TNP Regulatory Guidance

1. INTRODUCTION

1. On 1 January 2016, the United Kingdom is introducing a Transitional National Plan (TNP). The TNP allows operators of Large Combustion Plants (LCP), i.e. those with a thermal input greater than or equal to 50MW\textsubscript{th}, to optionally comply with the Industrial Emissions Directive (IED - 2010/75/EC) by means of annual mass based emissions caps in place of the Emission Limit Values (ELV) which would otherwise apply according to Article 30(2) of the IED. The TNP applies from 1 January 2016 until 30 June 2020 and, similarly to the previous directive, the Large Combustion Plant Directive (LCPD - 2001/80/EC), the TNP has the provision for enabling mass emission allowances to be traded internally between plant owned by a single operator and between Operators within the TNP. Individual pollutants can be opted into the TNP (NO\textsubscript{x}, SO\textsubscript{2} and Dust) with gas turbines being restricted to NO\textsubscript{x} only. In addition to the limits placed on the LCP by the TNP, each LCP will be subject to the respective permit ELVs applicable from 1 January 2016.

It is worth noting that although there is general information provided within this document, the requirements of the sites’ individual Permits take precedence and therefore should be the first point of reference for specific information.

2. The trading scheme applies to the whole of the UK and so this Guidance has been prepared jointly by industry and the Environmental Regulators who regulate the TNP and the related trading scheme in the UK. These are the Environment Agency, Natural Resources Wales (NRW), the Scottish Environment Protection Agency (SEPA) and the Northern Ireland Environment Agency (NIEA), part of the Department of the Environment (Northern Ireland). As such, the Guidance will apply throughout the UK, although it should be noted that some requirements for a particular aspect of the scheme may vary between regulators.

3. The aim of this guidance document is to advise regulatory staff members and operators of the LCP within the TNP on the operation and implementation of the trading scheme and the reporting of the annual mass emissions.

4. The Guidance is sub-divided into five main sections and these cover:

- Description of the TNP;
- Requirements of the TNP Regulations (which include the requirement for the Environment Agency to establish a Register to co-ordinate trading within the Scheme and sets out the information which will be contained in the Register) and the requirements of governmental directions and other associated regulations;
- Pattern for changes to the Register during the Trading calendar year;
- Use of the forms required by the Scheme;
- Self-verification of the Annual Mass Emissions data supplied by operators of the participating LCP.
2. TERMS USED IN THE GUIDANCE

5. A glossary of the terms used in the Guidance is included in Annex I.

6. It should be noted that the terms ‘trading’ and ‘transfer’ of all or part of the emission allowances between participating LCP within the TNP are used interchangeably in the Guidance. As such no difference should be implied between these terms. Trading may be viewed, however, as the vehicle by which the transfer of emission allowances occurs.

3. GUIDANCE ON THE TNP TRADING SCHEME

7. This is set out below using the 5 Sections outlined in paragraph 4 above.

3.1. SECTION 1 – DESCRIPTION OF THE TNP

IED and the TNP

8. The IED sets minimum standards for emissions to the air of SO$_2$, NO$_x$ and dust (and CO for gas fired plant) from LCP with a total rated thermal input equal to or greater than 50 MW$_{th}$, based on the Net Calorific Value (lower or inferior Heating Value). The minimum standards set within Annex V of the IED cannot prejudice those laid down in BAT Conclusions and it is therefore expected that LCP in the TNP will need to conform with the relevant BAT Conclusions, as per the relevant BREF, after 30 June 2020 unless they are subject to a BAT derogation or derogations related to limited running.

9. The IED makes provision for a Transitional National Plan (Article 32) for large combustion plants which were first granted a permit for operation before 27 November 2002 or for operators which had submitted a complete application for a permit prior to that date, provided that the LCP was operational prior to 27th November 2003.

10. The IED stipulates that for each LCP within the TNP, one or more of the following pollutants can be optionally included in the TNP: Nitrogen Oxides (NO$_x$); Sulphur Dioxide (SO$_2$) and dust. For gas turbines, only Nitrogen Oxides emissions can be included in the TNP, noting that the TNP does not apply to emissions of Carbon Monoxide (CO).

11. The objective of the TNP is to achieve compliance by means of an annual mass emissions cap. The TNP sets a linear decrease in the mass emission limits from the LCPD values in 2016 to the IED Annex V values in 2019. For Gas Turbines, the emission limit values for NO$_x$ set out for such plants in Part B of Annex VI to Directive 2001/80/EC shall be used. This is clarified further below.

For the years 2019 & 2020, the mass emission ceilings are based on the emission limit values set out in Part 1 of Annex V to the IED or, where applicable, the relevant rates of desulphurisation set out in Part 5 of Annex V of the IED.

The ceilings for 2017 & 2018 shall be set providing a linear decrease from the 2016 ceiling to the 2019 ceiling.

12. Operators have the following options with regards to compliance once the TNP has commenced.
• Continue to comply with the mass based emission values as set out in the TNP

• Leave the TNP at any time between 1 January 2016 and 30 June 2020 to be subject to full ELV compliance (IED Annex V) or the Annex V 1,500 hour derogations. A separate protocol has been agreed applying to England and Wales which specifies the requirements for operation under the 1500 hours derogation.

• Close the whole LCP or reduce the plant Net Thermal Input to lower than 50MWth, such that the plant ceases to be an LCP.

13. The whole LCP must be subject to the TNP and therefore only the whole LCP can leave.

14. LCP operating under the TNP will be required during each calendar year to emit no more SO₂, NOₓ and dust than their respective emission allowance shown in the TNP Register as at 31 March of the following year. For the calendar year 2020, the TNP will end on 30 June and therefore only a 6 month period is to be reported. In this case, the reporting deadline will be 3 months after the end of the reporting period, i.e. 30 September 2020.

However, under the trading scheme, participating LCP can acquire additional emission allowances from other LCP in the TNP if they are unable to operate within their respective annual emission allowances. Equally, surplus emission allowances can be transferred to other participating LCP within the TNP. Thus the respective emission allowance shown will be the:

[Initial annual emission allowance] + [any Acquired emission allowances] - [any Transferred emission allowances] - [Actual emissions during the trading year]

And this must never be zero or less than zero.

15. Upon completion of the TNP on 30 June 2020, operators have the following options in terms of compliance:

• Operate the LCP in accordance with the permitted ELVs at that date which will take account of BAT Conclusions and will require Annex V ELVs as a minimum standard (as required by Article 30 (2) of the IED).

• If the achievement of the emissions levels associated with the implementation of Best Available Techniques, as described in the BAT conclusions, lead to disproportionally higher costs then a derogation can be applied for, where less strict ELVs are set by the Regulator in accordance with Article 15 (4) of the IED. However, these less strict ELVs can be no higher than the Annex V ELVs.

• Closure or partial closure of the LCP. The definition of closure is clarified in Section 3.4.4

• Take the Annex V 1,500 hours derogation, subject to consideration from the Regulator as to how the provision applies to whole plant and part(s) of a plant. A separate protocol has been agreed applying to England and Wales which specifies the requirements for operation under the 1500 hours derogation.

16. If part of an LCP closes after 1 January 2016 whilst participating in the TNP, the emissions ceiling for the LCP, based on the original capacity upon entering the TNP, continues to apply. For example, an LCP entering the TNP with 4 x 500MW units in service
will continue to have emission allowances based on the total output should up to 3 of the units cease operating.

17. In the UK, Defra required operators of existing LCP to confirm by 8 May 2012 the qualifying large combustion plant to be included in the draft UK TNP.

3.2. SECTION 2 - REQUIREMENTS OF THE TNP REGULATIONS,

3.2.1. TNP Regulations

18. The Large Combustion Plant (Transitional National Plan) Regulations 2105, which came into force on 1 January 2016, provide the legal basis for the trading of the respective annual emission allowances between the participating LCP within the UK TNP. In particular, they set out:

**Regulation 3 and Schedule 1 Parts 1-4:** The provision of information by the Secretary of State which includes the annual emission allowances for SO₂, NOₓ and dust for each of the participating LCP within the TNP.

**Regulation 4:** Requirement for the Environment Agency to establish and maintain an electronic register of the plants participating in the TNP and their associated details and emission allowances provided by the Secretary of State in Regulation 3. It is also requires that the NRW, SEPA and the Chief Inspector (Northern Ireland Environment Agency or NIEA) provide links to the register from their respective websites.

**Regulation 5:** Requirement that the national Environmental Regulators carry out the necessary duties to ensure that each plant within the TNP does not exceed its emission allowance for each calendar year, with the inclusion of any transfer of emission allowances between participating plants set out in Regulation 7.

**Regulation 6:** Requirements for quarterly reports of actual emissions (see paragraph 24).

**Regulation 7:** Transfers of emission allowances (see paragraph 25).

**Regulation 8:** Determination of emission allowance on closure (see paragraph 26).

**Regulation 9:** Allows the Environment Agency to share costs incurred in relation to the register with SEPA, NRW and the Chief Inspector (i.e. NIEA).

19. The requirements of each of these Regulations and of the Schedules are set out below in more detail:

20. **Regulation 3:** The provision of information by the Secretary of State. After consulting with the Scottish Ministers, the Welsh Ministers and the Department of the Environment (Northern Ireland), the Secretary of State must supply to the Environment Agency, no later than 31 January 2016 for participation in Year 1(2016) of the TNP and 20 November for participation in each subsequent year, details of the LCP within the TNP and of their annual emission allowances for SO₂, NOₓ and dust.

21. **Regulation 4:** The requirement to establish a Register to co-ordinate the transfer arrangements and the contents of the Register; in summary, these provisions require:
• The Environment Agency to establish and maintain the Register for the purposes of
the TNP, which must be in electronic form. The Environment Agency will carry out this role
on behalf of all four Environmental Regulatory Authorities in the UK; and

• The Register to contain the information detailed in Paragraphs 1-4 of Schedule 1
(see paragraph 18);

• SEPA, NRW and NIEA to ensure that links are provided on their web pages to the
Register;

• The Register to contain certain information, including expressing of interest to
acquire/transfer annual emission allowances, if so notified by the respective operator using
Form IED TAA1 to the Register (see Section 3.4.3).

22. The TNP Register has been set up and the link is given below:
The TNP Register is hosted on the GOV.UK website
All correspondence with the Register will be via email. For that reason:

• A dedicated email address has been set up for operators of participating plants to
correspond with the Register

   TNP@environment-agency.gov.uk

• An email based Help Desk has also been set up to deal with administrative queries.

   TNPHelp@environment-agency.gov.uk

23. Regulation 5: The requirement for the regulator to ensure that each plant in the TNP
has the relevant provisions included in its permit for any operation under the TNP. This
includes LCP for which the operator has issued a notice of closure prior to the TNP
Regulations coming into force. This requirement is not applicable where the operator has
given notice that the plant should be exempted from inclusion in the TNP under Article 33
(limited life time derogation).

The requirement to ensure that operators notify the regulator in the event of a temporary or
permanent closure or any variation of operation of the plant which causes it not to be a large
combustion plant.

The requirement for the regulator to ensure that operators of participating plant do not
operate the plant so as to exceed their emission allowance for a calendar year as recorded
on the register, subject to any transfer of emission allowance in respect of the plant in
question.

24. Regulation 6: The requirement for the regulator to ensure that the operator of each plant
in the TNP provides a quarterly report of the actual emissions of each LCP pollutant within
the TNP. The TNP regulations require operators to provide this information in Form IED
RTA1 (Excel spreadsheet) submitted via email to the Register and to the respective
Regulatory Authority staff member within 28 days of the end of each quarter and copied to
the Register. The report detailing the actual emissions of each LCP pollutant for each plant
during a calendar year must be provided to the Regulator and copied to the Register by the
31 January of the following calendar year. It is important to note the following:

a) The latest version of the Form IED RTA1, which is available for download from GOV.UK is
used. The submission of information using other, previous, versions may result in the
submission being rejected.

b) All emissions data to be submitted in units of tonnes. Other units of measurement will not
be accepted.

c) These forms shall not be submitted in “.pdf” format in which case they will be rejected, although pdf copies may be held on site to assist with auditing.

25. Regulation 7: Transfers of emission allowances; (see Section 3.4.2); this establishes:

• Notification of a transfer of emission allowances between participating LCP to be
undertaken by correctly completing Form IED TON1 showing the respective amounts to be
transferred from LCP “A” to LCP “B” within the TNP completed by both LCP participating in
the transfer. A .pdf version of the form containing the divesting and acquiring parties’
signatories is to be emailed to the Register and copied to the respective Regulatory authority
staff members within 5 working days of the date on which the transfer is made. The
Environment Agency must record the transfer within 10 working days of notification.

• Trading of the current annual year's emission allowances until 31 March of the
following year. This gives sufficient time to enable the operators of the LCP to ensure that
they hold sufficient allowances to at least match their actual emissions of the TNP pollutants
during the year.

The following conditions in respect of transfers apply:

• No emission allowance in respect of a participating plant may be carried forward from
one calendar year to the next.

• Any transfer that results in a participating LCP having an emission allowance of zero
or less than zero will be void and not recorded in the Register by the Environment Agency.

26. Regulation 8: Determination of emission allowance on closure; (see Section 3.4.4). This
establishes that when notification of the closure of an LCP is received by the respective
Environmental Regulator, the respective Environmental Regulator must recalculate the
emission allowance based on the part of the year that the plant was operating and notify the
Register via e-mail using Form IED NTC1 (in pdf format) of the revised allowance within 10
working days of the receipt of the notification of closure or variation. The Environment
Agency must amend the emission allowance for the participating plant recorded in the
Register within 10 working days of receipt of the revised allowance notification from the
Regulator.

3.3. THE TNP REGISTER AND PATTERN FOR UPDATES

27. It was mentioned above (paragraph 25) that operators of participating LCP can only
trade the current year's emission allowances up to 31 March (or 30 September 2020 for the
trading in the final year of the TNP) of the following year and that no emission allowance may be carried forward from one calendar year to the next.

28. For that reason a separate Register for each calendar year will be set up by no later than 31 December of the year prior to the reporting period (to confirm to operators of LCP within the TNP of their emission allowances for the coming year) and it will last until 30 April of the year following the reporting period (to allow for any trades made up to 31 March of the following year to be recorded in the Register and for the respective Environmental Regulator to assess compliance and to consider any enforcement action needed). Thus each separate Register will last for a period of up to 17 months. For the final year of the TNP, i.e. ending 30 June 2020, the Register will run until 30 October for the same reasons as outlined above.

29. The permits for all LCP within the TNP contain a condition that the operator must not in any calendar year emit more than the emission allowance recorded on the TNP Register for that calendar year as at 31 March of the following year. So, compliance with the requirement will be assessed by 30 April of the following year by comparing the emissions of the particular LCP with the figures recorded in the Register at 31 March of the following year. For the final year of the TNP, i.e. ending 30 June 2020, the Register will run until 30 October for the same reasons as outlined above.

30. The Register will be published on GOV.UK and updated at regular intervals throughout the calendar year to show trading activities. The version shown will state the date when it was last updated.

31. It should be noted that the Register will only be updated with the emission data from each participating plant for the previous quarter, four times a year. The TNP regulations require operators to provide this information and the data shall be submitted via email to the Register and copied to the respective Regulatory Authority staff member within 28 days of the end of each quarter. The Environment Agency will then update the Register with this information within 10 working days of receipt of the report.

32. The information contained on the Register and the pattern of updates is set out below. In particular this deals with:

- Part 1: Before the trading scheme starts on 1 January 2016
- Part 2: Before the trading scheme starts on each subsequent year after 1 January 2016
- Part 3: From 1 January 2016 and subsequent years to 30 April of the respective following year

Part 1: Before the trading scheme starts on 1 January 2016

33. The TNP Register follows the same arrangement as the preceding NERP Register. The TNP Register therefore contains the following details:

<table>
<thead>
<tr>
<th>Action</th>
<th>Regulation/consultation document</th>
<th>By whom</th>
<th>When</th>
</tr>
</thead>
<tbody>
<tr>
<td>The Register is in the form of an electronic spreadsheet, which</td>
<td>Regulation</td>
<td>Environment</td>
<td>31 December</td>
</tr>
</tbody>
</table>
must be clearly displayed on GOV.UK.

<table>
<thead>
<tr>
<th>Links must be provided from the SEPA, NRW and NIEA web pages to the Register on GOV.UK.</th>
<th>Regulation 4(5)</th>
<th>SEPA, NRW and the Chief Inspector (NIEA) with the Environment Agency</th>
<th>31 December 2015</th>
</tr>
</thead>
</table>

The following details will be put on the Register:
For every participating plant:
- Name
- Grid reference
- Postal address
- Name of the operator

For the operator of every participating plant:
- Name
- Postal address
- Email address
- Telephone number
- and if the operator is a company:
  - Its Registered address

Respective annual emission allowances for SO₂, NOx and dust

<table>
<thead>
<tr>
<th>Regulation 4(1) and 4(2) and paragraphs 1-4 of Schedule 1</th>
<th>Environment Agency</th>
<th>Within 10 working days of being notified by the Secretary of State and by 31 December 2015 (or 21 December to advise if TNP or LLD) at the latest</th>
</tr>
</thead>
</table>

**Part 2: Before the trading scheme starts on each subsequent year after 1 January 2016**

34. For the years after 2015, the following arrangements will be put in place. This will give Defra the opportunity to update the information on the Register and confirm details and respective annual allocations.

<table>
<thead>
<tr>
<th>Action</th>
<th>Regulation/consultation document</th>
<th>By whom</th>
<th>When</th>
</tr>
</thead>
<tbody>
<tr>
<td>As above, but following confirmation by the Secretary of State of the information referred to the above. In particular, this concerns details of the operator, plant closures and the respective annual emission allowances for SO₂, NOx and dust.</td>
<td>Regulation 4(2)</td>
<td>Environment Agency</td>
<td>Within 10 working days of being notified by the Secretary of State, which should be</td>
</tr>
</tbody>
</table>
Part 3: From 1 January 2016 and subsequent years to 30 April of the respective following year

35. The following table summarises the updates to the Register during this time. Reference is made to specific notes which are included at the end of this part, to provide additional information.

<table>
<thead>
<tr>
<th>Action</th>
<th>Regulation/consultation document</th>
<th>By whom</th>
<th>When</th>
</tr>
</thead>
<tbody>
<tr>
<td>Regulation 6(2) requires the respective emission data from each participating plant for Q1 – Q3 to be published 3 times a year. This will be added to show the cumulative in-year mass emissions.</td>
<td>Regulation 6</td>
<td>Environment Agency with SEPA, NRW and the Chief Inspector</td>
<td>Within 10 working days of receiving notification (within 28 days of the end of the previous quarter – see paragraph 31 above)</td>
</tr>
<tr>
<td>Regulation 6(1) requires each operator to submit to the Regulator and copied to the Register by 31 January of the following year the operator’s annual mass emissions in respect of the previous calendar year. See Section 3.4.1 for details to be provided for every LCP and for Form IED RTA1</td>
<td>Environment Agency with SEPA, NRW and the Chief Inspector (NIEA)</td>
<td>Q4 cumulative -in-year mass emissions to be submitted no later than 31 January in each calendar year</td>
<td></td>
</tr>
<tr>
<td>Transfer of part of the respective emission allowance from one participating plant to another. See Section 3.4.2 for details of actions by respective operators and for transfer Form IED TON1</td>
<td><strong>Regulation 7</strong></td>
<td>Environment Agency together with SEPA, NRW and the Chief Inspector</td>
<td>Within 10 working days of receiving completed transfer Form IED TON1</td>
</tr>
<tr>
<td>---</td>
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<td>---</td>
<td>---</td>
</tr>
<tr>
<td>Notification of the amount of emission allowance that an operator of a participating plant wishes to transfer or acquire from other participating plants. See Section 3.4.3 for details of actions to be taken and for Form IED TAA1</td>
<td><strong>Paragraphs 5 (a) Schedule 1</strong></td>
<td>Environment Agency together with SEPA, NRW and the Chief Inspector</td>
<td>Within 10 working days of receiving Form IED TAA1</td>
</tr>
<tr>
<td>Reduced emission allowances for closing LCP to be shown on Register. See Section 3.4.4 for details of actions to be taken in cases of closing and for Form IED NTC1</td>
<td><strong>Regulation 7</strong></td>
<td>Environment Agency together with SEPA, NRW and DoE(NI)</td>
<td>Within 10 working days of receiving Form IED NTC1</td>
</tr>
<tr>
<td>For the LCP in England and Wales only (SEPA and NIEA have separate procedures to report this data) Details of total annual amount of energy input for each participating LCP to be submitted to the Register and copied to the Regulator by 31st January of the following year at the same time the respective emission data for the last quarter of the current year is submitted. However, the energy input data will not be shown on the Register. It will be collated for submission to</td>
<td><strong>IED Article 72</strong></td>
<td>-</td>
<td>-</td>
</tr>
</tbody>
</table>
the European Commission via Defra though Industry Regulation HO Policy. See Section 3.4.5 for details to be provided and for Form IED AR1

3.4. SECTION 4 USE OF THE FORMS REQUIRED BY THE SCHEME

36. All the forms referred to in these sections are available electronically via the TNP web pages hosted on the GOV.UK website.

37. A description of the use of each of these forms is given below:

3.4.1. Reporting emission data

38. As mentioned in paragraph 31, an operator of a participating LCP is required under the respective permit, to submit a report giving details of the emissions of $SO_2$, $NO_x$ and dust from the LCP for the previous quarter within 28 days of the end of that quarter.

39. This information will be used for inclusion in the Register on a quarterly basis and it should be sent via e-mail to the Register and also to the relevant Regulatory Authority staff member using Form IED RTA1 (available on the TNP webpage hosted on the GOV.UK website). Each time it is submitted it must show the name of the authorised member (see paragraph 48) of the operating company to confirm acceptance of the need to ensure acceptance of the declaration of the accuracy of the data submitted.

40. Failure to comply with such conditions is also deemed to be serious to ensure that the probity of the Scheme is not compromised. Such breaches will be dealt with in accordance with the Enforcement Policy of the respective Environmental Regulator.

41. After Quarter 1 of the Trading Year, the form should also show cumulative data for the year to date each time it is submitted. By Quarter 4 (which shall be submitted by 31 January of the following year) this will become the report of the annual mass emissions for the participating plant (Regulation 7 of the TNP Regulations).

42. The data provided in the completed IED AR1 form will be usually accepted for the Register and that does mean that the data shown on the Register throughout most of the Trading Year will be as reported by the operators. However the respective Regulatory Authority staff member will generally oversee the completed IED AR1 form to ensure that they do not contain major gross errors, say for example, in the units used (e.g. kg compared with tonnes). In such cases they will liaise with the operator to arrange for a corrected Form to be submitted and substituted for the original on the Register.
43. The TNP Regulations require the operators to self-verify the reports of annual mass emissions and to have submitted these electronically via email to the Regulator and copied to the Register by 31 January of the following year. The associated Environmental Regulator will not be responsible for verifying the emissions reports as was the case under the UK National Emissions Reduction Plan.

44. Operators of participating plants using measurement, calculation or factor methods will have to demonstrate to the respective Regulatory Authority staff member that they have chosen the most appropriate way of producing the necessary data. In some cases, this may mean varying the permit for the LCP.

45. The most appropriate method will be decided on an individual LCP basis taking into consideration that:

- even if it is not specifically set out in the IED, continuous monitoring should be the preferred approach for all solid and liquid fuelled LCP regarding NO\textsubscript{x}, SO\textsubscript{2} and dust measurement, and for Gas Turbines for NO\textsubscript{x};
- recommended minimum methods, as set out below, should be used;
- the permit condition that where appropriate monitoring equipment, techniques, personnel and organisations employed for the emissions testing shall have either MCERTS certification or MCERTS accreditation (as appropriate), for England and Wales with appropriate equivalent measures being applied in Scotland and in Northern Ireland.

46. Operators of all plant within the TNP should make sure that their monitoring arrangements, including for flow, meet the requirements for good quality monitoring, see below for a suitable example. Note should also be taken of other guidance, for example, the relevant parts of the Joint Environment Programme (JEP) Protocol concerning monitoring and reporting of SO\textsubscript{2}, NO\textsubscript{x} and dust.

This can be found here:

[https://www.energy-uk.org.uk/publication.html?task=file.download&id=5065](https://www.energy-uk.org.uk/publication.html?task=file.download&id=5065)

Preference remains however for continuous measurements of relevant emissions wherever possible.

The following hierarchy and minimum standards apply in other cases:

**Hierarchy for reporting emissions from using discontinuous measures**

<table>
<thead>
<tr>
<th>Fuel</th>
<th>Gas</th>
<th>Liquid (Oil)</th>
<th>Solid (Coal)</th>
</tr>
</thead>
<tbody>
<tr>
<td>IED pollutant</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>SO\textsubscript{2}</td>
<td>Measured fuel content calculation</td>
<td>Measured fuel content calculation</td>
<td>Measured fuel content calculation</td>
</tr>
<tr>
<td></td>
<td>LCP specific factor\textsuperscript{1}</td>
<td>LCP specific factor\textsuperscript{1}</td>
<td>LCP specific factor\textsuperscript{1}</td>
</tr>
<tr>
<td></td>
<td>Fuel</td>
<td>Coal/solid</td>
<td>Oil/liquid</td>
</tr>
<tr>
<td>----------</td>
<td>------</td>
<td>------------</td>
<td>------------</td>
</tr>
<tr>
<td>NO\textsubscript{x}</td>
<td>SO\textsubscript{2}</td>
<td>BS EN 14791: 2005</td>
<td>BS EN 14791: 2005</td>
</tr>
<tr>
<td></td>
<td>NO\textsubscript{x}</td>
<td>BS EN 14792: 2005</td>
<td>BS EN 14792: 2005</td>
</tr>
<tr>
<td></td>
<td>Dust</td>
<td>BS EN 13284-1: 2002</td>
<td>BS EN 13284-1: 2002</td>
</tr>
</tbody>
</table>

1 Based on discontinuous extractive sampling

2 Based on recognised published standards/literature


Minimum standards for air emissions monitoring (periodic measurements) †

<table>
<thead>
<tr>
<th>Fuel</th>
<th>Coal/solid</th>
<th>Oil/liquid</th>
<th>Gas</th>
</tr>
</thead>
<tbody>
<tr>
<td>SO\textsubscript{2}</td>
<td>BS EN 14791: 2005</td>
<td>BS EN 14791: 2005</td>
<td>BS EN 14791: 2005</td>
</tr>
<tr>
<td>NO\textsubscript{x}</td>
<td>BS EN 14792: 2005</td>
<td>BS EN 14792: 2005</td>
<td>BS EN 14792: 2005</td>
</tr>
<tr>
<td>Dust</td>
<td>BS EN 13284-1: 2002</td>
<td>BS EN 13284-1: 2002</td>
<td>BS EN 13284-1: 2002</td>
</tr>
</tbody>
</table>

†for alternative measurement techniques approved by the Environmental Regulator


BS EN 14791: 2005 Determination of Mass Concentration of Sulphur Dioxide – Reference Method

BS EN 14792: 2005 Determination of Mass Concentration of Nitrogen Oxides (NO\textsubscript{x}) – Reference Method: Chemiluminescence

3.4.2. Transfer of emission allowances

47. Regulation 7 of the TNP Regulations sets out the conditions associated with the transfer of emission allowances between participating plants. These are:

- 7(1) Transfers may be made between one participating plant to another at any time during the period comprising (a) the calendar year for which the transfer of
emission allowances is referred (or 1 January to 30 June in the year 2020) (b) within 3 months following that calendar year (or by 30 September in the year 2020).

- 7(2) No transfers can be made between participating plant that are not allowed to participate in emission allowance transfers.

- 7(3) Where transfers of part of an emission allowance between participating plants take place, the Agency must be notified by:
  o Correctly completing Form IED TON1; and
  o Sending it to the Register and copied to the Environmental Regulator within 5 working days of the date of the transfer

- 7(4) and (5) The form referred to in Reg. 7(3)(a) IED TON1 will be provided by the Agency and when completed, sent to the Register electronically. If the form is not completed correctly and sent within 5 working days of the transfer, the transfer is void.

- 7 (6) and (7) Providing that the Agency has been notified of the transfer in accordance with the regulations, the Agency must record the transfer in the register within 10 working days of notification.

- 7(8) no emission allowance can be carried forward from one calendar year to the next (no banking);

- 7(9) the transfer of an emission allowance which results in the participating plant having a zero or less than zero emission allowance has no effect (i.e. the transfer is void).

- 7 (10), (11) and (12) An operator of a plant may advertise an expression of interest to acquire or transfer an amount of emission allowance on the register (or vary an advertisement previously recorded on the Register) by correctly completing form IED TAA1 and sending it electronically via email to the Register and copying in the Environmental Regulator. The Agency must record a new advertisement on the register within 10 working days of notification.

48. Before the Environment Agency will record any transfer between participating LCP on the Register, both operators of the respective LCP must have informed the Register the names of the staff who are authorised by the company to submit Form IED TON1 and Form IED RTA1 (see below). These names will be given on the TNP website against details of the LCP within the TNP.

3.4.3. Notification of the wish to transfer or acquire emission allowances

49. Where an operator of a participating plant wishes to express an interest to acquire or transfer part of an emission allowance, it must do so by correctly completing form IED TAA1, and emailing it to the Register. Form IED TAA1 is available on the TNP webpage hosted on the GOV.UK website.

50. These expressions of interest will be put on the Register within 10 working days of an authorised Form TAA1 being received.

51. It is the Operator’s duty to make sure that these expressions of interest to transfer/acquire emission allowances are valid. If they no longer have an interest, then they should complete Form TAA1 and email it to the Register, instructing it to remove the expression of interest from the Register. This will be done within 10 working days of the Environment Agency receiving the instruction.
3.4.4. Plant closure (see Regulation 8 of UK TNP)

52. Participating LCP will be considered ‘closed’ by the relevant Environmental Regulator when the plant has definitively stopped operating.

53. The permit condition will require the operator to give the relevant Environmental Regulator as much notice as possible that the plant is closing. If the regulator believes that a plant has de facto closed without giving enough or any notice, the regulator will consider enforcement action.

54. On receipt of the notification of closure or variation the relevant Environmental Regulator must determine the appropriate amount of reduction in emission allowance for that plant (as it will not operate for the whole of the year). This requirement to recalculate the emission allowances for the closing plant is because Article 32(3) of the IED states that closure ‘shall not result in an increase in the total annual emissions from the remaining LCP covered by the TNP.’ The same process applies to a plant variation in which the plant ceases to be a Large Combustion Plant. The form IED NTC1 must be correctly completed, ensuring that the thermal input(s) for the remaining unit(s) is/are correctly determined, expressed in the correct format and included in the relevant box on form IED NTC1.

55. The relevant Environmental Regulator will notify the operator of the closing plant and the Register of the revised emission allowance for that plant using Form IED NTC1 (also included in the annex to this Guidance) within 10 working days of receipt of the notification of closure or variation.

56. The Environment Agency will ensure that the closure or variation is recorded on the Register and amend the emission allowance for the participating plant recorded in the register within 10 working days of receipt of the notification of the amount of the reduction.

57. To work out the reduction, the relevant Environmental Regulator will have regard to the example given in Section 4.6 of Defra Consultation on the NERP Regulations issued on 2 February 2007. In summary, this will involve starting with a ‘straight line’ assessment (i.e. taking no account of the actual emissions of the plant prior to its closure). However, the regulator may also take into account seasonal or other characteristics of the plant’s operation in arriving at the recalculated emission allowances on a case by case basis. It will be the responsibility of the operator of the participating plant to justify why it should be considered. As the recalculated emission allowance will be considered on a case by case basis, the reason behind the ultimate decision for each case will be made available, upon request, from the Register.

3.4.5. Total annual amount of energy input for each LCP

(Please note this section refers to LCP in England only, as Scotland, Wales and Northern Ireland have alternative schemes to obtain this data).

58. The requirement to report the total annual amount of energy input for every LCP under the IED is included in the TNP.

59. Thus under Part B of Annex VIII of the LCPD on 'Determination of total annual emissions of combustion plants', Member States were required each year starting in 2004 to compile an inventory for each LCP of the:
• total annual amount of energy input related to the net calorific value, broken down in terms of the following categories of fuel: coal, lignite, biomass, peat, other solid fuels, liquid fuels, natural gas and other gases.

60. Each participating plant within the TNP in England is required to report this information by correctly completing Form IED AR1 (Excel spreadsheet), (available from the TNP web pages hosted on the GOV.UK website) by 31 January of the following year. This information, together with that from the LCP outside the TNP in England and for all LCP in Scotland, Wales and Northern Ireland, will be provided to Defra for submission to the European Commission.

In Scotland, operators of Large Combustion Plant should follow the annual reporting conditions specified in their permits.

In Wales, Form IED AR1 is used to report this information for all LCP (including those in the TNP).

3.5. SECTION 5 – SELF-VERIFICATION OF THE REPORTS OF THE ANNUAL MASS EMISSIONS

61. Self-Verification of the reports of the annual mass emissions is one of the most important aspects of the Trading Scheme in order to demonstrate the overall credibility of the approach taken. Considerable amounts of money could be involved in the Scheme and operators must have confidence that it is underpinned by reliable reporting if they are to trade their TNP emission allowances with any certainty.

62. Self-Verification is based on the Operator defining and complying with an acceptable Quality Assurance approach for the gathering and reporting of emissions data (e.g. the JEP Protocol for Large Combustion Plant in the Electricity Supply Industry) subject to the usual compliance auditing conducted by the Regulator and enhanced transparency of the monitoring arrangements described below.

63. A number of the key issues associated with the recording of emissions are given below. It should be noted that these are not intended to be exhaustive and variation should be expected between the various Environmental Regulatory Authorities in view of their particular regulatory approach.

64. For plant with continuous monitoring, EN 14181 specifies three Quality Assurance Levels: QAL1 (use suitable instruments - covered by the above requirements for MCERTS or similar); QAL2 (calibration of the instruments using an accredited Test Laboratory – resulting in QAL2 calibration factors); QAL3 (ongoing zero and span drift checks plotted on a control chart) and an Annual Surveillance Test – the AST – in which an independent Test Laboratory checks the ongoing validity of the QAL2 calibration. The Environmental Regulators now require that QAL2 factors are applied under all circumstances from 1 Jan 2016 unless otherwise agreed with the local Regulatory Officer.

65. For trading purposes, in order to ensure that one tonne of emissions is comparable between LCP, enhanced Quality Assurance and transparency is required, noting that the confidence intervals specified in the IED are not subtracted when reporting mass emissions.
66. Report to the Environmental Regulator any correction factors that are applied to the emissions data, excluding the factors that are required to convert to standard reporting conditions (by 31 March 2016 and by 31 January in subsequent years). In Scotland, this is done via the permit condition requiring submission of the QAL 2 report.

67. A report form template is given below, requiring information from the QAL2/AST test laboratory reports, noting that the test laboratory may fill this in on behalf of the operator who is responsible for submission to the Environmental Regulator. A separate form is required for each pollutant in the TNP, for oxygen, for water vapour (if required for the correction of concentration or flow) and for flue gas flow rate for each LCP. For LCP with multiple units within a windshield or multiple monitors, the form allows data entry for up to six units/instruments (if this is insufficient then complete additional forms). The forms shall be returned to the respective Environmental Regulator (except Scotland) by 31 March 2016 (base-line return) and then by 31 January 2017 for Year 1 (2016) and by 31 January in each subsequent year of the TNP. In Scotland, this information is supplied via the permit condition requiring submission of the QAL 2 & AST reports.

68. This form shall include confirmation that the plant monitor measures at a representative location, recording any deviations from EN 15259 on the template. Any additional factors and their date of application, relating to stratification in the duct, that are directly applied to the emissions data separately from the QAL2 factors, shall be reported. Details of the instrument certification shall also be noted on the template (QAL1 section).

69. This form shall also include the QAL2 factors for gas concentrations, dust and flue gas flow rate (as required by EN 14181, EN 13284-2 and EN ISO 16911-2, respectively) and their dates of application (1 Jan 2016 in the first instance). The Operator shall review historic QAL2 factors to ensure that they are still appropriate (In Scotland, Operators should liaise directly with their SEPA site inspector on this issue). If the applied QAL2 factor is less than 0.90 (for gas concentrations or flow rate), a written justification shall be provided to the Regulator, on the same form, detailing the planned or completed investigation that has been conducted into the differences between the Test Laboratory readings and the plant monitor readings or specifying when additional QAL2 testing is scheduled (any additional initial testing to be conducted within 6 months of the TNP commencing). The form allows for more than one QAL2 factor being applied in a given year (if more than two use an additional form).

70. If the flue gas flow rate used for determining mass emissions is calculated (to EN ISO 16911-1 Annex E), confirm that this has been checked according to EN ISO 16911-2 and that the calculation method passes both the AST test of validity and the QAL2 variability test when the QAL2 is conducted.

If the flue gas flow rate used for determining mass emissions is measured then the instruments must be calibrated according to EN ISO 16911-2.

71. Report the QAL3 Warning and Alarm (Action) limits in units of concentration or flow, noting that the Alarm limit cannot be higher than half of the IED Confidence Interval at the Daily ELV. The oxygen Alarm limit for gas turbines and processes with a reference oxygen greater than 11% (by volume, dry) shall not be higher than 0.3% O₂ and shall be no higher than 0.6% O₂ for other processes. In Scotland, permit conditions define this requirement and
Operators need to liaise with their SEPA site inspector in respect to the requirements of their site permit conditions.

72. In addition, the Regulators should consider the following points:

- Operators of participating LCP are required to take all necessary measures throughout the year so that the data reported are of a high standard - this will be based largely on compliance reporting, with suitable amended QA requirements (see above);

- The monitoring should be to MCERT standard in England and Wales, with appropriate equivalent measures being applied in Scotland and in Northern Ireland;

- Operators should take particular care to choose the most appropriate method for monitoring to ensure that the results from LCP with a thermal input within the 50 – 100MWth range are of sufficient quality. Consideration of these requirements are set out above in Section 3.4.1 Reporting emission data; the presumption is that continuous monitoring will be chosen whenever possible however, periodic monitoring is required using applicable reference methods as a minimum requirement where continuous monitoring is not possible or required.

- Where the Environmental Regulatory staff member is dissatisfied with the quality of the submission, they should consider taking action under the normal provisions of the permit and/or the relevant Enforcement policy of each Environmental Regulator;

- For England: The Enforcement & Sanctions guidance document is available by following the following link:
  

For Scotland: SEPA’s Policy Statement on Enforcement is available by following the following link:

http://www.sepa.org.uk/media/62707/enforcement-policy.pdf

For Wales: NRW’s Enforcement and Prosecution Policy is available by following the links on the webpage below:

http://naturalresources.wales/how-we-regulate-you/regulatory-responsibilities

73. This will give the operator the opportunity to acquire further emission allowances by 31 March of the following year to at least balance their account. Compliance will be assessed by 30 April. If the operator still does not have enough emission allowances to at least match his emissions from the previous year, this will be a breach of a permit condition and the relevant Environmental Regulator will take enforcement action in-line with their Enforcement Policy.

4. CONTACTS WITHIN THE REGULATORY AUTHORITIES

74. All queries concerning the UK TNP should be sent by email to TNPHelp@environment-agency.gov.uk
## Reporting form for flue gas flow rate monitoring

**Transitional National Plan Annual Verification Report (V1.0)**

### STACK FLOW

<table>
<thead>
<tr>
<th>ELV(^1): (m(^3)/s)</th>
<th>LCP: (TNP ref.)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Process Operator:</td>
<td>Permit No:</td>
</tr>
<tr>
<td>Address:</td>
<td>TNP Contact:</td>
</tr>
<tr>
<td></td>
<td>Tel No:</td>
</tr>
<tr>
<td></td>
<td>Email:</td>
</tr>
</tbody>
</table>

**EN 15259 (Representative Sampling)**\(^9\)

<table>
<thead>
<tr>
<th>EN 15259: (PASS/FAIL)</th>
<th>Test Date(s):</th>
</tr>
</thead>
<tbody>
<tr>
<td>Non-Compliances:</td>
<td></td>
</tr>
<tr>
<td>(Including stratification factors if applied in addition to QAL2 factors)</td>
<td></td>
</tr>
</tbody>
</table>

**QAL1 (Instrument Suitability)**

<table>
<thead>
<tr>
<th>Make/Model:</th>
<th>MCERTS: (Y/N)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Manufacturer:</td>
<td>Sample Type(^2):</td>
</tr>
</tbody>
</table>

**QAL2 (Calibration)**\(^3\)

<table>
<thead>
<tr>
<th>LCP unit within windshield or Instrument number:</th>
<th>-</th>
<th>Unit 1</th>
<th>Unit 2</th>
<th>Unit 3</th>
<th>Unit 4</th>
<th>Unit 5</th>
<th>Unit 6</th>
</tr>
</thead>
<tbody>
<tr>
<td>QAL2 Factors: b (gradient)(^4):</td>
<td>-</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>a (offset)</td>
<td>m(^3)/s</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Test date</td>
<td>-</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Date applied(^5)</td>
<td>-</td>
<td></td>
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<td></td>
<td></td>
</tr>
<tr>
<td>Variability(^6)</td>
<td>m(^3)/s</td>
<td></td>
<td></td>
<td></td>
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<td></td>
<td></td>
</tr>
<tr>
<td>VCR from test data(^7)(^a)</td>
<td>m(^3)/s</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>VCR extended (if applicable)(^7)(^b)</td>
<td>m(^3)/s</td>
<td></td>
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<td></td>
</tr>
</tbody>
</table>

**Second QAL2 (Calibration) (if applicable)**

| QAL2 Factors: b (gradient)\(^4\): | - |        |        |        |        |        |        |
| a (offset)                        | m\(^3\)/s |        |        |        |        |        |        |
| Test date                         | - |        |        |        |        |        |        |
| Date applied\(^5\)                | - |        |        |        |        |        |        |
| Variability\(^6\)                 | m\(^3\)/s |        |        |        |        |        |        |
| VCR from test data\(^7\)\(^a\)    | m\(^3\)/s |        |        |        |        |        |        |
| VCR extended (if applicable)\(^7\)\(^b\) | m\(^3\)/s |        |        |        |        |        |        |

**AST (Annual Surveillance Test)**

<table>
<thead>
<tr>
<th>LCP units within windshield:</th>
<th>-</th>
<th>Unit 1</th>
<th>Unit 2</th>
<th>Unit 3</th>
<th>Unit 4</th>
<th>Unit 5</th>
<th>Unit 6</th>
</tr>
</thead>
<tbody>
<tr>
<td>Test date</td>
<td>-</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Variability(^6)</td>
<td>m(^3)/s</td>
<td></td>
<td></td>
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<td></td>
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<td></td>
</tr>
<tr>
<td>Validity (Mean Deviation)(^6)</td>
<td>m(^3)/s</td>
<td></td>
<td></td>
<td></td>
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<td></td>
<td></td>
</tr>
<tr>
<td>VCR extended (if applicable)(^7)(^c)</td>
<td>m(^3)/s</td>
<td></td>
<td></td>
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<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**QAL3 (Ongoing Drift Checks)**

<table>
<thead>
<tr>
<th>Frequency(^5):</th>
<th>Every</th>
</tr>
</thead>
<tbody>
<tr>
<td>Alarm (Action) Limit</td>
<td>m(^3)/s</td>
</tr>
<tr>
<td>Warning Limit</td>
<td>m(^3)/s</td>
</tr>
<tr>
<td>Signature</td>
<td>Date:</td>
</tr>
</tbody>
</table>

---

\(^1\) ELV: Emission Limit Value

\(^2\) Type: Type of LCP unit

\(^3\) QAL2 (Calibration): Calibration using QAL2 factors

\(^4\) QAL2 Factors: b (gradient), a (offset)

\(^5\) Date applied: Date of calibration

\(^6\) Variability: Variability of LCP unit

\(^7\) VCR: Verification of Calibration Range

\(^8\) Test date: Date of test

\(^9\) EN 15259: European Standard for Representative Sampling
# Reporting form for TNP pollutant monitoring

<table>
<thead>
<tr>
<th>TNP Species:</th>
<th>ELV:(^1) (mg/m(^3))</th>
<th>LCP: (TNP ref.)</th>
</tr>
</thead>
<tbody>
<tr>
<td>NO(_x) or SO(_2) or Dust</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### Process Operator:
- Permit No:
- Address:
- TNP Contact:
- Tel No:
- Email:

### EN 15259 (Representative Sampling)
- EN 15259: (PASS/FAL)
- Test Date(s):

### Non-Compliances:
(including stratification factors if applied in addition to QAL2 factors)

### QAL1 (Instrument Suitability)
- Make/Model:
- MCERTS: (Y/N)
- Manufacturer:
- Sample Type:\(^5\):

### QAL2 (Calibration)\(^1\)

<table>
<thead>
<tr>
<th>LCP unit within windshield or Instrument number:</th>
<th>Unit 1</th>
<th>Unit 2</th>
<th>Unit 3</th>
<th>Unit 4</th>
<th>Unit 5</th>
<th>Unit 6</th>
</tr>
</thead>
<tbody>
<tr>
<td>QAL2 Factors: b (gradient)(^4)</td>
<td>-</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>a (offset)</td>
<td>mg/m(^3)</td>
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</tr>
<tr>
<td>Test date</td>
<td>-</td>
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<td></td>
<td></td>
</tr>
<tr>
<td>Date applied(^5)</td>
<td>-</td>
<td></td>
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<td></td>
<td></td>
</tr>
<tr>
<td>Variability(^6)</td>
<td>mg/m(^3)</td>
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<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>VCR from test data(^7_a)</td>
<td>mg/m(^3)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>VCR extended (if applicable)(^7_b)</td>
<td>mg/m(^3)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### Second QAL2 (Calibration) (if applicable)

| QAL2 Factors: b (gradient)\(^4\) | - | | | | | |
| a (offset) | mg/m\(^3\) | | | | | |
| Test date | - | | | | | |
| Date applied\(^5\) | - | | | | | |
| Variability\(^6\) | mg/m\(^3\) | | | | | |
| VCR from test data\(^7\_a\) | mg/m\(^3\) | | | | | |
| VCR extended (if applicable)\(^7\_b\) | mg/m\(^3\) | | | | | |

### AST (Annual Surveillance Test)

<table>
<thead>
<tr>
<th>LCP units within windshield:</th>
<th>Unit 1</th>
<th>Unit 2</th>
<th>Unit 3</th>
<th>Unit 4</th>
<th>Unit 5</th>
<th>Unit 6</th>
</tr>
</thead>
<tbody>
<tr>
<td>Test date</td>
<td>-</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Variability(^6)</td>
<td>mg/m(^3)</td>
<td></td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>Validity (Mean Deviation)(^5)</td>
<td>mg/m(^3)</td>
<td></td>
<td></td>
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<td></td>
<td></td>
</tr>
<tr>
<td>VCR extended (if applicable)(^7_b)</td>
<td>mg/m(^3)</td>
<td></td>
<td></td>
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<td></td>
<td></td>
</tr>
</tbody>
</table>

### QAL3 (Ongoing Drift Checks)

<table>
<thead>
<tr>
<th>Frequency(^9):</th>
<th>Every</th>
</tr>
</thead>
<tbody>
<tr>
<td>Alarm (Action) Limit:</td>
<td>mg/m(^3)</td>
</tr>
<tr>
<td>Warning Limit:</td>
<td>mg/m(^3)</td>
</tr>
</tbody>
</table>

| Signature: | Date: |
## Reporting form for peripherals monitoring

<table>
<thead>
<tr>
<th>Transitional National Plan</th>
<th>Annual Verification Report (V1.0)</th>
<th>TNP YEAR</th>
<th>0 (Q1 2016)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Peripheral Species:</strong></td>
<td><strong>ELV(^1):</strong> (%)</td>
<td><strong>LCP:</strong> (TNP ref.)</td>
<td></td>
</tr>
<tr>
<td>O(_2) or H(_2)O (if applicable)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Process Operator:</td>
<td>Permit No:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Address:</td>
<td>TNP Contact:</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Tel No:</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Email:</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>EN 15259 (Representative Sampling)</strong></td>
<td>Test Date(s):</td>
<td></td>
<td></td>
</tr>
<tr>
<td>EN 15259:</td>
<td>(PASS/FAIL)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Non-Compliances:</td>
<td>(including stratification factors if applied in addition to QAL2 factors)</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>QAL1 (Instrument Suitability)</strong></td>
<td>Make/Model:</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>MCERTS: (Y/N)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Manufacturer:</td>
<td>Sample Type(^2):</td>
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<td></td>
</tr>
<tr>
<td><strong>QAL2 (Calibration)(^3)</strong></td>
<td>LCP unit within windshield or Instrument number: -</td>
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<td></td>
</tr>
<tr>
<td>QAL2 Factors:</td>
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<td></td>
</tr>
<tr>
<td>b (gradient)(^4):</td>
<td>-</td>
<td></td>
<td></td>
</tr>
<tr>
<td>a (offset)(^5):</td>
<td>%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Test date:</td>
<td>-</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Date applied(^6):</td>
<td>-</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Variability(^6):</td>
<td>%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>VCR from test data(^7\a):</td>
<td>%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>VCR extended (if applicable)(^7\b):</td>
<td>%</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Second QAL2 (Calibration) (if applicable)</strong></td>
<td></td>
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<td></td>
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<tr>
<td>QAL2 Factors:</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>b (gradient)(^4):</td>
<td>-</td>
<td></td>
<td></td>
</tr>
<tr>
<td>a (offset)(^5):</td>
<td>%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Test date:</td>
<td>-</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Date applied(^6):</td>
<td>-</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Variability(^6):</td>
<td>%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>VCR from test data(^7\a):</td>
<td>%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>VCR extended (if applicable)(^7\b):</td>
<td>%</td>
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</tr>
<tr>
<td><strong>AST (Annual Surveillance Test)</strong></td>
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<td></td>
</tr>
<tr>
<td>LCP units within windshield: -</td>
<td>Unit 1</td>
<td>Unit 2</td>
<td>Unit 3</td>
</tr>
<tr>
<td>Test date:</td>
<td>-</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Variability(^6):</td>
<td>%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Validity (Mean Deviation)(^6):</td>
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<td></td>
<td></td>
</tr>
<tr>
<td>VCR extended (if applicable)(^7\c):</td>
<td>%</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>QAL3 (Ongoing Drift Checks)</strong></td>
<td>Frequency(^8): Every</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Alarm (Action) Limit:</td>
<td>%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Warning Limit:</td>
<td>%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Signature:</td>
<td>Date:</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

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1. ELV: Exposed Limit Value
2. Sampling Type
3. Calibration
4. Gradient
5. Offset
6. Variability
7. VCR
8. Frequency
### Notes:

1. Specify the Daily Emission Limit Value (ELV) used for QA purposes (this may be a percentile daily ELV for some plant). For plant subject to the JEP Protocol, including power plant, the oxygen ELV is 6% by volume, or 10% for a gas turbine, and the water ELV (if applicable) is 6% by volume. For other plant, the oxygen and water ELV are 21% and 30% by volume respectively, as specified by the Environment Agency in TGN M20 (refer to the most recent version). For flow, specify the surrogate ELV defined in EN ISO 16911-2, i.e., 120% of the maximum flow rate measured during the QAL2 (or 120% of the base load flow if QAL2 data not yet available), noting that the flow reference condition are the actual duct conditions (when flow is measured continuously) or the reporting conditions (when the flow is calculated). The units on the form may be changed to m/s when the flow is measured continuously if this is more appropriate.

2. Sample type. Specify from the following options: In-situ (probe); In-situ (cross-duct); Extractive (hot/wet); Extractive (chiller/dry); Extractive (permeation drier).

3. The Pre-test and AST-AST must be compliant with PASS status on Variability/Validity Test as applicable using the current value of the Daily Emission Limit Value (see also Note 6). For oxygen, water vapour and verification of a flow calculation, the Pre-test factors are not usually applied but still enter the Pre-test factors and enter 'N/A' in the 'Date applied'. For verification of a flow calculation the Pre-test Validity test result (mean deviation) must also be recorded.

4. If b < 0.90 provide a justification or schedule for repeat testing in the space below.

5. In Year 1 this is 1 Jan 2016; only change the date if a repeat QAL2 is conducted.

6. Variability (scatter) and the average Deviation between the CEM and the Test Laboratory results are defined in EN14181:2014 Section 8.5 (AST) and Section 6.6 (QAL2) and these are reported by the Test Laboratory in the specified concentration or flow units. The Variability and Deviation must be less than predefined levels in order to pass.

7a. Valid Calibration Range (VCR) is defined in EN14181:2014 Section 6.5 and is reported by the Test Laboratory in the specified concentration or flow units.

7b. The VCR may be extended using reference materials by agreement with the Regulatory Authority. Report the VCR as extended by reference materials here (in addition to the VCR obtained from the test data - see 5a).

7c. The VCR may be extended using AST data by up to 50% of the daily ELV. Report the extended VCR from the AST (in addition to the VCR obtained from the test data - see 5a).

8. Specify the frequency of QAL3 checks, e.g., weekly. QAL3 is the control chart approach defined in EN 14181 for monitoring zero and span drift. Two thresholds for monitoring drift are defined - the Warning limit and the Alarm (Action) limit. Action must be taken when the drift exceeds the Action limit. For flow, the units may be changed to reflect the use of a flow surrogate for the QAL3, e.g., % deviation from span.

9. For flow, report the results of the pre-investigation flow survey (if applicable) in the space provided for recording non-compliances. Report the Reproducibility, crest factor and skewness as defined in EN ISI 16911-2.

Justification for QAL2 gradient being less than 0.90 and/or schedule for additional QAL2 testing:

In the above justification, consider the following factors as a minimum requirement. Consult with the Test Laboratory in relation to: the sampling locations for the CEM and the test probes (are these both representative and do they interfere with one another?); uncertainty of the test method (there may be loss of SO_2_ in test methods that use a chiller to dry the sample for analysis); functional test results for the CEM (has it been set up and checked properly prior to testing?); leakage in either the CEM or the test equipment (compare oxygen levels in the first instance); functional check history (has the instrument...
ANNEX I

Glossary of Terms

(1) In this guidance document-

“the Agency” means the Environment Agency;

“authorised member” means the names of the staff who are authorised by the company to submit Form IED TON1 and Form IED RTA1

“calendar year” means—

(a) in relation to any year from 2015 to 2019 inclusive, the period of 12 months beginning on 1st January; and

(b) in relation to the year 2020, the period from 1st January up to and including 30 June;

“the Chief Inspector” means the inspector constituted to be the chief inspector under regulation 8(3) of the Pollution Prevention and Control (Industrial Emissions) Regulations (Northern Ireland) 2013(a);

“the Department of the Environment” means the Department of the Environment in Northern Ireland;


“emission allowance” means, in relation to a participating plant for a given calendar year, an amount of emissions for each of the LCP pollutants expressed in tonnes or kilotonnes per annum, calculated in accordance with the second and third paragraph of Article 32(3);

“large combustion plant” means a combustion plant to which Chapter III of the Directive applies;

“LCP pollutants” means nitrogen oxides, sulphur dioxide and dust;

“National Emissions Reduction Plan” or “NERP” means the emissions plan prepared in accordance with section 2(4) of the Pollution and Prevention Control Act 1999.

“the NRW” means the Natural Resources Body for Wales;

“participating plant” means a large combustion plant in respect of which the permit contains a TNP provision;

“permit” means—

(a) as regards a plant in England and Wales, the environmental permit under the Environmental Permitting (England and Wales) Regulations 2010(c);

(b) as regards a plant in Scotland, the permit granted under Part III of the Pollution Prevention and Control (Scotland) Regulations 2012(d);
(c) as regards a plant in Northern Ireland, the permit granted under Part 2 of the Pollution Prevention and Control (Industrial Emissions) Regulations (Northern Ireland) 2013;

“the register” means the register maintained by the Agency in accordance with regulation 4(1);

“the regulator” means—

(a) the Agency, if the plant in question is in England,

(b) the NRW, if the plant in question is in Wales,

(c) SEPA, if the plant in question is in Scotland, or

(d) the Chief Inspector, if the plant in question is in Northern Ireland;

“SEPA” means the Scottish Environment Protection Agency;

“TNP provision” means a provision in a permit which identifies a large combustion plant as being a plant within the scope of the Transitional National Plan and so exempt from the requirement to comply with the emission limit values under Article 30(2) in respect of the LCP pollutants;

“Transitional National Plan” or “TNP” means the emission plan prepared under Article 32 by the Secretary of State [4 December 2015];

“working day” means any day other than a Saturday, a Sunday, Christmas Day, Good Friday or a day which is a bank holiday under the Banking and Financial Dealings Act 1971(e).

(2) Other expressions used in the TNP Regulations and in the Directive which are not defined in the TNP Regulations have the same meaning in the TNP Regulations as they have in the Directive.

(3) A reference in the TNP Regulations to a numbered Article is a reference to the Article so numbered in the Directive.