

Regulatory Sampling Plan 2022

Consent description	Minimum frequency of analysis	Standard	Consent limits	Measurement point	Resp. for ensuring sampling carried out	Who samples / measures	Who analyses	
Water - Mossmorran								
Pollution Prevention & Control PPC/A/1013494								
Effluent								
W01 Flowrate	Daily	Continuous flow meter with visual display	<470 m ³ /hr	GF700	Operations	Continuous Online	Shift Teams	
W01 pH	Daily	In-house analysis to standard: ASTM D 1293	5 to 9	GA703	Operations	Continuous Online	Shift Teams	
W01 Temperature	Daily	In-house analysis	<40°C	GT1700	Operations	Continuous Online	Shift Teams	
W01 Total Petroleum Hydrocarbon (oil in water)	Twice per week	In-house analysis to standard: Modified MHSO blue book method IP426.97 and EPA 413.2	CU = 100 kg/day	24 hr Comp. Sampler	Operations	Shift Teams	FEP Laboratory	
			CL = 60 kg/day	24 hr Comp. Sampler				
W01 Chemical Oxygen Demand	Twice per week	In-house analysis to standard: LCK314, LCK514, LCK1414, FEP 1104	CU = 2,250 kg/day	24 hr Comp. Sampler	Operations	Shift Teams	FEP Laboratory	
			CL = 1,250 kg/day	24 hr Comp. Sampler				
W01 PAH	Monthly	In-house analysis to standard: AN19A/1	No Consent	24 hr Comp. Sampler	Operations	Shift Teams	External Laboratory	
W01 BTEX	Monthly	In-house analysis to standard: AN15	No Consent	24 hr Comp. Sampler	Operations	Shift Teams	External Laboratory	
W01 Copper	Weekly	In-house analysis to standard: Hach method 8143, FEP 1085	No Consent	24 hr Comp. Sampler	Operations	Shift Teams	FEP Laboratory	
W01 Mercury	Monthly	In-house analysis to standard: ISO5961:1994	No Consent	24 hr Comp. Sampler	Operations	Shift Teams	External Laboratory	
W01 Cadmium	Monthly	In-house analysis to standard: ISO5961:1994	No Consent	24 hr Comp. Sampler	Operations	Shift Teams	External Laboratory	
W02 pH	Daily on overflow	In-house analysis to standard: FEP 1010 (ASTM D 1293)	5 to 9	Dronachy Burn Outfall	Operations	Shift Teams	FEP Laboratory	
W02 Total Petroleum Hydrocarbons (oil in water)	Daily on overflow	In-house analysis to standard: Modified MHSO blue book method IP426.97 and EPA 413.2	None Visible	Dronachy Burn Outfall	Operations	Shift Teams	FEP Laboratory	
W02 COD	Daily on overflow	In-house analysis to standard: LCK314, LCK514, LCK1414, FEP 1104 (ASTM D1252-06)	No Consent	Dronachy Burn Outfall	Operations	Shift Teams	FEP Laboratory	
Water - Braefoot Bay								
Control of Pollution Act R4204								
Flow Rate (A9)	n/a	Sampled by SEPA on periodic basis. In-house sampling conducted to ensure ongoing compliance.	9 m ³ /hr	Drain to Crawford Falls	n/a	not tested	not tested	
	n/a		196 m ³ /day	Drain to Crawford Falls	n/a	not tested	not tested	
pH (A6)	Weekly		5 to 9	Drain to Crawford Falls	Operations	Shift Teams	FEP Laboratory	
			30°C max	Drain to Crawford Falls	n/a	Shift Teams	not tested	
Suspended Solids (A1)	Weekly		80 mg/l	Drain to Crawford Falls	Operations	Shift Teams	FEP Laboratory	
Biological Oxygen Demand (BOD) (A2)	Monthly		20 mg/l	Drain to Crawford Falls	Operations	Shift Teams	External Laboratory	
Toxic Metals (Copper) (A3)	Monthly		200 ug/l	Drain to Crawford Falls	Operations	Shift Teams	FEP Laboratory	
Oil (A4)	Weekly		None Visible	Drain to Crawford Falls	Operations	Shift Teams	FEP Laboratory	
Water Abstraction								
Controlled Activities Regs CAR/L/1012804								
Flowrate (3.3.2)	Hourly data	Continuous Online Measurement	12,960 m ³ /day	GC7003	n/a	Continuous Online	Environmental Co-ord.	
Air								
Pollution Prevention & Control PPC/A/1013494								
Furnaces NOx (4.1.2)	Quarterly	Direct measurement with Testoterm 350 Flue Gas Analyser	350 mg/m ³	Furnace Stack	Maintenance	Maint. Execution Team	Maint. Execution Team	
Furnace O2 (4.1.2)	Continuous	Continuous Online Measurement	7% maximum except when on decoke	Furnace Stack	Operations	n/a	Shift Teams	
Furnace Smoke	Daily	BS 2742:1969 (Ringlemann)	<2	Furnace Stack	Operations	Shift Teams	Environmental Co-ord.	
Furnace thermal input (MW), temp & Op. rate	Continuous	Continuous Online Measurement	No Consent	Furnace	Operations	n/a	Shift Teams	
Gas Turbine NOx (4.1.2)	Quarterly	Direct measurement with Testoterm 350 Flue Gas Analyser	550 mg/m ³	Gas Turbine Exhaust	Maintenance	Maint. Execution Team	Maint. Execution Team	
Gas Turbine SOx (4.1.2)	Quarterly	Direct measurement with Testoterm 350 Flue Gas Analyser	No Consent	Gas Turbine Exhaust	Maintenance	Maint. Execution Team	Maint. Execution Team	
Gas Turbine O2	Continuous	Continuous Online Measurement	No Consent	Gas Turbine Exhaust	Operations	n/a	Shift Teams	
Flare Smoke	Daily SU/SD	BS 2742:1969 (Ringlemann)	<2	Furnace Stack	Operations	Shift Teams	Environmental Co-ord.	
Boiler O2 (5.1.3)	6 monthly	BS EN 14789 or alternative as agreed in writing with SEPA	No Consent	Boiler Stack	Maintenance	External Consultant	External Consultant	
	Continuous	As agreed in writing with SEPA	No Consent	Boiler Stack	n/a	n/a	n/a	
Boiler CO (5.1.3)	6 monthly	BS EN 15058	200 mg/m ³	Boiler Stack	Maintenance	External Consultant	External Consultant	
Boiler Water Vapour (5.1.3)	6 monthly	BS EN 14790 or alternative method as agreed in writing with SEPA	No Consent	Boiler Stack	Maintenance	External Consultant	External Consultant	
Boiler Temperature (5.1.3)	6 monthly	BS EN 16911-1	No Consent	Boiler Stack	Maintenance	External Consultant	External Consultant	
	Continuous	As agreed in writing with SEPA	No Consent	Boiler Stack	n/a	n/a	n/a	
Boiler Pressure (5.1.3)	6 monthly	BS EN 16911-1 or alternative as agreed in writing with SEPA	No Consent	Boiler Stack	Maintenance	External Consultant	External Consultant	
Boiler Velocity and volumetric flowrate (5.1.3)	6 monthly	BS EN 16911-2	No Consent	Boiler Stack	Maintenance	External Consultant	External Consultant	
Boiler Operating Rate (5.1.3)	Continuous	As agreed in writing with SEPA	No Consent	Boiler Stack	n/a	n/a	n/a	
Boiler Smoke (5.1.3)	As required (SU/SD)	BS 2742:1969	Ringleman Shades (see permit)	Boiler Stack	Maintenance	Shift Teams	Shift Teams/SEPA	
Boiler Nox (5.1.3)	6 monthly	BS EN 14792	Gas = 300 mg/m ³	Boiler Stack	Maintenance	External Consultant	External Consultant	
			Oil = 450 mg/m ³					
Boiler Sox (5.1.3)	6 monthly	BS EN 14791	Gas = 35 mg/m ³	Boiler Stack	Maintenance	External Consultant	External Consultant	
			Oil = 350 mg/m ³					
Boiler Particulates (Dust) (5.1.3)	6 monthly	BS EN 13284-1	Gas = 5 mg/m ³	Boiler Stack	Maintenance	External Consultant	External Consultant	
			Oil = 50 mg/m ³					