



Standard rules for the Environmental Permitting Regulations: consultation No 17

Summary of consultation responses and decisions

August 2018

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Published by:

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# 1. Introduction

The Environmental Permitting (England and Wales) Regulations 2016 ("EP Regulations") allow us to offer standard permits, to reduce the administrative burden on business while maintaining environmental standards. They are based on sets of standard rules that we can apply widely. The rules are developed using assessments of the environmental risk posed by the activity.

Through this consultation, live from 4 May 2018 to 15 June 2018, we proposed new and revised sets of rules to cover medium combustion plant and specified generators. We also sought views on whether to allow a single standard permit issued to an operator to cover a number of locations for the new medium combustion plant (MCP) standard rule sets.

The consultation invited views on whether the use of standard rules is the correct approach for this type of activity and if we have correctly identified and managed the risks associated with the activity.

## 2. How we ran the consultation

We invited comments on the proposal from operators, trade associations and businesses, other regulators, the public, community groups and non-governmental organisations with an interest in environmental issues.

We ran an e-consultation and made hard copies available to those who requested. We also met several trade associations and their members to explain our proposals and to understand their views. This document summarises the responses to the consultation questions and any other key points raised. It sets out our responses to the points raised by consultees, the decisions we have made and the actions we will take as a consequence.

# 3. Proposed rules and risk assessments for medium combustion plants and specified generators

#### 3.1. Summary of the key findings and the actions we will take

#### 3.1.1. Proposals we consulted on

The consultation proposed a number of new rule sets and generic risk assessments for medium combustion plant and specified generators:

- SR2018 No 1: standard rules specified generator, tranche B low risk, base load operation between 1 – 5 MW
- SR2018 No 2: specified generator, tranche B low risk, base load operation 1 2 MW with high background NOx
- SR2018 No 3: specified generator, tranche B low risk, base load operation 1 2 MW in Air Quality Management Areas or high ambient NOx
- SR2018 No 4: specified generator, tranche B low risk, 1 20 MW of abated diesel or gas engines operated less than 500 hours a year
- SR2018 No 5: specified generator, tranche B low risk, 1 20 MW of gas or abated diesel engines operated less than 1,500 hours a year

- SR2018 No 6: specified generator, tranche B low risk, base load operation 1 1.2 MW with high background NOx
- SR2018 No 7: new, low risk, stationary medium combustion plant 1 < 20MW (in operation after 20 December 2018)
- SR2018 No 8: mobile plant specified generator, tranche B low risk, base load operation  $<\!1-2$  MW

We also proposed revisions to the following existing rule sets:

- SR2009 No 4: combustion of biogas in new medium combustion plant engines at a sewage treatment works
- Standard rules for anaerobic digestion and use of biogas (SR2012 No 9, SR2012 No 10, SR2012 No 11 and SR2012 No 12)
- SR2012 No 10: on-farm anaerobic digestion facility using farm wastes only, including use of the resultant biogas
- SR2012 No 12: anaerobic digestion facility including use of the resultant biogas (waste recovery operation)
- SR2012 No 9: on-farm anaerobic digestion using farm wastes
- SR2012 No 11: anaerobic digestion facility including use of the resultant biogas

#### 3.2. Level of response

We received a total of 34 responses, which we have carefully considered. Of the 34 responses:

- 16 were from operators
- 11 were from a trade body/association
- 5 were from a government agency/local authority
- 2 were from individuals

#### 3.3. Key findings and the actions we will take

Of those that responded the large majority agreed with our approach to use standard rules for medium combustion plant and specified generators. There was not universal support for the proposal to allow a single standard permit issued to an operator to cover a number of locations for the new medium combustion plant (MCP) standard rule sets (9 out of 27 who responded did not agree with the proposal and with one who did not know).

We are satisfied that, with appropriate amendments (as detailed below) the proposed new and revised standard rules and risk assessments are appropriate for this activity. We will amend and implement the new rule sets and plan to publish them in August 2018. We do not at this current stage plan to implement the proposal for a single standard permit to cover a number of locations for medium combustion plant. This is because there are still some concerns about how permitting and compliance will operate in practice and the need to make the standard rules available for use at an early stage for operators to be able to apply for new permits. We will however, in response to consultation comments, be providing an additional rule set for smaller low risk sites up to 1MWth.

#### 3.4. Responses to questions and our response to these

#### Scope of the standard rules

Some respondents stated that the scope of the standard rules permits (SRPs) produced is too narrow which means that still a number of operators will need to apply for a bespoke permit which would entail more costly modelling work. We have produced the standard rules based on our own generic modelling and risk assessment so as to reduce costs through the streamlining of the permitting process. Due to the number of variables involved there is potential for some low risk sites to fall out of the scope of the SRPs. We therefore propose to introduce an additional SRP for <1 MWth sites (SR2018 No9), amend some of the SRPs (for example increasing the thermal input capacity for SR2018 No 6 from 1.2 to 1.3MW) and introduce a bespoke application screening tool

to help screen out, as many low risk sites as possible from requiring complex bespoke applications that require detailed modelling assessment. There will still be a need however for some bespoke applications for higher risk activities, for example larger units or smaller units with poorly designed stacks or situated in locations with high background concentrations.

#### Number of rule sets

One comment received was that the number of potential standard rules available for an operator each with slightly different criteria makes the application process too complex and that fewer rules with broader criteria would be better. We take the view that having broader criteria may make the rules more complex and we have struck the correct balance between having rules that can be understood and the different types of available SRPs. In addition we are providing guidance and pre-application advice is also available.

#### Restrictions of capacity and operating hours in the rules

Further clarity was requested regarding the reasons for the capacity limits and operating hours in some of the standard rule sets, for example SR2018 No 7 - restriction in size of 1 to <20MWth with aggregated total of 50WMth. The reason is because >20 MWth Medium Combustion Plant (MCP) is a Part B bespoke permit, 50 MWth is the limit above which would be a Part A installation permit.

The 1,500 hours limit of operation is the threshold below which is considered peaking plant operation and above base load (or mid merit) – this is an EPR Schedule 24 (Energy Efficiency Directive) bespoke permit.

# Proposal to allow medium combustion plants operated by a given operator situated at different locations to be covered by one standard permit

A number of respondents did not agree to this proposal due to concerns over its practical implementation. For example, how compliance activity takes place, application of rules/conditions for more than one site, controls over MCPs at a local level, charging for multiple sites, and flexibility in adding or removing sites from the permit or transferring sites to another operator. Due to these concerns we have decided at the moment not to take this proposal forward. There is however still the ability to apply for a number of MCPs under the standard permit for a single site.

#### Habitats regulations

We have carried out additional modelling of emissions for the proposed standard rule for medium combustion plant (SR2018 No 7). This is to satisfy the requirements of Habitats Regulations<sup>1</sup>. This standard rule will now, on the basis of the modelling, have the following screening distances:

Fuel and technology of MCP	Minimum release height	Minimum distance from any point source emission to Natura 2000 site (SAC or SPA)
Unabated diesel generators combusting ultra-low sulphur diesel (10 ppm sulphur)	3m	500m
Gas boilers combusting natural gas	15m and at least 2m above nearest building	900m
Gas boilers combusting gaseous fuels other than natural gas	15m and at least 2m above nearest building	2km

<sup>&</sup>lt;sup>1</sup> Conservation of Habitats and Species Regulations 2017

#### **Proposed charges**

Comments were made that the proposed charges appeared excessive compared with other simplified standard permits.

Charges for the various Medium Combustion Plant Standard Rules permits within the consultation document were derived outside of the Strategic Review of Charges, but were designed to cover our costs as the sole regulator under the The Environmental Permitting (England and Wales) (Amendment) Regulations 2018. The charges are confirmed and represent some of the lower charges applied by the Environment Agency in its EPR permitting activities. For example for a Specified Generator the application fee is £221 and the annual subsistence charge is £246. A mobile SG carries the same application charge with a slight increase in compliance as there is no separate deployment charge. The charge here is £273. For MCP the application charge for a single unit located on a site is £446 and the subsistence charge is £194. For all the above categories the transfer charge is £169 and the surrender charge £125. Note there are higher charges where more than a single MCP is located on a given site.

The charges were as follows;

SR2018 No 7 standard rules for new, low risk, stationary Medium Combustion Plant 1 < 20MW th

- a transfer charge of £169
- a surrender charge of £125

Application and subsistence charges vary depending on the number of MCP's on one site as follows;

Number of MCPs	Application charge £	Subsistence charge £
1	446	194
up to 3	520	256
up to 5	620	342
up to 8	720	394
up to 10	779	520
up to 15	813	620

Specified generators standard rules SR2018 No 1, SR2018 No 2, SR2018 No 3, SR2018

No 4, SR2018 No 5 and SR2018 No 6

- an application charge of £221
- a transfer charge of £169
- a surrender charge of £125
- an annual subsistence charge of £246

SR2018 No 8 mobile plant specified generator

- an application charge of £221
- a transfer charge of £169 that is a change of operator
- a surrender charge of £125
- an annual subsistence charge of £273
- no charge for deployment

#### Definitions relating to stack height

Clarification was required on definition of nearest building to the stack and where the 2m requirement should be measured from.

Nearest building should be the nearest building that can affect dispersion. Buildings that can affect dispersion are those that are both within 5L and have heights more than 40% of the stack height, where L is the lesser of the building height or maximum projected width. This same concept is used in the air emissions risk assessment guidance (in the effective height of release: impact of nearby buildings section). It is also referred to in Specified Generator dispersion modelling guidance, and in the screening tool being developed. The 2m requirement relates to the height of the building walls above ground that causes enhanced turbulence to wind flows around buildings, it should therefore be to the top of the parapet walls.

Clarification in guidance needs to be simple because there a lots of different building designs to cover, an example could be 2m above the highest building apex.

#### Definition of sensitive human receptor

Further clarification was sought on the definition for 'sensitive human receptor'.

The definition of sensitive human receptor is where there is relevant public exposure. Relevant public exposure are locations where members of the public have access, are regularly present and can be exposed for a significant portion of the averaging time of the standard. The SRPs already have this definition in the interpretation section. Our modelling guidance has the same definition and also includes examples of relevant public exposure.

## Obtaining background NO2 concentration and changes to background concentration

Clarification was sought on what measures are required to seek information on background levels and whether to rely on DEFRA background maps.

The Defra background maps are provided to assist the Local Authority with their Local Air Quality Management role. They provide backgrounds over a 1 km<sup>2</sup> resolution and therefore can underestimate the background at specific locations near to local sources. We agree that Local Authorities are best placed to provide local scale background at specific receptor locations. This is included in the modelling guidance. For all background concentration conditions the compliance point is at the sensitive human receptor In the event that background concentrations change after issue of the permit then appropriate measures would be taken by us during periodic review of the permit and this may mean varying the permit to bespoke.

#### Monitoring requirements

A question was raised regarding whether it could be considered that MCERTs monitoring should only be applied to generators over a certain size (>20MW for example), <20MW has a less stringent / costly method of sampling, therefore the requirement and cost would be proportional to the pollution risk.

We are taking a risk based approach to the monitoring requirements in both SRP and bespoke permits. TGN M5 will be included as the minimum monitoring requirements in SRPs because these are low risk permits. Larger MCPs and Specified Generators which are higher risk will require bespoke permits and more rigorous MCERTs monitoring will be specified as a permit condition.

Comments were also raised regarding the fact that many of the SRPs state 'non-specified' in relation to monitoring frequency for certain plant and fuel types and that it is not clear whether this implies that monitoring is not required, or that this will be agreed with the regulator on a site-specific basis. Also that the latter approach does not appear consistent with the principle of SRPs; conversely, there would be little value in setting an ELV with no associated monitoring requirement.

We have changed the term 'not specified' in the rules to 'N/A' to make it clear where monitoring is not required. For existing operations it is expected that all operators will carry out monitoring of emissions before applying for SRPs to ensure that they can the ELVs in the applicable rule set.

One proposal for monitoring was to consider the use of an emissions bubble concept where the overall impact is calculated at an installation level.

Our view is that the bubble method is complex to operate in what is a lighter touch regime and BAT is not applicable under the Specified Generator Regulations.

#### Control of emissions to air

Issues were raised regarding whether the standard rules under the Medium Combustion Plant Directive should have controls covering NOX, SO2 and Dust and not just NO2.

The conditions on fuel (natural gas for all SRPs, with ultra-low sulphur diesel added to the 190 mg/Nm3 ELV SRPs) and the requirement for no persistent 'dark smoke' mean that emissions of SO2 and PM10 are either negligible or do not pose the same risk of exceeding the environmental standard as NO2. NO2 conditions are therefore protective of these other pollutants. The distance to nearest receptor has been derived using dispersion modelling, assuming worst case downwind locations.

Clarification was also sought on combined flues, where there is a single release point, whether the emission limit value will apply to the release point rather than the individual engines.

The requirement is that each Generator meet the ELV – only where the multiflue gas flues pass through the same abatement do we allow a single ELV and this would require a bespoke permit.

#### Combined heat and power (CHP)

A question was raised regarding whether for CHP the standard rules should specify that the CHP must meet the Government's 'Combined heat and power quality assurance (CHPQA) programme' standards in 'CHPQA Standard Issue 16 October 2016'.

Our view is that this requirement is not relevant for the standard rules as there is no requirement in the regulations.

#### **Mobile generators**

A request was made for clarity about when a mobile generator would be considered stationary and therefore not eligible for the mobile plant standard rule (SR2018 No 8).

For the purposes of the standard rule there is a deployment period which is limited to a period of 12 months.

One response requested that the mobile plant rule set be removed because there could be inconsistencies between the use of mobile and stationary rule sets.

Our view is that we need to take account of generators that are mobile in the standard rules and their use is limited to deployment for a one year period.

#### **Diesel engines**

One respondent requested that the SRPs should be made on a technology neutral basis due to the fact that the current proposals would completely exclude diesel engines from a number of the SRP options, with no exceptions. They stated that this discriminates against those operators of diesel engines that can achieve the emissions performance required to qualify for an SRP.

The Specified Generator regulation is not technology neutral as it is intended to reduce the expansion of diesel generators into the balancing market. We have provided two SRPs (SR2018 No 4 and SR2018 No 5) for abated diesel operating for low hours (< 500 and < 1500 hrs pa) in the peaking market in which impacts have been modelled and risk assessed as acceptable.

We have not modelled abated diesels for longer operating hours as in SRPs SR2018 No 1, SR2018 No 2, SR2018 No 3 and SR2018 No 6. The key issue with modelling such generators is the additional ammonia releases that will impact Habitats sites requiring greater protective distances. Not knowing what the unabated NOx emissions might be – perhaps up to 5000 mg/m<sup>3</sup> NOx and the corresponding ammonia releases from the use of selective catalytic reduction might be significant.

Further, due to the cost of diesel fuel operating long hours we think it unlikely that we will receive many applications for such an SRP – hence we require a bespoke permit application.

#### Use of dual fuel for MCPs

One comment about SR2018 No7 was that due to the fact that it only allowed single fuel combustion this would limit its use, for example for the water industry.

We do not propose to amend this requirement because for the MCP to be dual fuel or co-fired with natural gas and biogas will make this a more complex permit with different NOx ELVs and a SO2 ELV for biogas only. This would also mean more complex monitoring conditions and therefore it needs to be a bespoke application.

#### Changes to rule sets for clarity and consistency

There were a number comments by respondents relating to making the rules clearer and more consistent. We have therefore made changes across the rule sets including:

- changing MW to MWth to clarify it refers to thermal input
- in monitoring table 3.1 changing 'not specified' to 'N/A' to provide greater clarity (there is no monitoring requirement but just an ELV) and of what needs to be monitored
- ensuring limits and criteria in activity tables and introductory notes are consistent with each other (for example use of terms less than or no greater than in different rule sets)
- clarification in rule sets

#### **Record keeping**

One respondent did not agree with the need to include a rule to keep operating records were there are no apparent operating restrictions.

There are general operating requirements such as no dark smoke, SU/SD to minimised, ELVs in all permits which require best maintenance and combustion practice to be used – operators must be able to demonstrate they do this.

#### Anaerobic digestion: affected rule sets

One operator stated that they currently held a standard permit for anaerobic digestion SR2010 No 16 that was not covered by the consultation.

The on farm standard rule SR 2010 No 16 is no longer available and operators should have already moved to rule set SR2012 No 10 or SR2012 No 9.

#### Anaerobic digestion: generators that are not MCPs

A question received was regarding generators that are not MCPs.

The proposed rules include new MCP requirements as well as specified generators requirements and the respondent asked about whether the SO2 limit only applies under the MCPD. Many AD plant in general are generators of electricity and have an agreement to generate energy to the national grid or generate power to the plant of facility. Existing MCPs will be required to comply with the SO2 limits for > 5 MWth from 1/1/2025 and 1 to 5 MWth from 1/1/2030 and the rules will be revised at a later date to take account of that. The standard rule SR20 09 No4: combustion of biogas in new medium combustion plant engines at a sewage treatment works will be amended to ensure that SO2 limits only apply to new MCPs.

#### Anaerobic digestion: discrepancy of location requirements

A discrepancy was identified for the location requirements between the generic risk assessments for SR2012 No 10 and the wording in the corresponding standard rules.

In the GRA, there is a parameter stating 'The activities shall not be carried out within 500 m of a European site or Site of Special Scientific Interest (excluding those designated solely for geological features).' However the wording in the permit states that the distance is 200 m. As there may be implications for existing operators in changing the location criteria we will carry out a separate consultation on rectifying this issue.

#### Anaerobic digestion: use of flares

Clarification was requested regarding whether MCPD applies to the planned use of flares.

We have clarified the requirement for all sites to have a stand by flare. Previously the rules allowed this but did not state clearly that it was permit requirement. Standby flares are not considered to be with the remit of SI 2018 No 110 The Environmental Permitting (England and Wales) (Amendment) Regulations 2018. However, flares that are operated persistently or frequently are considered a disposal activity. Similarly venting methane is not considered to be acceptable. Flares should only be used for planned activity, emergency or maintenance.

# 4. Next steps

We will use the responses from this consultation to inform any amendments to the proposed rules set and generic risk assessment.

The new standard rules sets will be published on the GOV.UK website in August 2018. Revised rules will be published in September 2018 and there will be a three month notification period for existing standard permit holders before the new rules apply.

If you responded and wish to follow up your response, or want more detail on any of the points made in this document, you can contact us:

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