

MEMORANDUM

To:	Abraham Ejim	Organisation:	Environment Agency
cc:	Ralph Keeble	Organisation:	Gent Fairhead & Co Limited
From:	Stephen Other	Our Ref:	S1552-0710-0143SMO
Date:	13 June 2017	No. of Pages:	4
Subject:	Clarification Response #5		

Dear Abraham,

Please find below a response to your questions of 9 June 2017.

As a general point, we note that the waste codes which are considered in questions 1 to 4 all cover materials which have been burnt in UK energy-from-waste plants over the last 10 to 15 years and that all of the waste codes have been included in environmental permits for other energy-from-waste plants.

Some of the wastes can be treated by other methods, but that decision depends on those treatments being close by and/or being available.

(1) Please explain why the following wastes are considered suitable for incineration using moving grate: EWC 19 06 04 and 19 06 06

These codes cover digestate from the anaerobic treatment of municipal waste (19 06 04) and animal and vegetable waste (19 06 06). They will be restricted to off-specification digestate and, as noted in Table 2.7 in the supporting information, will only be accepted if the moisture content is greater than 50%. These materials will be mixed with the RDF in the bunker. The proportion will be very small compared to general waste and therefore it is suitable for burning in the grate.

(2) Please justify processing these wastes for incineration at the CHP plant instead of recycling: 19 12 01, 19 12 04, 19 12 08, 20 01 01, 20 01 39

Codes 19 12 01 (paper and cardboard), 19 12 04 (plastic and rubber) and 19 12 08 (textiles) are intended to cover rejects from material recycling facilities which are contaminated or cannot be practically recycled or reused and would be otherwise destined for landfill.

Codes 20 01 01 (paper and cardboard) and 20 01 39 (plastics) are intended to cover separately collected recyclables which are contaminated or cannot be practically recycled or reused and would be otherwise destined for landfill.

(3) Please explain why the following waste codes are not suitable biological treatment such as composting (in-vessel / open-windrows) or anaerobic digestion: EWC 19 02 03, 19 02 10, 19 05 01, 19 05 02, 19 05 03, 19 06 04, 19 06 06, 19 12, 01, 19 12 07, 19 12 12, 20 01 01, 20 01 38, 20 01 39, 20 02 01, 20 03 01 and 20 03 02

As this is an extensive list, we have responded in the table below. As a general principle, the types of waste which can be processed via composting or anaerobic digestion are limited as contamination can prevent these processes from working and can render the compost output or digestate unsuitable for future use.

EWC Code	Description of Waste	Reason
<p>WASTES FROM WASTE MANAGEMENT FACILITIES, OFF-SITE WASTE WATER TREATMENT PLANTS AND THE PREPARATION OF WATER INTENDED FOR HUMAN CONSUMPTION AND WATER FOR INDUSTRIAL USE</p>		
<p><i>wastes from physico/chemical treatments of waste (including dechromatation, decyanidation, neutralisation)</i></p>		
19 02 03	premixed wastes composed only of non-hazardous wastes	Some wastes which fall under this code may be suitable for biological treatment, but not all. This code covers mixtures of biodegradable and non-biodegradable materials.
19 02 10	combustible wastes other than those mentioned in 19 02 08 and 19 02 09	Some wastes which fall under this code may be suitable for biological treatment, but not all. This code covers a range of organic and non-organic materials, which may be mixed and/or contaminated.
<p><i>wastes from aerobic treatment of solid wastes</i></p>		
19 05 01	non-composted fraction of municipal and similar wastes	These are all materials which have been rejected from a composting process. They are therefore not suitable for further biological treatment.
19 05 02	non-composted fraction of animal and vegetable waste	
19 05 03	off-specification compost	
<p><i>wastes from anaerobic treatment of waste</i></p>		
19 06 04	digestate from anaerobic treatment of municipal waste <i>(a solid content greater than 50% is necessary in the digestate for it to be acceptable in the CHP Plant)</i>	These cover off-specification digestate which is not compliant with PAS-110. As the materials have already been subject to biological treatment, they are not suitable for further biological treatment.
19 06 06	digestate from anaerobic treatment of animal and vegetable waste <i>(a solid content greater than 50% is necessary in the digestate for it to be acceptable in the CHP Plant)</i>	
<p><i>wastes from the mechanical treatment of waste (for example sorting, crushing, compacting, pelletising) not otherwise specified</i></p>		
19 12 01	paper and cardboard	This covers rejects from material recycling facilities which are contaminated or cannot be practically recycled or reused and would be otherwise destined for landfill.

EWC Code	Description of Waste	Reason
19 12 07	wood other than that mentioned in 19 12 06	Wood breaks down slowly under biological treatment which means that it is not recommended for composting or anaerobic digestion as a single feedstock. Also, this code is included to cover rejects from material recycling facilities which are not suitable for recycling. This will be due to contamination which means that they are also not suitable for biological treatment.
19 12 12	other wastes (including mixtures of materials) from mechanical treatment of wastes other than those mentioned in 19 12 11	Mixed material is not suitable for biological treatment as the output would not meet the PAS100 or PAS110 standards.
MUNICIPAL WASTES (HOUSEHOLD WASTE AND SIMILAR COMMERCIAL, INDUSTRIAL AND INSTITUTIONAL WASTES) INCLUDING SEPARATELY COLLECTED FRACTIONS		
20 01	<i>Separately collected fractions (except 15 01)</i>	
20 01 01	Paper and cardboard not suitable for recycling/recovery	This covers materials which are contaminated or cannot be practically recycled or reused and would be otherwise destined for landfill.
20 01 38	Wood other than that mentioned in 20 01 37	This covers materials which are not suitable for recycling. This will be due to contamination which means that it is also not suitable for biological treatment.
20 01 39	Plastics not suitable for recycling/recovery	Plastic is not suitable for biological treatment.
20 02	<i>Garden and park wastes (including cemetery waste)</i>	
20 02 01	Biodegradable waste not suitable for anaerobic digestion	This material is specifically material which is not suitable for biological treatment. It includes, for example, animal faeces.
20 03	<i>Other municipal wastes</i>	
20 03 01	Mixed municipal waste	Mixed material is not suitable for biological treatment due to contamination.
20 03 02	Waste from markets	Mixed material is not suitable for biological treatment as the output would not meet the PAS100 or PAS110 standards. Source-segregated biodegradable fractions would be suitable for anaerobic treatment and these are included in the acceptable waste inputs for the AD plant.

(4) Explain what wastes will be received under EWC 19 02 03

This covers materials removed from the discharges before water treatment.

(5) Please revise the attached site plan to remove:

- **the vertical and horizontal lines crossing the installation;**
- **red line surrounding the AD facility; and**
- **purple line**

As requested, a revised site plan is attached.

The louvres are principally intended to allow air to be sucked into the building maintaining the IWMF building(s) under negative air pressure and for ventilation purposes. Within the building(s) there are defined areas of operation that will be compartmentalised to control the working environment, emissions and odours. The internal ventilation system will be fed through ducts (following targeted process air treatment outlined within the Supporting Information and Odour Management Plan) and emitted through the louvres located at the periphery of the building. Emission point A7 is provided as an indicative location subject to detailed design.

Yours sincerely
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