**Guidance on when a plant is a Co-Incineration Plant – v 3**

**March 2011**

**Purpose**
To provide guidance for Environment Agency staff to use in reaching a decision on when a plant, within the scope of the Waste Incineration Directive (WID), should be classified as a co-incineration plant.

**Using this document**
The WID applies to incineration plants and co-incineration plants. Co-incineration plants constitute a particular form of incineration plant and this document provides a set of criteria to help decide when a plant should be considered a co-incineration plant (i.e. a plant having as its primary purpose the production of material products or generation of energy).

The table poses typical scenarios which should be assessed sequentially as shown in the flow chart attached. For each scenario select which of the two descriptions most aptly describes the plant under consideration. Where a conclusion can be drawn from a particular scenario, it is not necessary to consider the succeeding scenarios.

Assessment of the primary purpose of a plant is made on the basis of the facts existing at the time at which the assessment is carried out. The primary purpose of the plant can therefore be re-assessed at a later date should the facts change.

Should you be unclear on any element of the assessment, or should the scenarios posed below not produce a clear answer, contact National Technical Services.

1. **Does the plant produce Material Outputs?**
   - **No**
     - The plant only produces energy (electricity and / or heat).
     - Proceed to Question 2
   - **Or**
     - Yes
     - e.g. the plant produces a fuel product from waste or uses the fuel energy from the waste directly in making a product. (e.g. Cement plants).
     - The Plant is a Co-Incineration Plant – end of assessment.

2. **Is energy recovered from the waste burning plant?**
   - **No**
     - There is a net export of energy (as electricity or heat) to other plant in the installation or users outside the installation.
     - The Plant is an Incineration Plant – end of assessment.
   - **Or**
     - Yes
     - Proceed to Question 3

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1 The gas/liquid/solid produced by a gasification or pyrolysis plant is only considered a product where it has passed an end of waste test and is no longer considered a waste.
### 3. Is the waste the principal source of fuel?

<table>
<thead>
<tr>
<th>Yes</th>
<th>Or</th>
<th>No</th>
</tr>
</thead>
<tbody>
<tr>
<td>Waste is burnt as the principal source of fuel. (i.e. the plant operates on non-waste fuels only occasionally, or not at all)</td>
<td></td>
<td>The waste is a supplementary fuel in a plant designed to burn fuels which are not waste.</td>
</tr>
</tbody>
</table>

Proceed to Question 4

**The Plant is a Co-Incineration Plant** – end of assessment.

### 4. Is the waste being burnt mixed waste comprising different materials?

<table>
<thead>
<tr>
<th>Yes</th>
<th>Or</th>
<th>No</th>
</tr>
</thead>
<tbody>
<tr>
<td>The waste being burnt comprises different materials (e.g. mixed municipal waste, RDF).</td>
<td></td>
<td>The waste has consistent characteristics and can be compared to a virgin fuel (e.g. waste wood)</td>
</tr>
</tbody>
</table>

Proceed to Question 5

Proceed to Question 6

### 5. Has the waste been treated to improve its fuel quality?

<table>
<thead>
<tr>
<th>No</th>
<th>Or</th>
<th>Yes</th>
</tr>
</thead>
<tbody>
<tr>
<td>The waste being burnt does not undergo any significant pre-treatment to enhance its performance as a fuel.</td>
<td></td>
<td>All the waste has been treated (on or off site) to a relevant standard to enhance its performance as a fuel (e.g. SRF has CEN TS 15359)</td>
</tr>
</tbody>
</table>

**The Plant is an Incineration Plant** – end of assessment.

Proceed to Question 7

### 6. What level of Energy Recovery is achieved?

| Energy recovery is below 0.8 MWh\(_e\)/tonne waste | Or | Energy recovery is at least 0.8 MWh\(_e\)/tonne\(^2\) waste or the plant achieves good quality CHP status\(^3\). |

**The Plant is an Incineration Plant** – end of assessment.

**The Plant is a Co-Incineration Plant** – end of assessment.

### 7. How is the plant operation managed?

| The plant operation is not linked to a particular energy-consuming facility and is normally limited only by the availability of waste feed (e.g. The principal output is electricity which is mainly supplied to the national grid). | Or | The plant operation is linked to an energy-consuming facility (e.g. industrial site, business park) in terms of capacity and operability. When the consuming facility is not operating (other than short-duration maintenance), the producing plant stops operating. |

**The Plant is an Incineration Plant** – end of assessment.

**The Plant is a Co-Incineration Plant** – end of assessment.

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\(^2\) This figure has been derived from the BREF (BAT point 66). It is only relevant to this assessment and does not define an acceptable level of energy recovery. Energy recovery and energy efficiency are to be assessed in detail during permit determination.

\(^3\) See ‘The CHPQA Standard’ for details about good quality CHP status.
The output of the plant is a material product that uses the fuel energy from the waste directly in making that product. (e.g. Cement plants)

Energy, and the energy is generated by a plant that uses waste as

- a supplementary fuel in a plant designed to burn non-waste fuels and recover energy
- a principal source of fuel, where energy is recovered and there is

- No net export of energy
- A net export of energy, and the feedstock is

Waste with consistent characteristics which is comparable to a virgin fuel (e.g. waste wood), where the plant recovers

- Waste which has been treated (on or off site) to a relevant standard to enhance its performance as a fuel (e.g. SRF), and the operation of the plant is

- At least 0.8 MWh/t or the plant achieves good quality CHP status
- Less than 0.8 MWh/t

- not linked to a particular energy-consuming facility and normally limited only by the availability of waste feed
- is linked to an energy-consuming facility (e.g. industrial site, business park) in terms of capacity and operability.

Mixed waste comprising different materials, that may have undergone some pre treatment

Blue box = Incineration plant  Yellow box = Co- incineration plant