



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	Temply 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 RQD Programme ?	Data for :	Current Situath		Short-term RQD		Long-term RQD		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	SaIFish	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 m ³ /h/d	PG Sewage m ³ /d	I Infilt'n m ³ /d	E Trade m ³ /d	PG+I+E DWF m ³ /d	Storm Sewage Offlow Weir Setting x DWF	1/sec	Maximum Rate 1/sec	Maximum Daily Vol m ³ /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 + 4.7m ³ Infiltration.								
Design Horizons: Proposed: Ultimate:	Sewerage system is % combined	Flow values for Consent Conditions		Existing	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 Immediate Receiving Water			Flows in Main Receiving Water	
Flows in m ³ /d. If estimated, give method:			Meas / Estd at OSGR: SN 1944013			Meas / Estd at OSGR:	
			Minimum	5%ile	Mean	Minimum	5%ile
				34.6	270.4		242
			Dilution Ratios - expressed as x River : 1 Effluent				
Effluent Statistic			Source of Data		Effluent Volume		
D.W.F.			Meas / Estd		10.0		
Maximum			Meas / Estd				
RIVER REGIME			Width, Depth & Reaeration		W	m	D
					m	R	
					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:	H.Q. WATER QUALITY SECTION						
For use by:	WELSH OFFICE						

