



Environment  
Agency

# Permit with introductory note

The Environmental Permitting (England & Wales) Regulations 2016

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Equinix (UK) Limited

LD8

6/7/8/9 Harbour Exchange Square

London

E14 9GE

## Permit number

EPR/DP3906BE

# LD8

## Permit number EPR/DP3906BE

### Introductory note

#### **This introductory note does not form a part of the notice.**

The main features of the permit are as follows.

The site is a data centre which consists of a Schedule 1 Part A(1)(a) activity under the Environmental Permitting Regulations for the burning of diesel fuel in an appliance with a rated thermal input of 50 or more megawatts (MW).

The combustion plant comprises 17 diesel fuelled standby generators and 9 boilers, with an aggregated total combustion capacity on-site of approximately 64 MWth. The diesel generators are solely used to provide standby electricity generation capacity to power the data centre in the event of a grid power failure. The data centre is operational 24 hours/day, 7 days/week and its electrical power supply comprises fourteen power supplies which are fed from two separate substations. Of those fourteen supplies, only twelve are used at any one time. The two spare supplies are maintained for use in case of a sudden loss of power to the site. The boilers supply heating for the personnel.

Thirteen generators are located within building 6/7 and 8/9 and four generators are located outside, to the south of building 6/7 and 8/9. The generators outside are within designated, acoustic-insulated containers and will be equipped with Selective Catalytic Reduction (SCR) and Diesel Particulate Filters (DPF).

There are a total of 26 fuel storage tanks on site. Eleven of these tanks are bulk storage tanks with appropriate secondary containment, including bunding to 110% of each tank's maximum capacity. The other 15 are smaller double skinned day tanks associated with each generator. Twenty-five tanks are above ground, and one is below ground. The capacity of these tanks varies from 1,000l to 31,968l and the total capacity is 237,076l. The below ground tank has a capacity of 48,000l and it is made of 6mm thick steel, and evidence shows that it is contained in a purpose-built concrete tank pit.

Four above ground urea storage tanks are installed as part of the SCR system. These tanks will have secondary containment.

Any water that accumulates in external bunds is tested prior to discharge into rainwater drains.

The site is located on Isle of Dogs within a meander loop of the River Thames, the Site's surface is elevated approximately 5 m above sea level. The National Grid Reference for the Site is TQ 37882 79559. The 6/7 and 8/9 Harbour Exchange (HEX) buildings were built between 1987 and 1990, designed and used as office buildings. The buildings were converted to data centres in approximately 1999. Equinix acquired the site in 2016. The surrounding area is a mix of commercial and residential uses.

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

<b>Status log of the permit</b>		
<b>Description</b>	<b>Date</b>	<b>Comments</b>
Application EPR/DP3906BE/A001	Duly made 21/05/21	Application for a combustion facility consisting of a data centre.
Additional information received in response to request for information (RFI) dated 22/04/22	11/07/22 14/07/22 08/09/22	Additional details regarding air quality and noise assessment.
Additional information received in response to RFI dated 27/10/22	23/03/23	Additional details regarding fuel tanks.

<b>Status log of the permit</b>		
<b>Description</b>	<b>Date</b>	<b>Comments</b>
Information provided in response to Schedule 5 notice for further information dated 15/11/22	23/03/23 29/03/23 31/03/23	Additional details regarding air quality.
Information provided in response to Schedule 5 notice dated 17/01/23	23/03/23 31/03/23	Additional details regarding noise assessment.
Additional information provided	12/07/23	Operating & maintenance details for SCR and DPF
Permit determined EPR/DP3906BE/A001	16/10/23	Permit issued to Equinix (UK) Limited.

End of introductory note

# Permit

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

### Permit number

**EPR/DP3906BE**

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

**Equinix (UK) Limited** (“the operator”),

whose registered office is

**Masters House  
107 Hammersmith Road  
London  
W14 0QH**

company registration number 03672650

to operate an installation

**LD8  
6/7/8/9 Harbour Exchange Square  
London  
E14 9GE**

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

Name	Date
Rob McHale	16/10/2023

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) take appropriate measures to ensure the efficiency of energy generation at the permitted installation is maximised;
- (c) review and record at least every four years whether there are suitable opportunities to improve the energy efficiency of the activities; and
- (d) 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;
- (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.

## **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 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 For the following activities referenced in schedule 1, table S1.1: AR1. The activities shall not operate for more than 500 hours in emergency use per annum.

### **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.

### **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 Periodic monitoring shall be carried out at least once every 5 years for groundwater and 10 years for soil, unless such monitoring is based on a systematic appraisal of the risk of contamination.

#### **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) point source emissions specified in tables S3.1 and S3.2; and
- (b) 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 continuous), calibrations, examinations, tests and surveys and any assessment or evaluation made on the basis of such data.

3.5.3 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;
- (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:
- (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.

4.3.5 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", in which case it may be provided by telephone.

# Schedule 1 – Operations

Table S1.1 activities			
Activity reference	Activity listed in Schedule 1 of the EP Regulations	Description of specified activity	Limits of specified activity
AR1	Section 1.1 Part A(1)(a): Burning any fuel in an appliance with a rated thermal input of 50 megawatts or more.	<p>Operation of 17 emergency standby generators with a total thermal input of 59.74MWth.</p> <p>The 17 generators will burn diesel <sup>Note 1</sup> solely for the purpose of providing electricity to the installation in the event of a failure of supply from the National Grid and during maintenance testing.</p> <p>The 17 emergency standby generators have the following capacities:</p> <p>7 x 5.71MWth (2 of these are fitted with SCR/DPF); 2 x 3.89MWth (SCR/DPF); 1 x 2.91MWth; 1 x 2.42MWth; 2 x 1.33MWth; 1 x 1.12MWth; 1 x 1.09MWth; 1 x 0.92MWth; 1 x 0.87MWth</p> <p>Operation of 7 boilers with a total thermal input of approximately 4.1MWth and individual capacities of less than 1MWth.</p>	<p>From receipt of raw materials and generation of electricity to despatch of waste.</p> <p>Electricity produced at the installation cannot be exported to the National Grid.</p> <p>Generators shall not be operated for elective power generation, such as Balancing Services, Demand Side Response operations including Frequency Control Demand Management (FCDM) or Triad Avoidance.</p> <p>The operational hours of the installation shall not exceed the specifications set out in condition 2.3.5 of this permit. <sup>Note 2</sup></p>
<b>Directly Associated Activity</b>			
AR2	Storage of raw materials, including storage of gas oil		From receipt of raw materials to use within the facility.
AR3	Surface water drainage		From input to site drainage system until discharge to sewer at emission point S1.
AR4	Operation of abatement measures (SCR and DPF)		From receipt of raw materials to release of abated emissions at emission points A1 (A67_01), A2 (A67_02), A3 (A89_01), A4 (A89_02).
Note 1: Definition in Schedule 6 Interpretation section of this permit.			
Note 2: The restriction does not apply to boilers			

<b>Table S1.2 Operating techniques</b>		
<b>Description</b>	<b>Parts</b>	<b>Date Received</b>
Application EPR/DP3906BE/A001	Section 3.3 - Engine Testing Regime Section 5 – Operating techniques Section 6 – EMS Section 7 – Waste Management Section 8 – Raw materials Section 9 – Energy Section 12 – Monitoring Section 13 – Risk assessment Appendix C – Diesel filling procedure Appendix D – Emergency response procedures, of Environmental Permit Application: Supporting Information Document (including Supporting Information Document: Addendum submitted on 27/03/23) in response to section 3a – technical standards, Part B3 of the application form.	21/05/21
Schedule 5 Notice Request dated 15/11/22	Appendix K - Air quality management plan. Section 22.3 Question 3 – Details Regarding Periodic Inspection of the Tanks of Appendix M - Response to Environment Agency Request for Information	23/03/23
Additional submitted information	SCR/DPF Operating & maintenance information	12/07/23

<b>Table S1.3 Improvement programme requirements</b>		
<b>Reference</b>	<b>Requirement</b>	<b>Date</b>
IC1	<p>The operator shall submit a report to the Environment Agency verifying the predicted emission concentrations at the boundary of the site. The report shall include but not necessarily be limited to:</p> <ul style="list-style-type: none"> <li>– Monitoring of ambient air quality at the boundary of the site during the all the testing scenarios using monitoring methods agreed in advance with the Environment Agency,</li> <li>– A comparison of modelled against monitored concentrations of nitrogen dioxide,</li> <li>– A demonstration that appropriate monitoring location(s) were selected at the boundary of the site, considering the modelled predictions and the weather conditions prevalent at the time of the monitoring,</li> <li>– Evidence to demonstrate that the monitoring team holds appropriate qualifications.</li> </ul> <p>The output of the verification exercise shall be used to inform / revise the air quality management plan if necessary.</p>	31/06/24

<b>Table S1.3 Improvement programme requirements</b>		
<b>Reference</b>	<b>Requirement</b>	<b>Date</b>
IC2	<p>The operator shall submit a monitoring plan for approval by the Environment Agency detailing their proposal for the implementation of the flue gas monitoring requirements specified in table S3.1 of this permit, in line with web guide 'Monitoring stack emissions: low risk MCPs and specified generators' Published 16 February 2021 (formerly known as TGN M5) for emission points A10 and A11. The plan shall include, but not necessarily be limited to:</p> <ul style="list-style-type: none"> <li>– When the generators are not fitted with sampling ports, a proposal to install them within the shortest practical timeline,</li> <li>– Details of any relevant safety, cost and operational constraints affecting the monitoring regime, in support of any proposed deviation from the testing regime specified in table S3.1 of this permit.</li> </ul>	30/01/24
IC3	<p>The operator shall submit a written report to the Environment Agency which demonstrates that the following systems and equipment, as detailed in the response to schedule 5 notice received on 27/03/23, have been installed:</p> <ul style="list-style-type: none"> <li>– SCR</li> <li>– DPF</li> <li>– Stack configuration</li> </ul> <p>The report will also propose indicative target ELV per year, confirming the abatement system meets the specifications (in the agreed start-up time) in the AQ model submitted as part of the permit application.</p>	28/02/24
IC4	<p>If the report submitted as a result of IC1 shows that the measured emission concentrations is greater than the predicted emission concentrations in the air quality modelling submitted at permit application, the operator shall submit a plan to reduce the predicted short term nitrogen dioxide (NOx) emissions impacts during the maintenance, testing and emergency operations of the standby generators. This shall include but is not limited to:</p> <ul style="list-style-type: none"> <li>– Considerations of the conclusions of the validation exercise specified in improvement condition IC1 to inform a feasibility study including cost benefit analysis for upgrades or other changes to infrastructure or operational regimes on site that could reduce emissions of NOx and increase dispersion;</li> <li>– Use of the above information to propose appropriate changes, including but not limited to an assessment of the following options: changes to stack configuration to enhance dispersion (e.g. vertical emission points and increased stack heights); amending the testing schedule to reduce the daily emissions from the testing operations; upgrading the standby engines to reduce emissions or installing newer ones with lower emissions of NOx; installing NOx abatement. If changes in the height of the stacks are demonstrated to be effective, but are not deemed feasible due to local planning restrictions, the Operator shall provide evidence of the engagement carried out with the Local Authority planning department, in support of this conclusion, and propose other emission reduction options.</li> <li>– The Operator shall submit an updated air dispersion modelling study demonstrating how the proposed option(s), selected among those assessed, result in reduced levels of oxides of nitrogen at the sensitive receptors, including the non-statutory ecological sites in proximity of the installation;</li> </ul>	28/02/2025

<b>Table S1.3 Improvement programme requirements</b>		
<b>Reference</b>	<b>Requirement</b>	<b>Date</b>
	<ul style="list-style-type: none"> <li>– Proposal of the shortest practical timescale for the implementation of the selected improvements.</li> </ul> <p>The review and timescale for improvement shall be submitted to the Environment Agency in writing for approval.</p>	

## Schedule 2 – Raw materials and fuels

<b>Table S2.1 Raw materials and fuels</b>	
<b>Raw materials and fuel description</b>	<b>Specification</b>
Gas oil or equivalent substitute to be agreed in writing with the Environment Agency	Sulphur content 0.001% max

## Schedule 3 – Emissions and monitoring

Table S3.1 Point source emissions to air						
Emission point ref. & location As shown in Schedule 7	Source	Parameter	Limit (including unit)	Reference period	Monitoring frequency	Monitoring standard or method
A10 (AE_04), A11 (AE_05)	Diesel generator exhausts	Oxides of nitrogen (NO and NO <sub>2</sub> expressed as NO <sub>2</sub> )	No limit set Note 1	In line with web guide 'Monitoring stack emissions: low risk MCPs and specified generators' Published 16 February 2021 (formerly known as TGN M5)	Every 1500 hours of operation or once every three years (whichever comes first).	In line with web guide 'Monitoring stack emissions: low risk MCPs and specified generators' Published 16 February 2021 (formerly known as TGN M5)
		Carbon monoxide				
		Sulphur dioxide				
		Particulates				
A3 (A89_01), A4 (A89_02), A7 (AE_01), A8 (AE_02), A9 (AE_03)	Diesel generator exhausts	Oxides of nitrogen (NO and NO <sub>2</sub> expressed as NO <sub>2</sub> )	No limit set Note 2	In line with web guide 'Monitoring stack emissions: low risk MCPs and specified generators' Published 16 February 2021 (formerly known as TGN M5)	Every 1500 hours of operation or once every three years (whichever comes first).	In line with web guide 'Monitoring stack emissions: low risk MCPs and specified generators' Published 16 February 2021 (formerly known as TGN M5)
		Carbon monoxide				
		Sulphur dioxide				
		Particulates				
A1 (A67_01), A2 (A67_02), A5 (A6_LL), A6 (A7_LL), A12 (A8_LL), A13 (A89_03), A14 (A89_06), A15 (A9_LL), A16 (A89_05), A17 (A89_04)	Diesel generator exhausts	Oxides of nitrogen (NO and NO <sub>2</sub> expressed as NO <sub>2</sub> )	No limit set Note 3	In line with web guide 'Monitoring stack emissions: low risk MCPs and	Every 1500 hours of operation or once every three years	In line with web guide 'Monitoring stack emissions: low risk MCPs and



<b>Table S3.1 Point source emissions to air</b>						
<b>Emission point ref. &amp; location As shown in Schedule 7</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>
		Carbon monoxide		specified generators' Published 16 February 2021 (formerly known as TGN M5)	(whichever comes first).	specified generators' Published 16 February 2021 (formerly known as TGN M5)
		Sulphur dioxide				
		Particulates				
A1 (A67_01), A2 (A67_02), A3 (A89_01), A4 (A89_02)	SCRs	NH3	No limit set	-	-	-
	DPF	Particulates	No limit set	-	-	-
Vents associated with bulk diesel storage tanks	Vents from storage tanks located outside	No parameters set	No limit set	-	-	-
7 boilers rated <1MWth	9 boilers rated <1MWth	No parameters set	No limit set	-	-	-
Note 1: As agreed in IC2 Note 2: monitoring requirement applies from 01/01/2025 Note 3: monitoring requirement applies from 01/01/2030						

<b>Table S3.2 Point Source emissions to sewer – emission limits and monitoring requirements</b>						
<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>
S1 on site plan in schedule 7 emission to Thames Water	Uncontaminated site surface water	No parameters set	No limit set	-	-	-

<b>Table S3.3 Process monitoring requirements</b>				
<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>
SCR	Urea levels	Continuous	–	In accordance with SCR/DPF Operating & maintenance information
DPF	Dust levels	Continuous	–	

## Schedule 4 – Reporting

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

Parameter	Emission or monitoring point/reference	Reporting period	Period begins
Emissions to air Parameters as required by condition 3.5.1.	A10, A11	Every 1500 hours of operation once or every three years (whichever comes first).	1 January Note 1
	A3, A4, A7, A8, A9	Every 1500 hours of operation once or every three years (whichever comes first).	01/01/2025
	A1, A2, A5, A6, A12, A13, A14, A15, A16, A17	Every 1500 hours of operation once or every three years (whichever comes first).	01/01/2030
Process monitoring parameters as required by condition 3.5.1.	SCR/DPF	Annually	1 January
Note 1: Unless otherwise agreed in writing with the Environment Agency as a result of approval of improvement condition IC2 in this permit.			

Parameter	Frequency of assessment	Units
Gas oil usage	Annually	Tonnes
Generator operation for testing and maintenance	Report to be submitted annually	Total hours for the site (hours), Total hours per generator (hours), Total number of runs per generator (quantity and dates) Number of minutes per run (minutes)
Generator operation during emergency scenario	Within 24 hours if operation commences	Date and time of grid failure, Number of generators operating immediately after the failure, Number of generators operating two hours after failure, Anticipated duration of the mains supply failure (hours)
Generator operation during emergency scenario	Annually	Total number of runs (quantity), duration of runs (hours)
Indicative SCR performance in accordance with IC3	Annually or as agreed in writing by the Environment Agency	Indicative abatement efficiency and achieved output concentration

<b>Table S4.3 Reporting forms</b>		
<b>Media/ parameter</b>	<b>Reporting format</b>	<b>Agency recipient</b>
Air	Emissions to Air Reporting Form or other form as agreed in writing by the Environment Agency	31/08/23
Process monitoring	Form 'process 1' or other form as agreed in writing by the Environment Agency	31/08/23
Other performance indicators	Form 'performance 1' or other form as agreed in writing by the Environment Agency	As agreed with the Environment Agency
Generator operation during emergency scenario	Form 'emergency scenario' or other form as agreed in writing by the Environment Agency	As agreed with the Environment Agency

# 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	

<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>	
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>	
<b>To be notified within 24 hours of detection</b>	
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>	
<b>To be notified within 24 hours of detection</b>	
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.	
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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 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.

“emissions to land” includes emissions to groundwater.

“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.

“gas oil” means: (a) any petroleum-derived liquid fuel falling within CN codes 2710 19 25, 2710 19 29, 2710 19 47, 2710 19 48, 2710 20 17 or 2710 20 19; or (b) any petroleum-derived liquid fuel of which less than 65 % by volume (including losses) distils at 250 °C and of which at least 85 % by volume (including losses) distils at 350 °C by the ASTM D86 method. Gas oil includes diesel and is defined in Article 3(19) of the MCPD.

“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.

“List of Wastes” means the list of wastes established by Commission Decision 2000/532/EC replacing Decision 94/3/EC establishing a list of wastes pursuant to Article 1(a) of Council Directive 75/442/EEC on waste and Council Decision 94/904/EC establishing a list of hazardous waste pursuant to Article 1(4) of Council Directive 91/689/EEC on hazardous waste, as amended from time to time.

“low polluting fuels” means biomass or coal with an average as-received sulphur content of less than 0.4% by mass as described in the ESI IED Compliance Protocol for Utility Boilers and Gas Turbines.

“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, as read in accordance with Schedule 1A to the Environmental Permitting (England and Wales) Regulations 2016.

“Natural gas” means naturally occurring methane with no more than 20% by volume of inert or other constituents.

“Net rated thermal input” means the rate at which fuel can be burned at the maximum continuous rating of the appliance multiplied by the net calorific value of the fuel and expressed as megawatts thermal.

“operational hours” are whole hours commencing from the first unit ending start up and ending when the last unit commences shut down.

“SI” means site inspector.



“Standby fuel” means alternative liquid fuels that are used in emergency situations when the gas fuel which is normally used, is not available.

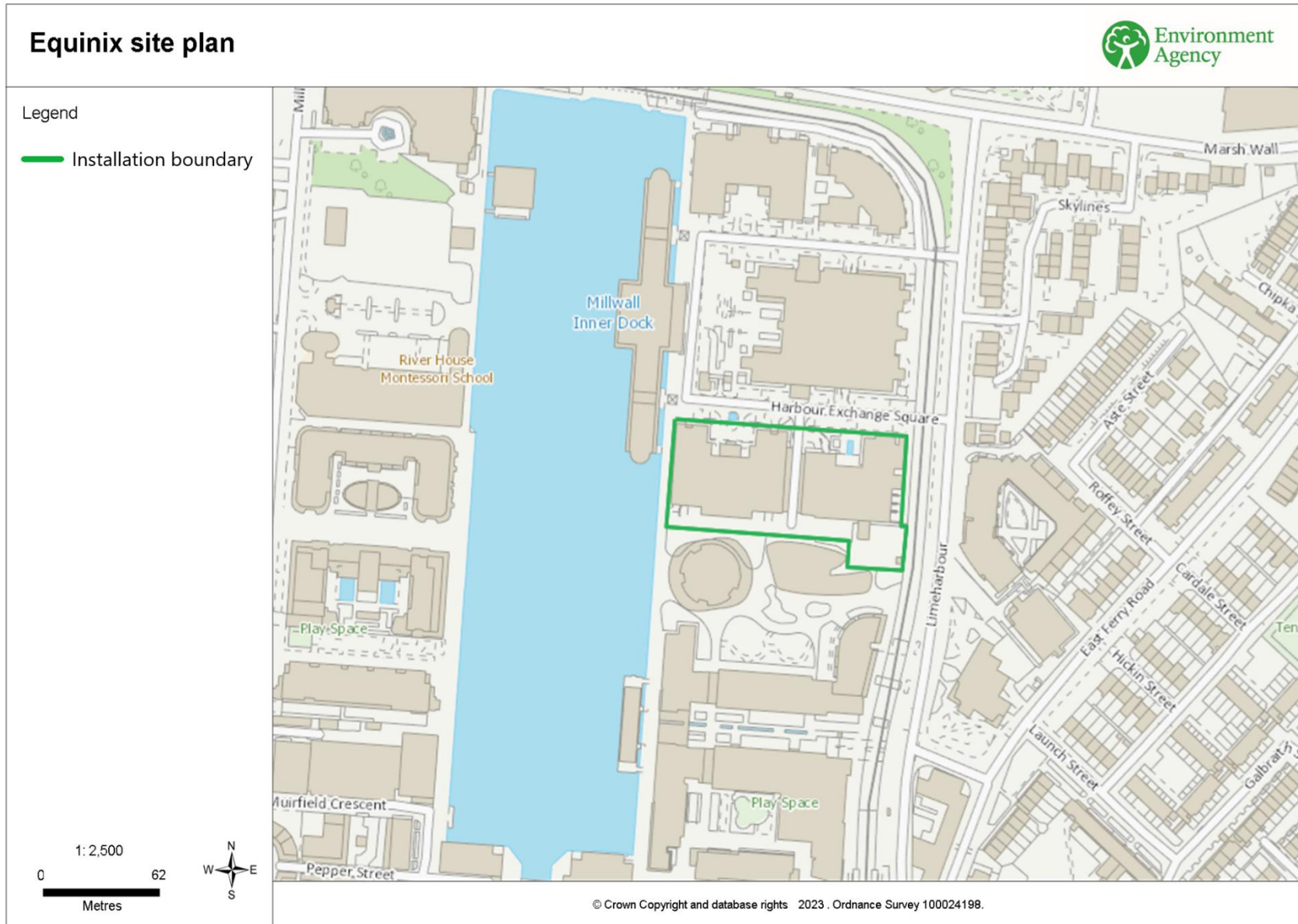
Where a minimum limit is set for any emission parameter, for example pH, reference to exceeding the limit shall mean that the parameter shall not be less than that limit.

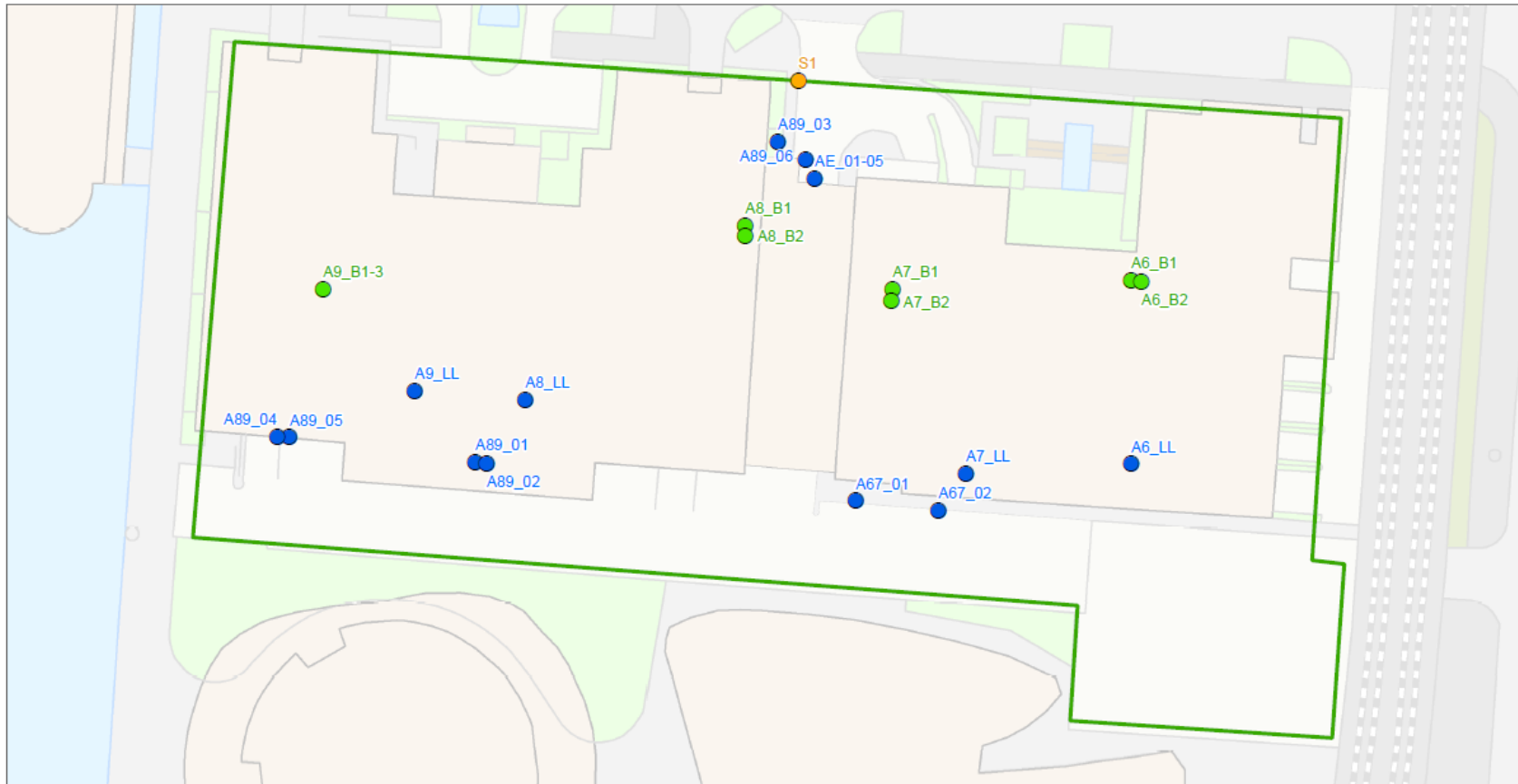
Unless otherwise stated, any references in this permit to concentrations of substances in emissions into air means:

- in relation to emissions from combustion processes, the concentration in dry air at a temperature of 273K, at a pressure of 101.3 kPa and with an oxygen content of 3% dry for liquid and gaseous fuels, 6% dry for solid fuels; and/or
- in relation to emissions from gas turbine or compression ignition engine combustion processes, the concentration in dry air at a temperature of 273K, at a pressure of 101.3kPa and with an oxygen content of 15% dry for liquid and gaseous fuels; and/or
- in relation to emissions from combustion processes comprising a gas turbine with a waste heat boiler, the concentration in dry air at a temperature of 273K, at a pressure of 101.3kPa and with an oxygen content of 15% dry, unless the waste heat boiler is operating alone, in which case, with an oxygen content of 3% dry for liquid and gaseous fuels; and/or
- in relation to emissions from non-combustion sources, the concentration at a temperature of 273K and at a pressure of 101.3 kPa, with no correction for water vapour content.

“year” means calendar year ending 31 December.

# Schedule 7 – Site plan





<p><b>Permit Boundary</b></p> <p><b>Emission Points</b></p> <ul style="list-style-type: none"> <li><span style="color: green;">●</span> Boilers</li> <li><span style="color: blue;">●</span> Generators</li> <li><span style="color: orange;">●</span> Sewer</li> </ul>	<p>0 10 20</p> <p>Metres</p> <p>N</p>	<p><b>Figure 4.1</b></p> <p><b>Emission Points</b></p> <p><b>6/7/8/9 Harbour Exchange Square,</b></p> <p><b>London, E14 9GE</b></p>	
		<p>SCALE: See Scale Bar</p> <p>SIZE: A4</p> <p>PROJECT: 0554720</p> <p>DATE: 13/05/2021</p>	<p>VERSION: A03</p> <p>DRAWN: JG</p> <p>CHECKED: HF</p> <p>APPROVED: CG</p>

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END OF PERMIT

Permit number  
EPR/DP3906BE