



Offshore Petroleum Regulator  
for Environment & Decommissioning

# CONSULTATION ON POLICY PROPOSALS FOR OFFSHORE COMBUSTION PLANT

Transposition of the Medium Combustion Plant Directive  
and requirements for Large Combustion Plant

September 2017

The consultation [and Impact Assessment] can be found on the Government consultation [webpage](#).

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# General information

## Purpose of this consultation

This consultation is seeking stakeholders' views on policy proposals for reducing, in accordance with the relevant requirements of the Medium Combustion Plant Directive (MCPD), emissions of specified pollutants from relevant medium combustion plants (i.e. boilers, heaters and dual fuel engines (not dual fuel gas turbines) on offshore platforms engaged in hydrocarbon-related activities (i.e. oil and gas operations, gas unloading and storage operations and carbon dioxide storage and unloading operations) on the United Kingdom Continental Shelf.

We are also consulting on policy proposals to ensure that Chapter III of the Industrial Emissions Directive (2010/75/EU) is transposed in full, as there are now large combustion plant (LCP) offshore that are within scope of this Chapter.

**Issued:** 7 September 2017

**Respond by:** 5 October 2017

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**Consultation reference:** Consultation on policy proposals for offshore combustion plant - Transposition of the MCPD and requirements for Large Combustion Plant

**Territorial extent:**

The proposals for regulation set out in this consultation would only apply to offshore platforms engaged in hydrocarbon-related activities so it only directly impacts the offshore oil and gas industry operating on the UK Continental Shelf or in the UK territorial sea (except that part of the territorial sea adjacent to Scotland, Wales and Northern Ireland which extends seaward for 3 miles from the landward baseline).

Information on proposed MCPD transposition for other sectors and regions can be found elsewhere:

### *England and Wales*

The Department for Environment, Food and Rural Affairs (Defra) (for England and Wales) published a separate [consultation](#) (which closed on 8 February 2017) on proposals to transpose the MCPD by amending the England and Wales environmental permitting regime to introduce emissions controls for medium combustion plants and generators.

### *Scotland*

Scotland intends to transpose the MCPD as part of the Integrated Authorisation Framework (IAF) which brings together four main regulatory areas (water, waste, radioactive substances and pollution prevention and control) under a single standard procedure. The Scottish Government published their [consultation](#) which closed on 10 March 2017.

### *Northern Ireland*

Northern Ireland will lay its own legislation. This will comprise amendments to the Pollution Prevention and Control (Industrial Emissions) Regulations (Northern Ireland) 2013. The Department of Agriculture, Environment and Rural Affairs in Northern Ireland has launched its own [consultation](#) which closes on 16 August 2017.

## Exit from the European Union

On 23<sup>rd</sup> June 2016, the EU referendum took place and the people of the United Kingdom voted to leave the European Union. Until negotiations to exit the EU are concluded, the UK remains a full member of the European Union and all the rights and obligations of EU membership remain in force. During this period the Government will continue to negotiate, implement and apply EU legislation. The outcome of these negotiations will determine what arrangements apply in relation to EU legislation in future once the UK has left the EU.

## How to respond

Your response will be most useful if it is framed in direct response to the questions posed in Annex A, though further comments and evidence are also welcome.

Responses should be provided using the template provided and submitted preferably by email to the above contacts. Hard copies can also be submitted to the address above. You may also respond by completing an online survey via CitizenSpace [webpage](#).

### **Additional copies:**

You may make copies of this document without seeking permission. An electronic version can be found at: <https://www.gov.uk/government/consultations/policy-proposals-for-offshore-combustion-plant>.

Hardcopies could be provided upon request at the above address.

### Confidentiality and data protection

Information provided in response to this consultation, may be subject to publication or disclosure in accordance with the access to information legislation (primarily the Freedom of Information Act 2000, the Data Protection Act 1998 and the Environmental Information Regulations 2004).

If you want information that you provide to be treated as confidential please say so clearly in writing when you send your response to the consultation. It would be helpful if you could explain to us why you regard the information you have provided as confidential. If we receive a request for disclosure of the information we will take full account of your explanation, but we cannot give an assurance that confidentiality can be maintained in all circumstances. An automatic confidentiality disclaimer generated by your IT system will not, of itself, be regarded by us as a confidentiality request.

We will summarise all responses and place this summary on the [GOV.UK website](#). This summary may include a list of names or organisations that responded but not people's personal names, addresses or other contact details.

### Quality assurance

This consultation has been carried out in accordance with the [Government's Consultation Principles](#).

If you have any complaints about the consultation process (as opposed to comments about the issues which are the subject of the consultation) please address them to:

Email: [enquiries@beis.gov.uk](mailto:enquiries@beis.gov.uk)

# Introduction

The Department for Business, Energy and Industrial Strategy's Offshore Petroleum Regulator for Environment & Decommissioning (OPRED) is seeking views via this consultation on proposals designed to reduce emissions of harmful air pollutants from medium sized combustion plants on offshore platforms engaged in hydrocarbon-related activities (i.e. oil and gas operations, gas unloading and storage operations and carbon dioxide storage and unloading operations). These plants are a source of air pollutants (oxides of nitrogen- NO<sub>x</sub>, dust, sulphur dioxide- SO<sub>2</sub> and carbon monoxide- CO) which impact on air quality. Air pollution harms human health, wellbeing and the environment. Poor air quality is the largest environmental risk to public health in the UK, exacerbating the impact of pre-existing health conditions, especially for the elderly and children. Long term exposure reduces life-expectancy, mainly due to increased risk of mortality from cardiovascular and respiratory causes and from lung cancer. Air pollution also damages biodiversity and reduces crop yields.

The UK Government is committed to tackling air pollution and improving air quality, and have recently published UK air quality plans for towns and cities with the aim of tackling NO<sub>x</sub>. The UK also has EU and international obligations to protect air quality by preventing harmful pollutant levels and limiting national emissions of pollutants (under the Convention on Long-Range Transboundary Air Pollution)<sup>1</sup>.

The [Medium Combustion Plant Directive](#) (MCPD) 2015/2193/EU seeks to improve air quality by regulating emissions of certain pollutants which are harmful to human health and the environment and which emanate from medium combustion plant (MCP). The MCPD entered into force on 18<sup>th</sup> December 2015 and must be transposed by Member States into domestic legislation by 19<sup>th</sup> December 2017.

Medium combustion plant is defined as combustion plant with a rated thermal input equal to or greater than 1 megawatt thermal (MWth) and less than 50MWth. To date, such plants have largely been an unregulated source of air pollutants, especially oxides of nitrogen (NO<sub>x</sub>), sulphur dioxide (SO<sub>2</sub>) and dust. The MCPD also lays down rules to monitor emissions of carbon monoxide (CO).

The MCPD fills a regulatory gap in the control of pollutant emissions arising from MCP. It adds to existing regulation of pollutant emissions arising from large combustion plant (equal to or greater than 50 MWth) which is covered by the Industrial Emissions Directive 2010/75/EU. Under the MCPD, from 20<sup>th</sup> December 2018, new MCP will need a permit / registration before they can be operated and emissions limits will apply. Existing MCP must comply with permitting / registration requirements from 1<sup>st</sup> January 2024 or 2029, and emissions limits will

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<sup>1</sup> UNECE Convention signed 1979

apply from 1<sup>st</sup> January 2025 or 2030, depending upon their size (Table 1). Annex B sets out a brief summary of the obligations for the regulator and operators by way of background. While many of the requirements in the MCPD are prescriptive, there are others where there are options for how to implement the MCPD for the offshore oil and gas industry. It is those options that are the focus of this consultation, and on which we are seeking your views.

**Table 1. Timetable of permitting and compliance for new and existing medium combustion plant.**

|                                    | <b>Permit / registration required</b>           | <b>Compliance with Emission limits</b> |
|------------------------------------|---|--|
| New MCP                            | Will need a permit before they can be operated. | 20 <sup>th</sup> December 2018         |
| Existing MCP > 5 MWth              | 1 <sup>st</sup> January 2024                    | 1 <sup>st</sup> January 2025           |
| Existing MCP ≥ 1 MWth but ≤ 5 MWth | 1 <sup>st</sup> January 2029                    | 1 <sup>st</sup> January 2030           |

This consultation document is about the control of pollutant emissions arising from MCP which are specifically located on offshore platforms engaged in hydrocarbon-related activities. Qualifying MCP on offshore platforms are determined as boilers, direct fired heaters (a burner that provides hot gases that transfer heat energy to a process liquid or gas flowing through a pipe or coils installed inside the heater vessel) and dual fuel engines (not dual fuel gas turbines) which are used for a variety of purposes including steam generation, heating hydrocarbons in cargo tanks and heating media to support hydrocarbon processing. It should be noted that gas turbines, gas engines and diesel engines when used on offshore platforms are not in the scope of the MCPD requirements (see Article 2(3)(h) of the MCPD) and therefore are not discussed in this document.

We are also consulting on policy proposals to ensure that Chapter III of the Industrial Emissions Directive is transposed in full, as there are now large combustion plant (LCP) offshore that are within scope of this Chapter.

## Structure of this document

This document is split into three key sections with additional information and a list of the consultation questions included in the Annexes at the end of this document.

A draft Impact Assessment (IA) published with this consultation document provides an analysis of the estimated costs and benefits of the proposals which is based upon industry's response to the costings questionnaire that requested this data. Your views on the IA are also being sought.

# Proposed implementation of MCPD for the offshore oil and gas sector

## Proposed legislative approach

The Department for Business, Energy and Industrial Strategy's Offshore Petroleum Regulator for Environment & Decommissioning (OPRED) is proposing to transpose the MCPD by amending The Offshore Combustion Installations (Pollution Prevention and Control) Regulations 2013, ("the PPC Regulations"), in order to combine existing processes and procedures where possible. The PPC Regulations transpose the Industrial Emissions Directive for offshore platforms engaged in hydrocarbon-related activities (i.e. oil and gas operations, gas unloading and storage operations and carbon dioxide storage and unloading operations). The requirements apply to offshore combustion installations, which are those combustion installations on a platform that have an aggregated total rated thermal input of 50 MW or more. A permit is required to operate offshore combustion installations (a "PPC permit"). The PPC permit conditions are designed to minimise the environmental impacts of offshore combustion installations.

The details of our proposals are set out under the particular matters covered below. We consider that by adopting existing processes and procedures for combustion plant already permitted under the PPC Regulations where possible, we would maintain a consistent approach, avoid confusion for regulators and operators, and also reduce the burdens associated with establishing a new regime.

**Q1. Do you have any comments on the proposals for amending the PPC Regulations in order to implement the MCPD?**

## Permitting and registration options

The MCPD introduces mandatory registration or permitting of MCP. It is estimated that the MCPD will affect 12 existing offshore platforms and 20 MCP, with 7 platforms required to comply with permitting / registration requirements by 1<sup>st</sup> January 2024 and the remaining 5 by 1<sup>st</sup> January 2029. A permit / registration cannot be obtained unless the information in Annex I of the MCPD is provided by the operator.

BEIS - OPRED are proposing to have a single permit covering an offshore combustion installation and MCP where both the Industrial Emissions Directive and MCPD regimes apply. Where qualifying MCP is already included within an existing PPC permit, the permit would need to be amended to ensure compliance with the MCPD (see Annex B) by integrating the PPC regulatory requirements for offshore combustion installations together with those of the MCPD in one permit through specific MCP permit conditions (see below section on permit / registration conditions). Both the offshore combustion installation and MCP aspects of the

permit would be subject to compliance assessment and inspections. For new offshore combustion installations with qualifying MCP, the permit application and the permit could cover the requirements for offshore combustion installations and MCP. The PPC Regulations require a new application covering an offshore combustion installation to be made publically available<sup>2</sup>, whilst the MCPD requires the information in Annex 1 and Article 9 to be published via a register following permit approval or registration<sup>3</sup>. We propose that these two processes would be managed independently as there is no requirement for public participation at the application stage under the MCPD. For platforms that fall below the PPC regulatory requirements for offshore combustion installations (i.e. less than 50 MWth) a permit that would only cover MCP would still need to be applied for using the existing online portal environmental tracking system (PETS). We propose that the application requirements for permits that only cover MCP do not go beyond those specified in the MCPD.

The alternatives to an integrated permitting approach would be to establish a new permitting regime to meet the requirements of the MCPD (i.e. a stand-alone permit), or establish a registration process with general binding rules which would replace permit conditions.

Through the proposal of having a combined permit where both the MCPD and Industrial Emissions Directive apply we would maintain a consistent process and reduce the burden that would be associated with establishing a separate regime. A permitting approach is proposed as this seems the best fit between requirements under the PPC Regulations for offshore combustion installations and that of the MCPD. It would also allow for permit conditions which are tailored to each particular application as necessary. It should be noted that for MCPs already permitted under an existing PPC permit for an offshore combustion installation the relevant PPC requirements will continue to apply as currently worded unless amended when the MCPD requirements come into force.

The Regulations would also provide the ability for operators to submit variations regarding the permit, apply for assignment to a new operator, and surrender the permit. OPRED would also be able to revoke the permit, and vary permit conditions following a review. Should a variation be necessary OPRED will give notice to the operator of the intended variation to the conditions. There is no intention to make this notice publically available, but any representations received from the operator will be taken into account. This is less onerous compared to the PPC Regulations requirements for offshore combustion installations which require notices to be made publically available.

**Q2. Do you agree with the proposed permitting approach? If not please explain why.**

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<sup>2</sup> Directive 2003/35/EC incorporated into Directive 2010/75/EU requiring the publicising of PPC applications to enable the public to comment upon applications.

<sup>3</sup> Directive 2003/4/EC applies to both IED and the MCPD which provides for public access to environmental information.

## Emission Limit Values (ELVs)

Emissions limit values (ELVs) are set out in Article 6<sup>4</sup> and Annex II of the MCPD and apply to qualifying MCP on offshore platforms. However, there are a limited number of potential exemptions (see Table 2) within the MCPD to cover specific circumstances where applying the emission limit values could be disproportionate. We propose to apply the exemptions set out in Table 2 where relevant.

**Table 2.**

| Option  | Rationale  |
|---|--|
| i) Exemption from MCPD Annex II ELVs for existing MCP operating not more than 500 hours per year as a 5 year rolling average.   | For MCP operating a limited number of hours, compliance with ELVs may not be proportionate considering the limited emission reductions achieved and the costs associated with doing so.  |
| ii) Exemption from MCPD Annex II ELVs for existing MCP operating not more than 1000 hours per year as a 5 year rolling average for MCP supplying heating in cases of exceptionally cold weather events.   | For MCP operating a relatively limited number of hours in such emergency circumstances, compliance with ELVs may not be proportionate considering the limited emission reductions achieved and the costs associated with doing so. |
| iii) Exemption from Annex II ELVs for new MCP operating no more than 500 hours per year as a 3 year rolling average.  | For MCP operating a limited number of hours, compliance with ELVs may not be proportionate considering the limited emission reductions achieved.   |
| iv) OPRED may grant a derogation from SO <sub>2</sub> ELV for a maximum period of six months for MCP which normally uses low-sulphur fuel because of an interruption in the supply of low-sulphur fuel resulting from a serious shortage.   | A derogation may be granted when fuel supply becomes problematic.  |
| v) OPRED may grant a derogation from ELVs for MCP in cases where gaseous fuel is used and has to resort to the use of other fuels because of a sudden interruption in the supply of gas and, for this reason, would need to be equipped with secondary abatement equipment. The period for which the derogation is granted shall not exceed ten days except where the operator demonstrates to OPRED that a longer period is justified. | Use of gas from the producing reservoir(s) that would normally be used within MCP is affected and may impact emissions. Demonstration for additional time will be on a case by case basis.   |

<sup>4</sup> Under Article 6(6) of the MCPD, until 1 January 2030, Member States may exempt existing MCP with a rated thermal input greater than 5 MW and which are used to drive gas compressor stations required to ensure the safety and security of a national gas transmission system from compliance with the emission limit values for NO<sub>x</sub>. However, while it is recognised that compressors are used on offshore platforms to gather and transfer gas between facilities and to an onshore terminal, these are not necessary to ensure the safety and security of a national gas transmission system. It is interpreted that Article 6(6) refers to compressor stations such as the National Grid compressor stations which are used to transmit gas following its supply to reception terminals. Therefore this exemption is not relevant to offshore hydrocarbon-related activities.

**Q3. Do you agree with the proposed approach in Table 2, and are there practical problems with applying the rolling averages?**

## Monitoring

Member States must ensure monitoring is carried out based on methods enabling reliable, representative and comparable results. We have recently asked industry about the cost implications of monitoring and described several approaches as to how the monitoring might be achieved. These were:

- i) An appropriately qualified 3<sup>rd</sup> party to conduct the monitoring surveys to the EN standard, and prepare a monitoring survey report for the operator annually or every three-years as appropriate in order to meet the MCPD requirements.
- ii) A one-off cost of buying an appropriate monitoring device that would meet an EN standard, storing and maintaining it offshore and the cost associated with training personnel to conduct the monitoring surveys annually or every three-years as appropriate and preparing the test report.
- iii) Conducting measurements to an EN standard once every 3 years for all qualifying MCP by an appropriately qualified 3<sup>rd</sup> party. The combustion units > 20 MWth are monitored annually by appropriately trained offshore personnel for the two years in between.

Where the above methods conform to an EN Standard, OPRED propose that industry could choose how monitoring is to be achieved from the above options and OPRED could require operators to provide details to demonstrate how monitoring is achieved. This information could also be inspected against during an onshore or offshore inspection to ensure the requirements are being met.

Monitoring for larger primary combustion units (i.e. combustion units that are providing critical power or gas compression) is required to follow the UK Monitoring Certification Scheme (MCERTs) which is an extensive monitoring requirement. Applying the MCERTs approach as a monitoring requirement for MCP is deemed disproportionate, as it would go beyond what is required by the MCPD monitoring requirements and would therefore lead to unnecessary work and costs. For this reason, OPRED do not propose that the MCERTs requirements be applied for MCP monitoring. OPRED are currently determining alternative approaches to monitoring (e.g. portable measurement systems which could potentially be used for monitoring under options i, ii and iii above) and would therefore welcome proposals on what monitoring sensors could be used and whether they conform to an EN Standard in response to this consultation.

**Q4. Do you have any suggestions for monitoring methods / monitoring sensors which could be applied to MCPs as an alternative to MCERTs?**

Operators are required to monitor pollutant emissions periodically. Where secondary abatement equipment is fitted, the operator is also required to keep records to prove effective continuous operation of the equipment.

The monitoring frequencies prescribed by the MCPD for each type of MCP are outlined in Table 3. It is acknowledged that there could be technical and space limitations to access the

relevant combustion equipment and these restrictions will be viewed on a case by case basis with provision of evidence where appropriate. This aligns with monitoring provisions under the PPC stack monitoring guidance.

For MCP which operate on average no more than 500 hours per annum, Member States may set a frequency of monitoring based on the number of operating hours (see Table 3), and this is proposed to be transposed.

**Table 3.** Monitoring where MCP capacity is  $\geq 1$  MWth but  $\leq 20$  MWth; and  $> 20$  MWth but  $< 50$  MWth.

| Fuel type <sup>5</sup>   | Pollutants monitored                        | MCP capacity (MWth) | Monitoring frequency  |
|--|---|---------------------|---|
| Natural gas  | Carbon monoxide (CO) and NOx emissions      | 1 - 20              | Every 3 years   |
|  |   | 20 - 50             | Annually  |
| MCP firing gaseous fuels other than natural gas                            | CO, NOx and SO <sub>2</sub> emissions       | 1 - 20              | Every 3 years   |
|  |   | 20 - 50             | Annually  |
| MCP firing liquid fuel (gas oil)   | CO and NOx emissions                        | 1 - 20              | Every 3 years   |
|  |   | 20 - 50             | Annually  |
| MCP firing liquid fuels other than gas oil                                 | CO, NOx, SO <sub>2</sub> and Dust emissions | 1 - 20              | Every 3 years   |
|  |   | 20 - 50             | Annually  |
| MCP firing gaseous and liquid fuels (operating $\leq 500$ hours per annum) | CO emissions                                | 1 - 20              | Every 1,500 hours of operation, and at least once every 5 years |
|  |   | 20 - 50             | Every 500 hours of operation, and at least once every 5 years   |

Under the MCPD, Member States may require continuous emissions monitoring (CEMS). However, we consider that the costs associated with CEMS would be disproportionate for the offshore industry so we propose that it should remain as optional and operators may choose CEMS if appropriate for the MCP. In addition, and as required by the MCPD, operators will need to check the MCP continuous monitoring equipment against the reference monitoring methods annually and report the results if using CEMS.

<sup>5</sup> The MCPD defines fuel types which are included within the scope and are defined by CN (combined nomenclature) codes. Gas oil is defined as any petroleum derived liquid fuel with the following CN codes 2710 19 25, 2710 19 29, 2710 19 47, 2710 19 48, 2710 20 17 or 2710 20 19; or any petroleum-derived liquid fuel of which less than 65 % by volume (including losses) distils at 250 °C and of which at least 85 % by volume (including losses) distils at 350 °C by the ASTM D86 method and operators should be aware of what fuel they are using. If gas oil is not a fuel being used, operators will need to monitor emissions as set out in the relevant part of Table 3 and comply with the ELVs as per Annex C.

Member States may allow alternative methods for determining SO<sub>2</sub> emissions (e.g. based on fuel sulphur content). We propose to continue existing provisions under the PPC guidance to permit monitoring of SO<sub>2</sub> emissions based upon calculation of the fuel sulphur content being used.

**Q5. Do you agree with:**

- a) Transposing the reduced monitoring requirements for MCP operating no more than 500 hours?**
- b) Retaining continuous emissions monitoring as optional?**
- c) Continuing to permit monitoring of SO<sub>2</sub> content within the fuel by calculation?**

**If not what are your concerns?**

## Permit / registration conditions

Permit / registration conditions will need to be implemented in order to meet the MCPD requirements. We propose that conditions for MCP are aligned as far as practical with that of existing PPC permits, in a way that does not go beyond the MCPD requirements. It is proposed that the permit would cover matters such as:

- a. *Prevention of pollution*: keep MCP start-up and shutdown periods as short as possible.
- b. *Maintenance of records*: retain records for a minimum of 6 years. Records must cover monitoring results, running hours of each MCP where Article 6(3) or 6(8) apply, type and quantity of fuel used, effectiveness of any abatement equipment and any malfunction of that abatement equipment, events of non-compliance and the measures taken to restore compliance.
- c. *Inspections*: afford an appointed inspector assistance to exercise powers conferred by the Regulations.
- d. *Monitoring*: submit - for approval by OPRED - a planned monitoring programme, monitor specified emissions at the defined frequency and submit the results of this to OPRED.
- e. *Emission limit values* for qualifying MCP shall be complied with and where this is breached, a non-compliance notice must be submitted.
- f. *Permit returns*: the permit holder shall, within three calendar months of the end of each calendar year, submit a return of the emissions from the combustion equipment authorised under the permit. The return should be submitted using the appropriate Environmental Emissions Monitoring System (EEMS) reporting form.
- g. *Permit / registration variation*: submit a permit variation application without undue delay regarding planned changes that would affect the applicable ELVs for MCPs, or to update the permit for any other changes to MCP, e.g. new MCP to be used or redundant equipment being removed off the platform.
- h. *Restoring compliance*: in the event of any non-compliance with the emission limit values, the operator shall restore compliance in the shortest possible time.

The requirements set out in the permit would not go beyond what is considered necessary in order to secure compliance with the MCPD.

**Q6. Do you agree with the proposed approach for permit conditions? If not what are your concerns?**

## Compliance checks

The MCPD requires Member States to set up an effective system, based on either environmental inspections or other measures, to check operator compliance. There are current existing provisions for checking compliance which are used for other regulatory functions:

- i) Off- and / or onshore inspections; and
- ii) Remote compliance checking of data (level of pollutants from monitoring, i.e., NO<sub>x</sub>, SO<sub>2</sub> and dust) submitted to Emissions and Environmental Monitoring System (EEMS).

We propose to extend these to include the requirements of the MCPD, as the sector is used to this process for other regulated activities and it avoids introducing a new inspection and compliance regime, thereby reducing the regulatory burden. Current offshore combustion installations permitted under the PPC Regulations are already subject to the above compliance checks and the majority of qualifying MCP are anticipated to already be regulated under the PPC Regulations. Going forwards, it is proposed that MCPD requirements are monitored using the same risk based approach. However, there would be no requirement to publish an inspection report which relates to MCP only and no fixed frequency for inspections regarding MCPD requirements. Offshore platforms that do not hold a PPC permit but will require a permit / registration for MCP would become subject to compliance checks and the existing inspection regime is anticipated to incorporate compliance checks for MCP at the same time that off- and / or onshore inspections regarding other environmental regulatory regimes take place. OPRED may also issue information notice(s) in order to perform its functions and monitor compliance.

**Q7. Do you agree that compliance monitoring for MCP should be incorporated into the existing inspection regime for other environmental legislation by combined on / offshore inspections and the use of EEMS? If you consider this is not appropriate, please explain why.**

## Non-compliance reporting

The MCPD requires Member States to lay down rules for the type, frequency and format of information concerning events of non-compliance with emission limits to be reported by operators. We have a system in place under the PPC Regulations which is proposed to be extended to include non-compliances related to MCP. The PPC permit requires submission of a notification via email to OPRED regarding the non-compliance without undue delay, its cause, what is to be done to resolve the non-compliance, steps taken to prevent re-occurrence

and information on whether the non-compliance is likely to result in a significant environmental impact. It is proposed that the same notification requirements would be required to capture non-compliances related to emission limit values under the MCPD. A record of events of non-compliance and corrective measures taken would also need to be maintained by the operator, in accordance with Article 7(5)(e) of the MCPD.

The operator may be required to take additional measures to ensure that compliance with ELVs is restored without undue delay, and must ensure suspension of operation of the MCP until compliance is restored where the non-compliance causes a significant degradation of local air quality.

**Q8. Do you agree with the proposal to replicate the non-compliance reporting process for PPC requirements? If not, what are your concerns?**

### Enforcement

The existing provisions under the PPC Regulations (regulations 30 to 36) are proposed to be extended to include MCP, rather than introducing a new enforcement approach. This includes enforcement notices, prohibition notices, action on failure to comply with an enforcement or prohibition notice, appeals, and offences in relation to operating MCP without an approved permit / registration, breaches of permit conditions / general binding rules, and failure to comply with an information notice. Penalties would also apply on the basis set out in the PPC Regulations where offences are committed.

**Q9. Do you agree with the proposal to replicate the enforcement and penalties process for PPC requirements? If not, what are your concerns?**

### Fees

It is proposed that the costs to OPRED in performing functions related to the MCPD would be recovered by charging the relevant company, which would usually be the operator, for functions that OPRED undertakes. This is in order to ensure compliance with HMT guidance on Managing Public Money. In this context, OPRED proposes to take the opportunity to review the fees provisions under the PPC Regulations to ensure that it has the necessary powers to charge for the legislative functions it performs under the Regulations. For example, OPRED would seek to recover costs it incurs regarding permit applications, permit variations, permit assignments, permit surrender, permit revocation, monitoring compliance, and necessary testing, analysis, verification and assessment processes. OPRED would also seek to recover costs for advice provided in relation to the listed functions, including advice given prior to an application being submitted or prior to a particular process being carried out, whether or not that application is submitted or the process is carried out. Fees would be calculated using the hourly rate set out in the Pollution Prevention and Control (Fees) (Miscellaneous Amendments and Other Provisions) Regulations 2015. The hourly rate, which applies across OPRED's regulatory activity, is updated periodically in order to ensure charges are in line with cost

recovery. Fees provisions would be set out in the PPC Regulations, with further detail also set out in a charging scheme, in order to ensure transparency.

The amendments to the PPC Regulations would essentially mirror amendments to the charging provisions of the Offshore Chemicals Regulations 2002 (as amended) and the Offshore Petroleum Activities (Oil Pollution Prevention and Control) Regulations 2005 (as amended), which were made following consultation with industry. OPRED additionally intends to amend the fees provisions in order to ensure that it can charge for a permit review under regulation 13 of the PPC Regulations.

**Q10. Do you agree with the proposed approach to fees? If not please explain why.**

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# Impact of the proposals

A draft impact assessment is provided in support of the proposals within this consultation.

**Q11. Do you agree with the evidence provided in the impact assessment e.g. monitoring, number of qualifying MCP, operating hours etc.?**

# Transposing Chapter III (Large Combustion Plant) of the Industrial Emissions Directive (IED)

Large Combustion Plant (LCP) is defined as combustion plant that has a total rated thermal input equal to or greater than 50 MW, irrespective of the type of fuel used – see Article 28 of the IED. Chapter III sets out provisions for emission limit values and monitoring requirements. For the offshore hydrocarbons sector, it has been determined that boilers, heaters and diesel engines that are  $\geq 50$  MWth are within scope, whilst gas turbines and gas engines (which for the IED includes dual fuel turbines and engines) are excluded from requirements in Chapter III by Article 28(i). A plant would also qualify under Article 29 where waste gases of two or more separate combustion plants are discharged, or could be discharged, through a common stack. The combination formed by such plants shall be considered as a single combustion plant and their capacities added (if equal to or greater than 15 MWth) for the purpose of calculating the total rated thermal input. The Chapter III requirements were not transposed previously as there were no qualifying LCP and none were envisaged to enter into service at that time. However there are now LCP that will fall within scope, and OPRED are making provisions to transpose Chapter III in order to ensure compliance. It is expected that the requirements of Chapter III will have a minor impact on offshore operators, as OPRED is currently aware of only two offshore large combustion plants that will fall under the requirements of Chapter III, and it is not expected that many more will come into operation in future. Nevertheless, we are seeking further information from operators on potential impacts – please see our questions below.

## Proposed legislative approach

OPRED is proposing to transpose the requirements of Chapter III by amending the PPC Regulations. The PPC Regulations would be amended to place an obligation on the Secretary of State to ensure compliance with the relevant requirements of Chapter III. The Secretary of State would then ensure compliance by incorporating the necessary conditions into the PPC permit.

## Permitting, Emission Limit Values and derogations

The existing PPC permit is proposed to be used instead of introducing a new permitting regime specifically for LCP, as all LCP require a PPC permit under the existing regime and this allows existing practices and procedures to be used. We also propose use of the derogations described below where relevant.

Article 30 sets out provisions for Emission Limit Values (ELVs) as defined in Annex V, Part 2 of the IED. The ELVs will apply to qualifying LCP and these ELVs cannot be exceeded unless a derogation applies. However, diesel engines do not have an ELV as set out in Article 30(8).

Article 30(5) allows a derogation to be granted for a maximum of 6 months from the obligation to comply with the ELVs for sulphur dioxide in respect of a combustion plant which normally uses low-sulphur fuel, in cases where the operator is unable to comply with those limit values because of an interruption in the supply of low-sulphur fuel resulting from a serious shortage.

A derogation may also be granted from the obligation to comply with the ELVs in cases where a combustion plant using only gaseous fuel has to resort exceptionally to the use of other fuels because of a sudden interruption in the supply of gas and for this reason would need to be equipped with a waste gas purification facility (see Article 30(6)). The period for which such derogation is granted shall not exceed 10 days except where there is an overriding need to maintain energy supplies.

Article 37 sets out requirements regarding malfunction or breakdown of the abatement equipment. In the case of a breakdown, OPRED must 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. Also, the cumulative duration of unabated operation must not exceed 120 hours in any 12-month period. However, a derogation may be granted from these time limits where there is an overriding need to maintain energy supplies or where the combustion plant with the breakdown would be replaced for a limited period by another plant which would cause an overall increase in emissions.

## Monitoring

Member States must ensure monitoring is carried out based on methods enabling reliable, representative and comparable results. For LCP this would be ensured by using the MCERTs approach to monitoring, the Environment Agency's Monitoring Certification Scheme.

Part 3 of Annex V of the IED sets out emission monitoring requirements. Specifically SO<sub>2</sub>, NO<sub>x</sub>, dust, and CO from plant firing gaseous fuels, in waste gases from each combustion plant with a total rated thermal input of ≥ 100 MW shall be measured continuously, and there must be an annual surveillance test. Where LCP fires on natural gas, SO<sub>2</sub> and dust do not need to be continuously monitored and for combustion plants firing oil with known sulphur content in cases where there is no waste gas desulphurisation equipment, SO<sub>2</sub> does not need to be continuously monitored. In these cases, measurements are required at least once every six months.

For LCP < 100 MWth continuous measurement is not required, but monitoring shall be required at least once every 6 months for SO<sub>2</sub>, NO<sub>x</sub> and dust (and CO for gas fired plants). As an alternative to the measurements of SO<sub>2</sub> and NO<sub>x</sub> when continuous measurements are not required, other procedures, verified and approved by the competent authority, may be used to determine the SO<sub>2</sub> and NO<sub>x</sub> emissions. OPRED would require use of MCERTS.

All monitoring results shall be recorded, processed and presented in such a way as to enable OPRED to verify compliance with the operating conditions and emission limit values which would be included in the permit.

Please refer to Chapter III of the Industrial Emissions Directive for full requirements.

**Q12. Do you have any comments on the proposals for transposing the requirements of Chapter III of the IED?**

OPRED are also requesting industry to respond to this consultation with estimated cost impacts of monitoring the respective pollutants for qualifying LCP and installing abatement equipment or an alternative means to control the level of emissions, in order to ensure these fall within the prescribed ELVs. This aspect has not been included within the impact assessment as we are requesting data as part of this consultation in order to support that assessment, and the impact assessment will be updated to account for Chapter III requirements post consultation.

**Q13. Do you have any qualifying LCP on your offshore platform(s) that would be within scope of the Chapter III requirements?**

**Q14. What are the cost implications on an annual basis and over a 15 year timescale of i) monitoring and ii) initial installation of abatement equipment or an alternative means to ensure compliance with ELVs?**

**Q15. Are you planning on installing / using a qualifying LCP in any future development(s)?**

**Responses to questions 12-15 can be ignored if these are not relevant to you.**

# Next steps

The consultation runs for 4 weeks. The consultation will close on 5 October 2017.

Within 12 weeks of the close of the consultation, the Government will publish a summary of all the replies received (subject to confidentiality restrictions) and the Government's response to them. The Government's response will include details on, plus the reasons for, decisions made in light of the consultation's outcomes. The document will be published on the [GOV.UK website](#) with paper copies available on request.

This consultation is in line with the Code of practice on Consultations. This can be found at <https://www.gov.uk/government/publications/consultation-principles-guidance>

Copies of responses will be made available to the public on request. If you do not want your response to be publicly available, please say so clearly in writing when you submit your response to the consultation. Please note, if your computer automatically includes a confidentiality disclaimer, that won't count as a confidentiality request.

Please explain why you need to keep details confidential. We will take your reasons into account if someone asks for this information under freedom of information legislation. But we cannot promise that we will always be able to keep those details confidential, as we may be legally obliged to disclose the information.

# Annex A: Catalogue of consultation questions

| Consultation Question |   |
|-----------------------|---|
| 1.                    | Do you have any comments on the proposals for amending the PPC Regulations in order to implement the MCPD?  |
| 2.                    | Do you agree with the proposed permitting approach? If not please explain why.  |
| 3.                    | Do you agree with the proposed approach in Table 2, and are there practical problems with applying the rolling averages?  |
| 4.                    | Do you have any suggestions for monitoring methods / monitoring sensors which could be applied to MCPs as an alternative to MCERTs?   |
| 5.                    | Do you agree with: <ul style="list-style-type: none"> <li>a) Transposing the reduced monitoring requirements for MCP operating no more than 500 hours?</li> <li>b) Retaining continuous emissions monitoring as optional?</li> <li>c) Continuing to permit monitoring of SO<sub>2</sub> content within the fuel by calculation?</li> </ul> If not what are your concerns? |
| 6.                    | Do you agree with the proposed approach for permit conditions? If not what are your concerns?   |
| 7.                    | Do you agree that compliance monitoring for MCP should be incorporated into the existing inspection regime for other environmental legislation by combined on / offshore inspections and the use of EEMS? If you consider this is not appropriate, please explain why.  |
| 8.                    | Do you agree with the proposal to replicate the non-compliance reporting process for PPC requirements? If not, what are your concerns?  |
| 9.                    | Do you agree with the proposal to replicate the enforcement and penalties process for PPC requirements? If not, what are your concerns?   |
| 10.                   | Do you agree with the proposed approach to fees? If not please explain why.   |
| 11.                   | Do you agree with the evidence provided in the impact assessment e.g. monitoring, number of qualifying MCP, operating hours etc.?   |
| 12.                   | Do you have any comments on the proposals for transposing the requirements of Chapter III of the IED?   |

## Annex A: Catalogue of consultation questions

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|     |   |
|-----|---|
| 13. | Do you have any qualifying LCP on your offshore platform(s) that would be within scope of the Chapter III requirements?   |
| 14. | What are the cost implications on an annual basis and over a 15 year timescale of i) monitoring and ii) initial installation of abatement equipment or an alternative means to ensure compliance with ELVs? |
| 15. | Are you planning on installing / using a qualifying LCP in any future development(s)?   |

## Annex B: MCPD obligations for OPRED and the operator

Please note this is just a summary of the main requirements, and operators should consult the MCPD for full details.

| <b>MCPD operator obligations</b>  |
|---|
| <ol style="list-style-type: none"><li>1. Obtain a permit / registration for medium combustion plant (MCP) operation by set deadlines and update OPRED as required without undue delay of planned changes which would affect the applicable emissions limit values (ELVs). (See Articles 5 and 9.)</li><li>2. Monitor emissions at the defined frequency (see Article 7 and Annex III), ensure MCP meet ELVs (see Article 6 and Annex II).</li><li>3. Retain records for a minimum of 6 years (see Article 7(5)) of:<ol style="list-style-type: none"><li>i. Monitoring results to demonstrate compliance;</li><li>ii. Evidence of effective continuous operation of secondary abatement equipment;</li><li>iii. where the MCP benefits from an exemption from compliance with Annex II ELVs because it operates limited hours, a record of operating hours;</li><li>iv. Record of the type of fuels used in the MCP and any malfunction or breakdown of secondary abatement equipment; and</li><li>v. a record of the events of non-compliance and the remediation measures taken.</li></ol></li><li>4. In the event of non-compliance with ELVs, ensure a return to compliance within the shortest possible time and report non-compliances with ELVs in accordance with OPRED requirements (see Article 7(7)).</li><li>5. Report emissions to OPRED via EEMS.</li><li>6. Keep start-up and shut-down periods as short as possible.</li><li>7. Provide information as requested by OPRED to undertake compliance checks or compile information for the purpose of Member State reporting requirements, and to gather information to assist OPRED in carrying out its duties.</li></ol> |
| <b>Minimum data required to support a permit application (including amending an existing PPC permit) as per Annex I of the MCPD</b>   |
| <ol style="list-style-type: none"><li>1. Rated thermal input (MW) of the MCP.</li><li>2. Type of the MCP (i.e. boiler, heater, dual-fuel engine).</li><li>3. Type and share of fuels used (gas, natural gas, gas oil, liquid fuel other than gas</li></ol>  |

oil).

4. Date of the start of the operation of the MCP or, where the exact date of the start of the operation is unknown, proof of the fact that the operation started before 20 December 2018.
5. Sector of activity of the MCP or the facility in which it is applied (NACE code).
6. Expected number of annual operating hours of the MCP and average load in use.
7. Where the option of exemption under Article 6(3) or Article 6(8) is used, a declaration signed by the operator that the MCP will not be operated more than the number of hours referred to in those paragraphs.
8. Name and registered office of the operator, platform name and latitude and longitude where the MCP is located.

### **MCPD obligations for OPRED**

1. Permit / register MCP based on information supplied by the operator.
2. Determine whether new MCP at a site should be aggregated if a common stack is shared.
3. Set permit / registration conditions which ensure compliance with the MCPD.
4. Amend permits when operator submits information about modifications to MCP, or if required when reviewing information collated in compliance checks.
5. Carry out checks to assess compliance with MCPD requirements and permit conditions.
6. Ensure operators comply with MCPD requirements and permit conditions, and direct operators to take action to rectify non-compliance.
7. Develop, update and make available, including via the internet, a public register with the information submitted by operators in permit applications, and modifications to MCPs which affect the applicable ELVs.
8. Determine when to apply the exemptions / derogations from ELVs and monitoring requirements.
9. When operators report a non-compliance with ELVs which causes significant degradation to local air quality, order suspension of operation until compliance is restored.
10. Lay down penalties applicable to infringements of the MCPD requirements.
11. Seek information from operators for the purpose of responding to requests from the public for the data which operators are required to hold for 6 years.

# Annex C: MCPD Annex II Emission Limit Values (ELVs)

All emission limit values set out in this Annex are defined at a temperature of 273,15 K, a pressure of 101,3 kPa. Please note this is just a summary of Annex II, and operators should consult the MCPD for full details.

## Part 1.

Emission Limit Values for *existing* medium combustion plant.

**Table 1.** Emission limit values (mg/Nm<sup>3</sup>) for existing medium combustion plants with a rated thermal input equal to or greater than 1 MWth and less than or equal to 5 MWth. Note that the table has been amended to reflect the relevant fuels used on offshore platforms.

| Pollutant       | Gas oil | Liquid fuels other than gas oil | Natural gas <sup>6</sup> | Gaseous fuels other than natural gas |
|-----------------|---------|---------------------------------|--------------------------|--------------------------------------|
| SO <sup>2</sup> | -       | 350                             | -                        | 200                                  |
| NO <sub>x</sub> | 200     | 650                             | 250                      | 250                                  |
| Dust            | -       | 50                              | -                        | -                                    |

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<sup>6</sup> 'natural gas' means naturally occurring methane with no more than 20 % (by volume) of inerts and other constituents

**Table 2.** Emission limit values (mg/Nm<sup>3</sup>) for existing medium combustion plants with a rated thermal input greater than 5 MW.

| <b>Pollutant</b> | <b>Gas oil</b> | <b>Liquid fuels other than gas oil</b> | <b>Natural gas</b> | <b>Gaseous fuels other than natural gas</b> |
|------------------|----------------|--|--------------------|---|
| SO <sup>2</sup>  | -              | 350 <sup>(1)</sup>                     | -                  | 35  |
| NO <sub>x</sub>  | 200            | 650                                    | 200                | 250   |
| Dust             | -              | 30                                     | -                  | -   |

(1) Until 1 January 2030, 850 mg/Nm<sub>3</sub> in the case of MCP with a rated thermal input greater than 5 MW and less than or equal to 20 MW firing heavy fuel oil.

**Table 3.** Emission limit values (mg/Nm<sup>3</sup>) for new medium combustion plants.

| <b>Pollutant</b> | <b>Gas oil</b> | <b>Liquid fuels other than gas oil</b> | <b>Natural gas</b> | <b>Gaseous fuels other than natural gas</b> |
|------------------|----------------|--|--------------------|---|
| SO <sup>2</sup>  | -              | 350                                    | -                  | 35  |
| NO <sub>x</sub>  | 200            | 300                                    | 100                | 200   |
| Dust             | -              | 20 <sup>(1)</sup>                      | -                  | -   |

(1) 50 mg/Nm<sup>3</sup> in the case of MCP with a total rated thermal input equal to or greater than 1 MW and less than or equal to 5 MW.

