

Variation of Permit

This permit has been varied by the Scottish Environment Protection Agency (SEPA) in exercise of its powers under Regulation 46 of the Pollution Prevention and Control (Scotland) Regulations 2012 ("the Regulations"). The terms used in this notice, unless otherwise defined, have the same meaning as in the Regulations.

Permit Number:	PPC/A/1008891
Site address:	Lerwick Power Station Gremista Industrial Estate Lerwick Shetland ZE1 9PS
Operator:	Scottish Hydro Electric Power Distribution PLC SC213460 Inveralmond House 200 Dunkeld Road Perth PH1 3AQ
Variation Number:	VAR02
Date of Notice:	
Effective Date of Variation:	< <enter date="" dd="" effective="" mm="" yyyy="" –="">></enter>
Details of Variation:	The permit is varied as specified in the Schedule attached.



Schedule

The permit has been varied as follows:

- **1.** In Schedule 1, Paragraph 1.1.4.1, the number "187.4" is deleted and replaced with "227.3".
- 2. In Schedule 1, Paragraph 1.1.5.11 (c) is deleted and replaced with:
 - (c) Four Wärtsilä 12V32E compression ignition diesel engines ("Units 2, 6, 7 and 9") each with a net rated thermal input of 13.3 MW burning gas oil.
- 3. In Schedule 1, Paragraph 1.1.6.6, the phrase "Unit 9" is deleted and replaced with "Units 2, 6, 7 and 9".
- **4.** In Schedule 2, Table 2.1, the row indicated "Environmental monitoring" is deleted and replaced with:

Environmental	3.4.1	Annual	31 January 2026
monitoring	3.4.1	Ailliuai	31 January 2020

5. In Schedule 2.1, Table 2.1, the following row is added:

Total concurrent			
combustion plant	3.12.6	Annual	31 January 2026
operating hours			

6. In Schedule 2, Tables 2.2 and 2.3 are deleted.



- 7. In Schedule 3, Conditions 3.4.1 and 3.4.2 are deleted.
- **8.** In Schedule 3, Conditions 3.4.1-3.4.5 and Tables 4.11 and 4.12 are inserted:
- 3.4.1 The Operator shall carry Environmental Monitoring for the substances in Table 4.11, at, or within 10 metres of, the monitoring points specified in Table 4.11, at the respective frequencies specified in that Table and subject to the requirements for monitoring specified in Table 4.12.
- 3.4.2 All of the samples collected in accordance with Condition 3.4.1 shall, as far as reasonably practicable, be collected at the same time.
- 3.4.3 Where circumstances beyond the control of the Operator prevent the undertaking of the monitoring as specified (such as lack of safe access to the sampling location or lack of availability of samples), the Operator shall take all reasonably practicable steps to obtain alternative samples.
- 3.4.4 The Operator shall record the date, time duration and results of all monitoring carried out under Condition 3.5.1 and report said results. For each result, the report shall include the range of the parameters specified in Tables 4.2 A and 4.2B.
- 3.4.5 An environmental monitoring sampling plan shall be implemented and reviewed every two years.



Table 4.11 Environmental Monitoring Location and Frequencies

Sampling point(s)	Location	Method	Substance	Sampling Frequency
Minimum of 5 locations or as otherwise agreed in writing with SEPA	As detailed in the sampling plan required by Condition 3.4.5	As detailed in the sampling plan required by Condition 3.4.5	NO ₂	As detailed in the sampling plan required by Condition 3.4.5

Table 4.12 Requirements for Monitoring

Substance	Reporting format	Standard/Method
	As detailed in the	
NO ₂	sampling plan required	Diffusion tubes
	by Condition 3.4.5	

- **9.** In Schedule 3, Conditions 3.5.2 and 3.5.4, the reference "Table 4.2" is deleted and replaced with "Tables 4.2A and Table 4.2B".
- 10. In Schedule 3, Conditions 3.5.19-3.5.22 are added:
- 3.5.19 The emissions from the combustion described in Paragraph 1.1.5.1.1 (a) which operates or is likely to operate for a period of at least 500 operating hours shall be monitored once per year, for those parameters specified in Table 4.1, subject to the condition that emissions are monitored from at least two engines each year on a rolling basis.
- 3.5.20 From SIS cessation, the emissions from the combustion described in Paragraph 1.1.5.1.1 (c) which operates or is likely to operate for a period of at least 500 operating hours shall be monitored once per year, for those parameters specified in Table 4.1, subject to the condition that emissions are monitored from at least two engines each year on a rolling basis.



- 3.5.21 From SIS cessation, in any year (expressed as a rolling average over five years) the total concurrent Operating Hours for the combustion plants referred to in Paragraph 1.1.5.1 shall not exceed 1,499 hours.
- 3.5.22 Condition 3.5.21 shall not apply in the event of an Interconnector Failure.
- **11.** In Schedule 3, Condition 3.6.9 is added:
- 3.6.9 Emissions to water must not have a significant adverse impact on the water environment as a result of:
 - (a) iridescence or sheen;
 - (b) discolouration;
 - (c) deposition of solids;
 - (d) increased foaming; or
 - (e) microbiological growth.
- 12. In Schedule 3, Condition 3.12.6 is added:
- 3.12.6 From SIS cessation, the Operator shall report to SEPA, the cumulative concurrent Operating Hours for the combustion plants referred to in Paragraph 1.1.5.1.
- **13.** In Schedule 3, Condition in Schedule 3, Table 4.1, the Columns indicated by Emission point numbers "N", "O" and "P" are deleted and replaced with:



1	N		0			Р	
Unit 2	Unit 3	Unit 4	Unit 5	Unit 6	Unit 7	Unit 8	Unit 9
22/0.915			22/0.915			22/0.915	
1	N		0			Р	
HU 464	18 4273	Η	U 4648 427	74	H	J 4648 42	75
SS	SS	SS	SS	SS	SS	SS	SS
Flue	Flue	Flue	Flue	Flue	Flue	Flue	Flue
190	1850	1850	1850	190	190	1850	190
20	45	45	45	20	20	45	20
175	400	400	400	175	175	400	175
40	40	40	40	40	40	40	40
-	-	-	-	-	-	-	-
15	-	-	-	15	15	-	15

14. In Schedule 3, Table 4.2 is deleted and replaced with Tables 4.2A and 4.2B:





Table 4.2A: Emissions to Air Monitoring Requirements (until SIS cessation)

	Emission	Spot sampling (SS)					
Parameter	Source (Emission Point Number)	Standard	Frequency	Operating mode			
	Units 2, 6, 7 & 9 (N, O, P)		Every six months				
Oxides of Nitrogen (as NO ₂)	Units 3, 4, 5, 8, 10 & 11 (N, O, P Q)	BS EN 14792	As per Condition 3.5.19	No less than 80% of the relevant rate recorded in Schedule 1			
	Gas turbines (S, T)		Every 500 operating hours				
	Units 2, 6, 7 & 9 (N, O, P)		Every six months				
Total Particulate Matter	Units 3, 4, 5, 8, 10 & 11 (N, O, P Q)	BS EN 13284	As per Condition 3.5.19	No less than 80% of the relevant rate recorded in Schedule 1			
	Gas turbines (S, T)		Every 500 operating hours				
	Units 2, 6, 7 & 9 (N, O, P)		Every six months				
Carbon Monoxide	Units 3, 4, 5, 8, 10 & 11 (N, O, P Q)	BS EN 15058	As per Condition 3.5.19	No less than 80% of the relevant rate recorded in Schedule 1			
	Gas turbines (S, T)		Every 500 operating hours				
Total Volatile	Units 2, 6, 7 & 9 (N, O, P)		Every six months				
Organic Compounds	Units 3, 4, 5, 8, 10 & 11 (N, O, P Q)	BS EN 12619	As per Condition 3.5.19	No less than 80% of the relevant rate recorded in Schedule 1			
(TVOC)	Gas turbines (S, T)		Every 500 operating hours				
Ammonia	Units 2, 6, 7 & 9 (N, O, P)	BS EN ISO 21877	Every six months	No less than 80% of the relevant rate recorded in Schedule 1			



Table 4.2B: Emissions to Air Monitoring Requirements (from SIS cessation)

	Emission	Spot sampling (SS)				
Parameter	Source (Emission Point Number)	Standard	Frequency	Operating mode		
	Units 2, 6, 7 & 9 (N, O, P)		As per Condition 3.5.20			
Oxides of Nitrogen (as	Units 3, 4, 5, 8, 10 & 11 (N, O, P Q)	BS EN 14792	As per Condition 3.5.19	No less than 80% of the relevant rate		
NO ₂)	Gas turbines (S, T)	14732	Every 500 operating hours or at least every 5 years	recorded in Schedule 1		
	Units 2, 6, 7 & 9 (N, O, P)		As per Condition 3.5.20			
Total Particulate	Units 3, 4, 5, 8, 10 & 11 (N, O, P Q)	BS EN 13284	As per Condition 3.5.19	No less than 80% of the relevant rate		
Matter	Gas turbines (S, T)	13204	Every 500 operating hours or at least every 5 years	recorded in Schedule 1		
	Units 2, 6, 7 & 9		As per Condition 3.5.20			
Carbon Monoxide	(N, O, P) Units 3, 4, 5, 8, 10 & 11 (N, O, P Q)	BS EN 15058	As per Condition 3.5.19	No less than 80% of the relevant rate		
WOTIONIGE	Gas turbines (S, T)	13030	Every 500 operating hours or at least every 5 years	recorded in Schedule 1		
	Units 2, 6, 7 & 9 (N, O, P)		As per Condition 3.5.20			
Total Volatile Organic Compounds (TVOC)	Units 3, 4, 5, 8, 10 & 11 (N, O, P Q)	BS EN	As per Condition 3.5.19	No less than 80% of the relevant rate		
	Gas turbines (S, T)	12619	Every 500 operating hours or at least every 5 years	recorded in Schedule 1		
Ammonia	Units 2, 6, 7 & 9 (N, O, P)	BS EN ISO 21877	As per Condition 3.5.20	No less than 80% of the relevant rate recorded in Schedule 1		



- **15.** In Schedule 3, Table 4.5, the Row indicated "BOD 5 Day" is deleted.
- **16.** In Schedule 3, Table 4.5, the Column indicated by Emission number point "W" is deleted.
- 17. In Schedule 3, Table 4.6 is deleted and replaced with Tables 4.6A and 4.6B:

Table 4.6A – Emissions to Water Environment/Sewer Monitoring Requirements (until SIS Cessation)

Parameter	Emission (Number(s))	Test Method	Reporting Format	Sampling/ Measurement Facility	Frequency
рН	U, V, X, Y	EN ISO 10523	As pH units	Exit of pipe	Monthly
Oil in water	Z	BS EN ISO 9377	As mg/l		Monthly
Suspended Solids	Z	EN 873	As mg/l		Monthly
Visible discharge quality	Z	Visual inspection	Presence of pollutants as specified in Condition 3.6.9	DAF plant exit chamber	Weekly
Total Residual Oxidant	U, V, X, Y	EN ISO 7393	As mg/l	Exit of pipe	Monthly



Table 4.6B – Emissions to Water Environment/Sewer Monitoring Requirements (from SIS Cessation)

Parameter	Emission (Number(s))	Test Method	Reporting Format	Sampling/ Measurement Facility	Frequency
рН	U, V, X, Y	EN ISO 10523	As pH units	Exit of pipe	Monthly
Oil in water	W, Z	BS EN ISO 9377	As mg/l		Monthly unless combustion
Suspended Solids	Z	EN 873	As mg/l	DAF plant exit chamber	plant are continuousl y operating for a period greater than 24 hours, where sampling shall be undertaken weekly.
Visible discharge quality	Z	Visual inspecti on	Presence of pollutants as specified in Condition 3.6.9		Weekly
Total Residual Oxidant	U, V, X, Y	EN ISO 7393	As mg/l	Exit of pipe	Monthly