

Energy From Waste Facility

Emissions from Incinerator

Note from the Environment Agency

Emissions from an incinerator are controlled by a combination of good combustion control and effective abatement. Water vapour and carbon dioxide are products of the combustion process. Therefore the exit gas from the stack at Javelin Park incinerator is a wet, hot gas. This means when the atmosphere is warm we don't usually see a large plume, however in winter as the hot wet gases meet with colder air, the water vapour in these gases condenses rapidly to steam and produces what we term as a visible plume.

The sites environmental permit set the limits pollutants can be emitted at and the site is required to continuously monitor oxides of nitrogen, carbon monoxide, total organic carbon, sulphur dioxide, hydrogen chloride and particulate matter. These limits are set at levels to protect the environment and human health in all weather conditions.

Smaller plumes can also be seen at the top off the site, not from the main stack. This is small losses of steam used to drive the site turbine. This is virtually a closed loop system, which enables energy recovery. The water is passed through a chamber (the Boiler) through which pipes containing the hot gases from combustion pass through. The resulting steam produced after it has passed the turbine is condensed and the water is returned back to the boiler. The gases from combustion and steam in the boiler do not come in to direct contact with each other.

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