

Archer's Fields Energy Recovery Facility
Response to issues raised during Essex CC consultation

Issue	Response
Traffic	
<p>Will the facility take additional waste.</p> <p>Will ash be transported off site.</p>	<p>As society's understanding of waste management increases, more businesses are requesting that materials which cannot be reused or recycled are used for the recovery of energy instead of being disposed of to landfill in accordance with the waste hierarchy.</p> <p>Clearaway Recycling Ltd currently receives waste and extracts those materials which can be reused or recycled at their existing facilities within the Burnt Mills Estate. Residual material (waste which is left over after reusable and recyclable materials are removed) is currently being sent for Energy Recovery in Europe or is disposed of by landfill in Essex or other landfill sites within the UK.</p> <p>The proposed Energy Recovery Facility will take approximately 150,000tpa of residual waste.</p> <p>The material will be sourced from MRF facilities in the Burnt Mills Industrial Estate, including Clearaway's existing Materials Recycling Facilities.</p> <p>The waste material from these facilities is generated within Essex and neighbouring counties.</p>
<p>Concern with increased road traffic on A127 and A13</p>	<p>A comparison of the traffic flows generated by the existing site use with that of the proposed use indicates that the proposals would result in an overall reduction in vehicle movements from the site, both HGV movements and light vehicle movements.</p>
<p>Air quality impacts from increased traffic</p>	<p>Traffic movements associated with the existing site uses are already on the network. The traffic movements associated with the proposed development are lower than for the existing use currently at the site and therefore the air quality impacts from these movements will also reduce.</p>
<p>Existing congestion, pot holes and subsidence on local roads caused by waste trucks and HGVs</p>	<p>The proposed development will generate less vehicle traffic than is currently generated, as such the impact on the nearby road network will be reduced.</p>

Littering/dirt on the roads from lorries	<p>The HGVs will be travelling on the local road network and will therefore not pick up or deposit dirt onto the highway.</p> <p>The trailers will be covered to ensure that litter will not be blown from the vehicles.</p>
It is a very small plot and the roads are often congested with stationery vehicles. There is not adequate parking, loading or turning areas making highway safety a major concern. Also, where would all the vehicles that currently use that area be relocated?	<p>The proposed development site has been designed to ensure that there is sufficient room for all delivery vehicles and that appropriate routing is provided to ensure that highway safety is not jeopardised.</p> <p>The existing vehicles have been relocated to another site in Clearaway's ownership.</p>
Support for reduction in vehicle movements	The applicant is in agreement with this statement.
Air quality	
Impact on local air quality which is already poor/Clean Air Zone/cumulative air quality impact	The Air Quality Impact Assessment submitted as part of the Environmental Statement has concluded that the impact on air quality for humans and the local ecology will be below required levels. Combined with the reduction in the number of road vehicles, it is expected that the facility to have a minimal impact on air quality.
More carbon into the atmosphere	The Green House Gas Assessment has demonstrated that the proposed development will not have an adverse impact on carbon when compared to other waste disposal operations.
Creation of dust	<p>Minimal dust is anticipated to be generated from traffic as the hardstanding and roads are concrete/tarmac.</p> <p>The fuel hall is enclosed and any dust from the process will be heavily filtered to ensure that no dust nuisance will be generated.</p> <p>The construction phase will be managed in accordance with best practice with dust suppression measures when necessary.</p>

Emission of harmful particles including carcinogens and nitrogen dioxide	A full air quality assessment and Human Health Risk Assessment has been provided as part of the planning application and associated Environmental Statement. This assessment has concluded that there is no risk to human health from the proposed development.
It should be possible to design a facility that does not produce pollution	<p>The thermal treatment of waste to manage material that people throw away (and can no longer be reused or recycled) is recognised as being the most sustainable and least polluting way of managing the residual waste.</p> <p>The facility will use proven technology and the process is closely regulated by the Environment Agency. Before it can operate the facility will need an Environmental Permit and it will have to meet very strict emissions limits.</p> <p>Emissions data is monitored continually with safety controls designed to shut the plant down if it exceeds allowed levels. The proposed development will be required to adhere to strict environmental limits. Data from the emissions stack will be collected via a sensor and sent straight to the control room and the Environment Agency 24 hours a day. This will ensure that limits are monitored, and action immediately taken in the unlikely event of any breach.</p> <p>In the interests of transparency, and to prevent perceived health impacts, Clearaway will publish emissions data on a daily basis to show that the facility has not exceeded permitted levels.</p> <p>The air quality and human health assessment has been submitted to ECC as part of the planning application. The application has received no objections from the Environment Agency, EHO and Public Health England.</p>
What are the prevailing wind patterns and which areas may be affected?	<p>The meteorological conditions and associated dispersion patterns are presented in Appendix 9.1 of the Environmental Statement.</p> <p>The Air Quality Assessment has confirmed that the impacts of the proposed development are below all required limits and that they are only a tiny fraction of the natural background concentrations.</p>
Health	

Perception of impact on the health of local people due to pollution, especially asthmatics, and risk of cancer	<p>The residual emissions from the facility's main chimney stack are predominantly water vapour and carbon dioxide which are harmless, and a range of other compounds all of which will be emitted in very small quantities and released high above ground level to disperse into the atmosphere.</p> <p>The facility will not result in inhalation of anything that is not already in the air we breathe, and its contribution to the air for local residents will be exceedingly small</p> <p>The planning application includes an Air Quality and Human Health Risk assessment which has assessed the potential impact of emissions in the local area (considering prevailing wind and proximity to residents and other designations). This concludes that the proposed development will not have a significant impact on local air quality, human health or local ecology. These assessments have been verified by Essex County Council's independent consultants and no objections have been raised.</p>
Issues with pollution from existing 'incinerator' exacerbating asthma	<p>There is a wide body of research, policy and regulation at national and European level that examines the health effects of waste incineration technologies and ensures that new facilities are designed and operated to the highest standards to ensure the health of people living in the vicinity of these facilities is well protected.</p> <p>The facility will also be fitted with a continuous monitoring system to demonstrate continued compliance with these limits and the system will automatically shut down the facility if these limits are ever breached.</p> <p>Imperial College London, on behalf of Public Health England (PHE), recently completed a major study on emissions and health effects of modern Energy from Waste facilities with the research and study findings published in 2018 and 2019. Following completion of this study, PHE's updated guidance remains that <i>"modern, well run and regulated municipal waste incinerators are not a significant risk to public health"</i>.</p>
Public Health England are unable to make an assessment as the supporting documents submitted have flaws which is concerning	Requested data has been provided to all statutory consultees and no objections remain to the scheme.
Smell & Vermin	
Potential for odour	The proposed development will not emit odours into the local community.

	<p>The pre-processed material will be delivered to the site and will be sealed to the fuel reception hall before depositing the material.</p> <p>The building will have fast shutting roller shutter doors to ensure that any odours are retained within the building.</p> <p>Any residual odours will then be destroyed as part of the combustion process.</p>
Potential for seagulls, vermin and flies	<p>The sealed nature of the system (as set out above) will ensure that no pests are attracted to the site. No waste will be stored outside.</p> <p>Active measures will be employed to monitor and control pests if they occur.</p>
Noise	
Existing noise from industry in the area/the existing facility	A Noise Impact Assessment found that cumulatively, noise levels would have no significant impact on the ambient noise levels at the receptors assessed. At night, noise mitigation measures will be in place to ensure noise doesn't affect local residents.
Vehicle noise	Due to the reduction in HGVs associated with the site, the impact of these vehicles on the existing noise climate will also be reduced.
Location	
Wrong location due to proximity to residential, primary schools, a nursery and care home	<p>The site is in an industrial area that is designated (and used) for 'untidy industry' which includes waste and other heavy industrial uses.</p> <p>The location of the proposed development accords with national and local policy.</p> <p>The Energy Recovery Facility will utilise waste that is already managed within the industrial estate to create energy which other businesses, or the national grid, can use. In so doing, it would not only reduce the waste sent to landfill (or to Europe for Energy Recovery), but it will also significantly reduce transport movements through Basildon.</p>

Potential impact on house prices	<p>There is no evidence to suggest that property prices are impacted by the presence of an energy recovery facility (ERF). In fact, a study undertaken by Cluttons LLP in 2011, showed that, based on empirical evidence of house prices near to three operational ERFs, that there were no noticeable effects due to the presence of the facilities.</p> <p>The proposed development will be an important and high value investment into the Burnt Mills Industrial Estate. It will present a step-change in the use of modern waste management technology and processes to manage the local waste materials collected within the Basildon area and brought to Burnt Mills for recycling and transfer, with local planning policy support.</p> <p>The proposed development will transform the immediate area within which it is located with a significant uplift in the quality of development and open areas surrounding it. This should help to improve confidence in the level of commitment and the quality of attempts to improve the sustainability and the environmental performance of waste management of local waste in the area.</p>
Basildon already has enough waste facilities and the facility should be located elsewhere in Essex	<p>There is an identified need for a new facility to treat and recover residual waste (material which cannot be reused or recycled higher up the waste hierarchy) within the County.</p> <p>The proposed development is located in an area allocated for such uses in the Local Plan.</p>
The waste can go to existing facilities in the area such as the 'incinerator' (MBT)	The ECC MBT plant is closed and is now in the process of being demolished.
The location of the incinerator will damage Basildon's ability to attract business and people.	<p>The proposed development is located in an area designed for 'untidy industries' which includes waste uses.</p> <p>The provision of a waste management service which will provide sustainable electricity and waste management services is a positive for the area.</p>
Waste source	
Local areas should be responsible for handling their own waste	The Energy Recovery Facility will have capacity to process up to 150,000 tonnes per annum of locally arising non-hazardous waste, with the materials coming mainly from the existing Clearaway Recycling activities with the opportunity to take waste from other existing waste operations.

	<p>At present, residual waste is transported to landfills in Essex or in other counties (in some cases materials are exported to Europe for Energy Recovery). The proposed development seeks to ensure that Essex can manage the residual waste that it produces rather than exporting it further afield.</p>
<p>The emphasis should be on recycling</p>	<p>The waste hierarchy ranks waste management options according to what is best for the environment. It gives top priority to preventing waste in the first place. When waste is created, we should look at re-using it first, then recycling, then recovery, and last of all disposal to landfill.</p> <p>Clearaway Recycling operates a major waste management facility with plant and equipment to sort and divert as much recyclable material away from final disposal as possible. Waste that arrives at the EfW facility will already have been screened for reusable and recycled material. Only residual (left over) waste material will be transported to the Energy Centre so that it can be used to generate electricity and heat.</p>
<p>No evidence provided on the recyclability of waste</p>	<p>Waste will be screened and segregated prior to being received at the site.</p> <p>Waste returns will be provided to the Environment Agency during the plant's operation, this will confirm the materials that are used in the plant.</p>
Environment	
<p>The original building is on the flood plain</p>	<p>The proposed development is not located on the flood plain and is already made up of hard standing from its previous use.</p> <p>The impact of the proposed development has been assessed and it has been concluded that the Site poses no significant residual risk to surface water resources either within the area or the catchment during either construction or operation.</p>
<p>The facility will positively impact the environment by generating low carbon energy and avoiding landfill</p>	<p>The ERF will help to tackle two problems facing society – how to sustainably manage the waste we produce and how to create secure, low carbon sources of energy.</p> <p>The facility will prevent up to 150,000 tonnes of waste going to landfill each year. Of this tonnage, anything that can be recycled will be removed earlier in the recycling process, and the residual material will be converted into energy.</p>

	<p>The proposed development will also significantly reduce the volume of waste being transported outside the Burnt Mills Industrial Estate.</p>
Concern about toxins contaminating the soil	<p>The proposed development will have a sealed drainage system to ensure that the ground is protected.</p>
Concern about the impact on mains water	<p>Regarding the impact on mains water, the local area is provided with mains water taken from reservoirs throughout the Essex and Suffolk Water region, the majority of which are located more than 30 km from the proposed facility. The closest reservoir is approximately 7 km away and is in a location that will be infrequently downwind of the facility and thus deposition of pollutants from the stack at this reservoir will be incredibly low indeed. It should be borne in mind that the emissions controls used on the facility will ensure that dioxin and furan emissions are very low, and with dispersion over a 7km or further distance upwind of the facility will be immeasurably low at the reservoir, and will represent only a tiny fraction of the natural background concentrations and deposition of dioxins and furans. Furthermore, the water from this reservoir will only comprise a portion of the mains water provided to local residents, as water will also be provided from the other reservoirs in the region. It is therefore expected that mains water in the local area will not be affected by the proposed facility and will not constitute a source of exposure to dioxins and furans.</p>
Potential impact on climate change/conflict with climate change policy/carbon impacts	<p>The Proposed Development will not have an adverse impact on carbon when compared against other residual waste management options.</p> <p>The close proximity of the proposed development to its source of waste seek to reduce the impacts of transportation of materials for other destinations for processing.</p>
Focus on other forms of green energy such as solar and wind	<p>The proposed development central function is to manage waste that is produced and cannot be managed higher up the waste hierarchy.</p> <p>The facility will provide a stable and constant supply of energy which will supplement the less consistent forms of renewable energy generation such as solar and wind.</p>
Concern about acid rain	<p>There is no evidence to suggest that EFWs give rise to acid rain.</p>

Design	
<p>The facility should be designed to blend into the environment</p>	<p>The development will fit into the wider area in which it is located. The proposed ERF has a smaller footprint than traditional ERFs, and is at a small scale. Building Heights are limited to 22m. Stacks will extend to 50m. The site is considered appropriate for the proposed development in the context of the industrial area within which it sits.</p> <p>The development pays regard to the wider area within which it is located. There are few design cues within Burnt Mills as the area is laid out and developed functionally with predominantly industrial and business sheds and storage yards for the most part.</p> <p>The surrounding built environment is again functional in appearance and overall, poor. The proposed development will transform the immediate area within which it is located with a significant uplift in the quality of development and open areas surrounding it. This should help to improve confidence in the level of commitment and the quality of attempts to improve the sustainability and the environmental performance of waste management of local waste in the area.</p> <p>Within the constraints imposed by the need to provide a functionally efficient development and to fit within the site, the design approach seeks to recognise the new town heritage of Basildon with the incorporation of features into the elevations which pay homage to the original design ideas which guided the development of the new town. The colour scheme also seeks to reflect this idea and also minimise any visual impacts where it can be seen from sensitive areas. The commitment to provide a design which stimulates recognition of the local provenance of the facility, its operators and the waste it will manage, should also stimulate some confidence that the development is based on a commitment to quality and to safety by those who already live and work to manage local waste in the local area.</p> <p>Views of the facility will be limited, particularly from sensitive areas, and are not considered to create significant adverse impacts.</p>
<p>The facility will feature two huge chimneys</p>	<p>The chimneys will be approximately 50m in height and will blend into the wider industrial surroundings as outlined above.</p>
Consultation	

When the Local Waste Plan was in the consultation phase the residents made it clear they did not want an incinerator, preferring a different type of waste facility	Whilst recycling and transfer plants are an essential part of waste management infrastructure, there will remain a need for facilities which manage materials that cannot be reused or recycled when they are generated.
The timing of the consultation meant residents weren't given the opportunity for face to face	<p>After initial pre-application discussions, the consultation process was developed in conjunction with Essex County Council and in full recognition of the restrictions of the COVID-19 lock down.</p> <p>The proposed consultation approach had to be adapted following lockdown, however local people were given a variety of ways to get involved in the consultation – both online and offline – which are set out in this report. This included nearly 11,000 newsletters – including a questionnaire to return comments – which were sent to advertise the consultation. The consultation period was also extended for a further two weeks to allow people further time to respond.</p> <p>The application has since been held in abeyance whilst other matters are resolved, this has provided an extended opportunity for members of the public to get in touch with Essex County Council or the project team.</p> <p>If planning permission is granted, the applicant will set up a community liaison group comprised of local residents' representatives, councillors, stakeholders and Clearaway representatives. This will meet on a regular basis and enable two-way dialogue during the construction and operation of the Energy Recovery Facility.</p>
The consultation materials were biased to illicit a positive response	The questionnaire was designed to address a number of the key points about the plans – including the aim to divert waste from landfill and generate low carbon energy – however it also provided space for respondents to give their views on any aspect of the proposal. All comments were reviewed and are included in Appendix VII of the Consultation Report submitted with the planning application.
Referring to it as an Energy Recovery Facility is a misleading use of language	<p>The facility is classified as energy recovery according to the Government's waste hierarchy because it recovers energy (and heat) from waste.</p> <p>Old style incinerators disposed of unwanted material simply by burning it. A modern energy recovery facility such as the one proposed for Basildon is a power plant that uses a carefully controlled thermal</p>

	<p>treatment process to generate electricity. Emissions are also very tightly controlled, treated and monitored, while ash left over from the process can be recycled and used to make concrete blocks for use in the construction industry. This means that very little residual waste needs to go to landfill.</p>
Safety and hazards	
<p>Track record of Clearaway to operate the facility / lack of public scrutiny of a private company</p>	<p>Clearaway Recycling Ltd have operated waste management facilities in the Burnt Mills Industrial Estate for over 11 years and have a proven track record in waste management.</p> <p>From 1999 onwards HoSt (who will provide the technology) has been an independent business whose activities focus 100% on the technological development of waste-to-energy systems for the processing of biomass and waste flows and the supply of systems for the sustainable generation of energy from biomass and waste.</p> <p>HoSt has become a major European supplier of bioenergy systems with over 27 years' experience, a large service team throughout Europe and a team of more than 120 engineers who design, construct and install these advanced bioenergy systems. The technology offered is based on a step grate, for which there are more than 40 reference plants throughout Europe. 10 of these plants have a boiler capacity between 5-20 MW and use a similar system.</p> <p>The project team is therefore well placed to operate a safe and modern waste management facility.</p>
<p>Concern about disposal of toxic ash, including heavy metals</p>	<p>The proposed facility will not process hazardous material.</p> <p>Ash produced in the boiler (bottom ash) and the cyclone (fly ash) will be transported to an internal wet ash system. Both are collected in separate sealed containers.</p> <p>A minimal amount of ash (from the filters) will contain elevated metals which will be mixed with spent additives and placed in fully sealed containers to be transported to a licensed landfill facility elsewhere for disposal.</p>
<p>Will the local community be informed if the plant exceeds emissions levels?</p>	<p>Emissions from the facility will be monitored continually and checked and regulated, not only by the facility itself, but also by the Environment Agency in accordance with the Environmental Permit. Safety</p>

	<p>controls will be in place which are designed to shut down the plant in the unlikely event that emissions exceed allowed levels.</p> <p>Real-time emissions monitoring is required as part of our Environmental Permit from the Environment Agency. Clearaway Recycling Ltd will be publishing this data on a daily basis on their website so that local people can see the real-time performance of the facility at any time.</p>
Concerns about making bricks from a toxic material	The bottom ash, where possible, will be used in construction products (blocks, concrete etc), or as an engineering material for haul roads on a local landfill, this material is not hazardous or toxic.
Potential for accidents leading to harmful emissions being released	<p>The technology is tried and tested and operated across the UK and Europe and is very safe.</p> <p>In the unlikely event of an accident the technology will immediately shut down.</p> <p>A water storage tank will be provided which will feed active fire suppression systems in the facility in the case of fire.</p> <p>The facility will operate in accordance with a fire prevention plan.</p>
Economic benefit and jobs	
Much needed jobs	<p>The applicant currently employs over 100 people at Clearaway Recycling Ltd, including apprentices, and the plans to build an Energy Recovery Facility will create an estimated further ten jobs within the Energy Recovery Facility itself, plus additional jobs are expected to be created through its sister company to support the growth in recycling. A number of jobs will also be created during the construction phase.</p> <p>All jobs created will be available to local people and will be advertised locally. Clearaway is a local family company and has always invested in local people. Full training will be provided by the Company.</p> <p>The facility represents an investment of in the region of £50 million into the local area. Clearaway Recycling Ltd will work with the Chambers of Commerce in the region, to make sure that local businesses can easily find out and apply for supplier opportunities.</p>

	Clearaway Recycling Ltd also hope the heat and power provided by the plant will encourage other businesses to the area, further increasing job opportunities.
Other	
Potential for the facility to be a 'white elephant'	<p>Clearaway Recycling Ltd fully intend to build and operate the proposed plant, providing a complete package of reuse, recycling and residual waste management to Essex.</p> <p>The applicant currently has the required land ownership and waste to operate the plant.</p>