

RWE

**2020 Annual
Performance
Report**
**Aberthaw Power
Station**

Permit Number: RP3133LD

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Summary

This document provides details of the performance of Aberthaw Power Station's activities throughout 2020 as required by condition 4.2.2 of the Station's Environmental Permit (EP) RP3133LD.

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1. Operational Update

The main coal fired units at Aberthaw power station stopped generating at the end of 2019. The OCGTs continued to operate until 31st March 2020 at which point the power station officially closed. Since the closure, a programme of decommissioning has been undertaken and it is anticipated that this will be completed in Q2 2021.

Key decommissioning milestones which have been achieved during the decommissioning period include:

- Disconnection of the power supply to the main station buildings. The site is currently being powered by a temporary generator while work progresses on installing a permanent site supply. A power supply is required on site for areas including street lighting, security cameras, surface water drainage pumps and monitoring equipment and the admin building and chimney lights. The new electrical supply to the site is expected to be completed in Q2 2021
- Isolation of the main cooling water systems from the Bristol Channel has begun which is expected to be completed in Q2 2021
- Removal of residual coal stock
- Removal of hazardous substances and decommissioning of bulk storage facilities for anhydrous ammonia, HFO and gas oil, hydrogen, propane, sulphuric acid, caustic soda, aqueous ammonia, carbonylhydrazide, and bulk lube oil and transformer insulating oils. Decommissioning work on the HFO and gas oil tank farm is expected to complete at the end of Q1 2021.

Environmental surveys of the Aberthaw Power Station site have been undertaken throughout 2020 to inform future plans for the site.

2. Review of Results for Emissions Monitoring

2.1. Air Quality Review

The main coal fired units at Aberthaw Power Station ceased commercial operation at the end of December 2019 and did not operate during 2020.

The OCGTs at Aberthaw continued to operate until the end of March 2020 when the station officially closed.

The MERS emission to air data acquisition, handling and reporting software programme for Aberthaw power station has been decommissioned and all the historic emissions monitoring and reporting data relating to station operation have been archived on a central server.

At the end of 2020 it was agreed with NRW that emissions to air no longer need to be reported for Aberthaw power station as the main units and the OCGTs have ceased operating.

2.2. Water Quality Review

Aberthaw Power Station ceased commercial operation in 2020 and has been undergoing decommissioning since its closure. The main cooling water system has not been in full operation as the main coal fired units ceased operation at the end of 2019. The OCGTs

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do not have any emissions to water. Therefore, the main discharges to water from the site during 2020 were from the site surface water drainage systems.

During 2020 monitoring and analysis was interrupted by the Covid-19 pandemic so the values in the table below are average values for the months during which a result was reported.

a) Emission Point W2 (Cooling Water Outlet)

<i>Emission Point</i>	<i>Parameter</i>	<i>EP ELV</i>	<i>Measured Data</i>	<i>Units</i>	<i>Result Type</i>	<i>Reference Period</i>
W2	Differential <i>total</i> suspended solids	50	41.77	mg/l	Maximum	Monthly average of daily samples (above background)
	Ammoniacal nitrogen	0.1	0.26	mg/l		Monthly average of daily samples (above background)
	Differential temperature	13.5	-0.73	°C		98%ile of continuous daily average values
	Total hydrocarbon oil	3	0.06	mg/l		Monthly average of daily samples
	pH	5.6	7.44	pH units	Minimum	Instantaneous
		5.8	7.80			95%ile of instantaneous measurements
		8.5	8.04		Maximum	95%ile of instantaneous measurements
	Mercury	60	0.00	kg	Annual	Annual Mass Release

b) Emission Point SWTP1, SWTP2,

Emission points SWTP1 and SWTP2 are not reported as they relate to the FGD which did not operate during 2020.

3. Annual Production / Treatment Data 2020 (Table S4.2 EP)

LCP 283: Units 7,8 and 9 coal-fired boilers	n/a units 7,8 and 9 did not operate in 2020	GWh
LCP 423: GT7, GT8 and GT9 gas oil-fired black start gas turbines	0.06984	GWh

4. Performance Parameters 2020 (Table S4.3 EP)

See IED AR1 and HR1 already submitted to NRW.

5. LCP283 Cumulative Rolling Breakdown and Malfunction Hours

LCP283 did not operate during 2020.

6. Contamination / Decontamination of Site

There have been no incidents or emissions which have caused any site contamination during 2020, and therefore no requirement to decontaminate the site during 2020.