



# Permit with introductory note

## The Environmental Permitting (England & Wales) Regulations 2016

---

Net Zero North Sea Storage Limited

Net Zero Teesside High Pressure Compressor Station

Redcar

Cleveland

TS10 5QW

### **Permit number**

EPR/FP3143QN

# Net Zero Teesside High Pressure Compressor

## Permit number EPR/FP3143QN

### Introductory note

#### This introductory note does not form a part of the permit

The main features of the permit are as follows:

The Installation operates as a directly associated activity (DAA) to the Net Zero Teesside Power Station and Carbon Capture Plant (EPR/PP3501LR). This installation is operated by Net Zero Teesside Power Limited and is permitted under the following Environmental Permitting Regulations (EPR) Schedule 1- Part 2 Activities:

- Section 1.1 Part A(1)(a) Burning of fuel in an appliance with a rated thermal input of 50 or more MW;
- Section 6.10 Part A(1): Capture of carbon dioxide streams from an installation for the purposes of geological storage

The DAA is located adjacent to the Power Station and Carbon Capture Plant on the previous Redcar Steelworks on the South Bank of the River Tees, approximately 750m west of Warrenby, 1.5km north-west of Dormanstown, and 400m to the south of the North Sea shoreline.

The DAA comprises a High-Pressure (HP) Compression train (booster station), metering system, and the connection to a carbon dioxide (CO<sub>2</sub>) export pipeline. The HP compressors consist of centrifugal compressors which are used to pressurise the CO<sub>2</sub> from the Power Station and Carbon Capture Plant prior to exporting it to an offshore storage facility. The compressors will have electrically driven motors and will require 15MWe of power to compress the CO<sub>2</sub> produced by the Power Station and Carbon Capture Plant.

There will be no emissions to air apart from periodic venting of CO<sub>2</sub> and nitrogen. Emissions to water are limited to uncontaminated surface water runoff which is discharged to Tees Bay. The site will operate in line with an Environmental Management System (EMS).

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/FP3143QN/A001	Duly made 30/06/2022	Application for High Pressure Compressor as a directly associated activity.
Schedule 5 Notice for further information issued	15/11/2022	Responses received 31/03/2023 & 18/10/2023
Permit determined EPR/FP3143QN	14/05/2024	Permit issued to Net Zero North Sea Storage Limited

Other Part A installation permits relating to this installation		
Operator	Permit number	Date of issue
Net Zero Teesside Power Limited	EPR/PP3501LR	14/05/2024

End of introductory note

# Permit

## The Environmental Permitting (England and Wales) Regulations 2016

### Permit number

**EPR/FP3143QN**

The Environment Agency hereby authorises, under regulation 13 of the Environmental Permitting (England and Wales) Regulations 2016

**Net Zero North Sea Storage Limited** (“the operator”),

whose registered office is

**Chertsey Road  
Sunbury On Thames  
Middlesex  
United Kingdom  
TW16 7BP**

company registration number 12473084

to operate part of an installation at

**Net Zero Teesside High Pressure Compressor Station  
Redcar  
Cleveland  
TS10 5QW**

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

Name	Date
Daniel Timney	14/05/2024

Authorised on behalf of the Environment Agency

# 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, 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.

### 1.2 Energy efficiency

1.2.1 The operator shall:

- (a) take appropriate measures to ensure that energy is used efficiently in the activities;
- (b) review and record at least every four years whether there are suitable opportunities to improve the energy efficiency of the activities; and
- (c) take any further appropriate measures identified by a review.

### 1.3 Efficient use of raw materials

1.3.1 The operator shall:

- (a) take appropriate measures to ensure that raw materials and water are used efficiently in the activities;
- (b) maintain records of raw materials and water used in the activities;
- (c) review and record at least every four years whether there are suitable alternative materials that could reduce environmental impact or opportunities to improve the efficiency of raw material and water use; and
- (d) take any further appropriate measures identified by a review.

### 1.4 Avoidance, recovery and disposal of wastes produced by the activities

1.4.1 The operator shall take appropriate measures to ensure that:

- (a) the waste hierarchy referred to in Article 4 of the Waste Framework Directive is applied to the generation of waste by the activities; and
- (b) any waste generated by the activities is treated in accordance with the waste hierarchy referred to in Article 4 of the Waste Framework Directive; and
- (c) where disposal is necessary, this is undertaken in a manner which minimises its impact on the environment.

1.4.2 The operator shall review and record at least every four years whether changes to those measures should be made and take any further appropriate measures identified by a review.

## **1.5 Multiple operator installations**

- 1.5.1 Where the operator notifies the Environment Agency under condition 4.3.1 (a) or 4.3.1 (c), the operator shall also notify without delay the other operator of the installation of the same information.

## **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 red on the site plan at schedule 7 to this permit, which is within the area edged in blue on the site plan that represents the extent of the installation covered by this permit and that/those of the other operator of the installation.

### **2.3 Operating techniques**

- 2.3.1 The activities shall, subject to the conditions of this permit, be operated using the techniques and in the manner described in the documentation specified in schedule 1, table S1.2, unless otherwise agreed in writing by the Environment Agency.
- 2.3.2 If notified by the Environment Agency that the activities are giving rise to pollution, the operator shall submit to the Environment Agency for approval within the period specified, a revision of any plan or other documentation (“plan”) specified in schedule 1, table S1.2 or otherwise required under this permit which identifies and minimises the risks of pollution relevant to that plan, and shall implement the approved revised plan in place of the original from the date of approval, unless otherwise agreed in writing by the Environment Agency.
- 2.3.3 Any raw materials or fuels listed in schedule 2 table S2.1 shall conform to the specifications set out in that table.
- 2.3.4 The operator shall ensure that where waste produced by the activities is sent to a relevant waste operation, that operation is provided with the following information, prior to the receipt of the waste:
- a) the nature of the process producing the waste;
  - b) the composition of the waste;
  - c) the handling requirements of the waste;
  - d) the hazardous property associated with the waste, if applicable; and
  - e) the waste code of the waste.
- 2.3.5 The operator shall ensure that where waste produced by the activities is sent to a landfill site, it meets the waste acceptance criteria for that landfill.

### **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 the Environment Agency.
- 2.4.2 Except in the case of an improvement which consists only of a submission to the Environment Agency, the operator shall notify the Environment Agency within 14 days of completion of each improvement.

## **2.5 Pre-operational conditions**

2.5.1 The activities shall not be brought into operation until the measures specified in schedule 1 table S1.4 have been completed.

## **3 Emissions and monitoring**

### **3.1 Emissions to water, air or land**

3.1.1 There shall be no point source emissions to water, air or land except from the sources and emission points listed in schedule 3 tables S3.1 and S3.2.

3.1.2 The limits given in schedule 3 shall not be exceeded.

3.1.3 The Operator shall carry out monitoring of groundwater and soil in accordance with IED articles 14(1)(b), 14(1) (e) and 16(2) of the IED to the protocol as detailed in the monitoring and maintenance plan and as approved in writing with the Environment Agency under PO6 in table S1.4.

### **3.2 Emissions of substances not controlled by emission limits**

3.2.1 Emissions of substances not controlled by emission limits (excluding odour) shall not cause pollution. The operator shall not be taken to have breached this condition if appropriate measures, including, but not limited to, those specified in any approved emissions management plan, have been taken to prevent or where that is not practicable, to minimise, those emissions.

3.2.2 The operator shall:

- (a) if notified by the Environment Agency that the activities are giving rise to pollution, submit to the Environment Agency for approval within the period specified, an emissions management plan which identifies and minimises the risks of pollution from emissions of substances not controlled by emission limits;
- (b) implement the approved emissions management plan, from the date of approval, unless otherwise agreed in writing by the Environment Agency.

3.2.3 All liquids in containers, whose emission to water or land could cause pollution, shall be provided with secondary containment, unless the operator has used other appropriate measures to prevent or where that is not practicable, to minimise, leakage and spillage from the primary container.

### **3.3 Odour**

3.3.1 Emissions from the activities shall be free from odour at levels likely to cause pollution outside the site, as perceived by an authorised officer of the Environment Agency, unless the operator has used appropriate measures, including, but not limited to, those specified in any approved odour management plan, to prevent or where that is not practicable to minimise the odour.

3.3.2 The operator shall:

- (a) if notified by the Environment Agency that the activities are giving rise to pollution outside the site due to odour, submit to the Environment Agency for approval within the period specified, an odour management plan which identifies and minimises the risks of pollution from odour;
- (b) implement the approved odour management plan, from the date of approval, unless otherwise agreed in writing by the Environment Agency.

## **3.4 Noise and vibration**

- 3.4.1 Emissions from the activities shall be free from noise and vibration at levels likely to cause pollution outside the site, as perceived by an authorised officer of the Environment Agency, unless the operator has used appropriate measures, including, but not limited to, those specified in any approved noise and vibration management plan to prevent or where that is not practicable to minimise the noise and vibration.
- 3.4.2 The operator shall:
- (a) if notified by the Environment Agency that the activities are giving rise to pollution outside the site due to noise and vibration, submit to the Environment Agency for approval within the period specified, a noise and vibration management plan which identifies and minimises the risks of pollution from noise and vibration;
  - (b) implement the approved noise and vibration management plan, from the date of approval, unless otherwise agreed in writing by the Environment Agency.

## **3.5 Monitoring**

- 3.5.1 The operator shall, unless otherwise agreed in writing by the Environment Agency, undertake the monitoring specified in the following tables in schedule 3 to this permit:
- (a) Process monitoring specified in table S3.3.
- 3.5.2 The operator shall maintain records of all monitoring required by this permit including records of the taking and analysis of samples, instrument measurements (periodic and continual), calibrations, examinations, tests and surveys and any assessment or evaluation made on the basis of such data.
- 3.5.3 Monitoring equipment, techniques, personnel and organisations employed for the emissions monitoring programme and the environmental or other monitoring specified in condition 3.5.1 shall have either MCERTS certification or MCERTS accreditation (as appropriate), where available, unless otherwise agreed in writing by the Environment Agency.
- 3.5.4 Permanent means of access shall be provided to enable sampling/monitoring to be carried out in relation to the emission points specified in schedule 3 tables S3.1 and S3.2 unless otherwise agreed in writing by the Environment Agency.

# **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 the Environment Agency, for at least 6 years from the date when the records were made, or in the case of the following records until permit surrender:
    - (i) off-site environmental effects; and
    - (ii) matters which affect the condition of the land and groundwater.
- 4.1.2 The operator shall keep on site all records, plans and the management system required to be maintained by this permit, unless otherwise agreed in writing by the Environment Agency.

## 4.2 Reporting

- 4.2.1 The operator shall send all reports and notifications required by the permit to the Environment Agency using the contact details supplied in writing by the Environment Agency.
- 4.2.2 A report or reports on the performance of the activities over the previous year shall be submitted to the Environment Agency by 31 January (or other date agreed in writing by the Environment Agency) each year. The report(s) shall include as a minimum:
- (a) a review of the results of the monitoring and assessment carried out in accordance with the permit including an interpretive review of that data; and
  - (b) the performance parameters set out in schedule 4 table S4.2 using the forms specified in table S4.3 of that schedule.
- 4.2.3 Within 28 days of the end of the reporting period the operator shall, unless otherwise agreed in writing by the Environment Agency, 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 S4.3; and
  - (c) giving the information from such results and assessments as may be required by the forms specified in those tables.
- 4.2.4 The operator shall, unless notice under this condition has been served within the preceding four years, submit to the Environment Agency, within six months of receipt of a written notice, a report assessing whether there are other appropriate measures that could be taken to prevent, or where that is not practicable, to minimise pollution.

## 4.3 Notifications

- 4.3.1 In the event:
- (a) that the operation of the activities gives rise to an incident or accident which significantly affects or may significantly affect the environment, the operator must immediately—
    - (i) inform the Environment Agency,
    - (ii) take the measures necessary to limit the environmental consequences of such an incident or accident, and
    - (iii) take the measures necessary to prevent further possible incidents or accidents;
  - (b) of a breach of any permit condition the operator must immediately—
    - (i) inform the Environment Agency, and
    - (ii) take the measures necessary to ensure that compliance is restored within the shortest possible time;
  - (c) of a breach of permit condition which poses an immediate danger to human health or threatens to cause an immediate significant adverse effect on the environment, the operator must immediately suspend the operation of the activities or the relevant part of it until compliance with the permit 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 the Environment Agency has requested in writing that it shall be notified when the operator is to undertake monitoring and/or spot sampling, the operator shall inform the Environment Agency when the relevant monitoring and/or spot sampling is to take place. The operator shall provide this information to the Environment Agency at least 14 days before the date the monitoring is to be undertaken.



4.3.4 The Environment Agency 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:

- (a) any change in the operator's name or address; and
- (b) any steps taken with a view to the dissolution of the operator.

In any other case:

- (c) any change in the operator's name(s) or address(es); and
- (d) 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.

4.3.5 Where the operator proposes to make a change in the nature or functioning, or an extension of the activities, which may have consequences for the environment and the change is not otherwise the subject of an application for approval under the Regulations or this permit:

- (a) the Environment Agency shall be notified at least 14 days before making the change; and
- (b) the notification shall contain a description of the proposed change in operation.

4.3.6 The Environment Agency shall be given at least 14 days' notice before implementation of any part of the site closure plan.

4.3.7 Where the operator has entered into a climate change agreement with the Government, the Environment Agency shall be notified within one month of:

- (a) a decision by the Secretary of State not to re-certify the agreement;
- (b) a decision by either the operator or the Secretary of State to terminate the agreement; and
- (c) any subsequent decision by the Secretary of State to re-certify such an agreement.

## 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" or "without delay", in which case it may be provided by telephone.

# Schedule 1 – Operations

Table S1.1 activities			
Directly Associated Activity			
Activity reference	Activity	Description of specified activity	Limits of specified activity
AR1	Operation of high-pressure compression plant	High pressure compression plant to compress CO <sub>2</sub> prior to exporting it to an offshore storage facility.	Compression of CO <sub>2</sub> from Net Zero Teesside Power Station and Carbon Capture Plant (operated under Environmental Permit EPR/PP3501LR) and from other sources on the low-pressure CO <sub>2</sub> gathering network.

Table S1.2 Operating techniques		
Description	Parts	Date Received
Application EPR/FP3143QN/A001	Responses to question in Part B3 of the application form and Appendix 1  Non-technical summary, supporting document and appendices	Duly made 30/06/2022
Schedule 5 Response to further information request	Response to question 1 & 2  CO <sub>2</sub> Venting Modelling Assessment V4	31/03/2023 & 18/10/2023
Additional information received via email	Additional information on CO <sub>2</sub> and N <sub>2</sub> venting	07/06/2023

Table S1.3 Improvement programme requirements		
Reference	Requirement	Date
IC1	<p><b><u>Commissioning</u></b></p> <p>The Operator shall submit a written report to the Environment Agency for assessment and written approval on the commissioning of the installation. The report shall summarise the environmental performance of the installation as set out in the commissioning plan required by pre-operational condition PO2 in table S1.4 of this permit.</p> <p>The report shall include, but not limited to:</p> <ul style="list-style-type: none"> <li>a summary of the environmental performance of the plant as installed against the design parameters and risk assessments set out in the application and updated in response to the pre-operational conditions in this permit;</li> <li>a review of the performance of the facility against the conditions of this permit and details of procedures developed during commissioning for achieving and demonstrating compliance with permit conditions and confirm that the Environmental Management System (EMS) has been updated accordingly.</li> </ul>	Within 3 months of the completion of commissioning.

**Table S1.4 Pre-operational measures**

Reference	Pre-operational measures
PO1	<p><b><u>EMS</u></b></p> <p>Prior to the commencement of commissioning, the Operator shall send a summary of the site Environment Management System (EMS) to the Environment Agency and make available for inspection all documents and procedures which form part of the EMS. The EMS shall be developed in line with the requirements set out in Environment Agency web guide on developing a management system for environmental permits (found on <a href="http://www.gov.uk">www.gov.uk</a>). The documents and procedures set out in the EMS shall form the written management system referenced in condition 1.1.1 (a) of the permit.</p>
PO2	<p><b><u>Commissioning plan</u></b></p> <p>At least 3 months prior to the commencement of commissioning, the Operator shall submit a written commissioning plan, including timelines for completion, for assessment and written approval by the Environment Agency. The commissioning plan shall include, but not limited to:</p> <ul style="list-style-type: none"> <li>• the timelines for the commissioning and the expected durations of these activities;</li> <li>• the expected emissions to the environment during the different stages of commissioning; risk assessment demonstrating that the environmental risks are not significant throughout all the phases of commissioning; the expected durations of commissioning activities and the actions to be taken to protect the environment and report to the Environment Agency in the event that actual emissions exceed expected emissions.</li> <li>• proposal for the validation of the approved noise assessment that is submitted in response to pre-operational condition PO4 in this table.</li> <li>• a methodology for approval for quantifying total mass of CO<sub>2</sub> emissions during short duration venting that may be required during the start-up sequence of the High Pressure Compression Train and during other than normal operating conditions.</li> </ul> <p>The commissioning activities shall be carried out in accordance with the commissioning plan approved by the Environment Agency.</p>
PO3	<p><b><u>CO<sub>2</sub> assessment</u></b></p> <p>Following the completion of the final design of the Installation and at least 12 months prior to the commencement of operations the Operator shall submit a report for assessment and written approval by the Environment Agency. The report shall include:</p> <ul style="list-style-type: none"> <li>• an updated assessment of the impact of CO<sub>2</sub> emissions on human health from the short duration venting that may be required during the start-up sequence of the High Pressure Compression Train, during other than normal operating conditions and during commissioning. The assessment shall be carried out in accordance with environmental risk assessment methodology set out in Environment Agency guidance <a href="https://www.gov.uk/guidance/air-emissions-risk-assessment-for-your-environmental-permit">https://www.gov.uk/guidance/air-emissions-risk-assessment-for-your-environmental-permit</a> , with impacts compared with CO<sub>2</sub> acute exposure levels to humans.</li> <li>• a management plan detailing operating techniques to minimise potential CO<sub>2</sub> phase changes, solid effects and dense gas behaviour when venting CO<sub>2</sub> atmosphere.</li> </ul>

**Table S1.4 Pre-operational measures**

<b>Reference</b>	<b>Pre-operational measures</b>
PO4	<p><b><u>Noise impact assessment (NIA)</u></b></p> <p>Following the completion of the final design of the Installation and at least 6 months prior to the commencement of commissioning the Operator shall submit an updated NIA for assessment and written approval by the Environment Agency. The NIA shall be in accordance with BS4142:2014 (Rating industrial noise affecting mixed residential and industrial areas) or other methodology as agreed with the Environment Agency. The assessment shall be based on the final design of the Installation and include consideration of CO<sub>2</sub> venting as a noise source.</p>
PO5	<p><b><u>Baseline conditions</u></b></p> <p>At least 6 months prior to the commencement of commissioning the Operator shall submit an updated report for assessment and written approval by the Environment Agency on the baseline conditions of soil and groundwater at the installation. The report shall contain:</p> <ul style="list-style-type: none"><li>• the information necessary to determine the state of soil and groundwater contamination so as to make a quantified comparison with the state upon definitive cessation of activities provided for in Article 22(3) of the IED.</li><li>• all information needed to meet the information requirements of the EA H5 Site Condition Report Guidance <u>Environmental permitting: H5 Site condition report - GOV.UK (www.gov.uk)</u>; and Article 22(2) of the IED including European Commission Guidance Note Concerning Baseline Reports under Article 22(2) (2014/C 136/03).</li></ul> <p>The report shall be implemented in accordance with that agreed with the Environment Agency.</p>
PO6	<p><b><u>Monitoring and maintenance plan</u></b></p> <p>At least 6 months prior to the commencement of commissioning the Operator shall submit a written protocol for assessment and written approval by the Environment Agency in the form of a monitoring and maintenance plan for the monitoring of soil and groundwater.</p> <p>The protocol shall demonstrate how the Operator will meet the requirements of Articles 14(1)(b), 14(1)(e) and 16(2) of the IED, the Water Framework Directive and Groundwater Daughter Directive</p> <p>As a minimum the plan should include but not be limited to the following;</p> <ul style="list-style-type: none"><li>• proposals for monitoring of soil quality;</li><li>• identification of monitoring points;</li><li>• sample collection methodology;</li><li>• sampling frequency;</li><li>• laboratory testing;</li><li>• baseline soil and groundwater quality;</li><li>• maintenance, inspection and contingency proposals;</li><li>• robust justification for the duration of periodic monitoring of soils and groundwater through a systematic appraisal of the risk of contamination and reporting requirements.</li></ul> <p>This plan should also provide a methodology for the appropriate decommissioning of any</p>

<b>Table S1.4 Pre-operational measures</b>	
<b>Reference</b>	<b>Pre-operational measures</b>
	<p>redundant historic or current ground investigation boreholes present on the site which have been installed but which are not required for monitoring purposes.</p> <p>The procedures above shall be implemented in accordance with the written approval from the Environment Agency.</p>
PO7	<p><b><u>Boreholes</u></b></p> <p>At least 3 months prior to the commencement of commissioning the Operator shall submit a validation report detailing how redundant historic and current ground investigation boreholes have been decommissioned for approval of the Environment Agency.</p>

## Schedule 2 – Waste types, raw materials and fuels

Table S2.1 Raw materials and fuels	
Raw materials and fuel description	Specification
-	-

## Schedule 3 – Emissions and monitoring

<b>Emission point ref. &amp; location</b>	<b>Source</b>	<b>Parameter</b>	<b>Limit (including unit)</b>	<b>Reference period</b>	<b>Monitoring frequency</b>	<b>Monitoring standard or method</b>
A1 - location(s) as agreed in accordance with Pre-Operational Condition PO3 in table S1.4 of this permit.	CO <sub>2</sub> and Nitrogen Vents	Carbon dioxide	No limit set	-	-	-
		Nitrogen	No limit set	-	-	-

<b>Emission point ref. &amp; location</b>	<b>Source</b>	<b>Parameter</b>	<b>Limit (incl. unit)</b>	<b>Reference Period</b>	<b>Monitoring frequency</b>	<b>Monitoring standard or method</b>
W1 on site plan in schedule 7 emission to Tees Bay	Uncontaminated surface water runoff	-	-	-	-	-

<b>Emission point reference or source or description of point of measurement</b>	<b>Parameter</b>	<b>Monitoring frequency</b>	<b>Monitoring standard or method</b>	<b>Other specifications</b>
Venting of CO <sub>2</sub> from the High-Pressure Compression Train – venting locations as identified in the assessment provided in response to PO3 in table S1.4 of this permit.	<ul style="list-style-type: none"> <li>Duration of event</li> <li>Total mass of CO<sub>2</sub> emissions (tonnes / event)</li> </ul>	Event specific, total annual	Calculation by method traceable to national standards compliant with UK ETS, to be agreed in writing with the Environment Agency as part of PO2 in table S1.4 of this permit.	The operator shall identify the root cause of the venting event and consider ways to prevent or reduce the frequency and duration of reoccurrence.

**Table S3.3 Process monitoring requirements**

Emission point reference or source or description of point of measurement	Parameter	Monitoring frequency	Monitoring standard or method	Other specifications
Carbon Dioxide Metering Package	Exported CO <sub>2</sub> mass flow (tonnes/hour)	Continuous	Mass flow metering traceable to national standards compliant with UK ETS, to be agreed in writing with the Environment Agency as part of PO2 in table S1.4 of this permit	
Carbon Dioxide compressor discharge	Composition of exported CO <sub>2</sub> , including but not limited to: <ul style="list-style-type: none"> <li>- Water content</li> <li>- H<sub>2</sub> content</li> </ul>	To be agreed in writing with the Environment Agency	By method traceable to national standards compliant with UK ETS, to be agreed in writing with the Environment Agency as part of PO2 in table S1.4 of this permit	CO <sub>2</sub> transport and storage system specification.



## Schedule 4 – Reporting

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

<b>Table S4.1 Reporting of monitoring data</b>			
<b>Parameter</b>	<b>Emission or monitoring point/reference</b>	<b>Reporting period</b>	<b>Period begins</b>
<ul style="list-style-type: none"> <li>- Number of events</li> <li>- Duration of events</li> <li>- Root cause analysis for each event and preventative / frequency reduction measures</li> </ul> Total mass of CO <sub>2</sub> emissions (tonnes / event)	Venting from HP Compressor - venting locations as identified in the assessment provided in response to PO3 in table S1.4 of this permit.	Annually	1 January

<b>Table S4.2 Performance parameters</b>		
<b>Parameter</b>	<b>Frequency of assessment</b>	<b>Units</b>
Water usage	Annually	m <sup>3</sup>
Energy usage	Annually	MWh
CO <sub>2</sub> exported	Annually	tonnes
CO <sub>2</sub> vented to atmosphere	Annually	tonnes

<b>Table S4.3 Reporting forms</b>		
<b>Parameter</b>	<b>Reporting form</b>	<b>Form version number and date</b>
Process Monitoring	Process Monitoring Reporting Form, or other form as agreed in writing by the Environment Agency	V1 14/05/2024
Water Usage	Water Usage Reporting Form, or other form as agreed in writing by the Environment Agency	V1 14/05/2024
Energy Usage	Energy Usage Reporting Form, or other form as agreed in writing by the Environment Agency	V1 14/05/2024
Other Performance	Other Performance Reporting Form, or other form as agreed in writing by the Environment Agency	V1 14/05/2024

# 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	

<b>(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</b>	
<b>To be notified within 24 hours of detection</b>	
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>(b) Notification requirements for the breach of a limit</b>	
<b>To be notified within 24 hours of detection unless otherwise specified below</b>	
Emission point reference/ source	
Parameter(s)	
Limit	
Measured value and uncertainty	
Date and time of monitoring	
Measures taken, or intended to be taken, to stop the emission	

<b>Time periods for notification following detection of a breach of a limit</b>	
<b>Parameter</b>	<b>Notification period</b>

<b>(c) Notification requirements for the breach of permit conditions not related to limits</b>	
To be notified within 24 hours of detection	
Condition breached	
Date, time and duration of breach	
Details of the permit breach i.e. what happened including impacts observed.	
Measures taken, or intended to be taken, to restore permit compliance.	

<b>(d) Notification requirements for the detection of any significant adverse environmental effect</b>	
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 the Environment Agency 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.

“emissions to land” includes emissions to groundwater.

“emissions of substances not controlled by emission limits” means emissions of substances to air, water or land from the activities, either from the emission points specified in schedule 3 or from other localised or diffuse sources, which are not controlled by an emission limit.

“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.

“groundwater” means all water, which is below the surface of the ground in the saturation zone and in direct contact with the ground or subsoil.

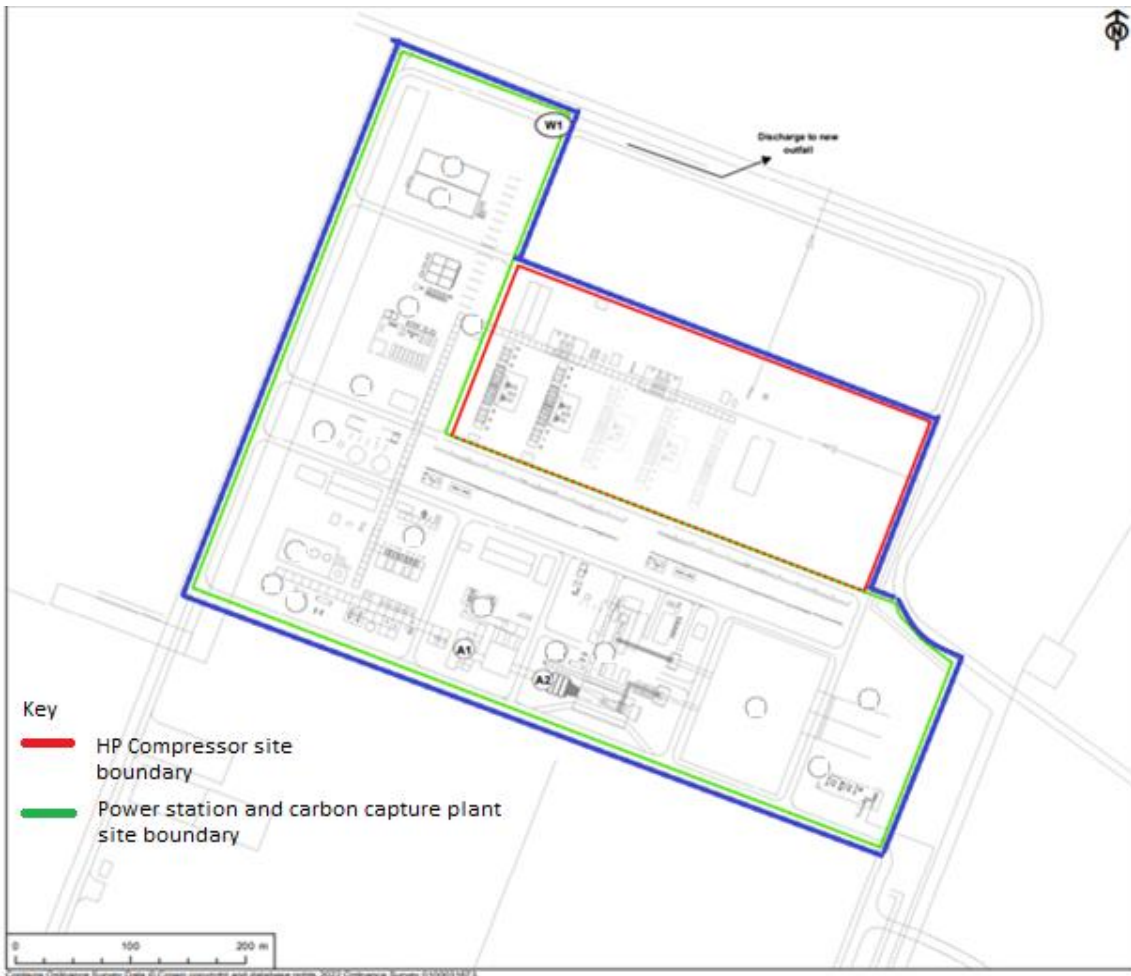
“Industrial Emissions Directive” means DIRECTIVE 2010/75/EU OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 24 November 2010 on industrial emissions, as read in accordance with Schedule 1A to the Environmental Permitting (England and Wales) Regulations 2016.

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

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

Where a minimum limit is set for any emission parameter, for example pH, reference to exceeding the limit shall mean that the parameter shall not be less than that limit.

# Schedule 7 – Site plan



© Crown Copyright and Database Rights 2024 OS AC0000807064.

END OF PERMIT