



Monitoring Methodology Plan Interim Guidance for Operators

Issue 1

30 January 2020

We are providing this guidance to assist in the process of improving monitoring methodology plans required by the [Free Allocation Regulation](#). There is however existing guidance issued by the EU which provides further details:

<https://www.sepa.org.uk/regulations/climate-change/eu-emissions-trading-system/>

https://ec.europa.eu/clima/policies/ets/allowances_en#tab-0-1

A review of this interim guidance will be undertaken as necessary and to include further details of the activity level change reporting requirements.

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1. What is a Monitoring Methodology Plan (MMP)?

The concept of a monitoring methodology plan was introduced by the Free Allocation Regulation FAR in 2019. The MMP sets out the methods you will follow to monitor the data required to calculate the amount of free allocation your installation will receive.

You will also have a monitoring plan (MP) which is for monitoring and reporting of your installation's emissions in accordance with the principles of the Monitoring and Reporting Regulation. –

The (MMP) considers what parts of your installation's activities would be eligible for a free allocation of allowances, and their relevant activity levels. This is done using the concept of 'sub-installations'.

If you took part in the data collection exercise in 2019 your MMP may consist of 2 parts:

1. 'backward looking' i.e. explaining how you have collected data during the baseline period (2014-2018), that is the basis of your application for free allowances in Phase IV, and
2. 'forward looking' i.e. explaining how you monitored this information during 2019 and 2020 as well as during the 1st allocation period of Phase IV, as you will need to monitor your activity levels, verify and report them annually and your free allocation of allowances being adjusted as necessary.

If you have a new installation your MMP will be forward looking only as you were not required to provide information to us for the baseline data collection exercise. The MMP will still need to be approved by us;

The MMP must describe how you calculate the relevant data and data sources used must meet the highest level in the hierarchy of accuracy (see section 4 of Annex VII of the FAR). This hierarchy applies to all categories of installation and any deviations must be provided with a relevant justification described in more detail below. **You will not have been asked to supply this extra information on deviation from the hierarchy as part of the data collection exercise.**

1.1 What happens now with the MMP?

If you took part in the data collection exercise, we will have made a review of some of the backward looking aspects of your MMP to ensure that the data you supplied was compliant with the Free Allocation Regulation (FAR). This review did not cover all aspects, such as the forward looking part of the MMP. Therefore, we are now starting the process to "Approve" your MMP and therefore we will be re-visiting MMPs to ensure that the forward looking aspects comply with the requirements of the FAR. For example, we will be requesting that you provide the relevant justification for not using the highest accuracy data sources.

Your verifier will be required to check that you have monitored against the approved MMP to produce your 1st report on activity level which will be submitted to us in the first quarter 2021 covering the 2019 and 2020 calendar years.

1.2 What is involved in the MMP Approval Process?

The minimum content of the MMP is contained in [Annex VI of the FAR](#); we will be checking to ensure that this is complied with. However, some areas of the MMP template are highlighted below to assist you in reviewing and updating the template:

<p>1.2.1 SHEET A Version MMP – MMP Version Control</p> <p>This table must be updated every time an alteration is made to the MMP detailing the nature of the change.</p>
<p>1.2.2 SHEET B Installation Data</p> <p>Section 'I Identification of the Installation'</p> <p>The information entered here should match the information contained on the permit. The registry ID in 3.(a).(ii) is the EUTL ID and is now the NIMs ID. Contact details: Must be completed for the primary person, a second contact is optional.</p>
<p>1.2.3 SHEET C INSTALLATION DESCRIPTION</p> <p>This section provides the information which is used to compare against multiple points in the MMP as it will set out how the installation is broken down into sub-installations; this information will be used to check against information supplied in Sheet D, F & G. The information provided should be clear and sufficient to enable a lay person to understand the installation and processes occurring within it.</p>
<p>Section 'I List of Sub-installations (product and fallback)':</p> <p>We will check the following against the data collection template:</p> <ul style="list-style-type: none"> • What sub-installations are expected? • Does this match the data collection template? • Does this match the flow diagram required under Section II below? • Is the carbon leakage (CL) status of the fallback sub-installations correctly listed? (Check the CL status against baseline data or NACE/prodcom codes against the CL list)
<p>Section 'II Description of installation'</p> <p>(a) Description of the sub-installation This is needed to enable a full check on the split of the sub-installations and equipment included as well as the measurement devices used.</p> <p>(b) Reference to the latest approved monitoring plan This should include a date of issue as ETSWAP issues a consolidated permit each time it is varied.</p> <p>(c) Reference to Flow Diagram – Filename and date should be included in the box;</p> <p><u>The Flow Diagram should be submitted to us on a separate document and is to be uploaded through ETSWAP in support of the MMP.</u></p> <p>It MUST include the following (requirement from Annex VI of the FAR):</p> <ol style="list-style-type: none"> 1. A description of the installation, including in particular: <ul style="list-style-type: none"> • a description of the main processes carried out, • a list of emissions sources, • a flow diagram and a plan of the installation which allow an understanding of the main material and energy flows; 2. A diagram which contains at least the following information: <ul style="list-style-type: none"> • The technical elements of the installation, identifying emissions sources as well as heat producing and consuming units; • All energy and material flows, in particular the source streams, measurable and non-measurable heat, electricity where relevant, and waste gases; • The points of measurement and metering devices; • Boundaries of the sub-installations, including the split between sub-installation serving sectors deemed to be exposed to a significant risk of carbon leakage and sub-installations serving other sectors, based on NACE rev. 2 or PRODCOM;

We will check information provided in Sheet C match the information entered into Sheet D, F & G. This is to ensure relevant units appear in these other sheets, which discuss the separate sub-installations and where a unit serves 2 sub-installations.

1.2.4 SHEET D METHODS & PROCEDURES

Section 'I Methods at installation level'

(a) Physical parts serving more than 1 sub-installation;

We will check the following:

- From the submissions under Sheet C - description of the installations and the breakdown into sub-installations, do any units serve more than 1 sub-installation? E.g., does a boiler or furnace provide the energy to produce 2 different products? Is one product carbon leakage exposed and the other not?
- If so, there should be an entry in this section; if not the section is blank and equipment will be mentioned under specific sub-installations in Sheet F & G

(b) Methods to assign parts of installations and their emissions to the respective sub-installations:

ANNEX VII 3.2 of the FAR:

For each sub-installation mentioned in point (a) the description of methods to assign parts of installations which serve more than one sub-installation and their emissions to the respective sub-installations must be included here. This does not apply to sub-installations which meet the 95% de-minimis rule in Article 10(3).

The methods described in this section of the MMP must correspond to the methods listed in the FAR:

Where data is not available - there are 2 possible routes: Annex VII 3.2(1)

- (a) Where different products are produced one after the other in the same production line, inputs, outputs and corresponding emissions shall be attributed sequentially based on the usage time per year for each sub-installation;
- (b) Inputs, outputs and corresponding emissions shall be attributed based on the mass or volume of individual products produced or estimates based on the ratio of free reaction enthalpies of the chemical reactions involved or based on another suitable distribution key that is corroborated by a sound scientific methodology.

Where several sources of data are available – there are several possible routes 3.2(2)

- (a) Determination of the split based on a determination method, such as sub-metering, estimate, correlation, used equally for each sub-installation. Where the sum of the sub-installation data is different from the data determined separately for the installation, a uniform “reconciliation factor” is applied for uniform correction to meet the total figure of the installation as follows. Annex VII 3.2 (2) contains the calculation which must be completed.
- (b) If only one sub-installation’s data is unknown or is of lower quality than the data of other sub-installations, known sub-installation data may be subtracted from the total installation data. This method is preferred only for sub-installations which contribute smaller quantities to the installation’s allocation.

It is possible that this information is provided instead in Sheets F and or G – however, the MMP on Sheet D should reference the later sections.

(c) Methods to avoid double counting

The total emissions, adding together the emissions attributed to sub-installations, should equal to 100% of the verified yearly emissions.

This calculation is displayed in the data collection template, Sheet K III Table 2. However the MMP requires a description on how this has been done (providing a calculation) and why there are any deviations from 100%.

Where deviations occur (i.e. not adding up to 100%) this must be explained. The reasons for this might be that there are emissions which are eligible but are not being claimed for under a sub-installation.

Please check that the relevant calculation as described is carried out.

Section 'II Procedures'

The following procedures are required as part of the MMP:

- (a) Managing assignment of responsibilities for monitoring & reporting and managing competencies of responsible personnel
- (b) Data Flow Activities
- (c) Control Activities

The MMP template must as a minimum have the following information provided for each procedure:

- (a) Title of Procedure
- (b) Reference for the procedure

Other information about the procedure is optional.

The procedures may be requested by us (Article 8(3) of the FAR) to check compliance with the requirements of the FAR, however, these procedures will not be approved by us. The procedures referenced could be the same as those used for emissions monitoring as processes and metering could be the same. However, there are a considerable number of new items required as part of the baseline data collection/annual activity level reporting where procedures may not have been developed by the Operator for Phase III:

Examples of areas where the monitoring methodology plan procedures may differ from emissions monitoring:

Heat

Where heat is generated/used/exported/imported the measurement is generally different to emissions monitoring: the installation wide balance of heat import, production, consumption and export must have an appropriate data flow and control activity associated with the calculations; there must be a reference to this in procedures e.g. calibration schedules of meters.

Electricity

Where a site produces electricity, the installation wide balance of electricity import, production, consumption and export is required; again this is not a requirement of emissions monitoring and therefore this must be acknowledged in the data flow and control activities

List of Products Produced by Prodcom

Products and production levels associated with sub-installations needs to be reported and must be acknowledged in the procedures.

Product Benchmark

Production levels calculated in accordance with the system boundaries e.g. air dried tonnes of saleable product of uncoated paper.

Annual Emissions per sub-installation

The installations yearly emissions must be broken down into the separate sub-installations – you may require to refer to section 1.2.4(b) above on how to set out your procedures to split emissions to the respective sub-installation.

Control System

The requirements of the control system associated with the data monitored using your MMP are outlined in Article 11 of the FAR. You will be required to update your current control system for emission monitoring with information relevant to data collection under the MMP

1.2.5 SHEETS E, F & G of the MMP Template

Sheets E, F and G of the MMP require a description of the methods used to calculate the data sets required for each parameter. We need to ensure that the following is provided for each data set that is relevant:

1.2.6 Data Sources Used Meet the Highest Accuracy:

Where the following data sources are **not** used at the installation then **“FALSE”** must be entered in the relevant section of the MMP showing that the highest accuracy is not met. You must then provide a justification to us for not meeting this. You must then meet the next highest in the hierarchy in descending order.

Parameter Being Measured (Installation/Sub-installation)	Data Source to Meet Highest Accuracy
Fuel Input	4.4.(a) Methods in accordance with the monitoring plan approved under Regulation (EU) No. 601/2012; 4.4.(b) Readings of measuring instruments subject to national legal metrological control (NLMC) or measuring instruments compliant with the requirements of the Directive 2014/31/EU or Directive 2014/32/EU for direct determination of a data set
Measurable Heat	4.5. (a) Readings of measuring instruments subject to national legal metrological control (NLMC) or measuring instruments compliant with the requirements of the Directive 2014/31/EU or Directive 2014/32/EU
Net Measurable Heat Flows	Method 1 (Using measurements) of Section 7.2
Waste Gas Balance	4.4.(a) Methods in accordance with the monitoring plan approved under Regulation (EU) No. 601/2012; 4.4.(b) Readings of measuring instruments subject to national legal metrological control (NLMC) or measuring instruments compliant with the requirements of the Directive 2014/31/EU or Directive 2014/32/EU for direct determination of a data set
Electricity	4.5. (a) Readings of measuring instruments subject to national legal metrological control (NLMC) or measuring instruments compliant with the requirements of the Directive 2014/31/EU or Directive 2014/32/EU
Quantities of Products (Product benchmark)	4.4.(a) Methods in accordance with the monitoring plan approved under Regulation (EU) No. 601/2012; 4.4.(b) Readings of measuring instruments subject to national legal metrological control (NLMC) or measuring instruments compliant with the requirements of the Directive 2014/31/EU or Directive 2014/32/EU for direct determination of a data set
Emission Factors & Energy Content	4.6. (a) Methods for determining calculation factors in accordance with the monitoring plan approved under Regulation (EU) No. 601/2012 4.6. (b) Laboratory analyses in accordance with section 6.1 of Annex VII (FAR)

You must provide evidence of the following:

- (a) Where a data source is subject to NLMC ;
- (b) Where a data source is claimed to be compliant with directive 2014/31/EU or 2014/32/EU

1.2.7 Description of the Methodology Applied:

The MMP under various sections required a description of how the data set is monitored. You can either enter the full information within the MMP or provide a reference to an external document. Where described in a separate document, that document must also be submitted.

Where a description of methodology is required, the following aspects must be demonstrated and this will be used to check the hierarchy methods applied:

- Calculation steps,
- Data sources & **corroborating data sources**,
- Calculation formulae,
- Relevant calculation factors including unit of measurement,
- Horizontal and vertical checks for corroborating data,
- Procedures underpinning sampling plan,
- Measurement equipment used with reference to the relevant diagram and a description how they are installed and maintained,
- A list of laboratories engaged in carrying out relevant analytical procedures.

System Boundary Description:

For each sub-installation a system boundary description is needed; you must ensure that the description covers the following:

- The technical units included,
- The processes carried out,
- The input materials and fuels, and
- The products and outputs attributed

You can either enter the information into the MMP, or as above, reference an external document which must be submitted with the MMP.

1.2.8 Methods used to produce data for the benchmark improvement;

It has yet to be finalised whether we will ask for this information to be reported, an update will be provided relating to annual activity level reporting.

Some of this information will already have been entered onto Sheet E where the installation comprises a single sub-installation.

Direct emissions of the **SUB-INSTALLATION**

This section should include how the data was gathered to enter into the NIMs template under Sheet F & G ((e) Blue section Attribution of Emissions). The approach chosen should first follow Article 10 of the FAR and the method is defined in Annex VII (10) rules for determining emissions at sub-installation level for the purpose of updating benchmark values.

1.2.9 Deviation from the Hierarchy – What Does This Mean?

The FAR Annex VII Section 4.1 and 4.2 set out the acceptable routes which must be followed where the data source representing the highest achievable accuracy cannot be used. Each relevant parameter sets out which data source represents the highest achievable accuracy.

Where the highest achievable accuracy cannot be met the next highest in the hierarchy must be applied. The justification for not applying the highest or next highest in the hierarchy must be provided with the MMP to the competent authority.

The justification must be reviewed annually to ensure that any deviation is still applicable.

Technical feasibility: That justification shall be based on the operator having technical resources capable of meeting the needs of a proposed system or requirement that can be implemented in the required time for the purposes of the FAR. Those technical resources shall include availability of required techniques and technology.

Unreasonable Cost: An unreasonable cost template has been provided which must be completed in accordance to the specific data source as each has a different improvement factor:

(a) In the case of a fuel or material containing carbon, including waste gases, the emissions that would result if the carbon contained in the annual quantity of the fuel or material were converted into CO₂;

(b) In the case of emissions monitored by a measurement-based methodology, the annual emissions of the respective emission source;

(c) In the case of measurable heat, the respective annual amount of measurable heat multiplied by the heat benchmark;

(d) In the case of non-measurable heat, the respective annual amount of non-measurable heat multiplied by the fuel benchmark;

(e) In the case of electricity, the respective annual amount of electricity multiplied by the factor specified in Article 22(3);

(f) In the case of the quantity of a product for which a product benchmark applies, the sub-installation's preliminary annual number of emission allowances allocated free of charge determined in accordance with Article 16(2) for the first year of the respective allocation period. Where the relevant benchmark has not yet been determined in accordance with Article 10a (2) of Directive 2003/87/EC, the respective benchmark specified in Annex I to this Regulation shall be used.

Simplified Uncertainty Assessment

Based on a simplified uncertainty assessment identifying major sources of uncertainty and estimating their associated levels of uncertainty, the operator demonstrates to the satisfaction of the competent authority that the associated level of accuracy of the data source proposed by the operator is equivalent to or better than the level of accuracy of most accurate data sources pursuant to section 4 of Annex VII.

2. Activity Level Change Reporting

You should be monitoring against your MMP now to produce a report covering the years 2019 & 2020. This data will also require to be verified and submitted to us during the 1st quarter of 2021. The rules governing activity level change reporting and the template to be used has not been finalised. We will update this section in due course.

3. What to do if you need to change your Monitoring Methodology Plan

As the MMP is a live document, any changes can be captured at various times depending upon the type of change as described in Article 9 of the FAR. You are advised to review your MMP to ensure that it reflects current practice or any changes which were made as part of the

baseline data collection review process. You will need to record those changes in the version control section. If you make a change to the version submitted to us, please re-submit via email. This will ensure that we are reviewing the most recent version. ETSWAP will be updated in future to allow modifications to be submitted via the system.

4. Further guidance on measurable heat

Guidance document 5 provides detailed examples on what is considered compliant approaches to monitoring heat.

Below is a summary of things which we may review in the MMP:

- Is heat metering installed which meets the highest accuracy (Readings of measuring instruments subject to national legal metrological control or measuring instruments compliant with the requirements of the Directive 2014/31/EU or Directive 2014/32/EU)? Is there evidence of this?
- If the highest accuracy method is not installed has a deviation (technical or cost – benefit) justification been provided?
- Is the heat metering installed at the heat consuming facilities? Is this shown on the flow diagram correctly? Has a justification been provided why the metering is not installed at the heat consuming facilities?

5. References to external useful documents:

Further information which may be useful:

Free Allocation Rules: COMMISSION DELEGATED REGULATION (EU) 2019/331 of 19 December 2018 determining transitional Union-wide rules for harmonised free allocation of emission allowances pursuant to Article 10a of Directive 2003/87/EC of the European Parliament and of the Council

<https://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:32019R0331&from=EN>

Allocation Change Rules: Commission Implementing Regulation (EU) 2019/1842 of 31 October 2019 laying down rules for the application of Directive 2003/87/EC of the European Parliament and of the Council as regards further arrangements for the adjustments to free allocation of emission allowances due to activity level changes

<https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX:32019R1842>

If you require further assistance you can contact SEPA:

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