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WEPD/OD/46/D7

WO REF WEP/WS9112/10
WWA REF BG 0038101

WELSH OFFICE

**CONTROL OF POLLUTION ACT 1974: SECTIONS 34 & 55
THE CONTROL OF POLLUTION (DISCHARGES BY AUTHORITIES) REGULATIONS 1984
CONSENT FOR A DISCHARGE**

WHEREAS

1. The WELSH WATER AUTHORITY (hereinafter referred to as 'the Water Authority') proposes to discharge biologically treated sewage effluent from the Rhoshill Sewage Treatment Works to an un-named stream at national grid reference SN 1944 4013 as shown on the attached plan.
2. The proposals require the consent of the Secretary of State for WALES in pursuance of sections 34 and 55 of the Control of Pollution Act 1974 as modified by the Control of Pollution (Discharges by Authorities) Regulations 1984 (hereinafter referred to as 'the Regulations').
3. In accordance with the provisions of Regulation 2 of the Regulations the Water Authority have submitted the proposals to the Secretary of State in the form of an application for consent dated 20 February 1989

THE SECRETARY OF STATE FOR WALES hereby consents to the proposed discharge subject to the conditions specified in the Schedule hereto attached.

Dated this ²¹ day of *June*
1989

Signed 

On behalf of the Secretary
of State for Wales



WEPD/OD/34/D7

SCHEDULE

Conditions prescribed for the discharge of biologically treated sewage effluent to an un-named stream at the Rhoshill Sewage Treatment Works

"Sewage" can mean domestic sewage alone or in admixture with industrial waste water(s).

1. The nature of the effluent shall be biologically treated sewage effluent
2. Adequate facilities shall be provided for the Secretary of State's representative so as to enable samples of the effluent to be conveniently obtained at grid reference SN 1939 4010
3. The Welsh Water Authority shall take samples of the effluent in accordance with the relevant provisions of the Authority's sampling periodicity guidelines for the time being in force and approved for this purpose by the Secretary of State (and as may be indicated below) and shall keep records of such samples and the results of analyses thereof for inspection by the Secretary of State's authorised representative.
4. The volume of effluent under dry weather conditions shall not exceed 10 cubic metres in any period of 24 hours.
5. The maximum rate of flow discharged to the river at any time shall not exceed 0.24 litres per second. All sewage flow rates up to the maximum quoted above shall receive biological treatment.
6. The analytical methods used for determining compliance or otherwise with this consent shall be assumed to be those specified in the latest edition of "Methods for the Examination of Waters and Associated Materials" published by HMSO. Other methods of analysis may be used as alternatives to those specified in the above named publication providing that Secretary of State is

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satisfied that they give comparable or better performance characteristics. Such other methods shall be submitted for approval to the Secretary of State together with all necessary supporting evidence.

7. The quality of the effluent discharged to the river at all flow rates up to the maximum quoted in 5 above, shall not be inferior to the following numerical quality limits (determinands) save as provided for in the Annex (by reference to the table included therein) to this Schedule.

7a. The Suspended Solids concentration (dried at 105 degrees Celsius) shall not exceed 70 milligrams per litre.

7b. The BOD (Biochemical Oxygen Demand) concentration determined in the presence of 0.5 milligrams per litre of allyl-thiourea shall not exceed 45 milligrams per litre.

7c. The ammoniacal nitrogen expressed as nitrogen shall not exceed 47 milligrams per litre.

8. Any previous consents issued by the Secretary of State in respect of effluents to which this discharge relates shall be revoked as of the date of this consent.

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ANNEX

Where the number of samples taken in one year (that is from the 1 April to the 31 March) falls within any of the ranges given in Column 1 of the table below, the number of samples which are inferior to a specified numerical quality limit determinand set in Paragraph 7, and where relevant, Paragraph 8 of the Schedule shall not exceed the appropriate permitted number as listed in Column 2. A sample shall only be considered as having failed in relation to the particular determinand(s) for which the specified quality limit is exceeded. A sample shall be considered to be satisfactory in relation to other determinands, the concentration of which, are equal to or lower than the specified limit.

TABLE

Column 1	Column 2
Series of samples taken in any year	Maximum number of samples in which the same numerical quality limit may be exceeded.
4-7	1
8-16	2
17-28	3
29-40	4
41-53	5
54-67	6
68-81	7
82-95	8
96-110	9
111-125	10
126-140	11
141-155	12
156-171	13
172-187	14
188-203	15
204-219	16
220-235	17
236-251	18
252-268	19
269-284	20
285-300	21
301-317	22
318-334	23
335-350	24
351-365	25

WELSH WATER AUTHORITY				Welsh Office Form COPA4		Welsh Off Ref												
SUPPORTING INFORMATION FOR CONSENT/REVIEW - WWA Form SS.SI.1						Welsh W A Ref		BG 0038101										
DISCHARGER + Agent		W.W.A.						WWA District		SW / A								
PREMISES / SOURCE Address/Location		Rhoshill STW																
DISCHARGE TYPE																		
DISCHARGE STATUS		New reqg Consent		Exg reqg Review		Exg reqg Consent		Prevly Exempt		Temp'y until								
CONSENT / REVIEW EXISTING - issued		To: W.W.A.				By: W.O.			Date: 30.1.85									
ADVERTISEMENT ?		Yes / No because: <i>Existing Discharge</i>																
OUTLET DETAILS		New / Altered / Exg		OS Ref		SN1944 4013		Diam		100 mm	Form	UPVC						
SAMPLING POINT		TDIB SPT		100218		OS Ref		SN1939 4010		Outlet /								
DISCHARGE IS TO		Inland Stream		<input checked="" type="checkbox"/>		Landl Pond		Onto Land		Into Land		Groundwtr	Estuary	Coastal				
RECEIVING WATER		Immediate / Main		Un-named stream / 0.4 kms Trib Nant Morgennau														
Water in current RQO Programme ?		Data for :		Current Situath		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	83073/		
		Main Up / Down		/		/		/		/		19	/	/	19	83074		
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								1KM		2KM						
		Effect of discharge on uses, etc.		NONE														
EFFLUENT QUALITY DATA - derived from: samples taken from: to : (mg/l except pH)		Determinand		BOD(ATU)		Solids		Ammonia										
		Maximum		96.0		158.0		45.0										
		Minimum		1.6		9.0		0.5										
		Mean		23.6		57.3		17.1										
		Standard Deviation		21.8		45.5		13.3										
		Median / 50%ile		15.8		40.6		10.2										
		95%ile: N / LN / NP		77.8		75.1		84.2										
QUALITY LIMITS (mg/l except pH) S/W if seasonal 1/2 if phased		Existing		75		220		—										
		Proposed 95%ile		45		70		47										
		Proposed Maximum																
		Application																
CALCULATION MODE		To Quality Spec'n		9.00				9.00*										
		Method used		WARN BREW * = 0.021mg/l unionised.														
EFFLUENT FLOW DATA		P Popul'n No.		G Consum'n m³/h/d		PG Sewage m³/d		I Infilt'n m³/d		E Trade m³/d		PG+I+E DWF m³/d		Storm Sewage Offlow Weir Setting x DWF		Maximum Rate 1/sec		Maximum Daily Vol m³/d
Existing Design		35		0.120		4.2		1.4		-		5.6						
Meas/Estd Current		33		0.160		5.32		4.7		-		10 (Winter)						
Proposed Design		Max flow in this small sewerage system is taken to be																
Ultimate Design		3 X measured DWF + 4.7m³ Infiltration.																
Design Horizons: Proposed: Ultimate:		Sewerage system is		Flow values for		Existing												
		% combined		Consent Conditions		Proposed		10		-		-		-		-		20.6

SUPPORTING INFORMATION FOR A CONSENT / REVIEW (CONTINUED) Form SS.SI.1						Welsh Off Ref	
Relating to:						Welsh W A Ref BG 00381 01	
RIVER AND EFFLUENT FLOWS AND DILUTIONS Flows in m ³ /d. If estimated, give method:			Flows in Immediate Receiving Water			Flows in Main Receiving Water	
			Meas / Estd at OSGR: SN 1944013			Meas / Estd at OSGR:	
			Minimum	5%ile	Mean	Minimum	5%ile : Mean
				34.6	270.4		242 2013
Effluent Statistic	Source of Data	Effluent Volume	Dilution Ratios - expressed as x River : 1 Effluent				
D.W.F.	Meas / Estd	10.0		3.46	27.04		
Maximum	Meas / Estd						
RIVER REGIME	Width, Depth & Reaeration		W	m	D	m	R
TREATMENT PLANT UNITS - with Critical Dimensions			Primary Sett.		Area	m ²	
Unit	Detail	Existing	Proposed	Ultimate	Storm Tanks	Area	m ²
Storm S. Offlow	Set @ 1/s				" "	Volume	m ³
Screens	Space mm				Septic Tank	Volume	m ³ 8.3
Well Retent'n.	Hours				Biol. Filters	Media	m ³ 29.5
Pumping Rate	Max. 1/s				Act'd. Sludge #	Volume	m ³
Gravity Feed	Yes / No				Package Plant	Surface	m ²
Flow Meas't.*	Yes / No				Pasveer Ditch#	Volume	m ³
Grit Removal	Yes / No				Final Sett't.	Area	m ² 2X1.28m ²
Macer'n/Comm'n.	Yes / No				Tert'y Treat.*	Area	m ²
Other Units and Details	*.Type # Power						
SLUDGE TREAT. AND DISPOSAL							
TRADE WASTES Types & m ³ /d	NIL						
FURTHER DATA & STATEMENT From Dist/Div.	See attached letter of 21.02.89						
Additional conditions Nearby efflts and changes EC Dangerous Substances EC Designated Waters SSSIs (Continue on Form SS.SI.2 if necessary)							
CAPITAL WORKS	Outline Appra.		Second Appra.		Final Appra.		Start Finish
District Ref			District Contact	R. MORGAN		HOWOS Ref	
For use by: HQ WATER QUALITY SECTION							
For use by: WELSH OFFICE							

