Headquarters,
Johnstown Castle Estate,
County Wexford, Ireland

GREENHOUSE GAS EMISSIONS PERMIT

Permit Register Number: IE-GHG184-10508-4

Operator: Amazon Data Services Ireland Limited
One Burlington Plaza
Burlington Road
Dublin 4
D04RH96

Installation Name: DUB 56 Data Processing Centre

Site Name: Belgard Road Tallaght

Location: Belgard Road
Tallaght
Dublin 24
Ireland

Introductory Note

This introductory note does not form a part of the Greenhouse Gas Emissions Permit.

This Greenhouse Gas Emissions Permit authorises the holder to undertake named activities resulting in emissions of Carbon Dioxide from the listed emission sources. It also contains requirements that must be met in respect of such emissions, including monitoring and reporting requirements. This Greenhouse Gas Emissions Permit places an obligation on the Operator to surrender allowances to the Agency equal to the annual reportable emissions of carbon dioxide equivalent from the installation in each calendar year, no later than four months after the end of each such year.

Contact with Agency:

If you contact the Agency about this Greenhouse Gas Emissions Permit please quote the following reference: Greenhouse Gas Emissions Permit Nº IE-GHG184-10508.

All correspondence in relation to this permit should be addressed to:

Email: help.ets@epa.ie

By Post: Climate Change Unit, Environmental Protection Agency
P.O. Box 3000, Johnstown Castle Estate,
Co. Wexford

Updating of the permit:

This Greenhouse Gas Emissions Permit may be updated by the Agency, subject to compliance with Condition 2. The current Greenhouse Gas Emissions Permit will normally be available on the Agency's website at www.epa.ie and ETSWAP.

Surrender of the permit:

Before this Greenhouse Gas Emissions Permit can be wholly or partially surrendered, a written application must be made to the on-line ETS portal, and written permission received from, the Agency through ETSWAP.

Transfer of the permit or part of the permit:

Before this Greenhouse Gas Emissions Permit can be wholly or partially transferred to another Operator a joint written application to transfer this Greenhouse Gas Emissions Permit must be made (by both the existing and proposed Operators) to, and written permission received from, the Agency through the on-line ETS portal ETSWAP.

Licence held pursuant to the Environmental Protection Agency Act 1992, as amended. (as of the date of this permit)**:**

Status Log

Current Permit

Permit number	Date application received	Date Permit issued	Comment
IE-GHG184-10508-4	29 May 2019	29 January 2020	The inclusion of the additional emission sources S30, S31, S32,S33,S34,S35,S36,S37, S38,S39,S40,S41,S42,S43, S44,S45,S46, S47,S48,S49, S50,S51,S52,S53,S54,S55, S56,S57 and S58 and associated emission points EP30 to EP58. Inclusion of the additional metering devices MD3, MD4, MD5,MD7 and MD8.

Previous Permits

Permit number	Change Type	Date application received	Date Permit issued	Comment
IE-GHG184-10508-1	GHG Permit Application	23 September 2016	16 February 2017	
IE-GHG184-10508-2	GHG Variation	17 November 2017	21 December 2017	Inclusion of the emission sources S30, S31, S32,S33,S34,S35,S36,S37,S38,S39,S40, S41,S42,S43 and associated emission points and update of the relevant tables. Inclusion of the source stream natural gas. Inclusion of the Measurement Devices MD1-Bulk Tank1, MD2- Bulk Tank 2, MD3- Gas Supply, MD4 Gas Oil Tank 1,MD5- Gas Oil Tank 2, MD6- Fuel Delivery Meter.

Permit number	Change Type	Date application received	Date Permit issued	Comment
IE-GHG184-10508-3	GHG Variation	24 November 2018	15 January 2019	Removal of the emission sources S30-S43 inclusive and associated emission points EP30-EP43. Removal of the source stream F2 (Natural Gas) and associated meters.

End of Introductory Note

Glossary of Terms

For the purposes of this permit the terms listed in the left hand column shall have the meaning given in the right hand column below:

The Agency	Environmental Protection Agency.
Agreement	Agreement in writing.
Allowance	Permission to emit to the atmosphere one tonne of carbon dioxide equivalent during a specified period issued for the purposes of Directive 2003/87/EC by the Agency or by a designated national competent authority of a Member State of the European Union.
Annual Reportable Emissions	Reportable Emissions of carbon dioxide made in any calendar year commencing from 1 January 2005 or the year of commencement of the activity, whichever is the later.
A & V Regulation	Commission Regulation (EU) No 600/2012 of 21 June 2012 on the verification of greenhouse gas emission reports and tonne-kilometre reports and the accreditation of verifiers pursuant to Directive 2003/87/EC of the European Parliament and of the Council and any amendments or revisions thereto.
Category A Installation	As defined in Article 19.2 (a) of the M&R Regulation.
Category B Installation	As defined in Article 19.2 (b) of the M&R Regulation.
Category C Installation	As defined in Article 19.2 (c) of the M&R Regulation.
The Directive	Directive 2003/87/EC of the European Parliament and of the Council of 13 October 2003 establishing a scheme for greenhouse gas emission allowance trading within the Community and amending Council Directive 96/61/EC.
Emissions	The release of greenhouse gases into the atmosphere from sources in an installation.
EPA	Environmental Protection Agency.
Fall-Back Methodology	As defined in Article 22 of the M&R Regulation.
GHG	Greenhouse gas.
GHG Permit	Greenhouse gas emissions permit.
Greenhouse Gas	Any of the gases in Schedule 2 of the Regulations.
IPC/IE	Integrated Pollution Control/Industrial Emissions.
Installation	Any stationary technical unit where one or more activities listed in Schedule 1 to the Regulations are carried out. Also any other directly associated activities which have a technical connection with the activities carried out on that site and which could have an effect on emissions and pollution. References to an installation include references to part of an installation.

Installation with low emissions	As defined in Article 47 of the M&R Regulation.
Major Source Streams	As defined in Article 19.3 (c) of the M&R Regulation.
M&R Regulation	Commission Regulation (EU) No 601/2012 of 21 June 2012 on the monitoring and reporting of greenhouse gas emissions pursuant to Directive 2003/87/EC of the European Parliament and of the Council and any amendments or revisions thereto.
Mis-statement	An omission, misrepresentation or error in the Operators reported data, not considering the uncertainty permissible pursuant to Article 12(1)(a) of Regulation (EU) no 601/2012.
N/A	Not applicable.
Monitoring Plan	The Plan submitted and approved in accordance with Condition 3.1 of this permit and attached at Appendix 1.
Non-conformity	Any act or omission by the Operator, either intentional or unintentional, that is contrary to the greenhouse gas emissions permit and the requirements of the Monitoring Plan.
The National Administrator	The person so designated in accordance with the requirements of any Regulations adopted as provided for under Article 19.3 of Directive 2003/87/EC.
The Operator (for the purposes of this permit)	Amazon Data Services Ireland Limited
"operator"	Any person who operates or controls an installation or to whom decisive economic power over the functioning of the installation has been delegated.
Person	Any natural or legal person.
Reportable emissions	The total releases to the atmosphere of carbon dioxide (expressed in tonnes of carbon dioxide equivalent) from the emission sources specified in Table 2 and arising from the Schedule 1 activities which are specified in Table 1.
The Regulations	European Communities (Greenhouse Gas Emissions Trading) Regulations 2012 (S.I. No 490 of 2012) and any amendments or revisions thereto.
The Verifier	A legal person or another legal entity carrying out verification activities pursuant to Regulation (EU) No 600/2012 and accredited by a national accreditation body pursuant to Regulation (EC) No 765/2008 and Regulation (EU) No 600/2012 or a natural person otherwise authorised, without prejudice to Article 5(2) of Regulation (EC) No 765/2008, at the time a verification report is issued.
The Registry	The Registry as provided for under Article 19 of Directive 2003/87/EC.

Schedule 1	Schedule 1 to the Regulations.

Reasons for the Decision

The Agency is satisfied, on the basis of the information available, that subject to compliance with the conditions of this permit, the Operator is capable of monitoring and reporting emissions in accordance with the requirements of the Regulations.

Activities Permitted

Pursuant to the Regulations the Agency issues this Greenhouse Gas Emissions Permit, subject to any subsequent revisions, corrections or modifications it deems appropriate, to:

The Operator:

Amazon Data Services Ireland Limited
One Burlington Plaza
Burlington Road
Dublin 4
D04RH96

Company Registration Number: 390566

to carry out the following

Categories of activity:

Annex 1 Activity
Combustion of fuels in installations with a total rated thermal input exceeding 20 MW (except in installations for the incineration of hazardous or municipal waste)

at the following installation(s):

DUB 56 Data Processing Centre **Installation number:** 209903

located at

Belgard Road
Tallaght
Dublin 24
Ireland

subject to the five conditions contained herein, with the reasons therefor and associated tables attached thereto.

Conditions

Condition 1. The Permitted Installation

1.1 This permit is being granted in substitution for the previous GHG permit granted to the Operator as listed in the Status Log of this GHG permit.

1.2 The Operator is authorised to undertake the activities and/or the directly associated activities specified in Table 1 below resulting in the emission of carbon dioxide:

Table 1 - Activities which are listed in Schedule 1 of the Regulations and other directly associated activities carried out on the site:

Installation No.: 209903

Activity Description
Combustion of fuels in installations with a total rated thermal input exceeding 20 MW (except in installations for the incineration of hazardous or municipal waste)

Directly Associated Activity Description
N/A

1.3 Carbon dioxide from Schedule 1 activities shall be emitted to atmosphere only from the emission sources as listed in Table 2 below:

Table 2 Emission Sources and Capacities:

Emission Source Reference	Emission Source Description	Capacity	Capacity Units
S1	Stack 1 (Emergency back-up generator)	<400	MW
S2	Stack 2 (Emergency back-up generator)	<400	MW
S3	Stack 3 (Emergency back-up generator)	<400	MW
S4	Stack 4 (Emergency back-up generator)	<400	MW
S5	Stack 5 (Emergency back-up generator)	<400	MW
S6	Stack 6 (Emergency back-up generator)	<400	MW
S7	Stack 7 (Emergency back-up generator)	<400	MW

Emission Source Reference	Emission Source Description	Capacity	Capacity Units
S8	Stack 8 (Emergency back-up generator)	<400	MW
S9	Stack 9 (Emergency back-up generator)	<400	MW
S10	Stack 10 (Emergency back-up generator)	<400	MW
S11	Stack 11 (Emergency back-up generator)	<400	MW
S12	Stack 12 (Emergency back-up generator)	<400	MW
S13	Stack 13 (Emergency back-up generator)	<400	MW
S14	Stack 14 (Emergency back-up generator)	<400	MW
S15	Stack 15 (Emergency back-up generator)	<400	MW
S16	Stack 16 (Emergency back-up generator)	<400	MW
S17	Stack 17 (Emergency back-up generator)	<400	MW
S18	Stack 18 (Emergency back-up generator)	<400	MW
S19	Stack 19 (Emergency back-up generator)	<400	MW
S20	Stack 20 (Emergency back-up generator)	<400	MW
S21	Stack 21 (Emergency back-up generator)	<400	MW
S22	Stack 22 (Emergency back-up generator)	<400	MW

Emission Source Reference	Emission Source Description	Capacity	Capacity Units
S23	Stack 23 (Emergency back-up generator)	<400	MW
S24	Stack 24 (Emergency back-up generator)	<400	MW
S25	Stack 25 (Emergency back-up generator)	<400	MW
S26	Stack 26 (Emergency back-up generator)	<400	MW
S27	Stack 27 (Emergency back-up generator)	<400	MW
S28	Fire pump stack	<400	MW
S29	Fire pump stack	<400	MW
S30	Stack 30 (Emergency back-up generator)	<400	MW
S31	Stack 31 (Emergency back-up generator)	<400	MW
S32	Stack 32 (Emergency back-up generator)	<400	MW
S33	Stack 33 (Emergency back-up generator)	<400	MW
S34	Stack 34 (Emergency back-up generator)	<400	MW
S35	Stack 35 (Emergency back-up generator)	<400	MW
S36	Stack 36 (Emergency back-up generator)	<400	MW
S37	Stack 37 (Emergency back-up generator)	<400	MW

Emission Source Reference	Emission Source Description	Capacity	Capacity Units
S38	Stack 38 (Emergency back-up generator)	<400	MW
S39	Stack 39 (Emergency back-up generator)	<400	MW
S40	Stack 40 (Emergency back-up generator)	<400	MW
S41	Stack 41 (Emergency back-up generator)	<400	MW
S42	Stack 42 (Emergency back-up generator)	<400	MW
S43	Stack 43 (Emergency back-up generator)	<400	MW
S57	Fire Pump Stack	<400	MW
S56	Fire Pump Stack	<400	MW
S55	Stack 55 (Emergency back-up generator)	<400	MW
S44	Stack 44 (Emergency back-up generator)	<400	MW
S45	Stack 45 (Emergency back-up generator)	<400	MW
S46	Stack 46 (Emergency back-up generator)	<400	MW
S47	Stack 47 (Emergency back-up generator)	<400	MW
S48	Stack 48 (Emergency back-up generator)	<400	MW
S49	Stack 49 (Emergency back-up generator)	<400	MW

Emission Source Reference	Emission Source Description	Capacity	Capacity Units
S50	Stack 50 (Emergency back-up generator)	<400	MW
S51	Stack 51 (Emergency back-up generator)	<400	MW
S52	Stack 52 (Emergency back-up generator)	<400	MW
S53	Stack 53 (Emergency back-up generator)	<400	MW
S54	Stack 54 (Emergency back-up generator)	<400	MW
S58	Stack 58 (Emergency Roll Up back-up generator)	<400	MW

1.4 The activity shall be controlled, operated and maintained so that emissions of carbon dioxide shall take place only as set out in this GHG Emissions Permit. The permit does not control emissions of gases other than carbon dioxide. All agreed plans, programmes and methodologies required to be carried out under the terms of this permit, become part of this permit.

1.5 This GHG Permit is for the purposes of GHG emissions permitting under the European Communities (Greenhouse Gas Emissions Trading) Regulations 2012 and any amendments to the same only and nothing in this permit shall be construed as negating the Operator's statutory obligations or requirements under any other enactments or regulations unless specifically amended by the Regulations.

1.6 Any reference in this permit to 'installation' shall mean the installation as described in the Greenhouse Gas Emissions Permit application and any amendments approved by the Agency.

Reason: To describe the installation and clarify the scope of this permit.

Condition 2. Notification

2.1 No alteration to, or reconstruction in respect of, the activity or any part thereof which would, or is likely to, result in a change in:

2.1.1 the nature or functioning of the installation;

2.1.2 the capacity of the installation as detailed in this permit;

2.1.3 the fuels used at the installation;

2.1.4 the range of activities to be carried out at the installation

that may require updating of the GHG permit shall be carried out or commenced without prior notice to and without the prior written agreement of the Agency.

2.2 The Operator shall notify the Agency in writing of the cessation of all or part of any activity listed in Table 1 of this permit no later than one month from the date of cessation or by 31 December of the year of cessation, whichever is sooner.

2.3 The Operator shall apply for an update of this GHG Permit where there is a change to the Operator name and/or registered address of the Operator, within seven days of the change.

2.4 For installations or parts of installations which have not come into operation when the application for this permit was made the Operator shall notify the Agency of the date of commencement of the activity within seven days of commencement.

2.5 The Operator shall notify the Agency in writing within three days of becoming aware of any factors which may prevent compliance with the conditions of this permit.

2.6 The Operator shall submit to the Agency by 21 January of each year a declaration of operability. The declaration submitted shall be in the format required by the Agency.

2.7 All notifications required under Condition 2 above shall be made to the address given in the Explanatory Note included with this permit.

Reason: To provide for the notification of updated information on the activity.

Condition 3. Monitoring and Reporting

3.1 The Operator shall monitor and record greenhouse gas emissions on site in accordance with the M&R Regulation and the approved Monitoring Plan attached at Appendix 1 to this GHG permit and in compliance with any other guidance approved by the Agency for the purposes of implementing the Directive and/or the Regulations.

3.2 The Operator shall modify the monitoring plan in any of the following situations:

3.2.1 new emissions occur due to new activities carried out or due to the use of new fuels or materials not yet contained in the monitoring plan;

3.2.2 the change of availability of data, due to the use of new measurement instrument types, sampling methods or analysis methods, or for other reasons, leads to higher accuracy in the determination of emissions;

3.2.3 data resulting from the previously applied monitoring methodology has been found incorrect;

3.2.4 changing the monitoring plan improves the accuracy of the reported data, unless this is technically not feasible or incurs unreasonable costs;

3.2.5 the monitoring plan is not in conformity with the requirements of the M&R Regulation and the Agency requests a change;

3.2.6 it is necessary to respond to the suggestions for improvement of the monitoring plan contained in the verification report.

The Operator shall notify any proposals for modification of the monitoring plan to the Agency without undue delay. Any significant modifications of the monitoring plan, as defined in Article 15 of the M&R Regulation, shall be subject to approval by the Agency. Where approved these changes shall be implemented within a timeframe agreed by the Agency.

3.3 Temporary changes to the monitoring methodology:

3.3.1 Where it is for technical reasons temporarily not feasible to apply the tier in the monitoring plan for the activity data or each calculation factor of a fuel or material stream as approved by the Agency, the Operator shall apply the highest achievable tier

until the conditions for application of the tier approved in the monitoring plan have been restored. The Operator shall take all necessary measures to allow the prompt restoration of the tier in the approved monitoring plan. The Operator shall notify the temporary change to the monitoring methodology without undue delay to the Agency specifying:

(i) The reasons for the deviation from the tier;

(ii) in detail, the interim monitoring methodology applied by the Operator to determine the emissions until the conditions for the application of the tier in the monitoring plan have been restored;

(iii) the measures the Operator is taking to restore the conditions for the application of the tier in the approved monitoring plan;

(iv) the anticipated point in time when application of the approved tier will be resumed.

3.3.2 A record of all non-compliances with the approved monitoring plan shall be maintained on-site and shall be available on-site for inspection by authorised persons of the Agency and/or by the Verifier at all reasonable times.

3.4 The Operator shall appoint a Verifier to ensure that, before their submission, the reports required by Condition 3.5 below are verified in accordance with the criteria set out in Schedule 5 of the Regulations, the A&V Regulation and any more detailed requirements of the Agency.

3.5 The written report of the verified annual reportable emissions and the verification report in respect of each calendar year shall be submitted to the Agency by the Operator no later than 31 March of the following year. The reports shall be in the format required by the Agency and meet the criteria set out in the M&R and A&V Regulations.

3.6 The Operator shall enter the verified annual reportable emissions figure for the preceding year into the Registry no later than 31 March of the following year. This figure shall be electronically approved by the Verifier in the registry no later than 31 March of each year.

3.7 Where an Operator is applying the Fall-Back methodology, the Operator shall assess and quantify each year the uncertainties of all parameters used for the determination of the annual emissions in accordance with the ISO Guide to the Expression of Uncertainty in Measurement or another equivalent internationally accepted standard and include the verified results in the written report of the verified annual reportable emissions to be submitted to the Agency by 31 March each year.

3.8 An Operator shall submit to the Agency for approval a report containing the information detailed in (i) or (ii) below, where appropriate, by the following deadlines:

(a) for a category A installation, by 30 June every four years;

(b) for a category B installation, by 30 June every two years;

(c) for a category C installation, by 30 June every year.

(i) Where the Operator does not apply at least the tiers required pursuant to the first subparagraph of Article 26(1) and to Article 41(1) of the M&R Regulation, the Operator shall provide a justification as to why it is technically not feasible or would incur unreasonable costs to apply the required tiers. Where evidence is found that measures needed for reaching those tiers have become technically feasible and do not incur unreasonable costs, the Operator shall notify the Agency of appropriate modifications to the monitoring plan and submit proposals for implementing appropriate measures and its timing.

(ii) Where the Operator applies a fall-back monitoring methodology, the Operator shall provide a justification as to why it is technically not feasible or would incur unreasonable costs to apply at least tier 1 for one or more major or minor source streams. Where evidence is found

that measures needed for reaching at least tier 1 for those source streams have become technically feasible and do not incur unreasonable costs, the Operator shall notify the Agency of appropriate modifications to the monitoring plan, submit proposals and a timeframe for implementing appropriate measures.

3.9 Where the verification report states outstanding non conformities, misstatements or recommendations for improvements the Operator shall submit a report to the Agency for approval by 30 June of the year in which the verification report is issued. This requirement does not apply to the Operator of an installation with low emissions where the verification report contains recommendations for improvements only. The report shall describe how and when the Operator has rectified or plans to rectify the non-conformities identified and to implement recommended improvements. Where recommended improvements would not lead to an improvement of the monitoring methodology this must be justified by the Operator. Where the recommended improvements would incur unreasonable costs the Operator shall provide evidence of the unreasonable nature of the costs. The Operator shall implement the improvements specified by the Agency in response to the report submitted in accordance with this Condition in accordance with a timeframe set by the Agency.

3.10 The Operator shall make available to the Verifier and to the Agency any information and data relating to emissions of carbon dioxide which are required in order to verify the reports referred to in Condition 3.5 above or as required by the Agency to facilitate it in establishing benchmarks and/or best practice guidance.

3.11 Provision shall also be made for the transfer of environmental information, in relation to this permit, to the Agency's computer system, as may be requested by the Agency.

3.12 The Operator shall retain all information as specified in the M&R Regulation for a period of at least 10 years after the submission of the relevant annual report.

3.13 A record of independent confirmation of capacities listed in this permit shall be available on-site for inspection by authorised persons of the Agency at all reasonable times.

3.14 The Operator shall keep records of all modifications of the monitoring plan. The records shall include the information specified in Article 16.3 of the M&R Regulation.

3.15 The Operator shall ensure that members of the public can view a copy of this permit and any reports submitted to the Agency in accordance with this permit at all reasonable times. This requirement shall be integrated with the requirements of any public information programme approved by the Agency in relation to any other permit or licence held by the Operator for the site.

Reason: To provide for monitoring and reporting in accordance with the Regulations.

Condition 4. Allowances

4.1 Surrender of Allowances

4.1.1 The Operator shall, by 30 April in each year, surrender to the Agency, or other appropriate body specified by the Agency, allowances equal to the annual reportable emissions in the preceding calendar year.

4.1.2 The number of allowances to be surrendered shall be the annual reportable emissions for the preceding calendar year plus such allowances as may be necessary to cover any earlier calendar year in respect of which allowances remain outstanding and due. This includes allowances to cover the amount of any annual reportable emissions in respect of which allowances were not surrendered in accordance with Condition 4.1.1 in the previous year, and the amount of any reportable emissions which were discovered during

the previous year to have been unreported in reports submitted under Condition 3 in that or in earlier years.

4.1.3 In relation to activities or parts of activities which have ceased to take place and have been notified to the Agency in accordance with Condition 2.2 above, the Operator shall surrender to the Agency allowances equal to the annual reportable emissions from such activities in the preceding calendar year or part thereof, together with such allowances as may be necessary to cover any earlier calendar year in respect of which allowances remain outstanding and due as described in Condition 4.1.2 above.

4.1.4 The Operator may, from 2008 onwards, subject to the provisions of the Regulations and the relevant National Allocation Plan for that compliance year, surrender emission reduction units (ERUs) and certified emission reduction units (CERs) in place of allowances.

4.2 The holding, transfer, surrender and cancellation of allowances shall be in accordance with the requirements of any Regulations adopted as provided for under Article 19.3 of Directive 2003/87/EC, any amendment or revision to the same and any guidance issued by the Agency or the National Administrator.

4.3 The Operator shall provide the National Administrator with all the necessary information for the opening of an Operator holding account for the installation described in Condition 1 of this permit within twenty working days of the issue of this permit, unless such an account is already open.

Reason: *To provide for the surrendering, holding, transfer and cancellation of allowances in respect of reported emissions.*

Condition 5. Penalties

5.1 Any Operator who fails to comply with Condition 4.1 above shall be subject to the provisions of the Regulations, including, but not limited to the payment of penalties.

Reason: To provide for the payment of excess emissions penalties as required under the Regulations.

Sealed by the seal of the Agency on this the 29 January 2020:

PRESENT when the seal of the Agency was affixed hereto:

_____

Ms. Annette Prendergast
Inspector/ Authorised Person

Appendix 1 to Greenhouse Gas Emissions Permit Number IE-GHG184-10508

Monitoring Plan

1. Guidelines & Conditions

1. Directive 2003/87/EC as amended by Directive 2009/29/EC (hereinafter "the (revised) EU ETS Directive") requires operators of installations which are included in the European Greenhouse Gas Emission Trading Scheme (the EU ETS) to hold a valid GHG emission permit issued by the relevant Competent Authority and to monitor and report their emissions and have the reports verified by an independent and accredited verifier.

The Directive can be downloaded from:

http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=CONSLEG:2003L0087:20090625:EN:PDF

2. The Monitoring and Reporting Regulation (Commission Regulation (EU) No 601/2012) (hereinafter the "MRR") defines further requirements for monitoring and reporting.

The MRR can be downloaded from:

http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=OJ:L:2012:181:0030:0104:EN:PDF

Article 12 of the MRR sets out specific requirements for the content and submission of the monitoring plan and its updates. Article 12 outlines the importance of the Monitoring plan as follows:

The monitoring plan shall consist of a detailed complete and transparent documentation of the monitoring methodology of a specific installation [or aircraft operator] and shall contain at least the elements laid down in Annex I.

Furthermore Article 74(1) states:

Member States may require the operator and aircraft operator to use electronic templates or specific file formats for submission of monitoring plans and changes to the monitoring plan as well as for submission of annual emissions reports tonne-kilometre data reports verification reports and improvement reports. Those templates or file format specifications established by the Member States shall at least contain the information contained in electronic templates or file format specifications published by the Commission

3. All Commission guidance documents on the Monitoring and Reporting Regulation will be published at the link below as they become available:

http://ec.europa.eu/clima/policies/ets/monitoring/index_en.htm

(a) Information sources:

EU Websites:

EU-Legislation: http://eur-lex.europa.eu/en/index.htm
EU ETS general: http://ec.europa.eu/clima/policies/ets/index_en.htm

Monitoring and Reporting in the EU ETS: http://ec.europa.eu/clima/policies/ets/monitoring/index_en.htm

Environmental Protection Agency Website:

http://www.epa.ie

Environmental Protection Agency Contact:

GHGpermit@epa.ie

2. Application Details

The Installation Name, Site Name and the address of the site of the installation are detailed below. The Site Name and address can be updated from the Organisation Details Page on the ETSWAP website. The Installation Name can only be updated by your Competent Authority.

Installation name	DUB 56 Data Processing Centre
Site name	Belgard Road Tallaght
Address	Belgard Road Tallaght Dublin 24 Ireland
Grid reference of site main entrance	308852 (X) ; 228212 (Y)
Licence held pursuant to the Environmental Protection Agency Act 1992, as amended.	No
Has the regulated activity commenced at the Installation?	Yes
Date of Regulated Activity commencement	17 February 2017

This information is only required to identify the first relevant reporting year of an installation. If the installation was in operation from the beginning of 2008 and held a Greenhouse Gas Emissions Permit from this point, 1 January 2008 will be used where the actual date of commencement is not readily known.

3. About the Operator

The information about the "Operator" is listed below. The "Operator" is defined as the person who it is proposed will have control over the relevant Regulated Activities in the installation in respect of which this application is being made.

(b) Operator Details

The name of the operator and where applicable the company registration number are detailed below. These details can only be updated by the Environmental Protection Agency.

Operator name	Amazon Data Services Ireland Limited
Company Registration Number	390566

Operator Legal status

The legal status of the operator is:	Company / Corporate Body

(c) Company / Corporate Body

Is the trading / business name different to the operator name?	Yes
Trading / business name	ADSIL

Registered office address

Address Line 1	One Burlington Plaza
Address Line 2	Burlington Road
City/Town	Dublin 4
County	N/A
Postcode	D04RH96

Principal office address

Is the principal office address different to the registered office address?	No

Holding company

Does the company belong to a holding company?	Yes
Holding company name	Amazon EU S.á.r.l.

Holding company address

Address Line 1	5 Rue Platis
Address Line 2	L-2338
City/Town	Luxembourg
County	N/A
Postcode	L-2338
Company registration number	N/A
Is the holding company principal address different to the holding company address?	No

(d) Operator Authority

Does the operator named above have the authority and ability to:

a.	manage site operations through having day-to-day control of plant operation including the manner and rate of operation	Yes
b.	ensure that permit conditions are effectively complied with	Yes
c.	control monitor and report specified emissions	Yes
d.	be responsible for trading in Allowances so that at the end of a reporting period allowances can be balanced against reported emissions.	Yes

4. Service Contact

e. Service Contact

Address	Amazon Data Services Ireland Ltd Shannon Building, Burlington Road Dublin 4 Ireland

5. Installation Activities

f. Installation Description

Below is a description of the installation and its activities, a brief outline description of the site and the installation and the location of the installation on the site. The description also includes a non-technical summary of the activities carried out at the installation briefly describing each activity performed and the technical units used within each activity.

The ADSIL DUB 56 is a data processing centre providing information service activities for the storage, management and dissemination of data. Most of the equipment used at ADSIL DUB 56 is information technology equipment, together with the equipment required to deliver the ancillary services (such as power supply and air conditioning) that are required in order to facilitate the proper operation of the information technology equipment.

The installation uses power from the Irish electricity grid, and the installation is equipped with emergency back-up electricity generators for use in the event of a disruption to the supply of electricity from the Irish electricity grid. The emergency back-up generators are operated periodically throughout the year for testing and preventative maintenance purposes. The emergency back-up generators burn sulphur-free diesel fuel, stored onsite in above ground storage

tanks, which generates carbon dioxide (CO2) emissions. Based on the foreseeable operation of the emergency back-up generators, the site is considered a low emissions installation, and the CO2 emissions in any one year are predicted to be below 25,000 tonnes of CO2.

The monitoring and reporting of CO2 emissions will be conducted in accordance with Article 47 of the European Regulations No. 601/2012 for installation with low emissions. Annual emissions of carbon dioxide from the installation will be estimated based on generators' annual fuel consumption. This will be measured through a combination of (i) a start year and end of year stock take; together with (ii) the amount of diesel delivered (metered) by the fuel vendor during the year. Both data sets will be used, together with vendor information on the composition of the fuel and the net calorific value and emissions factors (as outlined in the current EPA guidance), to calculate an estimated figure for emissions of carbon dioxide by the generators. This method is appropriate for the installation as it qualifies under the "low emitter" threshold as installations which on average emit less than 25,000 tonnes CO2(e) per year. Our initial calculations indicate that this data centre as currently designed and operated will emit no more than 1000 tonnes CO2(e) per year.

This variation is to comply with the GHG permit requirements to notify the EPA of capacity expansions leading to new emission points.

g. Annex 1 Activities

The table below lists the technical details for each Annex 1 activity carried out at the installation.

Note that 'capacity' in this context means:

- Rated thermal input (for combustion installations) which is defined as the rate at which fuel can be burned at the maximum continuous rating of the installation multiplied by the calorific value of the fuel and expressed as megawatts thermal.
- Production capacity for those specified Annex I activities for which production capacity determines ETS eligibility.

Annex 1 Activity	Total Capacity	Capacity units	Specified Emissions
Combustion of fuels in installations with a total rated thermal input exceeding 20 MW (except in installations for the incineration of hazardous or municipal waste)	<400	MW	Carbon Dioxide

h. Site Diagram

The table below lists attachments (if available) that provide a simple diagram showing emissions sources source streams sampling points and metering/measurement equipment.

Attachment	Description
16_005_00_4004_PL00.pdf	Overall site plan showing location of generators
Generatortecdata.pdf	Generator Engine Manufacturers Specification
Firepump technical data.pdf	Firepump technical data
Bulk Tank Level Meters.pdf	Bulk Diesel Tank Level Meters

Attachment	Description
DUB66-CSE-00-XX-DR-C-4004 Overall Proposed Site Layout.pdf	DUB66 Site Layout
Engine Data Sheet.pdf	DUB66 Engine Data Sheet
RUG Fuel Calculations.xlsx	RUG Mobile Generator Capacity Calculations
RUG Data Sheet DS44-CPGK-RevC.pdf	RUG Mobile Generator Spec Sheet
DUB56 Gen Calculations.pdf	DUB56 Gen Capacity Calculations

i. Estimated Annual Emissions

Detail of the estimated annual emission of CO_2 equivalent. This information enables categorisation of the installation in accordance with Article 19 of the MRR and is based on the average verified annual emissions of the previous trading period data OR if this data is not available or is inappropriate a conservative estimate of annual average emissions including transferred CO_2 excluding CO_2 from biomass.

Estimated Annual Emissions (tonnes $CO_{2(e)}$)	1000
Justification for the use of a conservative estimate of CO_2 emissions.	The estimate above is based on the 2018 verification report plus expected growth from expansion during 2019 - a conservative approach was taken.

Installation Category: A

6. Emissions Details

j. About your emissions

Annex I of the Monitoring and Reporting Regulations (MRR) requires that monitoring plans include a description of "the installation" and activities to be carried out and monitored including a list of emission sources and source streams. The information provided in this template relates to the Annex I activity(ies) comprised in the installation in question and should relate to a single installation. It includes any activities carried out by the operator and does not include related activities carried out by other operators.

k. Emission Sources

The table below lists all the emission sources at the installation, which may include directly associated activities/excluded activities.

Emission Source Reference	Emission Source Description
S1	Stack 1 (Emergency back-up generator)
S2	Stack 2 (Emergency back-up generator)
S3	Stack 3 (Emergency back-up generator)

Emission Source Reference	**Emission Source Description**
S4	Stack 4 (Emergency back-up generator)
S5	Stack 5 (Emergency back-up generator)
S6	Stack 6 (Emergency back-up generator)
S7	Stack 7 (Emergency back-up generator)
S8	Stack 8 (Emergency back-up generator)
S9	Stack 9 (Emergency back-up generator)
S10	Stack 10 (Emergency back-up generator)
S11	Stack 11 (Emergency back-up generator)
S12	Stack 12 (Emergency back-up generator)
S13	Stack 13 (Emergency back-up generator)
S14	Stack 14 (Emergency back-up generator)
S15	Stack 15 (Emergency back-up generator)
S16	Stack 16 (Emergency back-up generator)
S17	Stack 17 (Emergency back-up generator)
S18	Stack 18 (Emergency back-up generator)
S19	Stack 19 (Emergency back-up generator)
S20	Stack 20 (Emergency back-up generator)
S21	Stack 21 (Emergency back-up generator)
S22	Stack 22 (Emergency back-up generator)
S23	Stack 23 (Emergency back-up generator)
S24	Stack 24 (Emergency back-up generator)
S25	Stack 25 (Emergency back-up generator)
S26	Stack 26 (Emergency back-up generator)
S27	Stack 27 (Emergency back-up generator)
S28	Fire pump stack
S29	Fire pump stack
S30	Stack 30 (Emergency back-up generator)
S31	Stack 31 (Emergency back-up generator)
S32	Stack 32 (Emergency back-up generator)
S33	Stack 33 (Emergency back-up generator)
S34	Stack 34 (Emergency back-up generator)
S35	Stack 35 (Emergency back-up generator)
S36	Stack 36 (Emergency back-up generator)
S37	Stack 37 (Emergency back-up generator)
S38	Stack 38 (Emergency back-up generator)
S39	Stack 39 (Emergency back-up generator)
S40	Stack 40 (Emergency back-up generator)

Emission Source Reference	**Emission Source Description**
S41	Stack 41 (Emergency back-up generator)
S42	Stack 42 (Emergency back-up generator)
S43	Stack 43 (Emergency back-up generator)
S44	Stack 44 (Emergency back-up generator)
S45	Stack 45 (Emergency back-up generator)
S46	Stack 46 (Emergency back-up generator)
S47	Stack 47 (Emergency back-up generator)
S48	Stack 48 (Emergency back-up generator)
S49	Stack 49 (Emergency back-up generator)
S50	Stack 50 (Emergency back-up generator)
S51	Stack 51 (Emergency back-up generator)
S52	Stack 52 (Emergency back-up generator)
S53	Stack 53 (Emergency back-up generator)
S57	Fire Pump Stack
S54	Stack 54 (Emergency back-up generator)
S55	Stack 55 (Emergency back-up generator)
S56	Fire Pump Stack
S58	Stack 58 (Emergency Roll Up back-up generator)

The table below lists the emission sources which are linked to the Regulated Activities at the installation.

Emission Source Reference	**Emission Source Description**
S1	Stack 1 (Emergency back-up generator)
S2	Stack 2 (Emergency back-up generator)
S3	Stack 3 (Emergency back-up generator)
S4	Stack 4 (Emergency back-up generator)
S5	Stack 5 (Emergency back-up generator)
S6	Stack 6 (Emergency back-up generator)
S7	Stack 7 (Emergency back-up generator)
S8	Stack 8 (Emergency back-up generator)
S9	Stack 9 (Emergency back-up generator)
S10	Stack 10 (Emergency back-up generator)
S11	Stack 11 (Emergency back-up generator)
S12	Stack 12 (Emergency back-up generator)
S13	Stack 13 (Emergency back-up generator)
S14	Stack 14 (Emergency back-up generator)

Emission Source Reference	**Emission Source Description**
S15	Stack 15 (Emergency back-up generator)
S16	Stack 16 (Emergency back-up generator)
S17	Stack 17 (Emergency back-up generator)
S18	Stack 18 (Emergency back-up generator)
S19	Stack 19 (Emergency back-up generator)
S20	Stack 20 (Emergency back-up generator)
S21	Stack 21 (Emergency back-up generator)
S22	Stack 22 (Emergency back-up generator)
S23	Stack 23 (Emergency back-up generator)
S24	Stack 24 (Emergency back-up generator)
S25	Stack 25 (Emergency back-up generator)
S26	Stack 26 (Emergency back-up generator)
S27	Stack 27 (Emergency back-up generator)
S28	Fire pump stack
S29	Fire pump stack
S30	Stack 30 (Emergency back-up generator)
S31	Stack 31 (Emergency back-up generator)
S32	Stack 32 (Emergency back-up generator)
S33	Stack 33 (Emergency back-up generator)
S34	Stack 34 (Emergency back-up generator)
S35	Stack 35 (Emergency back-up generator)
S36	Stack 36 (Emergency back-up generator)
S37	Stack 37 (Emergency back-up generator)
S38	Stack 38 (Emergency back-up generator)
S39	Stack 39 (Emergency back-up generator)
S40	Stack 40 (Emergency back-up generator)
S41	Stack 41 (Emergency back-up generator)
S42	Stack 42 (Emergency back-up generator)
S43	Stack 43 (Emergency back-up generator)
S57	Fire Pump Stack
S56	Fire Pump Stack
S55	Stack 55 (Emergency back-up generator)
S44	Stack 44 (Emergency back-up generator)
S45	Stack 45 (Emergency back-up generator)
S46	Stack 46 (Emergency back-up generator)
S47	Stack 47 (Emergency back-up generator)
S48	Stack 48 (Emergency back-up generator)

Emission Source Reference	Emission Source Description
S49	Stack 49 (Emergency back-up generator)
S50	Stack 50 (Emergency back-up generator)
S51	Stack 51 (Emergency back-up generator)
S52	Stack 52 (Emergency back-up generator)
S53	Stack 53 (Emergency back-up generator)
S54	Stack 54 (Emergency back-up generator)
S58	Stack 58 (Emergency Roll Up back-up generator)

I. Emission Points

The table below lists all the emission points at the installation, which may include directly associated activities/excluded activities.

Emission Point Reference	Emission Point Description
EP1	Diesel engine exhaust for "S1"
EP2	Diesel engine exhaust for "S2"
EP3	Diesel engine exhaust for "S3"
EP4	Diesel engine exhaust for "S4"
EP5	Diesel engine exhaust for "S5"
EP6	Diesel engine exhaust for "S6"
EP7	Diesel engine exhaust for "S7"
EP8	Diesel engine exhaust for "S8"
EP9	Diesel engine exhaust for "S9"
EP10	Diesel engine exhaust for "S10"
EP11	Diesel engine exhaust for "S11"
EP12	Diesel engine exhaust for "S12"
EP13	Diesel engine exhaust for "S13"
EP14	Diesel engine exhaust for "S14"
EP15	Diesel engine exhaust for "S15"
EP16	Diesel engine exhaust for "S16"
EP17	Diesel engine exhaust for "S17"
EP18	Diesel engine exhaust for "S18"
EP19	Diesel engine exhaust for "S19"
EP20	Diesel engine exhaust for "S20"
EP21	Diesel engine exhaust for "S21"
EP22	Diesel engine exhaust for "S22"
EP23	Diesel engine exhaust for "S23"

Emission Point Reference	**Emission Point Description**
EP24	Diesel engine exhaust for "S24"
EP25	Diesel engine exhaust for "S25"
EP26	Diesel engine exhaust for "S26"
EP27	Diesel engine exhaust for "S27"
EP28	Fire Pump exhaust
EP29	Fire Pump exhaust
EP30	Diesel engine exhaust for "S30"
EP31	Diesel engine exhaust for "S31"
EP32	Diesel engine exhaust for "S32"
EP33	Diesel engine exhaust for "S33"
EP34	Diesel engine exhaust for "S34"
EP35	Diesel engine exhaust for "S35"
EP36	Diesel engine exhaust for "S36"
EP37	Diesel engine exhaust for "S37"
EP38	Diesel engine exhaust for "S38"
EP39	Diesel engine exhaust for "S39"
EP40	Diesel engine exhaust for "S40"
EP41	Diesel engine exhaust for "S41"
EP42	Diesel engine exhaust for "S42"
EP43	Diesel engine exhaust for "S43"
EP44	Diesel engine exhaust for "S44"
EP45	Diesel engine exhaust for "S45"
EP46	Diesel engine exhaust for "S46"
EP47	Diesel engine exhaust for "S47"
EP48	Diesel engine exhaust for "S48"
EP49	Diesel engine exhaust for "S49"
EP50	Diesel engine exhaust for "S50"
EP51	Diesel engine exhaust for "S51"
EP52	Diesel engine exhaust for "S52"
EP53	Diesel engine exhaust for "S53"
EP54	Diesel engine exhaust for "S54"
EP55	Diesel engine exhaust for "S55"
EP56	Fire Pump Exhaust
EP57	Fire Pump Exhaust
EP58	Diesel engine exhaust for "S58"

m. Source Streams (fuels and/or materials)

The table below lists the source streams which are used in Schedule 1 Activities at the installation.

Source Stream Reference	Source Stream Type	Source Stream Description
F1	Combustion: Commercial standard fuels	Gas/Diesel Oil

n. Emissions Summary

The table below provides a summary of the emission source and source stream details in the installation.

Source streams (Fuel / Material)	Emission Source Refs.	Emission Point Refs.	Annex 1 Activity
F1	S1,S2,S3,S4,S5,S6,S7,S8,S9,S10,S11,S12,S13,S14,S15,S16,S17,S18,S19,S20,S21,S22,S23,S24,S25,S26,S27,S28,S29,S30,S31,S32,S33,S34,S35,S36,S37,S38,S39,S40,S41,S42,S43,S44,S45,S46,S47,S48,S49,S50,S51,S52,S53,S57,S54,S55,S56,S58	EP1,EP2,EP3,EP4,EP5,EP6,EP7,EP8,EP9,EP10,EP11,EP12,EP13,EP14,EP15,EP16,EP17,EP18,EP19,EP20,EP21,EP22,EP23,EP24,EP25,EP26,EP27,EP28,EP29,EP30,EP31,EP32,EP33,EP34,EP35,EP36,EP37,EP38,EP39,EP40,EP41,EP42,EP43,EP44,EP45,EP46,EP47,EP48,EP49,EP50,EP51,EP52,EP53,EP54,EP55,EP56,EP57,EP58	Combustion of fuels in installations with a total rated thermal input exceeding 20 MW (except in installations for the incineration of hazardous or municipal waste)

o. Excluded Activities

Certain activities that result in greenhouse gas emissions may be excluded under the EU ETS Directive for example truly mobile sources such as vehicle emissions.

Do you have any excluded activities which need to be identified in your monitoring plan?	No

7. Low Emissions Eligibility

p. Low Emissions Eligibility

The operator may submit a simplified monitoring plan for an installation where no nitrous oxide activities are carried out and it can be demonstrated that:

(a) the average verified annual emissions of the installation during the previous trading period was less than 25 000 tonnes $CO_{2(e)}$ per year or;

(b) where this data is not available or inappropriate a conservative estimate shows that emissions for the next 5 years will be less than 25 000 tonnes $CO_{2(e)}$ per year.

Note: the above data shall include transferred CO_2 but exclude CO_2 stemming from biomass.

Does the installation satisfy the criteria for installations with low emissions (as defined by Article 47 of the MRR)?	Yes

If the installation is an installation with low emissions as defined above there are a number of special provisions which may be applied to provide a simplified monitoring plan. These provisions are set out in Article 47 of the MRR.

8. Monitoring Approaches

q. Monitoring Approaches

Emissions may be determined using either a calculation based methodology ("calculation") or measurement based methodology ("measurement") except where the use of a specific methodology is mandatory according to the provisions of the MRR. [MRR Article 21].

Note: the operator may subject to competent authority approval combine measurement and calculation for different sources. The operator is required to ensure and demonstrate that neither gaps nor double counting of reportable emissions occurs.

Please specify whether or not you propose to apply the following monitoring approaches. Select all monitoring approaches that are applicable to you. The consecutive sections will become mandatory based on the selected approaches.

Calculation	Yes
Measurement	No
Fall-back approach	No
Monitoring of N_2O	No
Monitoring of PFC	No
Monitoring of transferred / inherent CO_2	No

9. Calculation

r. Approach Description

The calculation approach including formulae used to determine annual CO_2 emissions:

The methodology used to monitor CO2 emissions is based on calculation of gas oil consumption. The site consists of scheduled activities only. The calculation methodology uses the stock levels in the bulk tanks which are fitted with level indicators. These instruments are calibrated according to the manufacturers' specifications and frequencies by specialist instrumentation contractors.

STOCK AT START AND END OF YEAR (DIESEL GENERATORS)

The Site Facility Manager shall arrange for the level of the bulk storage gas oil tanks to be checked at the beginning of the year (within the first week of the year) to quantify the initial gas oil stocks. The stock level showing on the Operations Report at the time of the stock survey will be recorded. The difference (if any) will be ascertained. The stock difference between start and end of the year will be determined using the results of these tank level records. An independent external contractor shall be employed annually to confirm the validity of the bulk tank instrumentation.

GAS OIL CONSUMPTION (DIESEL GENERATORS)

Consumption will be based on delivery invoices and differences in stock levels at the start and end of each year. Oil is delivered by road tankers which are loaded through fiscal meters. The delivery dockets and invoices are based on the fiscal meters. The fiscal meters are calibrated and certified annually. Deliveries are determined from the delivery dockets (cubic meters) and converted to Tonnes using a factor of 0.86. Delivery dockets are cross-checked with the invoices. Data for NCV and EF are taken from the latest National Inventory data as submitted to the UNFCCC. An oxidation factor of unity is used.

CALCULATION FOR ANNUAL CO2 EMMISSIONS (DIESEL GENERATORS)

CO2 emissions (tonnes) = Fuel consumed (tonnes) x Emission Factor x NCV x Oxidation Factor.

The calculation is done on an annual basis. The oxidation factor applied is 1.0, in accordance with Annex II section 2.3 of the Commission Regulation No 601/2012.

s. Measurement Devices

Below is a description of the specification and location of the measurement systems used for each source stream where emissions are determined by calculation

Also a description of all measurement devices including sub-meters and meters used to deduct non-Annex I activities to be used for each source and source stream.

Source Stream Refs.	Emission Source Refs.	Measurement Device Ref.	Type of Measurement Device	Measurement Range	Metering Range Units	Specified Uncertainty (+/- %)	Location
F1	S1,S2,S3,S4,S5,S6,S7,S8,S9,S10,S11,S12,S13,S14,S15,S16,S17,S18,S19,S20,S21,S22,S23,S24,S25,S26,S27,S28,S29	MD1- Bulk Tank 1	Level Gauge	0-1	Bar converted to Litres	7.5	Bulk Tank 1
F1	S1,S2,S3,S4,S5,S6,S7,S8,S9,S10,S11,S12,S13,S14,S15,S16,S17,S18,S19,S20,S21,S22,S23,S24,S25,S26,S27,S28,S29	MD2- Bulk Tank 2	Level gauge	0-1	bar converted to litres	7.5	Bulk Tank 2
F1	S1,S2,S3,S4,S5,S6,S7,S8,S9,S10,S11,S12,S13,S14,S15,S16,S17,S18,S19,S20,S21,S22,S23,S24,S25,S26,S27,S28,S29,S30,S31,S32,S33,S34,S35,S36,S37,S38,S39,S40,S41,S42,S43,S44,S45,S46,S47,S48,S49,S50,S51,S52,S53,S57,S54,S55,S56,S58	MD6- Fuel Delivery Meter	Fuel delivery meter	variable	litres	7.5	Delivery Truck

Source Stream Refs.	Emission Source Refs.	Measurement Device Ref.	Type of Measurement Device	Measurement Range	Metering Range Units	Specified Uncertainty (+/- %)	Location
F1	S1,S2,S3,S4,S5,S6,S7,S8,S9,S10,S11,S12,S13,S14,S15,S16,S17,S18,S19,S20,S21,S22,S23,S24,S25,S26,S27,S28,S29	MD3	Level gauge	0-1	Bar (converted to Litres)	7.5	Bulk Tank
F1	S30,S31,S32,S33,S34,S35,S36,S37,S38,S39,S40,S41,S42,S43,S44,S45,S46,S47,S48,S49,S50,S51,S52,S53,S54,S55,S56,S57	MD4	Level gauge	0-1	Bar (converted to Litres)	7.5	Bulk Tank
F1	S30,S31,S32,S33,S34,S35,S36,S37,S38,S39,S40,S41,S42,S43,S44,S45,S46,S47,S48,S49,S50,S51,S52,S53,S57,S54,S55,S56	MD5	Level gauge	0-1	Bar (converted to Litres)	7.5	Bulk Tank
F1	S30,S31,S32,S33,S34,S35,S36,S37,S38,S39,S40,S41,S42,S43,S44,S45,S46,S47,S48,S49,S50,S51,S52,S53,S57,S54,S55,S56	MD7	Level gauge	0-1	Bar (converted to Litres)	7.5	Bulk Tank
F1	S58	MD8	Level gauge	0-1	Bar (Converted to Litres)	7.5	Roll Up Generator Container

Source Stream Refs.	Measurement Device Ref.	Determination Method	Instrument Under Control Of	Conditions Of Article 29(1) Satisfied	Invoices Used To Determine Amount Of Fuel Or Material	Trade Partner And Operator Independent
F1	MD1- Bulk Tank 1	Continual	Operator	N/A	N/A	N/A
F1	MD2- Bulk Tank 2	Continual	Operator	N/A	N/A	N/A
F1	MD6- Fuel Delivery Meter	Batch	Trade partner	Yes	Yes	Yes
F1	MD3	Continual	Operator	N/A	N/A	N/A
F1	MD4	Continual	Operator	N/A	N/A	N/A
F1	MD5	Continual	Operator	N/A	N/A	N/A
F1	MD7	Continual	Operator	N/A	N/A	N/A
F1	MD8	Continual	Operator	N/A	N/A	N/A

t. Applied Tiers

The table below identifies the tiers applied against the relevant input data for each source stream and confirms whether a standard (MRR Article 24) or mass balance (MRR Article 25) approach is applied.

(i) The highest tiers as defined in Annex II of the MRR should be used by Category B and C installations to determine the activity data and each calculation factor (except the oxidation factor and conversion factor) for each major source stream. Category A installations should apply as a minimum the tiers listed in Annex V.

(ii) Operators may apply a tier one level lower than those referred to in sub paragraph (i) above for Category C installations and up to two levels lower for Category A and B installations with a minimum of tier 1 if the operator can demonstrate to the satisfaction of the competent authority that this is not technically feasible or would lead to unreasonable cost to apply the higher tier. The justification for not applying the higher tier should be recorded when completing the tier table.

(iii) The competent authority may allow an operator to apply even lower tiers than those referred to in the sub paragraph (ii) with a minimum of tier 1 for a transition period of up to three years if the operator can demonstrate to the satisfaction of the competent authority that this is not technically feasible or would lead to unreasonable cost to apply the higher tier and provides an improvement plan detailing how and by when at least the tier referred to in sub paragraph (ii) will be achieved. The improvement plan should be referenced in subsequent table and provided to the competent authority at the time of submission of this plan.

(iv) For minor source streams operators shall apply the highest tier which is technically feasible and will not lead to unreasonable costs with a minimum of tier 1 for activity data and each calculation factor. For de-minimis source streams operators may use conservative estimations rather than tiers unless a defined tier can be achieved without additional effort (MRR Article 26(2)).

(v) Installations with low emissions as identified in section 6(d) may apply as a minimum tier 1 for determining activity data and calculation factors for all source streams unless higher accuracy is achievable without additional effort.

* Note 1: For commercial standard fuels the minimum tiers listed in Annex V of the MRR may be applied for all activities in all installations.

* Note 2: If you are intending to apply a fall-back approach please complete the table below and select "n/a" for the tiers to be applied for each source stream where a fall-back approach is used. Section 10 "Fall-back" must also be completed for these source streams.

* Note 3: For biomass or mixed fuels the emission factor is the preliminary emission factor as defined in Definition 35 Article 3 of the MRR.

Source Stream Refs.	**Emission Source Refs.**	**Measurement Device Refs.**	**Overall Metering Uncertainty (less than +/- %)**	**Applied Monitoring Approach**	**Activity Data Tier Applied**	**Net Calorific Value Tier Applied**	**Emission Factor Tier Applied**	**Carbon Content Tier Applied**	**Oxidation Factor Tier Applied**	**Conversion Factor Tier Applied**	**Biomass Fraction Tier Applied**	**Estimated Emissions $tCO_{2(e)}$**	**% of Total Estimated Emissions**	**Source Category**	**Highest Tiers Applied**	**Justification for not applying the highest tiers**	**Improvement Plan Reference (where applicable)**
F1	S1,S2,S3,S4,S5,S6,S7,S8,S9,S10,S11,S12,S13,S14,S15,S16,S17,S18,S19,S20,S21,S22,S23,S24,S25,S26,S27,S28,S29	MD1-Bulk Tank 1,MD2 - Bulk Tank 2,MD3, MD6-Fuel Delivery Meter	<7.5%	Standard	1	2a	2a	N/A	1	N/A	N/A	500	50	Major	Yes	n/a	n/a

Source Stream Refs.	**Emission Source Refs.**	**Measurement Device Refs.**	**Overall Metering Uncertainty (less than +/- %)**	**Applied Monitoring Approach**	**Activity Data Tier Applied**	**Net Calorific Value Tier Applied**	**Emission Factor Tier Applied**	**Carbon Content Tier Applied**	**Oxidation Factor Tier Applied**	**Conversion Factor Tier Applied**	**Biomass Fraction Tier Applied**	**Estimated Emissions $tCO_{2(e)}$**	**% of Total Estimated Emissions**	**Source Category**	**Highest Tiers Applied**	**Justification for not applying the highest tiers**	**Improvement Plan Reference (where applicable)**
F1	S30,S31,S32,S33,S34,S35,S36,S37,S38,S39,S40,S41,S42,S43,S44,S45,S46,S47,S48,S49,S50,S51,S52,S53,S54,S55,S56,S57,S58	MD6-Fuel Delivery Meter, MD4, MD5, MD7, MD8	<7.5%	Standard	1	2a	2a	N/A	1	N/A	N/A	500	50	Major	Yes	n/a	n/a

Total Estimated Emissions for Calculation (tonnes $CO_{2(e)}$) 1000

u. Applied tiers

Applied tiers for each source stream

Source Stream Ref.	Emission Source Refs.	Activity Data Tier Applied	Net Calorific Value Tier Applied	Emission Factor Tier Applied	Carbon Content Tier Applied	Oxidation Factor Tier Applied	Conversion Factor Tier Applied	Biomass Fraction Tier Applied
F1	S1,S2,S3,S4,S5,S6,S7,S8,S9,S10,S11,S12,S13,S14,S15,S16,S17,S18,S19,S20,S21,S22,S23,S24,S25,S26,S27,S28,S29	1	2a	2a	N/A	1	N/A	N/A
F1	S30,S31,S32,S33,S34,S35,S36,S37,S38,S39,S40,S41,S42,S43,S44,S45,S46,S47,S48,S49,S50,S51,S52,S53,S54,S55,S56,S57,S58	1	2a	2a	N/A	1	N/A	N/A

v. Justification for Applied tiers

Justifications for the applied tiers for each major source stream where highest tiers are not currently achieved.

Source Stream Ref.	**Emission Source Refs.**	**Justification for the applied tier**	**Improvement Plan Reference (where applicable)**
N/A	N/A	N/A	N/A

10. Calculation Factors

w. Default Values

The table below lists, for each parameter, where default values are to be used for calculation factors.

Source Stream Refs.	Emission Source Refs.	Parameter	Reference Source	Default Value applied (where appropriate)
F1	S1,S2,S3,S4,S5,S6,S7,S8,S9,S10,S11,S12,S13,S14,S15,S16,S17,S18,S19,S20,S21,S22,S23,S24,S25,S26,S27,S28,S29,S30,S31,S32,S33,S34,S35,S36,S37,S38,S39,S40,S41,S42,S43,S44,S45,S46,S47,S48,S49,S50,S51,S52,S53,S57,S54,S55,S56,S58	NCV	National GHG Inventory	N/A
F1	S1,S2,S3,S4,S5,S6,S7,S8,S9,S10,S11,S12,S13,S14,S15,S16,S17,S18,S19,S20,S21,S22,S23,S24,S25,S26,S27,S28,S29,S30,S31,S32,S33,S34,S35,S36,S37,S38,S39,S40,S41,S42,S43,S44,S45,S46,S47,S48,S49,S50,S51,S52,S53,S57,S54,S55,S56,S58	EF	National GHG Inventory	N/A
F1	S1,S2,S3,S4,S5,S6,S7,S8,S9,S10,S11,S12,S13,S14,S15,S16,S17,S18,S19,S20,S21,S22,S23,S24,S25,S26,S27,S28,S29,S30,S31,S32,S33,S34,S35,S36,S37,S38,S39,S40,S41,S42,S43,S44,S45,S46,S47,S48,S49,S50,S51,S52,S53,S57,S54,S55,S56,S58	OxF	EU Commission REGULATION No 601/2012: MRR	1

Sampling and Analysis

Do you undertake sampling and analysis of any of the parameters used in the calculation of your CO_2 emissions?	No

11. Management

x. Monitoring and Reporting Responsibilities

Responsibilities for monitoring and reporting emissions from the installation are listed below:

Relevant job titles/posts and provide a succinct summary of their role relevant to monitoring and reporting are listed below.

Job Title / Post	Responsibilities
Environmental Manager	Ensures that ADSIL is compliant with all applicable GHG regulatory requirements. The Environmental Manager's role includes identification of source data, validation of this data, making the necessary calculations of emissions, forwarding the required information to the Climate Change Unit of the EPA and having the data independently verified by an ISO 14065 accredited Verification Body. The Environmental Manager is supported in this role by the Site Facility Manager (FM). The FM's responsibility includes the management and supervision of site staff and the FM or his/her designee allocates duties involving gas oil off-loading operations - including recording of deliveries to a technical member of the site engineering staff. All staff involved in this work are either engineers or technicians. The site IT system also has an automated gas oil stock level/usage functionality and natural gas consumption functionality to ensure ongoing data acquisition and recording.

Attachment	Description
N/A	N/A

y. Assignment of Responsibilities

Details of the procedure used for managing the assignment of responsibilities for monitoring and reporting within the installation and for managing the competencies of responsible personnel in accordance with Article 58(3)(c) of the MRR:

This procedure identifies how the monitoring and reporting responsibilities for the roles identified above are assigned and how training and reviews are undertaken.

Title of procedure	Procedure for Collection of Fuelling Events and Records
Reference for procedure	SOP at Section 4 on Roles/Responsibilities
Diagram reference	N/A
Brief description of procedure. The description should cover the essential parameters and operations performed	Responsibilities for GHG Management are assigned by the Environmental Manager, who is responsible for guiding and directing the staff. Implementation of GHG activities on site is under the control of the Site FM. The Environmental Manager ensures that ADSIL is compliant with all applicable GHG regulatory requirements. The Environmental Manager's role includes identification of source data, validation of this data, making the necessary calculations of emissions, forwarding the required information to the Climate Change Unit of the EPA and having the data independently verified. The site works involving recording of GHG data such as fuel delivery activities and fuel oil consumption data is managed and controlled by the Site Facility Manager. The Site FM delegates field operational work to his/her reports in a line function, the Environmental Manager is a staff position which provides guidance and regulatory input to the Facility Manager. Competence is managed by virtue of the education, training and experience of the team. All employees participate in annual performance appraisals which includes a discussion of the key role performance indicators - which includes environmental compliance.
Post or department responsible for the procedure and for any data generated	Environmental Manager
Location where records are kept	Onsite on the internal IT system
Name of IT system used	SharePoint
List of EN or other standards applied	N/A

z. Monitoring Plan Appropriateness

Details of the procedure used for regular evaluation of the monitoring plan's appropriateness covering in particular any potential measures for the improvement of the monitoring methodology:

Title of procedure	Procedure for Collection of Fuelling Events and Records
Reference for procedure	SOP Section 3 - Monitoring Plan Appropriateness
Diagram reference	N/A
Brief description of procedure. The description should cover the essential parameters and operations performed	The procedure ensures a regular evaluation of the monitoring plan's appropriateness is undertaken, covering in particular any potential measures for the improvement of the monitoring methodology. This includes checking the list of emissions sources and source streams, ensuring completeness of the emissions and source streams and that all relevant changes in the nature and functioning of the installation will be included in the monitoring plan; assessing compliance with the uncertainty thresholds for activity data and other parameters (where applicable) for the applied tiers for each source stream and emission source; and assessment of potential measures for improvement of the monitoring methodology applied. There shall be specific duties and work plans which specify:- - The plan conforms with the Monitoring and Reporting Regulations or MRR, regular inspection of fuel quality and instrument calibrations, process and justification for determining and monitoring organisational boundaries; - Methods to identify and monitor GHG programme requirements by regular consultation of the MRR and updates thereto - methods of identifying measurement technologies and data sources; selection and application of the processes and tools used for collecting, processing and reporting GHG information; - Methods for assessing the effect of changes to other related systems; - Procedures for authorizing, approving and documenting changes to information systems, the information technology system used for dataflow activities is tested and controlled, including access control, back-up, recovery and security - assessment of potential improvements and optimization to the quantification and monitoring methodologies.
Post or department responsible for the procedure and for any data generated	Environmental Manager
Location where records are kept	Onsite on the internal IT system
Name of IT system used	SharePoint
List of EN or other standards applied	N/A

aa. Data Flow Activities

Details of the procedures used to manage data flow activities in accordance with Article 57 of the MRR:

Title of procedure	Procedure for Collection of Fuelling Events and Records
Reference for procedure	SOP Section 4, Subsections 8 through 17 on Data Flow Flow Activities
Diagram reference	N/A
Brief description of procedure. The description should cover the essential parameters and operations performed	This procedure specifies: 1. identification of the primary data sources 2. each step in the data flow from primary data to annual emissions 3. the relevant processing steps related to each specific data flow activity including the formulas and data used to determine the emissions 4. relevant electronic data processing and storage systems used as well as the interaction between such IT systems and other inputs including manual input 5. identification of how outputs of data flow activities are recorded and logged
Post or department responsible for the procedure and for any data generated	Environmental Manager
Location where records are kept	Onsite internal IT system
Name of IT system used	SharePoint
List of EN or other standards applied	N/A
List of primary data sources	1. Data generated by the gas oil/diesel fuel supplier metered delivery tankers. 2. Data from the onsite fuel oil tank level indicators 3. Emission and oxidation factors as issued and updated by the Irish EPA
Description of the relevant processing steps for each specific data flow activity. Identify each step in the data flow and include the formulas and data used to determine emissions from the primary data. Include details of any relevant electronic data processing and storage systems and other inputs (including manual inputs) and confirm how outputs of data flow activities are recorded	Monitoring data is collated with the facility's existing inventorisation process for budgetary control and fuel purchases. This consists of producing monthly reports, which feed into quarterly reports where appropriate and also into annual reports. The delivery of gas oil/diesel is subject to onsite supervision and includes a level check of the fuel tank before and after loading to ensure that the tank is displayed on the fuel truck delivery truck meter. A record of each delivery as well as the oil tank levels is recorded by the Facilities Manager or delegate and these data are recorded in the site GHG IMS. A standard manual check sheet is completed and stored for each delivery in order to comply with existing legislation under the ADR regulations as transposed into national legislation.

Verification of data will be undertaken periodically to ensure automated data is being accurately recorded. Errors will be reported to the site FM for immediate action.

For annual reporting purposes, Gas oil / Diesel consumption is calculated by reference to deliveries (invoices) and stock difference (the activity data). Data for NCV (fuel oil only) and EF are taken from the latest National tables submitted to the UNFCCC.

Submit relevant documents to record data flow activities

Attachment	**Description**
N/A	N/A

bb. Assessing and Controlling Risks

Details of the procedures used to assess inherent risks and control risks in accordance with Article 58 of the MRR:

Title of procedure	Procedure for Collection of Fuelling Events and Records
Reference for procedure	SOP Section 5 and Appendix 3
Diagram reference	N/A
Brief description of procedure. The description should cover the essential parameters and operations performed	The initial risk assessment studied the inherent risk (the risk of a material error or misstatement occurring) based on the complexity of the technology. However as these generator sets are common practice and well understood the Inherent Risk is classified as low. The Control Risk (the risk that ADSIL will not detect a material error or misstatement concerning GHG emissions) is regarded as low as the recording systems are fully automated and are regularly maintained in accordance with the manufacturer's recommendations. Instruments will also be independently calibrated. Annual emissions calculations will be independently verified by an accredited Verifier. The Environmental Manager and Site Facility Manager are responsible for adequately identifying and rectifying any inherent and / or control risks associated with the allocation of data.
Post or department responsible for the procedure and for any data generated	Environmental Manager and Site Facility Manager
Location where records are kept	On the internal IT system
Name of IT system used	SharePoint
List of EN or other standards applied	N/A

cc. Quality Assurance of Metering / Measuring Equipment

Details of the procedures used to ensure quality assurance of measuring equipment in accordance with Article 58 and 59 of the MRR.

Title of procedure	Procedure for Collection of Fuelling Events and Records
Reference for procedure	SOP Section 4, Subsections 5,6 and 7
Diagram reference	N/A
Brief description of procedure. The description should cover the essential parameters and operations performed	The fuel tank level indicators shall be calibrated by an external Instrumentation Company. All calibration work shall be carried out by trained and qualified technicians as part of external Instrumentation Company's Quality Control scheme. The Calibration records shall be examined by the Facility Manager (or designee) as a Quality Assurance measure to cross check the QC procedures are implemented appropriately. The fuel delivery tankers are fitted flow meters which are subject to national meteorological controls. Calibration records are obtained for the gas oil delivery trucks and reviewed upon receipt.
Post or department responsible for the procedure and for any data generated	Site Facility Manager or his/her designee
Location where records are kept	On the internal IT system
Name of IT system used	SharePoint
List of EN or other standards applied	N/A

dd. Quality Assurance of Information Technology used for Data Flow Activities

Details of the procedures used to ensure quality assurance of information technology used for data flow activities in accordance with Article 58 and 60 of the MRR:

Title of procedure	Procedure for Collection of Fuelling Events and Records
Reference for procedure	SOP Section 4, Subsection 27
Diagram reference	N/A
Brief description of procedure. The description should cover the essential parameters and operations performed	This SOP specifies how information technology used for data flow and monitoring is: a) tested and under management control b) access to the IT system is controlled through individual unique passwords and log-ins c) the individual log-in control provides complete information security d) all data is backed up on the company servers and redundant servers

	e) methods of identifying measurement technologies and data sources
Post or department responsible for the procedure and for any data generated	Facility Manager
Location where records are kept	On the internal IT system
Name of IT system used	SharePoint
List of EN or other standards applied	N/A

ee. Review and Validation of Data

Details of the procedures used to ensure regular internal reviews and validation of data in accordance with Articles 58 and 62 of the MRR.

Title of procedure	Procedure for Collection of Fuelling Events and Records
Reference for procedure	SOP Section 4; Subsection 21
Diagram reference	N/A
Brief description of procedure. The description should cover the essential parameters and operations performed	The procedure requires that ADSIL shall internally review, at least annually, the data and data system and this review includes the following aspects: a) regularly review all GHG data and records b) methods to identify errors in the data if discovered c) methods checking data for completeness d) methods of identifying measurement differences between current and previous years e) includes a cross-check between fuel delivery invoices and actual consumption rates of combustion units and oil stock levels f) the criteria for identification and addressing anomalous data.
Post or department responsible for the procedure and for any data generated	Environmental Manager
Location where records are kept	On the internal IT system
Name of IT system used	SharePoint
List of EN or other standards applied	N/A

ff. Corrections and Corrective Actions

Details of the procedures used to handle corrections and corrective actions in accordance with Articles 58 and 63 of the MRR:

Title of procedure	Procedure for Collection of Fuelling Events and Records

Reference for procedure	SOP Section 4; Subsections 22 and 23
Diagram reference	N/A
Brief description of procedure. The description should cover the essential parameters and operations performed	In accordance with condition 2.5 of the GHG Permit the Environmental Manager shall notify the Agency in writing within (3) days of becoming aware of any factors which may prevent compliance with the conditions of this permit, such as any capacity expansion or change to the approved monitoring plan. Where it is, for technical reasons only, temporarily not feasible to apply the tier in monitoring plan for the activity data or each calculation factor of a fuel or material stream as approved by the Agency, ADSIL shall apply the highest achievable tier until the conditions for application of the tier approved in the monitoring plan have been restored. ADSIL shall take all necessary measures to allow the prompt restoration of the tier in the approved monitoring plan. ADSIL shall notify the temporary change to the monitoring methodology without undue delay to the Agency specifying: (i) The reasons for deviation from the approved tier; (ii) a detailed description of the interim monitoring methodology applied by ADSIL - in order to determine the emissions until the normal or approved conditions for the application of the tier in the monitoring plan have been restored; (iii) the measures ADSIL is taking to restore the conditions for the application of the tier in the approved monitoring plan; (iv) the anticipated point in time when application of the approved tier will be resumed. A record of all non-compliances with the approved monitoring plan shall be maintained on-site and shall be available for inspection by authorised persons of the Agency and/or by the Verifier at all reasonable times. In the event of non-conformance, the Environmental Manager shall investigate the non-conformance to: i. determine what caused the non-conformance. ii. determine what corrective action is required for the non-conformance. iii. ensure if preventative measures implemented are effective. iv. ensure procedures affected by the corrective actions taken are revised accordingly. This procedure defines the person(s) responsible for, and the authority they have, for investigating, correcting, mitigating, and preventing non-conformances. This procedure ensures that any corrective, mitigating, or preventative actions are appropriate to the nature and

	scale of the associated environmental impact or potential for environmental impact of that non-conformance.
Post or department responsible for the procedure and for any data generated	Environmental Manger
Location where records are kept	On the internal IT system
Name of IT system used	SharePoint
List of EN or other standards applied	N/A

gg. Control of Outsourced Activities

Details of the procedures used to control outsourced processes in accordance with Articles 59 and 64 of the MRR.

Title of procedure	Procedure for Collection of Fuelling Events and Records
Reference for procedure	SOP Section 4; Subsection 28
Diagram reference	N/A
Brief description of procedure. The description should cover the essential parameters and operations performed	This procedure defines how the installation's management controls any outsourced activities. The prime control mechanism is through a Service Level Agreement which defines precise controls which the contractor shall have to comply with. Each outsourced activity will have a mission specific set of criteria with which the contractor shall comply with. Calibration records are obtained for the gas oil delivery trucks and reviewed upon receipt. For GHG verification the installation shall only appoint those Verification bodies which are ISO 14065 accredited and accredited in accordance with AVR Regulation and are on the Accreditation Body list of approved verifiers.
Post or department responsible for the procedure and for any data generated	Environmental Manager
Location where records are kept	On the internal IT system
Name of IT system used	SharePoint
List of EN or other standards applied	N/A

hh. Record Keeping and Documentation

Details of the procedures used to manage record keeping and documentation:

Title of procedure	Procedure for Collection of Fuelling Events and Records
Reference for procedure	SOP Section 4; Subsections 24, 25 and 26
Diagram reference	N/A
Brief description of procedure. The description should cover the essential parameters and operations performed	The installation shall establish and maintain procedures for document retention and record keeping. The procedure details that in accordance with Article 66 of the MRR data and information stipulated in Annex IX of relevance to the installation is stored onsite for 10 years and made readily

available upon request of the EPA or Verifier.

We shall retain and maintain documentation supporting the design, development and maintenance of the GHG inventory to enable verification. The documentation, whether in paper, electronic or other format, shall be handled in accordance with the organisation's GHG information management procedures for document retention and record keeping.

Controlled documents are:

1. The monitoring plan approved by the EPA

2. Documents justifying the selection of the monitoring methodology and the documents justifying temporal or non-temporal changes of monitoring methodologies and tiers approved by the EPA

3. All relevant updates of monitoring plans notified to the competent authority in accordance with Article 15 of the MRR, and any correspondence from the EPA.

4. All written procedures referred to in this monitoring plan, including the procedures for data flow activities and the procedures for control activities.

5. A list of all versions used of the monitoring plan and all related procedures.

6. Documentation showing the organisation's allocation of responsibilities in connection to the monitoring and reporting of GHG.

7. The risk assessment performed by the organisation.

8. The improvement reports in accordance with Article 69 of MRR.

9. The verified annual emission report issued by the organisation and a copy of the annual independent verification report/statement.

10. The permit.

11. Any uncertainty assessments where applicable.

12. Activity data used for calculation of emissions for each source stream.

	13. List of all default factor used as calculation factors. 14. Documentation about all ineffective procedures corrected and corrective action taken as per Art. 63. 15. Any results of calibration and maintenance of measuring instruments.
Post or department responsible for the procedure and for any data generated	Environmental Manager
Location where records are kept	On the internal IT system
Name of IT system used	SharePoint
List of EN or other standards applied	N/A

ii. Risk Assessment

The results of a risk assessment that demonstrates that the control activities and procedures are commensurate with the risks identified:

Attachment	Description
N/A	N/A

jj. Environmental Management System

Does your organisation have a documented Environmental Management System?	No

12. Changes in Operation

kk. Changes in Operation

Article 24(1) of Commission Decision 2011/278/EC requires that Member States must ensure that all relevant information about any planned or effective changes to the capacity activity level and operation of an installation is submitted by the operator to the competent authority by 31 December each year. Article 12(3) of the MRR further provides that Member States may require information to be included in the monitoring plan of an installation for the purposes of meeting these requirements.

Details of the procedure used to ensure regular reviews are carried out to identify any planned or effective changes to the capacity activity level and operation of the installation that have an impact on the installation's allocation:

The procedure specified below cover the following:

- planning and carrying out regular checks to determine whether any planned or effective changes to the capacity activity level and operation of an installation are relevant under Commission Decision 2011/278/EC; and
- Procedures to ensure such information is submitted to the competent authority by 31 December of each year.

Title of procedure	Procedure for Collection of Fuelling Events and Records
Reference for procedure	SOP Section 7
Diagram reference	N/A
Brief description of procedure. The description should cover the essential parameters and operations performed	In compliance with Condition 2.1 of the GHG Permit ADSIL shall make no alteration to, or reconstruction in respect of, the activity or any part thereof which would, or is likely to, result in a change in: 1. the nature or functioning of the installation. 2. the capacity of the installation as detailed in this permit. 3. the fuels used at the installation. 4. the range of activities to be carried out at the installation that may require updating of the GHG permit shall be carried out or commenced without prior notice to and without the prior written agreement of the EPA. This condition relates to new generators, fire pumps, oil tanks or other combustion plant. No changes shall be made without prior EPA approval. For any change in operations all related documents for new generators and tanks must be relayed to the Environmental Manager at least 30 days prior to landing onsite. The Environmental Manager will liaise with the EPA. Drawings of where the tanks are to be located for each site must be forwarded also. It is the responsibility of the Site Principal Engineer to supply these items. Environmental Manager will meet with Design Engineering and Construction regularly to record and plan for any changes which may impact generator capacity and onsite fuel storage. Activities are not limited to generators and fuel tanks, but may include anything relevant under Emissions Trading Regulations, Monitoring and Reporting Regulation and Commission Decision 2011/278/EC (where relevant to the installation).

Post or department responsible for the procedure and for any data generated	Environmental Manager
Location where records are kept	On the internal IT system
Name of IT system used	SharePoint

13. Abbreviations

II. Abbreviations Acronyms or definitions

Abbreviations acronyms or definitions that have been used in this monitoring plan:

Abbreviation	**Definition**
EPA	Environmental Protection Agency
GHG	Greenhouse Gas
EP	Emission Point
ADSIL	Amazon Data Service Ireland Limited
MRR	Commission Regulation on Monitoring and Reporting of Greenhouse Gas Emissions
FM	Facilities Manager

14. Additional Information

Any other information:

Attachment	**Description**
Calculations for ADSIL DUB 56 - Diesel.pdf	Emissions Calculations for Diesel Generators
Dub 56 Gas project completion letter 09 Nov 18.pdf	Letter from contractors - evidence of decommissioning of gas emissions sources November 2018

15. Confidentiality

mm. Confidentiality Statement

It is the Environmental Protection Agency's policy to make information received by it in the course of its work open to inspection by any person on request. This is in accordance with the provisions of the European Communities (Access to Information on the Environment) Regulations 2007 to 2011.

In the event that you considered that some of the information being submitted of a confidential nature, then the nature of this information and the reasons why it should be considered confidential, with reference to the European Communities (Access to Information on the Environment) Regulations 2007 to 2011 and any amendments must be explicitly requested using the facility below. The Board of the Environmental Protection Agency will consider the requests and if the information can be deemed as confidential and necessary.

Notwithstanding any request for confidentiality, the Environmental Protection Agency explicitly reserves the right to release data to the Commission, including emissions and allocations to the public, on the basis that the data will be used for the purposes foreseen in Directive 2003/87/EC of the European Parliament and of the Council of 13 October 2003 establishing a scheme for greenhouse gas emission allowance trading within the Community and amending Council Directive 96/61/EC.

Please tick this box if you consider that any part of your form should be treated as commercially confidential/sensitive: true

The table below identifies which (if any) sections of the form the operator considers should be treated as commercially confidential and explains why disclosure of this information would cause an adverse effect to commercial interests.

Section	**Justification**
Emissions Details	The individual generator RTI data and the total generator fleet RTI data are not generally known or accessible to parties outside of ADSIL. Similarly, the size and engineering specifications of the generators is also not known or accessible to outside parties. Because this information may be useful to competitors, it has commercial value. Therefore, we request that EPA refrain from disclosing this information presented in this application available to the public.
Installation Activities	The individual generator RTI data and the total generator fleet RTI data are not generally known or accessible to parties outside of ADSIL. Similarly, the size and engineering specifications of the generators is also not known or accessible to outside parties. Because this information may be useful to competitors, it has commercial value. Therefore, we request that EPA refrain from disclosing this information presented in this application available to the public. This includes the specification sheets for generators as attached. All such attachments should therefore be considered confidential.
Calculation	Uncertainty assessment - Details regarding the onsite generators, including the RTI data, the number and sizing

Section	Justification
	of the generators and their fuel tanks, and the engineering specifications of the generators, are commercially sensitive. We therefore requests that EPA hold this information confidential.
Management	Risk assessment - Details regarding the onsite generators, including the RTI data, the number and sizing of the generators and their fuel tanks, and the engineering specifications of the generators, are commercially sensitive. We therefore requests that EPA hold this information confidential.
Additional Information	Calculation Spreadsheets - Details regarding the onsite generators, including the RTI data, the number and sizing of the generators and their fuel tanks, and the engineering specifications of the generators, are commercially sensitive. We therefore requests that EPA hold this information confidential.

END of Appendix I.