

Energy from waste – regulation

All waste facilities, including energy from waste (EfW) incinerators, are regulated to prevent or minimise any risks to the environment or health.

Local authorities regulate many of the smaller (less than 1 tonne/hour waste) incinerators, whilst we regulate about 100 of the more complex and larger (greater than 1 tonne/hour non-hazardous waste and all hazardous waste incinerators) plants.

We regulate all EfW plants burning municipal waste. These plants are subject to the [EU Integrated Pollution Prevention and Control \(IPPC\) regime](#), which aims to prevent, reduce or eliminate pollution at source. We closely monitor these EfW plants to make sure that the emissions are as low as they can be to protect the environment and human health.

The requirements of EU Directives like IPPC and the WID (see below) are incorporated in the national Environmental Permitting Regulations.

Waste Incineration Directive

The Waste Incineration Directive (WID) sets strict environmental standards on all EfW plants and other plants burning waste. The directive also applies to co-incinerators, such as combustion plants and cement works which burn waste as a fuel.

EfW plant operators have improved their environmental performance greatly in recent years. In the early 1990s, municipal waste incinerators used to be the largest producers of some harmful substances like dioxins, but these days, they're among the lowest.

Regulation – our role

Before reaching a decision to grant a permit, we must be satisfied that:

- the applicant has demonstrated that the proposed facility meets the requirements of the Environmental Permitting Regulations and uses Best Available Techniques in its design and operation. It must also meet criteria set out in other relevant Directives on Air Quality, Urban Waste Water and Dangerous Substance;
- the standards proposed for the design, construction and operation of the facility meet or exceed our guidance, national legislation and relevant Directives;
- the comments received from the public and statutory consultees have been taken into account;
- as far as practicable, the energy generated by the EfW plant will be recovered for use;
- the amount of residues and their harmfulness will be minimised and recycled where appropriate; and
- proposed measurement techniques for emissions are in line with those specified in national legislation and relevant Directives.

We will only issue a permit if we are sure that the plant will be designed, constructed and operated in a way that will not significantly pollute the environment or harm human health.

If we are satisfied that the above criteria are met, we will issue the permit, accompanied by a decision document explaining our decision, and how we took comments into account.

The permit will contain a whole series of legally binding conditions and requirements including the following:

- Staff training, awareness of permit conditions and providing written operating instructions.
- Receiving, handling and storing waste and raw materials.
- Categories of waste that can be incinerated.
- Plant operating conditions, for example residence time, temperature, ash burn out;
- Energy efficiency, accident prevention, noise and vibration control.
- Emission limit values for air, water, land, sewer and ground water protection (where appropriate).
- Monitoring – techniques, equipment, standards, sampling etc. The permit specifies the frequency of monitoring and reporting. All EfW plants must have continuous monitors for gaseous pollutants and dust. Heavy metals and dioxins are monitored periodically but at a defined frequency.
- Record keeping, reporting and notifications, for example all exceedances of emission limits must be notified to the Environment Agency within 24 hours.

Issuing a permit is the first stage of our regulation of an EfW plant.

We then start a continued assessment of the plant operations and its environmental performance in a number of ways:

- Operators must monitor emissions at given times and report the results to us.
- We regularly inspect installations, review monitoring techniques and assess monitoring results to measure the performance of the plant.
- We carry out independent routine monitoring of emissions (once a year for all EfW plants) or undertake auditing of operator monitoring, as well as making spot checks.
- Operators must inform us within 24 hours of any breach of the emissions limits, followed by a fuller report of the size of the release, its impact and how they propose to avoid this happening in the future.
- Operators' monitoring results are placed on the public registers.
- We will take appropriate enforcement action and/or prosecute depending on the seriousness of any breach.

customer service line

08708 506 506

www.environment-agency.gov.uk

incident hotline

0800 80 70 60

floodline

0845 988 1188