

Dŵr Cymru Welsh Water

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**Eastern Valley Trunk  
Sewer CSO Strategy**

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Discharge Consent  
Application for  
Llanfrechfra Storm Tanks  
Supporting Document



Dŵr Cymru Welsh Water

**Eastern Valley Trunk Sewer CSO Strategy**

Discharge Consent Application for Llanfrechfa Storm Tanks Supporting  
Document

Llanfrechfa Storm Tanks  
(Unique Identifier DC 1101101)

November 2004

**Ove Arup & Partners Ltd**

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[www.arup.com](http://www.arup.com)

Job number 66809



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Issue Document Verification with Document



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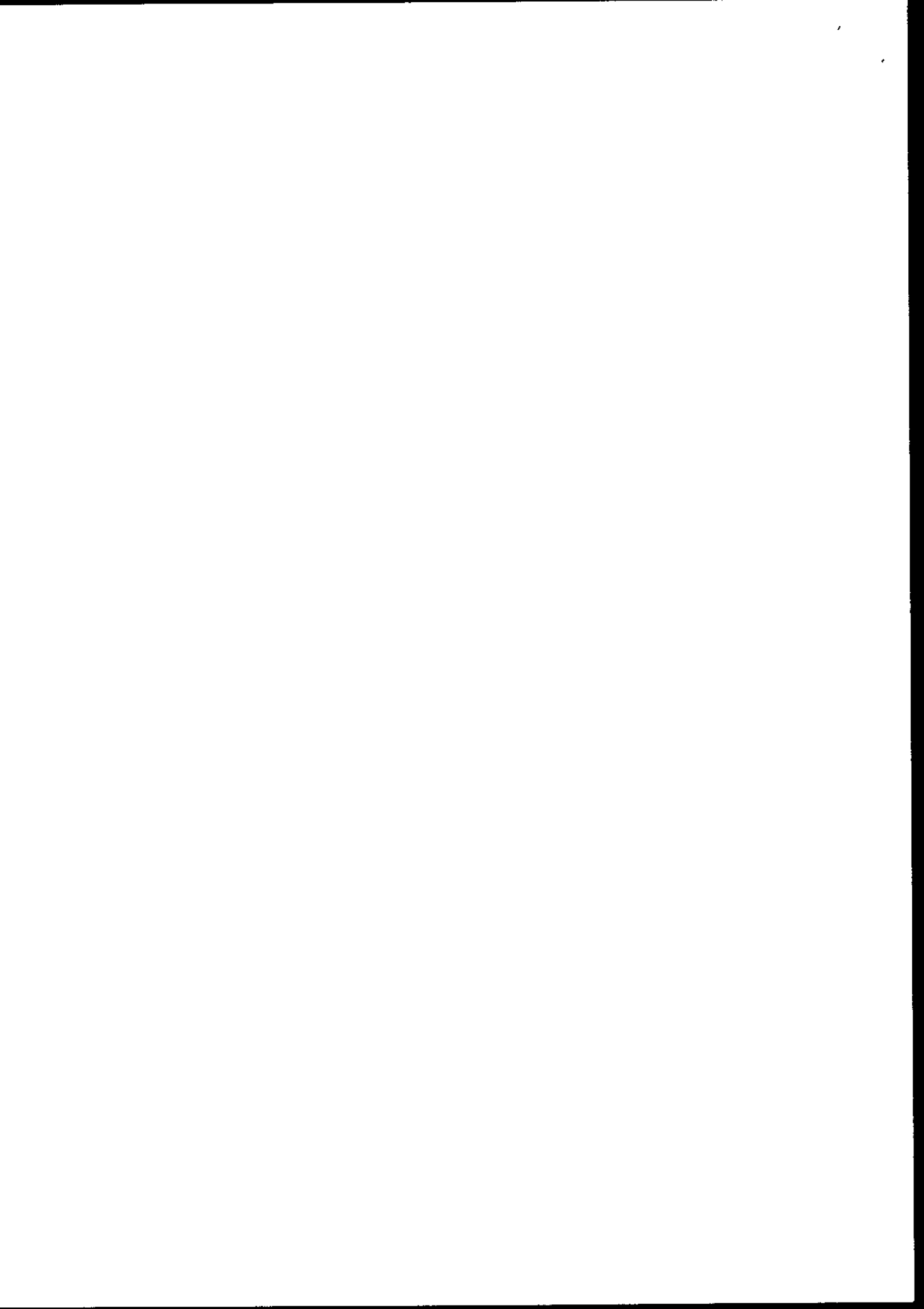
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## 1. INTRODUCTION

This document is submitted in support of an application under the Water Resources Act 1991 as amended by the Environment Act 1995, for an existing, currently consented, discharge from the Storm Tanks (SSO) associated with Ponthir Waste Water Treatment Works. The storm tanks are remote from the treatment works itself. The existing consent number for the Storm Tanks is AB0064001. The discharge consent for the treated effluent discharge from the works is AA 0026501.

The storm tanks are located Llanfrechfa, downstream of the inlet works, with the overflow discharging into the Afon Lwyd.

The storm tanks were classified as an Unsatisfactory Intermittent Discharge and included in the Eastern Valley Trunk Sewer AMP3 Scheme with an Aesthetics Driver.

## 2. PREFERRED SOLUTION

The existing SSO structure failed the criteria for aesthetic performance, the receiving water is of low amenity ranking and is class RE2 in accordance with EA watercourse classification.

The proposed solution for this SSO was to install new fine screens to provide 6mm screening to the flows discharging into the storm tanks. Additional improvements carried out at the inlet works include an extension of the coarse screen conveyors and the relocation and refurbishment of the grit pump. A hydraulic restriction at the main works has also been removed. With these improvements the required aesthetic improvements will be achieved.

Details of the new screens are provided in Appendix A.

The Ordnance Survey Grid References for the SSO, discharge point and sample point are as follows;

- Storm Tanks– ST 32003 92889
- Discharge and Sample Point – ST 32130 92796

A location plan is included as Appendix B.



**3. ASSET INFORMATION**

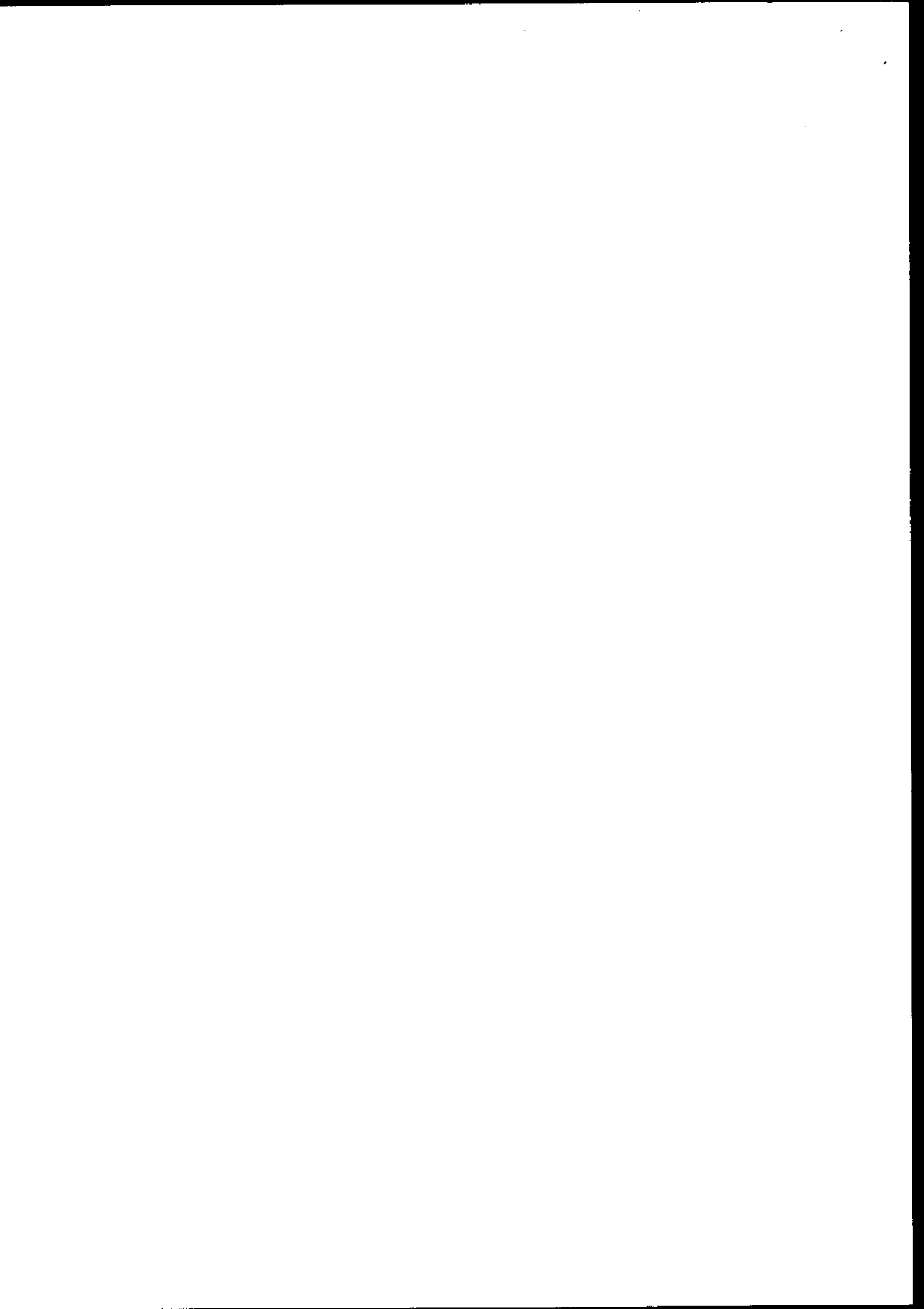
Asset Number	
Name	Llanfrechfa Storm Tanks
Location	Llanfrechfa, Ponthir
Receiving Watercourse	Afon Lwyd
Target RE Classification	RE2
Amenity Value	Low
Existing Consent Number	AB 0064001
Unique Identifier	DC1101101
Design	New 6mm aperture fine screens
FFT	886 l/s
EA screen requirements	6mm separation

**4. ASSET OPERATION**

Water will flow into the storm tanks when the flow to treatment capacity at Ponthir WwTW of 886 l/s is exceeded. When the flow to treatment drops below the 886 l/s storm water from the tanks is returned to the flow to treatment line. Should the tanks fill before storm return is activated then the storm tanks will discharge via the overflow pipe to the Afon Lwyd.

Flows in excess of 2,136 l/s are discharged directly to the river (SOC A = 2043 l/s).

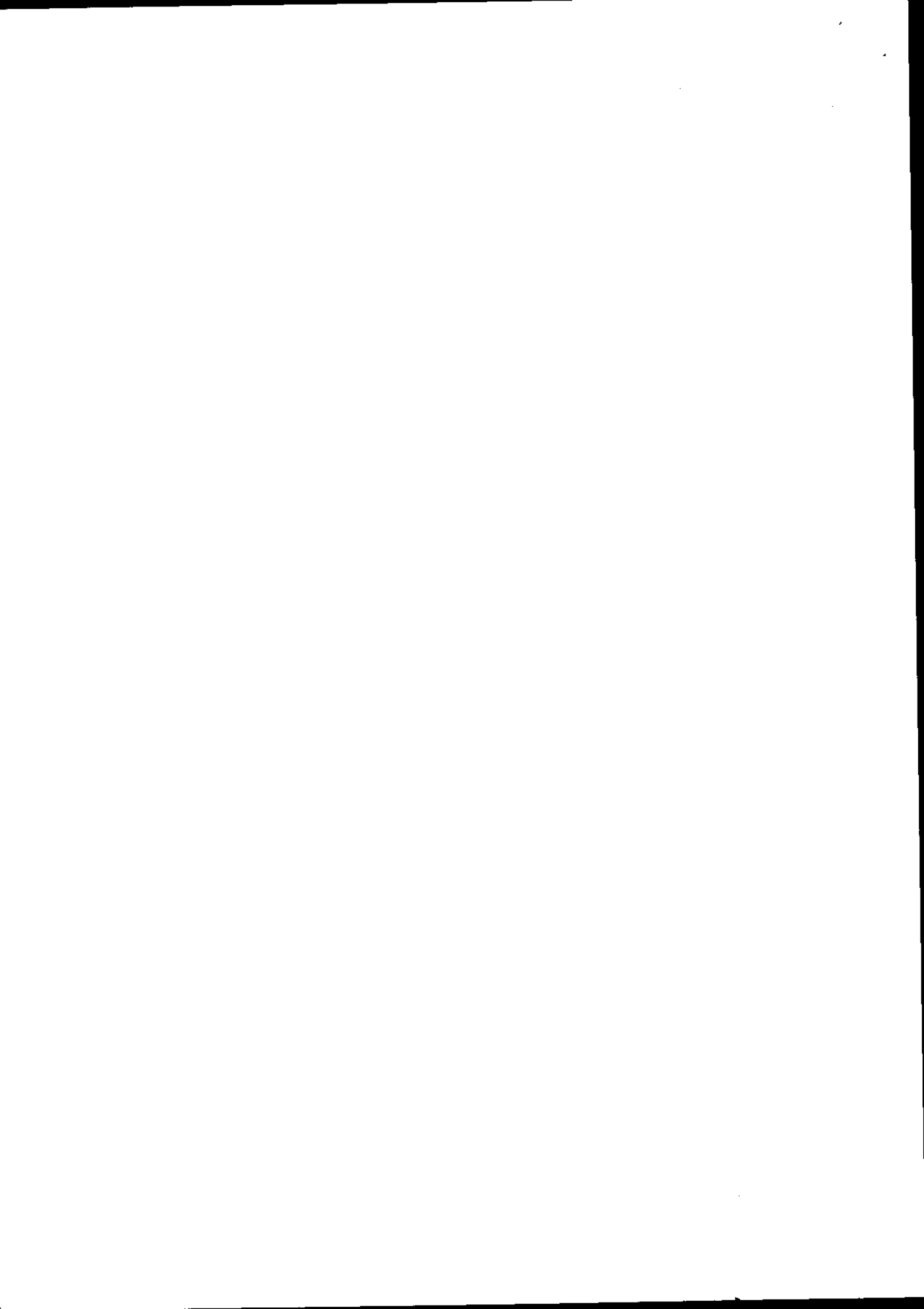
The maximum flow to the storm tanks is therefore 1,250 l/s.



APPENDIX A

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**Screen Details**





Photographs by courtesy of United Utilities

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## The ESCALATOR

a fine channel screen  
with aperture size 6mm  
or less for sewage  
and stormwater

Silver Street  
Huddersfield  
West Yorkshire  
England  
HD5 9BS

Tel 01484 424545

Fax 01484 437379

[sales@longwoodengineering.co.uk](mailto:sales@longwoodengineering.co.uk)

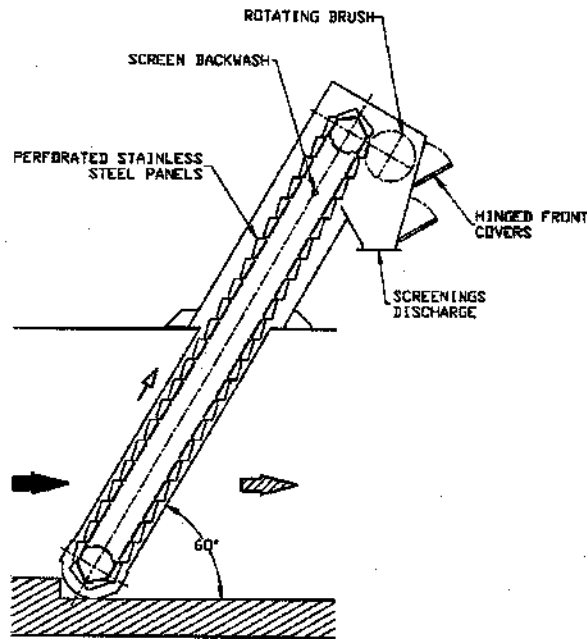
[www.longwoodengineering.co.uk](http://www.longwoodengineering.co.uk)

The  
Longwood Engineering  
Company Limited



LEI22/03





The Escalator gives continuous fine screening and can readily be installed in new or existing channels with a minimum of civil alterations.

The screen is WIMES compliant and performance testing by UKWIR resulted in a screenings capture ratio of 73%.

Construction is very robust and coarse protection is not required.

Stainless steel panels are carried on heavy duty chains and incorporate perforations of 6mm diameter or less. The panels form steps to remove larger screenings.

Flow capacity is dependent on channel width, top water level and perforation size. The screen is normally inclined at 60° but flow capacity can be significantly increased by inclining at 45°.

The unit is available with patented "bucket elements" to provide washwater where no site source is available.

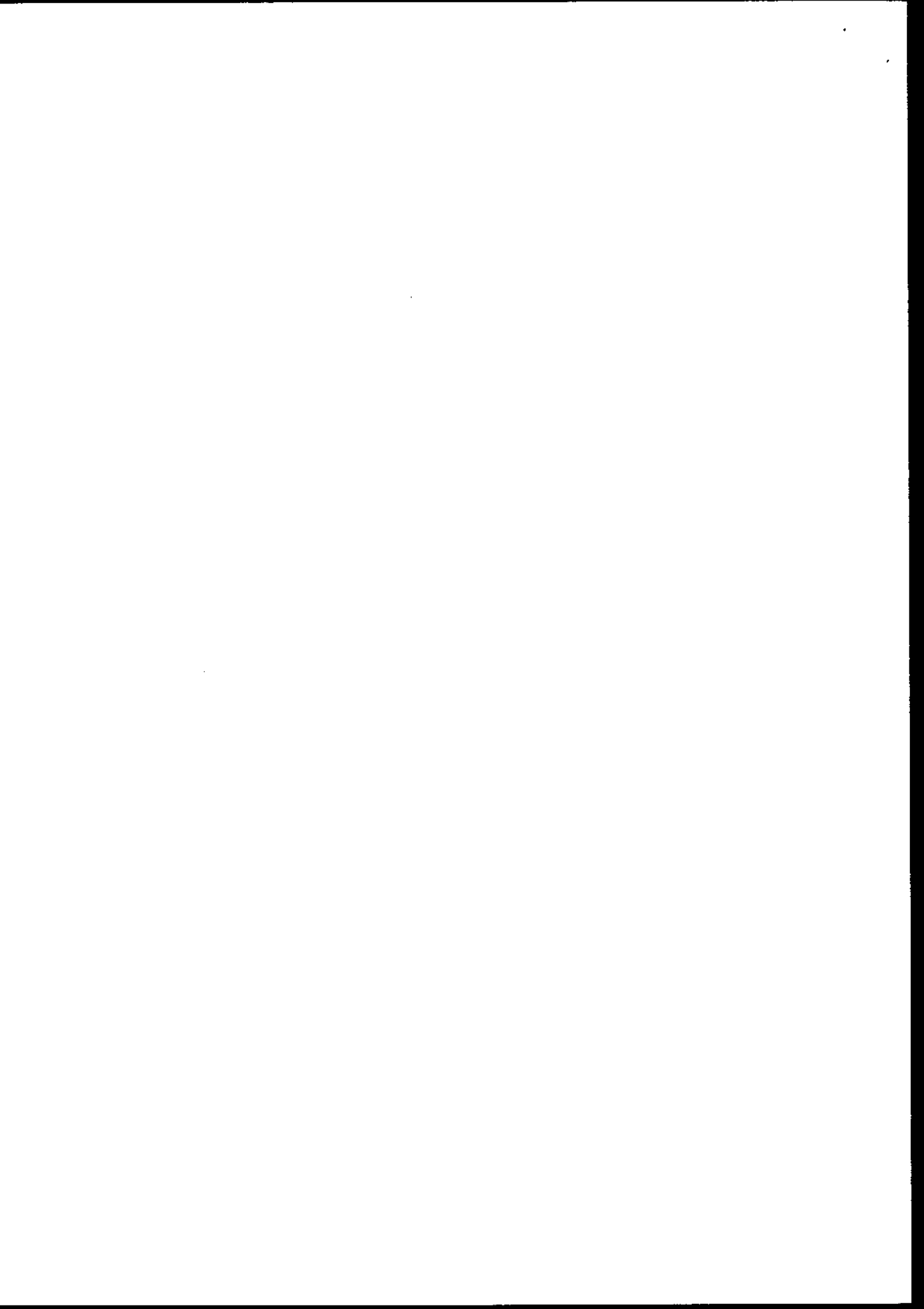
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The  
Longwood Engineering  
Company Limited



LEI22/03



The Longwood Engineering Company Limited

GS-ESC-3/01

## PARKWOOD ESCALATOR

### GENERAL SPECIFICATION

The Parkwood Escalator is a fine screen consisting of continuously moving perforated stainless steel panels.

#### SCREEN CONSTRUCTION

##### FRAME

The frame consists of two lateral mild steel plates connected by means of cross braces with metal protection to WIMES 4.01.

##### CHAINWHEELS

The machine works on the endless chain principle and incorporates two 5 tooth mild steel chainwheels top and bottom. The top wheels are keyed onto the main drive shaft. The bottom wheels are carried on stub shafts incorporating a sealed Nylatron GSM bearing with facility for re-greasing.

##### CHAIN

The chain is a 200 mm pitch single bush conveyor chain without rollers constructed in zinc plated carbon steel with the screen panels directly attached.

Chain pins are special headed screwed studs secured with stainless steel locknuts.

Chain pins and bushes are treated with a special protective coating.

##### SCREEN PANELS

Stainless steel 304 panels incorporate 6 mm diameter perforations as standard and are carried on the chains. The panels are specially formed to give a very rigid construction and create steps to enable larger screenings to be removed.

##### POLYETHYLENE SLIDES

On narrow machines, the chain is supported on guides with polyethylene slides. On wider machines, the guides are positioned inboard to support the panels. This gives a very rugged construction as all the weight of the screen panels and pressure exerted by the flow is transmitted back to the screen frame, not the chains.

##### SEALS

Polyethylene sealing strips are incorporated at each side and polypropylene brushes across the bottom of the screen to prevent screenings from by-passing the screen panels.

In addition, the screen panels have specially profiled plates attached at each end, which effectively cover and protect the side seals.

##### SCREENINGS DISCHARGE

Screenings are discharged on the downstream side of the unit and are removed from the screen panels by a heavy duty rotating brush. The brush material is nylon.

Screenings are delivered down an enclosed chute.

##### GUARDS

A cover with two hinged lockable panels is provided to give access to the rotating brush assembly and screen discharge area. Hinged inspection hatches are also incorporated on the sides of the cover.



The Longwood Engineering Company Limited

GS-ESC-3/01

The upstream side of the screen above coping incorporates handleable panels bolted onto the screen frame.

All guards are stainless steel 304.

**DRIVE UNITS**

The drive to the main shaft is by a Gamak 1440 rpm TEFV weatherproof IP55 motor fitted with an anti-condensation heater. The motor is flanged to a shaft mounted gear unit giving a final output speed of 3 RPM. This produces a linear speed for the screen panels of 3 M/minute.

Dual speed motors are available for larger screens.

The drive should be protected from mechanical overload by an electrical current sensing device in the screen control panel.

The screen discharge incorporates a rotating brush assembly driven by a geared motor with an output speed of 120 RPM.

	UP TO 1500 MM WIDE CHANNEL	ABOVE 1500 MM WIDE CHANNEL
<b>SCREEN DRIVE KW</b>	1.1	2.2
<b>BRUSH DRIVE KW</b>	1.1	1.1

**COOPER  
BEARINGS**

For increased life and ease of maintenance Cooper Split Roller Bearings are incorporated on both the main screen drive shaft and rotating brush drive shaft.

**WASHWATER**

A spray system is incorporated to back wash the screen panels and to help clean the screenings. Final effluent (or potable water) is required at a rate of 2 litres/second at 4 bar pressure.

**STAINLESS STEEL  
CONSTRUCTION**

As an alternative to standard construction, the frame and chain can be manufactured in stainless steel if required.

**WIMES 5.01**

When WIMES 5.01 is specified, the screen will incorporate the following additional features:-

Stainless steel extended grease lines and automatic grease dispensers.

Full bore actuated valve to the spray bar in lieu of a solenoid valve.

**NOTE!**

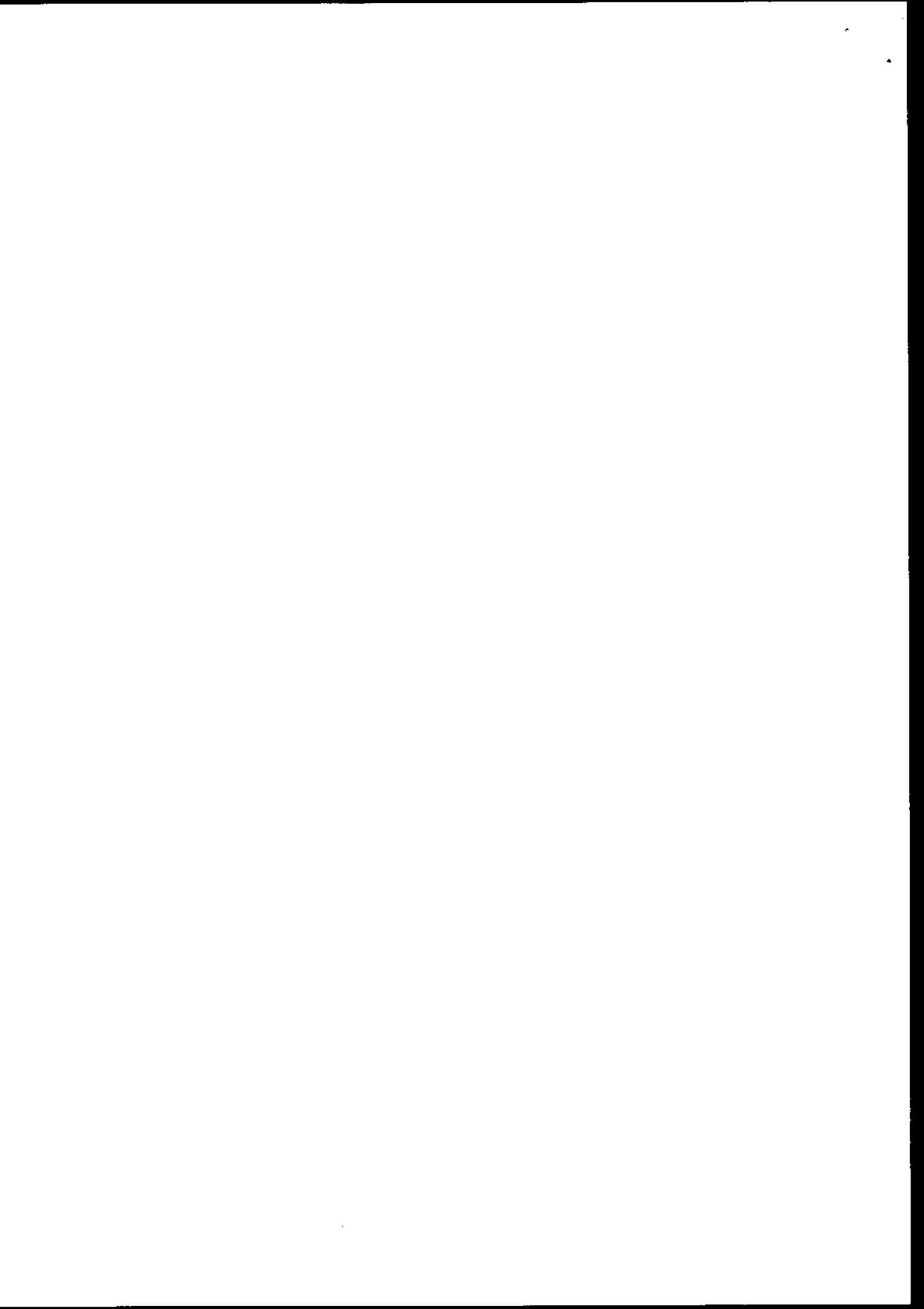
The above is intended as a General Specification only and should any statement given in the Equipment Specification for any particular scheme conflict with this General Specification, then the Equipment Specification shall over-rule in all cases.



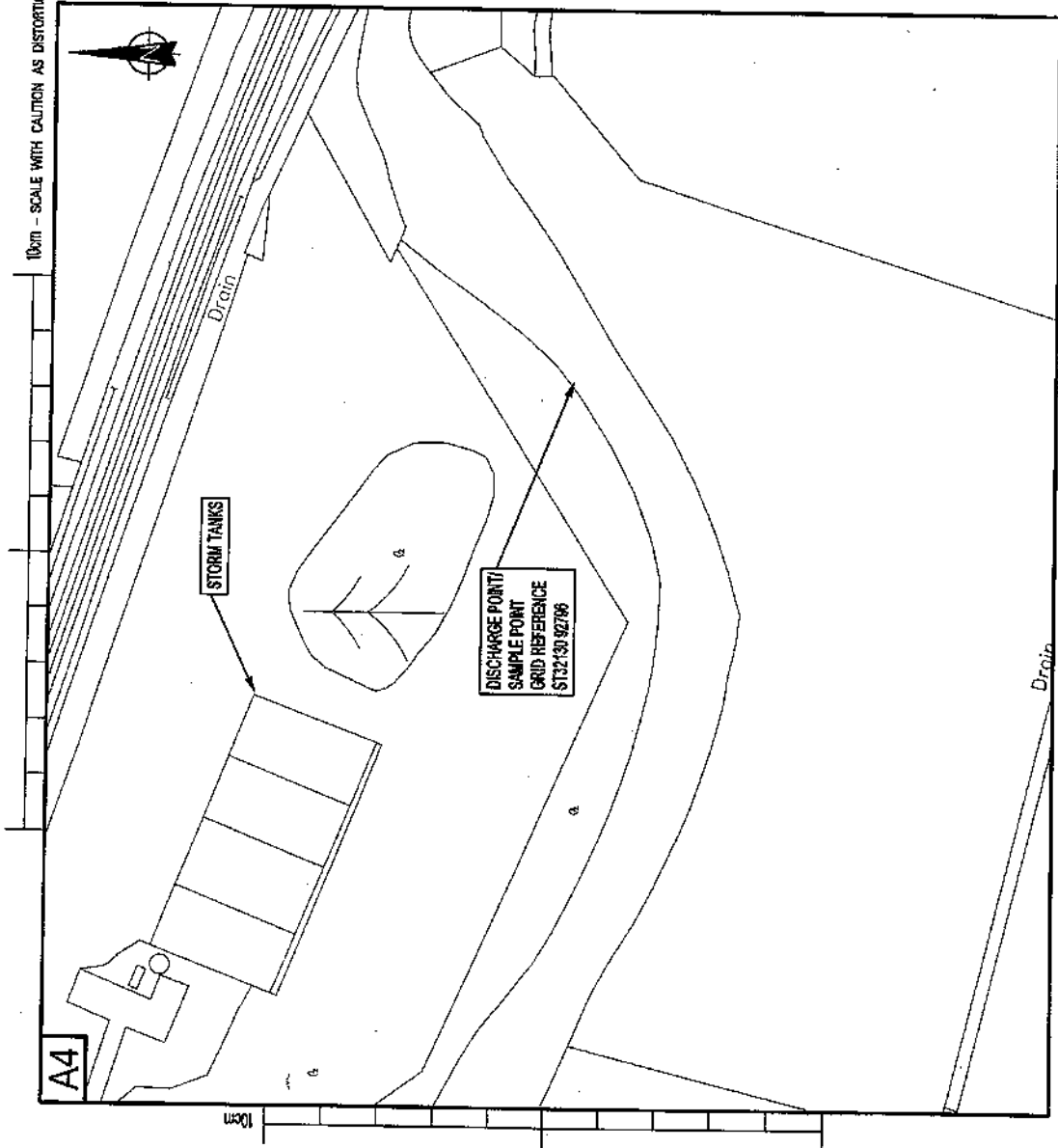
APPENDIX B  

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Location Plan



100m - SCALE WITH CAUTION AS DISTORTION CAN OCCUR



FOR INFORMATION ONLY	
No.	Description
1	25.1.04 LRG

**INFORMATION**

Welsh Water  
Capital Alliance

Cymdeithas Cymru  
FAIR CYMRU

**amec**

DDIN CYMRU  
WELSH WATER

40 The  
**EASTERN VALLEY  
TRUNK SEWER**

Drawing No: **LLANFRECHFA STORM TANKS  
EA LOCATION PLAN**

**ARUP**

4 Parkway, Cardiff, Wales  
CF10 2AA  
Tel: 0300 2007277

Contract No: 66809

Scale: 1:100

Checked: [ ]

Approved: [ ]

Engineer: LTB

Drawn: KOV/N

Drawn No: **M09**

Scale: **500**

Sheet: **10**



APPENDIX C

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**DWF and SOC 'A'**  
**Calculations**



**C1. DWF AND SOC 'A' CALCULATIONS**

$$\text{DWF} = (P \times G) + I + E$$

Where

*P* = population served by upstream sewers or equivalent population

*G* = daily water consumption of 180 litres/head/day

*I* = infiltration rate based on flow survey results (litres/s)

*E* = average trade effluent flow (litres/s)

$$\text{DWF} = \frac{(110,000 \times 180)}{(24 \times 60 \times 60)} + 56 + 9$$

$$\text{DWF} = 294 \text{ l/s}$$

$$\text{SOC 'A'} = \text{DWF} + 1360P + 2E$$

$$\text{SOC 'A'} = 294 + \frac{(110,000 \times 1360)}{(24 \times 60 \times 60)} + (2 \times 9)$$

$$\text{SOC 'A'} = 2,043 \text{ l/s}$$



**Water Resources Act 1991**  
as amended by the Environment Act 1995  
**Consent to Discharge**  
**Certificate of Holder**



**ENVIRONMENT  
AGENCY**

**Part A**

To: DWR CYMRU CYFYNGEDIG  
CONSENTS REGULATION OFFICER  
PLAS-Y-FFYNNON  
CAMBRIAN WAY  
BRECON LD3 7HP

The **Environment Agency** ("the Agency") hereby confirm that the above named person is a/the registered holder of consent AB0064001

Nature of Discharge(s): SEWAGE EFF/STORM EFF/RAINFALL  
at  
LLANFRECHFA STORM TANKS SSO

Note: This certificate should be kept with the consent document for future reference. If you transfer responsibility for the discharge to somebody else you must pass the consent to them and tell the Agency within 21 days. **Responsibility for the consent cannot be disclaimed by the holder but the registration of holder may be transferred to a successor.** To do this please complete the form below, then tear it off and return it to the address shown. If you fail to transfer the consent, even though you are no longer on the site, you may still be liable for prosecution for pollution. If you transfer the consent but do not tell us, you will be committing an offence. In case of any queries please contact your local Environment Agency office.

**Part B** Please complete in block capitals or type.

To:

**Water Resources Act 1991: Notice of transfer of consent to discharge**

**Consent:**

**Name:**

**Address:**

I/We\* hereby serve notice on the Agency that I/we\* am/are\* no longer a/the\* Holder of the above consent which will be/was\* transferred to:

\* delete as appropriate

**Name(s) of new holder(s):**

**Address:**

**Post Code:**

**Date of Transfer to new Holder(s);** .....

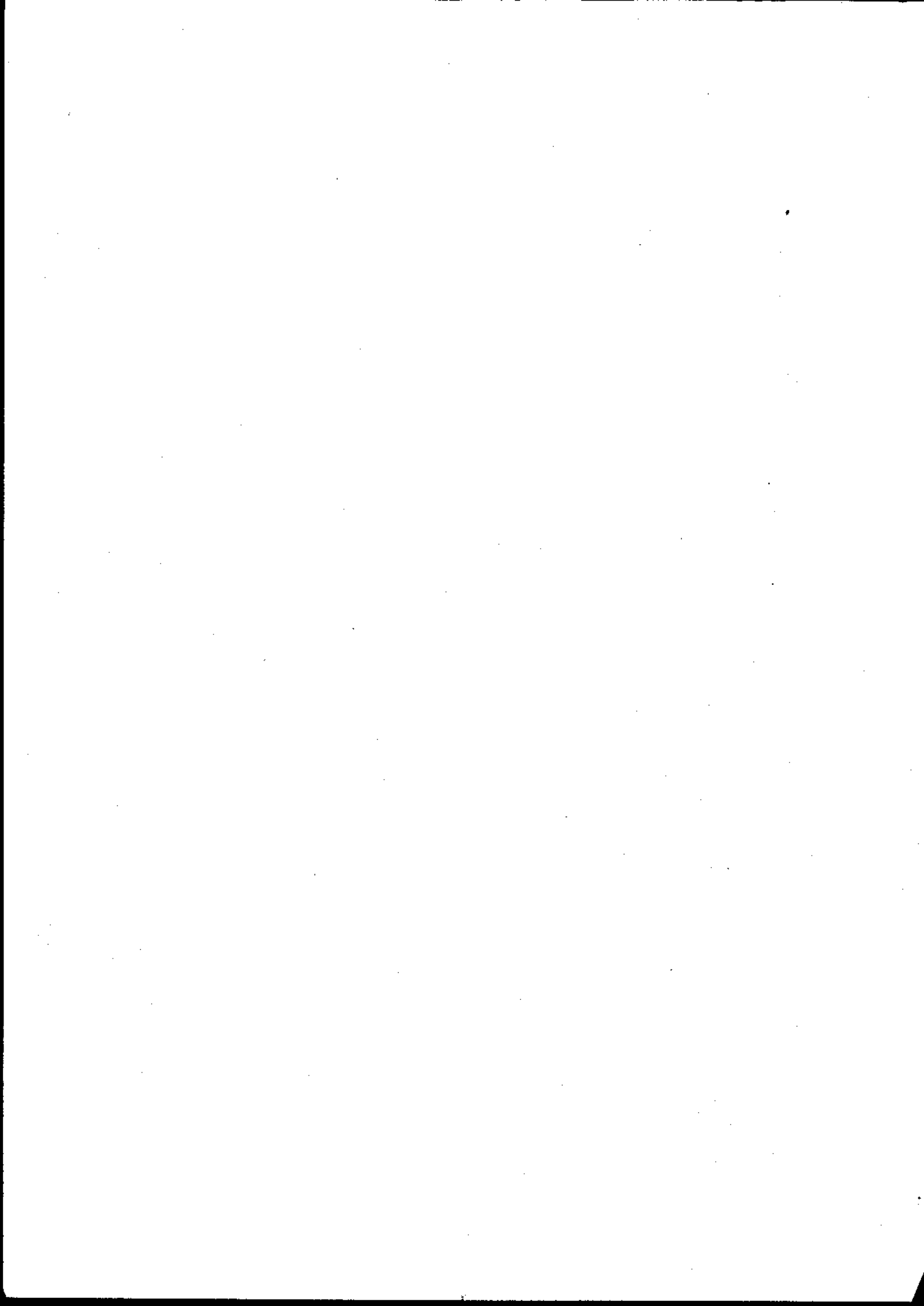
**Signed:**.....

**Dated:**.....

**Name (block capitals):** .....

**Position:** .....





**Water Resources Act 1991**  
as amended by the Environment Act 1995  
**Consent to Discharge**  
**Certificate of Holder**



**ENVIRONMENT  
AGENCY**

**Part A**

To: DWR CYMRU CYFYNGEDIG  
CONSENTS REGULATION OFFICER  
PLAS-Y-FFYNNON  
CAMBRIAN WAY  
BRECON LD3 7HP

The Environment Agency ("the Agency") hereby confirm that the above named person is a/the registered holder of consent AB0064002

Nature of Discharge(s); SEWAGE EFF/STORM EFF/RAINFALL  
at  
LLANFRECHFA PRELIMINARY AND

Note: This certificate should be kept with the consent document for future reference. If you transfer responsibility for the discharge to somebody else you must pass the consent to them and tell the Agency within 21 days. **Responsibility for the consent cannot be disclaimed by the holder but the registration of holder may be transferred to a successor.** To do this please complete the form below, then tear it off and return it to the address shown. If you fail to transfer the consent, even though you are no longer on the site, you may still be liable for prosecution for pollution. If you transfer the consent but do not tell us, you will be committing an offence. In case of any queries please contact your local Environment Agency office.

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Address:

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\* delete as appropriate

Name(s) of new holder(s):

Address:

Post Code:

Date of Transfer to new Holder(s); .....

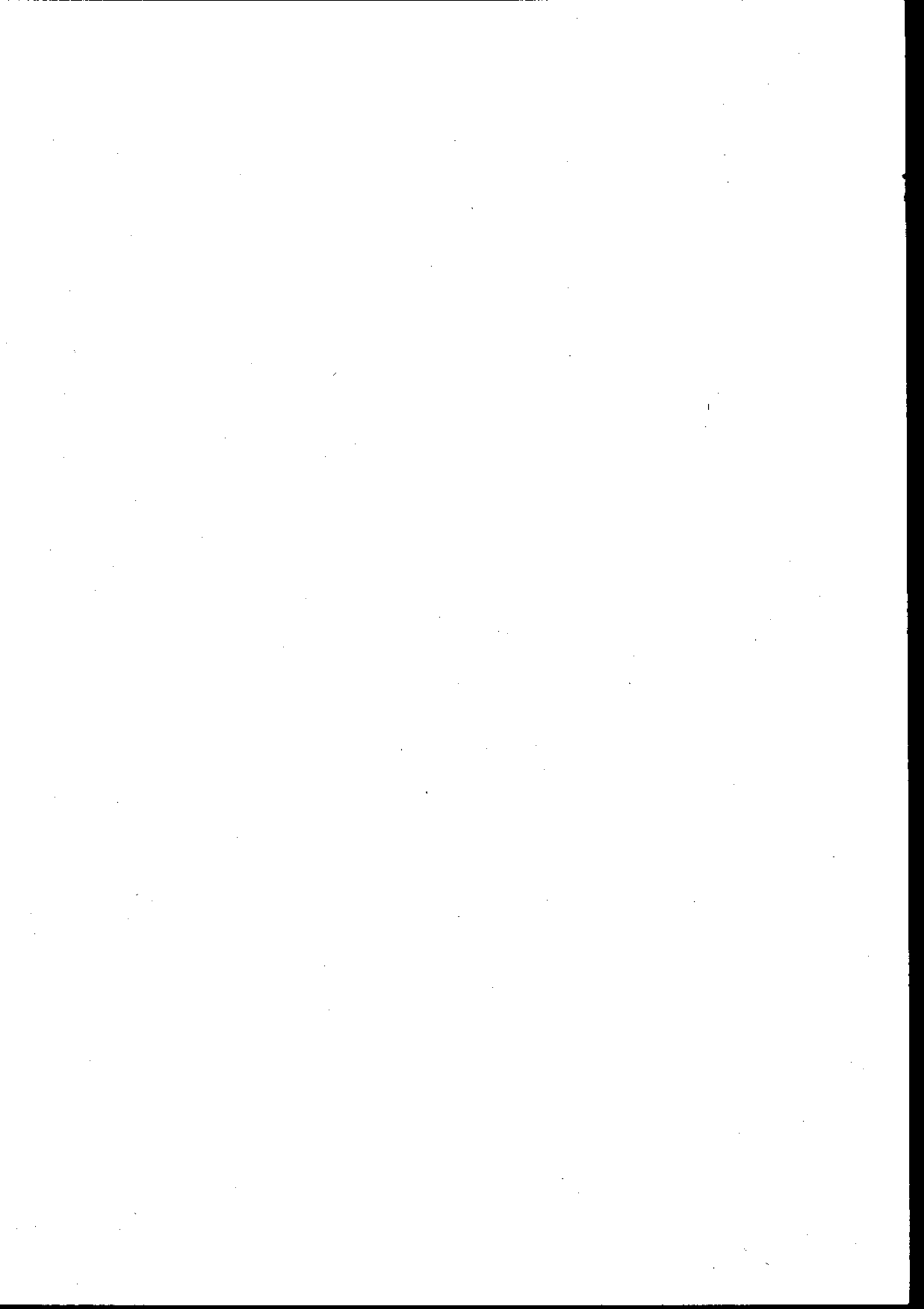
Signed: .....

Dated: .....

Name (block capitals): .....

Position: .....





Please return this form to:

Consents Officer.  
N.R.A. Welsh Region,  
FREEPOST  
Rivers House,  
St. Mellons Business Park,  
St. Mellons,  
Cardiff,  
CF3 7ZZ.

Our records contain the following consent details:

Name and Address Of Owner:

Dwr Cymru Cyfyngedig,  
Plas Y Ffynnon,  
Cambrian Way,  
Brecon,  
Powys LD3 7HP

Consent No.: AB0064001      Operative Date : 04th December 1968

Is this discharge still in operation ? YES  NO

If NO, do you wish this consent

If you wish this consent to be  
This discharge is not in operation

Signed : \_\_\_\_\_

If you do not wish this consent  
which follow and supply further

Address of premises  
Location of discharge :

Llanfrechfa Storm Tanks Sso

Storm Water Overflow

Outlet National Grid Refer

Population Served : \_\_\_\_\_

Is discharge periodic or

For office use only:

Reference No.: ABC0064001

Reply Received 22 MAY 91

Action FOR A 22/5/91 SK

NATIONAL RIVERS AUTHORITY	
For office use only:	
Reference No.:	
Reply Received:	
Action FOR:	
File:	
Other:	

Please indicate changes:

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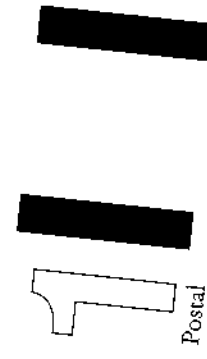
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Postal Service

AD

ils



this card is to be posted back to this address

Cynghordeb, Environment Agency,  
 Abacus Hse, St Mellons,  
 CARDIFF  
 Postcode CF3 0LT



Discharge Consent Conditions :

Condition Name	Limit Unit	Ind
DISCHARGE DAILY VOLUME MAXIMUM	68473 m3	
OIL AND GREASE	0 mg/l	

Other Details.

Note: If the discharge has changed in composition or volume since the consent was issued, please indicate the changes above.

If you wish future bills to be sent to a name and address other than that shown at the top of the previous page then please complete the details here.

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Please give a contact name and telephone number here.

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Signed : J Adams pp S Lewis Date: 20.5.91



# COPY



Awdurdod Afonydd Cenedlaethol  
Rhanbarth Cymru

National Rivers Authority  
Welsh Region

WATER ACT 1989

Consent No. AB 0064001/02

Under Section 113 and Schedule 12 of the Water Act 1989 and all other enabling powers the National Rivers Authority hereby gives this

### REVIEW OF CONSENT

Page 1 of 3

To : Dŵr Cymru Cyf (The Company)  
Of : Plas-y-Ffynnon, Cambrian Way, Brecon, Powys. LD3 7HP

In respect of the previous Consent No. AB 0064001 issued on 4th December 1968

For : A discharge of settled storm sewage<sup>(01)</sup> and storm sewage<sup>(02)</sup>

To : The Afon Lwyd

From: The Llanfrechfa preliminary and storm treatment works, Ponthir, Gwent.

### REVIEWED CONDITIONS OF CONSENT

1. The terms and conditions specified in the previous consent No. AB0064001 issued on the 4th December 1968 shall continue in force until the 31st July 1993. On 1st August 1993 the following conditions shall come into effect and shall replace all previous consent conditions issued in respect of this discharge.
2. The discharge shall consist of: settled storm sewage and/or storm sewage.
3. The discharge shall be made in the manner and at the place specified as follows:  
  
Discharging via : a 2000 mm wide concrete channel in a headwall  
Discharging to : The Afon Lwyd  
At OS Grid Ref : ST 3214 9278  
As shown marked : Discharge Point On attached Plan No.: PSTW1
4. All sewage flows up to 886 litres per second shall pass forward to Ponthir sewage works for full biological treatment.
- 5a) All sewage flows between 886 litres per second and 2136 litres per second shall receive settlement before discharge. The capacity of the storm tanks shall not be less than 3,300 cubic metres.
- 5b) The maximum volume of settled storm sewage discharged shall not exceed 108,000 cubic metres in any period of twenty four consecutive hours.

Aelod Rhanbarthol o'r Bwrdd  
Yr Athro Ron Edwards

Rheolwr Rhanbarth Cyffredinol  
Dr John Stoner

Plas-yr-Afon  
Parc Busnes Lloneirwg  
Lloneirwg  
Caerdydd CF3 0LT  
Ffôn: Caerdydd (0222) 770088  
Ffacs: (0222) 798555

Regional Board Member  
Professor Ron Edwards  
  
Regional General Manager  
Dr John Stoner  
  
Rivers House  
St Mellons Business Park  
St Mellons  
Cardiff CF3 0LT  
Tel: Cardiff (0222) 770088  
Fax: (0222) 798555





WATER ACT 1989

Consent No. AB 0064001

Under Section 113 and Schedule 12 of the Water Act 1989 and all other enabling powers the National Rivers Authority hereby gives this Review of Consent

Continuation Sheet

Page 2 of 3

- 5c) The effluent from the storm tanks shall not contain any solids which would be retained on a screen the aperture size of which does not exceed 6mm.
6. Sewage flows in excess of 2136 litres per second may pass directly to the river provided that they do not contain solids which would be retained on a screen the aperture size of which does not exceed 6mm.
7. The Company shall provide and maintain in full working order, apparatus approved by the Authority, to continuously measure and record the rate and quantity of settled storm sewage discharging to the river and the rate and quantity of storm sewage discharging directly to the river. The accuracy of this apparatus shall be agreed with the Authority in writing prior to the commencement of this Consent.
8. Records shall be kept for at least 2 years of the total daily volume and rate of discharge of the effluent and in particular of the readings of meters and recording apparatus provided in compliance with any condition of this Consent.
9. Returns, in a form approved by the Authority, shall be made as and when required by the Authority and shall include total daily volumes and maximum flow rates of the effluents discharged.
10. Facilities shall be provided by the Company for authorised officers of the Authority to safely and conveniently obtain representative samples, at any time, of the settled storm sewage effluent, the storm sewage effluent and a combination of both prior to discharge into the river.
11. After cessation of storm sewage flows into the tanks and as soon as incoming flows permit, the tank contents shall be returned for biological treatment within twenty four hours and the tanks cleaned. The tank washings shall also be returned for biological treatment.





*Au Gwerddol Afonydd Cenedlaethol  
Rheolwrth Cymru*

*National Rivers Authority  
Welsh Region*

Consent No.	AB 0064001
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**WATER ACT 1989**

**Under Section 113 and Schedule 12 of the Water Act 1989 and all other enabling powers the National Rivers Authority hereby gives this Review of Consent**

**Continuation Sheet**

**Page 3 of 3**

12. All available storm tank capacity shall be fully utilised before any settled storm sewage discharge occurs.
13. For the purposes of this Consent 'Sewage' shall mean domestic sewage only or in admixture with trade effluent.

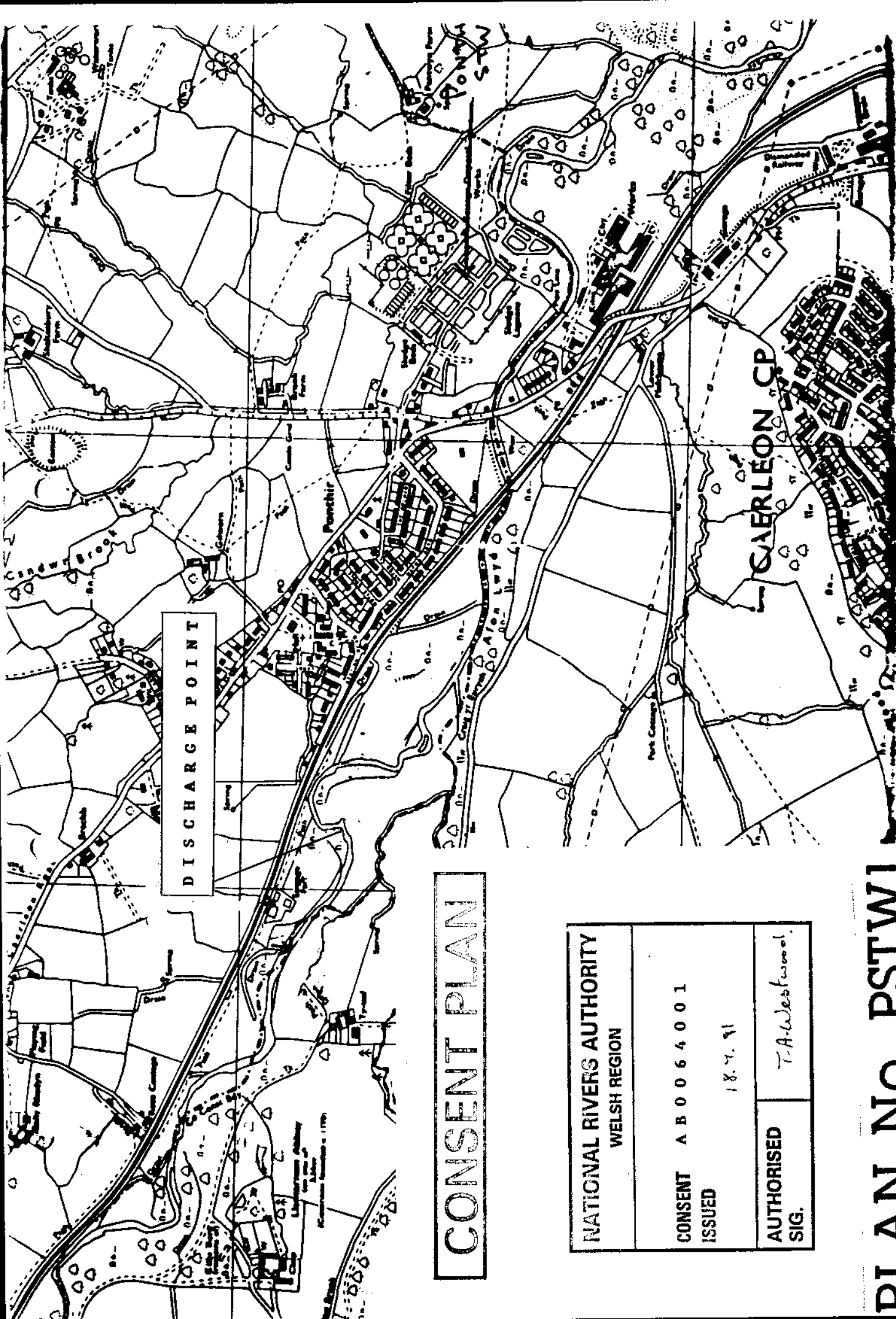
This Consent is given on: 18th July 1991 on behalf of the Authority  
by: T.A. Westwood DIVISIONAL SCIENTIST.

During the period ending with the: 17th July 1993 the terms of this  
Consent will not be altered without the written agreement of the person  
making this discharge.

Aeolwr Rheolwrthol o'r Bwrdd  
Yr Athro Ron Edwards  
Rheolwr Rheolwrthol Cyffredinol  
Dr John Stoner  
Pobolwrtholwr  
Parc Busnes Llanerwg  
Llanerwg  
Coedwrdd CF3 0LT  
Ffôn: Coedwrdd (0222) 770088  
Ffôn: (0222) 798555

Regional Board Member  
Professor Ron Edwards  
Regional General Manager  
Dr John Stoner  
Rivers House  
St Mellons Business Park  
St Mellons  
Cardiff CF3 0LT  
Tel: Cardiff (0222) 770088  
Fax: (0222) 798555

100



DISCHARGE POINT

CONSENT PLAN

NATIONAL RIVERS AUTHORITY WELSH REGION	
CONSENT ISSUED	A B 0 0 6 4 0 0 1 18.7.91
AUTHORISED SIG.	T.A. Westwood.

PLAN NO. PSTWI



RIVERS (CONTROL OF POLLUTION) ACTS 1951-1961  
THE WATER AUTHORITIES (CONTROL OF DISCHARGES) ORDER 1978

I am directed by the Secretary of State for Wales to refer to the discharge consent in respect of the ..PONTNAR..... sewage treatment works dated 27..APRIL..... 1983.

The Secretary of State for Wales, having consulted with the Welsh Water Authority, hereby gives notice that in exercise of his powers under Articles 4(8) and 8 of the Water Authorities (Control of Discharges) Order 1978 (SI 1978 No 1210), the conditions imposed on the said consent shall be varied in the following terms:

CONDITIONS

The quality and quantity of effluent shall not exceed the following maximum values:

Biochemical Oxygen Demand (+ ATU) over 5 days at 20°C; .....130..... (3) milligrammes per litre.

Suspended Solids dried at 105°C; .....100..... (4) milligrammes per litre.

Ammoniacal ammonia expressed as nitrogen ..... milligrammes per litre.

Dry Weather Flow ..... litres per second or 24.170... metres cubed per day. (2)

maximum rate of flow 949 litres per second or (1) 88992 metres cubed per day.

This variation takes effect from the ..30. January 1985.

This notice should be retained with the consent dated 27..APRIL..1983.

*Gyoung Roberts*

WEP Division  
Welsh Office



LOCAL GOVERNMENT ACT 1972 WATER ACT 1973  
RIVERS (PREVENTION OF POLLUTION) ACTS 1951-1961  
WATER AUTHORITIES (CONTROL OF DISCHARGES) ORDER 1978

NOTIFICATION OF VARIATION OF CONSENT  
for a discharge of treated sewage effluent

To :

WELSH WATER AUTHORITY

This Notice is issued under the above-mentioned Acts and Order and all other enabling powers as a NOTICE DEEMED TO HAVE BEEN GIVEN BY THE SECRETARY OF STATE FOR WALES, in respect of the existing discharge of treated sewage effluent from the Authority's :

PONTHIR SEWAGE TREATMENT WORKS

via an existing outlet and subject hitherto to a previous consent as specified below.

THE EXISTING OUTLET is to : Usk estuary

at National Grid Reference : ST 3351 9241

and has been shown marked : Discharge Point

on the attached Plan, No. : RW/0704/T/1

THE PREVIOUS CONSENT was : the Consent

Reference No. -

granted on : 4th December 1968

by : Usk River Authority

to : Eastern Valley Joint Sewerage Board

The Authority submitted this Notification of Variation on : 27th January 1983 to the Secretary of State for Wales in the form of a draft and the Secretary of State has NOT, within the relevant period, given notice of his intention to determine this matter. This discharge is therefore (in substitution for all the conditions hitherto in force) subject only to the following conditions as from : 27th April 1983

CONDITIONS

1. The discharge shall consist only of treated sewage effluent from the above works.
2. The quality and quantity of effluent shall not exceed the following maximum values:

<u>Determinand</u>	<u>Value</u>	<u>Unit</u>
Biochemical Oxygen Demand (+ATU) over 5 days at 20°C	130	milligrams per litre
Suspended Solids dried at 105°C	100	milligrams per litre

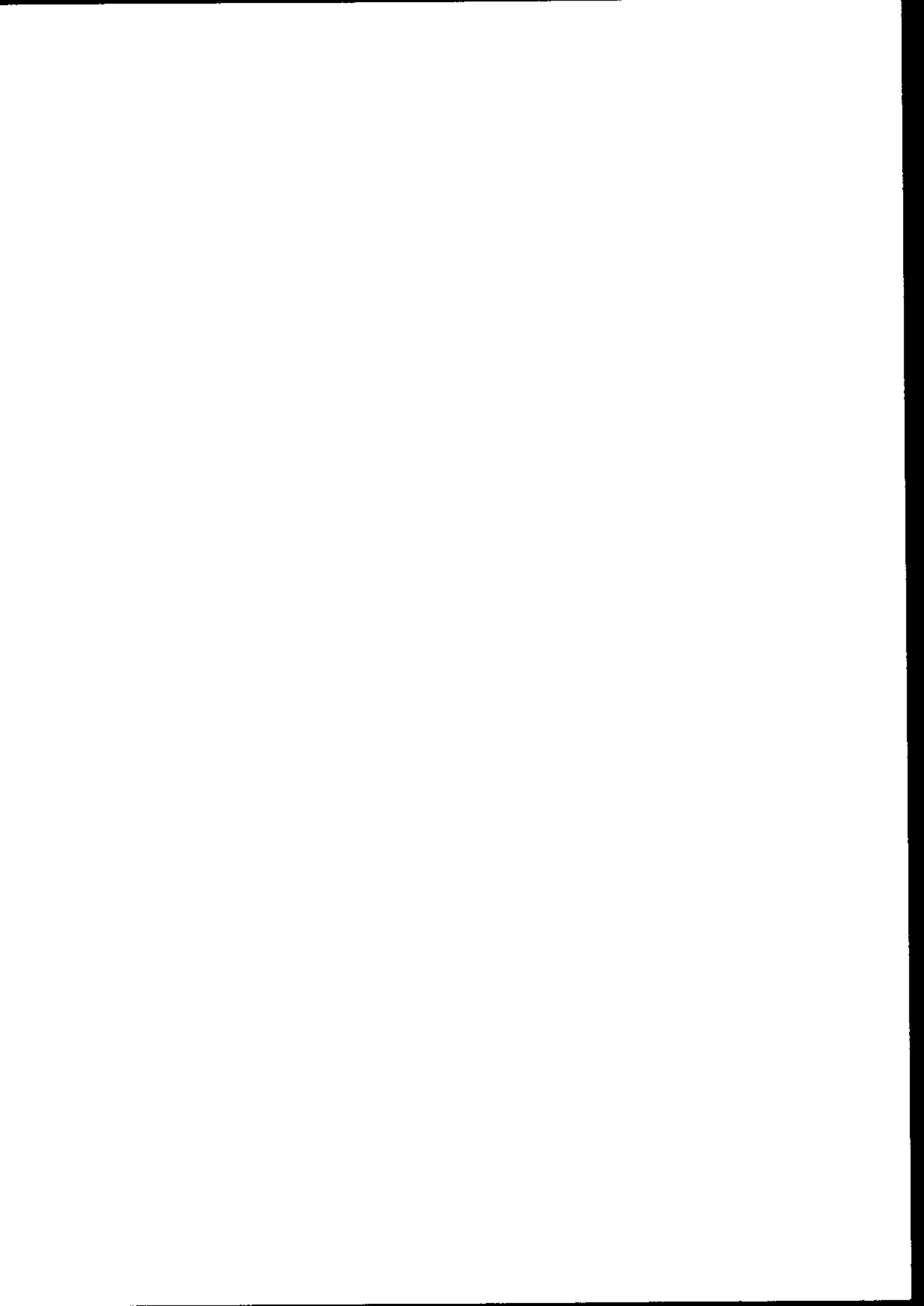
Rate of discharge	949	litres per second
Volume during any period of 24 consecutive hours	82000	cubic metres
Volume discharged under 'dry weather conditions' during any period of 24 consecutive hours	22800	cubic metres

3. Adequate facilities shall be provided for the taking of samples of the effluent at: manhole at OSGR ST 34195 91135, just south of Usk Road, Caerleon

(Additional conditions are set out on Sheet 2).

The terms of this Notice will not, without the consent in writing of the person to whom this Notice is given, (or his successor), be altered before the expiration of the period ending with the Twenty-seventh day of April 19 85.

This Notification is issued by the Directorate of Scientific Services, Headquarters, Welsh Water Authority, Cambridge House, ...



This Continuation Sheet is part of the Notification of: Variation of Consent  
deemed granted by the Secretary of State for Wales on: 27th April 1983.  
and is in respect of: a discharge of sewage effluent  
from the Authority's: PONTNIR SEWAGE TREATMENT WORKS

Sheet  
of

4. In addition to the limits specified in Condition 2 on Sheet 1 of this Notification,  
the quality and quantity of effluent shall not exceed the following maximum values:

<u>Determinand</u>	<u>Value</u>	<u>Unit</u>
Total Copper as Cu	0.15	milligrams per litre
Total Cadmium as Cd	0.02	milligrams per litre
Total Chromium as Cr	0.2	milligrams per litre
Total Zinc as Zn	0.3	milligrams per litre





DWR CYMRU

*Dave*  
Please will you register  
and return to me

*DW.*  
31.1.90

D H Williams Esq  
Pollution Control Manager  
NRA Rivers House  
St Mellons Business Centre  
St Mellons

WELSH NATIONAL RIVERS AUTHORITY					
Letter No.					
File Ref.					
REC'D 31 JAN 1990					
TO	CIMAN	RM	ANALYSE & D	FB	
FROM	FIN.	I.T.	LEGAL	PERS.	PLAN
FILE					
OFFICER	SIGNED			APPROVED	DATE

Dyddiad/Date:  
30th January 1990  
Ymholiadau/Enquiries:

Ein Cyf/Our Ref:  
SHL/GJPJ/SS469 SW  
Eich Cyf/Your Ref:

Dear *David*

Ponthir STW Improvements  
Formal Application for Consent Variation

I am enclosing COPA4 forms for the variation of conditions of consent for:-

- a) Screened Storm Sewage (Llanfrechfa) *AN02 142 (AB0064002) used instead.*
- b) Settled Storm Sewage (Llanfrechfa)
- c) Final Effluent (Ponthir STW)

Our consultants have been briefed to finalise the feasibility studies and the pre-design report by March 1990 to permit detailed design studies to commence at an early date. It is anticipated that construction work will commence in the financial year 1990/91 to ensure the completion of the extensions by 1993.

I do not have the information you require from WASP analyses but I shall forward it as soon as possible.

John Mosedale has informed me that you have the residual flow diagrams for the river Usk which includes data for the inclusion of effluent and removals due to abstraction. I shall be grateful if you will send me this information or any updated version you may consider necessary.

Plas y Ffynnon Ffordd Cambria Aberhonddu Powys LD3 7HP  
Ffôn: Aberhonddu (0874) 3181 Telex: 497429 Teleffacs: (0874) 4167

Plas y Ffynnon Cambrian Way Brecon Powys LD3 7HP  
Tel: Brecon (0874) 3181 Telex: 497429 Telefax: (0874) 4167

Dŵr Cymru Cyf. cwmni cyfyngedig wedi'i gofrestru yng Nghymru Rhif 2366777 Un o grŵp cwmnïau Welsh Water PLC  
Swyddfa Gofrestredig: Plas y Ffynnon Ffordd Cambria Aberhonddu Powys LD3 7HP  
Dŵr Cymru Cyf. a limited company registered in Wales No 2366777 One of the Welsh Water PLC group of companies  
Registered Office: Plas y Ffynnon Cambrian Way Brecon Powys LD3 7HP



I wish to discuss the proposed consent condition at an early stage so that any contentious conditions can be resolved before you issue the consent.

As the 3 applications are for variations of consents and will result in more stringent conditions I presume that they will not need to be advertised.

Yours sincerely



S H Lewis  
Consents Regulation Officer

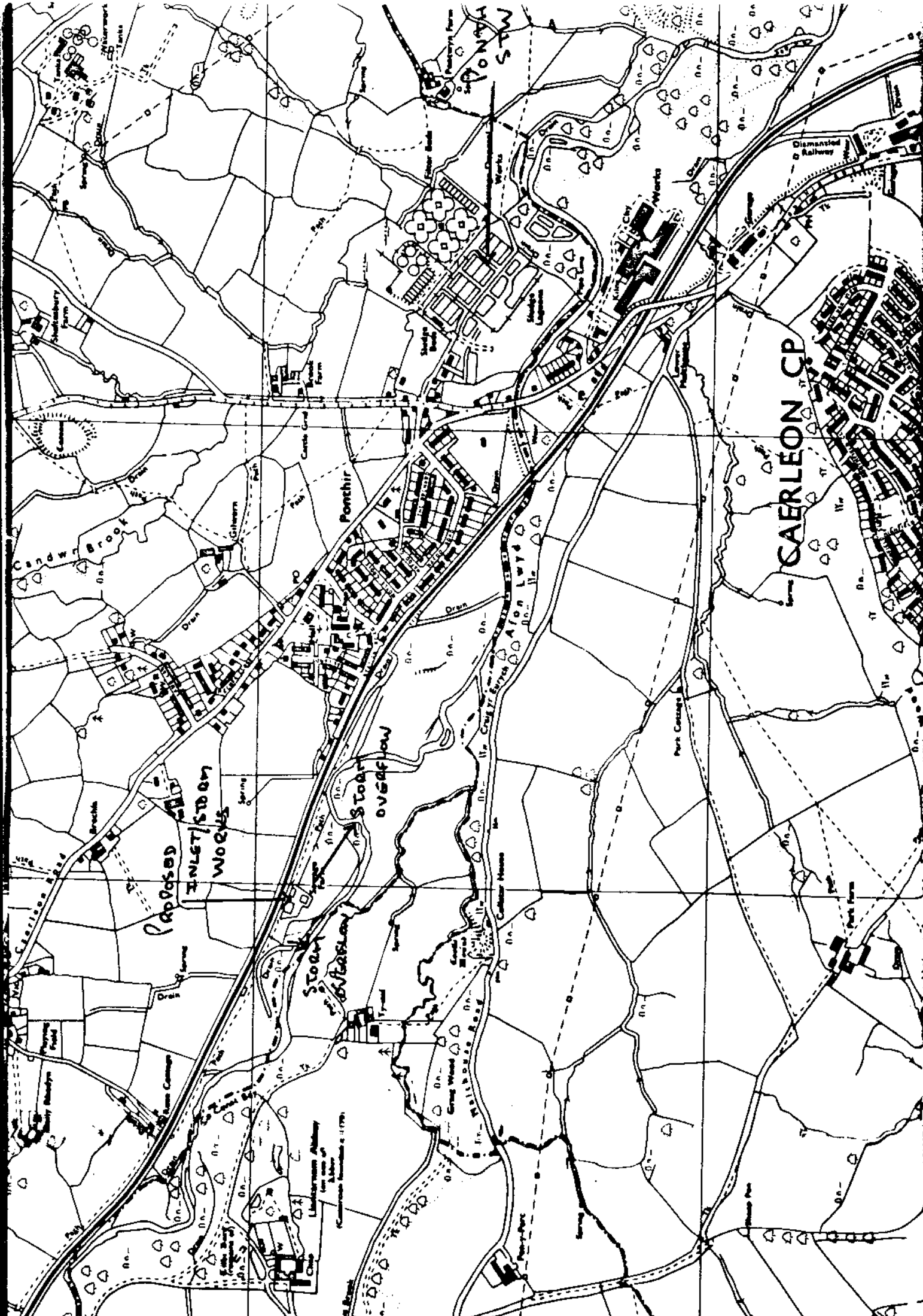


<b>WELSH WATER AUTHORITY</b>		Welsh Office Form COP44		Welsh Off Ref		AN0214201					
<b>SUPPORTING INFORMATION FOR CONSENT/REVIEW - WWA Form SS.SI.1</b>						Welsh W A Ref					
DISCHARGER + Agent		<b>DWR CYMRU CYF</b>						WMA District		/	
PREMISES / SOURCE Address/Location		<b>LLANFRECHFA NEW PRELIMINARY AND STORM TREATMENT WORKS</b>									
DISCHARGE TYPE		<b>SCREENED STORM OVERFLOW</b>									
DISCHARGE STATUS		New req Consent	Exg req Review		Exg req Consent		Prevly Exempt	Tempy until			
CONSENT / REVIEW EXISTING - issued		To:			By:			Date:			
ADVERTISEMENT ?		Yes / No because:									
OUTLET DETAILS		New / Altered / Exg	OS Ref	5T31889286		Ofam	mm	Form			
SAMPLING POINT		TOIB SPT	OS Ref	Outlet /							
DISCHARGE IS TO		Inland Stream	Landl Pond	Onto Land	Into Land	Groundwtr	Estuary	Coastal			
RECEIVING WATER		(Immediate / Main	<b>AFON LNYD / kms &gt; USK</b>								
Water in current RQO Programme ?		Data for :	Current Situatn		Short-term RQO		Long-term RQO		TOIB SPT Refs		
Assessed by :		NWC	Bio1	NWC	Bio1	by	NWC	Bio1	by		
Immed. Yes / No		Immed. Up / Down	/	/	/	/	19	/	/		
Main Yes / No		Main Up / Down	/	/	/	/	19	/	/		
USE(S) OF THE RECEIVING WATER, whether surface or groundwater		Exg / Future Use(s)	PotWS	IndWS	AgrWS	Stock	SalFish	CrsFish	WSports	VisAmen	Other
Of Immed R.W. @ km											
Of Main R.W. @ km											
Effect of discharge on uses, etc.											
EFFLUENT QUALITY DATA - derived from: samples taken from: to :		Determinand									
		Maximum									
		Minimum									
		Mean									
		Standard deviation									
		Median / 50%ile									
(mg/l except pH)		95%ile: N / LN / NP									
QUALITY LIMITS (mg/l except pH) 5/4 if seasonal 1/2 if phased		Existing									
		Proposed 95%ile									
		Proposed Maximum									
		Application									
CALCULATION MODE		To Quality Spec'n									
		Method used									
EFFLUENT FLOW DATA		P Popul'n No.	G Consum'n m³/h/d	PG Sewage m³/d	I Infil'n m³/d	E Trace m³/d	PG+I+E CWF m³/d	Storm Sewage Offlow Weir Setting		Maximum Rate 1/sec	Maximum Daily vol m³/d
Existing Design											
Meas/Escd Current											
Proposed Design		100000	0.14	14000	11126	7820	32946	5.6	2140	1430	
Ultimate Design											
Design Horizons: Proposed: Ultimate:		Sewerage system is % combined		Flow values for Consent Conditions		Existing		Proposed			



WELSH WATER AUTHORITY		Welsh Office Form COP44		Welsh Off Ref		AR0064001					
SUPPORTING INFORMATION FOR CONSENT/REVIEW - WWA Form SS.SI.1				Welsh W A Ref							
DISCHARGER + Agent		DWA CYMRU CYF				WWA District		1			
PREMISES / SOURCE Address/Location		LLANFRENCHFA NEW PRELIMINARY AND STORM TREATMENT WORKS									
DISCHARGE TYPE		STORM TANK DISCHARGE									
DISCHARGE STATUS		New reqg Consent	Exg reqg Review	Exg reqg Consent	Prevly Exempt	Tendy until					
CONSENT / REVIEW EXISTING - issued		To:			By:		Date:				
ADVERTISEMENT ?		Yes / No because:									
OUTLET DETAILS		New / Altered / Exg	OS Ref	ST32149276	Diam	mm	Form				
SAMPLING POINT		TDIB SPT	OS Ref	Outlet /							
DISCHARGE IS TO		Inland Stream	<input checked="" type="checkbox"/>	Land Pond	Onto Land	Into Land	Groundwtr	Estuary	Coastal		
RECEIVING WATER		Immediate / Main	AFON LNYD / kms > USK								
Water in current RQO Programme ?		Data for :	Current Situatn	Short-term RQO			Long-term RQO		TDIB SPT Refs		
Immed. Yes / No		Assessed by :	NWC	Biol	NWC	Biol	by	NWC	Biol	by	Up / Down
Main Yes / No		Immed. Up / Down	/	/	/	/	19	/	/	19	/
		Main Up / Down	/	/	/	/	19	/	/	19	/
USE(S) OF THE RECEIVING WATER, whether surface or groundwater		Exg / Future Use(s)	PotwS	IndwS	AgrwS	Stock	SalFish	CrsFish	WSports	VlsAmen	Other
		Of Immed R.W. @ km									
		Of Main R.W. @ km									
		Effect of discharge on uses, etc.									
EFFLUENT QUALITY DATA - derived from: samples taken from: to : (mg/l except pH)		Determinand									
		Maximum									
		Minimum									
		Mean									
		Standard Deviation									
		Median / 50%ile									
		95%ile: N / LN / NP									
QUALITY LIMITS (mg/l except pH) 5/4 if seasonal 1/2 1 <sup>st</sup> phased		Existing									
		Proposed 95%ile									
		Proposed Maximum									
		Application									
CALCULATION MODE		To Quality Spec'n									
		Method used									
EFFLUENT FLOW DATA		P Popul'n No.	G Consum'n m <sup>3</sup> /h/d	PG Sewage m <sup>3</sup> /d	I Infil'n m <sup>3</sup> /d	E Trade m <sup>3</sup> /d	PG+I+E CWF m <sup>3</sup> /d	Storm Sewage Offlow Weir Setting x CWF 1/sec		Maximum Rate 1/sec	Maximum Daily Vol m <sup>3</sup> /d
Existing Design											
Meas/Estcd Current											
Proposed Design		100,000	0.14	14000	11126	7820	32946	2.32	886	1250	
Ultimate Design											
Design Horizons: Proposed: Ultimate:		Sewerage system is % combined	Flow values for		Existing						
			Consent Conditions		Proposed						







WELSH WATER AUTHORITY

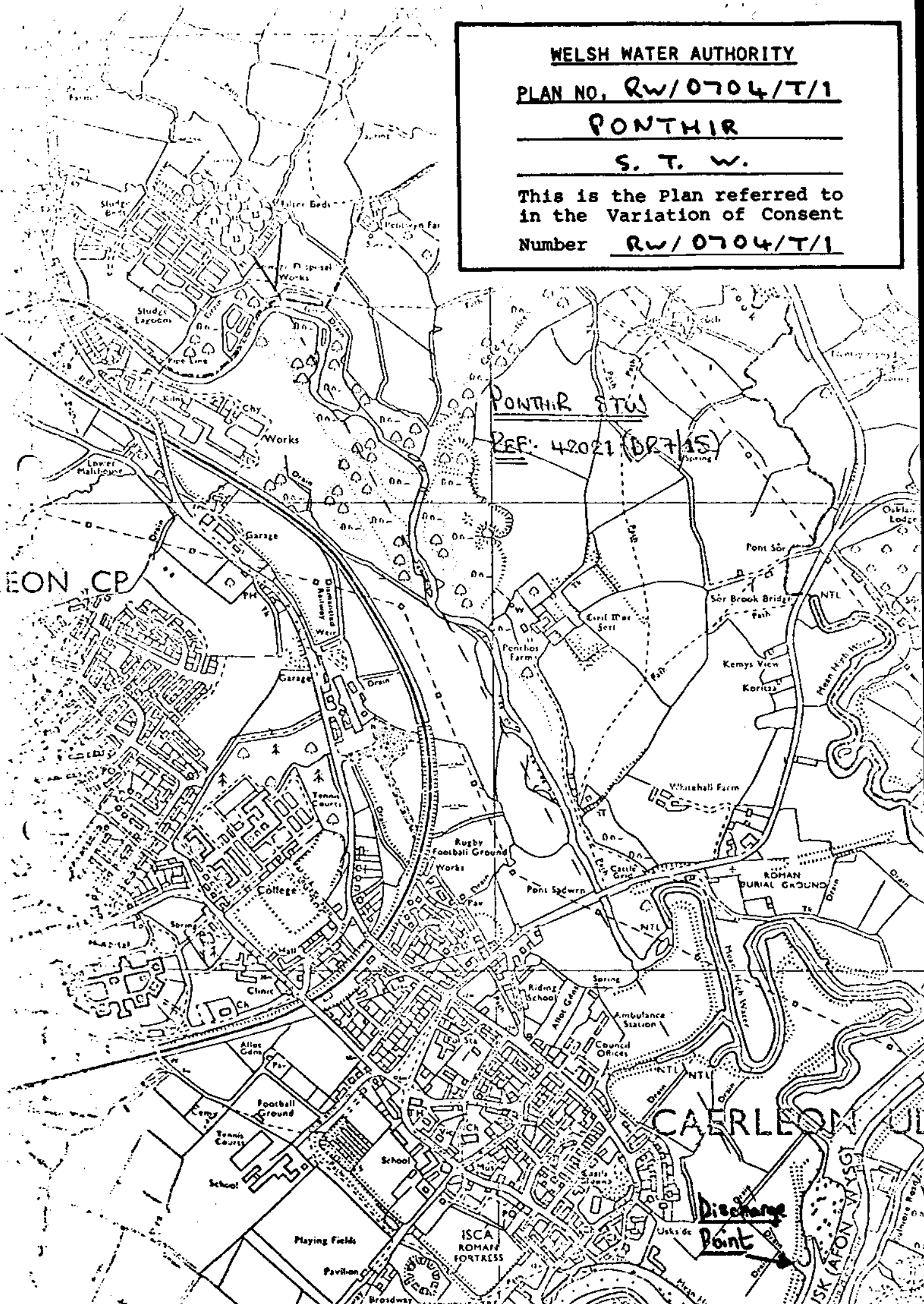
PLAN NO. RW/0704/T/1

PONTHIR

S. T. W.

This is the Plan referred to  
in the Variation of Consent

Number RW/0704/T/1



PONHIR STN  
REF. 42021 (DR7/15)

EON CP

CAERLEON

Discharge  
Point

ISCA  
ROMAN  
FORTRESS

USK (AFON YASG)

1



DWR CYMRU

*Dawe*  
Please will you register  
and return to me

*D.W.*  
31.1.90

D H Williams Esq  
Pollution Control Manager  
NRA Rivers House  
St Mellons Business  
St Mellons

NATIONAL RIVERS AUTHORITY					
Letter No.					
File Ref.					
REC'D 31 JAN 1990					
PASSED TO	C.MAN.	R.M.	ADMIN. & O.	FB	
PACK CIRC.	FIN.	I.T.	LEGAL	PERF.	PLAN.
FILE					
OFFICER	SIGNED	APPROVED DATE			

Dyddiad/Date:

30th January 1990  
Ymholiadau/Enquiries:

Ein Cyfl/Our Ref:

SHL/GJPPJ/SS469 SW  
Eich Cyfl/Your Ref:

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*Dŵr Cymru Cyf, cwmni cyfyngedig wedi'i gofrestru yng Nghymru Rhif 2366777 Un o grŵp cwmnïau Welsh Water PLC Swyddfa Gofrestredig: Plas y Ffynnon Ffordd Cambria Aberhonddu Powys LD3 7HP*

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S H Lewis  
Consents Regulation Officer



WELSH WATER AUTHORITY		Welsh Office Form COPA4		Welsh Off Ref		AB0064001					
SUPPORTING INFORMATION FOR CONSENT/REVIEW - WWA Form SS.SI.1				Welsh W A Ref							
DISCHARGER + Agent		DWR CYMRU CYF				WWA District		1			
PREMISES / SOURCE Address/Location		LLANFRECIFA NEW PRELIMINARY AND STORM TREATMENT WORKS									
DISCHARGE TYPE		STORM TANK DISCHARGE									
DISCHARGE STATUS		New reqg Consent	Exg reqg Review	Exg reqg Consent	Prevly Exempt	Tempy until					
CONSENT / REVIEW EXISTING - issued		To:			By:		Date:				
ADVERTISEMENT ?		Yes / No because:									
OUTLET DETAILS		New / Altered / Exg	OS Ref	ST 32149776	Diam	mm	Form				
SAMPLING POINT		TDIB SPT	OS Ref	Outlet /							
DISCHARGE IS TO		Inland Stream	<input checked="" type="checkbox"/>	Landl Pond	Onto Land	Into Land	Groundwtr	Estuary	Coastal		
RECEIVING WATER		Immediate / Main	AFON LNYD				/ kms > USK				
Water in current RQO Programme ?		Data for :	Current Situatn		Short-term RQO		Long-term RQO		TDIB SPT Refs		
Immed. Yes / No		Assessed by :	NWC	Biol	NWC	Biol	by	NWC	Biol	by	Up / Down
Main Yes / No		Immed. Up / Down	/	/	/	/	19	/	/	19	/
USE(S) OF THE RECEIVING WATER, whether surface or groundwater		Exg / Future Use(s)	PotWS	IndWS	AgrWS	Stock	SalFish	CrsFish	HSports	VisAmen	Other
		Of Immed R.W. @ km									
		Of Main R.W. @ km									
		Effect of discharge on uses, etc.									
EFFLUENT QUALITY DATA - derived from: samples taken from: to :		Determinand									
		Maximum									
		Minimum									
		Mean									
		Standard Deviation									
		Median / 50%ile									
		95%ile: N / LN / NP									
QUALITY LIMITS (mg/l except pH) 5/4 if seasonal 1/2 if phased		Existing									
		Proposed 95%ile									
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CALCULATION MODE		To Quality Spec'n									
		Method used									
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		Existing Design									
		Meas/Estcd Current									
		Proposed Design	100,000	0-14	14000	11126	7820	32946	2.32	886	1250
		Ultimate Design									
Design Horizons: Proposed: Ultimate:		Sewerage system is	Flow values for		Existing						
		% combined	Consent Conditions		Proposed						

11

WELSH WATER AUTHORITY		Welsh Office Form COPA4		Welsh Off Ref		ANO214201					
SUPPORTING INFORMATION FOR CONSENT/REVIEW - WMA Form SS.SI.1				Welsh W A Ref							
DISCHARGER +Agent		DWA CYMRU CYF				WMA District				/	
PREMISES / SOURCE Address/Location		LLANFRECHFA NEW PRELIMINARY AND STORM TREATMENT WORKS									
DISCHARGE TYPE		SCREENED STORM OVERFLOW									
DISCHARGE STATUS		New reqg Consent		Exg reqg Review		Exg reqg Consent		Prevly Exempt		Tempy until	
CONSENT / REVIEW EXISTING - issued		To:			By:			Date:			
ADVERTISEMENT ?		Yes / No because:									
OUTLET DETAILS		New / Altered / Exg	OS Ref	5T31889286		Diam	mm	Form			
SAMPLING POINT		TDIB SPT	OS Ref	Outlet /							
DISCHARGE IS TO		Inland Stream	Landl.Pond	Onto Land	Into Land	Groundwtr	Estuary	Coastal			
RECEIVING WATER		Immediate / Main	AFON LNYD / kms > USK								
Water in current RQO Programme ?		Data for :	Current Situatn		Short-term RQO		Long-term RQO		TDIB SPT Refs		
Immed. Yes / No		Assessed by :	NWC	Bio1	NWC	Bio1	by	NWC	Bio1	by	Up / Down
Main Yes / No		Immed. Up / Down	/	/	/	/	19	/	/	19	/
		Main Up / Down	/	/	/	/	19	/	/	19	/
USE(S) OF THE RECEIVING WATER, whether surface or groundwater		Exg / Future Use(s)	PotWS	IndWS	AgrWS	Stock	SalFish	CrstFish	WSports	VisAmen	Other
		Of Immed R.W. @ km									
		Of Main R.W. @ km									
		Effect of discharge on uses, etc.									
EFFLUENT QUALITY DATA - derived from: samples taken from: to : (mg/l except pH)		Determinand									
		Maximum									
		Minimum									
		Mean									
		Standard deviation									
		Median / 50%ile									
		95%ile: N / LN / NP									
QUALITY LIMITS (mg/l except pH) 3/4 if seasonal 1/2 if phased		Existing									
		Proposed 95%ile									
		Proposed Maximum									
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CALCULATION MODE		To Quality Spec'n									
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EFFLUENT FLOW DATA		P Popul'n No.	G Consum'n m³/h/d	PG Sewage m³/d	I Infil't'n m³/d	E Trade m³/d	PG+i+E QWF m³/d	Storm Sewage Offlow Weir Setting x QWF 1/sec		Maximum Rate 1/sec	Maximum Daily vol m³/d
Existing Design											
Meas/Est'd Current											
Proposed Design		100000	0.14	14000	11126	7820	32946	5.6		2140	1430
Ultimate Design											
Design Horizons: Proposed: Ultimate:		Sewerage system is % combined	Flow values for Consent Conditions			Existing	Proposed				



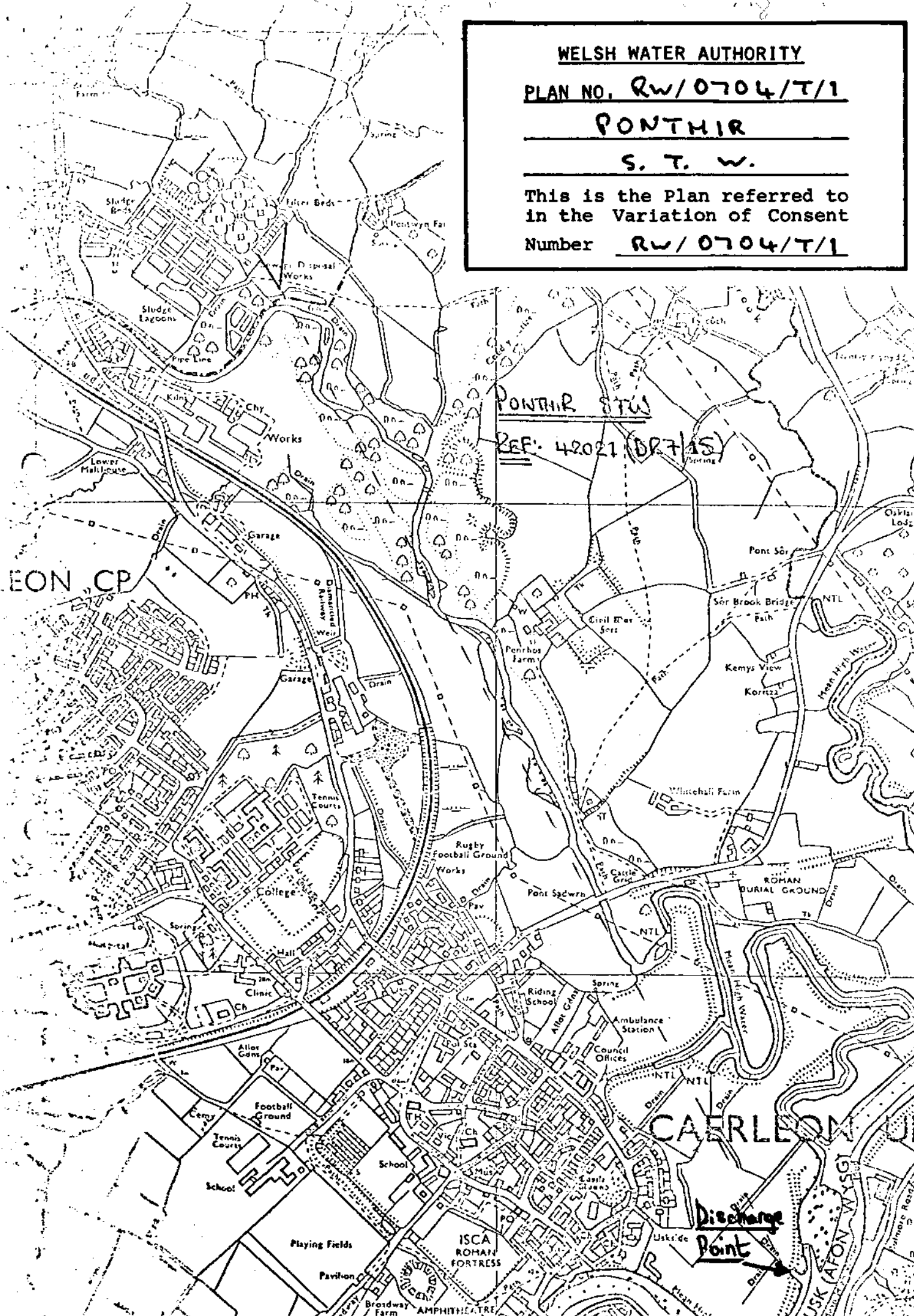
WELSH WATER AUTHORITY

PLAN NO. RW/0704/T/1

PONTHIR

S. T. W.

This is the Plan referred to  
in the Variation of Consent  
Number RW/0704/T/1



PONTHIR STW

REF: 42021 (DPT/15)

EON CP

CAERLEON UD

Discharge Point

USK (AFON WYSGI)







AMENDED 18/1/05

PIR



ASiantaeth YR  
AMGYLCHEDD  
ENVIRONMENT  
AGENCY

## WATER RESOURCES ACT 1991 (schedule 10)

(as amended by the Environment Act 1995)

### Variation to an existing consent to discharge

<b>Regional/Area Address:</b>  The Regional Finance Manager Environment Agency Welsh Region PO Box 425 St Mellons Business Park CARDIFF CF3 0LT	<i>Official Use Only</i> Dist/Area Ref: 1303  <i>Application No.</i> AR0064001 <i>Date Received:</i> 19/1/05. <i>Fee Received:</i>	ALREADY PAID
--	---	-----------------

Each applicant must complete the main form and may need to complete a separate annexe if appropriate. Please look through the form and read the notes carefully before you complete it. Processing of your application will be aided by full and accurate completion of all relevant sections and provisions of the necessary plans. If you have any queries regarding the form please contact the person given in the notes.

#### NOTE:

All information contained within this application will be made available on the public register unless there is a request to withhold any of it. Any such request should provide a full justification stating why the information needs to be withheld (see note xiii).

## 1 SITE ADDRESS

1.1 Address or other sufficient description of land or premises to which this application applies.

Llanfrechfa Storm Tanks  
Ponthir  
Torfaen

Post Code:

NP18 1GQ



**2 DETAILS OF DISCHARGE(S)**

2.1 State the nature of the discharge(s) (see note i and ii) - tick one or more boxes as appropriate:

- Sewage Effluent - volume of 5 cubic metres per day or less
- Sewage Effluent - volume greater than 5 cubic metres per day (**complete annexe 1**)
- Sewage Effluent discharged under storm or emergency conditions (**complete annexe 2**)
- Cooling Water (**complete annexe 3**)
- Trade Effluent (*including site drainage*) (**complete annexe 3**)
- Others (*please specify*)

2.2 Please state the maximum quantity it is proposed to discharge in any one day  
Briefly state how this figure was calculated (see note ii).

N/A

2.3 a) Indicate proposed means of discharge - tick as appropriate and show on plan:  
(for 1, 2 & 3 please state dimensions below)

- |  |                                      |   |
|--|--------------------------------------|---|
| 1. Pipe <input type="checkbox"/>               | 4. Borehole <input type="checkbox"/> | 7. Sub-Irrigation System <input type="checkbox"/>                 |
| 2. Channel <input checked="" type="checkbox"/> | 5. Well <input type="checkbox"/>     | 8. Combination of 6 & 7 <input type="checkbox"/>                  |
| 3. Culvert <input type="checkbox"/>            | 6. Soakaway <input type="checkbox"/> | 9. Other ( <i>please specify below</i> ) <input type="checkbox"/> |

b) National Grid Reference(s) of point(s) of discharge (see note iii).

S	T	3	2	1	6	3	9	2	8	3	8
---	---	---	---	---	---	---	---	---	---	---	---

*(please indicate on accompanying plans)*

2.4 a) The Agency will normally require adequate provision for the taking of samples of the discharge in a safe and convenient manner at any time. Please indicate the means proposed (see note iv) - tick as appropriate and show on plan:

- At the outlet  At a manhole or sampling chamber

Other (*please specify*)

Sample to be taken from the 1250mm CSO discharge channel at location marked on attached plan

b) National Grid Reference(s) of sampling point(s) (if different from 2.3 b) above).



S	T	3	2	1	2	7	9	2	8	5	4
---	---	---	---	---	---	---	---	---	---	---	---

*(please indicate on accompanying plans)*

- c) What flow measurement facilities will be provided (see note v)?  
Please give details.

N/A

- 2.5 a) Type of Treatment Plant(s) to be used (*please specify make and model*) - tick as appropriate:

Septic Tank  Package Sewage Treatment Works  Other

Off-site storm tanks to Ponthir WwTW

- b) Will the treatment process involve the use of any chemicals (eg ferric salts, polyelectrolytes). If yes please give details.  N

- 2.6 a) On what date do you anticipate the discharge will commence?  31/03/05

- b) If you require the consent for a limited time period please give dates; from:  N/A

to:  N/A

- c) If the discharge is not continuous please detail the period/circumstances when it will occur.

During Storm Conditions

- 2.7 a) Are there any existing consents for discharges from the premises (see note vi)?  Y

If yes, please give the reference numbers (*Any further information should be given in Section 5.3*).

AB0064001 / AB0064002

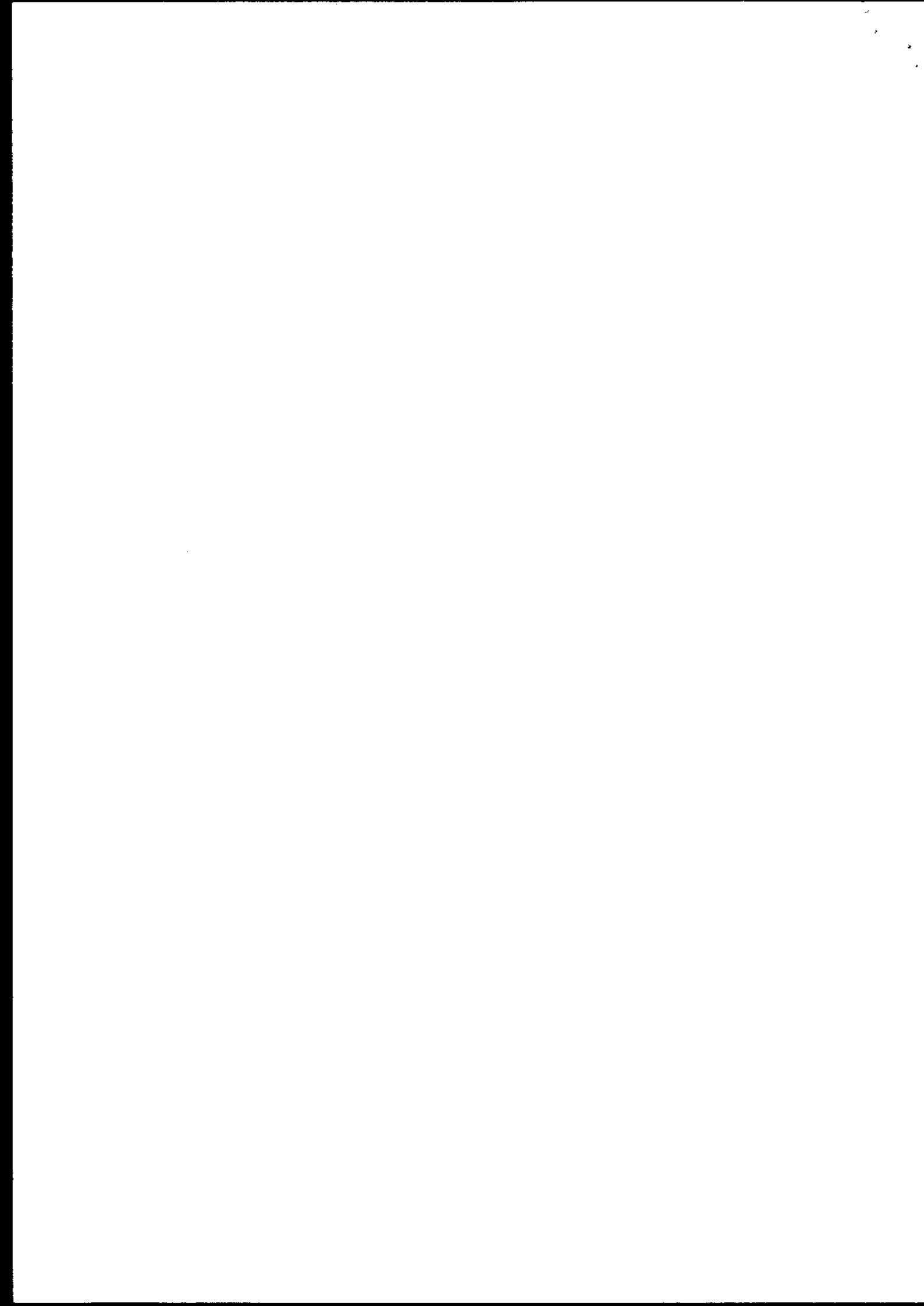
- b) Has any person had a Prohibition Notice serviced on them in respect of this site?  N

If yes, please give the reference number.

### 3 SITE DETAILS

- 3.1 Please give the name of the relevant Planning Authority.

Torfaen County Borough Council



3.2 Please give details of the premises - tick as appropriate:

- |  |                          |                                   |                                     |
|--|--------------------------|-----------------------------------|-------------------------------------|
| 1. Single Dwelling                             | <input type="checkbox"/> | 6. Fish Farm                      | <input type="checkbox"/>            |
| 2. Multiple Dwellings                          | <input type="checkbox"/> | 7. Mineral Workings               | <input type="checkbox"/>            |
| 3. Industrial Premises                         | <input type="checkbox"/> | 8. Water Services plc STW         | <input type="checkbox"/>            |
| 4. Vehicle Parking Area                        | <input type="checkbox"/> | 9. Water Supply                   | <input type="checkbox"/>            |
| 5. Commercial Premises <i>(please specify)</i> | <input type="checkbox"/> | 10. Other <i>(please specify)</i> | <input checked="" type="checkbox"/> |

Water Services Plc Off-Site Storm Tanks

3.3 Please indicate source of the water supply - tick as appropriate:

- |   |                          |  |                          |
|---|--------------------------|--|--------------------------|
| 1. Well   | <input type="checkbox"/> | 5. River <i>(please give name below)</i>         | <input type="checkbox"/> |
| 2. Borehole   | <input type="checkbox"/> | 6. Estuary <i>(please give name below)</i>       | <input type="checkbox"/> |
| 3. Precipitation (eg rain or snow)                  | <input type="checkbox"/> | 7. Coastal Water <i>(please give name below)</i> | <input type="checkbox"/> |
| 4. Mains <i>(please state water supply company)</i> | <input type="checkbox"/> | <input type="text"/>                             |                          |

#### 4 DETAILS OF RECEIVING ENVIRONMENT

4.1 Receiving Medium - tick the category(s) to which the proposed discharge(s) is(are) to be made:

- |  |                                     |                                 |                          |
|--|-------------------------------------|---------------------------------|--------------------------|
| 1. Estuarial Water (tidal river or stream) | <input type="checkbox"/>            | 5. Into Land                    | <input type="checkbox"/> |
| 2. River or Stream (non-tidal)             | <input checked="" type="checkbox"/> | 6. Onto Land                    | <input type="checkbox"/> |
| 3. Canal                                   | <input type="checkbox"/>            | 7. Directly into Groundwater    | <input type="checkbox"/> |
| 4. Lake, Lock or Pond                      | <input type="checkbox"/>            | 8. Coastal Water (see note vii) | <input type="checkbox"/> |

*State name of receiving water if known:*

Afon Lwyd

4.2 In the case of sub-irrigation systems, soakaways or boreholes:

- |  |                          |     |
|--|--------------------------|-----|
| (a) Is any part of the system within 5 metres of the boundary of the premises? | <input type="checkbox"/> | N/A |
| (b) Is any part of the system within 10 metres of a watercourse?               | <input type="checkbox"/> | N/A |
| (c) Is any part of the system within 50 metres of a borehole or spring?        | <input type="checkbox"/> | N/A |



(d) For wells and boreholes state dimension(s) in metres.

N/A

(e) For sub-irrigation systems, soakaway pits, wells and boreholes, state maximum depth in metres.

N/A

(f) For boreholes, state details of lining in metres:

(i) Depth of lining

N/A

(ii) Depth of perforated lining

N/A

(iii) Depth of unperforated lining

N/A

(g) A percolation test must be carried out in accordance with British Standard BS6297:1983.  
Have the results been provided?

N/A

4.3 Is there a foul sewer available to which the discharge(s) could be made (see note viii)?  
If yes, please give the reasons it is not practical to connect to it (eg distance, flow etc).

N/A



## 5 DETAILS OF APPLICANT AND OTHER INFORMATION

5.1 (See general notes and note ix)

(a) Full name and postal address of applicant. This should be the person who will become the consent holder should consent be issued.

\* Dwr Cymru Welsh Water  
\* Pentwyn Rd  
\* Nelson  
\* Treharris  
\* Mid Glam  
\*

Post Code: CF46 6LY

Daytime Telephone Number:

Company Registration Number (if appropriate): 2366777

(b) Agent (if any) - Full name and postal address.

\*  
\*  
\*  
\*  
\*  
\*

Post Code:

Contact Name and Daytime Telephone Number:

5.2

Please give full name and address to which bills should be sent if different to that given above:

\*  
\*  
\*  
\*  
\*  
\*

Post Code:

Daytime Telephone Number:

5.3 Are there any other factors to be taken into account? Please continue on a separate sheet if necessary.



**DECLARATION**

We:

1. apply under the Water Resources Act 1991 (as amended by the Environment Act 1995) for consent to discharge, as described in this Application. "This Application" means this page, all the other pages of this form and any attached annexes, the attached plan(s), any other sheets attached, and any other written information supplied to support the application.
2. \* enclose the required application fee, payable to the Environmental Agency (see note x).  
\* THIS IS AN AMENDMENT TO EARLIER SUBMISSION FOR WHICH FEE HAS BEEN PAID
3. enclose 3 copies of the plan(s) and location maps with all relevant information clearly marked (see note xi).
4. will pay required advertising costs (see note xii).
5. confirm that we will notify the Environment Agency of any changes in the information in this application which might be material to the continuation of the consent.
6. confirm that the information given in this application and any questions which the Environment Agency may have about it is true to the best of our knowledge, information and belief and are not aware of any other facts or information which might affect the granting of a consent, or conditions which might be put on it (see note xiii).
7. confirm that we will pay any annual charges due should a consent be granted YES. If no please indicate who will be completing section 5.2 above (see note xiv).

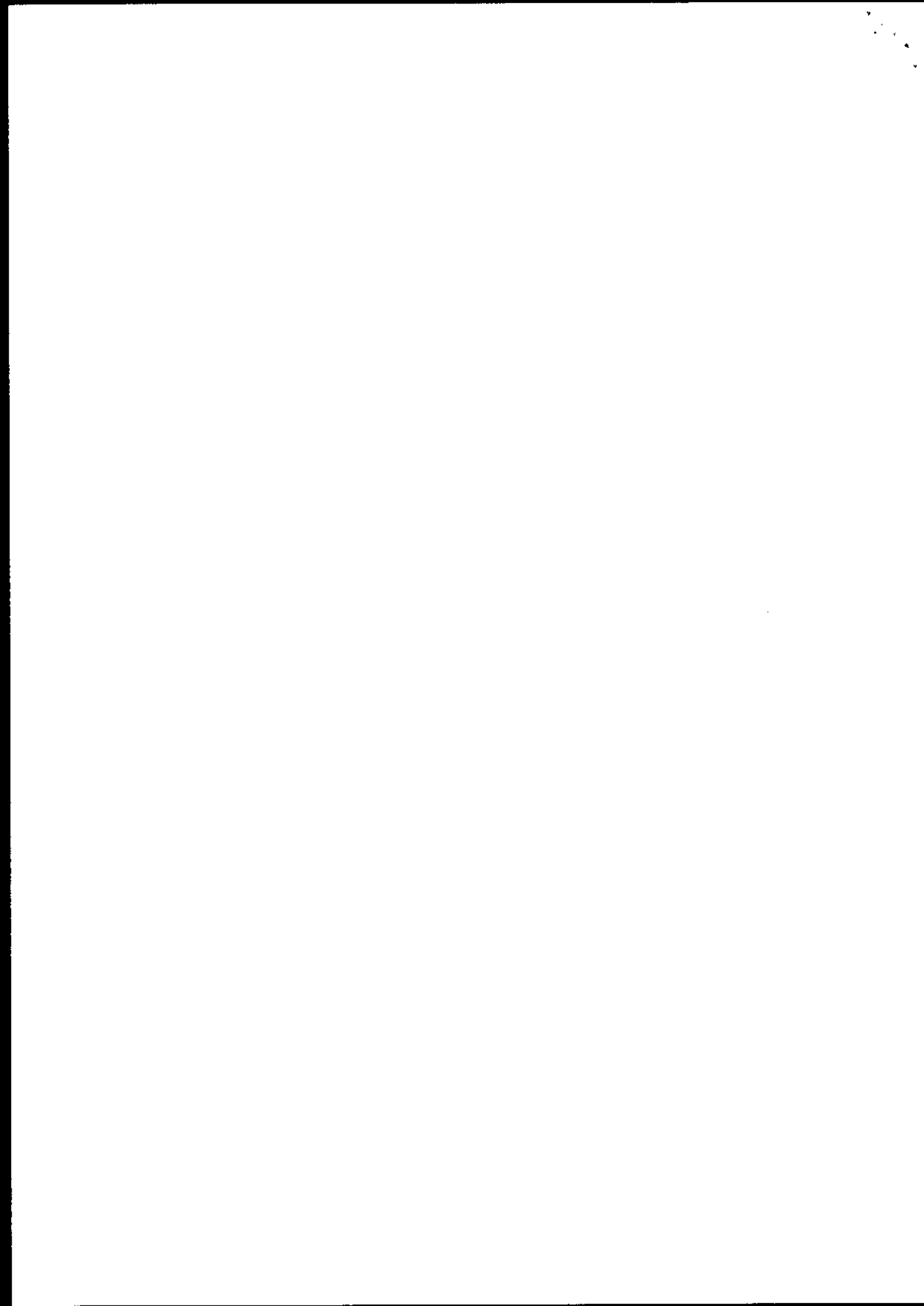
SIGNED: <i>Lewis Ken</i>	PRINT NAME: LEWIS KEN
ON BEHALF OF: DWR CYMRU CYF	DATED: 18/1/05

**CONFIDENTIALITY**

I/we apply for commercial confidentiality and enclose a full written justification (see note xv).

SIGNED: .....	DATED: .....
---------------	--------------

**PLEASE RETURN THIS FORM TO THE ADDRESS GIVEN ON THE FRONT PAGE**



AMENDED 18/1/05



ASIANTAETH YR  
AMGYLCHEDD  
ENVIRONMENT  
AGENCY

## ANNEXE 2 SEWAGE EFFLUENT DISCHARGED IN STORM OR EMERGENCY CONDITIONS

Please complete this annexe if you are proposing to make a discharge of sewage in emergency or storm conditions (if the effluent is to contain a trade component Annex 3 should also be completed).

*Official Use Only*  
Application No.

1. Site Name.

2. State the type of discharge - tick as appropriate:
- Storm tanks
- Combined Sewer Overflow from sewerage system
- Combined Sewer Overflow from pumping station
- Emergency overflow from sewerage system
- Emergency overflow from pumping station
- Other (please specify)
- 

3. For effluents discharging from sewage treatment works, is the storm/emergency effluent discharged via the same outlet as the treated effluent?

If no please give: a) the National Grid Reference of the treated effluent outlet.

b) the consent or application number covering the treated effluent discharge

If yes please give the National Grid Reference of the storm/emergency sampling point (see notes)

4. For effluents discharging from combined sewer overflows, is the discharge via a dedicated pipe?

\*Discharge channel is shared with CSO discharge

If no please give the National Grid Reference of the overflow into the sewer.



5. Overflow settings

- a) Overflow setting to storm tanks
- b) Maximum flow to storm tanks
- c) Overflow setting to storm sewage overflow (see separate application for CSO)
- d) Maximum flow to storm sewage overflow

6. Storage capacity

- a) Volume of Storm tanks
- b) Retention time of storm tanks at maximum flow
- c) Storage capacity of sewer/wet well

7. Please provide full details of the design criteria that have been used to support this application.

8. Will facilities be provided to raise alarms (eg telemetry)?   
If yes, please give details.

9. Will facilities be provided to prevent the discharge of gross solids?   
If yes, please give details (for screens give bar spacing or aperture).

10. What provisions will be made to deal with:

- a) power failure (eg standby generators)?
- b) mechanical breakdown (eg standby pumps)?
- c) rising main failure?
- d) tanker access?

Notes (see also the notes on the main form):

Full details of the design criteria must be provided in order for the application to be determined. If you have any queries about what information is required please contact the person given in notes attached to the main form.



PIR



ASiantaeth Yr  
AMGYLCHEDD  
ENVIRONMENT  
AGENCY

# WATER RESOURCES ACT 1991 (schedule 10)

(as amended by the Environment Act 1995)

## Variation to an existing consent to discharge

EA  
Chg E743  
2 DEC 2004  
PAID  
Chg E743  
10

<b>Regional/Area Address:</b>  The Regional Finance Manager Environment Agency Welsh Region PO Box 425 St Mellons Business Park CARDIFF CF3 0LT	<i>Official Use Only</i> Dist/Area Ref: 1303  Application No. A80064001 Date Received: 2/12/04. Fee Received:  £1486 PAID
--	---

Each applicant must complete the main form and may need to complete a separate annexe if appropriate. Please look through the form and read the notes carefully before you complete it. Processing of your application will be aided by full and accurate completion of all relevant sections and provisions of the necessary plans. If you have any queries regarding the form please contact the person given in the notes.

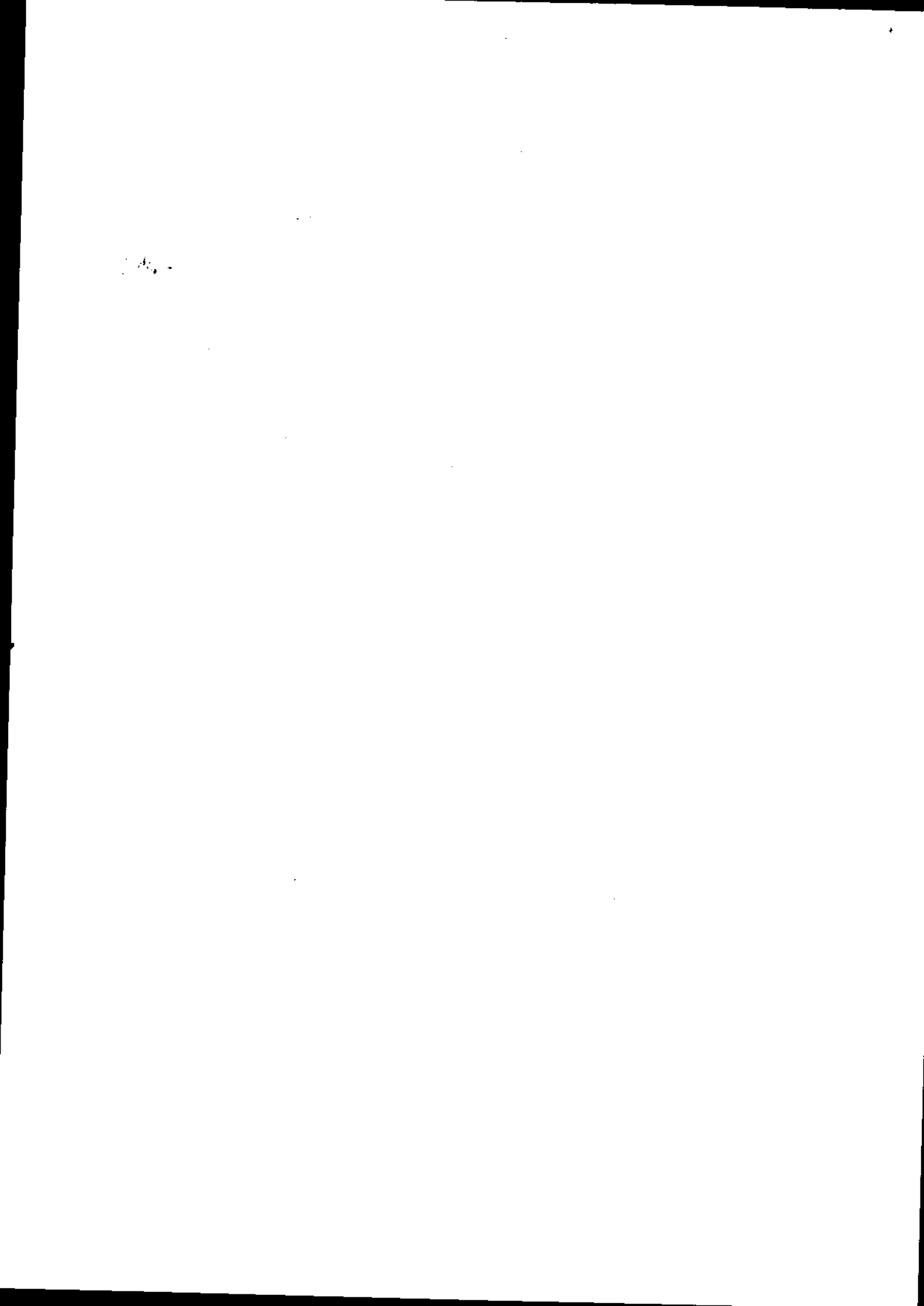
**NOTE:**  
All information contained within this application will be made available on the public register unless there is a request to withhold any of it. Any such request should provide a full justification stating why the information needs to be withheld (see note xiii).

### 1 SITE ADDRESS

1.1 Address or other sufficient description of land or premises to which this application applies.

Llanfrechfa Storm Tanks  
Ponthir  
Torfaen

Post Code: NP18 1GQ



**2 DETAILS OF DISCHARGE(S)**

2.1 State the nature of the discharge(s) (see note i and ii) - tick one or more boxes as appropriate:

- Sewage Effluent - volume of 5 cubic metres per day or less
- Sewage Effluent - volume greater than 5 cubic metres per day (**complete annexe 1**)
- Sewage Effluent discharged under storm or emergency conditions (**complete annexe 2**)
- Cooling Water (**complete annexe 3**)
- Trade Effluent (including site drainage) (**complete annexe 3**)
- Others (please specify)

2.2 Please state the maximum quantity it is proposed to discharge in any one day   
Briefly state how this figure was calculated (see note ii).

2.3 a) Indicate proposed means of discharge - tick as appropriate and show on plan:  
(for 1, 2 & 3 please state dimensions below)

- |            |                                     |             |                          |                                 |                          |
|------------|-------------------------------------|-------------|--------------------------|---------------------------------|--------------------------|
| 1. Pipe    | <input type="checkbox"/>            | 4. Borehole | <input type="checkbox"/> | 7. Sub-Irrigation System        | <input type="checkbox"/> |
| 2. Channel | <input checked="" type="checkbox"/> | 5. Well     | <input type="checkbox"/> | 8. Combination of 6 & 7         | <input type="checkbox"/> |
| 3. Culvert | <input type="checkbox"/>            | 6. Soakaway | <input type="checkbox"/> | 9. Other (please specify below) | <input type="checkbox"/> |

b) National Grid Reference(s) of point(s) of discharge (see note iii).

S	T	3	2	1	3	0	9	2	7	9	6
---	---	---	---	---	---	---	---	---	---	---	---

(please indicate on accompanying plans)

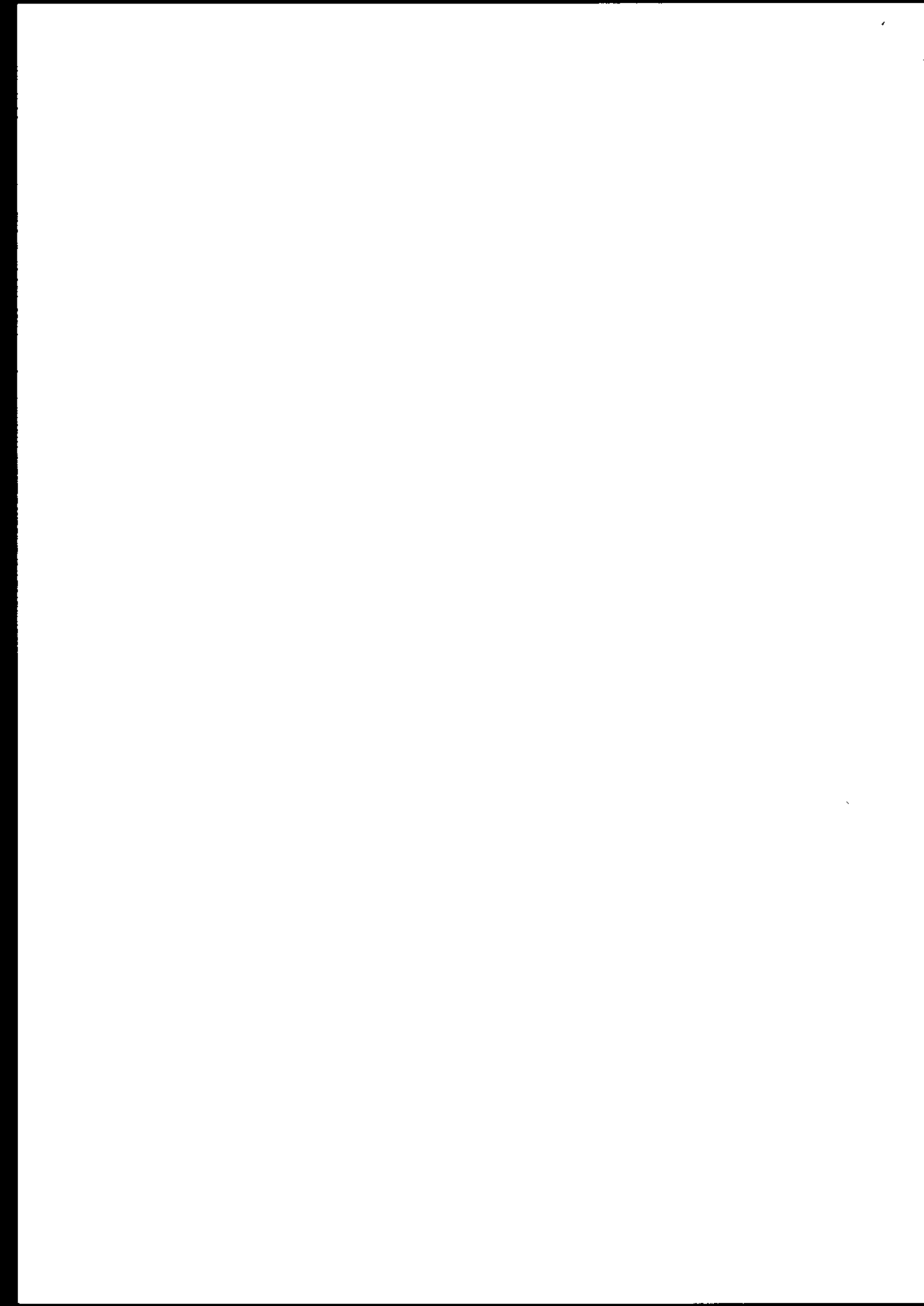
2.4 a) The Agency will normally require adequate provision for the taking of samples of the discharge in a safe and convenient manner at any time. Please indicate the means proposed (see note iv) - tick as appropriate and show on plan:

- At the outlet  At a manhole or sampling chamber

Other (please specify)

b) National Grid Reference(s) of sampling point(s) (if different from 2.3 b) above).

--	--	--	--	--	--	--	--	--	--	--	--



(please indicate on accompanying plans)

c) What flow measurement facilities will be provided (see note v)?

Please give details.

N/A

2.5 a) Type of Treatment Plant(s) to be used (please specify make and model) - tick as appropriate:

Septic Tank  Package Sewage Treatment Works  Other

Off-site storm tanks to Ponthir WwTW

b) Will the treatment process involve the use of any chemicals (eg ferric salts, polyelectrolytes). If yes please give details.

N

2.6 a) On what date do you anticipate the discharge will commence?

31/03/05

b) If you require the consent for a limited time period please give dates;

from:

N/A

to:

N/A

c) If the discharge is not continuous please detail the period/circumstances when it will occur.

During Storm Conditions

2.7 a) Are there any existing consents for discharges from the premises (see note vi)?

Y

If yes, please give the reference numbers (Any further information should be given in Section 5.3).

AB0064001 / AB0064002

b) Has any person had a Prohibition Notice serviced on them in respect of this site?

N

If yes, please give the reference number.

### 3 SITE DETAILS

3.1 Please give the name of the relevant Planning Authority.

Torfaen County Borough Council

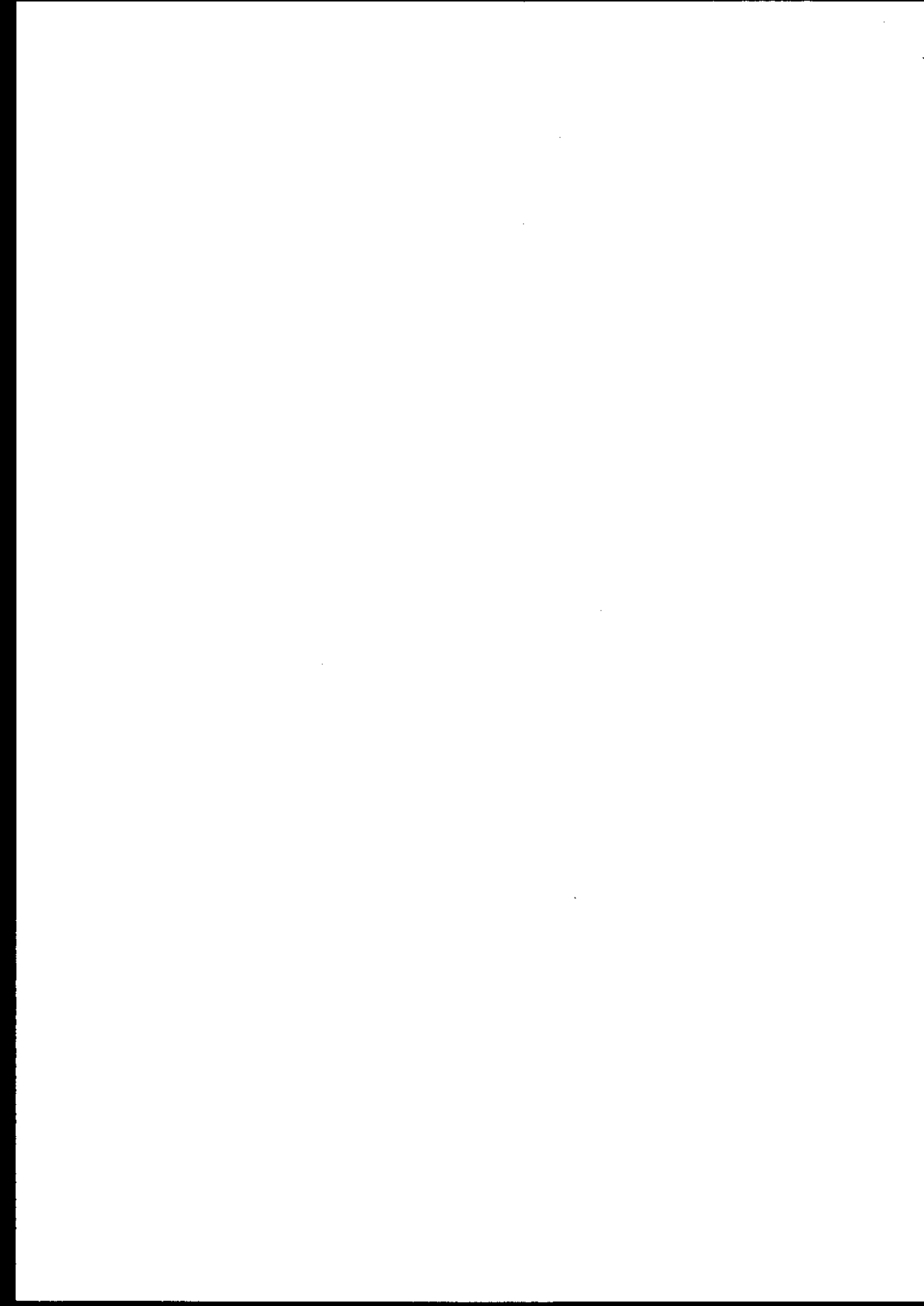
3.2 Please give details of the premises - tick as appropriate:

1. Single Dwelling

6. Fish Farm

2. Multiple Dwellings

7. Mineral Workings



- |  |                          |                                   |                                     |
|--|--------------------------|-----------------------------------|-------------------------------------|
| 3. Industrial Premises                         | <input type="checkbox"/> | 8. Water Services plc STW         | <input type="checkbox"/>            |
| 4. Vehicle Parking Area                        | <input type="checkbox"/> | 9. Water Supply                   | <input type="checkbox"/>            |
| 5. Commercial Premises <i>(please specify)</i> | <input type="checkbox"/> | 10. Other <i>(please specify)</i> | <input checked="" type="checkbox"/> |



3.3 Please indicate source of the water supply - tick as appropriate:

- |   |                          |  |                          |
|---|--------------------------|--|--------------------------|
| 1. Well   | <input type="checkbox"/> | 5. River <i>(please give name below)</i>         | <input type="checkbox"/> |
| 2. Borehole   | <input type="checkbox"/> | 6. Estuary <i>(please give name below)</i>       | <input type="checkbox"/> |
| 3. Precipitation (eg rain or snow)                  | <input type="checkbox"/> | 7. Coastal Water <i>(please give name below)</i> | <input type="checkbox"/> |
| 4. Mains <i>(please state water supply company)</i> | <input type="checkbox"/> | <input type="text"/>                             |                          |

**4 DETAILS OF RECEIVING ENVIRONMENT**

4.1 Receiving Medium - tick the category(s) to which the proposed discharge(s) is(are) to be made:

- |  |                                     |                                 |                          |
|--|-------------------------------------|---------------------------------|--------------------------|
| 1. Estuarial Water (tidal river or stream) | <input type="checkbox"/>            | 5. Into Land                    | <input type="checkbox"/> |
| 2. River or Stream (non-tidal)             | <input checked="" type="checkbox"/> | 6. Onto Land                    | <input type="checkbox"/> |
| 3. Canal                                   | <input type="checkbox"/>            | 7. Directly into Groundwater    | <input type="checkbox"/> |
| 4. Lake, Lock or Pond                      | <input type="checkbox"/>            | 8. Coastal Water (see note vii) | <input type="checkbox"/> |

*State name of receiving water if known:*

4.2 In the case of sub-irrigation systems, soakaways or boreholes:

- |  |                                  |
|--|----------------------------------|
| (a) Is any part of the system within 5 metres of the boundary of the premises?                     | <input type="text" value="N/A"/> |
| (b) Is any part of the system within 10 metres of a watercourse?                                   | <input type="text" value="N/A"/> |
| (c) Is any part of the system within 50 metres of a borehole or spring?                            | <input type="text" value="N/A"/> |
| (d) For wells and boreholes state dimension(s) in metres.  | <input type="text" value="N/A"/> |
| (e) For sub-irrigation systems, soakaway pits, wells and boreholes, state maximum depth in metres. | <input type="text" value="N/A"/> |



(f) For boreholes, state details of lining in metres:

(i) Depth of lining

(ii) Depth of perforated lining

(iii) Depth of unperforated lining

(g) A percolation test must be carried out in accordance with British Standard BS6297:1983.

Have the results been provided?

4.3 Is there a foul sewer available to which the discharge(s) could be made (see note viii)?

If yes, please give the reasons it is not practical to connect to it (eg distance, flow etc).



## 5 DETAILS OF APPLICANT AND OTHER INFORMATION

### 5.1 (See general notes and note ix)

(a) Full name and postal address of applicant. This should be the person who will become the consent holder should consent be issued.

- \* Dwr Cymru Welsh Water
- \* Pentwyn Rd
- \* Nelson
- \* Treharris
- \* Mid Glam
- \*

Post Code: CF46 6LY

Daytime Telephone Number:

Company Registration Number (if appropriate): 2366777

(b) Agent (if any) - Full name and postal address.

- \*
- \*
- \*
- \*
- \*
- \*

Post Code:

Contact Name and Daytime Telephone Number:

### 5.2

Please give full name and address to which bills should be sent if different to that given above:

- \*
- \*
- \*
- \*
- \*
- \*

Post Code:

Daytime Telephone Number:

5.3 Are there any other factors to be taken into account? Please continue on a separate sheet if necessary.



## DECLARATION

We:

1. apply under the Water Resources Act 1991 (as amended by the Environment Act 1995) for consent to discharge, as described in this Application. "This Application" means this page, all the other pages of this form and any attached annexes, the attached plan(s), any other sheets attached, and any other written information supplied to support the application.
2. enclose the required application fee, payable to the Environmental Agency (see note x).
3. enclose 3 copies of the plan(s) and location maps with all relevant information clearly marked (see note xi).
4. will pay required advertising costs (see note xii).
5. confirm that we will notify the Environment Agency of any changes in the information in this application which might be material to the continuation of the consent.
6. confirm that the information given in this application and any questions which the Environment Agency may have about it is true to the best of our knowledge, information and belief and are not aware of any other facts or information which might affect the granting of a consent, or conditions which might be put on it (see note xiii).
7. confirm that we will pay any annual charges due should a consent be granted YES. If no please indicate who will be completing section 5.2 above (see note xiv).

<b>SIGNED:</b> .....	<i>Lewis Keel</i>	<b>PRINT NAME:</b> .....	<i>Lewis Keel</i>
<b>ON BEHALF OF:</b> .....	<i>PLW CYMRU CYF</i>	<b>DATED:</b> .....	<i>28/11/04</i>

## CONFIDENTIALITY

I/we apply for commercial confidentiality and enclose a full written justification (see note xv).

<b>SIGNED:</b> .....	<b>DATED:</b> .....
----------------------	---------------------

**PLEASE RETURN THIS FORM TO THE ADDRESS GIVEN ON THE FRONT PAGE**





## ANNEXE 2 SEWAGE EFFLUENT DISCHARGED IN STORM OR EMERGENCY CONDITIONS

Please complete this annexe if you are proposing to make a discharge of sewage in emergency or storm conditions (if the effluent is to contain a trade component Annex 3 should also be completed).

*Official Use Only*  
Application No.

1. Site Name.

Llanfrechfa Storm Tanks SSO

2. State the type of discharge - tick as appropriate:

Storm tanks

Combined Sewer Overflow from sewerage system

Combined Sewer Overflow from pumping station

Emergency overflow from sewerage system

Emergency overflow from pumping station

Other (*please specify*)

3. For effluents discharging from sewage treatment works, is the storm/emergency effluent discharged via the same outlet as the treated effluent?

N/A

If no please give:

a) the National Grid Reference of the treated effluent outlet.

b) the consent or application number covering the treated effluent discharge

If yes please give the National Grid Reference of the storm/emergency sampling point (see notes)

4. For effluents discharging from combined sewer overflows, is the discharge via a dedicated pipe?

Y

If no please give the National Grid Reference of the overflow into the sewer.



5. Overflow settings

- |  |          |
|--|----------|
| a) Overflow setting to storm tanks           | 886 l/s  |
| b) Maximum flow to storm tanks               | 1250 l/s |
| c) Overflow setting to storm sewage overflow | 2136 l/s |
| d) Maximum flow to storm sewage overflow     | N/A      |

6. Storage capacity

- |  |                    |
|--|--------------------|
| a) Volume of Storm tanks                         | 3900m <sup>3</sup> |
| b) Retention time of storm tanks at maximum flow | 0.8 hours          |
| c) Storage capacity of sewer/wet well            | N/A                |

7. Please provide full details of the design criteria that have been used to support this application.

Aesthetic Driver Only – New 6mm Aperture Screens

8. Will facilities be provided to raise alarms (eg telemetry)?

Y

If yes, please give details.

Telemetry on screen raking mechanism

9. Will facilities be provided to prevent the discharge of gross solids?

Y

If yes, please give details (for screens give bar spacing or aperture).

New fine channel screen with aperture size 6mm

10. What provisions will be made to deal with:

a) power failure (eg standby generators)?

Permanent Standby Generator

b) mechanical breakdown (eg standby pumps)?

Duty, assist and standby screens

c) rising main failure?

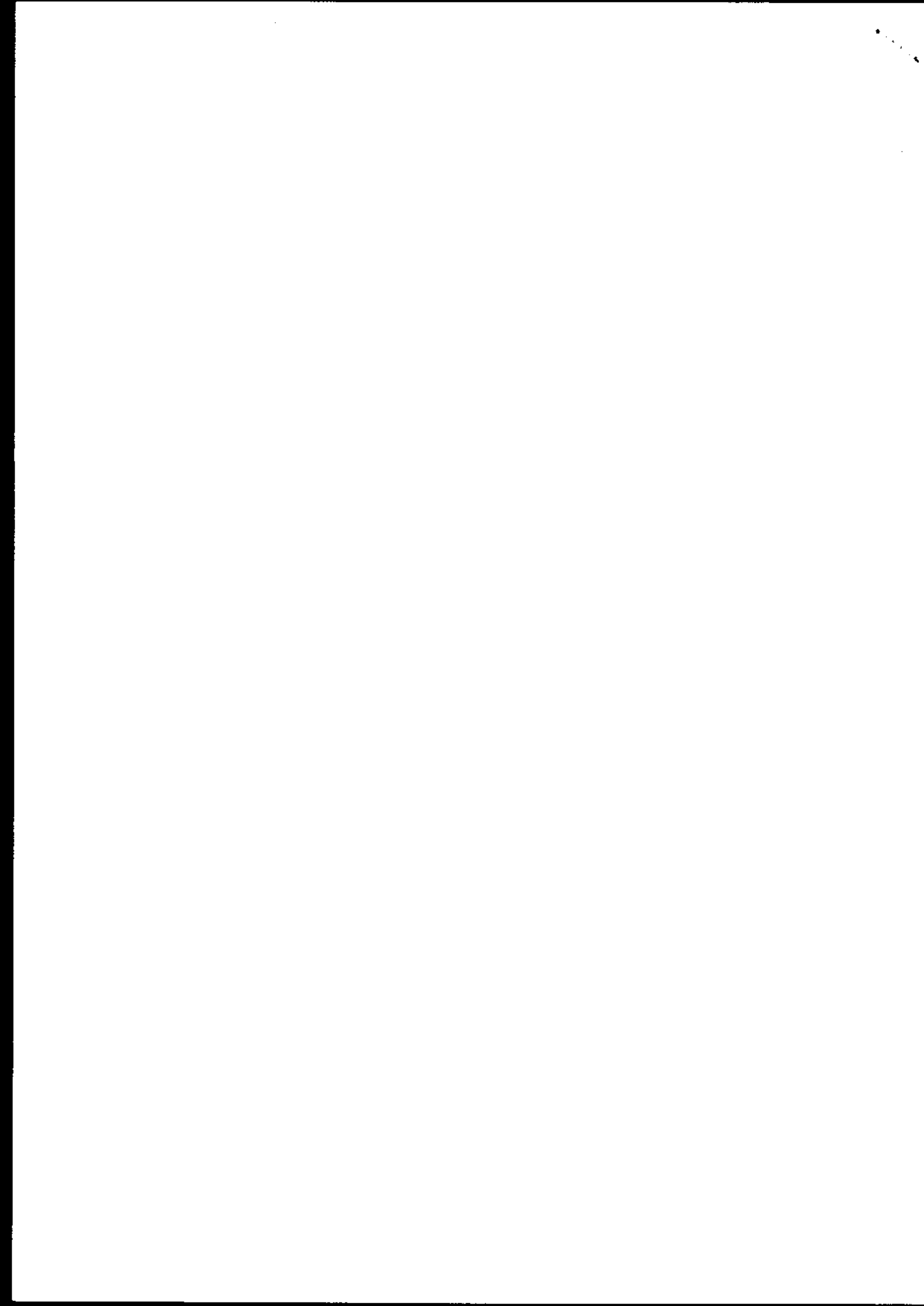
N/A

d) tanker access?

Yes

Notes (see also the notes on the main form):

Full details of the design criteria must be provided in order for the application to be determined. If you have any queries about what information is required please contact the person given in notes attached to the main form.





### ANNEXE 3 TRADE EFFLUENT DISCHARGES

Please complete this annexe if you are proposing to make a discharge trade effluent (this includes site drainage).

*Official Use Only  
Application No.*

1. Site Name.

Llanfrechfa Storm Tanks (SSO)

2. a) Describe in full the trade effluent and the process(es) from which it arises.

See Attached Trade Effluent Data Sheet

b) Please state the type and number of treatment units you are proposing to use (if site drainage please include details of oil/petrol interception facilities).

See Attached Trade Effluent Data Sheet

3. Rainfall Dependent Discharges

a) Is the volume going to be rainfall dependent?

N

b) If yes, please give the total area drained.

N/A

c) Please give details of any activities which occur in the drainage area which could contaminate surface water (see note b)

4. Rainfall Independent Discharges

a) What is the maximum rate of discharge?

215 l/s

b) What is the average daily flow?

3527 m<sup>3</sup>/d

c) For discharges where the source of supply is other than mains water:

i) give the abstraction licence number

N/A

ii) give the National Grid Reference of a point where the influent can be sampled.

--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--

(please mark on the plan)



5. a) Will any self monitoring take place? N/A  
If yes, please give details

b) Will automatic sampling equipment be provided? N/A  
If yes, please give details of type, frequency and location (*please indicate on plan*)

6. a) Please state the maximum temperature in degrees Celsius of the effluent when discharged if different from ambient.

Ambient

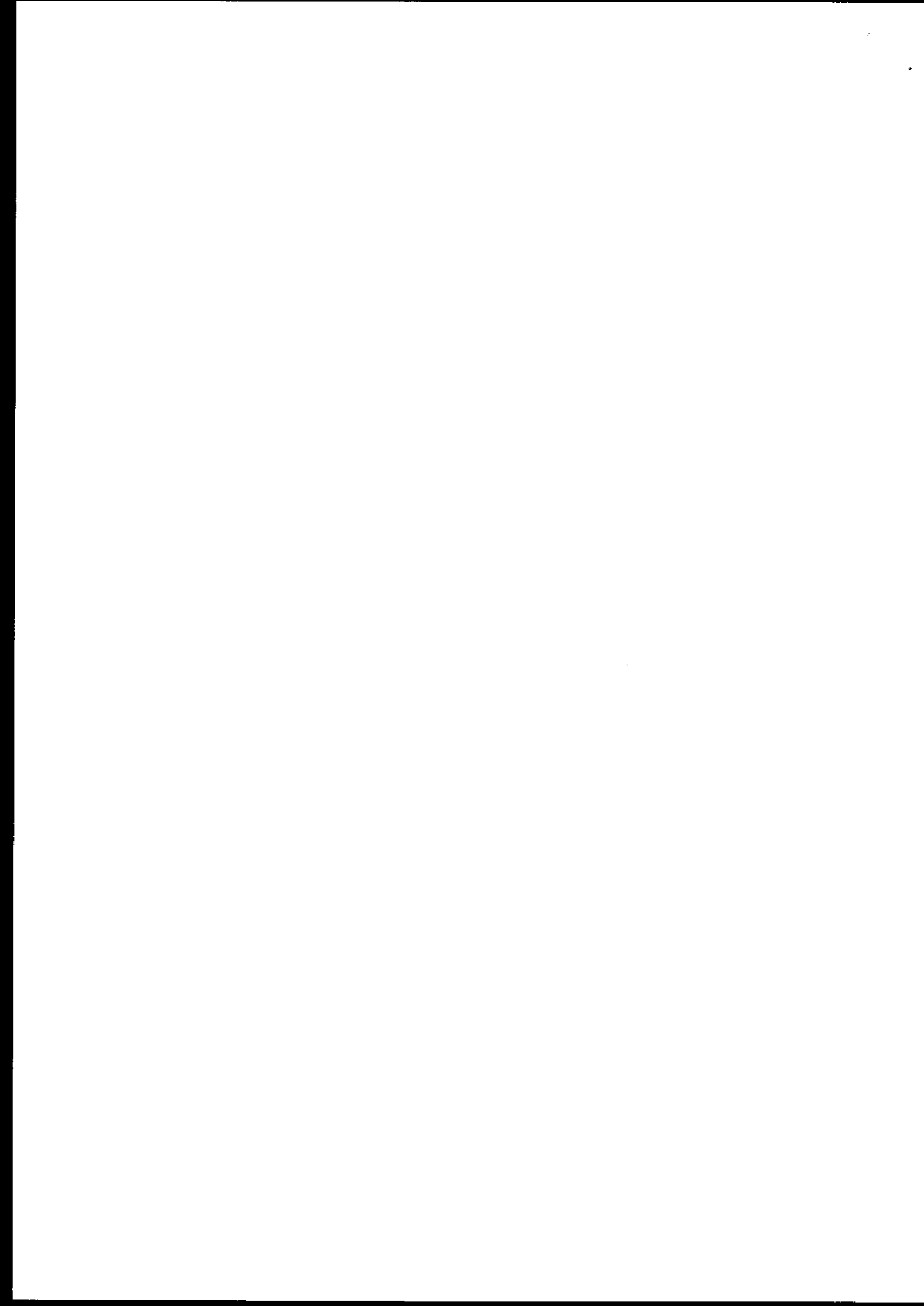
b) Will the discharge be monitored for temperature? N/A  
If yes, please give details of type and location (*please indicate on plan*)

7. Has an application for Authorisation been made for a 'prescribed process' as defined in Part 1 of the Environmental Protection Act 1990? No

If yes, please complete the following:

a) The application reference.

b) Contact name of case officer.

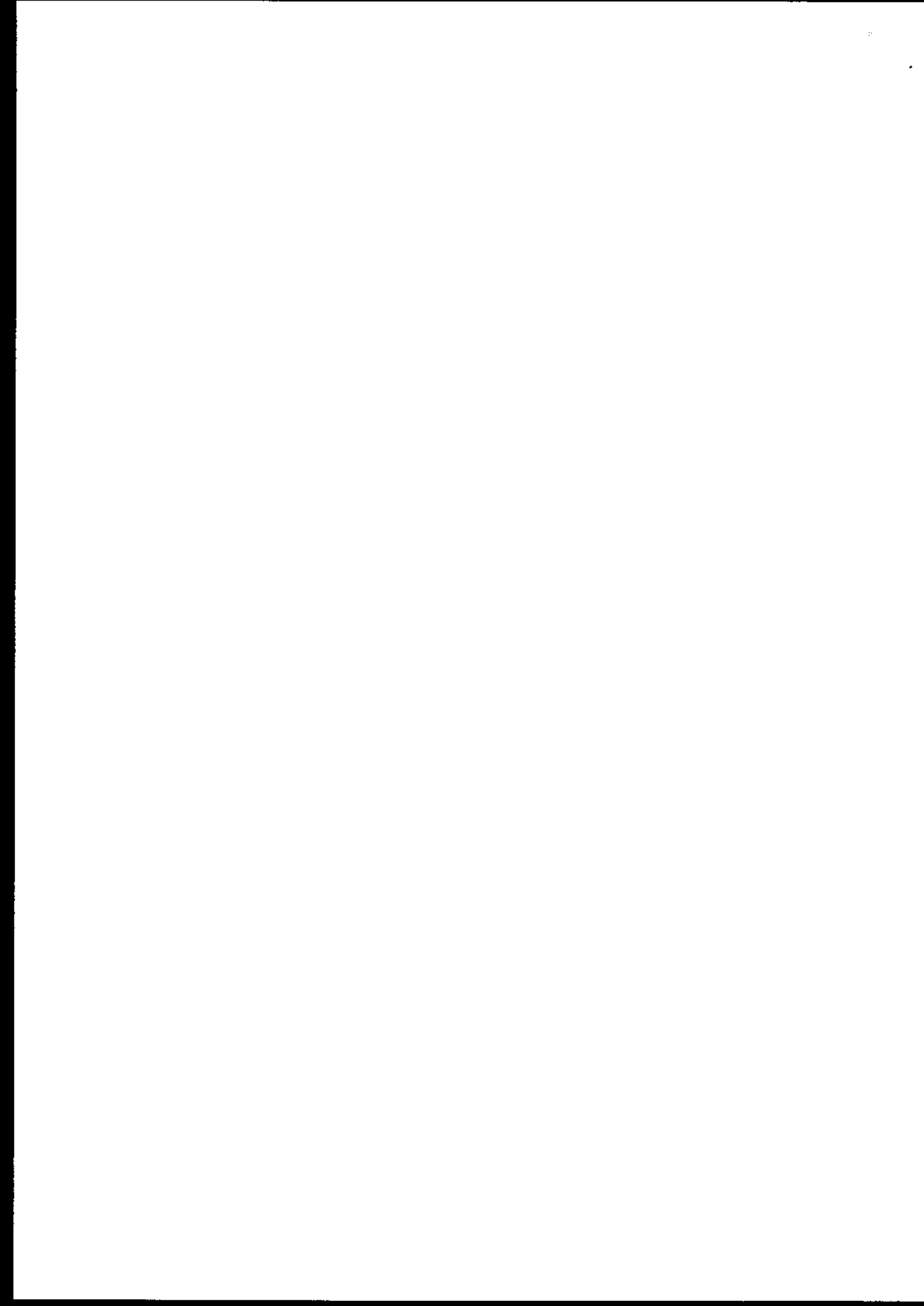


8. a) Please indicate if any of the specified substances given below or their compounds will be present in the effluent and if so at what maximum concentration (please give values in micrograms per litre - ug/l). Please see note c.

SUBSTANCE	CONCENTRATION (ug/l)			SUBSTANCE		CONCENTRATION (ug/l)		
	Max	Min	Mean			Max	Min	Mean
Iron				Lead	✓			
Arsenic ✓				Malathion				
Atrazine				Mercury				
Azinphos-ethyl				Nickel	✓			
Azinphos-methyl				PCB's	✓			
Boron				PCSD's				
Cadmium ✓				Parathion				
Carbon tetrachloride				Parathion-methyl				
Chloroform				Pentachlorophenol (PCP)				
Chromium ✓				Perchloroethylene				
Copper ✓				Permethrin				
Cyanide ✓				pH <5.5 or >9.0	✓			
Cyfluthrin				Phosphorus				
DDT				Polychlorinated biphenyls				
1,2 Dichloroethane				Simazine				
Dichlorovos				Sulcofuron				
Dioxins				Tetrachloroethylene				
Drins (eg Aldrin, Dieldrin)				Tributyltin compounds				
Endosulfan				Trichlorobenzene				
Fenitrothion				Trichloroethane				
Fenthion				Trichloroethylene				
Flucofuron				Trifluralin				
Hexachlorobenzene (HCB) ✓				Triphenyltin compounds				
Hexachlorobutadiene (HCBBD)				Vanadium				
Hexachlorocyclohexanes (HCH's)				Zinc	✓			

- b) Are there any other significant chemical components used on site which may be contained in the effluent, including biocides or additives? Y  
 If yes, please give details.

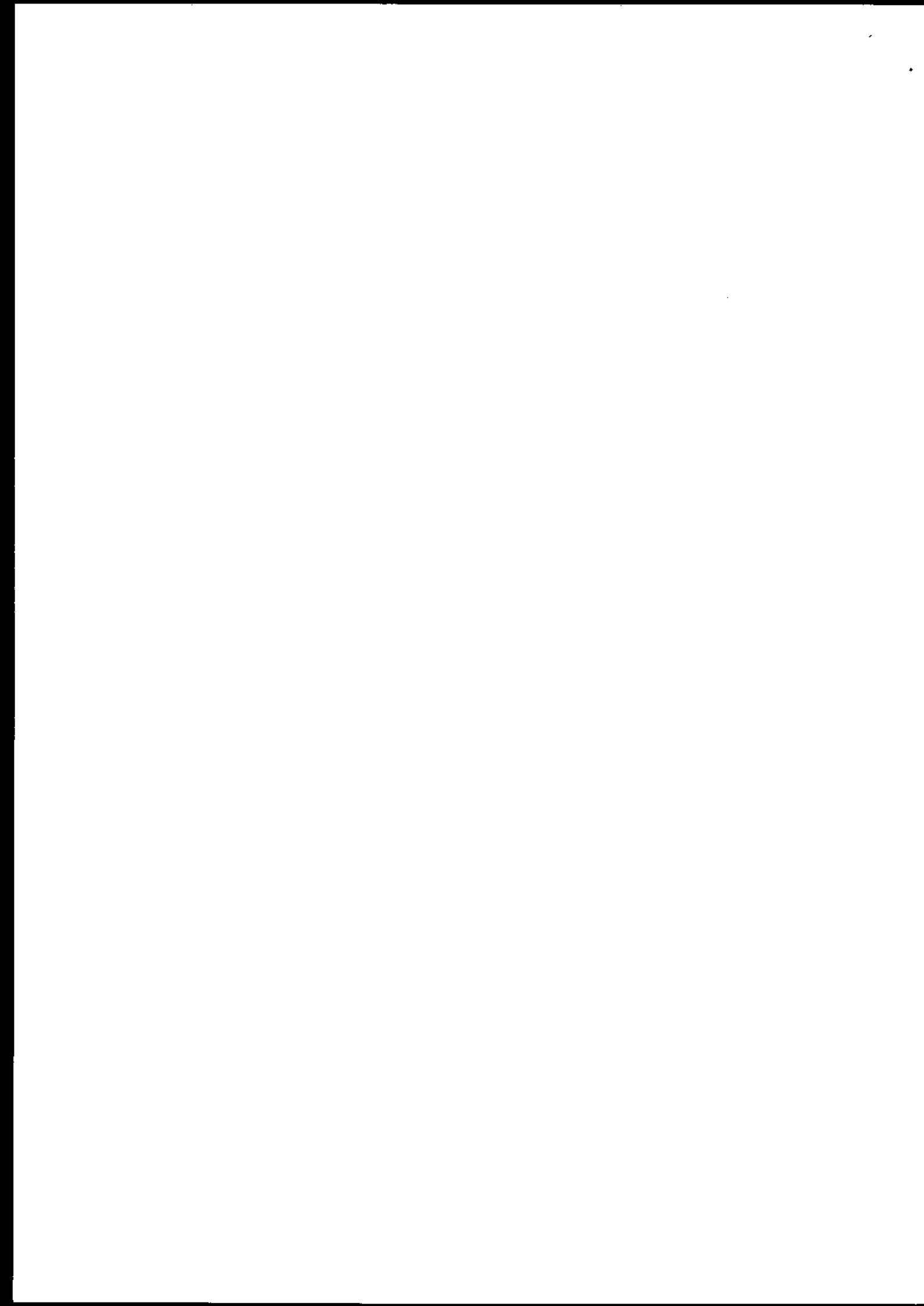
<i>Phenols</i>	<i>(Owens Corning)</i>
	<i>(Shanks - now closed)</i>
<i>Antimony</i>	<i>(Du Pont Traders - now closed)</i>
<i>Titanium</i>	<i>(Du Pont Traders - now closed)</i>



Ponthir Trade Effluent

Owners Name	SIC	Date Granted	Volume m3 / day	Rate l/s	Lower pH	Upper pH	COD - Settled (Det Code 91) mg/l	Total Suspended Solids Det 135 mg/l	Sulphide - Total Det 167 mg/l	Cyanide - Total (Det Code 175) mg/l	Sulphate (Det Code 183) mg/l	Copper (Det Code 215) mg/l
Technicolor Limited	MANUFACTURING	17/11/1986	12	0.7	06.0	11.0	1000	2000			1000	
Technicolor Limited	MANUFACTURING	17/11/1986	0	0.0			0	0			0	
Gwent Chemical & Ind Supplies	VEHICLE WASH	05/04/2000	3	0.3	06.0	11.0	3000	1000			500	
Alfa Laval Saunders Limited	MANUFACTURING	16/12/1976	100	2.8	06.0	11.0	500				1000	1
Mr. S.H. Phillips	LAUNDRY	26/05/1995	5	0.3	06.0	11.0	3000				1000	
Andrew Russell Limited	MANUFACTURING	19/11/1984	35	1.4	06.0	10.0	2500					
Biozyme (GB) Laboratories Ltd	CHEMICAL PROCESSING PLANT	27/10/1976	20	1.4	05.0	11.0	4000	1500			1500	
Burtons Gold Medal Bis Ltd	FOOD INDUSTRY	27/10/1976	100	2.8	04.5	11.0	20000				1000	
Biozyme Laboratories Limited	CHEMICAL PROCESSING PLANT	04/07/1997	15	1.4	06.0	11.0	2500				1000	
Torfaen County Borough Council	SWIMMING POOL	06/04/1978	11	30.6	06.0	10.0		500			1000	
Invida Leisure (Bradford) Ltd	SWIMMING POOL	17/11/2000	10	6.9	06.0	11.0						
Torfaen County Borough Council	SWIMMING POOL	28/07/1977	37	30.3	06.0	10.0					1000	
Doncasters Blaenavon Limited	MANUFACTURING	14/12/1976	10	0.5	05.0	09.0	500				800	1
Doncasters Blaenavon Limited	METAL PRETREATMENT	03/01/1994	2	0.0	05.0	11.0	3000				1000	
Fabicon (Wales) Limited	Metal treatment	22/01/1999	5	0.2	06.0	11.0	1000				1000	10
DuPont UK Limited	MANUFACTURING	19/07/1977	100	4.2	05.0	11.0	15000				1000	
Exide Batteries Limited	MANUFACTURING	23/05/1997	70	4.4	06.0	11.0	1000				1500	1
T/A Fairwater Cleancentre	LAUNDERETTE	20/11/1998	7	0.3	06.0	11.0	2500				1000	
Torfaen County Borough Council	SWIMMING POOL	12/01/1990	455	12.5	05.0	11.0	500				1000	
Hypark Hire	VEHICLE WASH	15/12/1976	20	0.4	06.0	10.0	400					
Extusion and Moulding Com Ltd	MANUFACTURING	25/09/1991	50	2.2	05.0	11.0	1000				1000	1
Johnston Cleaners UK Limited	LAUNDERETTE	15/03/1999	15	0.8	06.0	11.0	500				800	
Expamet building Products Ltd	MANUFACTURING	31/01/2001	30	0.8	06.0	11.0	1000	500			1000	
Gwent powder Coatings Limited	Metal treatment	04/11/1988	10	0.6	06.0	10.0						
Andluff Car Wash Limited	VEHICLE WASH	15/01/1988	17	1.0	06.0	11.0	2500				1000	
Heron Garage Properties Ltd	VEHICLE WASH	17/08/1992	9	0.5	06.0	11.0	500				1000	
Green Vale Linen Services	LAUNDRY	19/01/1993	500	20.8	06.0	11.0	5000				1000	
Torfaen County Borough Council	SWIMMING POOL	11/01/1990	168	7.8	05.0	11.0	500				1000	
Owens Corning	MANUFACTURING	15/12/1976	100	1.4	05.0	09.0	8000 U*					
ArvinMeritor Limited	Motor Industry	16/06/1981	25	1.4	06.0	11.0	4000	1000			500	
Lloyd Fraser Holdings Co Ltd	FOOD INDUSTRY	20/11/1997	10	0.6	06.0	11.0	4000				800	
Torfaen County Borough Council	SWIMMING POOL	15/12/1976	23	12.8	06.0	10.0						
Terry Adams Ltd	Waste Recycling	29/03/1993	15	1.1	06.0	11.0	2000				1000	2
Sun Valley Foods Limited	FOOD INDUSTRY	13/04/2000	75	1.5	06.0	11.0	5000	3000			1000	
Mr. T. Milling	LAUNDRY	21/11/1988	30	0.8	06.0	12.0	2500					
West Fry Foods Limited	FOOD INDUSTRY	27/10/1976	10	0.6	06.0	10.0	3500					
Shanks Chemical Services Ltd	Incinerator	07/11/1986	800	27.8	07.0	11.5	1000		5		5000	3
Mr T Milling TA Snow White Lnd	LAUNDRY	29/04/1988	100	2.8	06.0	12.0	5000	1500			800	2
Trico Limited	Motor Industry	21/10/1994	100	2.8	06.0	11.0	2000	2000			1000	2
Torfaen County Borough Council	SWIMMING POOL	11/01/1990	182	4.2	05.0	11.0	500				1000	
TRW Automotive Limited	Motor Industry	16/06/1981	200	13.9	06.0	11.0					1500	0.5
Emberwood Limited	SWIMMING POOL	12/11/1993	10	2.8	06.0	11.0	500				1000	
Western Corrugated Limited	MANUFACTURING	14/10/1987	1	2.8	06.0	10.0	0 U*					
R.J. Foster	Trade Effluent	28/04/2003	30	2.0	06.0	11.0	1000	1000			500	
			3527	214.6								

\*U : Unspecified



Ponthir Trade Effluent

Owners Name	Zinc (Det Code 245) mg/l	Cadmium (Det Code 253) mg/l	Nickel (Det Code 429) mg/l	Oil and Grease (Det Code 666) mg/l	Phenols Total (Det Code ) mg/l	Lead (Det Code 328) mg/l	Chromium (Det Code 375) mg/l	Tot Metals Pb/Cr/Ni kg/day	Anionic Surfactants mg/l	Tin (Det Code 324) mg/l	COD - Load kg/day	Solids - Load kg/day	Zinc fr kg/day	Nickel fr kg/day	Copper fr kg/day	Chromium fr kg/day
Technicolor Limited			2	100												
Technicolor Limited				0												
Gwent Chemical & Ind Supplies																
Alfa Laval Saunders Limited	10		1	500			1						0.75			
Mr. S. H. Phillips.				500												
Andrew Russell Limited				250												
Biozyme (GB) Laboratories Ltd				100												
Burtens Gold Medal Bis Ltd				500												
Biozyme Laboratories Limited				500												
Torfaen County Borough Council				20												
Invicta Leisure (Bradford) Ltd																
Torfaen County Borough Council				20												
Doncasters Blaenavon Limited	5		5	20		1	2	0.1								
Doncasters Blaenavon Limited				500												
Fabicon (Wales) Limited	2			100						10						
DuPont UK Limited				500							650	70				
Exide Batteries Limited	1		1	500		1	1									
T/A Fairwater Cleancentre				500												
Torfaen County Borough Council																
HyPark Hire				20												
Extrusion and Moulding Com Ltd	2		0.5	50		2.5	0.25									
Johnson Cleaners UK Limited				500												
Expamet building Products Ltd				100					50							
Gwent powder Coatings Limited								10								
Anduff Car Wash Limited				500												
Heron Garage Properties Ltd				100												
Green Vale Linen Services				500												
Torfaen County Borough Council																
Owens Corning				1000 U	20 U*						500 U*	80 U*				
ArvinMeritor Limited				200												
Lloyd Fraser Holdings Co Ltd				250												
Torfaen County Borough Council																
Tony Adams Ltd	5		1	300		1	1									
Sun Valley Foods Limited				500												
Mr. T. Milling																
West Fry Foods Limited				400												
Shanks Chemical Services Ltd	3	0.125	0.75	100	10	3	0.75					1750 U*	10 U*	2.5 U*	6 U*	2.5 U*
Mr T Milling TA Snow White Ltd	2		2	200		2	2									
Trico Limited	2		2	300		2	2									
Torfaen County Borough Council																
TRW Automotive Limited	10		0.5	200			4					20	1.5	0.05	0.03	0.4
Embanwood Limited				250												
Western Corrugated Limited				500												
R.J. Foster				200												

\*U : Unspecified



Ponthir Trade Effluent

Owners Name	Lead f/r	Cadmium f/r	Mercury f/r	Arsenic f/r	PCB's ug/l	PCB f/r	HCB ug/l	Solids mg/l	BOD ATU (Det Code 85) mg/l	Antimony (Det Code) mg/l	Titanium (Det Code 316) mg/l	Ammonia (Det Code 111) mg/l	Anionic Detergent Det 461 mg/l	Arsenic (Det Code 358) mg/l	Mercury (Det Code 105) mg/l	Tot Cr-Cu Pb-Ni-Zn mg/l	
Technicolor Limited																	
Technicolor Limited																	
Gwent Chemical & Ind Supplies								200									
Alfa Laval Saunders Limited								1500									
Mr. S.H. Phillips								1000									
Andrew Russell Limited												80					
Biozyme (GB) Laboratories Ltd								5000									
Burtons Gold Medal Bis Ltd								1000									
Biozyme Laboratories Limited								400	400								
Torfaen County Borough Council																	
Invicta Leisure (Bradford) Ltd																	
Torfaen County Borough Council								400	400								
Doncasters Blaenavon Limited								500									
Doncasters Blaenavon Limited								1000									
Doncasters Blaenavon Limited								1000									
Fabiricon (Wales) Limited								1000									
DuPont UK Limited								500		2	2						
Exide Batteries Limited								2000									
T/A Fairwater Cleancentre								500									
Torfaen County Borough Council								400									
Hypark Hire								2000									
Extrusion and Moulding Com Ltd								500									
Johnson Cleaners UK Limited																	
Expamet building Products Ltd																	
Gwent powder Coatings Limited																	
Anduff Car Wash Limited								1000									
Heron Garage Properties Ltd								1000									
Green Vale Linen Services								2000									
Torfaen County Borough Council								500									
Owens Corning								1000 U*									25
AryinMentor Limited																	
Lloyd Fraser Holdings Co Ltd								1500									
Torfaen County Borough Council								400	400								
Ferry Adams Ltd								1000									
Sun Valley Foods Limited								1000									
Mr. T. Milling								5000									
West Fry Foods Limited								500									
Shanks Chemical Services Ltd	6 U*	100 U*	70 U*	4 U*	3	3 U*	0.5	500						1	0.075		
Mr T Milling TA Snow White Lnd												25	50				
Trico Limited																	
Torfaen County Borough Council								500									
TRW Automotive Limited								500									
Emberwood Limited								1000									
Western Corrugated Limited																	
R.J. Foster																	

\*U : Unspecified





ANNEXE 4  
WELSH REGION SUPPLEMENTARY INFORMATION ANNEXE

Please complete this annexe for every proposed discharge.

*Official Use Only*  
*Application No.*

**For all proposed discharges:**

1. Site Name.

Llanfrechfa Storm Tanks (SSO)

2. Is this application being made to reinstate a lapsed Consent?

N

If so, please state the Number of the lapsed Consent:

**IMPORTANT: If you are in need of advice on either part of Question 2, please contact the Agency Regional Consents Section on 01222 770088.**

3. If the proposed discharge is to be made down a pipe, channel or culvert (as given in Section 2.3 of the main application form), please state the diameter (including units):

2000 mm

4. Please indicate the anticipated cost of the proposed scheme, including any alternatives which may have been considered:

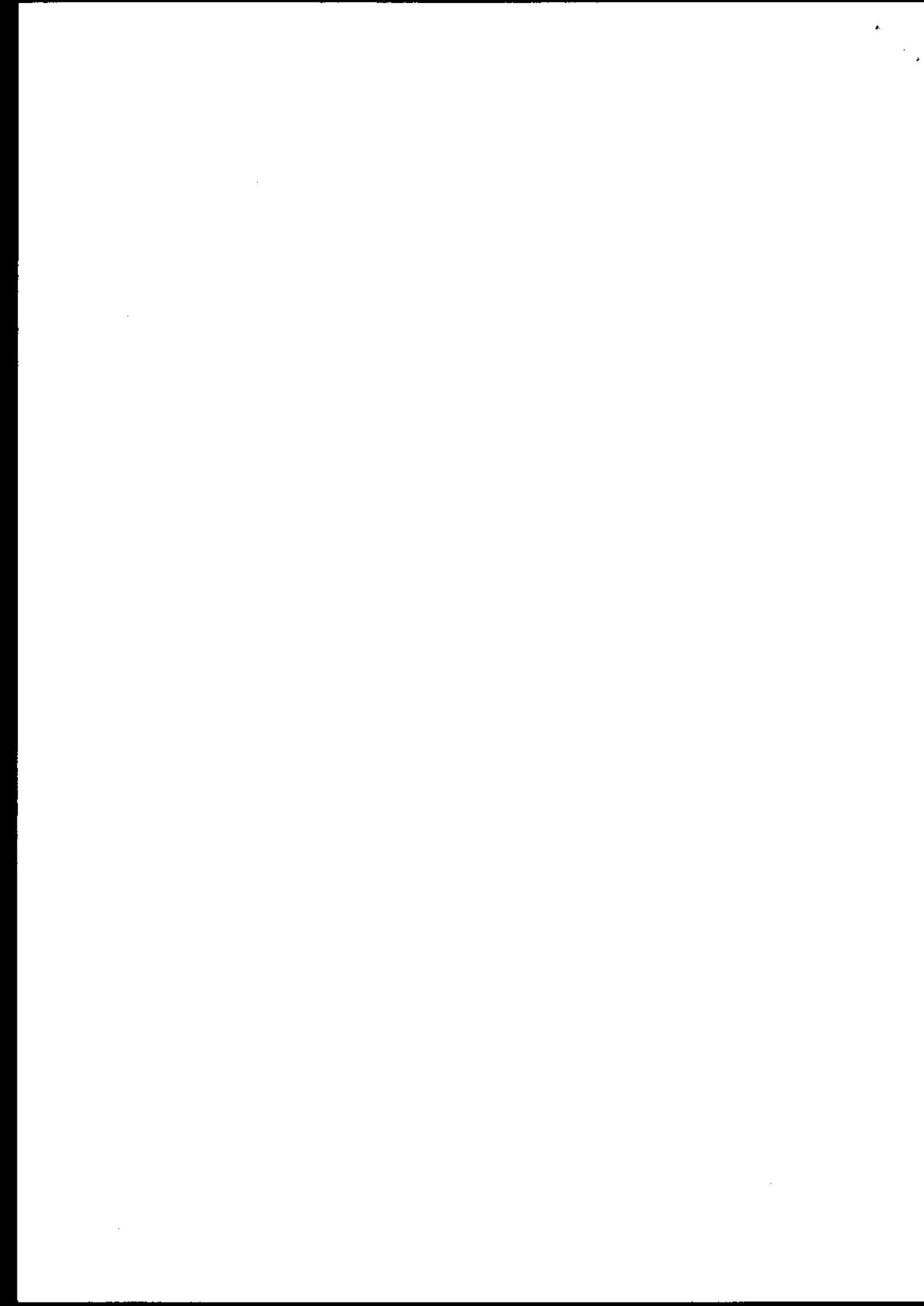
5. Is there any trade effluent component in the proposed discharge?

Y

If yes, please confirm here that you have completed and enclosed Annexe 3:

Tick

✓



6. Will the proposed discharge be pumped or made under gravity? (please circle)

If pumped, please state the maximum pump rate in l/sec:

**For proposed discharges of sewage in storm or emergency conditions:**

7. Please confirm here that you have completed and enclosed both Annexe 2:

8. Please state:

Population served (head)	110,000
Consumption (l/head/day) default = 180	180
Infiltration (m <sup>3</sup> /day)	4838.4
Industrial effluent flow (m <sup>3</sup> /day)	777.6 (based on actual average daily flows)
Dry Weather Flow (m <sup>3</sup> /day)	25401.6
Soc A (l/sec)	2043
Predicted spill frequency (per annum)	Estimated 50 spills per annum (7.2 %)

**IMPORTANT NOTES FOR ALL CONSENT APPLICATIONS:**

1. **Whoever signs the declaration on the main application form takes responsibility for the discharge, and will become the registered consent holder, if consent is given. In the case of a 'body corporate' (eg a public limited company ('plc'), limited, company, local authority), the 'body corporate' will be the registered consent holder, and the person with the delegated authority to sign on behalf of the 'body corporate' should give their job title.**
2. **Agents making an application on behalf of a client, must attach their clients written authority.**
3. **If the name and/or address of the applicant changes after submission of this application to the Environment Agency, the applicant must inform the Agency in writing.**



Your ref.: various  
Our ref.: N/WQConsents/DSAnnex

Date: 14<sup>th</sup> March 2000



ASiantaeth YR  
AMGYLCHEDD CYMRU  
ENVIRONMENT  
AGENCY WALES

Mr A. Andrews  
Dŵr Cymru cyf.  
Plas Y Fynnon  
Cambrian Way  
Brecon  
LD3 7HP

Dear Sir

### DISCHARGE CONSENTS - NOTIFICATION OF CHANGE TO DANGEROUS SUBSTANCES ANNEX

According to our records, you have a Consent to discharge trade or sewage effluent. The Discharge Consent contains the following condition or one that is similar: -  
*"The discharger shall notify the Agency in writing if any known introduction or material change in respect of discharges from trade premises...occurs that may increase or introduce into the effluent any "dangerous substance" included on List I, List II, or Red List (set out in Annex ...to this notice as updated from time to time and notified to the discharger in writing)..."*

Owing to Regulations issued by DETR, the Environment Agency has reviewed the listing of substances in the Annex to this condition.

The Surface Waters (Dangerous Substances) (Classification) Regulations (SI No 2560 (1997) and SI No 389 (1998)) have made some substances, which had previously been identified in Government circular 7/89, statutory and have added 20 new substances to this list. The Annex listing has also been revised to reflect the additional substances in the Regulations and to include other substances that have become a cause for concern since 1989 when the listing was first issued.

**This letter and the attached revised listing serves as the required Notification, referred to in the Consent condition. The change takes immediate effect. Please replace the old list with the new one. Please contact your local Environment Agency office and write or speak to Alun Davies if you have any queries about this letter.**

Thank you for your help in this important matter.

Yours faithfully

*B. Williams*

PP  
**KEVIN THOMAS**  
**WATER QUALITY MANAGER WALES**

Asiantaeth yr Amgylchedd Cymru  
Plas-yr-Afon, Parc Busnes Llancirwg, Llancirwg, Caerdydd, CF3 0EY  
Ffon: 029 20770088 Ffacs: 029 20798555

Environment Agency Wales  
Rivers House, St Mellons Business Park, St Mellons, Cardiff, CF3 0EY  
Tel: 029 20770088 Fax: 029 20798555



CONSENT NO.	
SCHEDULE NO.	

### ANNEX

- |  |                              |
|--|------------------------------|
| 1. Mercury and its compounds   | 2. Cadmium and its compounds |
| 3. Hexachlorocyclohexane<br>(lindane and related compounds)            | 4. Carbon tetrachloride      |
| 5. DDT (the isomers of 1,1,1-trichloro-2,2 bis{p-chlorophenyl} ethane) |                              |
| 6. Pentachlorophenol (PCP)   | 7. Aldrin                    |
| 8. Dieldrin  | 9. Endrin                    |
| 10. Isodrin  | 11. Hexachlorobenzene (HCB)  |
| 12. Hexachlorobutadiene (HCBd)   | 13. Chloroform               |
| 14. Polychlorinated biphenyls  | 15. Dichlorvos               |
| 16. 1,2-Dichloroethane   | 17. Trichlorobenzene         |
| 18. Atrazine   | 19. Simazine                 |
| 20. Tributyltin compounds  | 21. Triphenyltin compounds   |
| 22. Trifluralin  | 23. Fenitrothion             |
| 24. Azinphos-methyl  | 25. Malathion                |
| 26. Endosulfan   | 27. Lead                     |
| 28. Chromium   | 29. Zinc                     |
| 30. Copper   | 31. Nickel                   |
| 32. Arsenic  | 33. *Iron                    |
| 34. *pH outside range 5.5 to 9.0                                       | 35. *Boron                   |
| 36. Vanadium   | 37. PCSD'S                   |
| 38. Cyfluthrin   | 39. Sulcofuron               |
| 40. Flucofuron   | 41. Permethrin               |
| 42. 4-Chloro-3-methyl-phenol   | 43. 2-Chlorophenol           |
| 44. 2,4-Dichlorophenol   | 45. 2,4-D (ester)            |
| 46. 2,4-D (non ester)  | 47. 1,1,1-Trichloroethane    |
| 48. 1,1,2-Trichloroethane  | 49. Bentazone                |
| 50. Benzene  | 51. Biphenyl                 |
| 52. Chloronitrotoluenes  | 53. Demeton                  |
| 54. Dimethoate   | 55. Linuron                  |
| 56. MCPA   | 57. Mecoprop                 |
| 58. Mevinphos  | 59. Napthalene               |
| 60. Omethoate  | 61. Toluene                  |
| 62. Triazophos   | 63. Xylene                   |
| 64. Cyanide  | 65. Azinphos-ethyl           |
| 66. Fenthion   | 67. Parathion                |
| 68. Parathion-methyl   | 69. Trichloroethylene        |
| 70. Tetrachloroethylene  | 71. Dioxins                  |
| 72. PAHs   | 73. Nonyl phenol             |
| 74. Nonyl phenyl ethoxylate  | 75. Di-ethylhexyl phthalate  |
| 76. Bisphenol-A  | 77. Diazinon                 |
| 78. Chlorfenvinphos  | 79. Chlorotoluron            |
| 80. Isoproturon  | 81. Diuron                   |
| 82. Propetamphos   | 83. Flumethrin               |
| 84. Amitraz  | 85. High-Cis Cypermethrin    |
| 86. Cyromazine   | 87. Deltamethrin             |
| 88. Cypermethrin   |                              |

This list is applicable as at 1 December 1998 and will be updated as and when changes to the relevant legislative requirements occur.

\*Notification to the Agency by the Consent holder is only required in respect of changes to trade effluents likely to cause significant changes to the pH value, and/or iron or boron concentrations, of the crude sewage.



DŴR CYMRU  
W E L S H W A T E R

Gwaith Trin Dŵr Gwastraff Tregŵr  
Heol Victoria  
Tre Gŵyr  
Abertawe SA4 3AB

Gowerton Waste Water Treatment Works  
Victoria Road  
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Swansea SA4 3AB

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Gary Inight  
Customer Contact Dept  
Environment Agency Wales  
Rivers House  
St Mellons  
Cardiff  
CF3 0LT

29th November 2004

Tel 01792 511828

Dear Gary,

### Llanfrechfa Storm Tanks, Ponthir

Please find enclosed an application for a variation of consent no AB0064001 which permit the discharges of settled storm and storm sewage from Llanfrechfa storm tanks.

Please note that another Llanfrechfa storm tank consent (AB0064002) was issued on the same day as AB0064001 but DCWW and EAW only hold a copy of 01. The copy of 01 on the Agency's register is annotated to show 01 as settled storm and 02 as storm sewage.

In line with the formal consent document, I have structured this application as a variation to AB0064001, but consider it more appropriate to consent the settled storm and storm sewage discharges separately. I would therefore ask that you use this application to determine variations for AB0064001 and AB0064002 and have enclosed cheque nos. 4618 and 4619 totalling £1486.

Yours sincerely,

Dr Lewis Keil  
Wastewater Scientist

