

Permit with introductory note

The Environmental Permitting (England & Wales) Regulations 2016

Conrad (Sandycroft) Ltd

Sandycroft Peak Power Electricity
Generation Facility
Factory Road
Deeside
Sandycroft
CH5 2DD

Permit number

PAN-004258

Sandycroft Peak Power Electricity Generation Facility

Permit number PAN-004258

Introductory note

This introductory note does not form a part of the permit

This permit will allow the operator to operate:

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

The details of the units and associated limits and monitoring requirements are specified in Tables S1.1 and S3.1.

This permit will allow Conrad (Sandycroft) Ltd to operate two 5.26 MWth and one 2.65 MWth natural gas-fired generators (13.17 MWth total), which are used for the production of electricity. The engines are permitted as new medium combustion plant (MCP) on the basis that it will be operational after 20 December 2018. It has also been permitted as a Tranche B Specified Generator.

There are two SSSI sites within 2km of the site (Dee Estuary / Aber Afon Dyfrdwy SSSI and Afon Dyfrdwy (River Dee) SSSI) and three Natura 2000 sites within 3.5km of the facility (The Dee Estuary SAC/SPA/Ramsar, River Dee and Bala Lake SAC and Deeside and Buckley Newt sites SAC). Detailed air quality modelling and impact assessments have shown that the impact on airborne NO_x concentrations and nitrogen depositions at the designated ecological sites were determined to be insignificant.

The air quality modelling and impact assessments have also shown that exceedances of any air quality objectives are unlikely at the local receptors identified to protect human health.

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-004258 received on 20/12/2018 | Duly made 23/05/19 | Application for new medium combustion plant / specified generator permit. |
| Additional information received | 19/06/19 | Revised part B3 application form |
| Permit determined | 11/10/19 | Permit issued Conrad (Sandycroft) Ltd |
| Variation application and consolidation PAN-004258/V002 | Duly Made 12/03/20 | Variation to increase operational hours from 2000 hours to 2400 hours per annum |
| Variation Determined | 04/06/20 | Consolidated permit issued Conrad (Sandycroft) Ltd |

End of introductory note

Permit

The Environmental Permitting (England and Wales) Regulations 2016

Permit number

PAN-004258

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

Conrad (Sandycroft) Ltd (“the operator”),

whose registered office is

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

company registration number **10969652**

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

**Sandycroft Peak Power Electricity Generation Facility
Factory Road
Deeside
Sandycroft
CH5 2DD**

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

| Signed | Date |
|--------------------|-------------------|
| Holly Noble | 03/06/2020 |

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 The activities shall not extend beyond the site, being the land shown edged in green on the site plan at schedule 7 to this permit.

2.3 Operating techniques

- 2.3.1 For the following activities referenced in schedule 1, table S1.1, the activities shall be operated using the techniques and, in the manner, described in schedule 1, table S1.2.

3 Emissions and monitoring

3.1 Emissions to water, air or land

- 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:

- (a) point source emissions specified in tables S3.1.
- 3.2.2 Monitoring shall not take place during periods of start up or shut down.
- 3.2.3 For the following activities referenced in schedule 1, table S1.1 the first monitoring measurements shall be carried out within four months of the issue date of the permit or the date when the MCP is first put into operation, whichever is later.
- 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 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 in writing within 24 hours.
- 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 5 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 MCP and specified generator | Fuel | Operating hours limit per annum |
| National Grid Reference: Generator 1 (EP1 – CAT 3520): 332412, 367953 Generator 2 (EP2 – CAT 3520): 332503, 367938 Generator 3 (EP3 – CAT 3516): 332527, 367921 | The Environmental Permitting (England and Wales) Regulations (Amendment) 2018, Schedule S25A – MCP and S25B – Specified generators | Three natural gas-fired generators, comprising a thermal input of 2 x 5.26 MWth and 1 x 2.65 MWth engine (one 13.17 MWth specified generator). | Natural gas | <2400 hours |

| Table S1.2 Operating techniques |
|---|
| <ul style="list-style-type: none"> (a) Each MCP must be operated in accordance with the manufacturer's instructions and records must be made and retained to demonstrate this. (b) The operator must keep periods of start-up and shut-down of each MCP as short as possible. (c) There must be no persistent emission of 'dark smoke' as defined in section 3(1) of the Clean Air Act 1993. (d) Where secondary abatement is required to ensure compliance with the NO_x 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 generator. (e) The stack must be vertical and unimpeded by cowls or caps. (f) The operating regime of the generator(s) must be in line with document reference 778494-MLM-ZZ-XX-RP-J-0007 dated 12/03/2020 submitted as part of permit variation PAN-004258/V002. |

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 for new MCPs which are engines or gas turbines | | | | | | |
|--|--|---|------------------------|----------------------------------|--|---|
| Emission point as referred to in table S1.1 | Source | Parameter | Limit (including unit) | Reference period | Monitoring frequency | Monitoring standard or method Note 1 |
| EP1, EP2 and EP3. Identified as CAT 3520, CAT 3520 and CAT 3516 on site plan in schedule 7 | New medium combustion plant/specified generator which are engines fuelled on natural gas | Oxides of Nitrogen (NO and NO ₂ expressed as NO ₂) | 95 mg/m ³ | Periodic (average over one hour) | Within 4 months of permit issue or start of operation (whichever is latest), then every 3 years. | MCERTS BS EN 14792 |
| | | Carbon monoxide | No limit set | Periodic (average over one hour) | Within 4 months of permit issue or start of operation (whichever is latest), then every 3 years. | 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 O ₂ 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. | EP1, EP2 and EP3 | Within 4 months of permit issue or start of operation (whichever is latest), then every 3 years. | 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 | 11/10/19 |

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) | |

| | |
|---|--|
| (b) Notification requirements for the breach of a limit | |
| To be notified within 24 hours of detection unless otherwise specified below | |
| Limit | |
| 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.

“NRW TGN M5” means ‘Natural Resources Wales Technical Guidance Note M5: Monitoring of stack gas emissions from medium combustion plants and specified generators’ guidance published on Gov.UK.

“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.

“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.

“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 Natural Resources Wales’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.

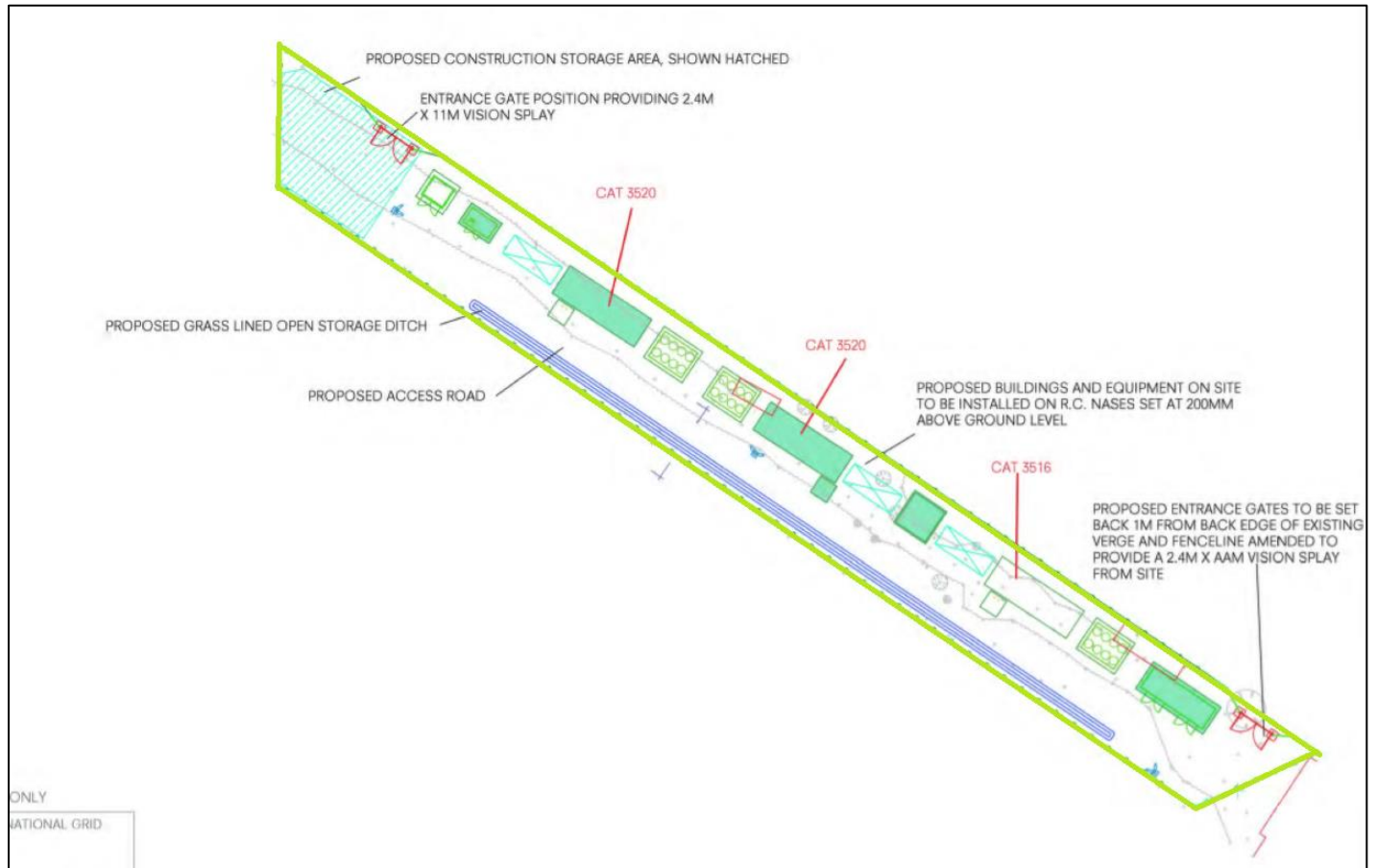
“operating hours” means the time, expressed in hours, during which a combustion plant is operating and discharging emissions into the air, excluding start-up and shut-down periods.

“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.

“year” means calendar year ending 31 December.

Schedule 7 – Site plan



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Site location map



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Schedule 8 – Annex 1 of MCPD

| | |
|---|---|
| MCP Identifier | National Grid Reference: Generator 1 (EP1 – CAT 3520): 332412, 367953 Generator 2 (EP2 – CAT 3520): 332503, 367938 Generator 3 (EP3 – CAT 3516): 332527, 367921 |
| 1. Rated thermal input (MW) of the medium combustion plant. | 2 x 5.26 MWth and 1 x 2.65 MWth comprising a total aggregated thermal input of 13.1 MWth. |
| 2. Type of the medium combustion plant (diesel engine, gas turbine, dual fuel engine, other engine or other medium combustion plant). | Gas Turbine |
| 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. | 07/10/2019 |
| 5. Sector of activity of the medium combustion plant or the facility in which it is applied (NACE code). | D35.1.1 |
| 6. Expected number of annual operating hours of the medium combustion plant and average load in use. | 2400 hours (100% 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. | Yes |
| 8. Name and registered office of the operator and, in the case of stationary medium combustion plants, the address where the plant is located. | Registered Address: Conrad (Sandycroft) Ltd, Suites D&E, Windrush Court, Blacklands Way, Abingdon, England, OX14 1SY Site Address: Sandycroft Peak Power Electricity Generation Facility, Factory Road, Deeside, Sandycroft, CH5 2DD |

END OF PERMIT

Permit Number: PAN-004258

Operator: Conrad (Sandycroft) Ltd

Facility: Sandycroft Peak Power Electricity Generation Facility

Form Number: Air1 / 11/10/19

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

| Emission | | | | | | | |
|----------------|---|----------------------|----------------------------------|-----------------------|----------------------------|--------------------------------------|----------------------------|
| Emission Point | Substance / Parameter | Limit Value | Reference Period | Result ^[1] | Test Method ^[2] | Sample Date and Times ^[3] | Uncertainty ^[4] |
| EP1 | Oxides of nitrogen (NO and NO ₂ expressed as NO ₂) | 95 mg/m ³ | Periodic (average over one hour) | | MCERTS BS EN 14792 | | |
| | Carbon Monoxide | No limit set | | | MCERTS BS EN 15058 | | |
| EP2 | Oxides of nitrogen (NO and NO ₂ expressed as NO ₂) | 95 mg/m ³ | | | MCERTS BS EN 14792 | | |
| | Carbon Monoxide | No limit set | | | MCERTS BS EN 15058 | | |
| EP3 | Oxides of nitrogen (NO and NO ₂ expressed as NO ₂) | 95 mg/m ³ | | | MCERTS BS EN 14792 | | |
| | Carbon Monoxide | No limit set | | | MCERTS 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.

Signed
(Authorised to sign as representative of Operator)

Date.....