



Headquarters,
Johnstown Castle Estate,
County Wexford, Ireland

GREENHOUSE GAS EMISSIONS PERMIT

Permit Register Number: IE-GHG188-10512-3

Operator: K2 Critical Facilities Management
(Ireland) Limited
K2 Dublin 1, Ballycoolin Business Park
Ballycoolin Road, Blanchardstown,
Dublin
D15 Y3EC

Installation Name: K2 Dublin 1

Site Name: K2 Dublin 1

Location: Ballycoolin Business Park
Blanchardstown
Dublin D15 Y3EC
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 N^o IE-GHG188-10512.

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-GHG188-10512-3	23 November 2018	17 December 2018	Removal of all references to 5 x gas generators (S13-S17) and 2 x gas oil/diesel generators (S18-S19) which are no longer at the installation; Removal of all references to the sources stream F2 (Natural gas) which is no longer being used at the installation.

Previous Permits

Permit number	Change Type	Date application received	Date Permit issued	Comment
IE-GHG188-10512-1	GHG Permit Application	06 October 2017	24 October 2017	
IE-GHG188-10512-2	GHG Variation	26 January 2018	27 March 2018	Change of Operator name to "K2 Critical Facilities Management (Ireland) Limited" and change of Installation name to "K2 Dublin 1". Addition of two diesel generators S18 and S19 and their associated emission points.

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)	K2 Critical Facilities Management (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:

K2 Critical Facilities Management (Ireland) Limited
K2 Dublin 1, Ballycoolin Business Park
Ballycoolin Road, Blanchardstown,
Dublin
D15 Y3EC

Company Registration Number: 604376

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)
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at the following installation(s):

K2 Dublin 1 **Installation number:** 210130

located at

Ballycoolin Business Park
Blanchardstown
Dublin D15 Y3EC
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.: 210130

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	Diesel Generator 1	<100	MW
S2	Diesel Generator 2	<100	MW
S3	Diesel Generator 3	<100	MW
S4	Diesel Generator 4	<100	MW
S5	Diesel Generator 5	<100	MW
S6	Diesel Generator 6	<100	MW
S7	Diesel Generator 7	<100	MW

Emission Source Reference	Emission Source Description	Capacity	Capacity Units
S8	Diesel Generator 8	<100	MW
S9	Diesel Generator 9	<100	MW
S10	Diesel Generator 10	<100	MW
S11	Diesel Generator 11	<100	MW
S12	Diesel Generator 12	<100	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 17 December 2018:

PRESENT when the seal of the Agency was affixed hereto:

Dr Suzanne Monaghan
Inspector/ Authorised Person

Appendix 1 to Greenhouse Gas Emissions Permit Number IE-GHG188-10512

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	K2 Dublin 1
Site name	K2 Dublin 1
Address	Ballycoolin Business Park Blanchardstown Dublin D15 Y3EC Ireland

Grid reference of site main entrance	E 309301, N 240896
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Licence held pursuant to the Environmental Protection Agency Act 1992, as amended.	No
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Has the regulated activity commenced at the Installation? Yes

Date of Regulated Activity commencement	25 October 2017
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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 K2 Critical Facilities Management (Ireland) Limited

Company Registration Number 604376

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? No

Registered office address

Address Line 1	K2 Dublin 1, Ballycoolin Business Park
Address Line 2	N/A
City/Town	Ballycoolin Road, Blanchardstown,
County	Dublin
Postcode	D15 Y3EC

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 Kuok DC Holdings Pte. Ltd.

Holding company address

Address Line 1	1 Kim Seng Promenade, #07-01
Address Line 2	Great World City
City/Town	Singapore
County	N/A
Postcode	237994
Company registration number	201619617G (incorporated in Singapore)

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

Hurley Palmer Flatt
204 West George Street
Glasgow
G2 2PQ
Scotland UK

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.

K2 Dublin 1 is a data centre, located in Blanchardstown near Dublin. It is operated by K2 Critical Facilities Management (Ireland) Limited. The site provides information service activities for the storage, management and dissemination of data and for supporting business processes. Electrical power is currently provided by the Irish National Grid via an onsite substation. There are 12 diesel generators onsite to provide backup emergency power in the event of a grid failure or disturbance.

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:

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	Diesel Generator 1
S2	Diesel Generator 2
S3	Diesel Generator 3
S4	Diesel Generator 4
S5	Diesel Generator 5
S6	Diesel Generator 6
S7	Diesel Generator 7
S8	Diesel Generator 8
S9	Diesel Generator 9
S10	Diesel Generator 10
S11	Diesel Generator 11
S12	Diesel Generator 12

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

Emission Source Reference	Emission Source Description
S1	Diesel Generator 1
S2	Diesel Generator 2
S3	Diesel Generator 3
S4	Diesel Generator 4
S5	Diesel Generator 5
S6	Diesel Generator 6
S7	Diesel Generator 7
S8	Diesel Generator 8

Emission Source Reference	Emission Source Description
S9	Diesel Generator 9
S10	Diesel Generator 10
S11	Diesel Generator 11
S12	Diesel Generator 12

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
EP1-1	Diesel Generator 1 - Stack 1
EP1-2	Diesel Generator 1 - Stack 2
EP1-3	Diesel Generator 1 - Stack 3
EP2-1	Diesel Generator 2 - Stack 1
EP2-2	Diesel Generator 2 - Stack 2
EP2-3	Diesel Generator 2 - Stack 3
EP3-1	Diesel Generator 3 - Stack 1
EP3-2	Diesel Generator 3 - Stack 2
EP3-3	Diesel Generator 3 - Stack 3
EP4-1	Diesel Generator 4 - Stack 1
EP4-2	Diesel Generator 4 - Stack 2
EP4-3	Diesel Generator 4 - Stack 3
EP5-1	Diesel Generator 5 - Stack 1
EP5-2	Diesel Generator 5 - Stack 2
EP5-3	Diesel Generator 5 - Stack 3
EP6-1	Diesel Generator 6 - Stack 1
EP6-2	Diesel Generator 6 - Stack 2
EP6-3	Diesel Generator 6 - Stack 3
EP7-1	Diesel Generator 7 - Stack 1
EP7-2	Diesel Generator 7 - Stack 2
EP7-3	Diesel Generator 7 - Stack 3
EP8-1	Diesel Generator 8 - Stack 1
EP8-2	Diesel Generator 8 - Stack 2
EP8-3	Diesel Generator 8 - Stack 3
EP9-1	Diesel Generator 9 - Stack 1
EP9-2	Diesel Generator 9 - Stack 2

Emission Point Reference	Emission Point Description
EP9-3	Diesel Generator 9 - Stack 3
EP10-1	Diesel Generator 10 - Stack 1
EP10-2	Diesel Generator 10 - Stack 2
EP10-3	Diesel Generator 10 - Stack 3
EP11-1	Diesel Generator 11 - Stack 1
EP11-2	Diesel Generator 11 - Stack 2
EP11-3	Diesel Generator 11 - Stack 3
EP12-1	Diesel Generator 12 - Stack 1
EP12-2	Diesel Generator 12 - Stack 2
EP12-3	Diesel Generator 12 - Stack 3

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 Diesel	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 Diesel	S1,S2,S3,S4,S5,S6,S7,S8,S9,S10,S11,S12	EP1-1,EP1-2,EP1-3,EP2-1,EP2-2,EP2-3,EP3-1,EP3-2,EP3-3,EP4-1,EP4-2,EP4-3,EP5-1,EP5-2,EP5-3,EP6-1,EP6-2,EP6-3,EP7-1,EP7-2,EP7-3,EP8-1,EP8-2,EP8-3,EP9-1,EP9-2,EP9-3,EP10-1,EP10-2,EP10-3,EP11-1,EP11-2,EP11-3,EP12-1,EP12-2,EP12-3	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 CO₂ but exclude CO₂ 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 ₂ O	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 CO₂ emissions:

F1: Gas/Diesel Oil

Annual emissions relating to gas/diesel oil consumption will be calculated using the following formula:

Annual Consumption (litres) = Year closing stock - Year opening stock + Deliveries - transfers/Disposals

Fuel in litres will be converted to tonnes using the SEAI gas oil density figure. Delivered fuel is determined from supplier records (e.g. invoices, deliveries spreadsheet, etc.). Waste contractor records (e.g. disposal notes) or K2 records (e.g. tank dips) will be used to determine fuel transfers/disposals. Stock levels are obtained at the beginning and end of the year using the level gauges on each fuel tank/BMS screenshots.

Fuel consumption calculated using stock levels are cross checked against a calculation using the hours run for each generator multiplied by the consumption rate per hour. This uses the consumption figures contained in the manufacturer's datasheet for the generators. This methodology is used to verify the principle methodology and as a backup should the stock level readings be unreliable for any reason.

Annual CO₂ for gas/diesel oil is calculated as follows:

CO₂ Emissions = AD x NCV x EF x OF.

AD = Activity Data

NCV = Net Calorific Value of fuel used

EF = Emission Factors of fuel used

OF = Oxidation Factor

Values for NCV and EF are taken from the latest Irish National Inventory and a default value of 1 taken for OF from Annex II of MRR. Fuel densities are taken from SEAI (Sustainable Energy Authority of Ireland).

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 Diesel	S1,S2,S3,S4,S5,S6,S7,S8,S9,S10,S11,S12	DM1	Level gauge	0-82,500	Litres	1	Bulk tank 1 / BMS screen
F1 Diesel	S1,S2,S3,S4,S5,S6,S7,S8,S9,S10,S11,S12	DM2	Level gauge	0-82,500	Litres	1	Bulk tank 2 / BMS screen
F1 Diesel	S1,S2,S3,S4,S5,S6,S7,S8,S9,S10,S11,S12	DM3	Level gauge	0-82,500	Litres	1	Bulk tank 3 / BMS screen
F1 Diesel	S1,S2,S3,S4,S5,S6,S7,S8,S9,S10,S11,S12	DM4	Level gauge	0-82,500	Litres	1	Bulk tank 4 / BMS screen
F1 Diesel	S1,S2,S3,S4,S5,S6,S7,S8,S9,S10,S11,S12	Invoices / Fuel Delivery Notes / Fuel Deliveries Spreadsheet	Supplier Records	N/A	Litres	0.5	Purchasing Department / Third Party Truck Meter / Supplier Records
F1 Diesel	S1,S2,S3,S4,S5,S6,S7,S8,S9,S10,S11,S12	Waste Transfer Notes / Tank Dips	Waste Contractor Records / K2 Records	N/A	Litres	N/A	Purchasing Department / K2 Records

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 Diesel	DM1	Continual	Operator	N/A	N/A	N/A
F1 Diesel	DM2	Continual	Operator	N/A	N/A	N/A

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 Diesel	DM3	Continual	Operator	N/A	N/A	N/A
F1 Diesel	DM4	Continual	Operator	N/A	N/A	N/A
F1 Diesel	Invoices / Fuel Delivery Notes / Fuel Deliveries Spreadsheet	Batch	Trade partner	Yes	Yes	Yes
F1 Diesel	Waste Transfer Notes / Tank Dips	Batch	Trade partner	Yes	Yes	Yes

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 Diesel	S1,S2,S3,S4,S5,S6,S7,S8,S9,S10,S11,S12	DM1,D M2,D M3,D M4	<7.5%	Standard	1	2a	2a	N/A	1	N/A	N/A	150	100	De-minimis	N/A	n/a	n/a

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

150

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 Diesel	S1,S2,S3,S4,S5,S6,S7,S8,S9,S10,S11,S12	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 Diesel	S1,S2,S3,S4,S5,S6,S7,S8,S9,S10,S11,S12	NCV, EF	Irish National Inventory	N/A
F1 Diesel	S1,S2,S3,S4,S5,S6,S7,S8,S9,S10,S11,S12	OxF	MRR	1.0

Sampling and Analysis

Do you undertake sampling and analysis of any of the parameters used in the calculation of your CO₂ 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
Senior Person	Overall responsibility for EUETS compliance at K2 Dublin 1 including ensuring sufficient resources are deployed and overseeing the EUETS monitoring and reporting process.
Site Representative	<p>Some or all of this may be delegated to an EUETS Consultant as required as a technical support function.</p> <ol style="list-style-type: none"> 1. Be the central point of contact regarding EUETS; 2. Ensuring sufficient resources are deployed and overseeing the EUETS monitoring and reporting process; 3. Requesting technical assistance and dealing with contractual issues, e.g. Regulatory Fees, Commissioning Verifier and EUETS Consultants; 4. Advising senior management of EUETS status, as and when required; 5. Review and sign-off of procedures, audits and verification reports; 6. Maintaining and updating written procedures; 7. Collation and periodic review of monitoring data from site; 8. Undertaking periodic site audits and monitoring; 9. Preparation of annual evidence pack for verification; 10. Submission of annual emissions report and improvement reports.
Site Engineer(s)	<ol style="list-style-type: none"> 1. Following the site specific procedure; 2. Collecting EUETS raw data; 3. Issue of fuel consumption spreadsheets, on a regular basis, and on request; 4. Implementing the annual improvement plan, if

Job Title / Post	Responsibilities
	<p>required;</p> <p>5. Advising the Site Representative of any abnormal fuel consumption and/ or planned changes to combustion plant on site.</p>
EUETS Consultant	This is an outsourced function and they may provide EUETS support as required. Contracts are controlled by the contract terms and conditions and any service level agreement.

Attachment	Description
K2 Dublin 1 Organisation Chart.pdf	EUETS Responsibilities Chart

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	K2 Dublin 1 EUETS Compliance Manual
Reference for procedure	K2 Dublin 1 EUETS Compliance Manual
Diagram reference	N/A
Brief description of procedure. The description should cover the essential parameters and operations performed	Roles and responsibilities are described in the site's EUETS Compliance Manual. Named individuals are assigned to these roles within the appendices of the manual. The Senior Person is responsible for appointing suitably qualified and trained staff for the implementation of EUETS activities on site. A mid year EUETS audit will include a review of competencies and training in relation to roles and responsibilities for monitoring and reporting within the installation.
Post or department responsible for the procedure and for any data generated	Site Representative/EUETS Consultant
Location where records are kept	K2 computer system. The EUETS Consultant may also maintain off-site copies.
Name of IT system used	N/A
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	K2 Dublin 1 EUETS Compliance Manual
Reference for procedure	K2 Dublin 1 EUETS Compliance Manual
Diagram reference	N/A
Brief description of procedure. The description should cover the essential parameters and operations performed	Frequent communication between Site Representative/ Site Engineers/ EUETS Consultant (as required) will identify any proposed changes to site and therefore the appropriateness of the monitoring plan. Frequent data checks will also identify deviations from planning operations. In addition, an annual review can be undertaken by the Site Representative/ EUETS Consultant to help ensure the continuing appropriateness of the Monitoring Plan. This will include checking the list of

emission sources and source streams; ensuring completeness of the emissions and sources streams and that all relevant changes in the nature and functioning of the installation will be included in the monitoring plan and assessing compliance with the uncertainty thresholds for activity data for the applied tiers for each source stream and emission source and to identify any potential measures for the improvement of the monitoring methodology. Where improvements of the monitoring methodology have been identified these will be fed back to the Site Representative for implementation.

Post or department responsible for the procedure and for any data generated Site Supervisor/ Site Engineer/ EUETS Consultant

Location where records are kept K2 computer system. The EUETS Consultant may also maintain off-site copies.

Name of IT system used N/A

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 K2 Dublin 1 EUETS Compliance Manual

Reference for procedure K2 Dublin 1 EUETS Compliance Manual

Diagram reference N/A

Brief description of procedure. The description should cover the essential parameters and operations performed The EUETS Compliance Manual contains a site specific process written to help ensure compliance with Chapter V of the MRR 2012 covering all topics including the sequence and interaction of data which provides information on all the necessary data flow activities required to arrive to the annual emission report. The K2 Dublin 1 EUETS Compliance Manual contains a chart depicting the data flow.

Post or department responsible for the procedure and for any data generated Site Supervisor/ Site Engineer/ EUETS Consultant

Location where records are kept K2 computer system. Paper records (if required) are stored in the facilities operations centre. The EUETS Consultant may also maintain off-site copies.

Name of IT system used N/A

List of EN or other standards applied N/A

List of primary data sources Level gauge readings of gas oil bulk tanks/ BMS screens

Description of the relevant processing steps for each specific data flow activity. Invoices/ delivery notes/ waste transfer notes of gas oil F1: Gas Oil/Diesel

Identify each step in the data flow and include the formulas will be calculated using the following formula: Annual emissions relating to gas oil/diesel consumption 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 Annual Consumption (litres) = Year closing stock - Year

activities are recorded

opening stock + Deliveries - transfers/Disposals

Fuel in litres will be converted to tonnes using the SEAI gas oil density figure. Delivered fuel is determined from supplier records (e.g. invoices, deliveries spreadsheet, etc.). Waste contractor records (e.g. disposal notes) or K2 records (e.g. tank dips) will be used to determine fuel transfers/disposals. Stock levels are obtained at the beginning and end of the year using the level gauges on each fuel tank/BMS screenshots.

Fuel consumption calculated using stock levels are cross checked against a calculation using the hours run for each generator multiplied by the consumption rate per hour. This uses the consumption figures contained in the manufacturer's datasheet for the generators. This methodology is used to verify the principle methodology and as a backup should the stock level readings be unreliable for any reason.

Annual CO₂ for gas/diesel oil is calculated as follows:

CO₂ Emissions = AD x NCV x EF x OF.

AD = Activity Data

NCV = Net Calorific Value of fuel used

EF = Emission Factors of fuel used

OF = Oxidation Factor

Values for NCV and EF are taken from the latest Irish National Inventory and a default value of 1 taken for OF from Annex II of MRR. Fuel densities are taken from SEAI (Sustainable Energy Authority of Ireland).

A regular data record is prepared and sent to the Site Representative/ EUETS Consultant. This includes:

-gas oil bulk tank readings

-any fuel delivery/ disposal invoices

-generator run hours

These readings are periodically checked against one another for consistency. All of this is stored at the responsibility of the Site Representative. The Site Representative/ EUETS Consultant prepares the annual report using this data and as required will convert the

inventory in litres to tonnes using latest SEAI data for density and NCV, EF from latest Irish National Inventory.

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	K2 Dublin 1 EUETS Compliance Manual
Reference for procedure	K2 Dublin 1 EUETS Compliance Manual
Diagram reference	N/A
Brief description of procedure. The description should cover the essential parameters and operations performed	The site is a low emitter. The risk assessment which takes into account the inherent risks (in relation to the operation of the emission sources (generators) and control risks (risk of material error or misstatement concerning greenhouse gas emissions) is included in the Compliance Manual and is reviewed annually during the mid-year EUETS audit.
Post or department responsible for the procedure and for any data generated	EUETS Consultant
Location where records are kept	K2 computer system. The EUETS Consultant may also maintain off-site copies.
Name of IT system used	N/A
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	K2 Dublin 1 EUETS Compliance Manual
Reference for procedure	K2 Dublin 1 EUETS Compliance Manual
Diagram reference	N/A
Brief description of procedure. The description should cover the essential parameters and operations performed	The level gauges on the diesel tanks will be calibrated at commissioning stage prior to operation and thereafter calibrated and checked at periodic intervals. Periodic cross checks of the data such as run hours, energy generation, deliveries, disposals, and comparison between BMS screenshots showing tank levels and the readings at the physical gauges at the tanks will be carried out to confirm

	the accuracy of the fuel tank level gauges. If a potential issue with accuracy is identified through these cross checks, then calibration via a suitably qualified person (likely an external contractor) would be undertaken.
Post or department responsible for the procedure and for any data generated	Site Supervisor/ Site Engineer/ EUETS Consultant
Location where records are kept	K2 computer system. The EUETS Consultant may also maintain off-site copies.
Name of IT system used	N/A
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	K2 Dublin 1 EUETS Compliance Manual
Reference for procedure	K2 Dublin 1 EUETS Compliance Manual
Diagram reference	N/A
Brief description of procedure. The description should cover the essential parameters and operations performed	The site has an information security management system accredited to ISO/IEC 27001. The monitoring spreadsheet and associated EUETS documentation is maintained on K2's computer system, which is maintained and backed-up. If the EUETS Consultant has been commissioned to provide support; copies of periodic records may also be held off-site by the EUETS Consultant (for example for the purpose of conducting periodic or annual audits and reviews of data). As and when files held by the EUETS Consultant these are stored on a virtual drive hosted at a back-up data centre facility.
Post or department responsible for the procedure and for any data generated	EUETS Consultant/ Site Engineer
Location where records are kept	K2 computer system. The EUETS Consultant may also maintain off-site copies.
Name of IT system used	N/A
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	K2 Dublin 1 EUETS Compliance Manual
Reference for procedure	K2 Dublin 1 EUETS Compliance Manual
Diagram reference	N/A
Brief description of procedure. The description should cover the essential parameters and operations performed	The data is reviewed periodically by the Site Representative, and when required by the EUETS

	<p>Consultant, for anomalies, missing data etc. An annual audit will be undertaken at each site and an interim CO2 emissions calculation prepared. This will highlight possible data gaps and/or errors and actions to rectify. There is no specific threshold where data would be rejected, however if consumption was particularly higher than previous months, or obvious typographic errors had occurred these would be clarified with the operator, and changed where appropriate. Primary evidence will be compared with secondary sources to check for any inconsistencies. Technical assistance and support for periodic audit and review if data is available from the EUETS Consultant when required.</p>
Post or department responsible for the procedure and for any data generated	EUETS Consultant or Site Representative
Location where records are kept	K2 computer system. The EUETS Consultant may also maintain off-site copies.
Name of IT system used	N/A
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	K2 Dublin 1 EUETS Compliance Manual
Reference for procedure	K2 Dublin 1 EUETS Compliance Manual
Diagram reference	N/A
Brief description of procedure. The description should cover the essential parameters and operations performed	<p>The Senior Person is responsible for compliance with the EPA approved monitoring plan and GHG permit and ensuring that the EPA are notified of any non-compliant data and any factor which may prevent compliance with the conditions of the permit as soon as practicable, after being made aware of these factors. All non-compliance will be recorded onsite and records shall be made available for inspection by the EPA or by the independent verifier at all reasonable times. All non-compliance will be investigated to seek to determine the cause of the non-compliance and to determine the appropriate corrective action. This may include an assessment of the effectiveness of the existing preventative measures. The compliance manual/ risk assessment/ procedures/ work instructions will be amended if considered necessary.</p>

Where, for technical reasons only, the monitoring tier for the activity data, emissions factors, oxidation factors or conversion factors as approved in the monitoring plan is temporarily not feasible then the highest achievable tier will be applied to the monitoring data until it is possible to restore monitoring to the approved tier. Any such changes

will be reported to the EPA without undue delay with clarification over the reasons for the deviation, a description of the interim monitoring methodology, the measures being undertaken to restore monitoring to the approved tier, and the anticipated time frame for resuming approved monitoring.

Periodic reviews are undertaken of the quality of the data together with an annual audit of the site data records. Where errors or opportunities for improvements are apparent, discussion will be undertaken between the EUETS Consultant and site staff to agree corrective action. Where this is expected to be on-going, or if further review is required, this will be added to the site's 'EUETS Corrective Action Log'. All findings from verification's and internal audits will also be recorded on this document. This spreadsheet will record; when the action was raised, the date raised and by whom, the issue observed, the action required, the responsible party and the date for completion. All items will be marked as either "OPEN" or "CLOSED" depending on the status of the required action. This will be reviewed regularly to help ensure Corrective Actions are closed out in a timely manner.

Post or department responsible for the procedure and for any data generated
 Location where records are kept
 Name of IT system used
 List of EN or other standards applied

Site Supervisor/ Nominated Responsible Person/ EUETS Consultant
 K2 computer system. The EUETS Consultant may also maintain off-site copies.
 N/A
 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
 Reference for procedure
 Diagram reference
 Brief description of procedure. The description should cover the essential parameters and operations performed

K2 Dublin 1 EUETS Compliance Manual
 K2 Dublin 1 EUETS Compliance Manual
 N/A
 The Senior Person/ Site Representative/ Colleagues are responsible for appointing outsourcing parties. For EUETS these are expected to include the accredited verifier, EUETS Consultants for technical support and services associated with the maintenance or operation of the combustion plant and fuel storage. The performance of this service is monitored by the Site Representative and/ or the Senior Person. Contracts are controlled by the contract terms and conditions and the service level agreement.

Post or department responsible for the procedure and for any data generated
 Location where records are kept

Nominated Responsible Person/ Senior Person
 K2 computer system. The EUETS Consultant may also

Name of IT system used	maintain off-site copies. N/A
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	K2 Dublin 1 EUETS Compliance Manual
Reference for procedure	K2 Dublin 1 EUETS Compliance Manual
Diagram reference	N/A
Brief description of procedure. The description should cover the essential parameters and operations performed	All appropriate documentation and records shall be stored and managed for a minimum of 10 years in accordance with Annex IX of the MRR and should be made available upon request of the EPA or the verifier. All relevant documents shall be clearly labelled and carry a unique identifier. The Site Representative/ EUETS Consultant will ensure that relevant versions of applicable documents are available at points of use and review all documents produced by the EUETS Consultant that are for internal use. The Site Representative/ EUETS Consultant will ensure that documents of external origin determined necessary for EUETS Compliance are identified and distributed as necessary. Records will be stored in electronic form on secure server clearly identified and labelled. These will include EUETS Compliance Manual and Site Procedure; EUETS site Permit and Monitoring plan; Records of EUETS monthly submissions from Site Representative; Communications with the Verifier and Regulator; Annual Evidence pack to support annual EUETS submission; Records of Verification Events; all primary data collected, documentation on the selection of the monitoring methodology, any updates to the monitoring plan, any non-compliances or temporal variations to the monitoring plan, all written procedures including those outlined in this monitoring plan, the site risk assessment, details of all calibration and external auditing, and any improvement reports, monthly reports, annual reports and any other related documentation whether in paper, electronic or other format.
Post or department responsible for the procedure and for any data generated	Site Supervisor/ Nominated Responsible Person/ EUETS Consultant
Location where records are kept	K2 computer system. The EUETS Consultant may also maintain off-site copies.
Name of IT system used	N/A
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	K2 Dublin 1 EUETS Compliance Manual
Reference for procedure	K2 Dublin 1 EUETS Compliance Manual
Diagram reference	N/A
Brief description of procedure. The description should	All planned changes are to be notified to the Site

cover the essential parameters and operations performed Representative/ EUETS Consultant in order that they may notify the regulator at least 14 days in advance of the change occurring. Regular communication between the Site Representative, Site Engineers and the EUETS Consultant and a mid-year audit will help ensure that changes don't occur without prior notice. This is especially important where these are deemed "significant" changes by the regulator as a permit variation will be required. Ideally a 4 weeks notification period is needed in order for the EUETS Consultant to ensure that the Regulator can be informed before the change in operation occurs.

Significant changes include:

- The addition/removal of sources e.g. generators/boilers;
- Changes to metering devices e.g. adding, removing or changing a gas meter/bulk tank gauge;
- Moving a fuel meter to a different location;
- Changes to sampling/analysis arrangements;
- A change in the types of fuels used on the installation/substitution of fuels;
- Changes to tiers i.e. accuracy of metering devices;
- Changes to the operating regime (e.g. changing from stand-by duty to generating power for export off-site.

Changes that require notification to the regulator but not a variation include:

- Failures or errors in measurement devices
- Where data gaps occur
- Replacing a meter where accuracy (tier) not affected
- Changing details or description of a procedure that has no impact on the accuracy of the data

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

Site Manager/ Nominated Responsible Person/ EUETS Consultant
 K2 and/ or EUETS Consultant backed up drive
 N/A

13. Abbreviations

II. Abbreviations Acronyms or definitions

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

Abbreviation	Definition
N/A	N/A

14. Additional Information

Any other information:

Attachment	Description
2. Diesel Generator Datasheet.pdf	Datasheet for the diesel generators
2. Diesel Gen Specs (Photos taken on site).docx	Specification of the diesel generators
4.1 Diesel Tank Gauge Datasheet.pdf	Diesel tank gauge datasheet - evidence of accuracy
K2 Emission Sources.pdf	Emissions sources, EPs, metering points, thermal calculation etc

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
Installation Activities	The rated thermal input (RTI) data for each of the generators and the total RTI for the facility are generally not known or accessible to outside parties. Similarly, the size and engineering specifications of the generators are 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 when making other information presented in this application available to the public.
Emissions Details	This section includes similar information, on RTI data for each generator and the total RTI for the facility, as provided in the section "Installation Activities". As stated above, this information is not generally 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 when making other information presented in this application available to the public.
Calculation	The metering devices and metering types are not generally 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 when making other information presented in this application available to the public.
Additional Information	The attachments contained in this section, provide information about the size and technical specification of the generators which are used at the installation. In addition, there is information on the rated thermal input (RTI) data for each generator and the total RTI for the facility. This information is generally 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 when making other information presented in this application available to the public.

END of Appendix I.