

Permit with introductory note

The Environmental Permitting (England & Wales) Regulations 2016

GFI73 LTD

**Wanarlwydd Generation
Titanium Road
Wanarlwydd
SA5 4SF**

Permit number

PAN-018186

Waunarlwydd Generation

Permit number PAN-018186

Introductory note

This introductory note does not form a part of the permit

The main features of the permit are as follows.

This permit regulates 48 individual 1.0 MW thermal input generators. All 48 generators are each an existing Medium Combustion Plant and they form one 48 MW thermal input Specified Generator. At the time of permitting they are a Tranche A Specified Generator however a new capacity agreement is expected to be signed in February 2023 which would trigger it to be classed as a Tranche B Specified Generator.

All the generators are identical in make and model, are all fuelled on low sulphur diesel, each discharge combustion products to air from individual 2.37 m high stacks, the generators will have Selective Catalytic Reduction (SCR) abatement fitted in order to meet the emission limit value within the SG regulations.

The flexible electricity generation plant is permitted to operate up to a maximum of 880 hours per year (unabated) and 1500 hours per year (abated). The plant has a contract to provide electrical power to the UK's networks when there is a shortage so is expected to operate for short durations at a time.

The plant is located north of Waunarlwydd, near to the Titanium Road industrial area, the surrounding area is predominantly a mixture of rural and industrial. The plant is located within 5 km of Gower Commons Special Area of Conservation (SAC), Carmarthen Bay and Estuaries SAC, Bury Inlet SPA and Ramsar site.

We have completed early permitting of the existing MCP and have postdated the relevant conditions.

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 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 PAN-018186/A001	Duly made 26/09/2022	Application for Specified Generator permit
Permit determined PAN-018186/A001	22/11/2022	Permit issued to GFI73 LTD

End of introductory note

Permit

The Environmental Permitting (England and Wales) Regulations 2016

Permit number

PAN-018186

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

GFI73 LTD (“the operator”),

whose registered office is

17 Gorsey Lane

Coleshill

Birmingham

England

B46 1JA

company registration number **13499035**

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

Waunarlwydd Generation

Titanium Road

Waunarlwydd

SA5 4SF

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

Signed	Date
Holly Noble	22/11/2022

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, table S1.2.

2.4 Improvement programme

- 2.4.1 The operator shall complete the improvements specified in schedule 1 table S1.3 by the date specified in that table unless otherwise agreed in writing by Natural Resources Wales.
- 2.4.2 Except in the case of an improvement which consists only of a submission to Natural Resources Wales, the operator shall notify Natural Resources Wales within 14 days of completion of each improvement.

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, table 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 at any time for existing MCPs, 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.

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
Site Centre NGR: SS 60715 96412	Schedule 25A – Medium Combustion Plant as detailed in	48 x 1 MWth input compression ignition engines	Gas oil (Diesel)	<880 hours when not fitted with SCR abatement
Emission points A1 – A48 national grid references as referenced in Table B.1 Appendix B of Document ref: 808243-WOOD-RP-QA-00005_P01.01	Schedule 7 and Schedule 25B – Specified Generator	To be fitted with Selective Catalytic Reduction (SCR) abatement when relevant compliance date reached or when the Tranche A SG becomes a Tranche B SG		<1500 hours when fitted with SCR abatement

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

Description

Each generator/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

Where secondary abatement is required to ensure compliance with the NOx ELV it must be met within 10 minutes from when the generator commences operation or within 20 minutes when the generator was a Tranche A and is now a Tranche B

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

Abatement plant must be operated in accordance with the manufacturer's instructions and records must be made and retained to demonstrate this.

Table S1.3 Improvement programme requirements

Reference	Requirement	Date
IC1	The Operator shall notify Natural Resources Wales in writing when the Tranche A Specified Generator becomes a Tranche B Specified Generator.	When the Tranche A Specified Generator becomes a Tranche B Specified Generator.
IC2	The Operator shall notify Natural Resources Wales in writing when the Selective Catalytic Reduction abatement is fitted.	When the Tranche A Specified Generator becomes a Tranche B Specified Generator.

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 ref. & location as referenced in table S1.1	Combustion technology	Pollutant	Limit (including unit)	Reference period	Monitoring frequency	Monitoring standard or method ^{Note 1}
A1 – A48	Existing medium combustion plant which are engines fuelled on gas oil	Oxides of Nitrogen (NO and NO ₂ expressed as NO ₂)	190 mg/Nm ³ Limit applies from 01/01/2025 or immediately when the Tranche A Specified Generator becomes a Tranche B Specified Generator whichever comes first	In line with web guide: Monitoring stack emissions: low risk MCPs and specified generators	Every 3 years	In line with web guide: Monitoring stack emissions: low risk MCPs and specified generators
		Carbon monoxide	No limit set		Monitoring every 3 years shall commence from 01/01/2025 or when the Tranche A Specified Generator becomes a Tranche B Specified Generator whichever comes first Every 3 years from date of acceptance of first monitoring measurement under condition 3.2.3	

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 15 % for engines.

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 – A48	Every 3 years Reporting every 3 years shall commence from 01/01/2025 or immediately when the Tranche A Specified Generator becomes a Tranche B Specified Generator whichever comes first	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	22/11/2022

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.

“combined heat and power” (CHP) or Cogeneration means the simultaneous generation in one process of thermal energy and electrical or mechanical energy.

“compliance date” means 01/01/2030 for existing MCPs 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.

“gas oil” includes diesel and is defined in Article 3(19) of the MCPD.

“limited operating hours MCP” means an MCP that meets the requirements of paragraph 8 of Part 2 of Schedule 25A of the EP Regulations.

“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.

“new MCP” means an MCP first put into operation on or after 20/12/2018.

“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.

“tranche B generator” is any generator that is not a Tranche A generator.

“year” means calendar year ending 31 December.

Schedule 7 – Annex I of MCPD

1. Rated thermal input (MW) of the medium combustion plant.	1 MWth input each, 48 MWth total
2. Type of the medium combustion plant (diesel engine, gas turbine, dual fuel engine, other engine or other medium combustion plant).	Diesel engine
3. Type and share of fuels used according to the fuel categories laid down in Annex II.	Gas oil, 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.	2012
5. Sector of activity of the medium combustion plant or the facility in which it is applied (NACE code).	D35.1.1 – Production of electricity
6. Expected number of annual operating hours of the medium combustion plant and average load in use.	Maximum 1500 hours (when abated), 100 % average load in use
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>Registered office address of the Operator:</p> <p>GFI73 LTD, 17 Gorsey Lane, Coleshill, Birmingham, England, B46 1JA</p> <p>Address where the plant is located:</p> <p>Wanarlwydd Generation, Titanium Road, Wanarlwydd, SA5 4SF</p>

END OF PERMIT