

Guidance on Unabated Operation at Large Combustion Plants Licensed by the EPA



EPA 2016

1. BACKGROUND

The Industrial Emissions Directive 2010/75/EU (IED) entered into force on 6 January 2011 and has been transposed into Irish Legislation by the following Statutory Instruments (S.I.);

- S.I. No. 138 “European Union (Industrial Emissions) Regulations 2013”. These regulations primarily amend the EPA Act 1992 and the Waste Management Act 1996 to transpose Chapters II and VI of the IED.
- S.I. No. 566 “European Union (Large Combustions Plants) (LCP) Regulations 2012” transpose Chapter III and Annex V of the IED, revoking and replacing the LCP Regulation 2003 (S.I. No. 644 of 2003).

These provisions apply to combustion plants, the total rated thermal input of which is equal to or greater than 50 MW, irrespective of the fuel type used with the exception of those plants listed in Article 28 (a-j) of the IED.

2. IRISH REGULATORY CONTEXT

Regulation 15 of S.I. No. 566 details the provisions in relation to the malfunction and/or breakdown of abatement equipment and such provisions are defined in the individual combustion plants environmental licence.

15. *(1) The Agency shall ensure that provision is made in licences for procedures relating to malfunction or breakdown of abatement equipment.*
- (2) The operator shall notify the Agency within 48 hours after the malfunction or breakdown of abatement equipment.*
- (3) In the case of a breakdown, the Agency shall require the operator to reduce or close down operations if a return to normal operation is not achieved within 24 hours, or to operate the plant using low polluting fuels.*
- (4) The cumulative duration of unabated operation shall not exceed 120 hours in any 12-month period.*
- (5) The Agency may grant a derogation from the time limits set out in paragraphs 3 and 4 in one of the following cases—*
- (a) there is an overriding need to maintain energy supplies; or*
 - (b) the combustion plant with the breakdown would be replaced for a limited period by another plant which would cause an overall increase in emissions.*

Typical Environmental Protection Agency (EPA) licence conditions enforcing these requirements are:

'In the event of a breakdown or malfunction of any abatement or control equipment the licensee shall:

- i) Reduce or close down operations where a return to normal operation is not achieved within 24 hours, such action shall be undertaken in liaison with the Commission for Energy Regulation or the Grid Code, or as otherwise agreed by the Agency.*

or

- 1. Operate the plant using low polluting fuels; and*
- 2. Record the duration of unabated operation.'*

- ii) 'Under no circumstances shall the cumulative duration of unabated operation in any twelve-month period exceed 120 hours without prior written approval of the Agency.'*

For extended periods of unabated operation (where agreed by the Agency), the licensee may also be requested to carry out ambient air quality monitoring to assess the impact on the local environment, and to ensure that ambient air quality standards are not breached.

3. DEFINITIONS

Malfunction: means that part of the abatement equipment, for a given pollutant, is not working properly and the emissions are partially abated.

Breakdown: means that the abatement equipment, for a given pollutant has failed and is no longer providing any abatement.

Unabated Operation: means operation where the abatement equipment is not functioning because it has broken down or has malfunctioned and is giving rise to emissions which exceed those set out in the Best Available Techniques (BAT) Guidance note for the Energy (Large Combustion Plant Sector). This refers to all abatement equipment for a given pollutant.

Combustion Plant: means any technical apparatus in which fuels are oxidised in order to use the heat thus generated. A combustion unit with a single stack is considered a single combustion unit for compliance purposes.

4. INTERPRETATION

4.1 GENERAL REQUIREMENTS.

- i) The requirements refer to unabated operation with respect to individual pollutants. If any one pollutant is unabated, then the unabated operation must be recorded.

- ii) The cumulative duration of unabated operation, in any twelve month rolling period, shall not exceed 120 hours per combustion plant, for any given pollutant, without **prior** written approval of the Agency (see Section 5 below).
- iii) On sites where BAT associated emission levels (AELs) do not apply their use is only for the determination of unabated operation.
- iv) Breach of BAT-AELs will be assessed in accordance with the interpretation of daily average emission limits values as per S.I No. 566 of 2012.
- v) Unabated operation of each given pollutant must be recorded and reported separately.
- vi) The licence holder shall notify the Agency within 48 hours, or sooner if required by the licence, after the malfunction or breakdown of abatement equipment. The licensee shall refer to their licence specific reporting requirements in this regard.
- vii) The duration of unabated operation must be recorded from the time that the emission is unabated and shall end when the abatement plant is returned to service and no longer meets the definition of unabated operation. The licence holder shall include periods of unabated operation where they continue to operate using low polluting fuels or have taken measures to reduce operational loads, unless those measures bring emissions below the BAT-AELs.
- viii) For the purposes of the calculation of the average emission values for assessment of compliance, the values measured during periods of unabated operation shall be disregarded, as per the requirements of S.I. No. 566 of 2012.
- ix) Unabated operational requirements do not apply during start-up and shutdown.
- x) Periods where abatement equipment is not operating because of an agreed routine maintenance programme are excluded from the breakdown requirements.
- xi) The requirements of this guidance do not apply to monitoring equipment which are covered by separate licence reporting conditions.
- xii) The requirements of this guidance do not apply to combustion plants which have no abatement equipment.
- xiii) These requirements do not apply to combustion plants which have been given a limited lifetime derogation (LLD).

4.2 REQUIREMENTS IN CASE OF BREAKDOWN

Notwithstanding the requirements of 4.3 below, in the event of unabated operation then the licence holder must:

- (i) notify the Agency,
- (ii) reduce or close down operations where a return to normal operation is not achieved within 24 hours, or operate the plant using low polluting fuels.

4.3 REQUIREMENTS IN CASE OF UNABATED OPERATION OF DURATION >120 HOURS

If the cumulative hours of unabated operation, for a given pollutant, is greater than 120 hours in any 12 month period, and is not agreed under the derogations set out in Section 5 below, then the licence holder must immediately notify the Agency, and cease operating the relevant combustion plant until a return to normal operation is achieved.

5. DEROGATIONS FROM THE TIME LIMITS

A licensee may apply to the Agency, under Article 15(5) of S.I. No. 566 of 2012, to make a request to exceed the 120 hours which are set out in the Regulations. In order for the Agency to approve such a request, the licensee must prove one of following:

- a) There is an overriding need to maintain energy supplies; or*
- b) The combustion plant with the breakdown would be replaced for a limited period by another plant which would cause an overall increase in emissions.*

Where the Agency must make a judgement under Regulation 15(5) as to whether there is an overriding need to maintain energy supplies, that judgement may be made in consultation with Eirgrid and any other relevant stakeholder.

References:

- Industrial Emissions Directive 2010/75/EU (IED).
- S.I. No. 138 - European Union (Industrial Emissions) Regulations 2013.
- S.I. No. 566 - European Union (Large Combustions Plants) Regulations 2012.