CONSENT NO.	AN0391701

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creating a better place

Asiantaeth yr Amgylchedd Cymru
Environment Agency Wales

WATER RESOURCES ACT 1991

SECTION 88 - SCHEDULE 10

(AS AMENDED BY THE ENVIRONMENT ACT 1995)

CONSENT TO DISCHARGE

TO: Environment Quality Scientist
Dŵr Cymru Cyfyngedig
Pentwyn Road
Nelson
Treharris
CF46 6LY

The **ENVIRONMENT AGENCY** ("The Agency") in pursuance of its powers under the Water Resources Act 1991 **HEREBY CONSENTS** to the making of a discharge **OF SEWAGE EFFLUENT**, as follows:

Settled Storm Sewage Effluent

FROM: Presteigne Sewage Treatment Works.

AT: Clatterbroom, Presteigne, Powys.

TO: The River Lugg.

HEREAFTER SUBJECT TO the conditions set out in the following schedule(s):

Settled Storm Sewage Schedule No. AN039170101

Subject to the provisions of Paragraphs 7 and 8 of Schedule 10 of the Water Resources Act 1991, no notice shall be served by the Agency, altering this consent without the agreement in writing of the consent holder, during a period of 4 years from the date this consent takes effect or such later date as may be specified in an endorsement to this document.

This consent is issued on the 16 day of December 2005
and takes effect on the 31st day of December 2005.

Signed .....
Team Leader Regulatory Water Quality

Asiantaeth yr Amgylchedd Cymru
29 Ffordd Casnewydd, Caerdydd CF24 0TP
Ffon: 08708 506506 Ffacs: 029 20466070

Environment Agency Wales
29 Newport Road, Cardiff, CF24 0TP
Tel: 08708 506506 Fax: 029 20466070

CONSENT NO.	**AN0391701**
SCHEDULE NO.	**AN039170101**
DATE ISSUED	16/12/05

CONDITIONS OF CONSENT TO DISCHARGE

Settled Storm Sewage ("the Discharge")

FROM: Presteigne Sewage Treatment Works, Clatterbroom, Presteigne.

NATURE

1. The Discharge shall consist solely of settled storm sewage.

LOCATION

2. The Discharge shall be made in the manner and at the place specified as:

   (a) discharging via a 325 mm diameter pipe;

   (b) discharging to The River Lugg;

   (c) at National Grid Reference SO 32232 64365;

   (d) shown marked 'Consent Point' on Plan AN0391701 attached as Annex 1.

SAMPLE POINT

3. An appropriately labelled sample point shall be provided and maintained at National Grid Reference SO 32150 64190, as shown marked 'Sample Point' on Plan AN0391701, so that a representative sample of the Discharge may be obtained. The consent holder shall ensure that all constituents of the Discharge pass through the said sampling point at all times and in any legal proceedings it shall, for the purposes of Section 10 of the Rivers (Prevention of Pollution) Act 1961, be presumed, until the contrary is shown that any sample of the Discharge taken at the said sampling point is a sample of what was discharging into controlled waters.

VOLUME

4. The Discharge shall occur when and only for as long as, the storm tanks are full. The discharge of storm sewage to the storm tank shall only occur when the rate of flow at the storm sewage separating weir is in excess of 26.5 litres per second due to rainfall and/or snowmelt. The storm tanks shall be emptied and their contents returned for full treatment as soon as practicable after cessation of the overflow to the storm tanks.

5. The capacity of the storm tanks shall be at least 259 cubic metres.

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COMPOSITION

6. (a) The Discharge shall have passed, without prior comminution or maceration, through a screening device having apertures no greater than 6 millimetres in two dimensions.

(b) The screening device shall be maintained in an efficient operational condition.

(c) All screenings must be removed and disposed of in a manner such as to prevent entry to the discharge.

WORKS OPERATION

7. a) The works shall be operated and the effluent shall be treated in a manner which, so far as reasonably practicable, minimises the polluting effects of the Discharge made from the works on controlled waters.

b) This condition does not require any alteration of the works or a change in the type of treatment used.

RECORDING AND REPORTING

8. (a) The consent holder shall establish and operate a documented maintenance programme and record all non-routine actions undertaken that may have adversely affected the operation of the storm tanks. Copies of the programme shall be made available for inspection by the Agency's officers at all reasonable times.

(b) On request the consent holder shall supply the Agency with a written report on the maintenance and all non-routine actions that may have adversely affected the operation of the storm tanks.

9. The consent holder shall notify the Agency in writing if any known or planned introduction or material change in respect of discharges from trade premises to the sewerage system occurs, that may increase or introduce into the effluent any "dangerous substance" (set out in Annex 2 to this notice as updated from time to time and notified to the consent holder in writing), and any other substance considered by the consent holder as having or likely to have a significant effect on the receiving waters.

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SUBSTANTIAL CHANGE

10. A discharge shall not be made from the works if it would cause a significant increase in the polluting effects of the Discharge on controlled waters as a result of a new or altered discharge of trade effluent into the works.

11. A discharge of trade effluent into the works is new if -

(a) it is made by the sewerage undertaker and is of a kind not made into the works by the undertaker immediately before the date of effect of this variation; or

(b) it is made by a third party and the discharge is authorised on or after that date.

12. A discharge of trade effluent into the works is altered if -

(a) it is made by the sewerage undertaker and its composition or quantity changes significantly on or after the date of effect of this variation; or

(b) it is made by a third party and the alteration of the discharge is authorised on or after that date.

13. An increase in the polluting effects of the Discharge on controlled waters is not significant for the purposes of this condition if it relates to any characteristic of the Discharge which is specifically regulated by conditions in this consent but it may be significant if it is caused by a change in some other characteristic of the Discharge.

14. For the purposes of this condition "trade effluent" means -

(a) any discharge by the sewerage undertaker other than

(i) domestic sewage from premises connected directly or indirectly to the works; or

(ii) surface water run-off;

(b) any discharge by a third party which is authorised under Chapter III of Part IV of the Water Industry Act 1991 or which is accepted as a result of a contract with the sewerage undertaker.

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UNAUTHORISED DISCHARGES

15. A Discharge made from the works shall not contain any poisonous, noxious or polluting matter or solid waste matter which is attributable to any unauthorised discharge into the works.

(a) A Discharge into the works is unauthorised if it is made by a third party and either there is no obligation to receive it or conditions subject to which there is an obligation to receive it are not observed.

(b) Nothing in this, or any other, condition of this consent prevents anyone from relying on any defence available to them under Section 87 of the Water Resources Act 1991.

START DATE

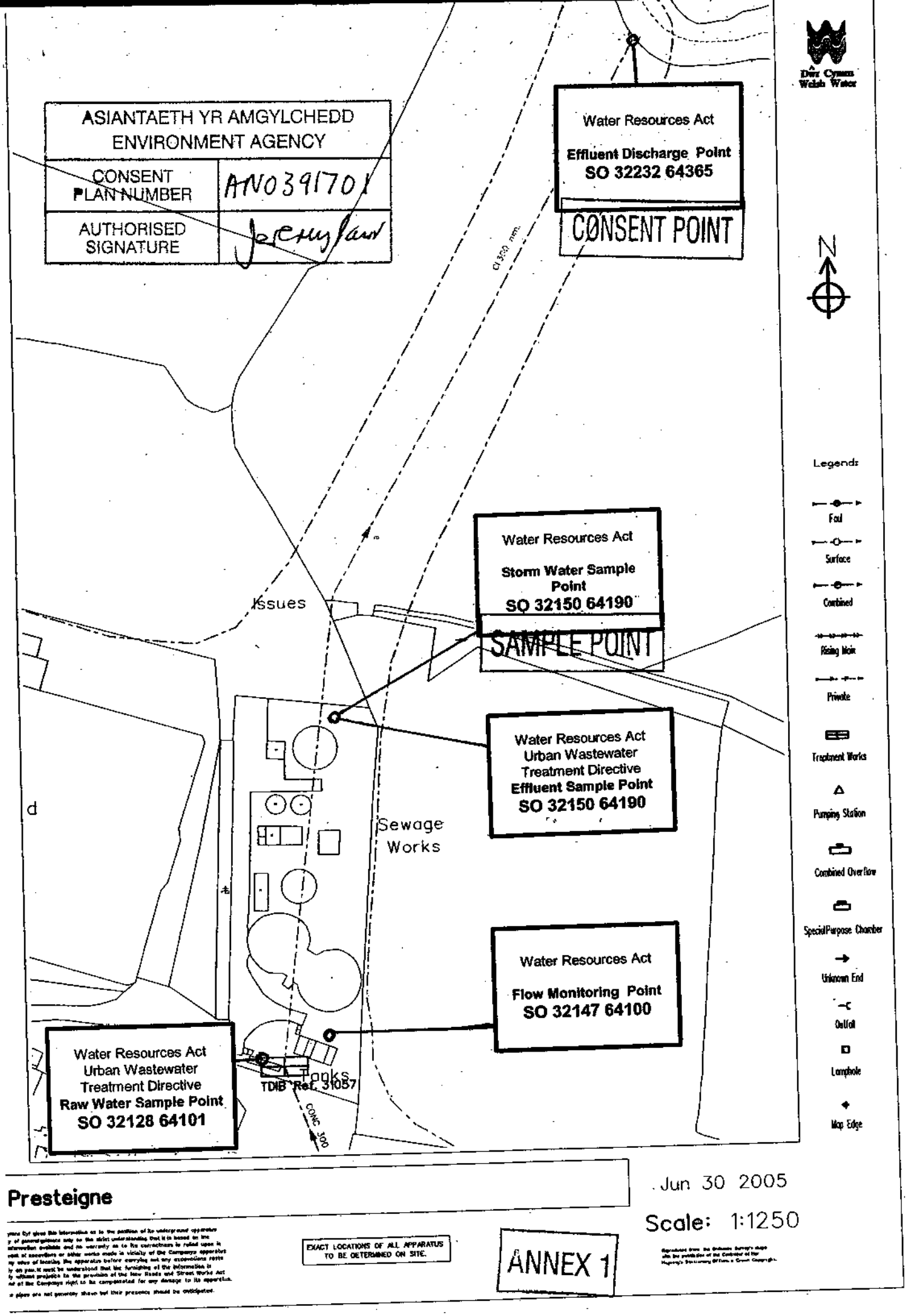
16. There shall be no discharge under the terms of this consent until the 31st December 2005 or the start of commissioning of the settled storm overflow whichever is the sooner.

ANNEX 2

1.	Mercury and its compounds	2.	Cadmium and its compounds
3.	Hexachlorocyclohexane (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.


ASIANTAETH YR AMGYLCHEDD
ENVIRONMENT AGENCY
CONSENT PLAN NUMBER
AN039170X
AUTHORISED SIGNATURE
Jeremy Law
Dŵr Cymru Welsh Water
Water Resources Act
Effluent Discharge Point
SO 32232 64365
CONSENT POINT
N
Legends
Foul
Surface
Combined
Rising Main
Private
Treatment Works
Pumping Station
Combined Overflow
Special Purpose Chamber
Unknown End
Outfall
Manhole
Map Edge
Water Resources Act
Storm Water Sample Point
SO 32150 64190
SAMPLE POINT
Water Resources Act
Urban Wastewater Treatment Directive
Effluent Sample Point
SO 32150 64190
Water Resources Act
Flow Monitoring Point
SO 32147 64100
Water Resources Act
Urban Wastewater Treatment Directive
Raw Water Sample Point
SO 32128 64101
Sewage Works
Tanks
TDIB Ref. 31057
Issues
d
CONC 300
Presteigne
Jun 30 2005
Scale: 1:1250
EXACT LOCATIONS OF ALL APPARATUS TO BE DETERMINED ON SITE.
ANNEX 1

PR

creu lle gwell
creating a better place

FILE COPY

Asiantaeth yr Amgylchedd Cymru
Environment Agency Wales

Environment Quality Scientist
Dwr Cymru Cyfyngedig
Pentwyn Road
Nelson
Treharris
CF46 6LY

Ein cyf/Our ref:
ACSC/CUST/SE/MS/AN0391701
Eich cyf/Your ref:

Dyddiad/Date: 21 December 2005

Dear Sir

WATER RESOURCES ACT 1991, SCHEDULE 10 (AS AMENDED BY THE ENVIRONMENT ACT 1995) APPLICATION FOR CONSENT TO DISCHARGE SETTLED STORM SEWAGE EFFLUENT BY DWR CYMRU CYF FROM PRESTEIGNE SEWAGE TREATMENT WORKS, CLATTERBROOM, PRESTEIGNE, POWYS

APPLICATION NO: AN0391701

Further to your application the Agency has decided that consent should be given subject to conditions. I enclose the Agency's formal consent to discharge sewage effluent at Presteigne Sewage Treatment Works, Clatterbroom, Presteigne, Powys.

Under the present Scheme of Charges for Discharges to Controlled Waters an annual charge will be made for all consents to discharge, except where the discharge is of sewage effluent of five cubic metres or less per day. The charge is based on information derived from the conditions attached to the consent to discharge, as outlined in the enclosed leaflet.

If you consider that the conditions imposed by the consent are unreasonable you have a right of appeal to the Secretary of State for the Environment at National Assembly for Wales at Cathays Park, Cardiff CF10 3NQ.

Notice of an appeal must be given in writing within three months of this notification and must be accompanied by a statement of the grounds of appeal.

If granted, a consent under Schedule 10 of the Act, covers water quality considerations only. It does not alter the need to obtain any other consents or approvals which might be required in connection with your proposal under other legislation. For example it does not give any right or permission to discharge where land is not owned by the applicant.

Asiantaeth yr Amgylchedd Cymru
Plas-yr-Afon, Parc Busnes Llaneirwg, Llaneirwg, Caerdydd, CF3 0EY
Llinell gwasanaethau cwsmeriaid: 08708 506 506
Ebost: enquiries@environment-agency.gov.uk
www.asiantaeth-amgylchedd.cymru.gov.uk

Environment Agency Wales
Rivers House, St Mellons Business Park, St Mellons, Cardiff, CF3 0EY
Customer services line: 08708 506 506
Email: enquiries@environment-agency.gov.uk
www.environment-agency.wales.gov.uk

Please take careful note that if the holder of the consent changes, you must inform the Agency IN WRITING as soon as possible of the name of the new holder. This is to ensure that the rights and charges associated with the Consent are transferred to the new holder. A Certificate of Holder notice will be sent to you shortly which is designed for this purpose, and should be kept safely with the Consent until required.

If you have any queries regarding the enforcement of this consent, please do not hesitate to contact Jeremy Parr, Team Leader Regulatory Water Quality, Environment Agency Wales.

Yours sincerely

A Price

pp **MATTHEW SIMON**
External Relations
South East Area
Direct Dial: 02920 245330

Cont/d..

DŴR CYMRU
WELSH WATER

Pentwyn Road
Nelson
Mid Glamorgan
Treharris CF46 6LY

Tel: +44 (0)1443 452300
Fax: +44 (0)1443 452323
Web site: www.dwrcymru.com

Heol Pentwyn
Nelson
Morgannwg Ganol
Treharris CF46 6LY

Ffôn: +44 (0)1443 452300
Ffacs: +44 (0)1443 452323
Safle gwe: www.dwrcymru.com

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

12th August 2005

Tel 01443 452138

ANO 391701.

PIR.

Dear Gary,

Presteigne WwTW FE & Storm Consent Applications

Please find enclosed applications for variation of the final effluent consent AW1005101 for Presteigne WwTW together with an application for a new consent for the storm element.

I enclose cheque no 4848 for £1544 to cover:
Presteigne WwTW FE £772
Presteigne WwTW Storm £772

E.A. DST cheque £1544.00 16 AUG 2005 PAID WELSH REGION

Yours sincerely,

Scott Webster
Environment Performance Manger

ASIANTAETH YR AMGYLCHEDD
ENVIRONMENT AGENCY

WATER RESOURCES ACT 1991 (schedule 10)

(as amended by the Environment Act 1995)

Application for a new consent to discharge

Settled Storm Water

Regional/Area Address:	*Official Use Only*
The Regional Finance Manager Environment Agency Welsh Region PO Box 425 St Mellons Business Park CARDIFF CF3 0LT	*Dist/Area Ref:* 1303 *Application No.* AN035170I. *Date Received:* *Fee Received:*

E.A. £772. 16 AUG 2005 PAID WELSH REGION

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.

Clatterbroom
Presteigne
Powys

Post Code: **LD8 2LB**

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 **unknown**
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	☑	4. Borehole	☐	7. Sub-Irrigation System	☐
2. Channel	☐	5. Well	☐	8. Combination of 6 & 7	☐
3. Culvert	☐	6. Soakaway	☐	9. Other (*please specify below*)	☐

325 mm Pipe

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

S	O	3	2	2	3	2	6	4	3	6	5

(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).

S	O	3	2	1	5	0	6	4	1	9	0

(please indicate on accompanying plans)

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

None

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 [✓]

1 No inlet works
3 No storm tanks operating in parallel.

b) Will the treatment process involve the use of any chemicals (eg ferric salts, polyelectrolytes). If yes please give details. **No**

2.6 a) On what date do you anticipate the discharge will commence? **31/12/05**

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

to: / /

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

The overflow will occur when flow to the works exceeds 26.5l/s for longer than 2 hours.

2.7 a) Are there any existing consents for discharges from the premises (see note vi)? **Yes**
If yes, please give the reference numbers *(Any further information should be given in Section 5.3).*

AW1005101 – Final effluent discharge consent

b) Has any person had a Prohibition Notice serviced on them in respect of this site? **No**
If yes, please give the reference number.

3 SITE DETAILS

3.1 Please give the name of the relevant Planning Authority.

Powys

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	[ ]	8. Water Services plc STW	[✓]

4. Vehicle Parking Area ☐ 9. Water Supply ☐

5. Commercial Premises *(please specify)* ☐ 10. Other *(please specify)* ☐

3.3 Please indicate source of the water supply - tick as appropriate: **Not Applicable**

1. Well ☐ 5. River *(please give name below)* ☐

2. Borehole ☐ 6. Estuary *(please give name below)* ☐

3. Precipitation (eg rain or snow) ☐ 7. Coastal Water *(please give name below* ☐

4. Mains *(please state water supply company)* ☐

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) ☐ 5. Into Land ☐

2. River or Stream (non-tidal) ☑ 6. Onto Land ☐

3. Canal ☐ 7. Directly into Groundwater ☐

4. Lake, Lock or Pond ☐ 8. Coastal Water (see note vii) ☐

State name of receiving water if known:

River Lugg

4.2 In the case of sub-irrigation systems, soakaways or boreholes: **Not Applicable**

(a) Is any part of the system within 5 metres of the boundary of the premises? Y/N

(b) Is any part of the system within 10 metres of a watercourse? Y/N

(c) Is any part of the system within 50 metres of a borehole or spring? Y/N

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

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

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

(i) Depth of lining | m

(ii) Depth of perforated lining | m

(iii) Depth of unperforated lining | m

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

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

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).

SIGNED: S ..... **PRINT NAME:** Scott Webster .....

ON BEHALF OF: Dwr Cymru Cyf ..... **DATED:** 12th August '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

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 Annexe 3 should also be completed).

Official Use Only
Application No.

1. Site Name.

Presteigne STW

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? **Yes**

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)

S	O	3	2	1	5	O	6	4	1	9	O

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

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

5. Overflow settings

a)	Overflow setting to storm tanks	**26.5 l/s**
b)	Maximum flow to storm tanks	**unknown**
c)	Overflow setting to storm sewage overflow	**N/A l/s**
d)	Maximum flow to storm sewage overflow	**N/A l/s**

6. Storage capacity

a)	Volume of Storm tanks	**259 m³**
b)	Retention time of storm tanks at 3PG+I+3E	**2.8 hours**
c)	Storage capacity of sewer/wet well	**N/A m³**

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

As per scoping document

8. Will facilities be provided to raise alarms (eg telemetry)? **No**
If yes, please give details.

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

6 mm perforated plate screens.

10. What provisions will be made to deal with:

a) power failure (eg standby generators)?

None

b) mechanical breakdown (eg standby pumps)?

None

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.

ASIANTAETH YR AMGYLCHEDD
ENVIRONMENT AGENCY

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.

Presteigne

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

Labtec – Circuit board manufacture
Kaye Ltd –
Note: A third industrial consent may be applied for during 2005. This will be waste from production of dairy products. The current design loading and flow onto the works includes this flow.

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).*

1 No Inlet screen
1 No Primary tank
2 No trickling filters
1 No humus tank

3. Rainfall Dependent Discharges

a) Is the volume going to be rainfall dependent? **No**

b) If yes, please give the total area drained. m²

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? **5.2 l/s**

b) What is the average daily flow? **200 m³/d**

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

i) give the abstraction licence number

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? **No**
If yes, please give details

b) Will automatic sampling equipment be provided? **No**
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.

b) Will the discharge be monitored for temperature? **No**
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 (HCBD)				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? **No**

If yes, please give details.

Notes (see also the notes attached to the main form):

a) *For direct trade effluent discharges, full details of the type of the effluent are required (eg cooling water from air conditioning units), along with typical analytical details and the results of any toxicity studies on the effluent or its constituents. In certain circumstances the Agency may require that specific samples be taken and tests and analysis carried out. The Agency is empowered to recover any costs incurred as a result of special studies.*

b) *Possible sources of contamination include oil/chemical storage areas, vehicle loading/unloading areas, heavy vehicle parking areas and oil/petrol filling points. Any other potential sources of contamination should be detailed.*

c) *Where discharges of trade effluent take place to a sewerage system, as covered by this application, please give details of all authorised discharges of substances listed in table 8 overleaf.*

ASIANTAETH YR AMGYLCHEDD
ENVIRONMENT AGENCY

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.
   Presteigne STW

2. Is this application being made to reinstate a lapsed Consent? **No**

   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):
   325 mm

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

   £2,150,000

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

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

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

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

For proposed discharges of sewage in storm or emergency conditions:

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

8. Please state:

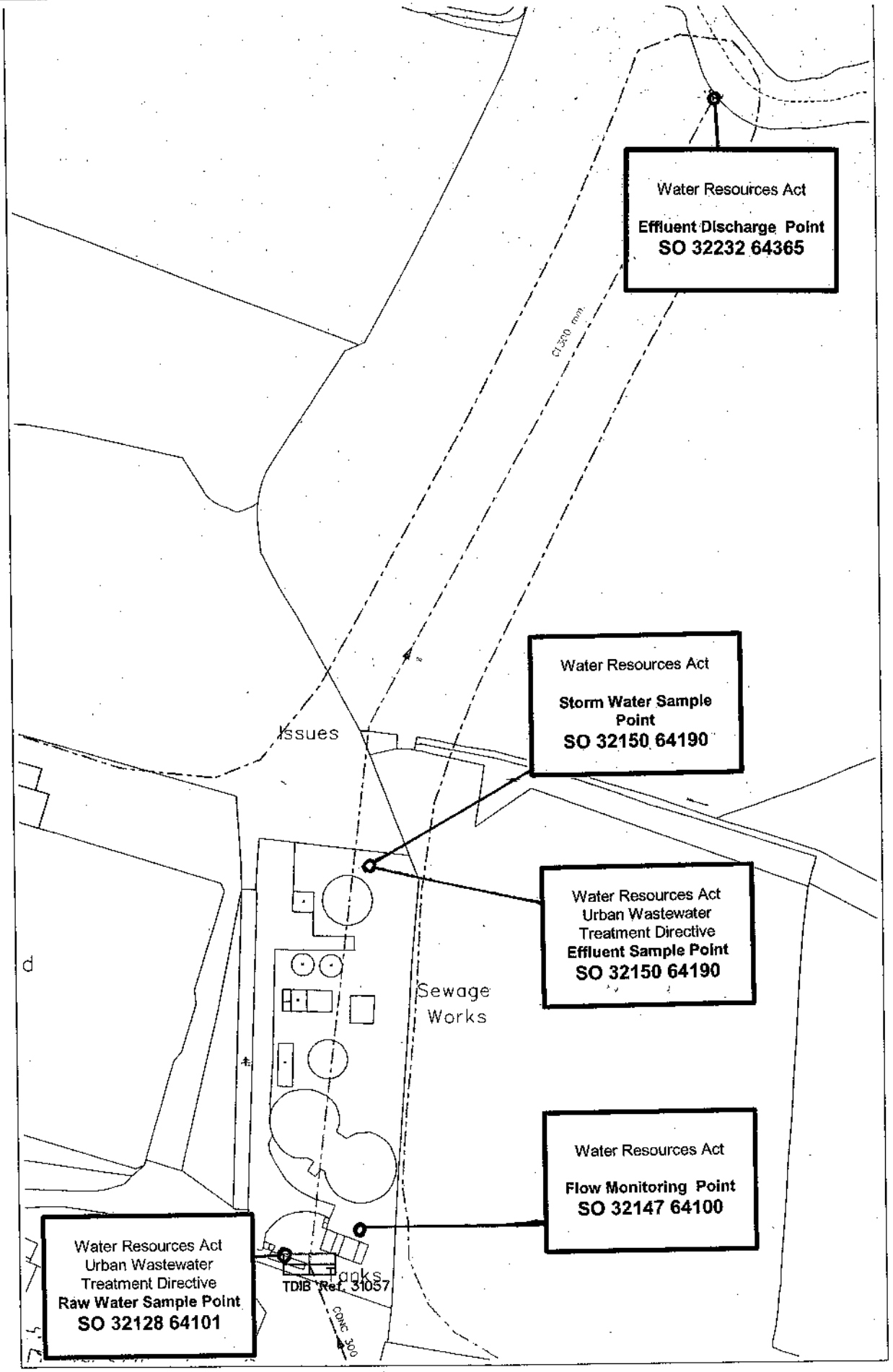
Population served (head)	**2158**
Consumption (l/head/day) default = 180	**180**
Infiltration (m^3/day)	**117**
Industrial effluent flow (m^3/day)	**635**
Dry Weather Flow (m^3/day)	**1140**
Soc A (l/sec)	**59.7**
Predicted spill frequency (per annum)	**Not Known**

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.**



Dŵr Cymru Welsh Water

N

Legend:

- Foul
- Surface
- Combined
- Rising Main
- Private
- Treatment Works
- Pumping Station
- Combined Overflow
- Special Purpose Chamber
- Unknown End
- Outfall
- Lamphole
- Map Edge

Presteigne

Jun 30 2005

Scale: 1:1250

Dwr Cymru Cyf gives this information as to the position of its underground apparatus by way of general guidance only on the strict understanding that it is based on the best information available and no warranty as to its correctness is relied upon in the event of excavations or other works made in vicinity of the Companys apparatus and any need of locating the apparatus before carrying out any excavations rests entirely on you; it must be understood that the furnishing of this information is entirely without prejudice to the provision of the New Roads and Street Works Act 1991 and of the Companys right to be compensated for any damage to its apparatus.

Service pipes are not generally shown but their presence should be anticipated.

EXACT LOCATIONS OF ALL APPARATUS TO BE DETERMINED ON SITE.

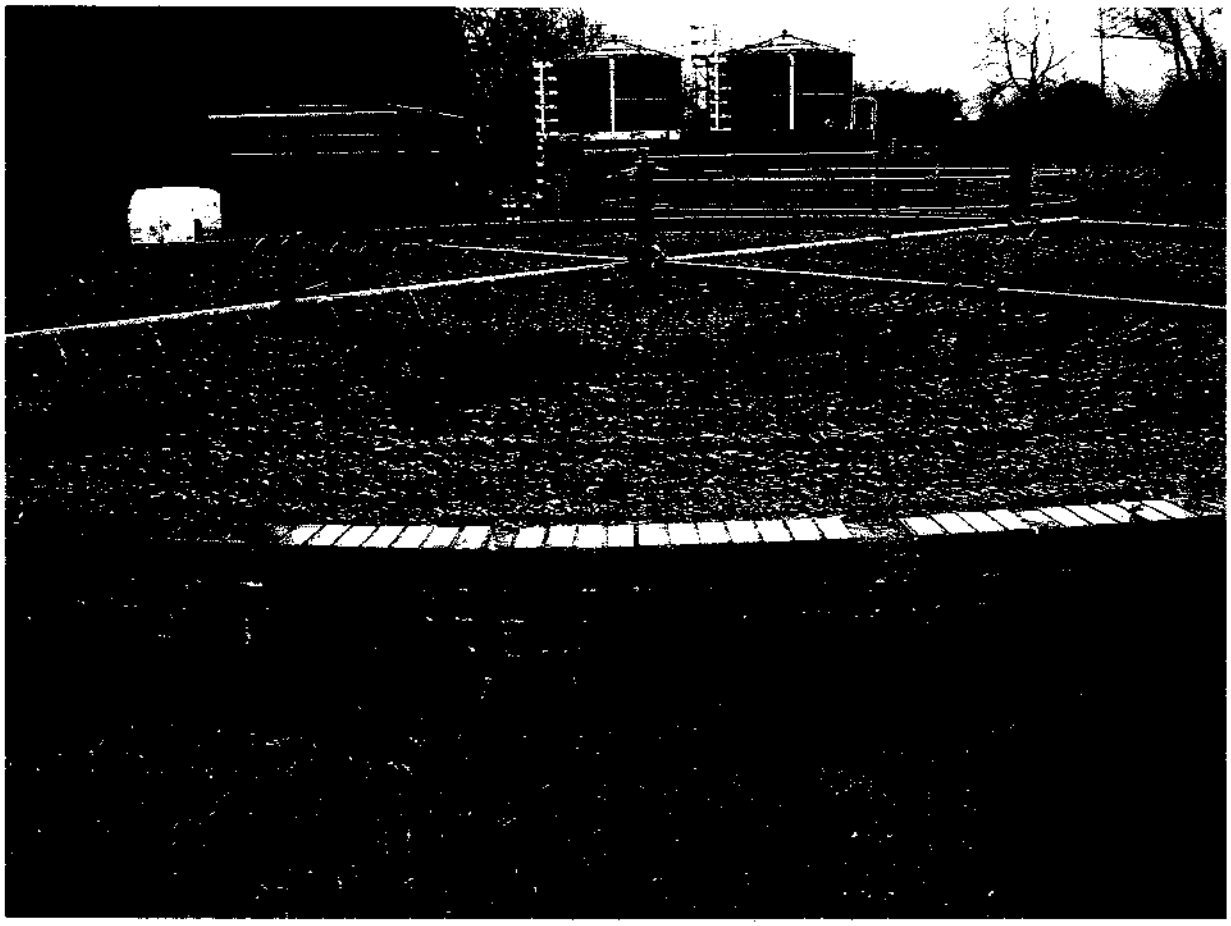
BLACK & VEATCH

DŴR CYMRU
WELSH WATER

Welsh Water
Capital Alliance
Cynghrair Cyfalaf
Dŵr Cymru

Solutions Report

Presteigne WwTW



Introduction

Presteigne sewage treatment works serves the town of Presteigne and the surrounding areas. It has drivers to improve the consent on the works in both AMP 3 and AMP 4. The AMP 3 drivers will modify the consent from 80 mg/l Suspended solids 38 mg/l BOD and 50 mg/l ammonia, to 40/30/9 respectively. In addition Habitats modelling of the river Lugg in 2008 will further modify the consent by adding a phosphorous limit to the consent. The work carried out in AMP 3 on the works will deal with the AMP 3 modification only though consideration will be given to the infrastructure requirements to meet the future P consent.

The works comprises preliminary treatment, primary settlement, secondary treatment in rock media filters, and humus settlement. The works sludge is stored on site prior to removal to treatment in tankers.

The general condition of the works infrastructure is good but all of the process units are not sufficient in their current state to meet the needs of the new consent. Space on the works is constrained with little land available at the top of the site where conditions are most favourable for additional structures. The land to the bottom of the site is very poor and recent experience with building there has shown that this area should be avoided if possible.

Given the constraints on the site the proposed modification involve reuse of the existing structure as much as possible. This means increasing the capacity of some of the units without changing the footprint and changing the function of other units to make best use of the current hydraulic profile. The recommendations for modification on the site are:

- Replace the inlet screen with 6 mm perforated plate unit.
- Replace the existing Dortmund primary tanks with one new unit 10 m diameter unit.
- Convert the existing primary tanks to an inlet pump station. This will also provide storm storage capacity.
- Convert existing circular humus tank to storm volume.
- Convert existing storm tank to final settlement tank.
- Modify the existing filters to provide additional secondary treatment volume by adding 500 mm to the current level and replace the current flow split chamber and distributors.

Works Solution

The new process stream is illustrated in the attached process block diagram.

Inlet works

The existing inlet works requires refurbishment and setting up to allow accurate splitting of the new works flows. This will be achieved by resetting the storm weir and installing a new inlet screen.

Primary treatment

The existing primary tanks are undersized for the new FFT and inefficient in removing solids load from the process. A new primary tank will be provided allowing for more effective use of the secondary process. The existing tanks will be used for storm storage and as a pump sump to pass flow into the new primary tank.

Secondary treatment

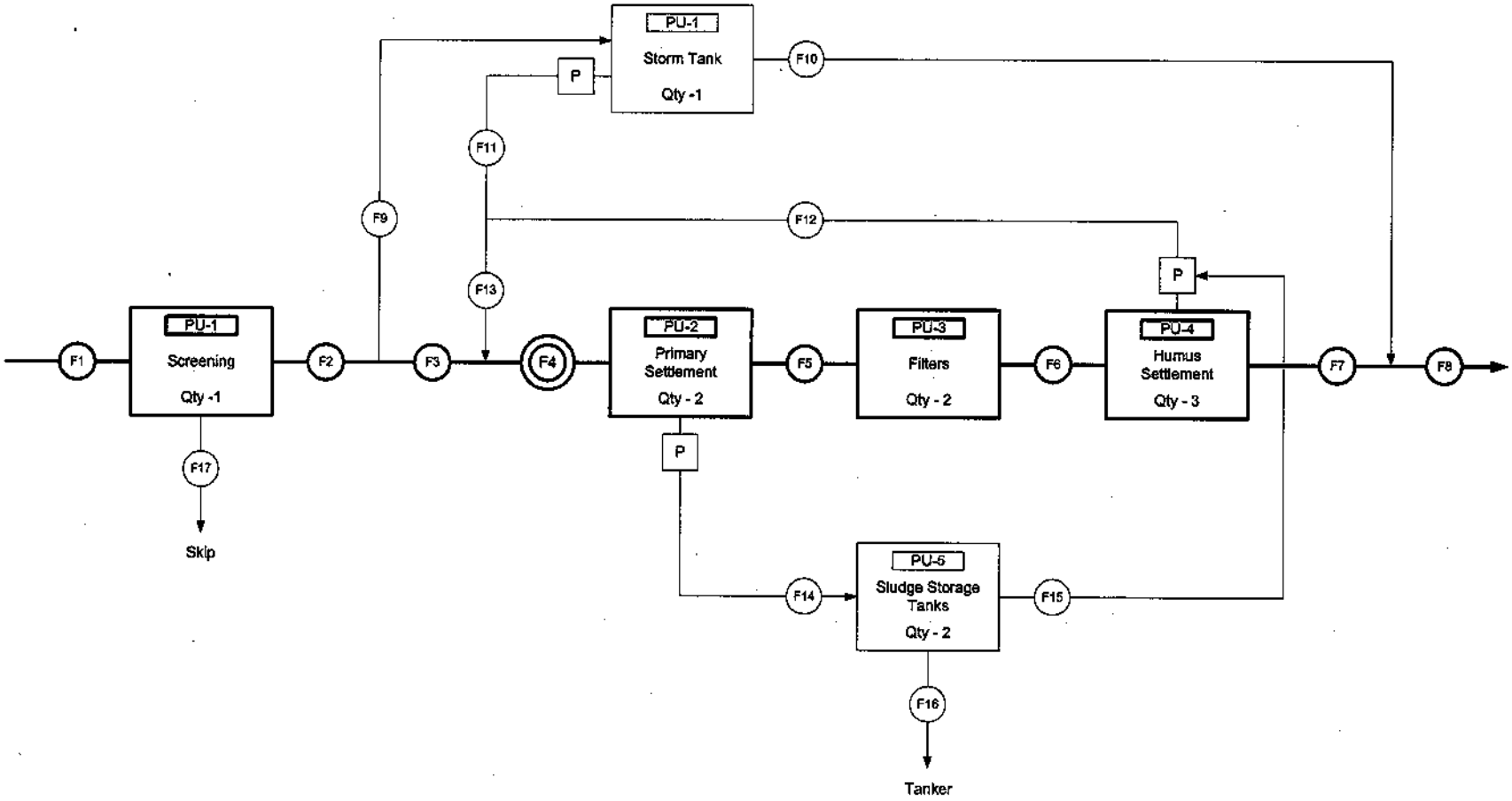
The existing secondary process is undersized for the new ammonia consent and extra capacity is required. Because of the space limitation on the site this will be provided by adding depth to the existing units. During this process temporary plant will be required to treat to the current effluent standard. This will be located at the bottom of the plant and will be removed from site at the end of the project.

Final settlement

The existing final settlement tanks are too small to meet the new consent. Given the limitations on space available on the site the plant will use the existing storm tanks for final settlement and the existing humus tanks, in conjunction with the existing primary tanks for storm storage.

Storm treatment

The existing storm tank will be converted to humus settlement as part of the new scheme. Storm storage will be provided by conversion of the existing humus and primary tanks to storm tanks. This will provide 259 m3 of storage or 2.8 hours based on the new FFT.



Process Block Diagram for the works and storm

Storm treatment sign off sheet

SCHEME NAME:

DC No	Consent No	Name	NGR	Present		Future		Screens (type & size)	Storage (m3)	No. of spills		Emergency provision if PS	Comments (for EA use)
				SOCA (l/s)	CSO setting (l/s)	SOCA (l/s)	CSO setting (l/s)			Current	Future		
3DC1007701	AW1005101	Presteigne	SO 32235 64375					6 mm perforated plate	258 m3	-	-	-	

Accepted by EA

Name: [signature] Date: 28/7/05

BLACK & VEATCH

Black & Veatch Contracting Limited. Registered in England No. 3163649
Registered Office: 650 London Road, Isleworth, Middlesex, TW7 4EG
Telephone: +44 (0)20 8560 5199 Fax: +44 (0)20 8568 5479

OPTIONS REPORT

DOCUMENT NO:	132971-00-1007
TITLE:	Options for storm water storage during construction
TAG NO:	
CLIENT:	DCWW
CONTRACT TITLE:	Presteigne STW
B&VCL CONTRACT NO:	132971

REASON FOR ISSUE

☐ FOR ENQUIRY	☒ FOR REVIEW	☐ FOR CONSTRUCTION
☐ FOR INFORMATION	☒ FOR APPROVAL	

Rev	Date	Revision Description/ Status	No. Pages	Mech	Elec	Proc	Checked by	App'd by
A	06/10/03	For review and approval				PJW		

1 BACKGROUND

Presteigne sewage treatment works serves the town of Presteigne and the surrounding areas. It has drivers to improve the consent on the works in both AMP 3 and AMP 4. The AMP 3 drivers will modify the consent from 80 mg/l Suspended solids 38 mg/l BOD and 50 mg/l ammonia, to 40/30/9 respectively. In addition Habitats modelling of the river Lugg in 2008 will further modify the consent by adding a phosphorous limit to the consent. The work carried out in AMP 3 on the works will deal with the AMP 3 modification only though consideration will be given to the infrastructure requirements to meet the future P consent.

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The general condition of the works infrastructure is good but all of the process units are not sufficient in their current state to meet the needs of the new consent. Space on the works is constrained with little land available at the top of the site where conditions are most favourable for additional structures. The land to the bottom of the site is very poor and recent experience with building there has shown that this area should be avoided if possible.

Given the constraints on the site the proposed modification involve reuse of the existing structure as much as possible. This means increasing the capacity of some of the units without changing the footprint and changing the function of other units to make best use of the current hydraulic profile. The recommendations for modification on the site are:

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- Convert the existing primary tanks to an inlet pump station. This will also provide storm storage capacity.
- Convert existing circular humus tank to storm volume.
- Convert existing storm tank to final settlement tank.
- Modify the existing filters to provide additional secondary treatment volume by adding 500 mm to the current level and replace the current flow split chamber and distributors.

To carry out this work the main process stream will need to be replaced with a temporary unit and there will be disruption to the storm storage volume. This report outlines the modification required to the storm storage to ensure sufficient volume is provided at each stage of the program.

The current works FFT is 15 l/s. This requires that 108 m3 of storage is required to meet the current storm volume.

A number of options have been considered for the additional storage these include: and

- Provision of additional storage and tankering away storm water
- Provide additional passive storm storage.

Providing temporary storage has been identified as the most environmentally safe and cost effective solution. This will require the conversion of an existing sludge tank to a storm storage tank and the construction of a temporary pumping station to transfer the storm flows. The pump station will be provided with a standby pump to ensure security of operation. The key risk with this option is the power failing on the site during a storm. To militate against this standby power will be provided to ensure security of operation.

The temporary storage tank will be required for a period of approximately 6 weeks starting from the 4th July 2005.

2 OPTIONS CONSIDERED

Several options were considered in defining the solution for the temporary works, these were:

2.1 Tankering of additional flows

Storm flows could be stored and tankered away to prevent discharge to the environment. This is not considered a possible option a there is not sufficient storage on site to hold potential storm flows. The construction of additional volume would inhibit the works required to make the site compliant and would be costly. This option would rely on pumping of the storm flows into the new storage tanks and thus would be subject to the same risks as any solution that provided flow through storage. In the event that tankers could not be brought to site before the volume provided filled up a facility to discharge to the environment would be required. This would provide 1.4 hours of storage at the existing FFT.

Advantages	Disadvantages
- Provides a "no discharge solution".	- Requires pumping. - Difficult to operate - Costly compared with other options.

2.2 Provision of additional gravity (passive) storage.

The best option for the site would be to provide passive storage which provides the required retention. This is difficult and expensive to achieve and would leave redundant assets at the end of the changeover period. The site is constrained by available land and ground conditions. The water table is very high and the ground above is poor. This makes buried structures difficult and expensive to provide. The existing infrastructure provides sufficient storage for the longer term solution once the tanks have been modified. Thus the temporary tanks would be redundant once the works modifications were completed.

Advantages	Disadvantages
- Provides sufficient passive storage reducing risks implied by pumping.	- Expensive and risky construction - Wasted asset - Costly compared with other options.

2.3 Provision of temporary storage

It is possible to use existing tanks on the site to supplement the storm volume during. This will require that flow is pumped into the additional volume and allowed to spill for the temporary tank. In the event of power or pump failure this would risk the storm flows spilling from the smaller volume providing insufficient retention. This risk can be mitigated by providing standby pumping facilities and standby power generation.

Advantages	Disadvantages
- Provides sufficient storage without increasing site infrastructure - cost effective construction for temporary works.	- Risks associated with pumping between tanks require mitigation.

3 CONSTRUCTION PHASES

The general layout of the tanks at Presteigne is shown in Figure 1:

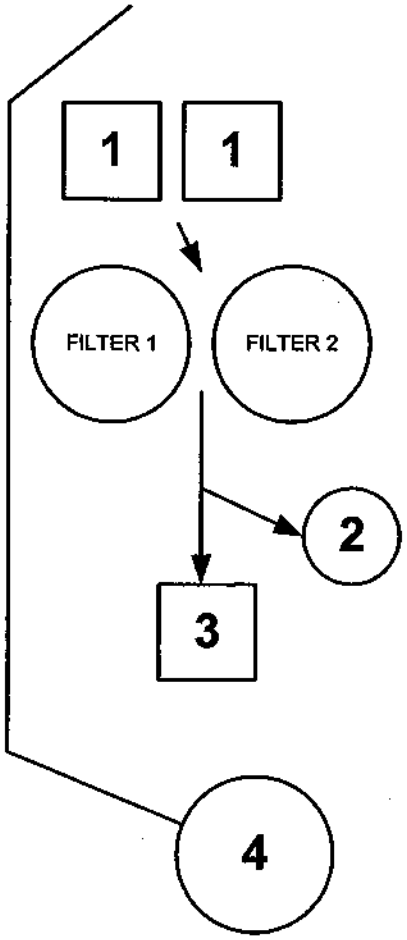

Figure 1 Existing plant layout

3.1 Phase 1: Conversion of existing storm tank (4) to provide future settlement capacity.

During this period the humus tank (tank 2) will be used in its current capacity while the humus tank (tank 3) will be used for storm storage. The volume of tank 3 is 77 m3 which requires an additional 31 m3 of storage to meet the required volume of 108 m3. To provide this an adjacent sludge tank will be cleaned out and used to supplement the storm volume. The volume of this sludge tank is 33 m3 and thus, together the two tanks, meet the volume requirements. To use the tank a temporary pump will be placed in the humus tank (tank 4) this will operate on high level in the humus tank and pump the flow to the temporary storm tank. Once the temporary tank is full flow will spill into the existing storm outfall. Once the storm flows abate the storm system will be emptied back into the works flow by the operator.

A standby pump will be provided for the transfer pumps however in the event of the pumps failing the temporary volume will not be available and the storm flows will weir out of tank 4 and pass to the river. In this case 1.4 hours of storage will be provided.

3.2 Phase 2: Conversion of the existing humus tank (2) to a storm tank

Once the new humus capacity (4) becomes available it will be used in that capacity and the existing humus tank (2) will be converted for use as a storm tank. During this period tank 3 will continue to be used as storm storage combined with the temporary storage described in 2.1.

3.3 Phase 3: Demolition of tank 3 and construction of new primary tank

The new primary tank will be located on top of the area of tank 3. During the construction of the primary tank the newly converted tank 2 will be used for storm storage. The volume of this tank can be varied by setting the outlet weir at different levels thus this tank will provide the full storage requirement at 15 l/s of 108 m3. This will remove the need to pump to the temporary tank to provide additional storage and the sludge tank and associated buildings will be demolished. The storage provide by the new tank will be passive and will only require operator intervention to empty the tank until such time as the automated storm return system is commissioned after phase 4.

3.4 Phase 4: Conversion of the primary tanks to storm storage.

Once the new primary tank is on line the existing tanks will be available for additional storm storage. These in combination with tank 2 will provide sufficient storage for the new FFT of 26 l/s.

4 CONSTRUCTION PROGRAM

A final program is not available for the works but it is currently understood that the temporary storm storage will be required from the 4th of July 2005 for a period of up to 6 weeks. All efforts will be made to ensure this period is reduced as much as possible. Any changes to these dates will be indicated to the Environment Agency as they occur.

A detailed program will be made available to the Environment Agency once the modifications to the works required are understood and can be programmed in detail.

freshwater
MARKETING COMMUNICATIONS

FAX

TO: Matthew Simon.

COMPANY: Environment Agency Wales

FAX:

DATE: 25/8/05

PAGE: 1 OF 2

FROM: Helen Minto.

Matthew,

Confirmation of order AN0391701.

Helen

WE HAVE MOVED. Please note our new details...

Freshwater House Cardiff Gate Business Park Cardiff CF23 8RS
Tel - 029 2054 5370 Fax - 029 2054 5380

memo

ASIANTAETH YR AMGYLCHEDD CYMRU
ENVIRONMENT AGENCY WALES

1

I/To Helen Minto, HowellPetersen

Ein Cyf/Our ref **AN0391701**

Eich Cyf/Your ref EA3797

Oddi wrth/From Matthew Simon

Wednesday, 24 August 2005

Phone No. (02920) 245330

ADVERTISMENT - APPLICATION FOR CONSENT TO DISCHARGE

I would be grateful if you would place the attached advertisement as follows: one insertion in ***Brecon & Radnor Express (bilingual)***, and one insertion in the **London Gazette** ***(not bilingual)***.

To comply with the Water Resources Act 1991, the notice in the London Gazette should not appear earlier than one day after the last publication in the local newspapers.

CAN YOU PLEASE RETURN A COPY OF THIS MEMO SPECIFYING THE PROPOSE DATES OF PUBLICATION:

	Week 1 (Date)
Brecon & Radnor Express	1/9/05
London Gazette	2/9/05

Thanks

MATTHEW SIMON
External Relations

Direct fax 029 20362920

Asiantaeth yr Amgylchedd Cymru
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Llinell gwasanaethau cwsmeriaid: 08708 506 506
Ebost: enquiries@environment-agency.gov.uk
www.asiantaeth-amgylchedd.cymru.gov.uk

Environment Agency Wales
Rivers House, St Mellons Business Park, St Mellons, Cardiff, CF3 0EY
Customer services line: 08708 506 506
Email: enquiries@environment-agency.gov.uk
www.environment-agency.wales.gov.uk