	17.3					2	<5	0.03	<15	17.7	17.1
Wed	26	18.0									17.6	17.3
Thu	27	18.4									17.8	17.4
Fri	28	18.1									17.1	16.8
Sat	29	16.2									16.0	16.2
Sun	30	14.0									15.3	15.4
Mon	31	13.9									14.6	14.9

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TRADE EFFLUENT DISCHARGE LICENCE 37 COOLEY DISTILLERY PLC,

REPORT FOR OCTOBER 2006

Day	Date	COOLING WATER PRIOR TO DISCHARGE Temp C	BOD mg/l	S.S. mg/l	NH3 mg/l	COD mg/l	UPSTREAM RIVER WATER BOD mg/l	S.S. mg/l	NH3 mg/l	COD mg/l	RIVER TEMPERATURE Upstream C	Downstream C
Sun	1	11.7									12.9	13.4
Mon	2	10.6									12.2	12.7
Tue	3	11.9									11.0	11.4
Wed	4	16.8									10.5	11.0
Thu	5	16.8									11.4	12.1
Fri	6	19.0									12.1	12.8
Sat	7	12.6									10.5	11.0
Sun	8	13.0									11.2	11.7
Mon	9	15.9									11.4	12.1
Tue	10	19.7	<1.5	<5	0.02	<15	<1.5	6	0.04	<15	10.6	11.3
Wed	11	19.3									12.3	13.0
Thu	12	19.3									11.5	12.2
Fri	13	20.0	<1.5	<5	<0.015	<15	<1.5	<5	<0.015	<15	11.7	12.5
Sat	14	13.6									12.7	13.2
Sun	15	11.5									12.2	12.6
Mon	16	15.7									11.6	12.2
Tue	17	19.1	<1.5	<5	<0.015	<15	<1.5	<5	<0.015	<15	12.0	12.8
Wed	18	18.2									12.2	12.9
Thu	19	19.4									12.3	13.1
Fri	20	19.3	<1.5	<5	0.03	15	<1.5	<5	0.04	19	11.6	12.4
Sat	21	12.5									12.0	12.5
Sun	22	9.7									11.2	11.7
Mon	23	14.5									10.5	11.2
Tue	24	17.1	<1.5	26	0.02	<15	<1.5	<5	<0.015	<15	9.5	10.2
Wed	25	18.2									10.3	12.7
Thu	26	19.8									10.8	12.4
Fri	27	19.0	<1.5	12	0.02	17	<1.5	24	0.06	19	10.1	11.2
Sat	28	13.2									11.4	12.5
Sun	29	9.0									10.3	11.6
Mon	30	11.5									11.4	12.8
Tue	31	13.5	<1.5	<5	0.02	19	<1.5	6	0.02	<15	9.9	12.2

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TRADE EFFLUENT DISCHARGE LICENCE 34 COOLEY DISTILLERY PLC,

REPORT FOR OCTOBER 2006

		TREATED EFFLUENT PRIOR TO MIXING						MIXED EFFLUENT AS DISCHARGED TO IRISH SEA					
Day	Date	Temp C	pH	BOD mg/l	S.S. mg/l	pH	NH3 mg/l	Temp C	pH	BOD mg/l	S.S. mg/l	pH	NH3 mg/l
Sun	1	6.9	8.1					7.2	7.4				
Mon	2	6.9	8.0					7.3	7.4				
Tue	3	6.7	7.9					7.4	7.4				
Wed	4	6.3	7.8					7.0	6.9				
Thu	5	6.1	7.4					8.3	6.2				
Fri	6	6.3	7.5					9.4	6.3				
Sat	7	6.1	7.6					6.7	6.5				
Sun	8	6.2	7.8					6.6	7.0				
Mon	9	6.6	7.8					8.7	6.8				
Tue	10	6.0	7.6	2900	110	7.1	1.70	9.4	6.4	2650	36	7.1	0.48
Wed	11	6.5	7.6					9.5	6.4				
Thu	12	6.2	7.6					9.3	6.4				
Fri	13	6.2	7.6	688	94	7.6	2.54	9.9	6.4	23	14	7.2	1.44
Sat	14	6.5	7.7					7.6	6.7				
Sun	15	6.5	7.7					7.0	6.6				
Mon	16	6.5	7.7					8.0	6.5				
Tue	17	6.6	7.6	4	40	7.7	2.34	9.5	6.4	<1.5	26	7.6	1.03
Wed	18	6.7	7.7					9.3	6.6				
Thu	19	6.7	7.6					9.6	6.5				
Fri	20	6.5	7.6	7	28	7.5	0.94	9.6	6.4	2	<5	7.5	0.35
Sat	21	6.5	7.7					7.4	6.6				
Sun	22	6.4	7.7					6.9	6.7				
Mon	23	7.4	7.7					8.6	6.7				
Tue	24	8.1	7.6	<1.5	16	7.6	0.06	9.2	7.0	<1.5	6	7.7	0.04
Wed	25	7.7	7.6					9.1	7.6				
Thu	26	5.9	7.5					9.1	7.2				
Fri	27	5.8	7.5	5	8	7.3	0.07	9.4	7.3	4	16	7.0	0.66
Sat	28	6.0	7.7					6.9	7.7				
Sun	29	6.1	7.9					6.7	8.2				
Mon	30	6.3	7.8					7.2	7.6				
Tue	31	6.2	7.6	<1.5	<5	7.4	0.02	8.2	7.2	<1.5	8	7.4	0.03

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22 SEP 2006

20/09/2006

Cooley Distillery Plc
Riverstown
Dundalk
Co. Louth

For the attention of: NOEL SWEENEY

Certificate of Analysis

Samples of: **Water**

Certificate No: **C200607M0026**
Date Received: **04/07/2006**
Date Tested: **See Below**

Sample No:	Client Ref	Test Date
607M20069	Final Effluent	04/07/2006

Method	Location	Description	Result	Unit
EUMM4.01	EUIRDU	Presumptive coliforms	130	cfu/100ml
EUMM4.01	EUIRDU	Presumptive E coli	150	cfu/100ml

Sample No:	Client Ref	Test Date
607M20070	Effluent Reed Bed	04/07/2006

Method	Location	Description	Result	Unit
EUMM4.01	EUIRDU	Presumptive coliforms	50	cfu/100ml
EUMM4.01	EUIRDU	Presumptive E coli	50	cfu/100ml

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Authorised Signatures:

Sunnibha Corcoran	Kellie Brady	Padraig Larkin
Local Quality/ Technical Manager	Senior Microbiologist	Microbiologist

On behalf of Eurofins Scientific (Ireland) Ltd

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Cooley Distillery Plc
Riverstown
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Co. Louth

For the attention of: NOEL SWEENEY

Certificate of Analysis

Samples of: Effluent from reed bed

Certificate No: C200610M0480-F1
Date Received: 17/10/2006
Date Tested: See Below

Sample No:	Client Ref	Test Date
610M20747	Effluent from reed bed	17/10/2006

Method	Location	Description	Result	Unit
EUMM4.01	EUIRDU	Presumptive coliforms	01	cfu/100ml
EUMM4.01	EUIRDU	Presumptive E coli	<1	cfu/100ml

Authorised Signatures:

K Brady

Sunnibha Corcoran
Local Quality/ Technical Manager
On behalf of Eurofins Scientific (Ireland) Ltd

Kellie Brady
Senior Microbiologist

Padraig Larkin
Microbiologist

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25 OCT 2006

Cooley Distillery Plc
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For the attention of: NOEL SWEENEY

Certificate of Analysis

Samples of: Final Effluent

Certificate No: C200610M0479-F1
Date Received: 17/10/2006
Date Tested: See Below

Sample No:	Client Ref	Test Date
610M20746	Final Effluent	17/10/2006

Method	Location	Description	Result	Unit
EUMM4.01	EUIRDU	Presumptive coliforms	70	cfu/100ml
EUMM4.01	EUIRDU	Presumptive E coli	60	cfu/100ml

Authorised Signatures:

K Brady

Sunnibha Corcoran
Local Quality/ Technical Manager
On behalf of Eurofins Scientific (Ireland) Ltd

Kellie Brady
Senior Microbiologist

Padraig Larkin
Microbiologist

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Cooley Distillery Plc
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Dundalk
Co. Louth
Ireland

For the attention of: NOEL SWEENEY

Certificate of Analysis

Sample of: **Effluent/Riverwater**

Certificate No:

Date Received: **04/07/2006**

Sample No:	Client Ref	Date Tested
607E20015	Final Effluent	04/07/2006

Location	Method	Analyte	Result	Unit
EUIRDU	SC2	Copper*	0.170	mg/l
EUIRDU	SC14	Lead*	< 0.005	mg/l
EUIRDU	SC1	Zinc*	0.031	mg/l

Sample No:	Client Ref	Date Tested
607E20016	Reed bed Effluent	04/07/2006

Location	Method	Analyte	Result	Unit
EUIRDU	SC2	Copper*	0.086	mg/l
EUIRDU	SC14	Lead*	< 0.005	mg/l
EUIRDU	SC1	Zinc*	0.030	mg/l

Sample No:	Client Ref	Date Tested
607E20017	Riverwater	04/07/2006

Location	Method	Analyte	Result	Unit
EUIRDU	SC2	Copper*	<0.005	mg/l
EUIRDU	SC14	Lead*	< 0.005	mg/l
EUIRDU	SC1	Zinc*	0.017	mg/l

Sample No:	Client Ref	Date Tested
607E20018	Cooling water prior to discharge	04/07/2006

Location	Method	Analyte	Result	Unit
EUIRDU	SC2	Copper*	0.007	mg/l
EUIRDU	SC14	Lead*	< 0.005	mg/l
EUIRDU	SC1	Zinc*	0.007	mg/l

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Certificate No:

Authorised Signatures:

Nicola Halpenny

Nicola Halpenny	**Kellie Brady**	**Sunnibha Corcoran**
Laboratory Manager	**Senior Analyst**	**Local Quality/Technical Manager**
On behalf of Eurofins Scientific (Ireland) Ltd		

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27/10/2006

Cooley Distillery Plc
Riverstown
Dundalk
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Ireland

For the attention of: NOEL SWEENEY

Certificate of Analysis

Sample of: **Effluent/Riverwater**

Certificate No: **C200610E0073-F1**
Date Received: **17/10/2006**

Sample No:	Client Ref	Date Tested
610E20114	Final Effluent	17/10/2006

Location	Method	Analyte	Result	Unit
EUIRDU	SC2	Copper*	30.000	ug/l
EUIRDU	SC14	Lead*	3.000	ug/l
EUIRDU	SC1	Zinc*	34.300	ug/l

Sample No:	Client Ref	Date Tested
610E20115	Reed Bed Effluent	17/10/2006

Location	Method	Analyte	Result	Unit
EUIRDU	SC2	Copper*	130.000	ug/l
EUIRDU	SC14	Lead*	4.000	ug/l
EUIRDU	SC1	Zinc*	46.100	ug/l

Sample No:	Client Ref	Date Tested
610E20116	Riverwater	17/10/2006

Location	Method	Analyte	Result	Unit
EUIRDU	SC2	Copper*	3.000	ug/l
EUIRDU	SC14	Lead*	5.000	ug/l
EUIRDU	SC1	Zinc*	28.000	ug/l

Sample No:	Client Ref	Date Tested
610E20117	Cooling water prior to discharge	17/10/2006

Location	Method	Analyte	Result	Unit
EUIRDU	SC2	Copper*	4.000	ug/l
EUIRDU	SC14	Lead*	5.000	ug/l
EUIRDU	SC1	Zinc*	34.600	ug/l

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Certificate No: C200610E0073-F1

Authorised Signatures:

Nicola Halpenny

Nicola Halpenny	Kellie Brady	Sunnibha Corcoran
Laboratory Manager	Senior Analyst	Local Quality/Technical Manager
On behalf of Eurofins Scientific (Ireland) Ltd		

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13 AUG 2007

Customer	Gabriel O'Loughlin	*Lab Report Ref. No.*	2610/004/01
	Cooley Distillery	*Date of Receipt*	10/07/2007
	Cooley	*Date Testing Commenced*	10/07/2007
	Dundalk	*Received or Collected*	Courier: Interlink
	Co Louth	*Condition on Receipt*	Acceptable
	Ireland		
Customer PO		*Date of Report*	27/07/2007
Customer Ref	Sludge Sample	*Sample Type*	Water

CERTIFICATE OF ANALYSIS

Test Parameter	SOP	Analytical Technique	Result	Units	Acc.
% Dry Matter	302	Drying @ 104 C	4.6	%	
Cadmium	177	ICPMS	4	ug/L	
Calcium	184	ICPMS	133.5	mg/L	
Cobalt	177	ICPMS	39	ug/L	
COD	107	Colorimetry	76100	mg/L	
Copper	177	ICPMS	6802	ug/L	
Iron (Total)	177	ICPMS	5002	ug/L	
Lead	177	ICPMS	629	ug/L	
Magnesium	184	ICPMS	58.17	mg/L	
Manganese	177	ICPMS	1046	ug/L	
Nickel	177	ICPMS	122	ug/L	
Nitrogen (Total Kjeldahl)	104	Digestion/ Distillation/ T	3176	mg/L as N	
Nitrogen (Total Oxidised)	151	Colorimetry	30.18	mg/L as N	
Nitrogen (Total)	0	Calculation	3206.18	mg/L as N	
pH	110	Electrometry	4.6	pH Units	INAB
Phosphate (Total)	166	Digestion/ Colorimetry	216.531	mg/L as P	
Potassium	184	ICPMS	164.2	mg/L	
Tin	177	ICPMS	40	ug/L	
Zinc	177	ICPMS	2684	ug/L	

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Signed : Donna Heslin

Date : 27/07/07

Donna Heslin - Laboratory Manager

Acc. : Accredited Parameters by ISO 17025:2005

All organic results are analysed as received and all results are corrected for dry weight at 104 C
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Consolidated Balance Sheet for the Year Ended 31 December 2006

	Notes	2006 €'000	2005 €'000
FIXED ASSETS			
Tangible assets	8	4,658	4,706
Financial assets	9	25	25
		4,683	4,731
CURRENT ASSETS			
Stocks	10	22,700	20,590
Debtors	11	2,765	2,322
Bank		245	114
		25,710	23,026
CREDITORS: (Amounts falling due within one year)	12	(14,292)	(13,242)
NET CURRENT ASSETS		11,418	9,784
TOTAL ASSETS LESS CURRENT LIABILITIES		16,101	14,515
Provision for liabilities and charges	13	(216)	(200)
TOTAL ASSETS LESS LIABILITIES		15,885	14,315
CAPITAL AND RESERVES			
Called-up share capital	14	1,138	1,138
Capital conversion reserve	15	17	17
Share premium account	16	6,937	6,937
Profit and loss account	17	5,902	4,395
SHAREHOLDERS FUNDS - ALL EQUITY	18	13,994	12,487
Minority interests – Non equity	19	1,891	1,828
		15,885	14,315

The financial statements were approved by the Board of Directors on 14th August, 2007 and signed on its behalf by:

John Teeling
James Finn } DIRECTORS

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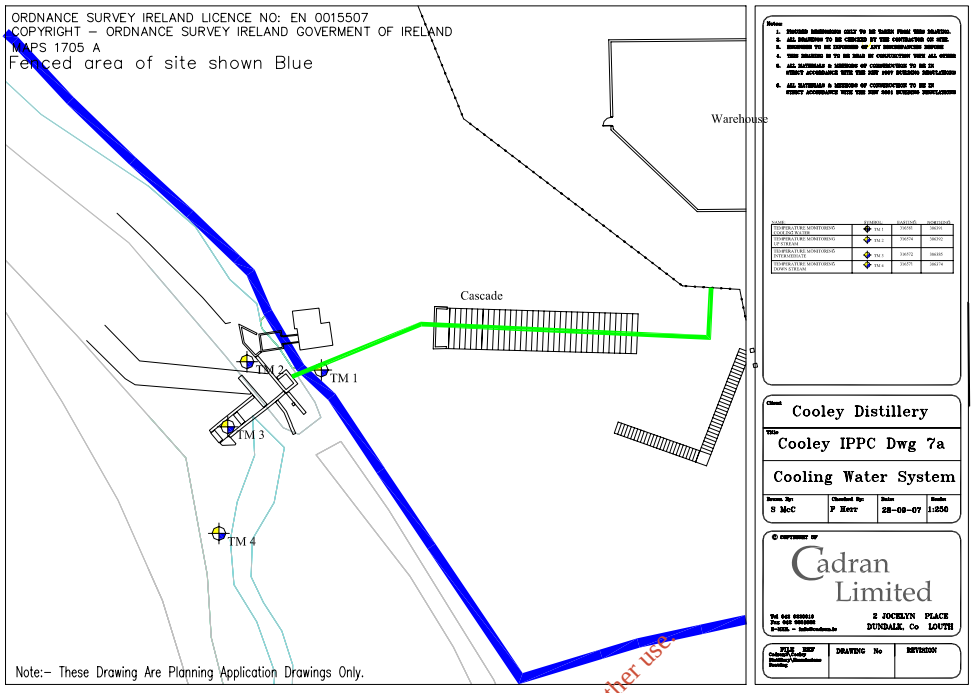

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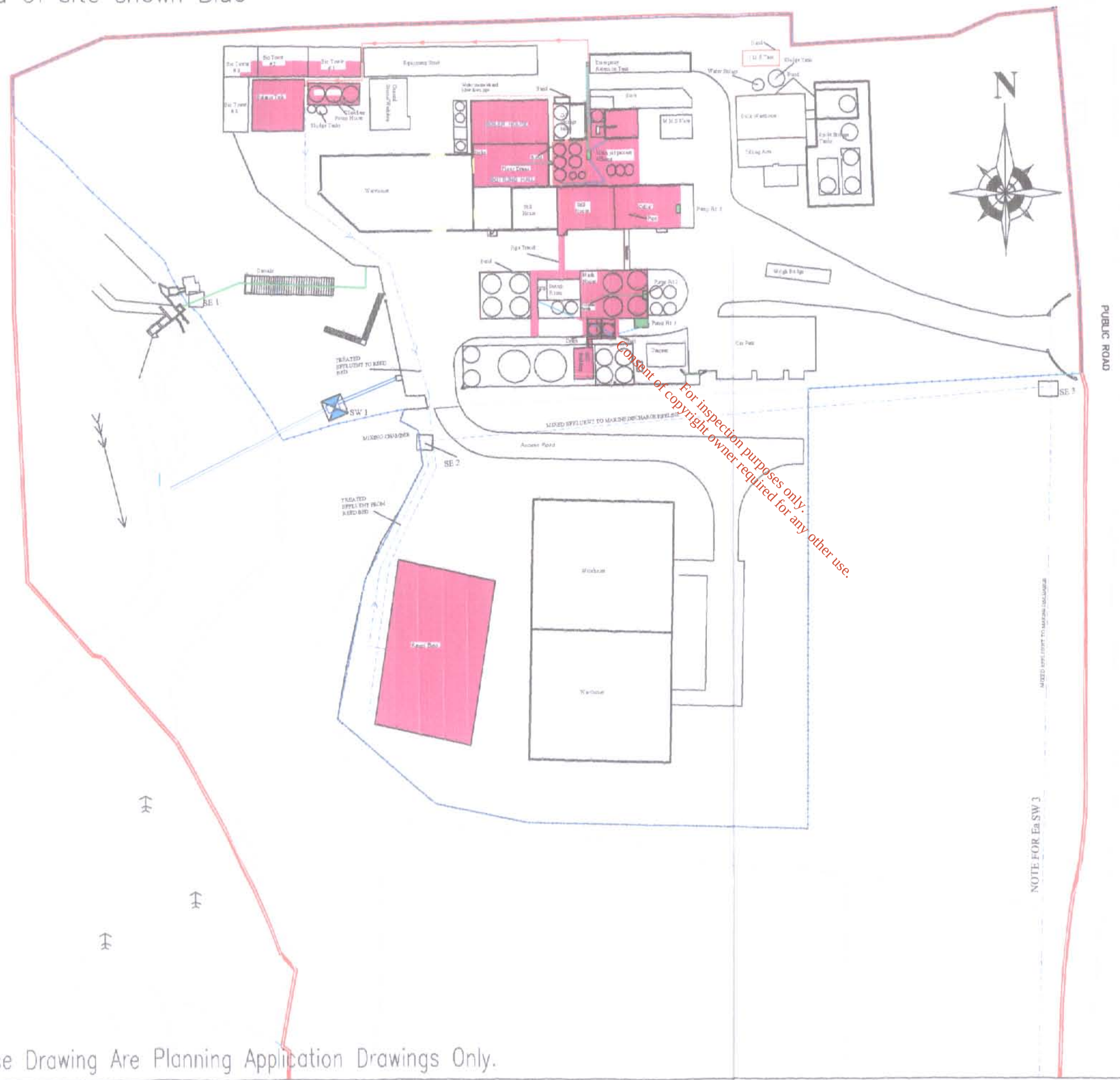
Area of site outlined in red
Fenced area of site shown Blue



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Note:– These Drawing Are Planning Application Drawings Only.

Notes:

1. FIGURED DIMENSIONS ONLY TO BE TAKEN FROM THIS DRAWING.
2. ALL DRAWINGS TO BE CHECKED BY THE CONTRACTOR ON SITE.
3. ENGINEER TO BE INFORMED OF ANY DISCREPANCIES BEFORE
4. THIS DRAWING IS TO BE READ IN CONJUNCTION WITH ALL OTHER
5. ALL MATERIALS & METHODS OF CONSTRUCTION TO BE IN STRICT ACCORDANCE WITH THE NEW 1997 BUILDING REGULATIONS
6. ALL MATERIALS & METHODS OF CONSTRUCTION TO BE IN STRICT ACCORDANCE WITH THE NEW 2001 BUILDING REGULATIONS

Trenches & Pits
Underground Drains
Overground Pipes
Bunded Areas
Area Defined to waste water Treatment Plant

NAME	SYMBOL	NORTHING	EASTING
Pump Pit 1		306765	316987
Pump Pit 2		306772	316988
Pump Pit 3		306792	316999
Pump Pit 4		306805	316875
Emergency Tank		306826	316886
Balance Tank		306817	316801
Sampling & Monitoring Point	SW 1	306051	317312
Sampling & Monitoring Point	SE 1	306076	317279
Sampling & Monitoring Point	SE 2	306042	317333
Sampling & Monitoring Point	SE 3	306055	317481

Client
Cooley Distillery

Title
Cooley IPPC Dwg 8a
Process Effluent System

Drawn By:	Checked By:	Date:	Scale:
S McC	P Herr	28-09-07	1:1000

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FILE REF	DRAWING No	REVISION
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