

# Information on energy from waste facilities

## Background

The Scottish Environment Protection Agency (SEPA) is Scotland's environmental regulator. Our main role is to protect and improve the environment. We do this by being an effective environmental regulator, helping business and industry to understand their environmental responsibilities, enabling customers to comply with legislation and good practice and to realise the many economic benefits of good environmental practice. We protect communities by regulating activities that can cause harmful pollution and by monitoring the quality of Scotland's air, land and water. Further information about SEPA is available on our website at: [www.sepa.org.uk/about\\_us.aspx](http://www.sepa.org.uk/about_us.aspx)

This document aims to answer some of the most commonly asked questions about SEPA's involvement in the planning and environmental licensing processes for energy from waste developments.

## Questions and answers

### What is energy from waste?

'Energy from waste' is the process of creating energy, in the form of electricity or heat, from the incineration of waste. For further information on the definition of waste please read our document *Is it waste: understanding the definition of waste* and its supplementary guidance document, both of which are on our website at: [www.sepa.org.uk/waste/waste\\_regulation/is\\_it\\_waste.aspx](http://www.sepa.org.uk/waste/waste_regulation/is_it_waste.aspx)

### What is SEPA's role in planning applications?

SEPA is identified as a key agency under the Planning etc (Scotland) Act 2006 and is proactively assisting delivery of the Scottish Government's commitment to provide a more effective and efficient planning system. We provide formal environmental advice development plans and on a wide range of development proposals across Scotland.

We are a statutory consultee in planning applications for waste facilities and we provide comments to the planning authority on issues that are relevant to our interests, including:

- appropriate land use;
- waste strategy issues;
- whether the application would be consentable (ie whether we are likely to issue a permit to operate) under the appropriate regulations;
- whether it will comply with our *Thermal Treatment of Waste Guidelines 2009*.

We control energy from waste facilities under the Pollution Prevention and Control (Scotland) Regulations (PPC) 2000 (as amended) – referred to as the PPC regulations – and the Waste Incineration (Scotland) Regulations 2003. Please see the end of this document for more information on the PPC regulations.

The planning authority also consults the public on the applications and more information on this can be found on local authority websites.

## What are the roles and responsibilities of local authorities?

The Scottish Government's *A Guide to the Planning System in Scotland* is available at: [www.scotland.gov.uk/Publications/2009/08/11133705/0](http://www.scotland.gov.uk/Publications/2009/08/11133705/0)

The local authority, as the planning authority, is responsible for determining planning applications in accordance with planning legislation, guidance and local and strategic policy. Representation from the public and other bodies are taken into consideration at the decision making stage by the planning authority's staff and elected councillors.

Each planning authority works under the general principle that decisions are taken locally unless there are specific reasons for referring them to Scottish Ministers. Scottish Ministers have the general power to intervene in the determination of a planning application and would do so only if it appears there may be some matter of genuine national interest at stake.

More information on development management is available from: [www.scotland.gov.uk/Topics/Built-Environment/planning/National-Planning-Policy/themes/dev-man](http://www.scotland.gov.uk/Topics/Built-Environment/planning/National-Planning-Policy/themes/dev-man).

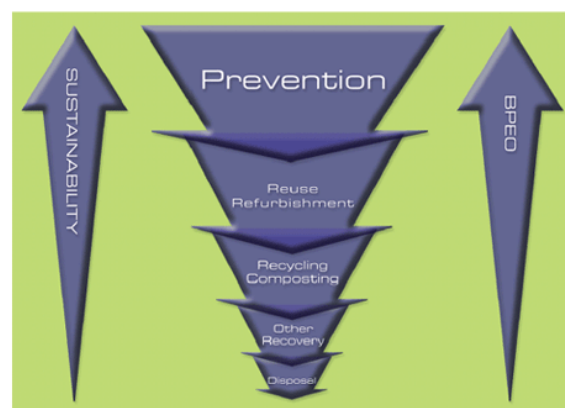
## What is the role of NHS Health Boards?

National Health Service Health Boards may be consulted by the planning authority. We will also consult them if we receive an application for a PPC permit as the local NHS Health Board is a statutory consultee in the PPC process and is responsible for providing advice on the public health aspects of the proposed development. This advice may cover local issues, requirements under other regulatory regimes and specialist opinions.

## How do proposals for energy from waste developments fit in with the National Waste Strategy and the Scottish Government's Zero Waste Plan?

The National Waste Plan 2003 ([www.sepa.org.uk/waste/moving\\_towards\\_zero\\_waste/national\\_waste\\_plan.aspx](http://www.sepa.org.uk/waste/moving_towards_zero_waste/national_waste_plan.aspx)) was the keystone to implementing the National Waste Strategy in Scotland, and outlined how we could achieve increased levels of recycling and an overall reduction in the amount of waste we produce. It also identified 11 Waste Strategy Areas ([www.sepa.org.uk/waste/moving\\_towards\\_zero\\_waste/area\\_waste\\_plans.aspx](http://www.sepa.org.uk/waste/moving_towards_zero_waste/area_waste_plans.aspx)), which each produced an Area Waste Plan. The Area Waste Plans set out the Best Practicable Environmental Option (BPEO) for municipal waste and also describes actions to move commercial and industrial waste up the waste hierarchy (see figure right and [www.sepa.org.uk/waste/moving\\_towards\\_zero\\_waste/waste\\_hierarchy.aspx](http://www.sepa.org.uk/waste/moving_towards_zero_waste/waste_hierarchy.aspx)).

However, a review of this plan is currently being undertaken as the Scottish Government is committed to moving toward a Zero Waste Scotland ([www.scotland.gov.uk/News/This-Week/Speeches/Greener/vision-for-waste](http://www.scotland.gov.uk/News/This-Week/Speeches/Greener/vision-for-waste)) and has consulted on the Zero Waste Plan ([www.scotland.gov.uk/Publications/2009/08/19141153/0](http://www.scotland.gov.uk/Publications/2009/08/19141153/0)).



Zero Waste means sustainable design, resource efficiency and waste prevention, reusing products where possible, eliminating the unnecessary use of raw materials and recovering value from products when they reach the end of their lives either through recycling, composting or energy recovery.

As well as outlining the Scottish Government's priorities and policies in relation to waste, the Zero Waste Plan, when finalised, will comply with the requirement in Article 28 of the revised European Union Waste Framework Directive that EU Member States adopt a waste management plan. It will also comply with the requirement in Article 29 for Member States to have a waste prevention programme. The Zero Waste Plan outlines our recycling targets for both municipal and construction and demolition waste, and provides details on the cap on the amount of municipal waste that can be treated from energy from waste facilities. It also discusses whether it would be appropriate to identify targets for commercial and industrial waste. More information on the Zero Waste Plan can be found at: [www.scotland.gov.uk/Topics/Environment/waste-and-pollution/Waste-1](http://www.scotland.gov.uk/Topics/Environment/waste-and-pollution/Waste-1)

A core principle of the national waste plan is the waste hierarchy, which aims to encourage the management of waste materials in order to reduce the amount produced, and to recover maximum value from the wastes that are produced. Zero Waste intends to create opportunities for Scotland by making a positive contribution towards meeting renewable electricity and heat targets through the treatment of waste. In Richard Lochhead's (Cabinet Secretary for Rural Affairs and the Environment) speech on 24 January 2008 he indicated that the Scottish Government would introduce a cap of 25% on the amount of municipal waste that could be treated by energy from waste plants. More information on the recovery of energy from residual waste can be found on our website at: [www.sepa.org.uk/waste/moving\\_towards\\_zero\\_waste/waste\\_hierarchy/recovery.aspx](http://www.sepa.org.uk/waste/moving_towards_zero_waste/waste_hierarchy/recovery.aspx).

More information on the 25% energy from waste cap for municipal waste can be found in Annex J of the Zero Waste Plan consultation at [www.scotland.gov.uk/Publications/2009/08/19141153/0](http://www.scotland.gov.uk/Publications/2009/08/19141153/0)

### **What is municipal waste?**

Municipal waste is waste (including some commercial and industrial waste) which a local authority makes arrangements for the collection and subsequent disposal. The definition of municipal waste is given at:

[www.sepa.org.uk/waste/waste\\_data\\_1/municipal\\_waste.aspx](http://www.sepa.org.uk/waste/waste_data_1/municipal_waste.aspx). It is often referred to as municipal solid waste.

### **What is commercial and industrial waste?**

Commercial and industrial waste is a broad category which includes business waste, construction and demolition waste and waste from agriculture, fishing and forestry.

More information on commercial and industrial waste can be found on our website at: [www.sepa.org.uk/waste/waste\\_data/commercial\\_industrial\\_waste.aspx](http://www.sepa.org.uk/waste/waste_data/commercial_industrial_waste.aspx).

It will be up to the applicant to tender and negotiate for any waste disposal contracts that are available from local authorities and commercial organisations.

### **Where can I find more information on waste data?**

The total controlled waste arisings in Scotland in 2007/2008 was 20.69 million tonnes, an increase of 2.62 million tonnes (14.5%) from 2004/2005. Information on waste data is available on our website at:

[www.sepa.org.uk/waste/waste\\_data/waste\\_data\\_digest.aspx](http://www.sepa.org.uk/waste/waste_data/waste_data_digest.aspx).

Currently a significant proportion of this waste is sent directly to landfill, which is a massive misuse of resources and a major source of greenhouse gas and other potentially polluting emissions.

### **Where will the waste come from for any proposed energy from waste plant?**

*Scottish Planning Policy 10: Planning for Waste Management* ([www.scotland.gov.uk/Resource/Doc/143177/0036298.pdf](http://www.scotland.gov.uk/Resource/Doc/143177/0036298.pdf)) identifies that waste should be handled as close as possible to source. The 11 area waste plans also identified that waste should be disposed of as near as possible to the point at which it arose, supporting the idea of self sufficiency. This 'proximity principle' does not identify a specific distance. More information on the Area Waste Plans can be found at: [www.sepa.org.uk/waste/moving\\_towards\\_zero\\_waste/area\\_waste\\_plans.aspx](http://www.sepa.org.uk/waste/moving_towards_zero_waste/area_waste_plans.aspx)

Additionally, the planning authority could place a condition on any grant of planning permission limiting the geographic location of the origin of the waste to be processed.

### **Do energy from waste plants undermine efforts to improve recycling?**

In principle, SEPA does not agree that an energy from waste facility will reduce recycling or prevention if developers adhere to our *Thermal Treatment of Waste Guidelines 2009*. The waste hierarchy identifies a series of options for managing waste sustainably and is the basis of Government policy. The waste hierarchy is intended to guide choices about waste management options and the Best Practicable Environmental Option (BPEO).

The table below shows waste arisings in Scotland in 2008. A certain percentage of municipal solid waste is reused or recycled but the majority is landfilled

**Table 1 - Total controlled waste arisings in Scotland 2007/2008**

<b>Waste type</b>	<b>Million tonnes</b>	<b>%</b>
Household	3.00	14.5
Commercial	5.48	26.5
Industrial - other	2.75	13.3
Industrial - Construction and demolition	9.46	45.7
<b>Total</b>	<b>20.69</b>	<b>100.0</b>

**Source: Waste Data Digest 9: data tables 2007**

The Scottish Government has set the following targets for recycling of municipal solid waste.

Year	Percentage Target to be met
2010	40%
2013	50%
2020	60%
2025	70%

Additionally the Scottish Government has set a cap on the amount of municipal waste that can be treated by energy from waste plants.

There are currently no targets for the recycling of industrial or commercial waste. A new target will be introduced through the Waste Framework Directive requiring that:

By 2020, the preparing for re-use, recycling and other material recovery, including backfilling operations using waste to substitute other materials, of non-hazardous construction and demolition waste excluding naturally occurring material defined in the European waste category 17 05 04 in the list of waste shall be increased to a minimum of 70 % by weight.

Annex A of the Zero Waste Plan provides further information on targets.

SEPA supports the movement of waste up the Waste Hierarchy. However recycling and recovery cannot deal with all waste produced: the thermal treatment of waste that cannot be recycled or recovered has a key role to play to meet our energy needs in the future and it is vital we recognise the inherent energy value and carbon benefits of using appropriate waste materials for energy.

SEPA's *Thermal Treatment of Waste Guidelines 2009* apply to all municipal solid waste and commercial and industrial waste that are treated at installations licensed under Part A of the Pollution Prevention and Control (Scotland) Regulations 2000 (as amended). Additionally, we believe that energy recovery and efficiency, and consequent carbon reduction opportunities are relevant matters for consideration at the planning application stage. Applicants for waste thermal treatment facilities which will not be licensed as a Pollution Permit Control Part A installation should therefore still refer to these guidelines even though we may not impose any consequential requirement within their environmental licence. The practical implications of these guidelines will be that thermal treatment facilities handling waste should:

- only treat residual waste (ie waste remaining after all efforts have been made to extract recyclable materials, either prior to or after delivery to the plant) in order not to impede recycling and waste prevention efforts;
- be part of an integrated network of recycling and composting and other waste management facilities;
- recover and use the energy derived from waste efficiently.

This policy is set out in our *Thermal Treatment of Waste Guidelines* available at [www.sepa.org.uk/waste/moving\\_towards\\_zero\\_waste/waste\\_hierarchy/recovery.aspx](http://www.sepa.org.uk/waste/moving_towards_zero_waste/waste_hierarchy/recovery.aspx)

The applicant would have to identify at the planning stage that even taking into account recycling targets there is still a need for additional waste facilities within the area to deal with the amount of residual waste arising.

SEPA would request that the planning authority places conditions on any planning permission granted. These may require, depending, on the nature of the facility that:

- only residual waste is treated at the facility;
- there is a cap on the amount of municipal waste that can be treated by

- energy from waste facilities which will ensure that the amount of waste recycled is not compromised;
- facilities for the segregation of ferrous and non-ferrous metals from the bottom ash should be provided;
  - the facility provides both heat and power for export thus recovering and using the energy derived from the waste efficiently;
  - no development should commence on site until a heat plan for the potential use of heat recovered has been provided, and that the facility is constructed in accordance with the details submitted;
  - the facility connects to the public water supply;
  - a site waste management plan is provided.

### **How far can heat be transported from the facility?**

Energy from waste facilities can be designed to provide power and heat, the ratio of heat compared to power can be split to favour heat or power. The distance you can send heat in a district heating schemes depends on how much energy is in the steam/hot water being sent out. Obviously the greater the energy content, the further it can be transported before system losses make it unsuitable for use. A waste company in Denmark transmits heat over 80 km using substations (booster stations) to account for energy losses. Further information on district heating in Denmark is available on our website at:

[www.sepa.org.uk/waste/information\\_resources/events/previous\\_events/sustainable\\_waste\\_management.aspx](http://www.sepa.org.uk/waste/information_resources/events/previous_events/sustainable_waste_management.aspx) .

Good quality District Heating schemes make use of steam drawn off the turbine to heat the District Heating hot water system, typically around 80°C+. However, this reduces the electrical generation provision, because this can be subsidised via Renewable Obligation Certificate (ROC) scheme this may prove to be quite expensive for the operator. More information on ROC's can be found at [www.scotland.gov.uk/Publications/2009/12/10134807/4](http://www.scotland.gov.uk/Publications/2009/12/10134807/4). The proposed Renewable Heat Incentive scheme may help offset this imbalance, for more information can be found at [www.scotland.gov.uk/Publications/2009/11/04154534/3](http://www.scotland.gov.uk/Publications/2009/11/04154534/3).

By providing electricity you are only left with low quality heat arising from steam condenser cooling operations giving hot water which is at best about 40°C. This is sufficient for space heating large areas such as warehouses, sports centres etc but is of little use domestically as most hot water systems run at 60°C, unless there is some form of energy boost.

### **What about the energy from waste facility in Shetland?**

The energy from waste facility in Lerwick provides only heat rather than heat and power (electricity). Heat is distributed to properties over 6km away. The Lerwick facility treats approximately 21,000 tonnes of residual waste per year and supplies over 900 domestic and commercial premises. In Lerwick these premises include the full range of local authority applications including leisure centres and a hospital.

The price range for a domestic heat exchanger providing heating and hot water is £1000-1500 plus installation costs. The price depends on the size of house and thus energy demand. Installation costs also depend on the type of heating system being replaced or upgraded. The size of the domestic heat exchanger is significantly

smaller than a conventional boiler. The pipework sizes for distribution pipes are typically up to 200mm diameter and 25mm diameter on the actual house supply (the house supply size may increase for large houses). In Lerwick, when the energy from waste facility is not operating there is a standby boiler system which uses heavy fuel oil as a back up heat source.

More information on the district heating system in Shetland can be found on their website at [www.sheap-ltd.co.uk/site/Home%201.html](http://www.sheap-ltd.co.uk/site/Home%201.html).

### **How do we know if a development will be consentable at the planning stage?**

The development proposer requires both planning permission and a PPC permit before the proposed facility can operate. Planning Advice Note 51: Planning Environmental Protection and Regulation ([www.scotland.gov.uk/Resource/Doc/152228/0040973.pdf](http://www.scotland.gov.uk/Resource/Doc/152228/0040973.pdf)), states that "when SEPA comments on a planning application and is also the environmental regulator, it should assess the land use aspects of the planning application to clarify whether, on the information available at the time, the proposed development is potentially capable of being consented under the licensing regime." Therefore at the planning stage we require sufficient information to identify whether the facility is likely to be consentable.

We strongly encourage the applicant to twin-track their applications for planning permission and any environmental licence such as PPC. Our preference is that all the technical information required for all permissions and licences is submitted at the same time as the planning application. However, we consider it to be at the applicant's commercial risk if any significant changes required during the regulatory stage necessitate a further planning application and/or neighbour notification or advertising.

### **What types of waste can an incinerator burn?**

If planning permission is granted, planning conditions may indicate the types of waste that can be accepted at a facility eg municipal and/or commercial and industrial waste, and/or only non-hazardous waste. Under the PPC regime the applicant has to specify the particular types of waste they intend to incinerate and show that the proposed facility is capable of handling those wastes and that the abatement equipment will be suitable. SEPA is required to list the permitted wastes in any permit granted.

This listing is based on the European Waste Catalogue system. Should the applicant wish to amend the list of wastes allowed an application for a variation must be made to SEPA. This variation application could be advertised and be subject to review by statutory consultees which will also include public consultation. Any plant applying for a variation to burn hazardous waste in addition to non-hazardous waste will require advertising and statutory consultation.

### **How can a demonstration be made that the appropriate level of energy recovery will take place?**

In an environment of growing global resource pressures, rising energy prices and the increasing challenges we face in tackling energy security and climate change, SEPA believes renewable energy has a significant role to play and it is vital that we recognise the inherent energy value and carbon benefits of using appropriate waste materials for energy. Information would have to be provided by the applicant to identify that sufficient commercial premises are available to use the heat with the

added potential of nearby land being designated for development.

### **How will the proposals affect local air quality?**

The applicant will be required to use advanced air quality modeling techniques to predict the impact of emissions from a proposed incinerator. This would be assessed by SEPA's modelling experts who would ultimately conclude if the modelling had been properly undertaken. SEPA will assess these results to ensure that the impact on air quality is within acceptable levels.

### **Will emissions to air be a problem for sensitive receptors?**

The air quality modelling above predicts the ground level concentrations in the surrounding environment including at sensitive receptors such as hospitals, nurseries, and nearby homes. The modelling is based on worst case scenarios, and must be within the limits set out in the air quality standards. The modelling results are also used to specifically consider the predicted impact on any sensitive receptor.

### **What difference does the weather make?**

The weather affects how discharges from a chimney are distributed in the local environment. The weather is a factor that SEPA takes into account when assessing any permit application. The operator would carry out pollution dispersion modelling, which aims to predict how the emissions will react in different weather conditions, not just the normal weather, at the proposed location. This includes any specific conditions that are prevalent and particular to the local area such as haar, local topography and any effect they could have on dispersion of emissions.

### **What is the risk of adverse health effects?**

SEPA has recently published a report on the incineration of waste and reported human health effects. The report was carried out by Health Protection Scotland and is available on SEPA's website at:

[www.sepa.org.uk/about\\_us/news/2009/report\\_on\\_incineration\\_of\\_wast.aspx](http://www.sepa.org.uk/about_us/news/2009/report_on_incineration_of_wast.aspx)

The report looked at a range of previous studies on the health effects of incinerators, concluding that due to many uncertainties it is difficult to be definitive about the effects. However, it is clear from the studies that any past health effects on populations living near incinerators is likely to have been small.

Today's incinerators are subject to much stricter legislative controls, lowering airborne emissions and have improved technology. Consequently any health effects from a modern incinerator would be very small, if detectable at all.

### **What risk is there from emission of dioxins?**

Dioxins are formed by the burning of materials that contain chlorine. Alongside industrial emissions sources, other significant sources include domestic stoves and fires, garden waste or refuse burning, bonfires, fireworks, vehicle exhausts and tobacco smoke. Where a unit of weight is expressed below it refers to I-TEQ units for dioxin measurement.

In 1995 55% of all UK dioxin mass (total) emissions came from waste incineration (in excess of 600g). In 1996 incinerators were subject to stricter controls on their emissions and a dioxin emission limit was set at 1 nanogram (one thousand millionth

of a gram)/m<sup>3</sup> of flue gas. Consequently mass emissions fell and in 2003/4 the incineration of household waste produced between 0.04 and 0.21g of dioxins in total. The emissions limit was further reduced on the implementation of the Waste Incineration Directive and now stands at 0.1ng/m<sup>3</sup> of flue gas.

In July 2009 a report was issued that reviewed the sources of dioxins in the UK (carried out for DEFRA), this report can be found on DEFRA's website at <http://www.defra.gov.uk/environment/quality/chemicals/documents/dioxins-report090727.pdf>.

. This showed dioxin mass emissions from incineration of municipal solid waste to be 0.02g in 2006. This compares to 2.64g from road transport, 4.41g from residential combustion and 60.59g from accidental fires.

Whilst there is no safe level of exposure to dioxins, it is now the case that emissions from incinerators are much less than other everyday sources and the risk of health effects from dioxins from incinerators is very small to the level that it would not be possible to detect it.

### **What risk is there from particulate matter?**

As mentioned above, the applicant would be required to carry out a detailed modelling exercise to predict the pollutant levels in the surrounding area if the facility was operational. The outcome of this would determine the contribution to the of the annual mean air quality objective and be one of the factors used by SEPA in any impact assessment or decision making.

Particulates arise from a number of sources which includes natural sources (such as forest fires, dust storms and sea salt), power generation, domestic heating, transport, quarries, construction sites and waste disposal operations.

A review of the mass emissions of particulates from a variety of sources was undertaken in 2001 by the Government's Air Quality Expert Panel. This identified that in the UK, transport generated the highest levels of PM<sub>10</sub> (particles with a size less than 10 microns ie 0.01mm) mass emissions at 48.4 kilo tonnes (kT) per annum while power generation generated 17.7 kT. Domestic heating generated 31.1 kT and waste disposal operations (which includes waste incineration operations, landfills etc) 1.5kT. Road and kerbside levels of particulates give rise to the greatest number of local air quality limit exceedances in the UK. The report also noted that burning natural gas generates the same proportion of PM<sub>10</sub>, PM<sub>2.5</sub> and PM<sub>0.1</sub> as the incineration of waste.

It is important to also note that due to regulatory changes, significant reduction in particulate emissions in the UK has been achieved over recent years (ie PM<sub>10</sub> emission fell by 42% during the period 1990-2001 and are expected to fall a further 28% by 2010).

### **What will happen to the ash?**

Any proposals to recycle ash will be fully investigated by SEPA. It will be up to the applicant (wishing to accept this waste) when applying for a licence under the Waste Management Licensing Regulations 1994 (as amended) or a permit under the Pollution Prevention and Control (Scotland) Regulations 2000 (as amended), to demonstrate that the materials will be used appropriately and that there will be no harm to the environment or human health. The ash will remain a waste until it has

been subjected to a final recovery operation.

In addition, a much smaller waste stream is air pollution control residues, also known as fly ash. This is classified as hazardous waste and will be disposed of at a suitable hazardous waste facility. The design of an energy from waste facility will allow fly ash to be collected and placed in closed containers prior to removal off site.

Further detail will be required from the applicant for both the disposal of bottom ash and fly ash at the application stage for a permit under the PPC.

### **Will carbon emissions be effected?**

The Zero Waste Plan ([www.scotland.gov.uk/Resource/Doc/282143/0085295.pdf](http://www.scotland.gov.uk/Resource/Doc/282143/0085295.pdf) Annex I page 185 Executive Summary), compared the different options to manage municipal waste. Five options were considered using the WRATE (Waste and Resources Assessment Tool for the Environment) life cycle assessment modelling tool.

It was found that carrying out 70% recycling and composting; 25% energy from waste and 5% landfill was the best performer, predicting a reduction in Scotland of (over 100 years) equivalent to 1.2 million tonnes of carbon dioxide and a reduction in resource use equivalent to that consumed by up to 371,000 average Europeans.

### **Do these facilities create odour pollution?**

SEPA would require that any facility controls fugitive odours by keeping the waste handling and storage areas under negative pressure and extracting this air to the combustion plant where they should be burnt. This is common practice and is an effective method of dealing with odours.

### **Will the incinerator be thought of as creating renewable energy?**

Scottish Planning Policy 6: Renewable Energy ([www.scotland.gov.uk/Resource/Doc/171491/0047957.pdf](http://www.scotland.gov.uk/Resource/Doc/171491/0047957.pdf)) identifies that energy from waste, landfill gas and other technologies will be used to help meet Scotland's targets for increasing the amount of electricity generated from renewable energy sources, as this is a vital part of our response to sustainable development and climate change.

The Renewables Obligation is the main support scheme for renewable electricity projects in the UK. It places an obligation on UK suppliers of electricity to source an increasing proportion of their electricity from renewable sources. Renewable Obligation Certificates (ROCs) are a green certificate issued to an accredited generator for eligible renewable electricity generated and supplied in the UK. Further information can be found at: [www.ofgem.gov.uk/sustainability/environment/renewablobl/Pages/RenewablObl.aspx](http://www.ofgem.gov.uk/sustainability/environment/renewablobl/Pages/RenewablObl.aspx)

### **What will happen if planning permission is not granted?**

The applicant can appeal against the decision to the Scottish Government's Inquiry Reporters Unit or the Court of Session to have the decision set aside.

### **If planning permission is granted, what happens next?**

In order to operate an Energy from Waste facility, the operator will need to apply to

SEPA for a permit under the Pollution Prevention and Control (Scotland) Regulations 2000 (as amended). SEPA will follow the requirements set out in law by the European Union, the Scottish and UK Governments to ensure that the facility complies with relevant legislation.

There is no legal requirement to submit an application prior to planning permission being given. However, we do encourage applicants to apply for a permit at the same time as submitting a planning application. This is because a change may need to be made as a result of our response to a permit application that would make the planning approval null and void and require revision.

The legislation will require that the applicants:

- do not begin operation before receiving a PPC permit from SEPA;
- must submit a comprehensive application;
- must take account of best available techniques when describing all activities and their environmental impact (including 'abnormal' operations);
- must advertise their application in a local newspaper and the *Edinburgh Gazette*.

The application will be subject to statutory consultation which also includes the opportunity for public participation. The local authority is a statutory consultee for SEPA during the determination of an application for a PPC permit. For the avoidance of doubt, SEPA is the determining body in the grant or otherwise of a PPC application.

SEPA then has to judge whether or not the application meets the requirements of the law. If it does, SEPA will issue a permit setting out what the applicant may and may not do, and setting out minimum standards of performance. If the application meets the legal requirements we are legally obliged to issue a permit. SEPA cannot grant a permit if the application does not meet the requirements of the Regulations.

### **How can I get a copy of any application to operate an energy from waste facility?**

We will make public as much of any application as possible through our website. You can print this for your own use. Some parts of the application may not be available for practical reasons (eg large diagrams), however, you can view a hard copy in our Registry which serves the region in which the application is made.

### **If SEPA grants a permit, what conditions will it set?**

SEPA's permit will detail many things, covering every aspect of the operation of the facility:

- standards for operating the facility;
- standards for maintaining the plant;
- types and quantities of waste allowed;
- how waste is to be handled and disposed of;
- strict limits on emissions to the environment;
- how emissions are to be monitored;
- arrangements for reporting emissions;
- limits on noise and vibration;
- environmental monitoring requirements;
- methods of reporting breaches or possible breaches of limits and permit

- conditions to SEPA;
- disposal (including recycling) routes for residues such as bottom and fly ash.

### **Can SEPA refuse an application for a PPC permit?**

SEPA can refuse the application if it does not demonstrate that the site will use best available techniques in all aspects of its operations (technology and administration/management) in accordance with the regulations. These techniques are site specific and must be justified by applicants. SEPA must also refuse the application if it considers that the applicant is not in control of the installation or will not comply with the conditions in the permit.

### **What if I do not agree with SEPA's decision?**

If you do not think SEPA has acted properly, you should first of all contact the local office dealing with the application. If the staff or their managers responsible for the application are not able to deal with your concerns, they will advise you of the senior management in SEPA you can contact.

Only the applicant can appeal to the Scottish Government regarding a permit refusal, or specific conditions attached to an approved permit if they are aggrieved by them.

### **What powers does SEPA have if site operators do not comply with permit conditions and limits?**

SEPA officers are able to enter premises at any time of day or night. They will also carry out regular inspections at the site (both unannounced and arranged as appropriate) and periodic emission monitoring checks.

We have the power to close any part or all of the operation by serving a suspension notice if the operator was found not to be complying with the permit. However, this is an extreme measure and can only be used where there is likely to be an imminent risk of serious pollution.

Enforcement action usually takes place at a number of levels:

- informal discussions;
- formal letters and meetings;
- enforcement notices that require specific action within a specific timescale;
- recommending prosecution to the Procurator Fiscal.

The action we take depends on the situation. A minor breach of a permit may only require a warning letter, but a major breach may require an enforcement notice demanding that the operator takes specific actions or it may justify our sending a report to the Procurator Fiscal. Fines imposed by the courts for offences are at their discretion and are limited to a maximum of £20,000 for each offence. However in exceptional circumstances the courts can impose unlimited fines.

### **What should I do if I suspect a site operator is in breach of their permit conditions?**

Contact your local SEPA office ([www.sepa.org.uk/about\\_us/contacting\\_sepa.aspx](http://www.sepa.org.uk/about_us/contacting_sepa.aspx)) or call our free 24 hour pollution hotline on 0800 80 70 60.

### **Scottish Pollutant Release Inventory**

The Scottish Pollutant Release Inventory (SPRI) is a database of annual mass releases of specified pollutants to air, water and land from SEPA regulated industrial sites. An operational energy from waste plant will be required to complete an annual SPRI return which will be published on completion of verification. This will be available annually on our website at:

[www.sepa.org.uk/air/process\\_industry\\_regulation/pollutant\\_release\\_inventory.aspx](http://www.sepa.org.uk/air/process_industry_regulation/pollutant_release_inventory.aspx)

### **Other sources of information**

More information is available from [www.sepa.org.uk](http://www.sepa.org.uk) and from these websites.

Department of Environment, Food and Rural Affairs: [www.defra.gov.uk](http://www.defra.gov.uk)

Environmental Services Association: [www.esauk.org](http://www.esauk.org)

Environment Agency: [www.environment-agency.gov.uk](http://www.environment-agency.gov.uk)

Food Standards Agency: [www.foodstandards.gov.uk](http://www.foodstandards.gov.uk)

Friends of the Earth: [www.foe.co.uk](http://www.foe.co.uk)

Greenpeace: [www.greenpeace.org.uk](http://www.greenpeace.org.uk)

National Society for Clean Air: [www.nasca.org.uk](http://www.nasca.org.uk)

Scottish Government: [www.scotland.gov.uk](http://www.scotland.gov.uk)