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Permit with introductory note

The Environmental Permitting (England & Wales) Regulations 2016

Conrad (Dowlais) Limited

**Dowlais Power Generation Plant
Pengarnddu Industrial Estate
Dowlais
Merthyr Tydfil
CF48 2YF**

Permit number

EPR/DB3099CT

Dowlais Power Generation Plant

Permit number EPR/DB3099CT

Introductory note

This introductory note does not form a part of the permit

This permit will allow the operator to operate:

- One or more existing medium combustion plant (MCP) between 1 and <50MWth but aggregated to <50MWth, which were put in operation before 20/12/2018 at a specified location; and
- One Tranche A Specified Generator aggregated to <50MWth at a specified location.

The medium combustion plant / specified generator comprises of 14 individual Jenbacher natural gas fuelled gas engines. Five have an net rated thermal input of 3.46 MW and nine have a net rated thermal input of 2.99 MW. Each engine will discharge exhaust gases to air via a 7 m high individual stack. The plant's aggregated thermal input is 44.21 MW and it is permitted to operate up to 3,000 hours per year. The purpose of the plant is to generate electricity to supply to the National Grid at times when demand for electricity outstrips capacity and during power outages and interruptions. The site is located in Pengarnddu Industrial Estate, Dowlais, Merthyr Tydfil, and is surrounded by mixed use commercial and industrial units.

The status log of the permit sets out the permitting history, including any changes to the permit reference number.

Status log of the permit		
Description	Date	Comments
Application EPR/DB3099CT/A001	Duly made 21/09/2023	Application for Medium Combustion Plant
Additional information received	04/01/2024	Confirmation of net rated thermal input of engines
Additional information received	05/01/2024	Revised Non-Technical Summary and Air Quality Dispersion Modelling Study Report containing correct MWth input figures.
Permit determined EPR/DB3099CT/A001	25/01/24	Permit issued to Conrad (Dowlais) Limited

End of introductory note

Permit

The Environmental Permitting (England and Wales) Regulations 2016

Permit number
EPR/DB3099CT

The Natural Resources Body for Wales (“Natural Resources Wales”) authorises, under regulation 13 of the Environmental Permitting (England and Wales) Regulations 2016

Conrad (Dowlais) Limited (“the operator”),
whose registered office is

**Suites D&E Windrush Court
Blacklands Way
Abingdon
United Kingdom
OX14 1SY**

company registration number 12953413

to operate one or more Medium Combustion Plant and/or Specified Generators at

Pengarnddu Industrial Estate
Dowlais
Merthyr Tydfil
CF48 2YF

to the extent authorised by and subject to the conditions of this permit.

Signed	Date
Holly Noble	25/01/2024

Authorised on behalf of Natural Resources Wales

Conditions

1 Management

1.1 General management

- 1.1.1 The operator shall manage and operate the activities:
- (a) in accordance with a written management system that identifies and minimises risks of pollution, so far as is reasonably practicable, including those arising from operations, maintenance, accidents, incidents, non-conformances, closure and those drawn to the attention of the operator as a result of complaints; and
 - (b) using sufficient competent persons and resources.
- 1.1.2 Records demonstrating compliance with condition 1.1.1 shall be maintained.
- 1.1.3 Any person having duties that are or may be affected by the matters set out in this permit shall have convenient access to a copy of it kept at or near the place where those duties are carried out.

2 Operations

2.1 Permitted activities

- 2.1.1 The operator is only authorised to carry out the activities specified in schedule 1, table S1.1 (the “activities”).

2.2 The site

- 2.2.1 No MCP shall be operated beyond the site of the grid reference specified for it in schedule 1, table S1.1 of the permit.

2.3 Operating techniques

- 2.3.1 The activities shall be operated using the techniques and, in the manner, described in schedule 1, tables S1.2.

3 Emissions and monitoring

3.1 Emissions to air

- 3.1.1 There shall be no point source emissions to air except from the sources and emission points listed in schedule 3, tables S3.1.
- 3.1.2 The limits given in schedule 3 shall not be exceeded.

3.2 Monitoring

- 3.2.1 The operator shall, unless otherwise agreed in writing by Natural Resources Wales, undertake the monitoring specified in the following tables in schedule 3 to this permit, or at a greater frequency if notified to the operator in writing by Natural Resources Wales:
- (a) point source emissions specified in table S3.1.
- 3.2.2 Monitoring shall not take place during periods of start up or shut down.

- 3.2.3 The first monitoring measurements shall be carried out
- (a) For existing MCP at any time but no later than 4 months after the relevant compliance date.
- 3.2.4 The operator shall maintain records of all monitoring including records of the taking and analysis of samples, instrument measurements (periodic and continual), calibrations, examinations, test and surveys and any assessment or evaluation made on the basis of such data.
- 3.2.5 Monitoring equipment, techniques, personnel and organisations employed for the emissions monitoring programme specified in condition 3.2.1 shall have either MCERTS certification or MCERTS accreditation (as appropriate), where available, unless otherwise agreed in writing by Natural Resources Wales.

4 Information

4.1 Records

- 4.1.1 All records required to be made by this permit shall:
- (a) be legible;
 - (b) be made as soon as reasonably practicable;
 - (c) if amended, be amended in such a way that the original and any subsequent amendments remain legible, or are capable of retrieval; and
 - (d) be retained, unless otherwise agreed in writing by Natural Resources Wales, for at least 6 years from the date when the records were made.
- 4.1.2 The operator shall maintain convenient access, in either electronic or hard copy, to the records, plans and management system required to be maintained by this permit.
- 4.1.3 The operator shall maintain a record of the type and quantity of fuel used and the total annual hours of operation for each MCP and/or Specified Generator.
- 4.1.4 The operator shall maintain a record of any events of non-compliance and the measures taken to ensure compliance is restored in the shortest possible time

4.2 Reporting

- 4.2.1 The operator shall send all reports and notifications required by the permit to Natural Resources Wales using the contact details supplied in writing by Natural Resources Wales.
- 4.2.2 Within 28 days of the end of the reporting period the operator shall, unless otherwise agreed in writing by Natural Resources Wales, submit reports of the monitoring and assessment carried out in accordance with the conditions of this permit, as follows:
- (a) in respect of the parameters and emission points specified in schedule 4, table S4.1;
 - (b) for the reporting periods specified in schedule 4, table S4.1 and using the forms specified in schedule 4, table S4.2; and
 - (c) giving the information from such results as required by the forms specified in those tables.

4.3 Notifications

- 4.3.1 In the event:
- (a) of a breach of any of the permit conditions the operator must immediately—
 - (i) inform Natural Resources Wales, and
 - (ii) take the measures necessary to ensure that compliance is restored within the shortest possible time;

- (b) of a breach of any of the permit conditions which causes a significant degradation of local air quality, the operator must immediately suspend the operation of the activities or the relevant part of them until compliance with the conditions has been restored.
- 4.3.2 Any information provided under condition 4.3.1 shall be confirmed by sending the information listed in schedule 5 to this permit within the time period specified in that schedule.
- 4.3.3 Where Natural Resources Wales has requested in writing that it shall be notified when the operator is to undertake monitoring and/or spot sampling, the operator shall inform Natural Resources Wales when the relevant monitoring and/or spot sampling is to take place. The operator shall provide this information to Natural Resources Wales at least 14 days before the date the monitoring is to be undertaken.
- 4.3.4 Natural Resources Wales shall be notified within 14 days of the occurrence of the following matters, except where such disclosure is prohibited by Stock Exchange rules:
- Where the operator is a registered company:
- (a) any change in the operator's trading name, registered name or registered office address; and
 - (b) any steps taken with a view to the operator going into administration, entering into a company voluntary arrangement or being wound up.
- Where the operator is a corporate body other than a registered company:
- (c) any change in the operator's name or address; and
 - (d) any steps taken with a view to the dissolution of the operator.
- In any other case:
- (e) the death of any of the named operators (where the operator consists of more than one named individual);
 - (f) any change in the operator's name(s) or address(es); and
 - (g) any steps taken with a view to the operator, or any one of them, going into bankruptcy, entering into a composition or arrangement with creditors, or, in the case of them being in a partnership, dissolving the partnership.

4.4 Interpretation

- 4.4.1 In this permit the expressions listed in schedule 6 shall have the meaning given in that schedule.
- 4.4.2 In this permit references to reports and notifications mean written reports and notifications, except where reference is made to notification being made "immediately", in which case it may be provided by telephone.

Schedule 1 – Operations

Table S1.1 activities

National Grid Reference and or activity reference/ emission point	Activity listed in the EP Regulations	Description of Medium Combustion Plant and/or Specified Generator	Fuel	Operating hours limit per year
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Site Centre NGR:	Schedule 25B –	5x 3.46 MWth and 9x	Natural	3,000
A1, unique identifier: 307825, 208924	Specified Generator, and	2.99 MWth spark ignition engines comprising 1x	gas	
A2, unique identifier: 307825, 208918	Schedule 25A – Medium	44.21 MWth Specified Generator		
A3, unique identifier: 307825, 208913	Combustion Plant as			
A4, unique identifier: 307825, 208906	detailed in Schedule 7			
A5, unique identifier: 307825, 208901				
A6, unique identifier: 307825, 208888				
A7, unique identifier: 307825, 208883				
A8, unique identifier: 307846, 208930				
A9, unique identifier: 307846, 208925				
A10, unique identifier: 307846, 208918				
A11, unique identifier: 307846, 208912				
A12, unique identifier: 307846, 208907				
A13, unique identifier: 307846, 208895				
A14, unique identifier: 307846, 208889				

Table S1.2 Operating techniques for Medium Combustion Plant as detailed in Schedule 7

Description

Each MCP must be operated in accordance with the manufacturer's instructions and records must be made and retained to demonstrate this

The operator must keep periods of start-up and shut-down of each MCP as short as possible

There must be no persistent emission of 'dark smoke' as defined in section 3(1) of the Clean Air Act 1993

The stack must be vertical and unimpeded by cowls or caps.

Schedule 2 – Waste types, raw materials and fuels

This schedule is not used.

Schedule 3 – Emissions and monitoring

Table S3.1 Point source emissions to air – emission limits and monitoring requirements

Emission point reference & location	Source/technology	Parameter	Limit (including unit)	Reference period	Monitoring frequency	Monitoring standard or method ^{Note 1}
Emission points A1, A2, A3, A4, A5, A6, A7, A8, A9, A10, A11, A12, A13 and A14- location as stated in Table S1.1	Existing medium combustion plant which are engines fuelled on natural gas	Oxides of Nitrogen (NO and NO ₂ expressed as NO ₂)	190 mg/m ³ Limit applies from 01/01/2025	Periodic	Every 3 years From date of acceptance of first monitoring measurements under condition 3.2.3	MCERTS BS EN 14791
		Carbon monoxide	No limit set	Periodic	Every 3 years From date of acceptance of first monitoring measurements under condition 3.2.3	MCERTS BS EN 15058

Note 1: Monitoring requirements are defined at a temperature of 273.15 K, a pressure of 101.3 kPa and after correction for the water vapour content of the waste gases at a standardised O₂ content of 6 % for solid fuels, 15 % for engines and gas turbines and 3 % all other MCPs

Schedule 4 – Reporting

Parameters, for which reports shall be made, in accordance with conditions of this permit, are listed below.

Table S4.1 Reporting of monitoring data

Parameter	Emission or monitoring point/reference	Reporting period	Period begins
Emissions to air Parameters as required by condition 3.2.1.	A1, A2, A3, A4, A5, A6, A7, A8, A9, A10, A11, A12, A13 and A14	Every 3 years from date of acceptance of first monitoring measurements under condition 3.2.3	1 January

Table S4.2 Reporting forms

Media/parameter	Reporting format	Date of form
Air	Form air 1 or other form as agreed in writing by Natural Resources Wales	25/01/24

Schedule 5 – Notification

These pages outline the information that the operator must provide.

Units of measurement used in information supplied under Part A and B requirements shall be appropriate to the circumstances of the emission. Where appropriate, a comparison should be made of actual emissions and authorised emission limits.

If any information is considered commercially confidential, it should be separated from non-confidential information, supplied on a separate sheet and accompanied by an application for commercial confidentiality under the provisions of the EP Regulations.

Part A

Permit Number	
Name of operator	
Location of Facility	
Time and date of the detection	

(a) Notification requirements for any malfunction, breakdown or failure of equipment or techniques, accident, or emission of a substance not controlled by an emission limit which has caused, is causing or may cause significant pollution	
To be notified within 24 hours of detection	
Date and time of the event	
Reference or description of the location of the event	
Description of where any release into the environment took place	
Substances(s) potentially released	
Best estimate of the quantity or rate of release of substances	
Measures taken, or intended to be taken, to stop any emission	
Description of the failure or accident.	

(b) Notification requirements for the breach of a limit	
To be notified within 24 hours of detection unless otherwise specified below	
Emission point reference/ source	
Parameter(s)	
Limit	

(b) Notification requirements for the breach of a limit	
To be notified within 24 hours of detection unless otherwise specified below	
Measured value and uncertainty	
Date and time of monitoring	
Measures taken, or intended to be taken, to stop the emission	

Time periods for notification following detection of a breach of a limit	
Parameter	Notification period

(c) Notification requirements for the detection of any significant adverse environmental effect	
To be notified within 24 hours of detection	
Description of where the effect on the environment was detected	
Substances(s) detected	
Concentrations of substances detected	
Date of monitoring/sampling	

Part B – to be submitted as soon as practicable

Any more accurate information on the matters for notification under Part A.	
Measures taken, or intended to be taken, to prevent a recurrence of the incident	
Measures taken, or intended to be taken, to rectify, limit or prevent any pollution of the environment which has been or may be caused by the emission	
The dates of any unauthorised emissions from the facility in the preceding 24 months.	

Name*	
Post	
Signature	
Date	

* authorised to sign on behalf of the operator

Schedule 6 – Interpretation

“accident” means an accident that may result in pollution.

“application” means the application for this permit, together with any additional information supplied by the operator as part of the application and any response to a notice served under Schedule 5 to the EP Regulations.

“authorised officer” means any person authorised by Natural Resources Wales under section 108(1) of The Environment Act 1995 to exercise, in accordance with the terms of any such authorisation, any power specified in section 108(4) of that Act.

“compliance date” means 01/01/2025 for existing MCPs and a tranche A specified generator with net rated thermal input of greater than 5MW or 01/01/2030 for existing MCPs and a tranche A specified generator with a net rated thermal input of less than or equal to 5MW.

“EP Regulations” means The Environmental Permitting (England and Wales) Regulations SI 2016 No.1154 and words and expressions used in this permit which are also used in the Regulations have the same meanings as in those Regulations.

“existing MCP” means an MCP first put into operation before 20/12/2018.

“first put into operation” means that the plant must have been fired with its design fuel up to its full load. This can be, but does not have to be, during commissioning.

“MCERTS” means the Environment Agency’s Monitoring Certification Scheme.

“medium combustion plant” or “MCP” means a combustion plant with a rated thermal input equal to or greater than 1 MW but less than 50 MW.

“Medium Combustion Plant Directive” or “MCPD” means Directive 2015/2193/EU of the European Parliament and of the Council on the limitation of emissions of certain pollutants into the air from medium combustion plants.

“operating hours” means the time, expressed in hours, during which a combustion plant is operating and discharging emissions into the air, excluding start-up and shut-down periods.

“quarter” means a calendar year quarter commencing on 1 January, 1 April, 1 July or 1 October.

“specified generator” has the meaning given in paragraph 2(1) of Schedule 25B of The EP Regulations.

“tranche A generator” has the meaning given in paragraph 3(3) of schedule 25B of The EP Regulations.

“year” means calendar year ending 31 December.

Schedule 7 – Annex I of MCPD

MCP Identifier	A1, A2, A3, A4, A5, A6, A7, A8 A9, A10, A11, A12, A13 and A14
1. Rated thermal input (MW) of the medium combustion plant.	5x 3.46 and 9x 2.99 (44.21 combined)
2. Type of the medium combustion plant (diesel engine, gas turbine, dual fuel engine, other engine or other medium combustion plant).	Other engine
3. Type and share of fuels used according to the fuel categories laid down in Annex II.	Natural gas, 100%
4. Date of the start of the operation of the medium combustion plant or, where the exact date of the start of the operation is unknown, proof of the fact that the operation started before 20 December 2018.	01/01/2017
5. Sector of activity of the medium combustion plant or the facility in which it is applied (NACE code).	D.35.11
6. Expected number of annual operating hours of the medium combustion plant and average load in use.	3,000 hours
7. Where the option of exemption under Article 6(3) or Article 6(8) is used, a declaration signed by the operator that the medium combustion plant will not be operated more than the number of hours referred to in those paragraphs.	N/A
8. Name and registered office of the operator and, in the case of stationary medium combustion plants, the address where the plant is located.	<p><u>Registered Office</u></p> <p>Suites D&E Windrush Court Blacklands Way Abingdon United Kingdom OX14 1SY</p> <p><u>Site Location</u></p> <p>Pengarnddu Industrial Estate Dowlais Merthyr Tydfil CF48 2YF</p>

END OF PERMIT

Permit Number: DB3099CT Operator: Conrad (Dowlais) Limited

Facility: Dowlais Power Generation Facility Form Number: Air1 / 25/01/2024

Reporting of emissions to air for the period from DD/MM/YYYY to DD/MM/YYYY

Emission Point	Substance / Parameter	Emission Limit Value	Reference Period	Result ^[1]	Test Method ^{[2][5]}	Sample Date and Times ^[3]	Uncertainty ^[4]
A1, A2, A3, A4, A5, A6, A7, A8, A9, A10, A11, A12, A13 and A14	Oxides of Nitrogen (NO and NO ₂ expressed as NO ₂)	190 mg/Nm ³	Periodic		BS EN 14792		
	Carbon monoxide	No limit set	Periodic		BS EN 15058		

- [1] The result given is the maximum value (or the minimum value in the case of a limit that is expressed as a minimum) obtained during the reporting period, expressed in the same terms as the emission limit value. Where the emission limit value is expressed as a range, the result is given as the 'minimum – maximum' measured values.
- [2] Where an internationally recognised standard test method is used the reference number is given. Where another method that has been formally agreed with Natural Resources Wales is used, then the appropriate identifier is given. In other cases the principal technique is stated, for example gas chromatography.
- [3] For non-continuous measurements the date and time of the sample that produced the result is given. For continuous measurements the percentage of the process operating time covered by the result is given.
- [4] The uncertainty associated with the quoted result at the 95% confidence interval, unless otherwise stated.
- [5] Monitoring requirements are defined at a temperature of 273.15 K, a pressure of 101.3 kPa and after correction for the water vapour content of the waste gases at a standardised O₂ content of 6 % for solid fuels, 15 % for engines and gas turbines and 3 % all other MCPs

Signed

Date.....