



Department
for Environment
Food & Rural Affairs

Consultation on the implementation of amendments to the environmental permitting guidance on waste incineration

www.gov.uk/defra

September 2015



Llywodraeth Cymru
Welsh Government



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1. Introduction

- 1.1. On 16 July 2015 the Parliamentary Under Secretary of State for Environment and Rural Affairs Rory Stewart announced that as part of the commitment to cleaner air the Government would amend the current Environmental Permitting Guidance – the Waste Incineration Directive¹ document to state clearly that all waste incineration plants and waste co-incineration plants burning waste oils in England and Wales fall under the scope of Chapter IV of the Industrial Emissions Directive (IED). The IED came into force in 2014, superseding the Waste Incineration Directive (WID). This change affects small, basic appliances such as Small Waste Oil Burner (SWOBs).
- 1.2. The amendment will reduce the emission of air pollutants from the use of waste oil as a fuel as it will require all operators of SWOBs burning waste oils to meet the requirements of Chapter IV of the Industrial Emission Directive or, alternatively, to choose to use other non-waste fuels such as gas or fuel oils.
- 1.3. In reaching this decision the Government has taken account of various views and perspectives. Government also recognises that there is now an established waste oil recycling industry which offers an opportunity to further reduce air emissions, with potential benefits to human health and the environment.
- 1.4. The UK Government announcement advised that the Department for Environment, Food and Rural Affairs (Defra) would undertake a consultation on the amended guidance for England and Wales and provide information about measures available to help industry with the transition. This consultation is being conducted jointly with the Welsh Government.
- 1.5. As a result of the UK Government's Red Tape Challenge all guidance issued by the Defra is being reviewed using smarter guidance principles² to make it clearer for businesses and others to understand and comply with their obligations. The current Environmental Permitting Guidance – the Waste Incineration Directive document is being considered as part of this wider review. Changes will therefore be made to update the guidance to comply with the smarter guidance principles and to update any references to the WID to refer to the IED. In addition, references to any other legislation which is applicable to burning of waste will also be updated. This consultation document focuses on changes being made to the guidance that relate to SWOBs. These are presented in Chapter 6 of this consultation document.

¹Environmental Permitting Guidance – The Waste Incineration Directive

https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/201215/pb-13570-wid-guidance-201003.pdf

² Smarter Guidance Review - <http://guidanceanddata.defra.gov.uk/smarter-guidance/>

- 1.6. The amended guidance will be published in December 2015 and will take effect in April 2016. The amendments to the guidance will apply to England and Wales. Guidance in Scotland and Northern Ireland already advises that SWOBs are within the scope of the IED.
- 1.7. We are seeking your views on whether the amendments being made to the guidance are clear that the use of waste oil in a SWOB will be subject to the requirements of the IED. We are also seeking any evidence you can provide to support the impact assessment which has been undertaken on this change. We are not consulting on whether or not to make the changes to the guidance.

2. Background

The Industrial Emissions Directive

- 2.1. The IED replaced the WID³ and places stringent operating, monitoring and reporting requirements upon any technical unit, irrespective of its size or capacity, in which waste is incinerated or co-incinerated. The IED aims to prevent or limit as far as practicable the release of harmful pollutants to land, air and water.
- 2.2. As part of the implementation of the WID in England and Wales, comprehensive guidance was drawn up and first published in 2003. This included guidance that some devices, such as SWOBs, are typically simple and lack the technical attributes which would make them subject to WID requirements. The guidance explained that regulators should assess whether the unit was subject to the WID on a case-by-case basis. This reflected the Government's interpretation of the WID, and that there was limited scope to recycle waste oil at the time the guidance was drafted.
- 2.3. The use of SWOBs which are not considered to be subject to the WID but burn waste oils are currently subject to regulation by local authorities (under the Environmental Permitting Regulations (EPR), Part B processes)⁴. The EPR regulates emissions to air from the use of these appliances when burning waste oil through the inclusion of specific conditions within an environmental permit.
- 2.4. This guidance has now been reviewed and consideration has been given to whether Chapter IV of the IED covers basic units such as SWOBs when burning waste oils. Particular consideration has been given to the impact on human health and the environment from the use of waste oil as a fuel without sufficient

³ Directive 2000/76/EC of the European Parliament and of the Council of 4 December 2000 on the incineration of waste. Full text: <http://eur-lex.europa.eu/legal-content/EN/TXT/?uri=URISERV:l28072>

⁴ The Environmental Permitting (England and Wales) Regulations 2010 (S.I. No. 2010/675). Full Text: <http://www.legislation.gov.uk/ukSI/2010/675/contents/made>

emission abatement equipment to limit the emission of harmful pollutants. We have also considered the availability of alternative routes for the recycling of waste oil, including the maturity of the waste oil recycling sector in the UK.

- 2.5. Government has therefore determined that the guidance on how waste incineration plants and waste co-incineration plants are regulated needs to be amended to make clear that the requirements of the IED apply to all waste incineration plants and waste co-incineration plants, including SWOBs if burning waste oil.
- 2.6. This change to the guidance will clarify the application of the IED and will result in a reduction in pollutants being emitted from the use of waste oil as a fuel, resulting in potential benefits to human health. Further, waste oil arising from the motor trade industry and elsewhere will be sustainably managed, including, we anticipate, through an increase in the amount of waste oil being recycled and managed further up the waste hierarchy.
- 2.7. Separate guidance⁵ (Guidance for Waste Oil and Recovered Oil Burners Less Than 0.4MW and Guidance for Waste Oil or Recovered Oil Burners, 0.4-3 MW Net Rated Thermal Input) was published for Local Authority regulators on how basic units such as SWOBs, which did not fall under the scope of the WID, should be regulated under the Environmental Permitting Regulations (EPR). This guidance will be withdrawn.
- 2.8. As a result of the amendments to the guidance, operators of simple devices, such as SWOBs burning waste oil will need to change their current practices. It will no longer be permissible to burn waste oil in such devices unless the operator obtains the necessary permit in accordance with Schedule 13A of the EPR and meets the requirements of the IED for the operation of waste incineration and waste co-incineration plants.
- 2.9. As these requirements are expected to be difficult to meet for small and or simple devices such as SWOBs, operators are expected to prefer to change from using waste oil to alternative non-waste fuels or use alternative space-heating appliances (e.g. gas boiler). Any of these options will reduce the emission of

5 Secretary of State's Guidance for Waste Oil and Recovered Oil Burners Less Than 0.4MW

<http://webarchive.nationalarchives.gov.uk/20130123162800/http://archive.defra.gov.uk/environment/quality/pollution/ppc/localauth/pubs/guidance/notes/pgnotes/documents/pg1-01.pdf>;

and

Secretary of State's Guidance for Waste Oil or Recovered Oil Burners, 0.4-3 MW Net Rated Thermal Input

http://webarchive.nationalarchives.gov.uk/20130123162800/http://archive.defra.gov.uk/environment/quality/pollution/ppc/localauth/pubs/guidance/notes/pgnotes/documents/PG1_02.pdf

pollutants to air and the negative human health and environmental impacts associated with burning waste oil in SWOBs.

- 2.10. Additionally, waste oil will have to be disposed of appropriately, or collected for waste oil recycling. Where waste oil is sent for recycling this will lead to increased application of the waste hierarchy which encourages the recycling of waste products over disposal.
- 2.11. If an operator does not use waste oil in their SWOB and instead uses alternative non-waste fuel they will not need to obtain a “Part B Processes” Environmental Permit to operate it.

3. Impact of changes

- 3.1. In deciding to amend the guidance, the Government has also considered when the best time to implement the changes would be. The impact assessment included at Annex A discusses this. The Government considers that an early implementation date (i.e. immediate amendment to the guidance applicable from September 2015) would not give operators sufficient time to explore the options for alternative heating or fuels and for disposal of their waste oil. Implementation from April 2016 provides operators with time to mitigate, as much as possible, additional costs by allowing them time to explore the range of options that are available to them. Implementation in April 2016 will also mean that operator’s will be able to fit new heating systems if appropriate in the summer months when space heating is not required, thus reducing the risks and cost impacts on businesses.
- 3.2. A change to the guidance would result in operators needing to purchase alternative fuel for use in their SWOB, or to invest in a more efficient heating system. Assuming that SWOBs are gradually replaced with gas boilers, the present value cost of equipment would be up to £6.1m while the cost of alternative fuel for affected operators would be in the range of £258 – 340m over a ten year period. The full economic assessment produced a total cost estimate of implementing the change to the guidance to be between £264 – 346m over the 10 year appraisal period, corresponding to an average annual undiscounted cost of £31.7 – 41.6m. Based on industry advice that there are about 15,000 SWOBs in use, each consuming about 5,000 litres of fuel per annum (on a seasonal basis), we have estimated that the total cost per business is likely to be in the region of £1,800 – 2,300 per year over 10 years. The range of costs captures uncertainties around projected gasoil and gas fuel prices.
- 3.3. The burning of waste oil in SWOBs results in higher emissions of air pollutants when compared to the use of alternative fuels; therefore negatively affecting human health. We estimated that the present value health benefits could be in the range of £84 – 232m over 10 years, comprising benefits to human health from reduced emissions of PM10, NOx and SO₂. Operators would also gain

waste oil disposal revenue from the oil recycling companies in the range of £23.5 – 35.3m. The total present value benefit is therefore between £107 – 267m, corresponding to an average annual benefit of £13.1 – 32.7m. The range of impacts reflects uncertainty around our damage costs, carbon values and rates paid to operators for their waste oil.

- 3.4. The monetised air quality benefits only cover a subset of the impacts for which robust evidence is available leaving aside other health benefits arising from lower levels of heavy metals pollution. Emissions estimates taken from the National Atmospheric Emissions Inventory (NAEI) suggest that burning alternative fuel, such as gas could reduce the level of emissions by 88kg of chromium; 201kg of arsenic; 14kg of cadmium; 7kg of mercury; 9kg of nickel; and 3,322kg of lead.

4. Options for alternative heating or fuels

- 4.1. Operators of SWOBs are expected to prefer to change the fuel they use in the SWOBs and to explore options for alternative heating systems which over the long period may be more energy and cost efficient than running SWOBs. There are some government funded schemes in place which may be able to help those business operators that choose to introduce alternative sources of heating such as the Renewable Heat Incentive (RHI) and the Feed in Tariff (FIT).
- 4.2. The non-domestic RHI is open to commercial, industrial, public sector, not for profit and community generators of renewable heat and covers a range of technologies including heat pumps, biomass boilers, biogas and biomethane injection to grid, solar thermal, energy from waste and combined heat and power plants. Further information can be found at the following weblink: <https://www.gov.uk/non-domestic-renewable-heat-incentive>.
- 4.3. Participants in the FIT scheme receive payments from their energy supplier if they generate their own electricity. The rates vary dependent on the type of technology installed which includes solar panels, wind turbines and micro combined heat and power (micro-CHP) systems. Further information can be found at the following weblink: <https://www.gov.uk/feed-in-tariffs>.
- 4.4. Installation of energy efficiency measures can help businesses take control of their energy use, reduce avoidable loss and cut energy bills. A UK Government guide is available online at <https://www.gov.uk/government/publications/sme-guide-to-energy-efficiency>. This provides advice and ideas to help any small and medium sized business (SMEs) become more energy efficient. Based on experience the average SME could reduce its energy bill by 18-25% by installing energy efficiency measures with an average payback of less than 1.5 years, and it is estimated 40% of these savings would require zero capital cost. Advice on Welsh Government energy efficiency schemes and support is available at <http://gov.wales/topics/environmentcountryside/energy/efficiency/>.

5. Purpose of this Consultation

- 5.1. The Government has decided to amend the Environmental Permitting Guidance – the Waste Incineration Directive for the Environmental Permitting (England and Wales) Regulations to clarify that the requirements under Chapter IV of the IED apply to SWOBs. We will therefore be amending specific paragraphs which refer to the use of appliances such as SWOBs as described in section 6 below. The purpose of this consultation is to understand what you think about the clarity of these proposed revisions. We are not consulting on whether or not to make the proposed changes.
- 5.2. We are also interested to know what you think on the impact assessment which we have developed, and specifically if you have any further data which we can use to verify our understanding of the impact of this change.
- 5.3. As advised at paragraph 1.4 above the UK Government is currently revising all guidance as part of the smarter guidance review. Further information about this review can be found at the following link: <http://guidanceanddata.defra.gov.uk/smarter-guidance/>. As part of this review we will be updating the legislative references to ensure they reflect current requirements. We would welcome your views on the overall clarity of the Environmental Permitting Guidance - Waste Incineration Directive for the Environmental Permitting (England and Wales) Regulations, so this can be taken into account as part of the smarter guidance review.

6. Changes to the Guidance

- 6.1. As explained at paragraph 1.4 above, the entire guidance document is being considered as part of the smarter guidance review and will be updated accordingly, including addressing the outdated references to WID. The changes proposed in order to clarify that IED applies to simple devices such as SWOBs are as follows:
- 6.2. Under heading - Meaning of ‘Incineration Plant’, paragraph 3.5 of the current guidance states that:

‘The definition implies that an ‘incineration plant’ will have a degree of technical sophistication. There is a diversity of devices in which waste is burnt, and regulators must therefore consider each type of device on a case by- case basis to assess whether it may be an ‘incineration plant’ for the purposes of the WID. A device which does nothing more than provide physical containment for what would otherwise be an open bonfire lacks the necessary degree of technical sophistication. But devices providing more than that – for example, fan assisted air flow controls – may be ‘incineration plant’ for the purposes of the WID.’

- 6.3. This paragraph will be changed to remove the requirement to assess the type of device on a case-by-case basis and confirm that all SWOBs will require a permit under the IED. Wording similar to the following is proposed:

'The definition implies that an 'incineration plant' will have a degree of technical sophistication. Devices such as Small Waste Oil Burners are considered to meet the requirements and therefore fall within the scope of the (Industrial Emissions) Directive. They will therefore require the necessary permit in accordance with Schedule 13A of the Environmental Permitting Regulations if used to burn waste oil as a fuel.'

- 6.4. Under heading - Meaning of 'Co-Incineration Plant', paragraph 3.11 of the current guidance states that:

'As with incineration plant, this definition also covers the site and the entire plant including all co-incineration lines, waste reception, storage, on site pre-treatment facilities, waste-, fuel- and air-supply systems, boiler, facilities for the treatment of exhaust gases, on-site facilities for treatment or storage of residues and waste water, stack devices and systems for controlling incineration operations, recording and monitoring incineration conditions. Also as with incineration plant, this definition may include devices which do anything more than provide physical containment or uncontrollable support for what in practical terms can be regarded as an open bonfire.'

- 6.5. This will be amended to clarify that SWOBs will require a permit as follows:

'As with incineration plant, this definition also covers the site and the entire plant including all co-incineration lines, waste reception, storage, on site pre-treatment facilities, waste-, fuel- and air-supply systems, boiler, facilities for the treatment of exhaust gases, on-site facilities for treatment or storage of residues and waste water, stack devices and systems for controlling incineration operations, recording and monitoring incineration conditions. Also as with incineration plant, devices such as Small Waste Oil Burners are considered to meet the requirements and therefore fall within the scope of the (Industrial Emissions) Directive. They will require the necessary permit in accordance with Schedule 13A of the Environmental Permitting Regulations if used to burn waste oil as a fuel.'

- 6.6. Paragraph 3.12 of the current guidance states:

'Also as with incineration plant, this definition excludes devices which do nothing more than provide physical containment for what would otherwise be an open bonfire.'

- 6.7. This sentence will be removed as it repeats guidance in paragraph 3.11

- 6.8. Under heading - Plant characteristics, paragraph 3.14 of the current guidance states:

'As indicated in the Section on the Meaning of 'Co-Incineration Plant' above, regulators may determine that some devices in which waste is burnt may lack the technical sophistication which would place them with the definitions of 'incineration plant' or 'co-incineration plant. Burning waste in such devices is therefore not covered by the WID, but may still be subject to controls under the Waste Framework Directive, the IPPC Directive, statutory nuisance legislation or Health and Safety legislation in any combination. For example, simple appliances with no degree of technical sophistication which may burn waste oil for the provision of space heating fall into this category and are already subject to local authority regulation under the Environmental Permitting Regulations and require a permit to operate. The Government keeps under review whether regulation of these appliances by these means is delivering proportionate and effective environmental safeguards.'

- 6.9. This will be amended to refer to the IED and provide an example of the type of plant not covered by the IED as follows:

'As indicated in the Section on the Meaning of 'Incineration Plant' above, regulators may determine that some devices in which waste is burnt may lack the technical sophistication which would place them within the definitions of 'incineration plant' or 'co-incineration plant. Burning waste in such devices is therefore not covered by the (Industrial Emissions) Directive. For example, a device which does nothing more than provide physical containment for what would otherwise be an open bonfire lacks the necessary degree of technical sophistication.'

7. Consultation Questions

- 7.1. We would specifically welcome comments and suggestions in relation to the following questions:

Question 1: Do the revised paragraphs make it clear that if burning waste oils, SWOBs are subject to the requirements of the IED?

Question 2: If 'No' how could the clarity of the guidance be improved?

Question 3: Taking account the principles of the Smarter Guidance Review⁶ what other aspects of the guidance could we improve as part of the Smarter Guidance Review? Where possible, please refer to specific paragraphs in your response.

⁶ Smarter Guidance Review - <http://guidanceanddata.defra.gov.uk/smarter-guidance/>

- 7.2 Specific questions on aspects of the Impact Assessment where additional information would be helpful are included in the Impact Assessment at Annex A.

8. Tell Us What You Think

Who will be interested in responding?

- 8.1. This is a public consultation and it is open to anyone with an interest to provide comments. It will be of particular interest to those manufacturing and operating SWOBs, regulators and waste oil recycling industries. It may also be of interest to environmental and health groups.
- 8.2. A list of stakeholders and interested groups whom we have specifically made aware of this consultation is available at Annex B.

Having Your Say

- 8.3. If you wish to respond, please submit your comments by **Monday 26 October 2015**

You can respond in one of three ways:

1. Online, by completing a questionnaire at:

<https://consult.defra.gov.uk/atmosphere-local-environment-team/waste-incineration-guidance>

2. Email, by sending comments to:

Control.Pollution@defra.gsi.gov.uk

3. Post, by sending comments to:

Industrial Pollution Team

Department for Environment, Food and Rural Affairs

Area 2C

Nobel House

17 Smith Square

London

SW1P 3JR

- 8.4. Our preferred method is online because it is the fastest and most cost-effective way for us to collate and analyse responses.
- 8.5. Please note that, unless you specifically request for it to be treated confidentially, your response may be made publically available.

9. Next Steps

- 9.1. A summary of the responses to this consultation will be published and placed on the Government websites at www.gov.uk/defra.
- 9.2. This summary will include a list of names and organisations that responded but not personal names, addresses or other contact details.
- 9.3. If you do not want your response - including your name, contact details and any other personal information - to be publicly available, please say so clearly in writing when you send your response to the consultation. Please note, if your computer automatically includes a confidentiality disclaimer, that won't count as a confidentiality request.
- 9.4. 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, because of the law, we cannot promise that we will always be able to keep those details confidential.
- 9.5. We plan to publish the amended guidance in December 2015 with the amendments taking effect from April 2016.