zcompetent authority logo

# Greenhouse gas emissions permit

**Hospital or small emitter permit**

## The Greenhouse Gas Emissions Trading Scheme Order 2020 (the Order)

Operator name(s)

Installation name

Site name (if applicable)

Installation address

Permit number

Effective date of permit

Issued by the

## INTRODUCTORY NOTE

This introductory note does not form part of the permit.

This greenhouse gas emissions permit (permit) is issued by the «${(competentAuthority.name)!}». It authorises the regulated activities set out in the permit to be carried out at the installation and includes a number of conditions with which you must comply, including the monitoring and reporting of emissions, the surrender of allowances and notification requirements. If you are a ‘FA installation’ (as defined in the Order), this also includes the free allocation conditions.

Part 1 of this permit contains a description of the installation to which it applies, the regulated activities carried out at the installation and the specified emissions from those activities. Part 2 contains the conditions with which you must comply and Part 3 contains definitions of terms used in this permit.

Your monitoring plan relating to the monitoring of emissions is attached to this permit as Appendix 1. If applicable, your monitoring methodology plan relating to the monitoring of activity levels is attached as Appendix 2.

### Talking to us

You can contact us by e-mail on .

If you contact the regulator about this permit, please quote the permit reference number.

### Variations to the permit

You may apply to us to vary your permit and must do so where required by a condition of this permit. We also have powers to vary your permit in certain circumstances set out in the Order.

### Surrender of the permit

You must apply to surrender your permit where the installation has ‘ceased operation’, as defined in the Order. The timescales and requirements for this surrender application are set out in the Order. You may also choose to surrender your permit if a regulated activity is no longer being carried out but it is technically possible to resume operation.

### Transfer of the permit or part of the permit

Before the permit can be wholly or partially transferred to another operator, a joint application to transfer the permit must be made by the transferring operator and the new operator. The procedure and requirements are set out in the Order.

This hospital or small emitter permit (permit) is issued by the . It authorises the regulated activities set out in the permit to be carried out at the installation and includes a number of conditions with which you must comply, including the monitoring and reporting of emissions and notification requirements.

Part 1 of this permit contains a description of the installation to which it applies, the regulated activities carried out at the installation, the specified emissions from those activities and your emissions targets for the scheme years 2021 to 2025. Part 2 contains the conditions with which you must comply and Part 3 contains definitions of terms used in this permit.

Your monitoring plan relating to the monitoring of emissions is attached to this permit as Appendix 1.

### Talking to us

You can contact us by e-mail on .

If you contact the regulator about this permit, please quote the permit reference number.

### Variations to the permit

You may apply to us to vary your permit and must do so where required by a condition of this permit. We also have powers to vary your permit in certain circumstances set out in the Order.

### Surrender of the permit

You must apply to surrender your permit where the installation has ’ceased operation’, as defined in the Order. The timescales and requirements for this surrender application are set out in the Order. You may also choose to surrender your permit if a regulated activity is no longer being carried out but it is technically possible to resume operation.

### Transfer of the permit

Before the permit can be transferred to another operator, a joint application to transfer the permit must be made by the transferring operator and the new operator. The procedure and requirements are set out in the Order. An application may not be made for the partial transfer of a hospital or small emitter permit.

### Appeals

You may appeal against the provisions of this permit. The Order contains information about the appeals procedure.

### Charges

Following the issue of the permit, annual subsistence fees will be payable. Other fees may also be payable, including for permit transfers, surrenders and revocations.

### Regulator's Address

Our contact address is as follows:

Email to: «${(competentAuthority.email)!}»

## Status Log

### Permit

| Permit number | Date application received | Date further information received | Date permit issued or change made |
| --- | --- | --- | --- |
|  | «${(workflow.requestSubmissionDate?date?s» | «[#if (params.issuanceMetadata.rfiRespons» | «${(workflow.requestEndDate.format('dd MM» |

### Changes to Permit

| Notice number | Change Type | Date  application received | Date  further information received | Date  Notice issued | Comment |
| --- | --- | --- | --- | --- | --- |
| «${(variationRequestInfo.id)!}» | AEM Variation | «${(variationRequestInfo.submissionDate.f» | «@before-row[#list params.variationReques»«[#if (variationRequestInfo.metadata.rfiR»«@after-row[/#list]» | «${(variationRequestInfo.endDate.format('» | «${(variationRequestInfo.metadata.logChan» |

### End of introductory note

## PERMIT

Under the Greenhouse Gas Emissions Trading Scheme Order 2020

Permit Number

Consolidated version number

«${(params.consolidationNumber)!}»

The «${(competentAuthority.name)!}» **(the regulator)** in exercise of its powers under the Greenhouse Gas Emissions Trading Scheme Order 2020, authorises:

«${(account.legalEntityName)!}» **(the operator)**

«[#if (params.permitContainer.installatio»

Company Registration Number

«${»

Registered Office Address

«${(account.legalEntityLocation)!}»

Office Address

«${(account.legalEntityLocation)!}»

to carry out regulated activities resulting in greenhouse gas emissions, as described and defined in and subject to the conditions set out in this permit, at:

Installation Name

Site Name (if applicable)

Installation Address

National Grid Reference

«${»

«[#if workflow.requestType != 'PERMIT\_VAR»

|  |  |
| --- | --- |
| Signed  Signature  «${(signatory.fullName)!}»  Authorised to sign on behalf of the «${(competentAuthority.name)!}» | Date  «${currentDate?date?string('dd MMMM yyyy'» |

## PART 1

### Scope of permit and of the installation

1. This permit authorises the regulated activities listed in Table 1 below to be carried out at the installation.

|  |  |
| --- | --- |
| Regulated activities | Specified emissions |
| «${(activity.type.description)!}» | «${(activity.type.» |

Table 1 Regulated activities carried out at the installation.

1. For the purposes of this permit, the installation is as described in Table 2, as supplemented by any change notified to the regulator in accordance with the permit conditions.

|  |
| --- |
| «${(params.permitContainer.permit.install»  «${(params.permitContainer.permit.install» |

Table 2 Description of the installation

1. The following emissions targets apply.

|  |  |
| --- | --- |
| Year | Target (tCO2eq) |
|  | «${» |

## PART 2

### Conditions

1. The operator must monitor the reportable emissions of the installation in accordance with the Monitoring and Reporting Regulation and the monitoring plan (including the written procedures supplementing that plan).
2. The operator must prepare in accordance with the Monitoring and Reporting Regulation a report of the installation’s reportable emissions in each scheme year that is verified as satisfactory in accordance with the Verification Regulation and must submit the report (and the verification report) to the regulator on or before 31 March in the following year.
3. The operator must surrender allowances equal to the installation’s reportable emissions in a scheme year on or before 30 April in the following year.
4. The operator must modify its monitoring plan in accordance with Articles 14 and 59(4) of the MRR and:
   1. where the operator proposes to make a significant modification as defined in Article 15(3) or as referred to in Article 66(1) of the MRR, it must apply to the regulator for a variation of its permit at least 14 days before making the modification or, where this is not possible, as soon as reasonably practicable and such application must:
      1. include a description of the change; and
      2. set out how it affects the information contained in the monitoring plan; or
   2. where the operator makes a change to its monitoring plan that is not a significant modification, it must notify the regulator on or before 31 December in the year in which the change occurred and such notification must:
      1. include a description of the change;
      2. set out how it affects the information contained in the monitoring plan; and
      3. explain how the change is in accordance with the Monitoring and Reporting Regulation.
5. Where the name of the operator changes, the operator must apply to the regulator for a variation of its permit to reflect the change as soon as reasonably practicable following the change.
6. Where the operator does not apply at least the tiers required by or applies a fall-back methodology pursuant to the Monitoring and Reporting Regulation, the operator must submit a report to the regulator in accordance with the requirements specified in Articles 69(1) to (3) of the MRR by the following deadlines (unless an alternative deadline has been approved by the regulator in writing pursuant to Article 69(1) of the MRR and, in which case, that deadline applies), starting in the case of a new operator with 30 June in the year after that in which the permit is granted and for any other operator, 30 June 2021:
   1. for a category A installation, on or before 30 June every four years
   2. for a category B installation, on or before 30 June every two years
   3. for a category C installation, on or before 30 June every year
7. Where a verification report states outstanding non-conformities or recommendations for improvements (or in relation to an installation with low emissions, non-conformities only) as specified in Article 69(4) of the MRR, the operator must submit a report to the regulator in accordance with the requirements of that Article on or before 30 June of the year in which the verification report is issued, unless the operator has, before the relevant 30 June deadline:
   1. resolved such non-conformities or recommendations; and
   2. submitted a variation application covering the related modifications in accordance with condition 4(a).
8. The operator must notify the regulator in accordance with the Monitoring and Reporting Regulation at least 14 days before the circumstances referred to in (a) to (d) occur or, where this is not possible, as soon as reasonably practicable:
   1. where there is a temporary change to its monitoring methodology as specified in Article 23 of the MRR;
   2. where tier thresholds are exceeded or equipment is found not to conform to requirements which require corrective action as specified in Article 28(1) of the MRR;
   3. where a piece of measurement equipment is out of operation as specified in Article 45(1) of the MRR; and
   4. where an installation with low emissions exceeds the relevant threshold as specified in Article 47(8) of the MRR.
9. The operator must keep records of all relevant data and information in accordance with Article 67 of the MRR.

### Free allocation conditions

Conditions 10 to 15 apply while the installation is a FA installation:

1. The operator must monitor the activity level of the installation in accordance with the Free Allocation Regulation and the monitoring methodology plan (including the written procedures referred to in Article 8(3) of the FAR).
2. The operator must prepare in accordance with the Activity Level Changes Regulation a report of its activity level of each sub-installation of the installation in each scheme year that is verified as satisfactory in accordance with the Verification Regulation and must submit the report (and the verification report) to the regulator on or before 31 March in the following year.
3. The operator of an installation that has ceased operation must notify the regulator on or before 31 December in the year in which the cessation occurs or within one month of the cessation, whichever is later.
4. The operator of an installation where a regulated activity is no longer being carried out but where it is technically possible to resume operation must notify the regulator on or before 31 December in the year in which the change occurred.
5. The operator must modify its monitoring methodology plan in accordance with Articles 9(2) and 12(3) of the FAR and:
   1. where an operator proposes to make a significant modification as defined in Article 9(5) of the FAR, it must apply to the regulator for a variation of its permit at least 14 days before making the modification or, where this is not possible, as soon as reasonably practicable and such application must:
      1. include a description of the change; and
      2. set out how it affects the information contained in the monitoring methodology plan; or
   2. where an operator makes a change to its monitoring methodology plan that is not a significant modification, it must notify the regulator on or before 31 December in the year in which the change occurred and such notification must:
      1. include a description of the change;
      2. set out how it affects the information contained in the monitoring methodology plan; and
      3. explain how the change is in accordance with the Free Allocation Regulation.
6. The operator must keep records of all relevant data and information in accordance with Article 7(3) and 9(6) of the FAR.

## PART 3

### Definitions

1. In this permit:
   1. “the Activity Level Changes Regulation” means Commission Implementing Regulation (EU) 2019/1842 of 31 October 2019 as it forms part of domestic law, as amended from time to time;
   2. “allowance” has the meaning given in Article 4 of the Order;
   3. “category A installation” has the meaning given in Article 19(2) of the Monitoring and Reporting Regulation;
   4. “category B installation” has the meaning given in Article 19(2) of the Monitoring and Reporting Regulation;
   5. “category C installation” has the meaning given in Article 19(2) of the Monitoring and Reporting Regulation;
   6. “ceased operation” has the meaning given in Article 4(3) of the Order;
   7. “FA installation” has the meaning given in Article 4A of the Order;
   8. “the Free Allocation Regulation” or “FAR” means Commission Delegated Regulation 2019/331 of 19 December 2018 as it forms part of domestic law, as amended from time to time;
   9. “installation” means the installation operated by the operator and as described in Part 1 of this permit, as supplemented by any change notified to the regulator in accordance with the conditions of this permit;
   10. “installation with low emissions” has the meaning given in Article 47(2) of the Monitoring and Reporting Regulation;
   11. “the Monitoring and Reporting Regulation” or “MRR” means Commission Implementing Regulation (EU) 2018/2066 of 19 December 2018 on the monitoring and reporting of greenhouse gas emissions pursuant to Directive 2003/87/EC of the European Parliament and of the Council (disregarding any amendments adopted after 11th November 2020) as given effect for the purpose of the UK ETS by Article 24 of the Order subject to the modifications made for that purpose from time to time;
   12. “monitoring plan” means the plan attached as Appendix 1, together with any modifications notified to the regulator under condition 4 and includes the written procedures supplementing that plan;
   13. “monitoring methodology plan” means the plan attached as Appendix 2, together with any modifications notified to the regulator under condition 14 and includes the written procedures supplementing that plan;
   14. “new operator” means the operator of an installation whose permit was granted after 1 January 2021;
   15. “operator” means the holder of this permit;
   16. “the Order” means The Greenhouse Gas Emissions Trading Scheme Order 2020 as amended from time to time;
   17. “regulated activity” has the meaning given in Schedule 2, paragraph 3 to the Order;
   18. “the regulator” means the «${(competentAuthority.name)!}»;
   19. "reportable emissions" means the total emissions of gases specified in Table 1 in Part 1 of this permit (expressed in tonnes of carbon dioxide equivalent) which arise from the regulated activities carried out in the installation;
   20. “scheme year” means a calendar year commencing on 1 January;
   21. “surrender” means the process described in Schedule 5A, paragraph 24(1) to the Order;
   22. “sub-installation” has the same meaning as in the Free Allocation Regulation;
   23. “verification report” has the same meaning as in the Verification Regulation and for the purposes of condition 7 means a report submitted in accordance with condition 2 of this permit;
   24. “the Verification Regulation” means Commission Implementing Regulation (EU) 2018/2067 of 19 December 2018 on the verification of data and on the accreditation of verifiers pursuant to Directive 2003/87/EC of the European Parliament and of the Council (disregarding any amendments adopted after 11th November 2020), as given effect for the purpose of the UK ETS by Article 25 of the Order subject to the modifications made for that purpose from time to time;
2. For the purposes of condition 3 (surrender of allowances), where an installation’s reportable emissions in a scheme year (the “non-compliance year”) exceeds the allowances surrendered on or before 30 April in the following year, the installation’s reportable emissions in the relevant scheme year must be treated as being increased by the difference. For this purpose, the relevant scheme year means:
   1. the scheme year following the non-compliance year; or
   2. if the failure to comply with the surrender condition results from an error in the verified emissions report submitted by the operator, the scheme year in which the error is discovered.

## PART 2

### Conditions

1. The operator must monitor the reportable emissions of the installation in accordance with the Monitoring and Reporting Regulation and the monitoring plan (including the written procedures supplementing that plan).
2. The operator must prepare in accordance with the Monitoring and Reporting Regulation a report (the emissions report) of the installation’s reportable emissions that is:
   1. verified as satisfactory in accordance with the Verification Regulation, or
   2. accompanied by a declaration that:
      1. in preparing the emissions report, the operator has complied with the Monitoring and Reporting Regulation;
      2. the operator has complied with the monitoring plan; and
      3. the emissions report is free from material misstatements,

and to submit the emissions report (and any verification report where (a) applies or declaration where (b) applies) to the regulator on or before 31 March in the following year.

1. The operator must modify its monitoring plan in accordance with Article 14 and 59(4) and:
   1. where the operator proposes to make a significant modification as defined in Article 15(3) or as referred to in Article 66(1), it must apply to the regulator for a variation of its permit at least 14 days before making the modification or, where this is not possible, as soon as reasonably practicable and such application must:
      1. include a description of the change; and
      2. set out how it affects the information contained in the monitoring plan; or
   2. where the operator makes a change to its monitoring plan that is not a significant modification, it must notify the regulator on or before 31 December in the year in which the change occurred and such notification must:
      1. include a description of the change;
      2. set out how it affects the information contained in the monitoring plan; and
      3. explain how the change is in accordance with the Monitoring and Reporting Regulation.
2. Where the name of the operator changes, the operator must apply to the regulator for a variation of its permit to reflect the change as soon as reasonably practicable following the change.
3. The operator must notify the regulator in accordance with the Monitoring and Reporting Regulation at least 14 days before the circumstances referred to in (a) to (c) occur or, where this is not possible, as soon as reasonably practicable:
   1. where there is a temporary change to its monitoring methodology as specified in Article 23;
   2. where tier thresholds are exceeded or equipment is found not to conform to requirements which require corrective action as specified in Article 28(1); and
   3. where a piece of measurement equipment is out of operation as specified in Article 45(1).
4. The operator must keep records of all relevant data and information in accordance with Article 67 and in relation to any declaration submitted under condition 2.
5. Where the installation is not a hospital qualifying installation, if the installation’s reportable emissions in a scheme year exceed the maximum amount, the operator must notify the regulator on or before 31 March in the following year.
6. Where the installation is a hospital-qualifying installation, if the installation ceases to be an installation that primarily provides services to a hospital in a scheme year, the operator must notify the regulator on or before 31 March in the following year.
7. Where the installation is a hospital-qualifying installation and except where the operator has given notice under condition 8, the operator must:
   1. maintain records demonstrating that it continues to be an installation that primarily provides services to a hospital; and
   2. comply with requests from the regulator to inspect those records for the purpose of verifying the accuracy of the records and of the emissions report

## PART 3

### Definitions

1. In this permit:
   1. “hospital-qualifying installation” has the meaning given in Schedule 7, paragraph 1 to the Order;
   2. “installation” means the installation operated by the operator and as described in Part 1 of this permit, as supplemented by any change notified to the regulator in accordance with the conditions of this permit;
   3. “maximum amount” means 24,999 tonnes of carbon dioxide equivalent;
   4. “the Monitoring and Reporting Regulation” means Commission Implementing Regulation (EU) 2018/2066 of 19 December 2018 on the monitoring and reporting of greenhouse gas emissions pursuant to Directive 2003/87/EC of the European Parliament and of the Council (disregarding any amendments adopted after 11th November 2020) as given effect for the purpose of the UK ETS by Article 24 of the Order subject to the modifications made for that purpose (including modifications relating to hospital or small emitters only) from time to time;
   5. “monitoring plan” means the plan attached as Appendix 1, together with any modifications notified to the regulator under condition 4 and includes the written procedures supplementing that plan;
   6. “operator” means the holder of this permit;
   7. “the Order” means The Greenhouse Gas Emissions Trading Scheme Order 2020 as amended from time to time;
   8. “regulated activity” has the meaning given in Schedule 2, paragraph 3 to the Order;
   9. “the regulator” means the ;
   10. "reportable emissions" means the total emissions of gases specified in Table 1 in Part 1 of this permit (expressed in tonnes of carbon dioxide equivalent) which arise from the regulated activities carried out in the installation;
   11. “scheme year” means a calendar year commencing on 1 January;
   12. “the Verification Regulation” means Commission Implementing Regulation (EU) 2018/2067 of 19 December 2018 on the verification of data and on the accreditation of verifiers pursuant to Directive 2003/87/EC of the European Parliament and of the Council (disregarding any amendments adopted after 11th November 2020), as given effect for the purpose of the UK ETS by Article 25 of the Order subject to the modifications made for that purpose from time to time;
   13. “verification report” has the same meaning as in the Verification Regulation.
2. In this permit, a reference to a numbered Article is to that Article of the Monitoring and Reporting Regulation.
3. In this permit, an installation that primarily provides services to a hospital has the meaning given in Schedule 7, paragraph 2 to the Order.

«[#if account.emitterType == 'GHGE']»

## Appendix 1 to Greenhouse gas emissions permit number

## Appendix 1 to Hospital or small emitter permit number

## Monitoring Plan

«[#if params.permitContainer.permit.envir»

List of environmental licenses related to this installation

| Type | Number | Issuing authority | Permit holder |
| --- | --- | --- | --- |
| «@before-row[#list params.permitContainer»«${» | «${» | «${» | «${» |

|  |  |
| --- | --- |
| Estimated annual emissions (tonnes CO2(e)) | «${» |
| Installation Category |  |

### Source Streams (fuels and/or materials)

Summary of the source streams used in the regulated activities at the installation.

| Source Stream Reference | Source Stream Type | Source Stream Description |
| --- | --- | --- |
| «@before-row[#list params.permitContainer»«${» | «${» |  |

### Emission Sources

Summary of emission sources which relate to the regulated activities at the installation.

| Emission Source Reference | Emission Source Description |
| --- | --- |
| «@before-row[#list params.permitContainer»«${» | «${» |

### Emission Points

Summary of the emission points which relate to the regulated activities at the installation.

| Emission Point Reference | Emission Point Description |
| --- | --- |
| «@before-row[#list params.permitContainer»«${» | «${» |

### Technical details of the regulated activities

| Source streams (Fuel / Material) | Emission Source Refs. | Emission Point Refs. | Regulated Activity |
| --- | --- | --- | --- |
| «@before-row[#list params.permitContainer»«${(» |  |  | «${» |

### Excluded Activities

Detail of excluded activities.

| Source Stream Refs | Emission Source Ref | Emission Point Ref |
| --- | --- | --- |
| «${(» |  |  |

### Measurement Devices

| Measurement Device Ref. | Type of Measurement Device | Measurement Range | Metering Range Units | Specified Uncertainty  (+/- %) | Location |
| --- | --- | --- | --- | --- | --- |
| «@before-row[#list params.permitContainer»«${» |  | «${» | «${» | «${» |  |

«[#if params.permitContainer.permit.monit»

## Calculation

«[#list»

### Approach Description

|  |
| --- |
| «${» |

### Applied tiers

| Source Stream Ref. | Emission Source Refs. | Measurement Device Refs. | Overall uncer-  tainty  (+/- %) | Activity Data Tier | NCV Tier | Emis-  sion Factor Tier | Oxida-  tion Factor Tier | Carbon Content Tier | Conver-  sion Factor Tier | Bio-  mass Fraction Tier | Category |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| «@before-row[#list calculationValue. sour»«${( sourceStreams?filter(ss -> ss.id == »«@after-row[/#list]» | «[#list css.sourceStreamCategory.emission» | «[#list css.activityData.measurementDevic» | «${» | «${» | «${» | «${» | «${» | «${» | «${» | «${» | «${» |

### Reference sources applied

The table below lists, for each parameter, the reference sources to be used for calculation factors.

| Source Stream Refs. | Emission Source Refs. | Parameter | Reference Source | Default Value applied (where appropriate) |
| --- | --- | --- | --- | --- |
| «@before-row[#list params. referenceSourc»«${( rs.sourceStream)}»«@after-row[/#list]» | «[#list rs.emissionSources as es]${es}[#s» | «${» | «${» | «${» |

«[#if params.analysisMethods?size != 0]»

### Analytical approaches to be applied to each source stream

The table below lists, for each source stream, where calculation factors are to be determined by analysis.

| Source Stream Refs. | Emission Source Refs. | Parameter | Method of Analysis | Frequency | Laboratory Name | Laboratory ISO17025 Accredited |
| --- | --- | --- | --- | --- | --- | --- |
| «@before-row[#list params. analysisMethod»«${( am .sourceStream)}»«@after-row[/#list]» | «[#list am.emissionSources as es]${es}[#s» | «${» | «${» | «${» | «${» | «${» |

«[#if calculationValue.samplingPlan.exist»

### Written procedures relating to the analytical approaches applied

|  |  |
| --- | --- |
| Title of procedure | «${» |
| Reference for procedure |  |
| Diagram reference | «${» |
| Brief description of procedure | «${» |
| Post or department responsible for the procedure and for any data generated | «${» |
| Location where records are kept | «${» |
| Name of IT system used | «${» |
| List of EN or other standards applied | «${» |

### Sampling Plan

Written procedures relating to the sampling plan.

|  |  |
| --- | --- |
| Title of procedure | «${» |
| Reference for procedure |  |
| Diagram reference |  |
| Brief description of procedure |  |
| 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 |  |

### Reference to sampling plan procedures

| Attachment |
| --- |
| «[#list calculationValue.samplingPlan.det» |

### Sampling Plan Appropriateness

Written procedures relating to the appropriateness of the sampling plan.

|  |  |
| --- | --- |
| Title of procedure | «${» |
| Reference for procedure |  |
| Diagram reference |  |
| Brief description of procedure |  |
| 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 |  |

«[#if calculationValue.samplingPlan.detai»

### Year end reconciliations

The procedure to be used to estimate stocks at the beginning/end of a reporting period where applicable. This should include any source streams monitored using batch metering e.g. where invoices are used.

|  |  |
| --- | --- |
| Title of procedure | «${» |
| Reference for procedure |  |
| Diagram reference |  |
| Brief description of procedure |  |
| 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 |  |

«[#if params.permitContainer.permit.monit»

## Measurement Approach

«${»

### Description

A concise description of the measurement approach used to determine annual CO2 emissions is described below:

|  |
| --- |
| «${» |

### Measured Emissions

The emission points where emissions are determined by measurement:

| Emission Point Ref. | Source Stream Refs. | Emission Source Refs. | Measurement Device Refs. | Emissions measured during typical or non-typical operation? | Tier Applied | Highest Tier Applied |
| --- | --- | --- | --- | --- | --- | --- |
| «@before-row[#list measurementValue.emiss»«${(emissionPoints?filter(ss -> ss.id == »«@after-row[/#list]» | «[#list css.emissionPointCategory.sourceS» | «[#list css.emissionPointCategory.emissio» | «[#list css.measuredEmissions.measurement» | «[#if css.measuredEmissions.samplingFrequ» | «${(css.measuredEmissions.tier.getDescrip» | «[#if (css.measuredEmissions.isHighestReq»«[#if (css.measuredEmissions.isHighestReq»«[#else]N/A[/#if]» |

### Applied Standards

List of applied standards and briefly describe any deviations from these standards:

| Emission Point Ref. | Emission Source Refs. | Parameter | Applied Standard | Deviations from Applied Standard | Laboratory Name | Laboratory ISO17025 Accredited | Evidence Reference |
| --- | --- | --- | --- | --- | --- | --- | --- |
| «@before-row[#list measurementValue.emiss»«${(emissionPoints?filter(ss -> ss.id == »«@after-row[/#list]» | «[#list css.emissionPointCategory.emissio» | «${(css.appliedStandard.parameter)!}» | «${(css.appliedStandard.appliedStandard)!» | «[#if (css.appliedStandard.deviationFromA» | «${(css.appliedStandard.laboratory.labora» | «[#if (css.appliedStandard.laboratory.lab» | «[#if (css.appliedStandard.laboratory.lab» |

### Measurement Procedures

### Determination of Emissions by Measurement

Details about the written procedures which describe in detail the calculation formulae used and the method of data aggregation where measurement based methodologies are applied in accordance with Article 44 of the MRR:

|  |  |
| --- | --- |
| Title of procedure |  |
| Reference for procedure |  |
| Diagram reference |  |
| Brief description of procedure |  |
| 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 |  |

### Determination of Reference Periods

Details about the written procedures which describe the methods for determining if valid hours or shorter reference periods for each parameter can be provided and for substitution of missing data in accordance with Article 45 of the MRR:

|  |  |
| --- | --- |
| Title of procedure |  |
| Reference for procedure |  |
| Diagram reference |  |
| Brief description of procedure |  |
| 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 |  |

### Gas Flow Determination

Details about the written procedure for this calculation for each relevant emission source in accordance with Article 43(5)(a) of the MRR:

|  |  |
| --- | --- |
| Title of procedure |  |
| Reference for procedure |  |
| Diagram reference |  |
| Brief description of procedure |  |
| 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 |  |

«[/#if]»

### Corroborating Calculations

Details about the written procedure for carrying out the corroborating calculations in accordance with Article 46 of the MRR:

|  |  |
| --- | --- |
| Title of procedure |  |
| Reference for procedure |  |
| Diagram reference |  |
| Brief description of procedure |  |
| 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 |  |

### Biomass Emissions Deduction

Details about the written procedure detailing how the biomass CO2 is to be determined and subtracted from the measured CO2 emissions in accordance with Article 43(4) of the MRR:

|  |  |
| --- | --- |
| Title of procedure |  |
| Reference for procedure |  |
| Diagram reference |  |
| Brief description of procedure |  |
| 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 |  |

«[/#if]»

«[/#if]»

## Fall-back Approach

«${»

### Description

|  |
| --- |
|  |

### Source stream categories

| Source Stream Ref. | Emission Source Refs. | Measurement Device Refs. | Overall uncertainty  (+/- %) | Category |
| --- | --- | --- | --- | --- |
|  |  |  |  |  |

### Justification for fall-back approach

|  |
| --- |
|  |

### Annual Uncertainty Analysis

Details about the written procedures used for carrying out the annual uncertainty analysis required under Article 22 of the MRR:

|  |  |
| --- | --- |
| Title of procedure |  |
| Reference for procedure |  |
| Diagram reference |  |
| Brief description of procedure |  |
| 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 |  |

«[/#if]»

«[#if params.permitContainer.permit.monit»

## N2O Monitoring

«[#list params.permitContainer.permit.mon»

### Approach Description

|  |
| --- |
|  |

|  |
| --- |
| Attachment |
| «[#list n2OValue.getAttachmentIds() as at» |

### Determination of Emissions

Details about the N2O emission points at the installation and confirm the approach to be used for determination of emissions in accordance with Annex IV (section 16) of the MRR:

| Emission Point Ref. | Source Stream Refs. | Emission Source Refs. | Measurement Device Refs. | Type of N2O Emissions | Source Stream Category | Approach to be Applied | Tier Applied | Highest Tier Applied? |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| «@before-row[#list n2OValue.emissionPoint»«${(emissionPoints?filter(ss -> ss.id == »«@after-row[/#list]» | «[#list css.emissionPointCategory.sourceS» | «[#list css.emissionPointCategory.emissio» | «[#list css.measuredEmissions.measurement» | «${(css.emissionPointCategory.emissionTyp» | «${(css.emissionPointCategory.categoryTyp» | «${(css.emissionPointCategory.monitoringA» | «${(css.measuredEmissions.tier.getDescrip» | «[#if (css.measuredEmissions.isHighestReq»«[#if (css.measuredEmissions.isHighestReq»«[#else]N/A[/#if]» |

### Applied Standards

Details of the laboratory and a list of applied standards including brief descriptions of any deviations from these standards in accordance with Article 42 of the MRR:

| Emission Point Ref. | Emission Source Refs. | Parameter | Applied Standard | Deviations from Applied Standard | Laboratory Name | Laboratory ISO17025 Accredited? | If no reference evidence to be submitted |
| --- | --- | --- | --- | --- | --- | --- | --- |
| «@before-row[#list n2OValue.emissionPoint»«${(emissionPoints?filter(ss -> ss.id == »«@after-row[/#list]» | «[#list css.emissionPointCategory.emissio» | «${(css.appliedStandard.parameter)!}» | «${(css.appliedStandard.appliedStandard)!» | «[#if (css.appliedStandard.deviationFromA» | «${(css.appliedStandard.laboratory.labora» | «[#if (css.appliedStandard.laboratory.lab» | «[#if (css.appliedStandard.laboratory.lab» |

### Emissions Determination Procedure

Details of the written procedures detailing the method and any calculation formulae used for data aggregation to determine the annual N2O emissions and the corresponding CO2(e) values of each emission source in accordance with Article 44 of the MRR.

|  |  |
| --- | --- |
| Title of procedure |  |
| Reference for procedure |  |
| Diagram reference |  |
| Brief description of procedure |  |
| 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 |  |

### Determination of Reference Periods

Details of the written procedures which describe the methods for determining if valid hours or shorter reference periods for each parameter can be provided and for substitution of missing data in accordance with Article 45 of the MRR:

|  |  |
| --- | --- |
| Title of procedure |  |
| Reference for procedure |  |
| Diagram reference |  |
| Brief description of procedure |  |
| 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 |  |

### Gas Flow Determination

Details about the written procedure for this calculation for each relevant emission source in accordance with Article 43(5)(a) of the MRR:

|  |  |
| --- | --- |
| Title of procedure |  |
| Reference for procedure |  |
| Diagram reference |  |
| Brief description of procedure |  |
| 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 | «${(n2OValue.gasFlowCalculation.procedure» |

### Quantity of Materials

Details of the written procedure which describes the method and parameters used to determine the quantity of materials used in the production process and the maximum quantity of material used at full capacity:

|  |  |
| --- | --- |
| Title of procedure |  |
| Reference for procedure |  |
| Diagram reference |  |
| Brief description of procedure |  |
| 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 | «${(n2OValue.quantityMaterials.procedureD» |

### Determination of the Quantity of Product Produced

Details of the written procedure which describes the method and parameters used to determine the quantity of product produced as an hourly load expressed as nitric acid (100%) adipic acid (100%) glyoxal and glyoxylic acid and caprolactam per hour:

|  |  |
| --- | --- |
| Title of procedure |  |
| Reference for procedure |  |
| Diagram reference |  |
| Brief description of procedure |  |
| 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 |  |

### Determination of N2O Concentration

Details of the written procedure describing the method and parameters used to determine the N2O concentration in the flue gas from each emission source its operating range and its uncertainty and details of any alternative methods to be applied if concentrations fall outside the operating range and the situations when this may occur.

|  |  |
| --- | --- |
| Title of procedure |  |
| Reference for procedure |  |
| Diagram reference |  |
| Brief description of procedure |  |
| 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 |  |

### Determination of N2O Emissions

Details of the written procedure detailing the calculation method used to determine N2O emissions from periodic unabated sources in nitric acid adipic acid caprolactam glyoxal and glyoxylic acid production.

|  |  |
| --- | --- |
| Title of procedure |  |
| Reference for procedure |  |
| Diagram reference |  |
| Brief description of procedure |  |
| 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 |  |

### Operational Management

Details of the written procedure describing the way in which or the extent to which the installation operates with variable loads and the manner in which the operational management is carried out.

|  |  |
| --- | --- |
| Title of procedure |  |
| Reference for procedure |  |
| Diagram reference |  |
| Brief description of procedure |  |
| 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 |  |

«[/#if]»

«[#if params.permitC?ontainer.permit.monit»

## PFC Monitoring Approach

«[#list»

### Approach Description

|  |
| --- |
|  |

### PFC Emissions

Details of the PFC emission points at the installation and confirm the approach to be used for determination of emissions in accordance with section 8 of Annex IV of the MRR.

| Source Stream Ref. | Emission Source Refs. | Emission Point Refs. | Calculation Method Applied | Emission Factor Tier Applied | Source Stream Category | Highest Tiers Applied? |
| --- | --- | --- | --- | --- | --- | --- |
| «@before-row[#list calculationValue as cs»«${( params.permitContainer.permit.source»«@after-row[/#list]» | «[#list css.sourceStreamCategory.emission» | «[#list css.sourceStreamCategory.emission» | «${(css.sourceStreamCategory.calculationM» | «${(css.emissionFactor.tier.getDescriptio» | «${(css.sourceStreamCategory.categoryType» | «[#if (css.measuredEmissions.isHighestReq»«[#if (css.measuredEmissions.isHighestReq»«[#else]N/A[/#if]» |

### Tier 2 Emission Factor

### Schedule of Measurements

Details of the written procedure setting out the schedule for repetitions of the measurements detailed above to be carried out in accordance with Section 8 of Annex IV of the MRR:

|  |  |
| --- | --- |
| Title of procedure |  |
| Reference for procedure |  |
| Diagram reference |  |
| Brief description of procedure |  |
| 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 |  |

### Determination of Installation Specific Emission Factors

Details of the written procedure used to determine the installation specific emission factors for CF4 and C2F6:

Note: the procedure should also show that the measurements have been and will be carried out for a sufficiently long time for measured values to converge but at least for 72 hours.

|  |  |
| --- | --- |
| Title of procedure |  |
| Reference for procedure |  |
| Diagram reference |  |
| Brief description of procedure |  |
| 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 |  |

### Collection Efficiency for Fugitive Emissions

Details of the written procedure detailing the methodology for determining the collection efficiency for fugitive emissions where applicable:

|  |  |
| --- | --- |
| Title of procedure |  |
| Reference for procedure |  |
| Diagram reference |  |
| Brief description of procedure |  |
| 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 |  |

### Cell and Anode Types

Types of cell and anode at the installation:

| Cell Type | Anode Type |
| --- | --- |
| «@before-row[#list pfcValue.cellAndAnodeT»«${(node.cellType)!}»«@after-row[/#list]» |  |

«[/#if]»

## Inherent CO2

«[#list»

### Receiving and Transferring Installations

Details of the receiving and transferring installations:

Note: Installation identification codes are defined by the regulation pursuant to Article 19 of the EU ETS Directive

| Direction of travel | Installation Identification Code | Installation Name | Contact details |
| --- | --- | --- | --- |
|  | «[#else]-» | «${(inherent.inherentReceivingTransferrin»«[#else]-[/#if]» | «${(inherent.inherentReceivingTransferrin» |

«[/#if]»

## Transferred CO2 and N2O

«[#list»

### Receiving and Transferring Installations

Details of the receiving and transferring installations:

Note: Installation identification codes are defined by the regulation pursuant to Article 19 of the EU ETS Directive

| Direction of travel | Installation Identification Code | Installation Name | Contact details |
| --- | --- | --- | --- |
|  | «[#if (transfer.transferInstallationDetai»«${(transfer.transferInstallationEmitter.»«[#else] - [/#if]» | «[#if (transfer.transferInstallationDetai»«${(transfer.transferInstallationEmitter.»«[#else] - [/#if]» | «[#if (transfer.transferInstallationDetai»  «${(transfer.transferInstallationEmitter.»  «${(transfer.transferInstallationEmitter.»  «${(transfer.transferInstallationEmitter.»  «${(transfer.transferInstallationEmitter.»  «${(transfer.transferInstallationEmitter.»  «${(transfer.transferInstallationEmitter.» |

### Deductions to the Amount of Transferred CO2 and N2O

Details of the written procedure used for deducting the amount of transferred CO2 and N2O, which does not originate from fossil carbon activities covered by the EU ETS Directive:

|  |  |
| --- | --- |
| Title of procedure |  |
| Reference for procedure |  |
| Diagram reference |  |
| Brief description of procedure. |  |
| 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 |  |

### Preventing Detecting and Quantification of Leakage

Details of the written procedure for preventing detecting and quantification of leakage events from transport networks:

|  |  |
| --- | --- |
| Title of procedure |  |
| Reference for procedure |  |
| Diagram reference |  |
| Brief description of procedure. |  |
| 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 |  |

### Temperature and Pressure Measurement Equipment

All equipment used for measurement of temperature and pressure in the transport network in the determination of emissions from leakage events in accordance with section 22 of Annex V of the MRR:

| Measurement Device Ref. | Type of Measurement Device | Location |
| --- | --- | --- |
|  |  |  |

### Transfer of CO2 and N2O

Details of the written procedure for transport networks ensuring that CO2 and N2O are transferred only to installations which have a valid greenhouse gas emission permit or where any emitted CO2 or N2O is effectively monitored and accounted for in accordance with Article 49:

|  |  |
| --- | --- |
| Title of procedure |  |
| Reference for procedure |  |
| Diagram reference |  |
| Brief description of procedure. |  |
| 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 |  |

### Quantification Methodologies

Details of the written procedure which describe the quantification methodologies for emissions or CO2 released to the water column from potential leakages as well as the applied and possibly adapted quantification methodologies for actual emissions or CO2 released to the water column from leakages as specified in section 23 of Annex IV:

|  |  |
| --- | --- |
| Title of procedure | «${» |
| Reference for procedure |  |
| Diagram reference |  |
| Brief description of procedure. |  |
| 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 |  |

«[/#if]»

## Management Procedures

### Monitoring and Reporting Responsibilities

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

| Job Title / Post | Responsibilities |
| --- | --- |
|  |  |

### 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.

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 |  |
| Reference for procedure |  |
| Diagram reference |  |
| Brief description of procedure |  |
| 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 |  |

### 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 |  |
| Reference for procedure |  |
| Diagram reference |  |
| Brief description of procedure |  |
| 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 |  |

### Data Flow Activities

Details of the procedures used to manage data flow activities.

|  |  |
| --- | --- |
| Title of procedure |  |
| Reference for procedure |  |
| Diagram reference |  |
| Brief description of procedure |  |
| 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 |  |
| List of primary data sources |  |
| 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 |  |

Documents relevant to the recording of data flow activities.

| Attachment |
| --- |
|  |

### 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.

|  |  |
| --- | --- |
| Title of procedure |  |
| Reference for procedure |  |
| Diagram reference |  |
| Brief description of procedure |  |
| 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 |  |

### Review and Validation of Data

Details of the procedures used to ensure regular internal reviews and validation of data.

|  |  |
| --- | --- |
| Title of procedure |  |
| Reference for procedure |  |
| Diagram reference |  |
| Brief description of procedure |  |
| 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 |  |

### Assessing and Controlling Risks

Details of the procedures used to assess inherent risks and control risks.

|  |  |
| --- | --- |
| Title of procedure |  |
| Reference for procedure |  |
| Diagram reference |  |
| Brief description of procedure |  |
| 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 |  |

### Quality Assurance of Metering / Measuring Equipment

Details of the procedures used to ensure quality assurance of measuring equipment.

|  |  |
| --- | --- |
| Title of procedure |  |
| Reference for procedure |  |
| Diagram reference |  |
| Brief description of procedure |  |
| 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 |  |

### Corrections and Corrective Actions

Details of the procedures used to handle corrections and corrective actions.

|  |  |
| --- | --- |
| Title of procedure |  |
| Reference for procedure |  |
| Diagram reference |  |
| Brief description of procedure |  |
| 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 |  |

### Control of Outsourced Activities

Details of the procedures used to control outsourced processes.

|  |  |
| --- | --- |
| Title of procedure |  |
| Reference for procedure |  |
| Diagram reference |  |
| Brief description of procedure |  |
| 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 |  |

### Record Keeping and Documentation

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

|  |  |
| --- | --- |
| Title of procedure |  |
| Reference for procedure |  |
| Diagram reference |  |
| Brief description of procedure |  |
| 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 |  |

### Environmental Management System

|  |  |
| --- | --- |
| Standard to which the Environmental Management System is certified: |  |

## Abbreviations

Abbreviations, acronyms or definitions referred to in the monitoring plan

|  |  |
| --- | --- |
| Abbreviation | Definition |
|  |  |

# Monitoring methodology plan

## Installation description

### Installation details

|  |  |
| --- | --- |
| Describe the installation and its main processes |  |
| Upload a flow diagram | «[#list params.permitContainer.permit.mon» |

### Connections to other ETS installations or non-ETS entities

|  |  |
| --- | --- |
| Installation or entity name |  |
| Type of entity |  |
| Type of connection |  |
| Flow direction |  |
| Installation ID used in the registry |  |
| Name of contact person |  |
| Email address |  |
| Phone number |  |

«[/#list]»

«[/#if]»

## Sub-installations

### Sub-installations with product benchmarks

| Sub-installation type | Carbon leakage |
| --- | --- |
| «@before-row[#list params.permitContainer»«${(subInstallation.subInstallationType.d» «@after-row[/#list]» | «[#if subInstallation.subInstallationType»«Exposed»«[#else]»«Not Exposed»«[/#if]» |

### Sub-installations with fallback approaches

| Sub-installation type | Carbon leakage |
| --- | --- |
| «@before-row[#list params.permitContainer»«${(subInstallation.subInstallationType.d» «@after-row[/#list]» | «[#if subInstallation.subInstallationType»«Exposed»«[#else]»«Not Exposed»«[/#if]» |

«[#list params.permitContainer.permit.mon»

## Sub-installation with product benchmark: «${subInstallation.subInstallationType.de»

### Sub-installation details

|  |  |
| --- | --- |
| **Product benchmark** | «${subInstallation.subInstallationType.de» |
| **Describe the system boundaries of this sub-installation** | «${subInstallation.description}» |
| **Supporting files** | «[#list subInstallation.supportingFiles a»«[#if (key==id)]${value?trim}[#break][/#i»«[/#if]» |

### Annual production levels (activity)

| Data sources | «@before-cell[#list subInstallation.annua»«Source ${source\_index + 1}»«@after-cell[/#list]» |
| --- | --- |
| **Quantities of products** | «@before-cell[#list subInstallation.annua»«${source.quantityProduct.code}»«@after-cell[/#list]» |

|  |  |
| --- | --- |
| **Method used to determine the annual quantity of products** | «${subInstallation.annualLevel.annualQuan» |
| **Description of methodology applied for each data source** | «${subInstallation.annualLevel.methodolog» |
| **Has the hierarchical order been followed** | «[#if subInstallation.annualLevel.hierarc»«Yes»«[#else]»«No»«[/#if]» «[#if subInstallation.annualLevel.hierarc» |
| **Reason for not following the hierarchy** | «${subInstallation.annualLevel.hierarchic» |
| **Provide more details on any deviation from the hierarchy** | «${subInstallation.annualLevel.hierarchic»«[/#if]» |
| **Description of the methodology used for keeping track of the products produced** | «${subInstallation.annualLevel.trackingMe» «[#if subInstallation.annualLevel.support» |
| **Supporting files** | «[#list subInstallation.annualLevel.suppo»«[#if (key==id)]${value?trim}[#break][/#i»«[/#if]» |

«[#if subInstallation.fuelAndElectricityE»

### Exchangeability of fuel and electricity

| Data sources for energy flows | «@before-cell[#list subInstallation.fuelA»«Source ${source\_index + 1}»«@after-cell[/#list]» |
| --- | --- |
| **Relevant electricity consumption** | «@before-cell[#list subInstallation.fuelA»«${source.relevantElectricityConsumption.»«@after-cell[/#list]» |

|  |  |
| --- | --- |
| **Description of methodology applied for each data source** | «${subInstallation.fuelAndElectricityExch» |
| **Has the hierarchical order been followed** | «[#if subInstallation.fuelAndElectricityE» «[#if subInstallation.fuelAndElectricityE» |
| **Reason for not following the hierarchy** | «${subInstallation.fuelAndElectricityExch» |
| **Provide more details on any deviation from the hierarchy** | «${subInstallation.fuelAndElectricityExch»«[#if subInstallation.fuelAndElectricityE» |
| **Supporting files** | «[#list subInstallation.fuelAndElectricit»«[#if (key==id)]${value?trim}[#break][/#i»«[/#if]» |

«[/#if]»

### Imported measurable heat flows from non-ETS

|  |  |
| --- | --- |
| **Are there any measurable heat flows imported from non-ETS installations or entities?** | «[#if subInstallation.importedMeasurableH»«Yes»«[#else]»«No»«[/#if]»«[#if subInstallation.importedMeasurableH» |
| **Description of methodology applied for each data source** | «${subInstallation.importedMeasurableHeat»«[#if subInstallation.importedMeasurableH» |
| **Supporting files** | «[#list subInstallation.importedMeasurabl»«[#if (key==id)]${value?trim}[#break][/#i»«[/#if]»«[/#if]» |

### Directly attributable emissions

|  |  |
| --- | --- |
| **Attribution of directly attributable emissions** | «${subInstallation.directlyAttributableEm» |
| **Are further internal source streams relevant?** | «Yes»«[#else]»«No»«[/#if]» |

«[#if subInstallation.directlyAttributabl»

| Data sources for amounts imported or exported | «@before-cell[#list subInstallation.direc»«Source ${source\_index + 1}»«@after-cell[/#list]» |
| --- | --- |
| **Amounts imported or exported** | «@before-cell[#list subInstallation.direc»«${source.amounts.code}»«@after-cell[/#list]» |
| **Energy content** | «@before-cell[#list subInstallation.direc»«${source.energyContent.code}»«@after-cell[/#list]» |
| **Emission factor or carbon content** | «@before-cell[#list subInstallation.direc»«${source.emissionFactorOrCarbonContent.c»«@after-cell[/#list]» |
| **Biomass content** | «@before-cell[#list subInstallation.direc»«${source.biomassContent.code}»«@after-cell[/#list]» |

|  |  |
| --- | --- |
| **Description of methodology applied for each data source** |  |
| **Describe how the amounts are monitored, if not already covered by the monitoring plan under the MRR.** | «[#if subInstallation.directlyAttributabl» |
| **Supporting files** | «[#list subInstallation.directlyAttributa»«[#if (key==id)]${value?trim}[#break][/#i»«[/#if]» |

«[/#if]»

|  |  |
| --- | --- |
| **Is any transferred CO2 imported or exported?** | «[#if subInstallation.directlyAttributabl»«Yes»«[#else]»«No»«[/#if]» |

### Fuel input and relevant emission factor

|  |  |
| --- | --- |
| **Is fuel input relevant for this sub-installation?** | «[#if subInstallation.fuelInputAndRelevan»«Yes»«[#else]»«No»«[/#if]» |

| Data sources for fuel input | «@before-cell[#list subInstallation.fuelI»«Source ${source\_index + 1}»«@after-cell[/#list]» |
| --- | --- |
| **Fuel input** | «@before-cell[#list subInstallation.fuelI»«${source.fuelInput.code}»«@after-cell[/#list]» |
| **Weighted emission factor** | «@before-cell[#list subInstallation.fuelI»«${(source.weightedEmissionFactor.code)!}»«@after-cell[/#list]» |

|  |  |
| --- | --- |
| **Description of methodology applied for each data source** | «${subInstallation.fuelInputAndRelevantEm» |
| **Has the hierarchical order been followed** | «Yes»«[#else]»«No»«[/#if]» |
| **Reason for not following the hierarchy** | «${subInstallation.fuelInputAndRelevantEm» |
| **Provide more details on any deviation from the hierarchy** | «${subInstallation.fuelInputAndRelevantEm»«[/#if]»«[#if subInstallation.fuelInputAndRelevan» |
| **Supporting files** | «[#list subInstallation.fuelInputAndRelev»«[#if (key==id)]${value?trim}[#break][/#i»«[/#if]» |

«[/#if]»

### Imported and exported measurable heat

|  |  |
| --- | --- |
| **Is any measurable heat imported to or exported from this sub-installation?** | «[#list subInstallation.importedExportedM» |

«[#if !subInstallation.importedExportedMe»

| Data sources for energy flows | «@before-cell[#list subInstallation.impor»«Source ${source\_index+1}»«@after-cell[/#list]» |
| --- | --- |
| «@before-row[#list subInstallation.import»«${(item.description)!}» | «@before-cell[#list subInstallation.impor»«[#if item=="MEASURABLE\_HEAT\_IMPORTED"]»«${source.measurableHeatImported.code}»«[#elseif item=="MEASURABLE\_HEAT\_FROM\_PUL»«[#elseif item=="MEASURABLE\_HEAT\_FROM\_NIT»«[#elseif item=="MEASURABLE\_HEAT\_EXPORTED»«[/#if]»«@after- cell[/#list]»«@after-row[/#list]» |
| **Net measurable heat flows** | «@before-cell[#list subInstallation.impor»«[#if (source.netMeasurableHeatFlows?has\_»«${source.netMeasurableHeatFlows.code}»«[/#if]»«@after-cell[/#list]» |

|  |  |
| --- | --- |
| **Description of methodology applied for each data source** |  |
| **Has the hierarchical order been followed** | «Yes»«[#else]»«No»«[/#if]» |
| **Reason for not following the hierarchy** | «${(subInstallation.importedExportedMeasu» |
| **Provide more details on any deviation from the hierarchy** |  |
| **Description of the methodology for determination of the relevant attributable emission factors** |  |
| **Are there any measurable heat flows imported from sub-installations producing pulp?** | «Yes»«[#else]»«No»«[/#if]» |
| **Description of methodology applied** | «${(subInstallation.importedExportedMeasu» «[#if subInstallation.importedExportedMea» |
| **Supporting files** | «[#list subInstallation.importedExportedM»«[#if (key==id)]${value?trim}[#break][/#i» |

### Waste gas balance

|  |  |
| --- | --- |
| **Are there any waste gas activities at this sub-installation?** | «[#list subInstallation.wasteGasBalance.w» |

«[#if !subInstallation.wasteGasBalance.wa»

| Data sources for waste gas amounts | «@before-cell[#list subInstallation.waste»«Source ${source\_index+1}»«@after-cell[/#list]» |
| --- | --- |
| «@before-row[#list subInstallation.wasteG»**Waste gases «${(item?split("\_")?last?lower\_case)!}»** | «@before-cell[#list subInstallation.waste»«[#list source.wasteGasActivityDetails as»«@after-cell[/#list]» |
| **Energy content of waste gases «${(item?split("\_")?last?lower\_case)!}»** | «@before-cell[#list subInstallation.waste»«[#list source.wasteGasActivityDetails as»«@after-cell[/#list]» |
| **Emission factor of waste gases «${(item?split("\_")?last?lower\_case)!}»** | «@before-cell[#list subInstallation.waste»«[#list source.wasteGasActivityDetails as»«@after-cell[/#list]»«@after-row[/#list]» |

|  |  |
| --- | --- |
| **Description of methodology applied for each data source** |  |
| **Has the hierarchical order been followed** | «Yes»«[#else]»«No»«[/#if]» |
| **Reason for not following the hierarchy** |  |
| **Provide more details on any deviation from the hierarchy** | «[/#if]» «[#if subInstallation.wasteGasBalance.sup» |
| **Supporting files** | «[#list subInstallation.wasteGasBalance.s»«[#if (key==id)]${value?trim}[#break][/#i»«[/#if]» |

«[/#if]»

«[#if subInstallation.specialProduct.spec»

### Calculation of historical activity levels for refinery products

|  |  |
| --- | --- |
| **Relevant CO2 weighted tonne (CWT) functions for this sub-installation** | «[#list subInstallation.specialProduct.re» |

| Data sources for the quantities of supplemental feed | «@before-cell[#list subInstallation.speci»«Source ${source\_index+1}»«@after-cell[/#list]» |
| --- | --- |
| «@before-row[#list subInstallation.specia»«${(item.description)!}» | «@before-cell[#list subInstallation.speci»«[#list source.details as key,value][#if »«@after-cell[/#list]»«@after-row[/#list]» |

|  |  |
| --- | --- |
| **Description of methodology applied for each data source** |  |
| **Has the hierarchical order been followed** | «Yes»«[#else]»«No»«[/#if]» |
| **Reason for not following the hierarchy** |  |
| **Provide more details on any deviation from the hierarchy** | «[/#if]» «[#if subInstallation.specialProduct.supp» |
| **Supporting files** | «[#list subInstallation.specialProduct.su»«[#if (key==id)]${value?trim}[#break][/#i»«[/#if]» |

«[/#if]»

«[#if subInstallation.specialProduct.spec»

### Calculation of historical activity levels for lime

| Data sources for lime | «@before-cell[#list subInstallation.speci»«Source ${source\_index+1}»«@after-cell[/#list]» |
| --- | --- |
| **Composition data** | «@before-cell[#list subInstallation.speci»«${(source.detail.code)!}»«@after-cell[/#list]» |

|  |  |
| --- | --- |
| **Description of methodology applied for each data source** |  |
| **Has the hierarchical order been followed** |  |
| **Reason for not following the hierarchy** |  |
| **Provide more details on any deviation from the hierarchy** | «[#if subInstallation.specialProduct.supp» |
| **Supporting files** | «[#if (key==id)]${value?trim}[#break][/#i» |

«[/#if]»

«[#if subInstallation.specialProduct.spec»

### Calculation of historical activity levels for dolime

| Data sources for dolime | «@before-cell[#list subInstallation.speci»«Source ${source\_index+1}»«@after-cell[/#list]» |
| --- | --- |
| **Composition data** | «@before-cell[#list subInstallation.speci»«${(source.detail.code)!}»«@after-cell[/#list]» |

|  |  |
| --- | --- |
| **Description of methodology applied for each data source** |  |
| **Has the hierarchical order been followed** |  |
| **Reason for not following the hierarchy** |  |
| **Provide more details on any deviation from the hierarchy** | «[#if subInstallation.specialProduct.supp» |
| **Supporting files** | «[#if (key==id)]${value?trim}[#break][/#i» |

«[/#if]»

«[#if subInstallation.specialProduct.spec»

### Calculation of historical activity levels for steam cracking

| Data sources for supplemental feed | «@before-cell[#list subInstallation.speci»«Source ${source\_index+1}»«@after-cell[/#list]» |
| --- | --- |
| **Hydrogen, ethylene and other HVC** | «@before-cell[#list subInstallation.speci»«${(source.detail.code)!}»«@after-cell[/#list]» |

|  |  |
| --- | --- |
| **Description of methodology applied for each data source** |  |
| **Has the hierarchical order been followed** |  |
| **Reason for not following the hierarchy** |  |
| **Provide more details on any deviation from the hierarchy** | «[#if subInstallation.specialProduct.supp» |
| **Supporting files** | «[#if (key==id)]${value?trim}[#break][/#i» |

«[/#if]»

«[#if subInstallation.specialProduct.spec»

### Calculation of historical activity levels for aromatics

|  |  |
| --- | --- |
| **Relevant CO2 weighted tonne (CWT) functions for this sub-installation** | «[#list subInstallation.specialProduct.re» |

| Data sources for the quantities of supplemental feed | «@before-cell[#list subInstallation.speci»«Source ${source\_index+1}»«@after-cell[/#list]» |
| --- | --- |
| «@before-row[#list subInstallation.specia»«${(item.description)!}» | «@before-cell[#list subInstallation.speci»«[#list source.details as key,value][#if »«@after-cell[/#list]»«@after-row[/#list]» |

|  |  |
| --- | --- |
| **Description of methodology applied for each data source** |  |
| **Has the hierarchical order been followed** |  |
| **Reason for not following the hierarchy** |  |
| **Provide more details on any deviation from the hierarchy** | «[#if subInstallation.specialProduct.supp» |
| **Supporting files** | «[#if (key==id)]${value?trim}[#break][/#i» |

«[/#if]»

«[#if subInstallation.specialProduct.spec»

### Calculation of historical activity levels for hydrogen

| Data sources for hydrogen volume fraction | «@before-cell[#list subInstallation.speci»«Source ${source\_index+1}»«@after-cell[/#list]» |
| --- | --- |
| **Total hydrogen production** | «@before-cell[#list subInstallation.speci»«${(source.details.totalProduction.code)!»«@after-cell[/#list]» |
| **Volume fraction of hydrogen** | «@before-cell[#list subInstallation.speci»«${(source.details.volumeFraction.code)!}»«@after-cell[/#list]» |

|  |  |
| --- | --- |
| **Description of methodology applied for each data source** |  |
| **Has the hierarchical order been followed** |  |
| **Reason for not following the hierarchy** |  |
| **Provide more details on any deviation from the hierarchy** | «[#if subInstallation.specialProduct.supp» |
| **Supporting files** | «[#if (key==id)]${value?trim}[#break][/#i» |

«[/#if]»

«[#if subInstallation.specialProduct.spec»

### Calculation of historical activity levels for synthesis gas

| Data sources for hydrogen volume fraction | «@before-cell[#list subInstallation.speci»«Source ${source\_index+1}»«@after-cell[/#list]» |
| --- | --- |
| **Total synthesis gas production** | «@before-cell[#list subInstallation.speci»«${(source.details.totalProduction.code)!»«@after-cell[/#list]» |
| **Composition data** | «@before-cell[#list subInstallation.speci»«${(source.details.compositionData.code)!»«@after-cell[/#list]» |

|  |  |
| --- | --- |
| **Description of methodology applied for each data source** |  |
| **Has the hierarchical order been followed** |  |
| **Reason for not following the hierarchy** |  |
| **Provide more details on any deviation from the hierarchy** | «[#if subInstallation.specialProduct.supp» |
| **Supporting files** | «[#if (key==id)]${value?trim}[#break][/#i» |

«[/#if]»

«[#if subInstallation.specialProduct.spec»

### Calculation of historical activity levels for ethylene oxide and ethylene glycols

| Data sources for production of ethylene oxide and glycols | CF(EOE) | «@before-cell[#list subInstallation.speci»«Source ${source\_index+1}»«@after-cell[/#list]» |
| --- | --- | --- |
| **Ethylene oxide** | 1.000 | «@before-cell[#list subInstallation.speci»«${(source.details.ethyleneOxide.code)!}»«@after-cell[/#list]» |
| **Monoethylene glycol** | 0.710 | «@before-cell[#list subInstallation.speci»«${(source.details.monothyleneGlycol.code»«@after-cell[/#list]» |
| **Diethylene glycol** | 0.830 | «@before-cell[#list subInstallation.speci»«${(source.details.diethyleneGlycol.code)»«@after-cell[/#list]» |
| **Triethylene glycol** | 0.880 | «@before-cell[#list subInstallation.speci»«${(source.details.triethyleneGlycol.code»«@after-cell[/#list]» |

|  |  |
| --- | --- |
| **Description of methodology applied for each data source** |  |
| **Has the hierarchical order been followed** |  |
| **Reason for not following the hierarchy** |  |
| **Provide more details on any deviation from the hierarchy** | «[#if subInstallation.specialProduct.supp» |
| **Supporting files** | «[#if (key==id)]${value?trim}[#break][/#i» |

«[/#if]»

«[#if subInstallation.specialProduct.spec»

### Calculation of historical activity levels for vinyl chloride monomer

| Data sources for heat consumption from hydrogen combustion | «@before-cell[#list subInstallation.speci»«Source ${source\_index+1}»«@after-cell[/#list]» |
| --- | --- |
| **Quantification of heat from hydrogen** | «@before-cell[#list subInstallation.speci»«${(source.detail.code)!}»«@after-cell[/#list]» |

|  |  |
| --- | --- |
| **Description of methodology applied for each data source** |  |
| **Has the hierarchical order been followed** |  |
| **Reason for not following the hierarchy** |  |
| **Provide more details on any deviation from the hierarchy** | «[#if subInstallation.specialProduct.supp» |
| **Supporting files** | «[#if (key==id)]${value?trim}[#break][/#i» |

«[/#if]»

«[/#if]»

«[/#list]»

«[#list params.permitContainer.permit.mon»

## Sub-installation with fallback approach: «${subInstallation.subInstallationType.de»

### Sub-installation details

|  |  |
| --- | --- |
| **Product benchmark** | «${subInstallation.subInstallationType.de» |
| **Describe the system boundaries of this sub-installation** | «${subInstallation.description}»«[#if subInstallation.supportingFiles?siz» |
| **Supporting files** | «[#list subInstallation.supportingFiles a»«[#list params.permitContainer.permitAtta»«[#if (key==id)]${value?trim}[#break][/#i»«[/#if]» |

### Annual activity levels

«[#if !(subInstallation.subInstallationTy»

«[#if subInstallation.subInstallationType»

| Data sources for energy flows | «@before-cell[#list subInstallation.annua»«Source ${source\_index + 1}»«@after-cell[/#list]» |
| --- | --- |
| **Quantification of measurable heat flows** | «@before-cell[#list subInstallation.annua»«${source.quantification.code}»«@after-cell[/#list]» |
| **Net measurable heat flows** | «@before-cell[#list subInstallation.annua»«${source.net.code}»«@after-cell[/#list]» |

«[#if subInstallation.subInstallationType»

| Data sources for energy flows | «@before-cell[#list subInstallation.annua»«Source ${source\_index + 1}»«@after-cell[/#list]» |
| --- | --- |
| **Fuel Input** | «@before-cell[#list subInstallation.annua»«${source.fuelInput.code}»«@after-cell[/#list]» |
| **Energy Content** | «@before-cell[#list subInstallation.annua»«${source.energyContent.code}»«@after-cell[/#list]» |

|  |  |
| --- | --- |
| **Description of methodology applied** | «${(subInstallation.annualLevel.methodolo»«[#if !(subInstallation.subInstallationTy» |
| **Has the hierarchical order been followed** | «[#if subInstallation.annualLevel.hierarc» «[#if subInstallation.annualLevel.hierarc» |
| **Reason for not following the hierarchy** | «${(subInstallation.annualLevel.hierarchi» |
| **Provide more details on any deviation from the hierarchy** | «${(subInstallation.annualLevel.hierarchi» |
| **Description of the methodology used for keeping track of the products produced** | «${(subInstallation.annualLevel.trackingM»«[#if subInstallation.annualLevel.support» |
| **Supporting files** | «[#if (key==id)]${value?trim}[#break][/#i» |

«[#if !(subInstallation.subInstallationTy»

### Directly attributable emissions

|  |  |
| --- | --- |
| **Attribution of directly attributable emissions** | «${subInstallation.directlyAttributableEm»«[#if subInstallation.directlyAttributabl» |
| **Supporting files** | «[#list subInstallation.directlyAttributa»«[#if (key==id)]${value?trim}[#break][/#i» |

### Fuel input and relevant emission factor

«[#if subInstallation.subInstallationType»

|  |  |
| --- | --- |
| **Is fuel input relevant for this sub-installation?** | «[#if subInstallation.fuelInputAndRelevan»«Yes»«[#else]»«No»«[/#if]» |

«[/#if]»

«[/#if]»

|  |  |
| --- | --- |
| **Is there any fuel input from waste gases?** | «[#if subInstallation.fuelInputAndRelevan»«Yes»«[#else]»«No»«[/#if]» |

|  |  |
| --- | --- |
| Data sources for fuel input | «@before-cell[#list subInstallation.fuelI»«Source ${source\_index + 1}»«@after-cell[/#list]» |
| **Fuel input** | «@before-cell[#list subInstallation.fuelI»«${(source.fuelInput.code)!}»«@after-cell[/#list]» |
| **Net calorific value** | «@before-cell[#list subInstallation.fuelI»«${source.netCalorificValue.code}»«@after-cell[/#list]» |
| **Weighted emission factor** | «@before-cell[#list subInstallation.fuelI»«${source.weightedEmissionFactor.code}»«@after-cell[/#list]» |

«[#if subInstallation.fuelInputAndRelevan»

|  |  |
| --- | --- |
| **Fuel input from waste gases** | «@before-cell[#list subInstallation.fuelI»«${source.wasteGasFuelInput.code}»«@after-cell[/#list]» |
| **Net calorific value** | «@before-cell[#list subInstallation.fuelI»«${source.wasteGasNetCalorificValue.code}»«@after-cell[/#list]» |
| **Emission factor** | «@before-cell[#list subInstallation.fuelI»«${source.emissionFactor.code}»«@after-cell[/#list]» |

«[/#if]»

|  |  |
| --- | --- |
| **Description of methodology applied** | «${(subInstallation.fuelInputAndRelevantE» |
| **Has the hierarchical order been followed** | «[#if subInstallation.fuelInputAndRelevan» «[#if subInstallation.fuelInputAndRelevan» |
| **Reason for not following the hierarchy** | «${(subInstallation.fuelInputAndRelevantE» |
| **Provide more details on any deviation from the hierarchy** | «${(subInstallation.fuelInputAndRelevantE» «[#if subInstallation.fuelInputAndRelevan» |
| **Supporting files** | «[#list subInstallation.fuelInputAndRelev»«[#if (key==id)]${value?trim}[#break][/#i» |

«[/#if]»

«[#if subInstallation.subInstallationType»

«[#if subInstallation.measurableHeat.meas»

### Measurable heat produced

|  |  |
| --- | --- |
| **Is measurable heat produced at this sub-installation?** | «[#if subInstallation.fuelInputAndRelevan»«Yes»«[#else]»«No»«[/#if]» |

«[#if subInstallation.fuelInputAndRelevan»

| Data sources for measurable heat produced | «@before-cell[#list subInstallation.measu»«Source ${source\_index + 1}»«@after-cell[/#list]» |
| --- | --- |
| **Heat produced** | «@before-cell[#list subInstallation.measu»«${source.heatProduced.code}»«@after-cell[/#list]» |

|  |  |
| --- | --- |
| **Description of methodology applied** | «${(subInstallation.measurableHeat.measur» |
| **Has the hierarchical order been followed** | «[#if subInstallation.measurableHeat.meas» «[#if subInstallation.measurableHeat.meas» |
| **Reason for not following the hierarchy** | «${(subInstallation.measurableHeat.measur» |
| **Provide more details on any deviation from the hierarchy** | «${(subInstallation.measurableHeat.measur» «[#if subInstallation.measurableHeat.meas» |
| **Supporting files** | «[#list subInstallation.measurableHeat.me»«[#if (key==id)]${value?trim}[#break][/#i» |

«[/#if]»

### Measurable heat imported

|  |  |
| --- | --- |
| **Is any measurable heat imported to this sub-installation?** | «[#list subInstallation.measurableHeat.me» |

«[#if !subInstallation.measurableHeat.mea»

| Data sources for measurable heat imported | «@before-cell[#list subInstallation.measu»«Source ${source\_index+1}»«@after-cell[/#list]» |
| --- | --- |
| «@before-row[#list subInstallation.measur»**Imported from «${(item?split("\_")?last?lower\_case)!}»** | «@before-cell[#list subInstallation.measu»«[#list source.measurableHeatImportedActi»«@after-cell[/#list]» |
| **Net measurable heat flows imported from «${(item?split("\_")?last?lower\_case)!}»** | «@before-cell[#list subInstallation.measu»«[#list source.measurableHeatImportedActi»«@after-cell[/#list]»«@after-row[/#list]» |

|  |  |
| --- | --- |
| **Description of methodology applied** | «${(subInstallation.measurableHeat.measur» |
| **Has the hierarchical order been followed** | «[#if subInstallation.measurableHeat.meas» «[#if subInstallation.measurableHeat.meas» |
| **Reason for not following the hierarchy** | «${(subInstallation.measurableHeat.measur» |
| **Provide more details on any deviation from the hierarchy** | «${(subInstallation.measurableHeat.measur» |
| **Description of the methodology for determination of the relevant attributable emission factors** | «${(subInstallation.measurableHeat.measur»«[#if subInstallation.measurableHeat.meas» |
| **Supporting files** | «[#list subInstallation.measurableHeat.me»«[#if (key==id)]${value?trim}[#break][/#i» |

«[/#if]»

«[#if subInstallation.subInstallationType»

### Measurable heat exported

|  |  |
| --- | --- |
| **Is any measurable heat exported from this sub-installation?** | «[#if subInstallation.measurableHeat.meas» |

| Data sources for measurable heat exported | «@before-cell[#list subInstallation.measu»«Source ${source\_index+1}»«@after-cell[/#list]» |
| --- | --- |
| **Heat exported** | «@before-cell[#list subInstallation.measu»«${source.heatExported.code}»«@after-cell[/#list]» |
| **Net measurable heat flows** | «@before-cell[#list subInstallation.measu»«${source.netMeasurableHeatFlows.code}»«@after-cell[/#list]» |

|  |  |
| --- | --- |
| **Description of methodology applied** | «${(subInstallation.measurableHeat.measur» |
| **Has the hierarchical order been followed** | «[#if subInstallation.measurableHeat.meas» «[#if subInstallation.measurableHeat.meas» |
| **Reason for not following the hierarchy** | «${(subInstallation.measurableHeat.measur» |
| **Provide more details on any deviation from the hierarchy** | «${(subInstallation.measurableHeat.measur» |
| **Description of the methodology for determination of the relevant attributable emission factors** | «${(subInstallation.measurableHeat.measur»«[#if subInstallation.measurableHeat.meas» |
| **Supporting files** | «[#list subInstallation.measurableHeat.me» |

«[/#if]»

«[/#if]»

«[/#list]»

## Methods at installation level

«[#if params.permitContainer.permit.monit»

### Physical parts of the installation and units which serve more than one sub-installation

|  |  |
| --- | --- |
| Are there any physical parts of the installation or units which serve more than one sub-installation? | «[#if params.permitContainer.permit.monit»«Yes»«[/#if]»«[#if params.permitContainer.permit.monit» |
| Methods used to assign parts of installations and their emissions to sub-installations | «${(params.permitContainer.permit.monitor» |

«[#if params.permitContainer.permit.monit»

| Physical part of the installation or unit | Sub-installations |
| --- | --- |
| «@before-row[#list params.permitContainer»«${(conn.itemName)!}»«@after-row[/#list]» | «[#list conn.subInstallations as sub]${(s» |

«[/#if]»

### Data gaps and double counting

|  |  |
| --- | --- |
| Methods used for ensuring that data gaps and double counting are avoided |  |

## Procedures

### Assignment of Responsibilities

|  |  |
| --- | --- |
| Name of the procedure |  |
| Procedure reference |  |
| Diagram reference |  |
| Procedure description |  |
| Department or role responsible for data maintenance |  |
| Location of records |  |
| IT system used |  |
| List of EN or other standards applied | «${(value.standardsAppliedList)!}» |

### Monitoring plan appropriateness

|  |  |
| --- | --- |
| Name of the procedure |  |
| Procedure reference |  |
| Diagram reference |  |
| Procedure description |  |
| Department or role responsible for data maintenance |  |
| Location of records |  |
| IT system used |  |
| List of EN or other standards applied |  |

### Data flow activities

|  |  |
| --- | --- |
| Name of the procedure |  |
| Procedure reference |  |
| Diagram reference |  |
| Procedure description |  |
| Department or role responsible for data maintenance |  |
| Location of records |  |
| IT system used |  |
| List of EN or other standards applied |  |

### Control activities

|  |  |
| --- | --- |
| Name of the procedure |  |
| Procedure reference |  |
| Diagram reference |  |
| Procedure description |  |
| Department or role responsible for data maintenance |  |
| Location of records |  |
| IT system used |  |
| List of EN or other standards applied |  |

## Energy flows

### Fuel input flows

| Data sources | «@before-cell[#list params.permitContaine»«Source ${sources\_index + 1}»«@after-cell[/#list]» |
| --- | --- |
| **Fuel input** | «@before-cell[#list params.permitContaine»«${sources.fuelInput}»«@after-cell[/#list]» |
| **Energy content** | «@before-cell[#list params.permitContaine»«${sources.energyContent}»«@after-cell[/#list]» |

|  |  |
| --- | --- |
| **Description of methodology applied for each data source** | «${params.permitContainer.permit.monitori» |
| **Has the hierarchical order been followed** |  |
| **Reason for not following the hierarchy** | «${params.permitContainer.permit.monitori» |
| **Provide more details on any deviation from the hierarchy** | «${params.permitContainer.permit.monitori» «[#if params.permitContainer.permit.monit» |
| **Supporting files** | «[#if (key==id)]${value?trim}[#break][/#i»«[/#if]» |

### Measurable heat flows of imports, exports, consumption and production

|  |  |
| --- | --- |
| **Are measurable heat flows relevant for the installation?** |  |

| Data sources | «@before-cell[#list params.permitContaine»«Source ${sources\_index + 1}»«@after-cell[/#list]» |
| --- | --- |
| **Quantification of measurable heat flows** | «@before-cell[#list params.permitContaine»«${sources.quantification.code}»«@after-cell[/#list]» |
| **Net measurable heat flows** | «@before-cell[#list params.permitContaine»«${sources.net.code}»«@after-cell[/#list]» |

|  |  |
| --- | --- |
| **Description of methodology applied for each data source** | «${params.permitContainer.permit.monitori» |
| **Has the hierarchical order been followed** |  |
| **Reason for not following the hierarchy** | «${params.permitContainer.permit.monitori» |
| **Provide more details on any deviation from the hierarchy** | «${params.permitContainer.permit.monitori»**«[/#if]»** «[#if params.permitContainer.permit.monit» |
| **Supporting files** | «[#list params.permitContainer.permitAtta»«[#if (key==id)]${value?trim}[#break][/#i»«[/#if]» |

### Waste gas flows of imports, exports, consumption and production

|  |  |
| --- | --- |
| **Are waste gas flows relevant for the installation?** |  |

«[#if params.permitContainer.permit.monit»

| Data sources | «@before-cell[#list params.permitContaine»«Source ${sources\_index + 1}»«@after-cell[/#list]» |
| --- | --- |
| **Quantification of waste gas flows** | «@before-cell[#list params.permitContaine»«${sources.quantification.code}»«@after-cell[/#list]» |
| **Energy content of waste gases** | «@before-cell[#list params.permitContaine»«${sources.energyContent}»«@after-cell[/#list]» |

|  |  |
| --- | --- |
| **Description of methodology applied for each data source** | «${params.permitContainer.permit.monitori» |
| **Has the hierarchical order been followed** |  |
| **Reason for not following the hierarchy** | «${params.permitContainer.permit.monitori» |
| **Provide more details on any deviation from the hierarchy** | «${params.permitContainer.permit.monitori»**«[/#if]»** «[#if params.permitContainer.permit.monit» |
| **Supporting files** | «[#list params.permitContainer.permitAtta»«[#if (key==id)]${value?trim}[#break][/#i»«[/#if]» |

### Electricity flows of imports, exports, consumption and production

|  |  |
| --- | --- |
| **Is electricity produced within the installation?** |  |

«[#if params.permitContainer.permit.monit»

| Data sources | «@before-cell[#list params.permitContaine»«Source ${sources\_index + 1}»«@after-cell[/#list]» |
| --- | --- |
| **Quantification of energy flows** | «@before-cell[#list params.permitContaine»«${sources.quantification.code}»«@after-cell[/#list]» |

|  |  |
| --- | --- |
| **Description of methodology applied for each data source** | «${params.permitContainer.permit.monitori» |
| **Has the hierarchical order been followed** |  |
| **Reason for not following the hierarchy** | «${params.permitContainer.permit.monitori» |
| **Provide more details on any deviation from the hierarchy** | «${params.permitContainer.permit.monitori»**«[/#if]»** «[#if params.permitContainer.permit.monit» |
| **Supporting files** | «[#list params.permitContainer.permitAtta»«[#if (key==id)]${value?trim}[#break][/#i»«[/#if]» |

«[/#if]»