



Department  
for Environment  
Food & Rural Affairs

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## **Environmental Permitting**

# **Consultation on draft Materials Recovery Facility (MRF) Regulations for insertion into Environmental Permitting (England and Wales) (Amendment) Regulations 2013**

**February 2013**



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Llywodraeth Cymru  
Welsh Government

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## Scope of the consultation

<b>Topic of this consultation:</b>	A draft MRF Regulation for insertion into the Environmental Permitting (England and Wales) (Amendment) Regulations 2013
<b>Scope of this consultation:</b>	All organisations involved with the collection, sorting and reprocessing of dry recyclates
<b>Geographical scope:</b>	England and Wales.
<b>Impact Assessment:</b>	An impact assessment accompanies this consultation paper: views on it are sought.

## Basic Information

<b>To:</b>	All operators of MRFs who come within scope of the environmental permitting framework
<b>Body/bodies responsible for the consultation:</b>	Department for Environment, Food and Rural Affairs and the Welsh Government
<b>Duration:</b>	1 <sup>st</sup> February 2013 to 26 <sup>th</sup> April 2013 – 12 weeks
<b>Enquiries:</b>	<a href="mailto:MRFRegs@defra.gsi.gov.uk">MRFRegs@defra.gsi.gov.uk</a>
<b>How to respond:</b>	By post to MRF Regulation Consultation, Defra, Area 6D Ergon House, Horseferry Rd, London SW1P 2AL. Or in Wales to Waste Strategy Branch, Waste and Resource Efficiency Division, Welsh Government, Cathays Park, Cardiff, CF10 3NQ. By E-mail to <a href="mailto:MRFRegs@defra.gsi.gov.uk">MRFRegs@defra.gsi.gov.uk</a> or in Wales <a href="mailto:wastestrategy@wales.gsi.gov.uk">wastestrategy@wales.gsi.gov.uk</a>
<b>Additional ways to become involved:</b>	As these are largely technical issues with largely specialist interests, this is a written exercise, although we shall be happy to respond to any questions you may have about it.
<b>After the consultation:</b>	When this consultation ends, we intend to put a copy of the responses, subject to any for which confidentiality is justified, in the Defra library at Ergon House, London. The responses will help us finalise the regulatory proposals for which we shall seek Parliamentary approval in 2013, the aim being to bring them into force in October 2013. The responses will also help us finalise the impact assessment and any draft guidance.

# 1. Introduction

1.1 This consultation seeks your views on draft Materials Recovery Facilities (MRF) Regulations that we intend to incorporate alongside a number of other amendments into the Environmental Permitting (England and Wales) (Amendment) Regulations 2013. A separate consultation will cover the other proposed amendments. This draft reflects informal discussions with a range of stakeholders, including local authorities, reprocessors and waste management companies. Whilst there seems to be consensus about the need for a mandatory approach that sets the framework, Government recognises that there are different views about the detail of that framework. What is proposed in this draft reflects discussions with the supply chain (manufacturers/producers, local authorities, waste management companies and reprocessors). On the basis of these discussions and the best available evidence, including the development of the Impact Assessment, the Government believes that the proposed approach strikes the right balance between providing sufficient rigour in the system, without placing undue burdens on business. The Government invites views on this and on a number of specific aspects of the proposed Regulation.

1.2 The draft MRF Regulations require operators of MRFs to test the composition of samples of the material they put into the sorting process, the residues, and the useable output. We propose to limit this to permitted facilities handling over 1000 tonnes per annum and which sort mixed dry recyclate from household and commercial co-mingled collections. The intention is that the test results would be made transparent, via the Environment Agency, to local authorities and reprocessors. The draft MRF Regulations are at Annex 1 and the accompanying Impact Assessment is attached as a standalone document with this consultation.

1.3 These Regulations are part of a wider package of proposed measures which are intended to promote high quality recycling. Our vision for improving the quality of recycling, and the full range of measures we plan to take to achieve this, is described within a Quality Action Plan (England only).

1.4 The purpose of the proposed MRF Regulations is to help stimulate the market conditions necessary to improve the quality of the material produced by MRFs so that it can be more readily recycled. Information on the quality of recyclate produced by MRFs is needed to demonstrate compliance with the separate collection requirements of the revised Waste Framework Directive.

1.5 This consultation invites views upon some of the technical aspects of the draft Regulations and whether we have correctly understood the problem, its causes and solutions.

1.6 Once consultation has taken place, we will amend the draft MRF Regulations to reflect the views of stakeholders where appropriate.

1.7 Please note that where references in the consultation document are made to the Environment Agency, they should be read as meaning Natural Resources Wales in so far as they relate to the exercise of the regulator's functions in Wales after the end of March 2013.

## Responding to this consultation

1.9 A number of questions are posed throughout the document, brought together for ease of replying below.

**Question 1:** **a)** Do you agree that the Government should intervene to correct the information asymmetry to improve the transparency of information on material quality? **b)** Do you agree with this proposal to mandate MRFs above a certain size threshold to measure, sample and report on their input, output and residual? **c)** If not, what other interventions (including voluntary schemes) could be used to achieve an improvement both in the provision of transparent information and an improvement in the quality of MRF material outputs?

**Question 2:** **a)** Are the assumptions in the draft Impact Assessment correct? **b)** Do you have any further information to improve our assumptions? **c)** Could the proposals have any impacts other than those intended?

**Question 3:** Is 1000 tonnes per annum a fair threshold or do you believe a different minimum threshold level should be applied?

**Question 4:** **a)** Do you agree with the proposed scope and exclusions? **b)** Is six months a sufficient transition time for MRFs to comply with the sampling requirements?

**Question 5:** We welcome views on the approach taken to sampling. Do you agree that the input, residual and main output streams should be sampled?

**Question 6:** Do you agree that material transferred from one MRF to another, should not be sampled?

**Question 7:** **a)** Do you agree with the proposals, including sampling weights and testing frequencies? **b)** Do you agree with the possibility of sampling reductions where a high degree of consistency is demonstrated? **c)** For MRF operators: do you intend to make use of the opportunity to reduce the prescribed sampling frequency by demonstrating a high degree of consistency in the composition of output?

**Question 8:** Which option do you support on transparency of information from the options below, or do you have an alternative suggestion, and how often do you think results should be sent to the EA?

- a. Only have the information retained by the Regulator;
- b. MRFs to make information available to customers on request;

- c. EA publish the information in some manual/electronic form and regulate the access (e.g. local authorities and reprocessors would need to register for access); or
- d. EA publish the information in some manual/electronic form with unrestricted access.

**Question 9:** a) Do you agree with proposed audit requirements? b) If not, do you have alternative suggestions?

**Question 10:** Do you think that minimum standards should be included in this proposal? If yes, what would your proposed maximum contamination percentage be for paper, plastics, metals and glass, and how should they be developed for the supply chain? In this instance we are assuming that contamination levels equate to non-target and non-recyclable material.

**Question 11:** If you have any other comments or observations on what is proposed here, please provide full details.

1.10 Although we would welcome comments in any form, it would help with the analysis of responses if you could respond using the appropriate question numbers. **Comments should be submitted by 26<sup>th</sup> April 2013 at the latest.**

Please return comments to:

**By email:** [MRFRegs@defra.gsi.gov.uk](mailto:MRFRegs@defra.gsi.gov.uk) or in Wales [wastestrategy@wales.gsi.gov.uk](mailto:wastestrategy@wales.gsi.gov.uk)

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**Or in Wales**

**Waste Strategy Branch  
Waste and Resource Efficiency Division  
Welsh Government  
Cathays Park  
Cardiff CF10 3NG**

## **Publication of responses**

1.11 This consultation is in line with the Government's Consultation Principles. These can be found at: <http://www.cabinetoffice.gov.uk/resource-library/consultation-principles-guidance>

1.12 When this consultation ends, we intend to put a copy of the responses in the Defra library at Ergon House, London. This is so that the public can see them. Members of the public may also ask to see a copy of responses under freedom of information legislation. 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 will not 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, because of the law, we cannot promise that we will always be able to keep those details confidential.

We will also summarise the responses and place this summary on our website at [www.defra.gov.uk/consult](http://www.defra.gov.uk/consult). This summary will include a list of names of organisations that responded but not individual contact details.

To see consultation responses and summaries, please contact the library at:

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## 2. Background

2.1 As set out in the Quality Action Plan (QAP), the Government wants to not only increase the quantity of material recycled, but also promote the quality of recycling. This will help maximise the environmental and economic benefits of reprocessing these raw materials, as part of a global market, and will deliver a robust recycling supply chain that meets the needs and expectations of local communities.

2.2 We recognise that high quality recycling operations, which turn waste back into the same product as it came from, need good quality material as feedstock. This is why the waste review said we need to “ensure our approach to extracting recyclables, such as paper and plastic, from our waste generates material of sufficiently high quality to meet the needs of reprocessors here and abroad, and to comply with the international rules on waste shipments”.

2.3 Whilst the quality of recyclates currently produced by co-mingled collections and MRFs can meet the quality specifications of reprocessors, this does not always appear to be the case. WRAP research<sup>1</sup> in 2009 on MRF material quality identified a broad range in material quality. This is also backed up by a WRAP survey<sup>2</sup> which highlighted reprocessors’ dissatisfaction with the quality of material from UK MRFs.

2.4 Poor quality recyclates are of concern because they undermine the viability of recycling and have significant environmental and economic costs. Therefore, one of the commitments in the Responsibility Deal with the waste and resource management sector launched in June 2011 was to improve the quality of recyclates coming out of MRFs<sup>3</sup>.

2.5 The QAP sets out a range of policy measures we intend to pursue to promote and specifically improve the quality of recyclate, particularly those coming out of MRFs. These are set out in more detail in the QAP, but in summary include:

- Work with the Environment Agency in England and Wales to maximise the effectiveness of the enforcement of export regulations, especially at MRFs. This will improve confidence in a level playing field for legitimate businesses.
- Development of a voluntary grading/banding system for different materials and quality levels depending on end use.
- Guidance to local authorities and the waste management industry on the revised Waste Framework Directive requirement for separate collection of different materials for recycling, and the circumstances under which co-mingling can play a role.

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<sup>1</sup> MRF Quality Assessment Study, 2009

<sup>2</sup> MRF Output Material Quality Thresholds, 2009

<sup>3</sup> <http://www.defra.gov.uk/publications/files/PB13580-responsibility-deal.pdf>

- Possible reform of the Packaging Recovery Note and Packaging Export Recovery Note system to even out any disparity in the playing field between exports and domestic reprocessing.

## Rationale for intervention

2.6 The Impact Assessment describes the rationale for intervention in detail. In summary, the robust, transparent information on quality delivered by this MRF Regulation is critical to:

- Demonstrate that the separate collection requirements in the revised Waste Framework Directive<sup>4</sup> (rWFD) are capable of being met through co-mingled collections and subsequent sorting at a MRF;
- Correct the current market failure of imperfect information and so improve the efficiency with which the recycle market functions; and
- Enable implementation of a number of other actions identified in the QAP which, as a package, aim to improve recycle quality and so deliver significant economic and environmental benefits.

## Revised Waste Framework Directive

2.7 The European Commission's guidance on the rWFD<sup>5</sup> sets out that co-mingling (collecting dry recyclates together but then separating them at a MRF) is allowed if it delivers the quality necessary for the relevant recycling sectors. A small number of MRFs do test their materials and can prove they do produce high quality output material, however the majority of MRFs do not measure the quality of their inputs or outputs in a consistent or transparent manner.

2.8 The proposed MRF regulations are intended to ensure that it can be demonstrated that co-mingled collection of dry recyclates followed by sorting at the MRF can deliver the requirements of the rWFD and promote high quality recycling. Government believes that local authorities and others involved in waste collection should have the flexibility to determine the most effective collection arrangements to suit local circumstances. Co-mingled collection of waste materials for recycling can be considered easier for householders and businesses (particularly smaller businesses who have little space for many bins), and more practical in dense, urban areas such as flats.

2.9 The Welsh Government has a policy preference for source separated collections as outlined in its Municipal Sector Plan, Collections Blueprint and Collections, Infrastructure and Markets Sector Plan<sup>6</sup>. It recognises though that where co-mingled collections and

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<sup>4</sup> <http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=OJ:L:2008:312:0003:0030:EN:pdf>

<sup>5</sup> [http://ec.europa.eu/environment/waste/framework/pdf/guidance\\_doc.pdf](http://ec.europa.eu/environment/waste/framework/pdf/guidance_doc.pdf)

<sup>6</sup> [http://wales.gov.uk/topics/environmentcountryside/epg/waste\\_recycling/publication/municipalsectorplan/?lang=en](http://wales.gov.uk/topics/environmentcountryside/epg/waste_recycling/publication/municipalsectorplan/?lang=en)

MRF sorting take place that the inputs and outputs should be subject to monitoring with a view to promoting high quality recycling.

## Market failures

2.10 These regulations are also seeking to address the current market failure of imperfect information and so improve market efficiency. The new information on quality will provide the missing information to suppliers of the material (local authorities) and buyers of the material (reprocessors). The regulations will also create a level playing field as all MRFs over a certain size threshold who process the vast majority of dry recyclates on the market will be required to provide this information. The testing, sampling and reporting regime will be audited by an independent, third party. This information will be provided to the Environment Agency.

## Economic and Environmental Benefits

2.11 The Impact Assessment identifies that there could be a considerable net benefit to business and wider society as a result of an improvement in quality that could be expected to be delivered by the package of proposed regulations and other measures outlined in the QAP. Specifically, the estimated total impact on business is £0.8m initial costs (£0.5m-£0.9m) and £12.1m annual costs (£9.3m -£15.5m). Benefits from the scenario given are estimated as £34.6m (£22.0m-£50.2m) to business (from higher material revenue and lower landfill costs) and £9m (£7.2m-£10.8m) of lower greenhouse gas emissions resulting in a net benefit of £30.9m (£13.1m-£51.5m) to society.

**Question 1: a)** Do you agree that the Government should intervene to improve the transparency of information on material quality and specifically with this proposal to mandate MRFs above a certain size threshold to measure, sample and report on the composition of their input and output material streams? **b)** If not, what other interventions (including voluntary schemes) could be used to achieve an improvement both in the provision of transparent information and an improvement in the quality of MRF material outputs?

**Question 2: a)** Are the assumptions in the draft Impact Assessment correct? **b)** Do you have any further information to improve our assumptions? **c)** Could the proposals have any impacts other than those intended?

## Alternatives to Regulation

2.12 A voluntary approach to encouraging MRFs to measure quality has been attempted by the waste management industry already. The mandatory option being consulted upon, builds upon the provisions of the existing 'Recycling Registration Service' (RRS) which was launched in April 2007. The RRS established similar monitoring requirements, but it failed to attract significant uptake (only about 20 MRFs, 15% of total MRFs).

2.13 Feedback to the Environmental Services Association (ESA), the trade association for waste management companies, from its members suggest that the main reason for its failure was because it was a voluntary scheme; many MRF operators felt compliance with the code would leave them at a competitive disadvantage. Industry needs assurance of a level playing before they are willing to invest in the quality assurance programmes required by the code.

## 3. Discussion of regulatory proposals

3.1 The following aspects of the proposed regulations are explained in detail below:

- Scope and definitions
- Sampling and composition testing requirements
- Reporting requirements and transparency
- Audit requirements
- Guidance
- Additional considerations

### Scope and definitions

3.2 The proposed Regulations are intended to apply to MRFs located in England and Wales from April 2014.

### What is a Materials Recovery Facility?

3.3 A MRF is any waste facility which:

- Receives mixed input material (i.e. two or more of the following types of material collected separately from residual waste but mixed together – paper, plastic, metal and glass<sup>7</sup>) totalling an amount greater than 1000 tonnes per annum. This de minimis is intended to ensure micro businesses are not captured by the regulations; and
- Receives mixed input material from households and/or commercial sources. Material from construction and industrial sources is not in scope; and
- Produces one or more grades of output material (i.e. output material is principally made up of a single material type (paper, plastic, metal or glass) that can be graded and is sold to a broker, dealer, exporter or as feedstock to a reprocessor (UK or overseas) who will recycle/recover that material); and
- Its primary purpose is the sorting of mixed input material to separate it and produce one or more grades of output material. This does not include facilities which remove non-target or non-recyclable material from an input of a single material type/grade (e.g. a paper mill removing plastic/glass from its feedstock of paper) or the primary purpose is not to sort mixed waste (e.g. household waste recycling centres).

The requirements will only apply to permitted MRFs; they do not need to apply to exempted facilities as sorting activities are not allowed under the terms of an exemption.

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<sup>7</sup> This definition of 'mixed input material' excludes dirty MRFs / MBT facilities

**Question 3:** Is 1000 tonnes per annum a fair threshold or do you believe a different minimum threshold level should be applied?

**Question 4:** **a)** Do you agree with the proposed scope and exclusions? **b)** Is six months a sufficient transition time for MRFs to comply with the sampling requirements?

## What will MRFs have to measure?

3.4 MRFs will have to take representative samples of the facility's input<sup>8</sup> and output<sup>9</sup> material (including the residual stream) and measure the composition of each sample (i.e. % of target, non-target and non-recyclable material).

3.5 Explanations of **target, non-target and non-recyclable material** are provided in Table 1. The MRF operator will be required to define and record what material they consider to be 'target' material.

**Question 5:** Do you agree that the input, residual and main output streams should be sampled?

**Question 6:** Do you agree that material transferred from one MRF to another, should not be sampled?

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<sup>8</sup> Sampling of inputs from commercial sources is not required.

<sup>9</sup> Mixed outputs from MRFs, which are sent to another MRF for further sorting, are not subject to the sampling requirements.

**Table 1:** Explanation of target, non-target and non-recyclable materials

	<b>Input</b>	<b>Output</b>
<b>Target material</b>	a recyclable material that the MRF operator identifies as needing to be separated from other types of material by virtue of fact they have identified a market (e.g. reprocessor) for this material. Target material will need to be defined at a more granular level than the four broad types of material (paper, metal, glass and plastic) and could be defined as the range of 'grades' of recyclable material output by the MRF (e.g. Old Corrugated Cardboard is a grade of paper under EN643). Possible that it may include material that falls outside the four broad material types (e.g. some MRFs will target textiles).	
<b>Non-target material</b>	material that is capable of being recycled but is not being targeted by the MRF for separation and sale (e.g. many MRFs are not targeting tetra paks because, although some paper mills can recycle this material, they do not have a buyer).	material that is capable of being recycled but is not being targeted by the reprocessor (e.g. brown card in a consignment of news & pams will cause production problems for some paper mills). Note, in this example, brown card may still be a target material for the MRF in the context of its inputs.
<b>Non-recyclable material</b>	material that is not capable of being widely recycled. The range of materials that are capable of being recycled will change over time.	material that is not capable of being recycled by the reprocessor (e.g. plastic in a consignment of news & pams will cause production problems for paper mills). Note, in this example, plastic may still be a target material for the MRF.

## Sampling and composition testing requirements

3.6 The aim is to provide a sampling and testing regime that is fair and proportional based upon facility size. The proposals at Annex 1 establish sampling frequencies by material stream and establish a minimum base frequency, which scales up with throughput for any given input or output stream (see Table 2). The frequencies and sample weights establish what we consider to be a reasonable minimum, balancing practical and cost issues with the need to provide robust information on composition. They have been based upon industry feedback and our understanding of practices that are already being undertaken by some MRFs.

3.7 Discussions have been held with stakeholders regarding a sampling and testing system that provided full statistical validity but it was felt that they would be too onerous for smaller facilities, and so have not been included in the proposals.

**Table 2:** Summary of proposed sampling frequencies and weights

	Sample weight (kg)	Time based frequency*	Weight based frequency*
MIXED INPUT	25	2 per week or	1 per 200T
RESIDUAL STREAM	20	1 per week or	1 per 100T
PAPER (per output stream)	20	1 per week or	1 per 100T
GLASS (per output stream)	10	1 per week or	1 per 50T
METALS (per output stream)	20	1 per week or	1 per 20T
PLASTICS (per output stream)	20	1 per week or	1 per 20T

\*whichever is most frequent

3.8 There is also the opportunity, at the cost of permit variation, for the prescribed testing frequency to be reduced if facilities can demonstrate to the regulator a high degree of consistency in the composition of their output materials. The draft regulations limit the reduction in sampling frequency to a minimum of one sample per week. The method to determine result consistency will be provided in future guidance.

**Question 7:** a) Do you agree with the proposals on sampling weights and testing frequencies? b) Do you agree with the possibility of sampling reductions where a high degree of consistency is demonstrated? c) For MRF operators: do you intend to make use of the opportunity to reduce the prescribed sampling frequency by demonstrating a high degree of consistency in the composition of output?

## Reporting requirements and transparency

3.9 The current lack of robust and consistent information on quality represents a significant market failure as it undermines the ability of reprocessors to confidently identify MRFs that meet their quality specifications, and means the price paid for material does not necessarily reflect its quality. Feedback of information on quality through the supply chain is also inhibited and this limits incentives to improve quality of feedstock.

3.10 The key parties interested in viewing and considering information on quality include:

- The Environment Agency – access to the information will enable better enforcement of the regulations.



- Waste collectors (predominantly local authorities) – help them identify which MRF they wish to contract with (e.g. which is best able to help them fulfil rWFD and other statutory requirements).
- End customers (predominantly reprocessors) – Access to information on quality will help them more easily identify MRFs that are able to meet their quality specifications.

3.11 The proposed regulations will deliver this transparency by requiring MRF operators to electronically submit to the Environment Agency quarterly summary reports containing the information in the tables in Annex 2 (coloured text provides example only, with limited output information shown. It is envisaged that all targeted outputs would be included).

3.12 It is understood that some within the waste management industry have concerns around making information on quality publicly available. For example, there may be an issue of MRFs or local authorities having confidentiality clauses in their contracts preventing the release of certain information. However, given the expected benefits of transparency, we are keen to explore ways of managing/overcoming any identified issues and risks through, for example, considering the various options for achieving transparency:

- Only have the information retained by the Regulator;
- MRFs to make information available to customers on request;
- EA publish the information in some manual/electronic form and regulate the access (e.g. local authorities and reprocessors would need to register for access); or
- EA publish the information in some manual/electronic form with unrestricted access.

3.13 The Government's preferred option is (d); this is in line with its agenda on local accountability and transparency. Waste Data Flow has been discounted as an option as it currently does not record non-local authority material.

**Question 8:** Which option do you support on transparency of information from the options below, or do you have an alternative suggestion, and how often do you think results should be sent to the EA?

- Only have the information retained by the Regulator;
- MRFs to make information available to customers on request;
- EA publish the information in some manual/electronic form and regulate the access (e.g. local authorities and reprocessors would need to register for access); or
- EA publish the information in some manual/electronic form with unrestricted access.

## Audit requirements and enforcement

3.14 The proposed regulations require an annual independent audit to be undertaken. We believe this is needed to provide confidence to stakeholders that the sampling and testing is being undertaken in an acceptable and comparable manner by all MRFs (to provide a level playing field) and that the results produced can be relied upon. The audit should cover the following elements:

- Confirmation that the MRF has taken representative samples and at a frequency that complies with the regulations, that the results recorded are accurate, and that all other records required by the regulation are accurate.
- Confirmation that the MRF has in place systems to ensure that where material is exported, it complies with relevant export regulations. This will improve confidence in exports, and perception of a level playing field.
- Confirmation that MRFs are implementing good industry practice in relation to equipment maintenance, and health and safety practices.

3.15 The auditors must be independent and a member of an appropriate professional body recognised by the regulator. The Environment Agency will publish a list of 'recognised' bodies at a later date, including guidance for the auditor outlining the purpose, scope and format of the audit report. The audit report will be electronically submitted to the regulator who will consider any elements of non-compliance.

**Question 9: a)** Do you agree with proposed audit requirements? **b)** If not, do you have alternative suggestions?

## Enforcement

3.16 The enforcement powers for the Environment Agency are all contained in Part 4 of the Environmental Permitting Regulations 2010 – and in summary involve serving enforcement notices for any contravention of a permit condition; and/or serving suspension notices for environmental permits where there is a serious risk of pollution; but it is an offence to contravene an environmental permit condition for which a person who is found guilty may be liable to a fine on summary conviction for up to £50,000 or imprisonment for up to 12 months (or both) ; and on indictment to a fine (unlimited) or a 5 year term of imprisonment or to both.

## Guidance

3.17 It is essential that the samples are taken in a manner which ensures the results are representative, robust, reliable, and reproducible. Clearly output material will be checked by the recipient and if it does not match the actual or comparable testing data from other MRFs then it will be quickly recognised and challenged.

3.18 The proposals at Annex 1 do not define the sampling method to allow innovation and in recognition that what may be possible in a large facility, may not be so in a smaller one. Instead, the Government will provide guidance on sampling methods to MRF operators<sup>10</sup>.

## Additional considerations

3.19 The EU End of Waste Criteria has set, or is setting, maximum contamination levels for paper, plastics, metals and glass to determine when those materials cease to be a waste and become a product. Currently, no limits on contamination levels exist for those materials to determine the lowest level of material quality that would be acceptable to reprocessors. The proposed Regulation does not seek to set minimum mandatory standards for MRF outputs.

**Question 10:** Do you think that minimum standards should be included in this proposal? If yes, what would your proposed maximum contamination percentage be for paper, plastics, metals and glass, and how should they be developed for the supply chain? In this instance we are assuming that contamination levels equate to non-target and non-recyclable material.

**Question 11:** If you have any other comments or observations on what is proposed here, please provide full details.

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<sup>10</sup> Plus the auditor will check that robust sampling methods are employed by MRFs by e.g. checking documented processes in place, staff knowledge/training.

# Annex 1 – Draft MRF Regulations

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## STATUTORY INSTRUMENTS

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**2013 No.**

### **ENVIRONMENTAL PROTECTION, ENGLAND AND WALES**

#### **The Environmental Permitting (England and Wales) (Amendment) [(No.2)] Regulations 2013**

<i>Made</i>	- - - -	***
<i>Laid before Parliament</i>		***
<i>Laid before the National Assembly for Wales</i>		***
<i>Coming into force</i>	- -	<i>6th April 2014</i>

The Secretary of State, in relation to England, and the Welsh Ministers, in relation to Wales, have in accordance with section 2(4) of the Pollution Prevention and Control Act 1999(11) consulted—

- the Environment Agency;
- such bodies or persons appearing to them to be representative of the interests of local government, industry, agriculture and small business as they consider appropriate; and
- such other bodies or persons as they consider appropriate.

The Secretary of State in relation to England, and the Welsh Ministers in relation to Wales, make the following Regulations in exercise of the powers conferred by section 2 of, and Schedule 1 to, the Pollution Prevention and Control Act 1999(12).

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<sup>(11)</sup> 1999 c. 24. Functions of the Secretary of State under or in relation to section 2, so far as exercisable in relation to Wales, were transferred to the National Assembly for Wales, except in relation to offshore oil and gas exploration and exploitation, by article 3(1) of the National Assembly for Wales (Transfer of Functions) Order 2005 (S.I. 2005/1958). But this was subject to article 3(2), which provided that, so far as any of those functions are exercisable by the Secretary of State in relation to a cross-border body but which, by their nature, are not functions which can be specifically exercised in relation to Wales, such functions are exercisable by the Assembly in relation to that body concurrently with the Secretary of State. Functions of the National Assembly for Wales were transferred to the Welsh Ministers by section 162 of, and paragraph 30 of Schedule 11 to, the Government of Wales Act 2006 (c. 32).

<sup>(12)</sup> The following relevant amendments have been made to Schedule 1. Paragraph 21A was inserted by section 38 of the Waste and Emissions Trading Act 2003 (c.33); paragraph 24 was amended by S.I. 2005/925, Schedule 6, paragraph 2, and paragraph 25 was amended by section 105(1) of the Clean Neighbourhoods and Environment Act 2005 (c. 16).

## Citation and commencement

1. These Regulations may be cited as the Environmental Permitting (England and Wales) (Amendment) [(No.2)] Regulations 2013 and come into force on 6th April 2014.

## Amendment of the Environmental Permitting (England and Wales) Regulations 2010

The Environmental Permitting (England and Wales) Regulations 2010(13) are amended in accordance with regulations 3 to 5.

### Regulation 35 (specific provisions applying to environmental permits)

In regulation 35(2), after sub-paragraph (c) insert—

“(ca) Schedule 9A (materials recovery facilities);”.

### New Schedule 9A (materials recovery facilities)

After Schedule 9 insert—

## “SCHEDULE 9A

Regulation 35(2)(ca)

### Materials recovery facilities

#### PART 1

##### General

##### Application

- 1.—(1) Subject to sub-paragraph (2), this Schedule applies in relation to every materials recovery facility.
- (2) This Schedule does not apply in relation to a materials recovery facility that—
- (a) in a 12-month period, receives for processing 1,000 tonnes or less of mixed waste materials consisting of commercial waste within the meaning of section 76(7) of the 1990 Act(14) or household waste; or
  - (b) sorts mixed waste materials for the purpose of separating only one type of target material as part of a recycling process.
- (3) The requirements in Part 2 do not apply in relation to any part of the facility that is not directly involved in sorting mixed waste materials into specified output materials.

##### Interpretation

2. In this Schedule—

“fines” means—

- (a) in relation to glass, material small enough to fall through a square-shaped mesh with openings no greater than 12 square millimetres in size;

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(13) S.I. 2010/675, amended by S.I. 2010/676, 2172; 2011/881, 988, 1043, 2043, 2377, 2933; 2012/630, 811.

(14) 1990 c. 43. Section 75(7) was amended by S.I. 2006/937.

(b) in relation to all other types of material, material small enough to fall through a square-shaped mesh with openings no greater than 45 square millimetres in size;

“independent auditor” means an auditor who is—

(a) independent of the operator of the materials recovery facility; and

(b) a member of a professional body for auditors that is recognised as such by the regulator;

“materials recovery facility” means a regulated facility or part of a regulated facility that, as its main purpose, receives mixed waste materials for sorting into one or more specified output materials;

“mixed waste materials” means waste that includes two or more of the following waste materials mixed together—

(a) glass;

(b) metal;

(c) paper;

(d) plastic;

“non-recyclable material” means a material that is not recyclable;

“non-target material” means a recyclable material that is not a target material;

“paper” includes cardboard and beverage cartons that include cardboard as a composite material;

“recyclable material” means a material that is capable of being recycled when waste;

“reporting period” means any of the following periods—

(a) 1st January to 31st March;

(b) 1st April to 30th June;

(c) 1st July to 30th September;

(d) 1st October to 31st December;

“residual output material” means a batch of material produced at a materials recovery facility that does not principally consist of a specified output material;

“specified output material” means a batch of material produced at a materials recovery facility principally consisting of one of the following—

(a) glass;

(b) metal;

(c) paper;

(d) plastic; and

“target material” means a recyclable material that the operator of a materials recovery facility identifies as needing to be separated from other types of material as part of its processing of mixed waste materials.

### **Modification and variation of conditions to environmental permits**

3.—(1) Any environmental permit which on 6th April 2014 authorises the operation of a materials recovery facility is modified so that, from that date, it includes, as a condition of that permit, a requirement for the operator to comply with Part 2 of this Schedule, subject to any variation by the regulator under regulation 20 and sub-paragraph (3).

(2) If there is an inconsistency between the requirements imposed by Part 2 and any prior condition in the environmental permit, the requirements imposed by Part 2 prevail.

(3) A variation by the regulator of an environmental permit that relates to the frequency of the measurements required in paragraphs 1(2) and 2(3) of Part 2 must not have the effect of reducing the frequency of those measurements to less than once per week.

### **Exercise of relevant functions**

4. The regulator must exercise its relevant functions in relation to a materials recovery facility to ensure compliance with Part 2 of this Schedule.

## **PART 2**

### **Requirements for materials recovery facilities**

#### **Measurement of inputs at materials recovery facilities**

- 1.—(1) The operator of a materials recovery facility must measure—
  - (a) the total amount in tonnes of waste materials accepted at that facility for processing in each reporting period; and
  - (b) in respect of household waste, the composition of those waste materials.
- (2) The measurements referred to in sub-paragraph (1)(b) must, as a minimum, be made whichever is the more frequent of—
  - (a) twice per week; or
  - (b) once per 200 tonnes of waste materials accepted at the facility.
- (3) The minimum weight of a sample used to make one of the measurements required in sub-paragraph (1)(b) is 25 kg.
- (4) For the purposes of sub-paragraph (1)(b), the composition is a description and measurement of weight in kilograms of each type of target material, non-target material and non-recyclable material found in the sample.
- (5) The description and measurement of target material must, as a minimum, separately identify the following types of waste material, as applicable—
  - (a) glass;
  - (b) metal;
  - (c) paper;
  - (d) plastic;
  - (e) other materials.
- (6) The number of samples used to make the measurements referred to in sub-paragraph (1)(b) in relation to a supplier of mixed waste materials must be in proportion to the total amount of mixed waste materials that supplier provides to the materials recovery facility in comparison to its other suppliers.
- (7) The weight of any fines found in a sample may be distributed and added to the weight of each type of target material, non-target material and non-recyclable material in proportion to the amounts of those materials found in the sample.

#### **Measurement of outputs from materials recovery facilities**

- 2.—(1) The operator of a materials recovery facility must measure—
  - (a) the total amount in tonnes of materials leaving the facility in each reporting period that is, following processing at the facility—
    - (i) no longer waste;
    - (ii) waste that is to be sent for processing as part of a recycling operation, or sent to another materials recovery facility for further processing; and
  - (b) the composition of those materials, with the exception of any materials that are sent to another materials recovery facility to which this Schedule applies.
- (2) The measurements referred to in sub-paragraph (1)(b) must be made in relation to each—

- (a) target material;
  - (b) specified output material, where this is not a target material; and
  - (c) residual output material.
- (3) Those measurements must, as a minimum, be made whichever is the more frequent of—
- (a) once per week; or
  - (b) once per the amount in tonnes leaving the materials recovery facility specified in the second column of the following table in relation to the material specified in the first column.

<i>Material</i>	<i>Amount</i>
Glass	50 tonnes
Metal	20 tonnes
Paper	100 tonnes
Plastic	20 tonnes
Other	100 tonnes

(4) The minimum weight of a sample used to make one of the measurements required in sub-paragraph (1)(b) is—

- (a) 10 kg in relation to glass; and
- (b) 20 kg in relation to any other material.

(5) For the purposes of sub-paragraph (1)(b), the composition is a description and measurement of weight in kilograms of each of the following types of material included in the sample—

- (a) target material;
- (b) non-target material; and
- (c) non-recyclable material.

(6) The weight of any fines found in a sample may be distributed and added to the weight of each type of target material, non-target material and non-recyclable material in proportion to the amounts of those materials found in the sample.

## **Records**

**3.—**(1) The operator of a materials recovery facility must keep records of—

- (a) all measurements required under paragraphs 1 and 2;
- (b) reports prepared under paragraph 4;
- (c) reports prepared by an independent auditor under paragraph 5;
- (d) a description of all materials identified as target materials in a reporting period;
- (e) the amount in tonnes of waste materials delivered to and accepted by the materials recovery facility for processing during a reporting period from each supplier;
- (f) the intended final destination of each batch of processed waste materials from the materials recovery facility in a reporting period;
- (g) in respect of each type of target material, the amount in tonnes of waste, during a reporting period—
  - (i) dispatched to a destination recorded under paragraph (f); and
  - (ii) accepted at that destination.

(2) A record kept under this paragraph must—

- (a) be kept for a minimum of three years from the date it is made;
- (b) be kept in an electronic format; and
- (c) be made available to the regulator on demand.



## Reporting

4.—(1) The operator of a materials recovery facility must provide a report to the regulator that includes the information set out in sub-paragraphs (3) to (6).

(2) A report required under sub-paragraph (1) must—

- (a) be kept in an electronic format; and
- (b) be submitted to the regulator in relation to each reporting period within one month of the end of that period.

(3) The information required in relation to waste materials accepted at the materials recovery facility for processing is—

- (a) the total weight in tonnes;
- (b) the number of samples taken under paragraph 1;
- (c) the total weight of the samples in kilograms;
- (d) the average composition of the samples, by percentage, of each of the following target materials—
  - (i) glass;
  - (ii) metal;
  - (iii) paper;
  - (iv) plastic;
  - (v) other materials;
- (e) the average amount of each of the following found in the samples, by percentage—
  - (i) target materials;
  - (ii) non-target materials;
  - (iii) non-recyclable materials; and
- (f) the minimum and maximum amounts of target materials found in any of the samples, by percentage.

(4) The information in sub-paragraph (3)(a) to (f) must be provided in relation to each supplier of waste material.

(5) The information required in relation to materials leaving the materials recovery facility following processing is—

- (a) the total weight in tonnes;
- (b) the number of samples taken under paragraph 2;
- (c) the total weight of the samples in kilograms;
- (d) the average amount of each of the following found in the samples, by percentage—
  - (i) target materials;
  - (ii) non-target materials;
  - (iii) non-recyclable materials; and
- (e) the minimum and maximum amounts of target materials found in any of the samples, by percentage.

(6) The information in sub-paragraph (5) must be provided in relation to each type of target material, specified output material (where this is not a target material) and residual output material.

(7) The information in sub-paragraph (5)(b) to (e) is not required in relation to materials that are sent to another materials recovery facility to which this Schedule applies.

## Report by an independent auditor

5.—(1) The operator of a materials recovery facility must, at least once each calendar year—

- (a) obtain a written report on the facility from an independent auditor; and

- (b) submit that report to the regulator in an electronic form.
- (2) The operator must ensure that the report—
  - (a) relates to an audit carried out at least three months after any previous report on the facility was made under sub-paragraph (1), if applicable;
  - (b) includes the following information—
    - (i) whether the operator has taken samples at a frequency in compliance with this Schedule and that the recorded results are accurate;
    - (ii) whether all other records the operator is required to make and keep under this Schedule are accurate;
    - (iii) whether the operator has systems in place to ensure that when material is exported to an overseas recovery facility after leaving the materials recovery facility, that the overseas facility is authorised to operate in its jurisdiction, complies with applicable environmental and health and safety legislation and is operated in a manner broadly equivalent to practices in the European Union;
    - (iv) whether the materials recovery facility follows good industry practice in relation to the maintenance of equipment and health and safety;
  - (c) is completed in accordance with any guidance issued by the regulator; and
  - (d) is completed using the form provided by the regulator and includes all the information specified on the form.

**Agreement on the supply of processed materials**

6. The operator of a materials recovery facility must, before supplying materials processed at the facility to another person for further processing, agree with that person what levels of non-target materials and non-recyclable materials may be included in the supplied materials.”.

**Schedule 24 (public registers)**

In Schedule 24, after paragraph 1(2)(c)—

- omit “and”;
- insert—

“(ca) the information provided to the regulator by the operator of a materials recovery facility under paragraph 4 of Part 2 of Schedule 9A; and”.

*Name*  
Parliamentary Under Secretary of State  
Department for Environment, Food and Rural Affairs

Date

Signed on behalf of the Welsh Ministers

*Name*  
Minister for Environment and Sustainability Development  
One of the Welsh Ministers

Date

**EXPLANATORY NOTE**

*(This note is not part of the Regulations)*

These Regulations amend the Environmental Permitting (England and Wales) Regulations 2010 (S.I. 2010/675) (“the 2010 Regulations”) to make provision to require certain Materials Recovery Facilities (MRFs) that sort mixed dry recycle from household and commercial co-mingled collections to sample and compositionally test their material input, residual and output streams. Recording and reporting obligations are also introduced.

## Annex 2 – Example quarterly reports for (a) input sampling and (b) output sampling

### (a) Example of quarterly report on facility inputs

Company : <a href="#">Recycle AAXX</a> Location : <a href="#">LEEDS</a> Postcode : <a href="#">LE99 7BG</a> MRF Capacity : <a href="#">50,000 TPA (med)</a> Identifier : <a href="#">(as WDF)</a>													
Input Material Testing Data for Quarter 3 - 2013													
Supplier	Total Weight of mixed input material (tonnes)	No of Samples Taken	Total Sample Weight (kg)	Average Target Material %					Total Target Material %			Average Non-Target Material %	Average Non-Recyclable Material %
				Paper	Plastics	Metals	Glass	Other Target Material	Min	Average	Max		
LA 1	15,456	101	2585.6	61.4	7.2	4.0	14.8	2.4	81.5%	<b>89.8%</b>	93.4%	<b>4.1%</b>	<b>6.1%</b>
LA 2	13,356	68	1740.8	60.3	8.6	3.2	15.8	3.7	78.3%	<b>91.6%</b>	95.6%	<b>6.2%</b>	<b>2.2%</b>
LA 3	11,123	42	1075.2	75.7	3.6	5.3	0.4	7.3	84.2%	<b>92.3%</b>	97.2%	<b>2.7%</b>	<b>5.0%</b>
LA 4	1660	26	665.6	59.7	7.6	3.8	15.4	3.2	85.4%	<b>89.7%</b>	92.3%	<b>4.1%</b>	<b>6.2%</b>
Other	1132	13	332.8	54.2	8.2	4.1	0.3	8.9	60.7%	<b>75.7%</b>	85.1%	<b>8.2%</b>	<b>16.1%</b>
<b>Total</b>	<b>42,727</b>	<b>250</b>	<b>6400.0</b>	<b>63.0%</b>	<b>7.1%</b>	<b>4.0%</b>	<b>12.0%</b>	<b>3.9%</b>					

				WEIGHTED AVERAGE		90.0%		4.5%	5.5%
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## (b) Example of quarterly report on facility outputs

Company : <a href="#">Recycle AAXX</a> Location : <a href="#">LEEDS</a> Postcode : <a href="#">LE99 7BG</a> MRF Capacity : <a href="#">50,000 TPA (med)</a> Identifier : <a href="#">(as WDF)</a>								
Output Material Testing Data for Quarter 3 - 2013								
Output Material	Total Weight of Output material (tonnes)	No of Samples Taken	Total Sample Weight (kg)	Target Material %			Average Non-Target Material %	Average Non-Recyclable Material %
				Min	Average	Max		
<b>Paper</b> – <a href="#">News &amp;Pams</a>	14,564	140	3584.0	84.8%	<b>94.3%</b>	96.1%	<b>4.1%</b>	<b>1.6%</b>
<b>Paper</b> – <a href="#">Mixed Paper</a>	8,998	138	3532.8	71.8%	<b>92.5%</b>	98.2%	<b>5.4%</b>	<b>2.1%</b>
<b>Paper</b> – <a href="#">Cardboard</a>	5,219	45	1152.0	76.8%	<b>96.0%</b>	97.4%	<b>2.0%</b>	<b>2.0%</b>
<b>Paper Total</b>	<b>28,781</b>	<b>323</b>	<b>8268.8</b>		<b>93.8%</b>		<b>4.4%</b>	<b>1,8%</b>
<b>Plastics</b> – <a href="#">PET Bottles</a>	1076	80	1648.0	75.3%	<b>91.9%</b>	95.3%	<b>2.0%</b>	<b>6.1%</b>
<b>Plastics</b> – <a href="#">HDPE</a>	1200	78	1606.8	62.7%	<b>88.0%</b>	93.6%	<b>6.2%</b>	<b>5.8%</b>

Bottles								
<b>Plastics – Rigid Plastics</b>	237	40	824.0	56.4%	<b>84.8%</b>	89.5%	<b>10.3%</b>	<b>4.9%</b>
<b>Plastic Total</b>	<b>2513</b>	<b>198</b>	<b>4078.8</b>		<b>88.9%</b>		<b>5.3%</b>	<b>5.8%</b>
<b>Metals– Aluminium Cans</b>	430	30	618.0	86.9%	<b>89.1%</b>	89.5%	<b>8.4%</b>	<b>2.5%</b>
<b>Metals – Steel Cans</b>	1487	95	1957.0	89.7%	<b>97.5%</b>	98.5%	<b>1.5%</b>	<b>1.0%</b>
<b>Metals Total</b>	<b>1917</b>	<b>125</b>	<b>2575.0</b>		<b>95.5%</b>		<b>3.2%</b>	<b>1.3%</b>
<b>Sorted Glass – Mixed Glass</b>	6420	148	1568.8	48.7%	<b>69.6%</b>	85.2%	<b>10.2%</b>	<b>20.2%</b>
<b>Glass Total</b>	<b>6420</b>	<b>148</b>	<b>1568.8</b>		<b>69.6%</b>		<b>10.2%</b>	<b>20.2%</b>
<b>Other Targeted- Textiles</b>	521	10	106.0	62.6%	<b>78.8%</b>	88.4%	<b>15.7%</b>	<b>5.5%</b>
<b>Other Targeted Total</b>	<b>521</b>	<b>10</b>	<b>106.0</b>		<b>78.8%</b>		<b>15.7%</b>	<b>5.5%</b>
<b>Material Total</b>	<b>40,152</b>	<b>804</b>	<b>16597.4</b>		<b>88.6%</b>		<b>7.2%</b>	<b>4.2%</b>
<b>Residual (Stand Alone)</b>	2575	36	741.6	28.7%	<b>52.6%</b>	67.8%	32.7	14.7%

## Annex 3 – List of consultees

AJ Recycling  
Amgen  
Biffa  
Bywaters  
Cardiff CC  
Casepak  
Cory Environmental  
CWM Environmental  
DS Smith  
Envirosort  
Exeter CC  
FCC  
Foreman Recycling  
Freedom Recycling  
Grundon  
Hills Waste Solutions  
HW Martins  
Ideal Paper  
J&B Recycling  
Merseyside Waste  
Mid UK Recycling  
MW Whites  
Newport Paper  
NEWS  
Nordic Recycling  
Northampton BC  
Plymouth CC  
Pure Recycling Ltd  
Shanks  
SITA  
Surrey Waste Management  
The Recycling Co  
Transcycle  
TQ Recycling  
UPM Shotton  
Veolia Environmental Services  
Viridor  
Wastecycle  
Wealdon DC

Yorwaste  
Paul Levett  
Aylesford Newsprint  
Axion Consulting  
Confederation of Paper Industries  
Ecoplastics  
British Plastics Federation  
NAWDO  
iESE  
Local Government Association  
LARAC  
Resource Association  
Closed Loop Recycling  
Environmental Services Association  
Mark Lyndon Paper  
Coca Cola  
Regain Polymers  
British Glass  
Novelis  
The Recycling Association  
Recoup  
Environment Agency  
Palm  
BMRA  
Jayplas  
CIWM  
Project Integra  
Smurfit Kappa  
Food and Drink Federation  
PAFA  
British Retail Consortium  
Campaign For Real Recycling  
EEF  
County Councils