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4.0 THE PLANNING AND LEGISLATIVE FRAMEWORK

4.1 Introduction

This Chapter details the planning and legislative framework in relation to this application and draws conclusions as to the extent to which this application complies with the relevant objectives and policies within the framework.

Section 38(6) of the Planning and Compulsory Purchase Act 2004 provides that those determining planning applications and appeals must have regard to the development plan and that decisions should be made in accordance with the plan unless material considerations indicate otherwise. The development plan, following the enactment of the Planning and Compulsory Purchase Act 2004 now includes the Regional Spatial Strategy as well as relevant local development documents. Material considerations include national planning policy set out in Planning Policy Statements (PPSs), Minerals Policy Statements (MPSs) and Planning Policy Guidance (PPGs) published by the Department for Communities and Local Government. Development Plan policies must be in conformity with national guidance. Where development plan policies are no longer up to date and do not reflect national policy, national guidance takes precedence.

Additionally, under the Waste Management Licensing Regulations 1994, a Waste Planning Authority in determining a planning application is required to discharge its function insofar as it is material and relates to the recovery or disposal of waste in accordance with any plan made under any plan making provision of the Waste Framework Directive, i.e. in the Waste Strategy for England 2007, Planning Policy Statement (PPS) 10 – Planning for Sustainable Waste Management (July 2005) and any relevant regional and local waste management strategy.

The detailed policy framework against which the main environmental impact of the proposed evolution of the Recycling and Composting Facility (eRCF) will be assessed in this Environmental Statement therefore includes relevant European and UK law and policy and regional and local planning and waste management policies including the following:

4.1.1 European Community Wide Law and Policy

- Consolidated EC Framework Directive on waste 2006/12/EC (previously the Waste Framework Directive 75/442/EEC (as amended));
- EC Landfill Directive 1999/31/EC;
- EC Waste Incineration Directive 2000/76/EC; and
- EC Integrated Pollution Prevention and Control (IPPC) Directive 96/61/EC.

4.1.2 England Wide Law and Policy

- Planning Policy Statements (PPS) and Planning Policy Guidance (PPGs); and

- Waste Strategy for England 2007 (May 2007)

4.1.3 Regional

- East of England Plan, The Revision to the Regional Spatial Strategy for the East of England, May 2008.

4.1.4 Local

- ‘Saved’ policies from the Adopted Essex and Southend-on-Sea Replacement Structure Plan 1996-2011 (2001);
- ‘Saved’ policies from the Essex and Southend Waste Local Plan (Adopted September 2001);
- ‘Saved’ policies from the Braintree District Local Plan Review (Adopted July 2005); and
- Joint Municipal Waste Management Strategy (JMWMS) for Essex (2007 to 2032).

With regard to regional and local development plan documents the Planning and Compulsory Purchase Act 2004 (the Act) has put in place a new system of Regional Spatial Strategies and Local Development Documents as the Development Plan for a particular area. This has superseded the previous system of Regional Planning Guidance, and Structure Plans, Local Plans and Unitary Development Plans. To maintain continuity in the Development Plans system as a framework for Development Control and to minimise costs the Government has put in place transitional arrangements.

Part of these transitional arrangements involve Structure Plans, Local Plans and Unitary Development Plans retaining their Development Plan status by automatically becoming ‘saved’ for a period of three years from commencement of Parts 1 and 2 of the Act or the adoption of such Plans, whichever is the later. Parts 1 and 2 of the Act commenced on the 28 September 2004. The effect of this is that in Essex the Essex and Southend-on-Sea Replacement Structure Plan and the Essex and Southend Waste Local Plan were saved until 28 September 2007. The Braintree District Local Plan Review was adopted on 25 July 2005 and therefore the policies in the Plan were saved until 24 July 2008.

Under these transitional arrangements the Secretary of State may direct that any ‘saved’ policies continue to be saved beyond the initial three year period, either at the request of the Regional Assembly in relation to Structure Plan Policies, or at the request of the Local Planning Authority in relation to Local Plan policies.

The effect of these transitional arrangements is that in relation to waste development proposals, the development plan now consists of the only those policies that the Secretary of State has directed to be saved for a further extended period. These now include a very limited number of Structure Plan policies together with policies from the Essex and Southend Waste Local Plan and the Braintree District Local Plan Review.

It is considered that an appropriate way to assess this proposal against policies of these plans is to undertake it on a subject basis in the order set out within each document where the plans concerned do not deal exclusively with waste issues.

The following areas are considered to be the most pertinent, although other considerations will impact on the proposal:

- Waste;
- Environment; and
- Transport.

4.2 European and UK Waste Policy Context

At the highest level there have been a number of drivers at an international and European level for changes in UK legislation and policy relating to the management and disposal of waste. These include the following:

4.2.1 EU legislation

At a European level, the European Union has adopted a number of directives aimed at waste reduction and dealing with waste in a more sustainable manner. “The Community Strategy for Waste Management” published in 1989 and updated in 1996 sets out the principle of a hierarchy for the management of waste. The emphasis of the hierarchy is waste minimisation, followed by recovery of value and finally, disposal as a last resort. This has been enshrined in subsequent EU legislation. Key pieces of legislation include:

4.2.1.1 Consolidated Framework Directive 2006/12/EC on Waste (previously Waste Framework Directive (75/442/EEC))

Directive 2006/12/EC codifies or consolidates and replaces the Waste Framework Directive 75/442/EEC as subsequently amended. It aims to clarify and rationalise the legislation applicable to waste. However no change is made to the content of the applicable rules from the previous Directive. All Member States including the UK are required to adopt the basic framework for the management of waste set out in the Directive. It:

- Identifies clear objectives relating to protection of human health and the environment against harmful waste-related effects;
- Establishes a system for the efficient and coordinated management of waste within the community;
- Encourages recovery of waste and use of recovered materials;
- Establishes a foundation for sustainable waste management;
- Defines waste and introduces the principles of the waste hierarchy, proximity principle and self sufficiency;
- Requires (under Article 7) that Member States must draw up waste management plans for dealing with, inter alia the types and quantities of wastes to be disposed of;

- Requires authorisation and inspection of undertakings which carry out waste disposal and recovery;
- Requires the setting up of a permitting system for any undertaking carrying out waste disposal activities; and
- Requires Member States to establish an integrated and adequate network of disposal installations to enable the EC as a whole and individual Member States individually to be self-sufficient.

The Directive has largely been implemented in the UK through Part II of the Environmental Protection Act 1990, the Waste Management Licensing Regulations 1994 and the Environmental Permitting (England and Wales) Regulations 2007. The principles enshrined in the Directive have been incorporated in the Waste Strategy for England 2007. An assessment of the objectives in relation to this Directive are therefore considered elsewhere.

On 17 June 2008, the European Parliament approved a further revision of the Waste Framework Directive. The new Directive will streamline EU waste legislation by replacing three existing directives: the existing Waste Framework Directive, the Hazardous Waste Directive and the Waste Oils Directive¹. It will:

- Sets new recycling targets to be achieved by the Member States by 2020, including recycling rates of 50% for household and similar wastes and 70% for construction and demolition waste;
- Strengthens provisions on waste prevention through an obligation for Member States to develop national waste prevention programmes and a commitment from the Commission to report on prevention and set waste prevention objectives;
- Sets a clear, five-step '*hierarchy*' of waste management options according to which prevention is the preferred option, followed by reuse, recycling, other forms of recovery and with safe disposal as the last recourse; and
- Clarifies a number of important definitions, such as recycling, recovery and waste itself. In particular, it draws a line between waste and by-products and defines when waste has been recovered enough – through recycling or other treatment - to cease being waste.

Of particular significance is that the Directive will mean that CHP will in future be classed as 'recovery' rather than 'disposal' provided it meets stringent energy efficiency criteria. The criteria in effect requires energy from waste plants to operate at a minimum of 65% efficiency².

The Framework Directive on waste provides the overarching European legal context within which development of new waste treatment and disposal facilities such as the proposed development is to be undertaken. The aim of the proposal is to facilitate at a local level the implementation of the waste management strategy in accordance with the principles of the

¹ Directive 2006/12/EC, Directive 91/689/EEC and Directive 75/439/EEC

² In the UK two existing plants meet this criteria (Sheffield and Orkney). The energy efficiency criteria will be reviewed after 6 years (around 2016).

waste hierarchy, proximity principle and self sufficiency, and to do so in a manner that does not give rise to any risk to human health and without using processes which could harm the environment.

4.2.1.2 Landfill Directive (99/31/EC) (Implemented July 2001)

The Landfill Directive seeks to further the aims of the Waste Framework Directive in relation to the role of landfill. It aims:

- To prevent or reduce as far as possible negative effects on the environment from landfilling waste.

It requires the following:

- The end to co-disposal of hazardous and non-hazardous waste in landfill (from July 2004);
- The introduction of stringent technical requirements for waste and landfills;
- A ban on the landfilling of specific wastes including liquid hazardous waste, plus other hazardous wastes (from 2002), whole tyres (from 2003) and shredded tyres (from 2006); and
- Pre-treatment of hazardous wastes (from 2004) and all other wastes from (2007).

The Landfill Directive also introduces:

- Targets for reduction of biodegradable waste (2010, 2013, 2020).

The implementation of the Directive in England and Wales by the Landfill (England and Wales) Regulations 2002 (as amended) and the Environmental Permitting (England and Wales) Regulations 2007, has been one of the most significant factors in determining how wastes are to be managed in the future. It marks a step change in the disposal of wastes away from landfill to more sustainable waste options including treatment, recycling and recovery.

This application is firmly in line with this Directive in that it relates specifically to the recycling of waste and manufacture a reusable waste derived fuel or product. It will therefore reduce the amount of landfill required for the final disposal of waste.

4.2.1.3 Waste Incineration Directive (2000/76/EC)

The Waste Incineration Directive (the WID) aims to prevent, or limit as far as practicable, negative effects on the environment from the recovery of energy from waste or waste derived products (including SRF) by any technology (including CHP); in particular pollution of air, soil, surface water and groundwater, and the resulting risks to human health.

The Directive:

- Sets emission limits requiring the use of stringent operational conditions and technical requirements; and
- Sets requirements concerning normal and abnormal operating conditions, water discharges from cleaning exhaust gases, ash recycling, plant control and monitoring, public access to information.

The aim of the WID is to prevent or limit, as far as practicable, negative effects on the environment, in particular pollution by emissions into air, soil, surface and groundwater, and the resulting risks to human health. The WID seeks to achieve this high level of environmental and human health protection by requiring the setting and maintaining stringent operational conditions, technical requirements and emission limit values. This application will be required to meet with the requirements of WID before it is permitted to operate.

4.2.1.4 Integrated Pollution Prevention and Control (IPPC) Directive (Council Directive 96/61/EC) & Environmental Permitting (England and Wales) Regulations 2007

The Integrated Pollution Prevention and Control (IPPC) Directive (Council Directive 96/61/EC) came into force in 1996 and has recently been re-enacted in England and Wales through the Environmental Permitting (England and Wales) Regulations 2007. It introduces a single permitting system for certain industrial processes, including waste management, in order to achieve the integrated prevention and control of pollution and all environmental media, i.e. land, air and water. The Directive is designed:

- To prevent, reduce and eliminate pollution at source; and
- To secure the prudent use of natural resources, thereby promoting sustainability.

The eRCF will not operate without an Environmental Permit (EP), irrespective of any valid planning permission being received from Essex County Council. Therefore, in advance of any operations at the eRCF, an EP application will be made to the Environment Agency.

An emissions monitoring programme will be implemented to monitor and control the eRCF. Continuous, daily, weekly, monthly, biannual and annual monitoring regimes will be implemented at specified points, to monitor a range of emissions to the frequencies and methods agreed with the Environment Agency, in accordance with the eRCF's Environmental Permit.

The environmental monitoring programme will ensure that monitoring is carried out under an appropriate range of operating conditions. Environmental control measures will also be used to mitigate any unacceptable levels of pollution and to promote the prudent use of natural resources through the treatment, processing, recovery and recycling of waste.

4.2.1.5 Council Directive 92/43/EEC on the Conservation of Natural Habitats and of Wild Fauna and Flora and Conservation (Natural Habitats, & c.) Regulations 1994

Council Directive 92/43/EEC on the Conservation of natural habitats and of wild fauna and flora (EC Habitats Directive) implements the Convention on the Conservation of European Wildlife and Natural Habitats (*Bern Convention*). The provisions of the Directive require Member States to introduce a range of measures including the protection of species listed in the Annexes; to undertake surveillance of habitats and species and produce a report every six years on the implementation of the Directive. The 189 habitats listed in Annex I of the Directive and the 788 species listed in Annex II, are to be protected by means of a network of sites. Each Member State is required to prepare and propose a national list of sites for evaluation in order to form a European network of Sites of Community Importance (SCIs). Once adopted, these are designated by Member States as Special Areas of Conservation (SACs), and along with Special Protection Areas (SPAs) classified under the EC Birds Directive, form a network of protected areas known as Natura 2000. The Directive was amended in 1997 by a technical adaptation Directive. The annexes were further amended by the Environment Chapter of the Treaty of Accession 2003.

The Habitats Directive introduces for the first time for protected areas, the precautionary principle; that is that projects can only be permitted having ascertained no adverse effect on the integrity of the site. Projects may still be permitted if there are no alternatives, and there are imperative reasons of overriding public interest. In such cases compensation measures will be necessary to ensure the overall integrity of network of sites. Member States shall also endeavour to encourage the management of features of the landscape to support the Natura 2000 network.

In the England the Directive has been transposed into national law by means of the Conservation (Natural Habitats, & c.) Regulations 1994 (as amended), known as '*the Habitats Regulations*'. Most SACs on land or freshwater areas are underpinned by notification as Sites of Special Scientific Interest (SSSIs).

There no designated European sites that will be affected by the eRCF. There are a number of European protected species identified as present on and around the application Site. These include Great Crested Newt and several species of bats. Appropriate mitigation measures are therefore proposed in order to ensure that the development of the eRCF does not give rise to any unacceptable impacts in terms of the European protected species.

4.2.2 UK Policy and Law

4.2.2.1 Waste Strategy for England 2007

At a UK level, government policy is set out in the UK waste management strategy. This was originally published as the Waste Strategy 2000, in May 2000. The publication of the Strategy together with planning guidance to local authorities (formerly contained in PPG10 and now set out in PPS10) on the siting of facilities represents in part the UK's implementation of Article 7 of the Waste Framework Directive to produce a waste management plan, including dealing with wastes disposed of to and diverted from landfill. It sets out the national policy response of the government in meeting the requirements of the Landfill Directive (99/31/EC) for reducing the amount of biodegradable municipal solid waste (MSW) landfilled. It sets out a vision for sustainable waste management in England and Wales to 2020.

The Waste Strategy for England updates the Waste Strategy 2000. It identifies that; the recycling and composting of waste in England has nearly quadrupled since 1996-97, achieving 27% in 2005-06; the recycling of packaging waste has increased from 27% to 56% since 1998; less waste is being landfilled, with a 9% fall between 2000-01 and 2004-05; and that waste growth is also being reduced with MSW growing much less quickly than the economy at 0.5% per year.

The key Objectives and targets of Strategy are to:

- Decouple waste growth (in all sectors) from economic growth and put more emphasis on waste prevention and re-use;
- Meet and exceed the Landfill Directive diversion targets for biodegradable MSW in 2010, 2013 and 2020;
- Increase diversion from landfill of non-MSW and secure better integration of treatment for MSW and non-MSW;
- Secure the investment in infrastructure needed to divert waste from landfill and for the management of hazardous waste; and
- Get the most environmental benefit from that investment, through increased recycling of resources and recovery of energy from residual waste using a mix of technologies.

A greater focus on waste prevention will be recognised through a new target to reduce the amount of household waste not re-used, recycled or composted from over 22.2 million tonnes in 2000 by 29% to 15.8 million tonnes in 2010 with an aspiration to reduce it to 12.2 million tonnes in 2020 – a reduction of 45%. This is equivalent to a fall of 50% per person (from 450 kg per person in 2000 to 225 kg in 2020).

Higher national targets than in 2000 have been set for:

- Recycling and composting of household waste – at least 40% by 2010, 45% by 2015 and 50% by 2020; and

- Recovery of MSW– 53% by 2010, 67% by 2015 and 75% by 2020.

The Government will also set a new national target for the reduction of commercial and industrial (C&I) waste going to landfill. On the basis of the policies set out in *Waste Strategy for England 2007*, levels of C&I waste landfilled are expected to fall by 20% by 2010 compared to 2004. The Government is considering, in conjunction with the construction industry, a target to halve the amount of construction, demolition and excavation wastes going to landfill by 2012 as a result of waste reduction, re-use and recycling.

The proposal is consistent with the objectives of the *Waste Strategy for England 2007* in that it will divert waste from landfill. The eRCF will result in the development of a fully integrated Composting, Anaerobic Digestion, Dry Recyclable Recovery, Paper Recycling and Combined Heat and Power Plant at the Site. It will combine the use of residual waste treatment technologies using Mechanical Biological Treatment (MBT), a Materials Recovery Facility (MRF), a mixed organic waste Anaerobic Digestion (AD) plant to generate green power from biogas, a Combined Heat and Power (CHP) facility to generate electricity, heat and steam and Market De-Inked Paper Pulp (MDIP) Facility (Pulp Facility) at the Site.

The eRCF is designed to accept the residual waste following the public's separation and removal of recyclable materials for processing elsewhere and the maximised composting of green waste and food wastes, depending upon the final range of services agreed with the Waste Collection Authorities (WCAs). Ultimately, the eRCF will form an integral part of a network of existing and new waste management facilities.

4.3 National Planning Policy and Guidance

Within the UK, the national planning guidance is formulated and controlled through a series of planning policy guidance notes (PPGs) and statements (PPSs). Regional and local planning policy is required to be in general conformity with national guidance.

National PPGs and PPSs deal with a range of strategic planning issues (i.e. green belts, coastal planning). PPGs are currently being updated and replaced by PPSs. Minerals planning policy is published separately in the form Minerals Planning Guidance (MPGs) and Minerals Planning Statements (MPSs). Regional Planning Guidance (RPG's), which is prepared and published by the Department for Communities and Local Government (DCLG) (formerly the Office of Deputy Prime Minister – (ODPM)) through regional Government Offices, assists with the development of detailed planning policies and land use which are controlled by planning authority development plans. These are similarly being replaced by the new generation of Regional Spatial Strategies (RSSs) being prepared by Regional Assemblies.

Listed below is a summary of the PPGs, PPSs and other guidance notes (i.e. MPGs and MPSs), developed by the Department for Communities and Local Government (DCLG), which have relevance to the development proposals.

4.3.1 PPS1 - Delivering Sustainable Development

PPS 1 (which includes the 'Planning System: General Principles published by the ODPM in 2005) details the overall approach of the new national planning policy framework and sets out the Government's objectives for creating sustainable communities whilst ensuring a better quality of life for everyone using the plan-led system. It highlights that the Government set out four aims for sustainable development in its 1999 strategy.

These were:

- Social progress which recognises the needs of everyone;
- Effective protection of the environment;
- The prudent use of natural resources; and
- The maintenance of high and stable levels of economic growth and employment.

The proposal is considered to be sustainable development in that it responds to the need for prudent use of natural resources, *i.e. the recycling and recovery of waste*, by reducing the need for landfill and promoting higher levels of composting, recycling and recovery. The eRCF will help to secure the "*protection and enhancement of the environment*" and deliver "*the prudent use of natural resources*". In addition, no significant adverse environmental effects are projected to occur because of the development. The application is therefore considered to be in conformity with this guidance.

In December 2007 the DCLG published Planning Policy Statement: Planning and Climate Change – Supplement to Planning Policy Statement 1. This indicates that planning policy on climate change will take precedence over other existing policy. Although largely concerned with built development the Supplement indicates that a consideration for selecting land for development should be the capacity of existing infrastructure to service the site.

On 30 March 2007, ECC resolved to grant planning permission for a Recycling & Composting Facility (the RCF) at Site WM1 - Schedule of Preferred Locations for Waste Management in the Essex and Southend Waste Local Plan (the Waste Plan) adopted 21 September 2001 by ECC and Southend-on-Sea Borough Council covering the period 1997-2010. Therefore, the eRCF will make use of a site that has already been selected on the basis of the capacity of existing infrastructure to service an important waste treatment process. The proposed Facility is therefore consistent with the principles set out in Climate Change Supplement to PPS 1.

4.3.2 PPS7 - Sustainable Development in Rural Areas

PPS7 sets out how the planning system should facilitate and promote sustainable patterns of development and sustainable communities in rural areas including the need to protect natural resources and conserve specific features and sites of landscape, wildlife and historic or architectural value, in accordance with statutory designations.

The eRCF could potentially have a number of impacts on the natural resources of the countryside including impact on the landscape, wildlife, features of historical and architectural value and local air quality. These are assessed in Chapters 7, 8, 9 and 11 in this Environmental Statement (ES). On 30 March 2007, ECC resolved to grant planning permission for the development of the RCF on Rivenhall Airfield. The EIA minimises and mitigates impacts from the eRCF equal to or less than the conditions benchmarked and approved by the Local Planning Authority for the RCF. This proposal is consistent with the objectives of PPS7.

PSS7 also states that the presence of best and most versatile agricultural land (defined as land in Grades 1, 2 and 3a of the Agricultural Land Classification) should be taken into account alongside other sustainability considerations. However, it sets out that it is for local planning authorities to decide whether best and most versatile agricultural land can be developed, having carefully weighed the options. In this respect, there are a number of local authority development plan policies that seek to ensure that the loss of best most and versatile agricultural land is taken into account and retained and/or is not developed unless there is an overriding need for the development and suitable alternative sites of lower agricultural quality, and other sustainability considerations are taken into account.

Approximately 11.5 hectares of Grade 3a agricultural land will be lost due to the construction of the extension to the existing access road and the eRCF. However, the development of the eRCF will not effect the loss of Grade 3a agricultural land on which ECC resolved to grant planning permission for the development of the RCF. The eRCF can therefore be justified against baseline environmental conditions established by the RCF. In addition, there is a demonstrable and overriding need for the eRCF. The main eRCF buildings fall within a preferred location identified in the Essex and Southend Waste Local Plan (2001) some of which is previously developed (brown-field) land and it is not possible to develop this area without including some of the surrounding agricultural land. Due to the size of the site required, there are no other comparable alternative brown-field locations in rural North Essex that would be suitable for the type and size of eRCF.

4.3.3 PPS9 - Biodiversity and Geological Conservation

PPS9 provides guidance on biodiversity and geological conservation. It identifies a number of key principles that regional planning bodies and local planning authorities should adhere to and ensure that the potential impacts of planning decisions on biodiversity and geological conservation are fully considered.

These include the aim that planning decisions should be to prevent harm to biodiversity and geological conservation interests. Where granting planning permission would result in significant harm to those interests, local planning authorities will need to be satisfied that the development cannot reasonably be located on any alternative sites that would result in less or no harm. In the absence of any such alternatives, local planning authorities should ensure

that, before planning permission is granted, adequate mitigation measures are put in place. Where a planning decision would result in significant harm to biodiversity and geological interests which cannot be prevented or adequately mitigated against, appropriate compensation measures should be sought. If significant harm cannot be prevented, adequately mitigated against, or compensated for, then planning permission should be refused.

Chapter 7 of this ES includes details of the ecological assessment that has been undertaken and identifies a range of potential impacts. On 30 March 2007, ECC resolved to grant planning permission for the development of the RCF on Rivenhall Airfield. The EIA minimises and mitigates impacts from the eRCF equal to or less than the conditions benchmarked and approved by the Local Planning Authority for the RCF. This proposal is consistent with the objectives of PPS9.

4.3.4 PPS10 - Planning for Sustainable Waste Management

PPS10 modifies and updates the former PPG10 to take into account changes in the planning system following the enactment of Planning and Compulsory Purchase Act 2004. It reiterates the principle of managing wastes in accordance with the waste hierarchy in order to deliver sustainable communities in accordance with PPS1. Waste planning authorities are required to adhere to specific principles in determining planning applications including having regard to the policies in the PPS as material considerations which may supersede the policies in their development plan. It also states that in the interim period before the development plan is updated to reflect the policies in PPS10, planning authorities should ensure proposals are consistent with the policies in the PPS.

Waste Planning Authorities should ensure sufficient opportunities for the provision of waste management facilities in appropriate locations including for waste disposal. Waste planning authorities should also be able to demonstrate how capacity equivalent to at least ten years of the annual rates set out in the RSS could be provided.

It discontinues the application of BPEO previously included in PPG10 and instead PPS10 sets out a 'plan-led' approach to planning for sustainable waste management. Planning strategies will be subject to sustainability appraisal and set within the expectation of community engagement set out in PPS1. PPS10 also reformulates the Proximity Principle to reflect the obligations on local authorities to provide a framework in which communities take more responsibility for their own waste (self-sufficiency), and that waste should be disposed of as near to the place of production in one of the nearest appropriate locations.

The proposed eRCF is consistent with PPS10 in that it will deliver a more sustainable approach to the management, and achieve higher levels of diversion of waste to landfill. It will also form part of a waste management strategy that seeks to promote higher levels of composting and recycling and recovery, in accordance with the regional and local waste

management strategies. It will be sited at a preferred location identified in the Essex and Southend Waste Local Plan.

4.3.5 PPS12 - Local Development Frameworks

PPS12 provides guidance on the role of development plans in the planning system. The eRCF proposal seeks to provide a solution to the management of residual municipal waste in Essex that is consistent with the objectives and policies of the development plan for the area.

4.3.6 PPG13 - Transport

The objective of PPG13 is to integrate planning and transport at the national, regional and local level to promote more sustainable transport choices for both people and for moving freight. It identifies that traffic management measures can contribute to planning objectives and that traffic management can also be applied in rural areas. It indicates that measures should be drawn up in consultation with the local community, be sympathetic to the character of the area and maintain the accessibility and viability of local businesses. Local authorities may consider designating roads as quiet lanes, an initiative promoted by the Countryside Agency and local authorities to make selected country lanes more attractive for walking, cycling and horse riding.

Chapter 10 of this ES sets out the assessment of the transport impact of the proposed eRCF. Ultimately, the eRCF will form an integral part of a network of existing and new waste management facilities across Essex which will be taken over and/or provided as part of the new county-wide Integrated Waste Management Contract (IWMC). Waste will be delivered to the eRCF for processing, sorting, separating, treating and recycling by road vehicles. The rate at which waste will be delivered to the Site will largely depend on the location and operation of a number of satellite facilities such as transfer stations, the ongoing implementation of waste minimisation initiatives, and the quantities of waste generated within Essex and surrounding regions.

The eRCF will operate to manage waste arising within local districts and currently landfilled under existing contracts. Refuse collection vehicles are therefore already using the highway network but will deliver to the Rivenhall Airfield as opposed to other existing destinations. Hence, the proposed eRCF will result in a large proportion of traffic using the facility being redirected from existing routes rather than being new trips on the highway network. No improvements to the public highway are considered necessary to enable the development to proceed. Country lanes around the site will however be protected by the use of a dedicated private access road that will remove traffic particularly from any Protected Lanes in the area and at grade crossings will be provided for footpaths and bridleways that cross the Site access road.

On 30 March 2007, ECC resolved to grant planning permission for the development of the RCF on Rivenhall Airfield. The EIA demonstrates that there will be no increase in the number of vehicles movements over and above those benchmarked and approved by the Local Planning Authority for the RCF. The proposal is therefore considered not to give rise to any significant adverse impacts in relation to the policy set out in PPG13 and is consistent with its objectives in relation to traffic management in rural areas.

4.3.7 PPG15 – Planning and the Historic Environment

This PPG provides a full statement of Government policies for the identification and protection of historic buildings, conservation areas, and other elements of the historic environment. It explains the role played by the planning system in their protection. It compliments the guidance on archaeology and planning given in PPG16. It is fundamental to the Government's policies for environmental stewardship that there should be effective protection for all aspects of the historic environment.

Two buildings within the proposed application site are listed as being of Special Architectural Interest. Woodhouse Farm is a Grade II Listed Building, which will be redeveloped (*as part of a proposed Education Centre linked to the eRCF operations*). The adjacent outbuilding, known as 'The Bakehouse', is also a Grade II Listed Building in an extremely dilapidated condition. A simple iron 'rocking' hand water pump, located on the southern side of this outbuilding, is also Grade II listed.

The likely extent of the refurbishment, improvement and redevelopment works in and around Woodhouse Farm will be investigated, reviewed, appraised and agreed with the District Local Planning Authority in accordance with any listed building consent applied for and granted in advance of any eRCF construction works. It is intended that the refurbished buildings will be used as an Education Centre for the public; the purpose of this Centre will be linked into the operations of the eRCF complex, including for example trials for the use of products emanating from the eRCF.

Therefore, the refurbishment, improvement and redevelopment works to Woodhouse Farm will be beneficial to the preservation of the historic environment.

4.3.8 PPG16 - Archaeology and Planning

PPG16 gives advice to planning authorities on the safeguarding of archaeological remains within the planning process. It sets out a presumption in favour of preservation of nationally important archaeological remains and their settings, whether or not they are scheduled. The PPG further advises that where preservation *in situ* is not justified, planning authorities may reasonably require developers to make appropriate and satisfactory provision for excavating and recording archaeological remains.

An archaeological evaluation was carried out on the Site by Essex County Council's Field Archaeology Unit (ECC FAU), during September and October 2006.

The evaluation revealed archaeological features and deposits dating to the Middle Iron Age, medieval and post-medieval to modern periods. Previous work in Bradwell Quarry had suggested a fairly disparate scattering of archaeological features of varying dates over the landscape with one or two archaeological '*hotspots*'. This was reflected in the results of the evaluation which also indicate a broad scattering of archaeological features with two clusters in the west and north-east of the Site.

Fifty-three evaluation trenches were excavated across 10.3ha of the 25.3ha Site. A variety of features and deposits dating to the prehistoric, medieval and post-medieval to modern periods were excavated and recorded. A single large pit, dated to the Middle Iron Age and containing a high quantity of deliberately buried charcoal and burnt flint, was investigated. No other prehistoric features were identified.

More archaeologically significant was the identification of remains of a possible medieval enclosure system, dating to the late 12th or early 13th century, identified in the west of the Site. Deposits and post-holes within the system of ditches may be evidence of agricultural or settlement activity. A second area containing possible later medieval remains was identified in the north-east of the Site, close to the former route of Woodhouse Lane.

A possible quarry pit and a ditch were excavated that had probably been backfilled in the 19th century or earlier. Further post-medieval features, depicted on early editions of the Ordnance Survey maps, including field boundary ditches, a pond and a possible hollow marking the former route of Woodhouse Lane were all backfilled with modern brick and rubble, probably as an initial stage of airfield construction during WWII.

Numerous drainage and service trenches constructed for the WWII airfield were recorded. The back wall of the demolished Control Tower was also identified. Disturbance and truncation associated with the airfield was more apparent beneath and to the east of the secondary runway. In comparison, the western half of the evaluation area seemed little disturbed which may at least in part explain the greater incidence of archaeological remains in this area of the Site.

The eRCF Site boundary will largely remain unaltered. Therefore, it is considered that the existing archaeological mitigation and control measures will be maintained. This will involve the establishment of a 'watching brief' managed through a programme of fieldwork and archaeological evaluation, undertaken prior to and during construction works. This proposal is therefore considered not to give rise to any significant adverse impacts in relation to the policy set out in PPG16.

4.3.9 PPS23 - Planning and Pollution Control

PPS23 provides advice on how the planning system should be used to help regulate pollution. It advises that it should focus on whether the development itself is an acceptable use of the land, and the impacts of those uses, rather than the control of processes or emissions themselves. Planning authorities should work on the assumption that the relevant pollution control regime will be properly applied and enforced.

They should act to complement but not seek to duplicate it. It further advises that close co-ordination between planning authorities, transport authorities and pollution control regulators is essential to meet the common objective that where development takes place, it is sustainable. It also provides advice on the role of the planning system in securing the remediation of contaminated land.

The proposed development falls under the remit of the Environmental Permitting Regulations (England and Wales) 2007 (EP Regulations).

The eRCF will not operate without an Environmental Permit (EP), irrespective of any valid planning permission being received from Essex County Council. Therefore, in advance of any operations at the eRCF, an EP application will be made to the Environment Agency.

4.3.10 PPG24 - Planning and Noise

PPG24 aims to minimise the adverse impacts of noise without placing unreasonable restriction on development or adding unduly to costs and administration of businesses. It says that noisy activities should be located away from noise sensitive land uses and local authorities are required to ensure that development does not cause an unacceptable level of disturbance.

As stated in Chapter 12 (Noise and Vibration), the predicted operational noise levels indicate that there will be little or no impact in terms of noise at the closest noise sensitive properties. It is considered that the surrounding villages of Bradwell, Silver End, Cressing, Rivenhall and Coggeshall will be unaffected by the operation of the eRCF.

4.3.11 PPS25 – Development and Flood Risk

PPS 25 emphasises the need to consider flood risk in an integrated way. Land at risk of flooding and the degree of that risk should be identified at the regional and local level. The primary aims are to avoid inappropriate development in at-risk areas and to direct schemes away from areas facing the highest threat. Any residual risk can then be managed.

A strategic approach should mean that development is not located or designed in a way that exacerbates flood risk. It may also be possible to reduce risk over wider areas, for example by

creating flood compensation areas, recreating functional flood plains and washlands and designing developments to combine more sustainable flood defences, green amenity space and increased flood storage.

PPS 25 uses a three-tiered approach to assessing flood risk. At the broadest level, regional spatial strategies (RSSs) should be informed by a regional flood risk appraisal, including consideration of risk based on appropriate management plans for river basins, catchments and shorelines. The flood risk appraisal should feed into the RSS sustainability appraisal and help formulate and evaluate options.

A sequential approach to determining whether land is suitable for particular types of development in flood risk areas is central to planning policy. PPS 25 emphasises the principle of first steering development towards areas that face the lowest probability of flooding wherever this is possible.

The Environment Agency's flood zones are the starting point for applying the sequential test. Zone 1 has the lowest risk of flooding and should be the preferred location for development. Zone 2 is medium risk, with an annual probability of river flooding of between one in 100 and one in 1,000 years or of sea flooding between one in 200 and one in 1,000 years. Zone 3 is high risk. If there is no reasonably available site in Zone 1, the flood vulnerability of the proposed development can be taken into account in siting the development in Zone 2 and only then, if necessary, in Zone 3.

PPS 25 clarifies how Zone 3 is to be treated in planning terms. Zone 3 is split into two categories - Zone 3a has a high probability of flooding while Zone 3b is the functional flood plain. Development here requires careful attention and a justification that overrides the intrinsic risk.

In areas lacking alternative lower-risk sites, further development may well be essential to maintain economic viability and social vitality. PPS 25's exception test provides a way of managing flood risk so that necessary development can go ahead safely in such areas.

The Site is located in an area identified by the Environment Agency indicative flood maps as being outside the extent of extreme fluvial or tidal flooding. Extreme flooding is defined by the Agency as flooding, which has more than a 0.1% chance of occurring every year (1 in 1,000 year return period). Therefore, in accordance with definitions provided in PPS25, the Site is located in Flood Zone 1. PPS 25 defines that all uses of land are appropriate within Flood Zone 1, therefore the proposed development is acceptable from this perspective.

The groundwater levels across the Site indicate that there is no existing risk to the Site from groundwater flooding.

The proposal is therefore assessed to be in conformity with PPS 25.

4.4 Development Plan Policies

As set out at the beginning of this Chapter section 38(6) of the Planning and Compulsory Purchase Act 2004 requires that:

“for the purpose of any determination to be made under the planning Acts the determination must be made in accordance with the plan unless material considerations indicate otherwise.”

The development plan in the context of Rivenhall Airfield comprises, at a regional level, the Revised Regional Spatial Strategy (RSS) Strategy for the East of England (May 2008). At a local level the development plan comprises the remaining ‘saved’ policies from the Essex and Southend-on-Sea Replacement Structure Plan 1996-2011 (Adopted April 2001), the ‘saved’ policies from the Essex and Southend Waste Local Plan (Adopted September 2001) and the ‘saved’ policies from the Braintree District Local Plan Review (Adopted July 2005).

As adopted development plans must be in general conformity with national guidance where adopted Plans predate national guidance the provisions of national guidance will where relevant prevail as this is an overriding material consideration. As the Essex and Southend-on-Sea Replacement Structure Plan 1996-2011 and Essex and Southend-on-Sea Waste Local Plan both predate PPS10 they are not wholly up-to-date development plan documents. Therefore, the provisions of PPS10 will also be relevant in this case.

4.4.1 East of England Plan – The Revision to the Regional Spatial Strategy for the East of England (May 2008)

At a regional level, development plan policies in the context of the eRCF are now set out in East of England Plan - The Revision to the Regional Spatial Strategy for the East of England published in May 2008. This has replaced the Regional Planning Guidance 6 (RPG6) (Regional Planning Guidance for East Anglia to 2016) as the Regional Spatial Strategy for the East of England. It incorporates and updates the East of England Regional Waste Management Strategy (EERWMS) 2003. The key relevant policies including the following:

Policy WMI: Waste Management Objectives

In implementing the overall vision and objectives of the Regional Spatial Strategy waste management policies should be based on the following objectives:

- *To ensure timely and adequate provision of the facilities required for the recovery and disposal of the region’s waste and for a reducing quantum of wastes imported into the region;*

- *To minimise the impact of new development, particularly in the key centres of development and change, on regional waste management requirements;*
- *To minimise the environmental impact of waste management, including impacts arising from the movement of waste, and help secure the recovery and disposal of waste without endangering human health;*
- *To seek community support and participation in promoting responsible waste behaviour and approaches to management, viewing waste as a resource and maximising re-use, recycling, composting and energy recovery; and*
- *In determining proposals for planning permission to give weight to the particular locational needs of some types of waste management facility, together with the wider environmental and economic benefits of sustainable waste management.*

As set out in Chapter 3 of this Environmental Statement the proposal for the eRCF has been developed in response to the changes to ECC's Joint Municipal Waste Management Strategy, and meet its new Outline Business Case (OBC) and in particular the need for energy recovery. It will meet or exceed ECC and Southend Borough Council's LATS targets from 2008 onwards. The Reference Project was therefore selected after an extensive technical, financial and deliverability evaluation as one that:

- Meets the waste management performance objectives of the Councils' Strategies;
- Secures an outlet for Solid Recovered Fuel (SRF) and generates a component of renewable energy in line with the local energy agenda, whilst allowing further innovation such as securing additional end markets and combined heat and power solutions during procurement;
- Is based on a site strategy that maximises chances for a competitive procurement and is based on sites identified in the Essex Waste Local Plan, mitigating planning risk; and
- Has the potential to deliver Value for Money when procured under PFI and meets in full the Defra PFI Credit approval criteria.

In addition and as set out in the other Chapters of this Environmental Statement it seeks to minimise the environmental impact of waste management, manage as a resource by maximising re-use, recycling, composting and energy recovery and addresses the locational needs of co-locating different types of waste management facility, together with the wider environmental and economic benefits of sustainable waste management.

It is therefore consistent with the objectives of Policy WM1 of the RSS.

Policy WM2: Waste Management Targets

Challenging but achievable targets should be adopted by all authorities and commercial waste producers to minimise waste and provide the basis for implementing the overall aim of recycling, composting and recovering value from waste. The objectives are to eliminate the

landfilling of untreated municipal and commercial waste by 2021 and secure at least the following minimum levels of recovery:

- *Municipal waste – recovery of 50% at 2010 and 70% at 2015; and*
- *Commercial and industrial waste – recovery of 72% at 2010 and 75% at 2015.*

The targets should be kept under review and extended beyond 2015 through the review of the RSS.

The proposal for the eRCF is consistent with the objectives of Policy WM2 in that it will have a vital role in ensuring that ECC will meet its recovery targets.

Policy WM3: Imported Waste

The East of England should plan for a progressive reduction in imported waste. After 2015 provision for the management of imported waste from London should be restricted to the landfill of residual waste that has been subject to the maximum practical level of recovery and treatment, for which landfill is the only practical option.

Through their Waste Development Plan Documents and when considering proposals for waste management facilities, in addition to that arising within their area, local authorities should provide for an apportionment of waste imported from London for landfill. Allowance should only be made for new non-landfill waste facilities dealing primarily with waste from outside the region where there is a clear benefit, such as the provision of specialist processing or treatment facilities which would not be viable without a wider catchment and which would enable recovery of more locally arising wastes.

It is a well-known fact in the waste management and paper industries that, since the growth of household waste segregation for recycling, the UK's capacity to reprocess waste paper and card is inadequate for the volume segregated and collected. In broad terms, as of 2006, around 8 Million tonnes is segregated by the British public and yet only 4 Million tonnes can be processed in UK mills. The remaining 4 Million tonnes is shipped abroad, predominantly to China and the Far East, where it is generally intended for reprocessing although a number of media investigations have proved that there are some dubious alternative means of disposal and dumping.

The eRCF will provide a fully integrated 'closed-loop' solution to the major waste disposal problems faced by many pulp facilities by:

- Recycling waste paper from municipal MRFs;
- Satisfying a market demand for pulp made from recovered fibres; and
- Sourcing its energy requirements (steam and electricity) from an on-site CHP plant fuelled by SRF and its own pulp production residues.

The need for the Pulp Facility (Section 7.7.3 of the Planning Application Supporting Statement) is based entirely on the anticipated levels of feedstock requiring processing within the East of England. Nonetheless, should there be surplus capacity, and the need arose, the Pulp Facility could potentially serve a wider market, such as that from London.

Policy WM4: Regional Waste Apportionment

In developing policies in their waste Local Development Documents, and when considering proposals for waste management facilities, waste planning authorities should take responsibility for waste arising within their own administrative areas. They should plan for the following quantities of waste (rounded figures), including provision to be made for imported waste in accordance with Policy WM3:

Annual tonnages of waste (thousand tonnes) to be managed			
Year	2005/6 – 2010/11	2010/11 – 2015/16	2015/16 – 2020/21
<i>Bedfordshire & Luton</i>	1,450	1,460	1,620
<i>Cambridgeshire & Peterborough</i>	2,140	2,190	2,460
<i>Essex & Southend</i>	3,150	2,300	3,670
<i>Hertfordshire</i>	2, 220	2,360	2,650
<i>Norfolk</i>	2,090	2,280	2,580
<i>Suffolk</i>	1, 870	1,950	2,180
<i>Thurrock</i>	510	510	510
Region	12,680	13,790	15,170

For waste arising in the region no allowance has been made for waste residues from treatment processes. Waste development documents should assess the level of post treatment residues requiring further management and plan to manage these wastes. Collaboration with other areas or between waste planning authorities should be pursued where it provides benefits in land use and sustainability terms.

The proposal for the eRCF is consistent with the objectives of Policy WM4 in that it will have a vital role in ensuring that sufficient waste management capacity is provided in Essex and Southend to ensure that the two authorities are able to manage their regional waste apportionment. Details of the need case for the development are set out in the Planning Application Statement to accompanying this Environmental Statement.

Policy WM5: Planning for Waste Management

Local Development Documents should include policies which identify the additional capacity required to manage their apportioned wastes. They should identify sites and areas suitable to accommodate the required facilities, including for the collection, sorting and storage of

waste, and its treatment, recycling and disposal and sufficient landfill capacity to meet the anticipated need across the region.

To minimise impacts on growth area objectives for Bedfordshire, the use of potential landfill capacity in the Marston Vale should reduce over time. New landfill development in the Marston Vale should not compromise proposals for environmental regeneration and housing development, and should only be permitted where the waste to be landfilled has been subjected to comprehensive pre-treatment, such that the maximum practicable value has been recovered, and provision is consistent with Bedfordshire's waste apportionment in Policies WM 3 and 4.

The Essex and Southend Waste Local Plan adopted 21 September 2001 identifies a number of Preferred Locations for new waste management facilities. These include the most of the present application site as Site WM1. Insofar as the proposed eRCF is to be developed on site WM1 it is consistent with the objectives of Policy WM5 of the RSS.

Other Relevant RSS Policies

The RSS also includes a number of other relevant policies relating to achieving sustainable development, transport, environmental protection and the water environment that are relevant the development of the proposed eRCF. These include the following:

- Policy SS1: Achieving Sustainable Development;
- Policy SS2: Overall Spatial Strategy;
- Policy ENV2: Landscape Conservation;
- Policy ENV3: Biodiversity and Earth Heritage;
- Policy ENV4: Agriculture, Land and Soils;
- Policy ENV5: Woodlands;
- Policy ENV6: The Historic Environment;
- Policy WAT3: Integrated Water Management; and
- Policy WAT4: Flood Risk Management.

In relation to national planning policy concerning the issues addressed in the above policies the proposed eRCF does not present any other reasons for which indicate that it is inconsistent with any of these policies.

4.5 Local Planning Policies

At a local level there are three relevant planning policy documents:

- Remaining 'saved' policies from the Essex & Southend-on-Sea Replacement Structure Plan 1996-2011 (adopted April 2001);
- 'Saved' policies from the Essex and Southend Waste Local Plan 2001 (adopted September 2001); and
- 'Saved' Policies from the Braintree District Local Plan Review (adopted in July 2005).

These local planning documents are required to be in conformity with national guidance in set out in PPGs and PPSs, and the Regional Spatial Strategy. As both the Essex & Southend-on-Sea Replacement Structure Plan 1996-2011 and the Essex and Southend Waste Local Plan 2001 (from which only 'saved' policies now remain) predate the publication of PPS10, the provisions of PPS10 (July 2005) will be material to the determination of any planning application for new waste management facilities.

4.5.1 Remaining 'saved' policies from the Essex & Southend-on-Sea Replacement Structure Plan 1996-2011

Most of the planning policies contained in the Adopted Structure Plan expired on the 27 September 2007 and are therefore no longer in effect. This is a consequence of the provisions of the Planning & Compulsory Purchase Act 2004.

However, the Secretary of State has decided that a limited number of Adopted Structure Plan policies should be 'saved' and should continue to apply after this date.

The Secretary of State issued a statutory Direction to this effect, since amended to reflect the approval of the East of England Plan on the 12 May 2008. These six 'saved' policies are:

- NR3 – Extension of Suffolk Coasts/Heaths AONB (in Tendring district);
- CC1 – Undeveloped Coast: Coastal Protection Belt;
- BIW9 – Airport Development;
- LRT6 – Coastal Water Recreation;
- EG1 – Proposals for New Power Stations; and
- MIN4 – Sterilisation & Safeguarding of Minerals Sites.

These saved policies above will continue to be a material consideration for the purposes of local planning and development control decisions. These policies have a transitional status and remain force until they are replaced by Development Plan Documents adopted by district planning authorities.

Of the above policies only Policy MIN4 is relevant to the proposed eRCF.

POLICY MIN4 - Sterilisation and Safeguarding of Mineral Sites

Wherever possible, potentially workable mineral deposits will be safeguarded from surface development that would sterilise the minerals or prejudice their working. If, in the opinion of the Mineral Planning Authority, surface development should be permitted, consideration will be given to the prior extraction of the minerals to the extent that such extraction would not be likely to render the site unsuitable for the development proposed, and that the deposit is, or may become, economically significant.

To reduce the overall visual impact of the proposed eRCF on the surrounding landscape, prior to its construction, overburden materials will be excavated and removed from the Site to lower the proposed eRCF at least 11 m below ground level. The construction of the AD and CHP facility will result in deep excavation works to lower the structures into the ground. Sand and gravel recovered from the Site will, where possible, be used to construct the eRCF, exported to Bradwell Quarry for screening and processing or transported off site for use in other construction projects as '*as-raised ballast*'.

Therefore, workable mineral deposits will be recovered from the Site, avoiding mineral sterilisation.

4.5.2 'Saved' policies from the Essex and Southend Waste Local Plan (2001)

The 'saved' policies from the Essex and Southend Waste Local Plan (2001)(WLP) together with the remaining 'saved' policies from Essex and Southend-on-Sea Replacement Structure Plan (2001) and the Braintree District Local Plan Review (2005) make up current extant the local development plan policies for the District. The Waste Local Plan policies aim to work towards sustainable waste management in the County, through waste minimisation, reuse and recycling and consequent reductions in landfill as a final means of disposal.

The main issues addressed are:

- The contribution the WLP makes to the aims of optimising the reduction, reuse, recycling and composting of all wastes but especially household waste;
- Compliance with revised regional guidance;
- Provisions for waste disposal by landfill;
- The identification of specific sites for waste management facilities in addition to the potential landfill sites and criteria against which applications for further facilities would be considered; and
- Policies to guide consideration of planning applications.

The Waste Local Plan was prepared in accordance with the guidance set out in the former PPG10: 'Planning and Waste Management' (September 1999) on the content of a Waste Local Plan. This required WPAs to "*...identify existing waste management sites with capacity for the future and, where practicable, new or extended sites to make adequate future provision of waste management facilities...*". It also stated that in identifying preferred locations, regard must be had to local and regional requirements and other planning considerations, such as "*...protection of the environment and the community, the BPEO, the proximity principle and regional self-sufficiency.*"

The Waste Local Plan therefore identifies several preferred sites for new waste management facilities, including a six hectare area of Rivenhall Airfield which forms part of the current application Site. The Local Plan does not proscribe the nature of the process possible on each

site, and states that this can only be considered in principle and detail when proposals are made at the planning application stage.

The Plan sets out the 'waste policies' of the WPA, which must now be read in conjunction with the Regional Spatial Strategy and remaining 'saved' policies of adopted Replacement Structure Plan (2001).

It states that consistent with the aims of sustainable development a balance should be achieved between:

- Minimising waste by recycling/composting and other means;
- Making adequate provision for necessary waste management facilities; and
- Safeguarding the environment of Essex, and the quality of life of its residents.

The key relevant 'saved' policies of the Plan are listed below together with an assessment of the compliance with the policy.

W3A - The WPAs will:

1. *in determining planning applications and in all consideration of waste management proposals have regard to the following principles:*
 - *consistency with the goals and principles of sustainable development;*
 - *whether the proposal represents the best practicable environmental option for the particular waste stream and at that location;*
 - *whether the proposal would conflict with other options further up the waste hierarchy;*
 - *conformity with the proximity principle;*
2. *in considering proposals for managing waste and in working with the WDAs, WCAs and industrial and commercial organisations, promote waste reduction, re-use of waste, waste recycling/composting, energy recovery from waste and waste disposal in that order of priority;*
3. *identify specific locations and areas of search for waste management facilities, planning criteria for the location of additional facilities, and existing and potential landfill sites, which together enable adequate provision to be made for Essex, Southend and regional waste management needs as defined in policies W3B and W3C.*

On 30 March 2007, ECC resolved to grant planning permission for a Recycling & Composting Facility (RCF) on the area identified as Site WM1 in the Waste Local Plan. The RCF comprises the following elements:

- The recovery of recyclable materials such as paper, card, plastic, metals and fine sand and gravels from residual municipal waste (i.e. waste residues following household and Civic Amenity³ sorting and removal of recyclables); and
- A waste treatment centre utilising Anaerobic Digestion (AD) technology and Enclosed Composting (EC) for the treatment of residual municipal waste – for an approximate eventual throughput of up to 510,000 tonnes per annum.

Following a significant change to the ECC Joint Municipal Waste Strategy, May 2008, GFC's RCF no longer represents the most suitable technologies for the future waste Contract, in particular the MBT and AD processes. Neither does it complete the full range of services that could be offered on the Site to meet the requirements of the County, in particular the need for energy recovery. Consequently, GFC has worked with Golder to evolve the design of the RCF to meet the revised strategy and its accompanying Outline Business Case (OBC).

A report was prepared by an independent panel under the auspices of a 'Waste Commission', which considered its robustness of the approach of the OBC. At a Cabinet meeting on the 22 January 2008 it was resolved that subject to the qualifications set out in the report, the Waste Commission's recommendations be integrated into the programme for the delivery of the medium- and long-term waste management solutions for Essex.

In order to deliver more sustainable waste management, including meeting the demanding landfill diversion targets dictated by the Landfill Allowance Trading Scheme ("LATS"), a major new network of waste facilities is required across Essex. The upfront funding requirement associated with developing this new infrastructure is beyond the resources of the Waste Partnership; and therefore securing private sector finance under long-term contractual arrangements is critical in ensuring the success of this project.

The Partnership agreed a Reference Project that has been designed to meet the objectives of the Councils' Strategies, which will, when combined with the Partnership's interim LATS management strategy, meet or exceed ECC and Southend Borough Council's LATS targets from 2008 onwards. The Reference Project was selected after an extensive technical, financial and deliverability evaluation as one that:

- Meets the waste management performance objectives of the Councils' Strategies;
- Secures an outlet for Solid Recovered Fuel ("SRF") and generates a component of renewable energy in line with the local energy agenda, whilst allowing further innovation such as securing additional end markets and combined heat and power solutions during procurement;
- Is based on a site strategy that maximises chances for a competitive procurement and is based on sites identified in the Essex Waste Local Plan, mitigating planning risk; and
- Has the potential to deliver Value for Money when procured under PFI and meets in full the Defra PFI Credit approval criteria.

³ Household Waste Recycling Centre (HWRC)

On 20 May 2008, the Cabinet approved the principles of the OBC for the future management of waste. The assumptions underlying the Reference Project remain consistent with Council policies as documented in the Draft Joint Municipal Waste Management Strategy (DJMWMS) and the Essex and Southend Waste Local Plan.

On the 15 July 2008, the County Council adopted the Joint Municipal Waste Management Strategy (JMWMS) for Essex (2007 to 2032).

Therefore, the following revised set of technologies are needed on the Site:

- MRF for 100,000 tpa MDR;
- AD for 85,000 tpa MOW;
- MBT for 226,000 tpa residual municipal waste; and
- Energy Recovery from 197,000 tpa SRF.

The technical process details of the proposed eRCF have been developed based upon the JMWMS which has been prepared by ECC to meet the UK Government's Waste Strategy for England 2007. The JMWMS has been subject to a BPEO assessment, and is intended to ensure that wastes are managed in accordance with the waste hierarchy. As mentioned above, the eRCF is located on a site identified as a preferred location for a new waste management facility in the Essex Waste Local Plan, and on a site that ECC resolved to grant planning permission.

The development of the proposed eRCF at Rivenhall Airfield is also fully consistent with the Proximity Principle in accordance with the Waste Strategy for England 2007 and PPS10. The Proximity Principle was originally defined as a stand alone principle under which waste should generally be managed as near as possible to its place of production, because transporting waste itself has an environmental impact.

With the publication of PPS10 in July 2005, the Proximity Principle has been re-formulated to reflect the obligations on local authorities to provide a framework in which communities take more responsibility for their own waste (self-sufficiency), and that waste should be disposed of as near as possible to the place of production (proximity). These objectives are now to be incorporated in the objectives which must be delivered through Municipal Waste Management Strategies and development plans. Decisions on planning applications must be in line with the objectives and planning strategy in the relevant development plan and should enable waste to be disposed of as near to the place of production in one of the nearest appropriate locations.

The development of the Site at Rivenhall Airfield is in accordance with this principle, being geographically located in the centre of North Essex area with good road links via the A120 to all the main centres of population (and the wider region) that the eRCF would serve.

W3C - Subject to policy W3B in the case of landfill and to policy W5A in the case of special wastes, significant waste management developments (with a capacity over 25,000 tonnes per annum) will only be permitted when a need for the facility (in accordance with the principles established in policy W3A) has been demonstrated for waste arising in Essex and Southend. In the case of non-landfill proposals with an annual capacity over 50,000 tonnes per annum, restrictions will be imposed, as part of any planning permission granted, to restrict the source of waste to that arising in the plan area. Exceptions may be made in the following circumstances:

- *Where the proposal would achieve other benefits that would outweigh any harm caused;*
- *Where meeting a cross-boundary need would satisfy the proximity principle and be mutually acceptable to both WPAs; and*
- *...*

Policy W3C is relevant to the proposal in that it will provide a non-landfill waste facility of over 50,000 tonnes per annum, which will be required to manage wastes arising within the plan area.

With reference to the East of England Plan - The Revision to the Regional Spatial Strategy for the East of England published in May 2008, Policy WM2, the eRCF has been designed and sized for the management of the following:

- A Mechanical Biological Treatment (MBT) to treat mixed residual Municipal Solid Wastes (MSW) or black bag wastes (capable of treating up to 250,000 tpa);
- A Materials Recovery Facility (MRF) to sort recyclable materials collected by the Waste Collection Authorities (input capacity of 100,000 tpa);
- An Anaerobic Digestion (AD) plant to generate energy from mixed organic wastes (input capacity of 85,000 tpa);
- A Paper Pulp Production Facility to de-ink and recycle paper and card such as newspapers and magazines (combined input capacity of up to 360,000 tpa); and
- A Combined Heat and Power (CHP) plant to supply energy to the Site (input capacity of 197,000 tpa of solid recovered fuel (SRF)) plus Pulp Production residues.

The eRCF will take integrated waste management to the next stage of sustainable development by reducing the export of recyclable wastes from Essex, and recycling wastes locally into marketable products using energy from non-fossil-fuel sources derived from the waste treatment processes.

The need case for the proposed eRCF is set out in Section 7.0 of Volume 1.

W4A - Waste management development will only be permitted where:

- *There would not be an unacceptable risk of flooding on site or elsewhere as a result of impediment to the flow or storage of surface water;*

- *There would not be an adverse effect on the water environment as a result of surface water runoff; and*
- *Existing and proposed flood defences are protected and there is no interference with the ability of responsible bodies to carry out flood defence works and maintenance.*

Since hard-standings and buildings will be replacing the current grassed area, there will be increased runoff, which would increase the risk of flooding to the Site. Therefore, although the Site does not lie within an area of flood risk, a flood risk assessment has been prepared. A lagoon system will be constructed that will attenuate and minimise any flood risks.

The discharge of excess surface water runoff from the temporary storage area to Bradwell Pond will not cause a residual negative impact on surface water quality after the implementation of mitigation measures, including the regulation and monitoring of the discharge. See Chapters 3 and 6 for further details.

W4B - *Waste management development will only be permitted where there would not be an unacceptable risk to the quality of surface and groundwaters or of impediment to groundwater flow.*

Following the implementation of the mitigation proposals, the proposed Site development is unlikely to cause a residual impact to the surface water and groundwater hydrology or quality. See Chapter 6 for further details.

W4C - 1. *Access for waste management sites will normally be by a short length of existing road to the main highway network consisting of regional routes and county/urban distributors identified in the structure plan, via a suitable existing junction, improved if required, to the satisfaction of the highway authority.*

As mentioned above, the proposed development would be accessed via the existing private access road to the mineral extraction area located to the north of the Site. This forms a junction with the A120. This junction has been designed to current design standards. Site WM1 was selected within the Waste Plan on the basis of the existing junction and the proposed access road. The development proposal accords with Policy W4C. See Chapter 10 for further details.

W6A - *The WPAs will seek to work with WDAs/WCAs to support and promote public, private and voluntary sector initiatives to reduce, re-use and recycle waste arising in an environmentally acceptable manner in accordance with the policies within this plan.*

The proposed eRCF will meet these needs and the criteria set out in the JMWMS by providing a treatment facility for residual wastes leftover after source separation. The proposals will incorporate improved environmental and technological features that reflect the

need for local recycling and waste treatment facilities by incorporating the following waste treatment processes:

- A Mechanical Biological Treatment (MBT) to treat mixed residual Municipal Solid Wastes (MSW) or black bag wastes (capable of treating up to 250,000 tpa);
- A Materials Recovery Facility (MRF) to sort recyclable materials collected by the Waste Collection Authorities (input capacity of 100,000 tpa);
- An Anaerobic Digestion (AD) plant to generate energy from mixed organic wastes (input capacity of 85,000 tpa);
- A Paper Pulp Production Facility to de-ink and recycle paper and card such as newspapers and magazines (combined input capacity of up to 360,000 tpa); and
- A Combined Heat and Power (CHP) plant to supply energy to the Site (input capacity of 197,000 tpa of solid recovered fuel (SRF)) plus Pulp Production residues.

The treatment process will maximise the amount of material recovered for further recycling, treatment and recovery in order to meet the targets and objectives of the waste strategy.

W7A - Proposals for indoor waste composting facilities will be supported at the following locations:

- *Te waste management locations identified in Schedule 1 (subject to policy W8A);*
- *Other locations (subject to policies W8B and W8C); or*
- *In association with other waste management development.*

Provided the development complies with other relevant policies of this plan.

Policy W7A is relevant to the proposal in that the proposed waste management processes include the Anaerobic Digestion of mixed organic wastes (input capacity of 85,000 tpa), and, as mentioned above, the facility is located on a site (Site WM1) identified as a preferred location for a new waste management facility in the Essex Waste Local Plan. The policy therefore supports the proposal.

W7C - The WPAs will seek to work with WDAs/WCAs to provide and support composting schemes and anaerobic digestion facilities as a method of treating putrescible waste materials and with the aim of producing a soil improver or growing medium and, where possible, recovering energy. Proposals for anaerobic digestion facilities will be supported at the following locations:

- *The waste management locations identified in schedule 1 (subject to policy W8A);*
- *Other locations, subject to policies W8B and W8C;*
- *In association with other waste management development;*
- *In association with sewage treatment works and intensive livestock units; and*
- *As part of district heating schemes.*

Provided the development complies with all other relevant policies of this plan.

Policy W7C is relevant to the proposal in that the proposed waste management processes include an AD stage for the treatment of putrescible waste (85,000 tpa of mixed organic waste), and, as mentioned above, the facility is located on a site identified as a preferred location for a new waste management facility in the Essex Waste Local Plan. The policy therefore supports the proposal.

W7E – To facilitate the efficient collection and recovery of materials from the waste stream, in accordance with Policy W3A, the WPAs will seek to work with the WDAs/WDCs to facilitate the provision of:

- *Development associated with the source separation of wastes;*
- *Material Recovery Facilities (MRF);*
- *Waste recycling centres;*
- *Civic amenity sites; and*
- *Bulking-up facilities and waste transfer stations.*

Proposals for such development will be supported at the following locations:

- *The waste management locations identified in Schedule 1 (subject to policy W8A);*
- *Other locations (subject to policies W8B and W8C);*
- *In association with other waste management development; and*
- *Small scale facilities may be permitted at current landfill sites, provided the development does not prejudice the agreed restoration timescale for the site and the use ceases prior to the permitted completion date of the site (unless an extension of time to retain such facilities is permitted).*

Provided the development complies with all other relevant policies of this plan.

Policy W7E is relevant to the proposal in that the proposed eRCF will receive a range of waste materials including:

- Mixed Dry Co-mingled Recyclables (MDR);
- Mixed Organic Wastes comprising kerbside collected kitchen and green waste (MOW);
- Residual Municipal Solid Waste (MSW) including a proportion of commercial and industrial (C&I) waste that is collected by the WCAs at the same time as residual MSW from schools, offices etc; and
- Other commercial and industrial waste.

The eRCF scheme will comprise the following elements:

- A MRF for 100,000 tonnes per annum (tpa) of mixed dry recyclables for the recovery of recyclable materials such as paper, card, plastic, metals and fine sand and gravels from local householders and Civic Amenity⁴ sites;
- Anaerobic Digestion for 85,000 tpa Mixed Organic Waste (MOW) from kitchen and green waste collections from local householders and Civic Amenity sites;
- Mechanical Biological Treatment for 226,000 tpa residual MSW wastes (*i.e. black bag wastes*) and/or C&I waste;

⁴ Household Waste Recycling Centre (HWRC)

- A Pulp Facility for up to 360,000 tpa of reclaimed paper; and
- CHP for 197,000 tpa Solid Recovered Fuel (SRF) (87,500 tpa from Courtauld Road Basildon and 109,500 tpa from the eRCF), plus 110-165,000tpa Paper Pulp Production residues.

The eRCF will receive reclaimed paper from Local Authority and merchant sources which alongside papers reclaimed from the eRCF's own MBT and MRF, will be converted to clean paper pulp feedstock for new paper. Therefore, through the introduction of integrated waste management processes the eRCF will facilitate the efficient collection and recovery of materials from the waste stream, in accordance with Policy W3A, and, as mentioned above, the facility is located on a site identified as a preferred location for a new waste management facility in the Essex Waste Local Plan. The policy therefore supports the proposal.

W8A - Waste management facilities will be permitted at the locations shown in schedule 1 provided all of the following criteria, where relevant, are complied with:

- *There is a need for the facility to manage waste arising in Essex and Southend (subject to policy W3C);*
- *The proposal represents the best practicable environmental option for the particular waste stream, having regard to any alternative options further up the waste hierarchy;*
- *The development complies with other relevant policies of this plan, including the policy/ies in chapter 7 for the type(s) of facility proposed;*
- *Adequate road access is provided in accordance with policy W4C. Access by rail or water will be supported if practicable;*
- *Buildings and structures are of a high standard of design, with landscaping and screening provided as necessary; and*
- *Integrated schemes for recycling, composting, materials recovery and energy recovery from waste will be supported where this is shown to provide benefits in the management of waste which would not otherwise be obtained.*

The need for the eRCF is addressed in the accompanying Planning Application Supporting Statement (in Volume 1), which demonstrates that there is a proven need for the facility to manage waste arising in Essex to meet the requirements of the JMWMS.

PPS10 discontinues the BPEO objective as a requirement in decision making. Instead, the underlying principles of sustainable waste management are to be delivered through a 'plan-led' approach and the emphasis on planning strategies delivering the objectives set out in paragraph 3 of the new PPS10. Paragraphs 22-23 of PPS10 sets out the Government's policy in relation to the approach of planning authorities in the determination of planning applications. These state that it is important that plans are kept up-to-date and properly reflect national policy but that, in the interim period before the development plan is updated, to reflect the policies in the PPS, planning authorities should ensure proposals are consistent with the policies in this PPS and avoid placing requirements on applicants that are inconsistent. Accordingly a BPEO assessment is not included with this ES. Instead, this

Chapter sets out an assessment of how the proposal should be considered in relation to development plan and other relevant planning policies, in accordance with the plan led approach now required by PPS10 (and as set out in Policy W3A in accordance with the waste hierarchy).

As set out in relation to Policy W4C above, the proposed development will be accessed via the existing private access road, which forms a junction with the A120. This junction has been designed to current design standards. Furthermore, on 30 March 2007, ECC resolved to grant planning permission for a Recycling & Composting Facility (the RCF) on the area identified as Site WM1 - Schedule of Preferred Locations for Waste Management in the Essex and Southend Waste Local Plan (the Waste Plan) adopted 21 September 2001 by ECC and Southend-on-Sea Borough Council covering the period 1997-2010. Therefore, the eRCF will make use of a site that has already been selected on the basis of the capacity of existing infrastructure to service an important waste treatment process. See Chapter 10 for further details.

The proposed eRCF will be lowered by at least 11 metres below surrounding ground level to reduce the overall visual impact on the surrounding landscape. A belt of existing trees will be retained around the southeast and southwest boundaries of the Site, whilst additional screen planting will be provided around the east, north and west perimeters of the Site to mitigate the visual impact further. The eRCF's chimney will extend 35m above existing ground level (*approximately 15 m above the surrounding tree line*). The chimney will be clad in stainless steel to reflect and mirror the surrounding environment and make its appearance as unobtrusive as possible. The proposed development would be executed to a high standard of layout and design. See Chapter 8 for further details.

The proposed eRCF processes include the recovery, separation and baling of dry recyclables, the generation of a solid recovered fuel (SRF), the segregation of inert materials to be recycled as aggregate, the production of a compost-like output and paper recycling. The facility is designed to take recycling in Essex to the next level through the provision of fully integrated waste processes that will essentially provide a closed loop waste treatment process.

The eRCF will incorporate AD processes, for the treatment of kerbside collected kitchen and green waste. The biogas generated by the AD process will be collected and used to generate electricity.

Its MRF will separate Mixed Dry Recyclables into components of paper, card, plastics, ferrous and non-ferrous metals. The MRF is designed to incorporate a range of materials sorting, handling and recovery systems which are widely used within the waste management industry. The various recyclable materials which are sorted and recovered by the MRF will be bulked up or baled for transport to off-Site specialist recyclers for further processing, secondary treatment and return into the materials market.

Residual Municipal Solid Waste (i.e. black bag wastes) and/or C&I wastes, imported into the Site will be treated by a 'biodrying' MBT process to produce a fuel which will be used to generate electricity, heat and steam within the eRCF's CHP.

Following the biodrying process, the resulting materials will be fed into a MRF to remove recyclable materials such as metals, glass, grit etc for secondary treatment and recycling off-Site. Following processing, treatment and recovery operations through the MRF the remaining residual (or non-recyclable materials) will consist of 'biodried' residual wastes which will have a relatively high calorific value. This material a Solid Recovered Fuel (or SRF) will used as a fuel in the eRCF's CHP.

The CHP will treat the 'biodried' SRF produced by the eRCF's MBT, together with other 'biodried' materials that will be imported to the Site from facilities such as the Courtauld Road Plant in South Essex. These MBTs will produce 197,000 tonnes per annum (tpa) of 'biodried' SRF. In addition the eRCF's Pulp Facility will produce pulp process waste sludge, the residues of which will also be treated by the CHP.

The Pulp Facility will receive reclaimed paper, such as newspapers and magazines, from Local Authority and merchant sources which alongside papers reclaimed from the eRCF's own MBT and MRF. The reclaimed paper will be converted to clean paper pulp feedstock for new paper.

Therefore through the introduction of integrated waste management processes the eRCF will facilitate the efficient collection and recovery of materials from the waste stream, in accordance with Policy W3A, and, as mentioned above, the facility is located on a site identified as a preferred location for a new waste management facility in the Essex Waste Local Plan. The policy therefore supports the proposal.

W8B - *Waste management facilities (except landfill to which Policies W9A and W9B apply) will be permitted at locations other than those identified in this plan, provided all of the criteria of Policy W8A are complied with where relevant, at the following types of location:*

- *Existing general industrial areas;*
- *Areas allocated for general industrial use in an adopted Local Plan; and*
- *Employment areas (existing or allocated) not falling into the above categories, or existing waste management sites, or areas of degraded, contaminated or derelict land, where it is shown that the proposed facility would not be detrimental to the amenity of any nearby residential area.*

Large-scale waste management development (of the order of 50,000 tonnes per annum capacity or more, combined in the case of an integrated facility) will not be permitted at such non-identified locations unless it is shown that the locations identified in Schedule 1 are less suitable or not available for the particular waste stream(s) which the proposal would serve.

Policy W8B is not directly relevant to the proposed development of the Site at Rivenhall Airfield, which includes the Preferred Location WM1. However, this application shows that the location WM1 in Schedule 1 is both suitable and available for the particular waste streams, in which case alternative non-identified sites can not be justified under this policy. Insofar as GFC has considered alternative locations for the development of the proposed facility, it is not aware of any alternative or more suitable non-identified site in the area than the Preferred Site WM1. Furthermore, on 30 March 2007, ECC resolved to grant planning permission for a large scale waste management process (510,000 tpa Recycling & Composting Facility) on the area identified as Site WM1. The proposed eRCF is an evolution in the waste treatment and processing operations at the Site.

W10A - When granting planning permission for waste management facilities, the WPA will impose conditions and/or enter into legal agreements as appropriate to ensure that the site is operated in a manner acceptable to the WPA and that the development is undertaken in accordance with the approved details.

The applicant, GFC, accepts that some conditions and/or legal agreements may be imposed if planning permission is granted for the proposed development.

W10B - For all proposals for waste management facilities the WPA will require the submission of a full planning application which should include the siting, design and external appearance of buildings, plant, equipment and storage facilities, landscaping and suitable measures to mitigate and control unacceptable adverse effects, including noise and artificial lighting.

This Volume 2, the ES, which is accompanied by a Planning Application Supporting Statement (in Volume 1), presents the findings of an Environmental Impact Assessment (EIA) carried out for the proposed eRCF. This includes details of the design and layout of the proposed eRCF including operational details (see Chapter 3), a full landscape and visual impact assessment (see Chapter 8) and other impacts including air quality, noise and vibration, etc. Appropriate mitigation measures have been incorporated into the proposal during the EIA process. Details of the proposed mitigation measures are included where appropriate in Chapters 5-14 of this ES.

W10E - Waste management development, including landfill, will be permitted where satisfactory provision is made in respect of the following criteria, provided the development complies with other policies of this plan:

- 1. The effect of the development on the amenity of neighbouring occupiers, particularly from noise, smell, dust and other potential pollutants (the factors listed in paragraph 10.12 will be taken into account);*
- 2. The effect of the development on the landscape and the countryside, particularly in the AONB, the community forest and areas with special landscape designations;*

3. *The impact of road traffic generated by the development on the highway network (see also policy W4C);*
4. *The availability of different transport modes;*
5. *The loss of land of agricultural grades 1, 2 or 3a;*
6. *The effect of the development on historic and archaeological sites;*
7. *The availability of adequate water supplies and the effect of the development on land drainage;*
8. *The effect of the development on nature conservation, particularly on or near SSSI or land with other ecological or wildlife designations; and*
9. *In the metropolitan green belt, the effect of the development on the purposes of the green belt.*

As mentioned above, the ES submitted with the planning application for this proposal includes a number of detailed assessments in Chapters 5 to 14. The potential impacts on all identified residential properties within 1 km and on other receptors have been assessed in terms of amenity. The proposed CHP will take all the exhaust and ventilation air from the eRCF, including that from the MBT, Waste Reception Areas, MRF etc, which will pass through the thermal treatment and combustion process. The technology used in the CHP will ensure that all emissions comply with the requirements of all relevant legislation. This will be achieved by incorporating the latest flue gas cleaning systems into the design of the eRCF. Emissions to air that may result from the waste treatment processes within the eRCF have been assessed as part of the EIA (see Chapter 11 and 14).

***W10F** – Where appropriate the WPA will impose a condition restricting hours of operation on waste management facilities having regard to local amenity and the nature of operation.*

The applicant, GFC, accepts that some conditions and/or legal agreements may be imposed if planning permission is granted for the proposed development.

It is proposed that the reception of waste at the eRCF will be limited to the Bradwell Quarry operating hours of 07:00 to 18:30 hrs Monday to Friday, and 07:00 to 13:00 hrs Saturday, excluding Sunday and Bank Holidays. However, due to the continuous operational nature of the waste treatment, processing and recycling operations, the internal processes of the eRCF will be operated on a 24-hour basis. It should be noted that this 24-hour operation will exclude the reception of waste throughout the evening and night time period of 18:30 to 07:00 hrs. It is intended that the eRCF would, if required under contract with the Waste Disposal Authority, accept and receive clearances from local Household Waste Recycling Centres on Sundays, Bank and Public Holidays.

The night-time operations will concentrate on the maintenance of the continuous processes within the buildings and not upon external activity involving large-scale plant or vehicle movements.

W10G - Applications for waste management facilities should include measures to safeguard and where practicable to improve the rights of way network, which shall be implemented prior to any development affecting public rights of way commencing.

Although the proposed Site access road would cross public footpath 35 and possibly 56, the ability of the public to safely utilise the existing public footpath/bridleway network would not be affected. See Chapter 3 and 10 for further details.

4.5.3 'Saved' policies of the Braintree District Local Plan Review (Adopted 25 July 2005)

This Plan was prepared by Braintree District Council to provide a framework for the development of the area for the period from 1996 to 2011. The Secretary of State for Communities and Local Government has decided that the majority of the Braintree District Local Plan Review policies can be 'saved' and should continue to apply after 24 July 2008. The Plan is based on sustainability principles which seek to guide development in such a way as to conserve and protect resources and not to compromise future generations in meeting their own needs.

The Plan sets out the policies and proposals to guide and promote development in the Braintree District for the plan period. The relevant 'saved' policies include:

Policy RLP 27 Location of Employment Land

Development for employment uses shall be concentrated on suitable sites in towns and villages where housing, employment and other facilities can be provided close together. Development for business, commercial and industrial use shall be located to minimise the length and number of trips by motor vehicles. Development for employment uses will not be permitted where it would be likely to add unacceptably to traffic congestion. The Council may require applicants to enter into Section 106 Agreements to provide for the development of employment land, in accordance with agreed development briefs, and for the provision of off-site works.

Although the eRCF is not located within an existing town or village, the facility is located on a site identified as a preferred location for a new waste management facility in the Essex Waste Local Plan.

On 30 March 2007, ECC resolved to grant planning permission for the development of the RCF on Rivenhall Airfield which could offer employment to an estimated 30 on-Site contractor staff during the construction phase and 50 permanent staff to manage the waste operations, depending upon final technology selections and shift arrangements. The proposed eRCF will offer similar employment opportunities.

As mentioned above, with reference to national planning guidance, the objective of PPG13 is to integrate planning and transport at the national, regional and local level to promote more sustainable transport choices for both people and for moving freight. The proposed eRCF traffic is forecast not to significantly increase the traffic flow on the A120 within the vicinity of the Site access. See Chapter 10 for further details.

Policy RLP 33 Employment Policy Areas

Employment Policy Areas are defined on the Proposals Map where proposals for uses other than those within Use Classes B1, B2 and B8 will be refused.

On 30 March 2007, ECC resolved to grant planning permission for the development of the RCF on Rivenhall Airfield which could offer employment to an estimated 30 on-Site contractor staff during the construction phase and 50 permanent staff to manage the waste operations, depending upon final technology selections and shift arrangements. The proposed eRCF will offer similar employment opportunities.

The eRCF will result in the development of a fully integrated Composting, Anaerobic Digestion, Dry Recyclable Recovery, Paper Recycling and Combined Heat and Power Plant at the Site. It will combine the use of residual waste treatment technologies using Mechanical Biological Treatment (MBT), a Materials Recovery Facility (MRF), a mixed organic waste Anaerobic Digestion (AD) plant to generate green power from biogas, a Combined Heat and Power (CHP) facility to generate electricity, heat and steam and Market De-Inked Paper Pulp (MDIP) Facility (Pulp Facility) at the Site.

It will be located on the area identified as Site WM1 - Schedule of Preferred Locations for Waste Management in the Essex and Southend Waste Local Plan (the Waste Plan) adopted 21 September 2001 by ECC and Southend-on-Sea Borough Council covering the period 1997-2010. Therefore, the eRCF will make use of a site that has already been selected on the basis of the capacity of existing infrastructure to service an important waste treatment process.

Policy RLP 34 Buffer Areas between Industry and Housing

In considering proposals for new employment uses, the District Council will seek, where appropriate, the retention of buffer zones between employment uses and adjacent housing areas. In appropriate circumstances the provision of suitable landscaping will be required between large-scale industrial uses falling in use Class B1, B2 and B8 and adjacent housing areas.

Due to the size and nature of the proposed development it requires a site that is not located in close proximity of the nearby residential development. Industrial land uses are already established on this and adjacent sites, with buffer zones already in existence. Within a 1 km radius there are 13 residential properties, of which the closest is approximately 0.4 km away

from the Site boundary (*i.e. Allshots Farm*). Additional woodland planting will be provided to screen the development as set out in Chapter 8 of this ES.

Policy RLP 36 Industrial and Environmental Standards

Planning permission will not be granted for new development, extensions and changes of use, which would have an unacceptable impact on the surrounding area, as a result of:

- *Noise;*
- *Smells;*
- *Dust;*
- *Grit or other pollution;*
- *Health and safety;*
- *Visual impact;*
- *Traffic generation;*
- *Contamination to air, land or water;*
- *Impact on nature conservation interests; and*
- *Unacceptable light pollution.*

The Council will refuse proposals where access roads would not be adequate to cope with consequential traffic.

As mentioned previously, the ES submitted with the planning application for this proposal includes a number of detailed assessments in Chapters 5 to 14. These show that the eRCF will not give rise to any unacceptable impacts on the surrounding area in terms of the issues identified in Policy RLP8. In terms of traffic access, as mentioned above, the proposed development would be accessed via a private access road, which forms a junction with the A120. This junction has been designed to current design standards and eRCF traffic is forecast not to significantly increase the traffic flow on the A120 within the vicinity of the Site access. See Chapter 10 for further details.

Policy RLP 54 Transport Assessments

All proposals for major new development will be required to be accompanied by a Transport Assessment in order to determine the effect of the proposal on traffic congestion, public transport, cycling and walking.

Chapter 10 of this ES consists of the Transport Assessment. As mentioned previously, the plant will result in a large proportion of traffic using the facility being redirected from existing routes rather than being new trips on the highway network. The eRCF traffic is forecast not to significantly increase the traffic flow on the A120 within the vicinity of the Site access and therefore no improvements to the public highway are considered necessary to enable the development to proceed. As also noted above, alternative modes of transport (including public transport) are unlikely to play a key role in travel to the Site.

On 30 March 2007, ECC resolved to grant planning permission for the development of the Recycling & Composting Facility on Rivenhall Airfield. No changes are proposed to the number of vehicles required to enter or leave the Site under this application.

Policy RLP 62 Development Likely to Give Rise to Pollution, or the Risk of Pollution

Planning permission will not be granted for development including changes of use which will, or could potentially, give rise to polluting emissions to land, air and water, or harm to nearby residents including noise, smell, fumes, vibration or other similar consequences, unless: i) adequate preventative measures have been taken to ensure that any discharges or emissions, including those which require the consent of statutory agencies, will not cause harm to land use, including the effects on health and the natural environment; and ii) adequate preventative measures have been taken to ensure that there is not an unacceptable risk of uncontrolled discharges or emissions occurring, which could cause harm to land use, including the effects on health and the natural environment.

The air quality and nuisance impacts were assessed in Chapters 11 and 14 respectively of this ES. The CHP unit will take all the exhaust and ventilation air from eRCF processes, including the MBT, Waste Reception Areas, MRF, etc. The air will be used within the CHP combustion process and the exhaust air treated, in accordance with the requirements of all relevant legislation before being emitted from the eRCF via a 35 m high stack. The CHP will be fitted with the latest flue gas cleaning systems to remove gases such as Nitrogen Oxide (NO_x), dioxins, furans and other trace components in line with European and National legislation. In addition, to ensure compliance to all relevant emissions legislation continuous monitoring systems will be put in place to ensure compliance and best practice.

For any planned or unplanned maintenance or inspection of the CHP, i.e. boiler inspections etc. when combustion air is not required, exhaust air from the eRCF will be fed through 'back up' air cleaning systems to ensure that emissions requirements are met and to minimise any potential environmental impact.

The noise assessment (Chapter 12) concludes that predicted operational and traffic noise levels indicate that there will be little or no impact in terms of noise at the closest noise sensitive properties.

Policy RLP 63 Air Quality

Where the District Council considers that air quality objectives are likely to be prejudiced, as a result of development proposals and/or resultant traffic movements, applicants will be required to submit a specialist assessment. Planning permission will be refused for developments where air quality objectives cannot be met.

The Travel and Transport Assessment (Chapter 10) concludes that the A120 would not experience a greater than 5% increase in two way traffic flow as a result of the development. The increase in Annual Average Daily Traffic (AADT) flows on the local road network due to the development will be less than 10%, which is not significant in terms of change in air quality.

Policy RLP 65 External Lighting

Proposals for external lighting which require planning permission will only be permitted if:

1. *The lighting is designed as an integral element of the development;*
2. *Low energy lighting is used;*
3. *The alignment of lamps and provision of shielding minimises spillage and glow, including into the night sky;*
4. *The lighting intensity is no greater than necessary to provide adequate illumination; and*
5. *There is no significant loss of privacy or amenity to nearby residential properties and no danger to pedestrians and road users; and*
6. *There is no unacceptable harm to natural ecosystems.*

The proposed eRCF Site is located within a light sensitive area and this has been taken into account in the design of the facility. External light sources will be required, but these will be fitted at a low level directed downwards towards the area requiring light. Areas with restricted access will not be illuminated unnecessarily. To minimise nuisance associated with light pollution to the surrounding area, mitigation measures such as movement sensitive lights and light coloured bitumen or concrete on the access road will be used. The eRCF, and hence light sources, will be screened from view. Full details of the lighting proposals are set out in Chapter 3.

Policy RLP 69 Sustainable Drainage

Where appropriate, the District Council will require developers to use Sustainable Drainage techniques such as grass swales, detention/retention ponds and porous paving surfaces, as methods of flood protection, pollution control and aquifer recharge.

Water usage will be controlled whereby potential losses from the waste treatment and recycling operations will be significantly minimised through the use of waste water treatment, surface water collection and closed loop treatment processes. Therefore, rainfall and surface water collected from the roofs of the eRCF and areas of hardstanding, which will be stored in Upper Lagoon for use within the waste treatment process.

Permeable paving will be provided where possible. As set out in Chapter 6, appropriate mitigation measures will be put in place to minimise the chance of spills occurring and their significance, and to clean up spills should they occur.

Policy RLP 70 Water Efficiency

The District Council will require measures that reduce the demand for water in all new developments, including low volume systems and grey water recycling.

Water usage will be controlled whereby potential losses from the waste treatment and recycling operations will be significantly minimised through the use of waste water treatment, collection and closed loop treatment processes.

An integrated waste water treatment plant will be developed within the proposed eRCF. The WWTP will treat process water (*i.e. water that is required to support the waste management operations proposed at the Site*) which will be returned to Upper Lagoon as clean and treated water for reintroduction into the waste treatment process.

Rainfall and surface water collected from the roofs of the eRCF and areas of hardstanding, will be stored in Upper Lagoon for use within the treatment process and used to balance a proportion of the process losses.

A water balance assessment indicates that the net water losses resulting from the operation of the eRCF are 121 m³ per day. Considering the eRCF waste treatment processes will require 7,343.9 m³ per day to operate, this equates to water losses of just 1.6%. This shortfall could be made up from a combination of sources, such as: water transferred from Bradwell Quarry into Upper Lagoon; water pumped from licensed surface water abstraction points held by GFC from the River Blackwater into Upper Lagoon; or possibly from the local utility water supply network.

Additional reference should be made to Chapters 3 and 6 of the ES.

Policy RLP 71 Water Supply, Sewerage and Land Drainage

Planning permission will not be given where there is inadequate water supply, sewerage or land drainage systems (including water sources, water and sewage treatment works) available to meet the anticipated demands of the development, unless there is an agreed phasing arrangement between the developer and the relevant service provider, for the provision of the necessary infrastructure. In line with the Environment Agencies' Pollution prevention guide lines on disposal of sewage, where no mains drainage is available, developers must show that they are proposing adequate facilities to service the development. Where a septic tank is proposed it is essential that a percolation test is carried out, as set out in the EA guidelines. Where agricultural reservoirs are proposed, a bunded area will be required so as to maintain water levels for the benefit of wildlife.

All non-potable water supplies will be managed within the Site. Upper Lagoon will be a large freshwater storage lagoon located in front of the eRCF. The lagoon will be constructed below

ground level to collect and store water from a combination of sources, namely: rainfall and surface water collected from the roofs of the eRCF and areas of hardstanding around the Site; groundwater pumped from the beneath the Site either during the construction phase of the works, or during the operation and management of the eRCF; water which has been cleaned and treated from the eRCF processes *i.e. liquids arising from the MBT's bio-drying operation*; water transferred from Bradwell Quarry or New Field Lagoon into Upper Lagoon; and water which will be pumped from licensed surface water abstraction points held by GFC from the River Blackwater. The eRCF process water balance and Site water balance is discussed further in Chapters 3 and 6.

Potable water supplies will be negotiated with Anglian Water at the detailed stage of the planning application. Domestic sewage generated on-Site will be managed on-Site within the wastewater treatment facility. In addition grey water collection from roofs of buildings will be reused wherever possible on-Site.

Policy RLP 72 Water Quality

Development will not be permitted which poses an unacceptable risk to the quality of the underlying groundwater, or surface waters.

Following the implementation of the mitigation proposals, the proposed Site development is unlikely to cause a residual impact to the surface water and groundwater quality. See Chapter 6 for further details.

Policy RLP 73 Waste Minimisation

Detailed or reserved matters applications for new development, building or other operations shall be accompanied by a supporting statement and drawings where relevant, demonstrating:

- *How waste and waste materials generated by the development are to be minimised, re-used, reclaimed or recycled;*
- *That the potential pollution from waste is minimised and that unavoidable waste is disposed of, so as to avoid or minimise adverse environmental effects; and*
- *How waste can be minimised during the construction of the development and its eventual demolition or removal.*

The proposed eRCF processes include the recovery, separation and baling of dry recyclables, the generation of a solid recovered fuel (SRF), the segregation of inert materials to be recycled as aggregate, the production of a compost-like output and paper recycling.

The eRCF will incorporate AD processes, for the treatment of kerbside collected kitchen and green waste. The biogas generated by the AD process will be collected and used to generate electricity.

Its MRF will separate Mixed Dry Recyclables into components of paper, card, plastics, ferrous and non-ferrous metals. The various recyclable materials which are sorted and recovered by the MRF will be bulked up or baled for transport to off-Site specialist recyclers for further processing, secondary treatment and return into the materials market.

Residual Municipal Solid Waste (i.e. black bag wastes) and/or C&I wastes, imported into the Site will be treated by a 'biodrying' MBT process to produce a fuel which will be used to generate electricity, heat and steam within the eRCF's CHP.

Following the biodrying process, the resulting materials will be fed into a MRF to remove recyclable materials such as metals, glass, grit etc for secondary treatment and recycling off-Site. Following processing, treatment and recovery operations through the MRF the remaining residual (or non-recyclable materials) will consist of 'biodried' residual wastes which will have a relatively high calorific value. This material a Solid Recovered Fuel (or SRF) will used as a fuel in the eRCF's CHP.

The CHP will treat the 'biodried' SRF produced by the eRCF's MBT, together with other 'biodried' materials that will be imported to the Site from facilities such as the Courtauld Road Plant in South Essex and waste sludge from the Pulp Facility.

The Pulp Facility will receive reclaimed paper which will be converted to clean paper pulp feedstock for new paper.

Therefore through the introduction of integrated waste management processes the eRCF will facilitate the efficient collection and recovery of materials from the waste stream.

During its construction materials excavated from the Site of the eRCF will be processed and reused. Temporary aggregate processing and concrete batching plants will be established on Site to maximise the reuse of Site-won minerals. Areas of hardstanding across the Site will be recovered, crushed, screened and graded for reuse as gravel. See Chapter 3 for further details.

Policy RLP 74 Provision of Space for Recycling

New development should incorporate adequate space for internal and external separation, storage and collection, to facilitate the recycling of waste generated within the building(s). For larger developments, including those with a significant public, tourist or customer presence, the development shall include designated space for a waste recycling facility in an accessible location. Supplementary guidance will be produced on the detailed floor space and design requirements for typical built developments. Proposals for waste reprocessing facilities will be permitted in suitable locations within employment policy areas.

The Site is not in an employment policy area. The eRCF will take integrated waste management to the next stage of sustainable development by reducing the export of recyclable wastes from Essex, and recycling wastes locally into marketable products using energy from non-fossil-fuel sources derived from the waste treatment processes. The eRCF will occupy the same area of land on which, ECC resolved to grant planning permission for a Recycling & Composting Facility, identified as Site WM1.

The proposed eRCF development will include a Pulp Facility which will receive reclaimed paper which will be reprocessed and converted into clean paper pulp feedstock for new paper.

The proposed eRCF will employ to an estimated 30 on-Site contractor staff during the construction phase and 50 permanent staff to manage the waste operations, depending upon final technology selections and shift arrangements.

Policy RLP 75 Waste Reprocessing Facilities

Development proposals involving waste recovery (such as recycling, waste transfer stations and composting) will be permitted in employment policy areas, subject to:

- i) there being no unacceptable adverse impact on adjoining uses by reason of noise, smell, dust or other airborne pollutants; and*
- ii) there being no adverse impact on the surrounding road network either in terms of road safety or capacity.*

The impacts of the development have been assessed in relation to noise, smell, dust, air borne pollutants and the impact of the surrounding road network. Details of the assessments are set out in Chapters 10 to 14 of this ES and they demonstrate that the impacts of the proposal are either acceptable or will be mitigated to an acceptable standard.

Policy RLP 76 Renewable Energy

Proposals for renewable energy schemes and the integration of renewable energy generation into new developments, will be encouraged and permitted where no demonstrable harm is caused to landscape, nature conservation, or historic features within or immediately adjacent to the site. Developers are also encouraged to enter into a dialogue with the District Council to identify sites for renewable energy development.

CHP is a system that involves the recovery of waste heat from power generation to form useful heat energy such as steam. CHP is the production of electricity and thermal energy in a single integrated structure. It avoids the loss of large amounts of heat energy which would otherwise occur if CHP is not utilised.

The Pulping Facility will be supplied with electricity, heat and steam from the CHP. By using steam and hot water from the CHP process, that would otherwise go to waste, the Pulping Facility improves the defined 'quality' of CHP used within the eRCF operation. As a result it is anticipated that the exported electricity from the eRCF (including electricity generated from the AD biogas) will be of the order of 33MW for transmission to the local electricity network or National Grid. As well as providing a sustainable source of energy, the use of biogas to generate power will reduce the amount of greenhouse gases being released into the atmosphere compared with the alternative, which would be the combustion of non-renewable fossil fuels.

Steam from the CHP could be exported from the site to provide a source of heat to future domestic or commercial developments.

Policy RLP 77 Energy Efficiency

New development proposals shall clearly demonstrate the optimum use of energy conservation and incorporate energy conservation and efficiency measures, including where appropriate passive solar gain or other systems and the use of energy-efficient appliances, in order to contribute to the reduction in their total energy consumption.

Electricity generated by the RCF energy plant will be transformed to 33kV for transmission to the local electricity network or National Grid. As well as providing a sustainable source of energy, using biogas gas to generate power will reduce the amount of greenhouse gases being released into the atmosphere from the alternative combustion of non-renewable fossil fuels.

Policy RLP 78 Countryside

The countryside will be protected for its own sake, particularly for its landscapes, natural resources and areas of ecological, historic, archaeological and recreational value. This will be achieved by the restriction of new uses to those appropriate to a rural area, and the strict control of new building in the countryside outside existing settlements to that required to support agriculture, forestry or other rural uses or development. Development should be well related to existing patterns of development and of a scale, siting and design sympathetic to the rural landscape character.

The eRCF is located outside any existing settlement and in a rural area. As mentioned above the facility is located on a site identified as a preferred location for a new waste management facility in the Essex Waste Local Plan. A full landscape and visual impact assessment as been undertaken and proposed mitigation measures for visual impact are detailed in Chapter 8. This concludes that the development of the eRCF will not have an unacceptably adverse impact on the landscape character of the countryside. Assessments of the impact in terms of ecology, archaeology and recreation use are similarly set out in Chapters 7, 9 and 13 respectively.

Policy RLP 79 Special Landscape Areas

Development likely to cause permanent loss or damage to the traditional rural qualities of the countryside, or its essential landscape character will be refused, especially in Special Landscape Areas. Special Landscape Areas are defined as a series of areas of distinctive scenic attraction: The Stour Valley, The Pant Valley, The Colne Valley, The Upper Blackwater, The Chelmer-Blackwater Ridges and Terling, The Pods Brook Valley and the Brain Valley, as defined on the Proposals Map. Any development that is permitted in Special Landscape Areas will be expected to conform to the highest standards of design, siting and layout with materials appropriate to the character of the area, with appropriate landscaping. The conservation and maintenance of features important to the local landscape such as trees, hedges, copses, woodlands and ponds will be encouraged. Planning obligations will be sought to secure the management of new landscape areas.

The Upper Blackwater valley to the north of the Site lies within a Special Landscape Area (SLA). Although the development Site lies outside the SLA, the existing access road, between the minerals processing area northwards to its junction with the A120, passes through this area. There are no proposals to change the route of the road; therefore, there are no additional impacts on the SLA. This access was constructed to remove mineral traffic, travelling to Bradwell Quarry, from the local road network, particularly from Church Road, Bradwell. The route of the road was mitigated with localised screen bunding, new hedgerows and copses that accord with the character of the area.

Policy RLP 80 Landscape Features and Habitats

Proposals for new development will be required to include an assessment of their impact on wildlife and should not be detrimental to the distinctive landscape features and habitats of the area such as trees, hedges, woodlands, grasslands, ponds and rivers. Development that would not successfully integrate into the local landscape will not be permitted. All new development will be expected to provide measures for any necessary mitigation of their impact upon wildlife and for the creation and management of appropriate new habitats, with particular attention paid to species and habitats mentioned in National and County Biodiversity Action Plans. Where development is proposed close to existing features, it should be designed and located to ensure that their condition and future retention will not be prejudiced. Additional landscaping including planting of native species of trees and other flora may be required to maintain and enhance these features.

These issues stated in Policy RLP 80 have been addressed in Chapter 7 (Ecology and Nature Conservation), and in particular the impacts and relevant mitigation.

The proposed development would result in the loss of (1.6 ha) existing woodland, including some specimen oak trees. However, perimeter belts of existing woodland would be retained (3.6 ha) and these combined with areas of new native species woodland (2.2 ha) would help to

mitigate these losses and integrate the development into the local landscape. The ditch/moat system will be retained as part of this proposal and the long term impacts on newts are expected to be beneficial as the habitat is restored, management is initiated, and water is pumped in when necessary to keep water levels up in Spring and Summer.

Grassland species chosen for habitat creation, that are native species mimicking known National Vegetation Classification NVC communities. The proposed woody species communities are mixed, as the habitats that will be lost include plantation and ornamental species (fruit trees, etc); they have been chosen to mimic that historical artificiality.

Negative impacts on Great Crested Newts, the only protected species negatively affected by the development, are likely to be temporary and indirect. The loss of some scrub/woodland and plantation woodland of low local value at the RCF Site will be lost will have minor impacts on Red List Birds of Conservation Concern species and on bat foraging lines. Loss of habitat to this project is unlikely to impact on Brown Hares on surrounding farmland. No other relevant species have been found within the 1 km search area.

Although the pond to the south of at Woodhouse Farm is outside the application boundary, it will also be restored and in the long term will be a net benefit to wildlife in this area. New planting proposed as part of the existing quarry restoration programme, will provide linking linear features around the airfield and quarry areas. See Chapters 7 and 8 for further details.

Policy RLP 81 Trees, Woodlands, Grasslands and Hedgerows

The Planning Authority will encourage landowners to retain, maintain and plant, in appropriate locations, locally native trees, woodlands, grasslands and hedgerows. The Planning Authority may make grants available in appropriate cases and orders and notices to protect trees, woodlands and hedgerows. New planting of appropriate native species will normally be required to replace the loss of any protected trees, woodland or hedgerow.

As mentioned previously, all trees on the Site are protected by a Tree Preservation Order (except a single willow tree on the edge of red line where the proposed access road enters the RCF). The proposed development would result in the loss of 1.6 ha of this existing woodland, including some specimen oak trees. However, perimeter belts of existing woodland (of 3.6 ha) would be retained and these combined with areas of new native species woodland (of 2.2 ha) would help to mitigate these losses. See Chapters 7 and 8 for further details.

There are a wide variety of possible soil support systems that can be used to construct the eRCF, such as sheet piles, contiguous piles, soldier piles, secant piles and diaphragm walling. The choice of system will ultimately be dependant on whether the wall needs to be impermeable, the applied loading from the structure and the height limitations of that system. Given that the foundations of the eRCF are being constructed below ground level, the pattern of

groundwater flow in and around the Site and that a combination of MSW wastes (*i.e. black bag wastes*) and/or C&I waste will be processed, sorted, separated, treated and recycled at the eRCF, it is likely that the foundations and retaining structures required will comprise a combination of piled, diaphragm walls and deep caisson construction techniques.

The retaining walls will provide the change in elevation required to construct the eRCF below ground level. Sheet, contiguous, interlocking or secant piles will be driven (or bored) from existing ground levels of approximately 51m AOD to establish the basement levels for the eRCF of between 40 m AOD and 30m AOD.

The installation works can be carried out using mobile piling rigs, which could approach the retaining wall from either direction. Therefore, to minimise and control any potential damage to the existing woodland, access to the piling rigs will be limited to the footprint of the eRCF thereby restricting and controlling perimeter access alongside the woodland.

Once the retaining walls have been installed, excavation works will commence to lower ground levels and establish the various basement levels. Plant access alongside the perimeter woodland will be restricted.

To construct deeper foundations inside the footprint of the eRCF, the retaining walls could be constructed using a combination piles or by using either standard diaphragm wall or deep caisson construction techniques. Additional reference should be made to Chapter 3.

Policy RLP 83 Local Nature Reserves, Wildlife Sites and Regionally Important Geological/Geomorphological Sites.

Development likely to have an adverse effect on a Local Nature Reserve, a Wildlife Site, or a Regionally Important Geological/Geomorphological Site, will not be permitted. Where appropriate, the authority will consider the use of planning conditions and/or planning obligations to provide mitigation or compensatory measures

As discussed above, there are no direct impacts on CWSs. Indirect impacts on CWSs near to the road will be mitigated but some indirect impacts of noise, etc are likely to remain. These are not considered to be significant adverse effects.

The three CWSs are located within a 0.5 km radius of the Site. These will not be impacted. No Local Nature Reserve or Regionally Important Geological/Geomorphological Site is located in the 1 km search area. See Chapter 7 for further details.

Policy RLP 84 Protected Species

Planning permission will not be granted for development, which would have an adverse impact on badgers, or species protected under various UK and European legislation, or on

the objectives and proposals in National or County Biodiversity Action Plans as amended. Where development is proposed that may have an impact on these species, the District Council will require the applicant to carry out a full ecological assessment. Where appropriate, the Planning Authority will impose conditions and/or planning obligations to:

- a) Facilitate the survival of individual members of the species;*
- b) Reduce disturbance to a minimum; and*
- c) Provide supplementary habitats.*

The limited impacts on protected or biodiversity species discussed above can be mitigated to a great extent. Some minor residual impacts, nearly all indirect, will remain however.

The only impact which cannot be mitigated, except by locating it away from flight lines, is that of the potential for bird casualties as a result of the intermittent operation of the biogas flare. The flare will be sited away from scrub, and therefore away from most flight lines of birds and bats. See Chapter 7 for further details.

Policy RLP 86 River Corridors

Development will not be permitted which would harm the open character, nature conservation importance or recreational importance of the floodplains of the Rivers Stour, Colne, Brain, Pant, Blackwater, Ter Valley and their tributaries and the Chelmer and Blackwater Navigation.

The River Blackwater lies approximately 1.5 km north of the Site at its closest point and flows eastward towards Coggeshall, where it alters course and flows southwards. The River Blackwater crossing of the access road is at present two lanes wide, which will not need to be widened and hence there will not be an impact on the river corridor. The ecological assessment shows that there will be no significant adverse impact on the river due to increased traffic volumes. In a verbal response, the Environment Agency confirmed that the River Blackwater is considered to be poor in this area.

Water could be pumped from licensed surface water abstraction points held by GFC from the River Blackwater. The use of the above abstraction licences will be subject to a 'Change of Use' application and negotiation associated with permitted abstraction quantities. The abstraction quantities will not increase. Therefore, the impact on the River Blackwater remains unchanged. See Chapter 7 for further details.

Policy RLP 87 Protected Lanes

The District Council will seek to conserve the traditional landscape and nature conservation character of roads designated on the Proposals Map as Protected Lanes, including their associated verges, banks and ditches. Any proposals that would adversely affect the physical

appearance of these protected lanes, or give rise to a material increase in the amount of traffic using them will not be permitted.

The use of a dedicated private access road would remove traffic particularly from any Protected Lanes. The existing access road crosses the Protected Lane of Ash Lane. The access road would not be altered in this location, so there would be no additional impact. The proposed development would be visible from the Protected Lane of Cuthedge Lane to the north of the Site. Mitigation will be provided by way of woodland planting in the triangular area to the west of Woodhouse Farm. See Chapter 8 for further details.

Policy RLP 88 Agricultural Land

Development of the best and most versatile agricultural land should only be permitted where opportunities have been assessed for accommodating development on previously developed sites or within existing settlement boundaries. Where development of agricultural land is required, developers should seek to use areas of poorer quality except where other sustainability considerations suggest otherwise.

Approximately 11.5 hectares of Grade 3a agricultural land will be lost due to the construction of the extension to the existing access road and the eRCF. However, the development of the eRCF will not affect the loss of Grade 3a agricultural land on which ECC resolved to grant planning permission for the development of the RCF. The eRCF can therefore be justified against baseline environmental conditions established by the RCF. In addition, there is a demonstrable and overriding need for the eRCF. The main eRCF buildings fall within a preferred location identified in the Essex and Southend Waste Local Plan (2001) some of which is previously developed (brown-field) land and it is not possible to develop this area without including some of the surrounding agricultural land. Due to the size of the site required, there are no other comparable alternative brown-field locations in rural North Essex that would be suitable for the type and size of eRCF.

Policy RLP 90 Layout and Design of Development

The Council seeks a high standard of layout and design in all developments, large and small, in the District. Planning permission will only be granted where the following criteria are met:

- (i) The scale, density, height and massing of buildings should reflect or enhance local distinctiveness;*
- (ii) Buildings, open areas, circulation spaces, and other townscape and landscape areas shall be of a high standard of design and materials;*
- (iii) There shall be no undue or unacceptable impact on the amenity of any nearby residential properties;*
- (iv) Designs shall recognise and reflect local distinctiveness, and be sensitive to the need to conserve local features of architectural, historic and landscape importance,*

- particularly within Conservation Areas and in proximity to parks and gardens of historic interest, ancient monuments and sites of archaeological importance;*
- (v) *The layout, height, mass and overall elevational design of buildings and developments shall be in harmony with the character and appearance of the surrounding area; including their form, scale and impact on the skyline in the locality;*
 - (vi) *Both the overall planning and detailed design shall incorporate measures to ensure the maximum practical environmental sustainability throughout the construction, occupation and demolition of the development, in relation to energy conservation, water efficiency, waste separation and the use of materials with low overall energy requirements. Supplementary planning guidance will be prepared on these aspects;*
 - (vii) *Use of the most sustainable modes of transport is promoted in the design and layout of new development, and the resultant traffic generation and its management shall seek to avoid significant increases in traffic movement, particularly in residential areas;*
 - (viii) *Designs and layouts shall promote a safe and secure environment, crime reduction and prevention and shall encourage the related objective of enhancing personal safety; with the maximum amount of natural surveillance of roads, paths and all other open areas and all open spaces incorporated into schemes;*
 - (ix) *Landscape design shall promote and enhance local biodiversity; and*
 - (x) *The design and level of any lighting proposals will need to be in context with the local area.*

As mentioned previously, the proposed development would be executed to a high standard of layout and design. The size of the proposed building has been determined by the quantity of waste to be processed, but the actual processing area has been restricted in size to an area equivalent to the designated Site WM1 in the Local Waste Plan. To ensure the building fits into the existing landscape, its overall height has been fixed by the height of existing features on the Site; the existing aircraft hangar and the surrounding woodland. The new building would be no higher than these features, which is to be achieved by the whole development being lowered into the ground through the removal of the clay overburden. Some of this overburden would be reused around the proposed development to raise levels in areas of proposed planting to screen the lower levels of the building in the early years of operation before the planting has had chance to gain any stature. The eRCF's chimney will extend 35m above existing ground level (*approximately 15 m above the surrounding tree line*). The chimney will be clad in stainless steel to reflect and mirror the surrounding environment and make its appearance as unobtrusive as possible.

See Chapters 3, 7, 8, and 10 for further details.

Policy RLP 91 Site Appraisal

A site appraisal shall be submitted, either preceding or accompanying the relevant planning application, for all non - residential buildings exceeding 1,000 square metres (gross), or other forms of developments with a site area of 1 hectare or more. This site appraisal shall address each of the principles set out in Policy RLP 90 Layout and Design of Development.

Planning Application Supporting Statement, Volume 1, includes the site appraisal for the proposed development.

Policy RLP 94 Public Art

In the interests of enhancement of design in the public realm, the Council will seek the promotion of works, or building elements, in the form of public art, or local crafts. Major developments, or other schemes creating or modifying the layout of public places, will make provision for the commissioning of suitable and durable features, or works of public art, or craft. Public involvement will be facilitated.

Inside the ‘Elephant House’ (the former airfield fire station) are a number of wall murals drawn by the servicemen who served at Rivenhall Airfield. These murals are currently neither visible nor accessible to the general public.

The frontage of the eRCF could be used as a canvas on which Public Art could be displayed to present a record of the Site’s heritage and former use as an airfield. Therefore, subject to agreement with ECC and the USAF, the wall murals from the ‘Elephant House’ could be reproduced and displayed on the front of the eRCF as Public Art, visible to both operators and visitors to the Site.

Policy RLP 100 Alterations and Extensions and Changes of Use to Listed Buildings, and their settings.

Development involving internal or external alterations, extensions and partial demolitions to a listed building or structure (including any structures defined as having equivalent status due to being situated within its curtilage), and changes of use will only be permitted if the proposed works or uses;

(i) do not harm the setting, character, structural stability and fabric of the building (or structure); and

(ii) do not result in the loss of, or significant damage to the building or structure’s historic and architectural elements of special importance, and include the use of appropriate materials and finishes. The Council will seek to preserve and enhance the settings of listed buildings by appropriate control over the development, design and use of adjoining land.

The development of the eRCF will enable the restoration and repair of the two listed buildings within the application Site. This will have a positive impact upon the heritage resource. See Chapter 9 for further details.

Policy RLP 102 Enabling Development

‘Enabling development’ (defined as development within the vicinity of a listed building, or site of archaeological importance) for the claimed purpose of assisting its repair, restoration or improvement will not be permitted, unless it satisfies all of the following criteria:

- (a) *The enabling development will not materially detract from the archaeological, architectural, historic or landscape interest of the asset, or materially harm its setting;*
- (b) *The proposal avoids detrimental fragmentation of management of the heritage asset;*
- (c) *The enabling development will secure the long term future of the heritage asset, and where applicable, its continued use for a sympathetic purpose;*
- (d) *The problem arises from the inherent needs of the heritage asset, rather than the circumstances of the present owner, or the purchase price paid;*
- (e) *Financial assistance is not available from any other source;*
- (f) *It is demonstrated that the amount of enabling development is the minimum necessary to secure the future of the heritage asset, and that its form minimises any harm to the asset; and*
- (g) *The value, or benefit, of the survival or enhancement of the heritage asset outweighs the long-term cost to the community (i.e. any harm to the asset) of providing the enabling development.*

The development of the eRCF will enable the restoration and repair of the two Grade II listed buildings within the application Site. This will have a positive impact upon the heritage resource. See Chapters 3 and 9 for further details.

Policy RLP 104 Ancient Monuments and Sites of Archaeological Importance

Where development would adversely affect the physical preservation of Scheduled Ancient Monuments and other nationally important archaeological remains, and their settings, whether scheduled or not, there will be a presumption in favour of their preservation in situ. Other areas of archaeological significance (i.e. those which, although important locally, are not of national significance) will be preserved. When development affecting such sites is acceptable in principle, mitigation of damage will be sought through the preservation of the remains in situ as a preferred solution. When in situ preservation is not justified, the developer will be required to make adequate provision for excavation and recording before or during development.

An archaeological evaluation was carried out on the Site by Essex County Council's Field Archaeology Unit (ECC FAU), during September and October 2006. The eRCF proposal does not give rise to any significant adverse impacts in relation to Ancient Monuments and Sites of Archaeological Importance.

Policy RLP 105 Archaeological Evaluation

Where important archaeological deposits are thought to be at risk from a proposed development the developer will be required to arrange for an archaeological evaluation to be undertaken prior to the planning decision being made. The evaluation will assess the character, importance and extent of the archaeological deposits and will allow an informed and reasonable decision to be made on the planning application.

An archaeological evaluation was carried out on the Site by Essex County Council's Field Archaeology Unit (ECC FAU), during September and October 2006. The evaluation

confirmed that the character, importance and extent of the archaeological deposits across the Site and confirms that the eRCF proposal does not give rise to any significant adverse impacts.

Policy RLP 106 Archaeological Excavation and Monitoring

Where permission is granted for developments affecting archaeological deposits, conditions will be imposed to ensure that the archaeological remains are properly excavated and recorded prior to the development commencing.

The eRCF is located within area of high archaeological potential, although no direct evidence found within site itself. The archaeological assessment considers that the overall impact of the scheme upon would be mitigated by a ‘watching brief’ managed through a programme of fieldwork and archaeological evaluation, undertaken prior to and during construction works. See Chapter 9 for further details.

Policy RLP 163 Infrastructure and Community Facilities

Developments will be expected to provide improvements to infrastructure and community facilities appropriate to the location, density, scale and nature of the development. Planning agreements will be sought in appropriate cases for developments to include:

... (e) Conservation and where appropriate enhancement of historic buildings, open space and the natural environment;

The development of the eRCF will enable the restoration and repair of the two listed buildings within the application Site. This will have a positive impact upon the heritage resource. See Chapter 9 for further details.

Policy RLP 164 Environmental Impact Assessment

Where appropriate the Council will require the submission of an Environmental Impact Assessment in accordance with the requirements of the Town and Country Planning (Environmental Impact Assessment) Regulations 1999. A transport, retail, pollution, noise or other impact study, and/or a design statement to accompany proposals will be required for development likely to have a significant effect on the surrounding area.

As previously mentioned, this policy assessment forms part of the ES that has been submitted with the application for planning permission for this proposal. It includes a number of more detailed assessments of issues such as traffic, landscape, archaeology, and emissions (See Chapters 5 to 14), as well as a construction statement in Chapter 3.

4.6 Other Relevant Regional and Local Development Strategies

4.6.1 A Shared Vision - The Regional Economic Strategy for the East of England (2004)

The East of England Development Agency (EEDA) has developed a strategic Regional Economic Strategy (RES) in line with the development plans of six regional development organisations: East of England Regional Assembly (EERA); Community and Voluntary Forum for the Eastern Region (COVER); The Confederation of British Industry (CBI); the Institute of Directors (IoD); the Federation of Small Businesses (FSB); and the East of England Chambers of Commerce. Consultation with these organisations produced a “Shared Vision” for the region which identified eight strategic goals which will support the delivery of the vision:

These eight goals are:

1. Develop a skills base that can support a world class economy;
2. Increase competitiveness, productivity and entrepreneurship;
3. Be a global leader in developing and realising innovation in science, technology and research;
4. Have high quality places to live and work;
5. Enable social inclusion and broad participation in the regional economy;
6. Maximise use of international gateways, national and regional transport corridors;
7. Create a leading information society; and
8. Become an exemplar for the efficient use of resources.

The proposal has been assessed against each of the above-mentioned goals in the SIA (Chapter 13). The proposed eRCF contributes significantly to regional waste management strategies and has the potential to contribute to the local and regional strategies. It should be noted that there are specific opportunities to take forward at both the local and regional level because GFC is prepared to adopt a series of commitments to supporting regional learning and local development and empowerment, through a pro-active community engagement programme.

4.7 Analysis of Alternatives and Justification for Site Selection

Schedule 3 of the Town and Country Planning (Environmental Impact Assessment) (England and Wales) Regulations 1999 states that the information for inclusion in an ES must include an outline of the main alternatives studied by the applicant and an indication of the main reasons for his choice, taking into account the environmental effects.

This Section describes the consideration given to alternatives considered by GFC.

4.7.1.1 Location Options

Part of the application Site incorporates Preferred Location WM1 in Essex and Southend Waste Local Plan (2001). Policy W8A of the Plan indicates a presumption in favour of development at Rivenhall Airfield as a Preferred Location subject to the criteria listed in that policy. This application shows that WM1 is available and suitable for the particular municipal waste streams. GFC is not aware of any alternative or more suitable non-identified sites in the area (that may be accord with Policy W8B of the Waste Local Plan) and therefore consideration of alternative locations for the development was ruled out at an early stage.

On 30 March 2007, ECC resolved to grant planning permission for a Recycling & Composting Facility (the RCF) on the area identified as Site WM1 - Schedule of Preferred Locations for Waste Management in the Essex and Southend Waste Local Plan (the Waste Plan) adopted 21 September 2001 by ECC and Southend-on-Sea Borough Council covering the period 1997-2010. Therefore, the eRCF will make use of a site that has already been selected on the basis of the capacity of existing infrastructure to service an important waste treatment process.

The eRCF will incorporate improved environmental and technological features that reflect the need for local recycling and waste treatment facilities by incorporating the following waste treatment processes:

- A Mechanical Biological Treatment (MBT) to treat mixed residual Municipal Solid Wastes (MSW) or black bag wastes (capable of treating up to 250,000 tpa);
- A Materials Recovery Facility (MRF) to sort recyclable materials collected by the Waste Collection Authorities (input capacity of 100,000 tpa);
- An Anaerobic Digestion (AD) plant to generate energy from mixed organic wastes (input capacity of 85,000 tpa);
- A Paper Pulp Production Facility to de-ink and recycle paper and card such as newspapers and magazines (combined input capacity of up to 360,000 tpa); and
- A Combined Heat and Power (CHP) plant to supply energy to the Site (input capacity of 197,000 tpa of solid recovered fuel (SRF)) plus Paper Pulp Production residues.

Combined Heat and Power (CHP) or cogeneration is a system that involves the recovery of waste heat from power generation to form useful heat energy such useable steam. CHP is the production of electricity and thermal energy in a single integrated structure. It avoids the loss of large amounts of heat energy which would otherwise occur if CHP is not utilised. CHP installations capture the waste heat in a variety of forms such as hot water, steam and process heating and cooling. Therefore, a practicable and sustainable use for the heat and steam has been introduced into the eRCF.

Initially, GFC and Golder investigated ideas of bio-ethanol production from waste paper, as this is known to be feasible and being undertaken in some parts of the world (USA, New Zealand). However, assessments of the bio-ethanol process highlighted that the feedstock to the process is a pulp which can be derived from waste paper. It was concluded that this pulp

could be also be used to produce new paper. Therefore, following a review of a range of alternative waste treatment processes, it was concluded that the introduction of a recovered Pulp Facility offers a sustainable waste recycling process, utilising waste heat and electricity generated by the proposed CHP facility.

In January 2005, WRAP's Report entitled "Market De-Inked Pulp Facility – Pre-Feasibility Study – Full Report" identified a need for new processing capacity in the UK to produce MDIP to be sold into the UK 'standard grade' production market, such that it could compete with bleached virgin chemical market pulp from South America or other forests. The size of optimum plant that was considered feasible was to produce 124,000 tonnes per annum of MDIP. A number of positive factors led WRAP to this conclusion. In particular, WRAP identified the already high demand in the UK for this material which is not available to the paper mills who confirmed that they do not make their own MDIP at present but would prefer to use it instead of virgin pulp if it could be available at the right competitive price.

The WRAP Report concluded, however, that a new MDIP facility may face economic challenges (based upon predicted operating economics at 2010) because of the various market rates for buying the recovered fibre and selling the pulp. The biggest conclusion was that such a plant might be feasible if co-located with other paper or waste management facilities in order to share the infrastructure and services costs. Since 2005 changes in the outlook for energy forest products and other commodities mean that these concerns are less of an issue provided the energy and waste management issues can be managed.

The eRCF will provide a fully integrated '*closed-loop*' solution to the major waste disposal problems faced by many pulp facilities.

4.7.1.2 Alternatives to the Design, Layout and Process

In May 2008, the Essex Waste Management Partnership published its most recent Outline Business Case (OBC) for the PFI Waste Disposal project for Essex. The OBC proposes the potential use of an integrated mechanical biological treatment facility and energy from waste at Rivenhall Airfield. For commercial purposes, the OBC proposes an MBT facility with associated materials recycling facility and anaerobic digestion of mixed organic waste at Basildon, a similar combined MBT, MRF and AD facility at Rivenhall Airfield and an EfW facility also at Rivenhall Airfield to receive the SRF from both the Basildon and the Rivenhall MBT plants.

The selection of technologies and introduction of the Pulping facility were driven by the latest OBC and approved Waste Strategy.

The design of the eRCF will result in the development of a fully integrated Composting, Anaerobic Digestion, Dry Recyclable Recovery, Paper Recycling and Combined Heat and Power Plant at the Site. It will combine the use of residual waste treatment technologies

using Mechanical Biological Treatment, a Materials Recovery Facility, a mixed organic waste Anaerobic Digestion plant to generate green power from biogas, a Combined Heat and Power facility to generate electricity, heat and steam and Market De-Inked Paper Pulp Facility at the Site.

The Site already has a resolution to grant planning permission for an important waste treatment process. The eRCF represents further development of the design of the original RCF.

GFC has sought to actively minimise potential impacts on the local community (*e.g. emissions, odours, fumes, traffic, impact on the landscape, etc*) through this design and EIA process. Baseline environmental and emissions conditions (*particularly air quality, transport, landscape and ecology*) established by ECC's resolution to grant planning permission for the RCF have been used to benchmark acceptable environmental impacts. The design of the eRCF has sought to mitigate impacts to a level equal to or less than the conditions benchmarked and approved by the Local Planning Authority for the RCF.

Mitigation measures are documented in the subsequent Chapters 5 to 14. This indicates that the developer is keen to embrace alternatives to reduce adverse impacts upon stakeholders.

GFC is committed to continuing liaison with the regulators (Local Authority and Environment Agency) to determine the best available techniques to minimise environmental impacts of the proposed installation. The results of discussions and decisions to date, including justification of techniques to control pollution are featured in the following sections.

4.7.1.3 Alternative Technologies Considered

Essex County Council conducted a public consultation of the Waste Strategy for the Future which was launched on 18 February and ended in early May 2008. This programme included public and stakeholder consultation on the draft strategy and also on the Strategic Environmental Assessment (SEA) Environmental Report, which assessed the sustainability impact of various waste collection and disposal options.

There were four key purposes to the ECC consultation programme in 2008:

1. To raise awareness of and inform residents and stakeholders about the options proposed in the draft strategy to deliver a sustainable waste management system for Essex;
2. To allow residents and stakeholders the opportunity to comment and give feedback on the draft strategy – these can be general comments as well as seeking answers to specific questions;
3. To raise awareness of and inform residents and stakeholders about the Strategic Environmental Assessment (SEA) Environmental Report; and
4. To allow residents and stakeholders the opportunity to comment on the SEA Environmental Report.

Overall, 84% of Essex respondents stated that they either ‘strongly agree’ or ‘tend to agree’ with the proposal that *“After all practical recycling and composting has taken place... Essex councils should treat ‘black bag’ waste by using MBT process rather than sending the waste directly to landfill.”*

A further 88% would *“prefer it if part of the material from the MBT process was used to produce fuel for energy rather than being sent to a landfill site”*.

In addition, environmental benefits, economic savings and enhanced recovery of recyclable materials are all popular aspects of the MBT process.

The Joint Municipal Waste Management Strategy for Essex is the policy that will steer all the important decisions and commitments regarding the future management of municipal waste in Essex. The strategy brings together the views of the public, key stakeholders and the Essex authorities and sets out options for how waste should be managed in the future.

On the 15 July 2008, the County Council adopted the Joint Municipal Waste Management Strategy (JMWMS) for Essex (2007 to 2032).

The design and layout of the eRCF has been an iterative process. The eRCF is intended to meet the requirements of the JMWMS and take waste treatment and recycling within Essex to the next stage. Therefore, over and above the RCF resolution, the eRCF includes biodrying waste treatment technologies, a CHP and a fully integrated waste paper recycling Pulp Facility.

The general arrangement of the eRCF process has been designed to maximise the plant’s operational efficiency within environmentally controlled and contained environment. The design has considered the need for operational access for routine cleaning and maintenance to be carried out.

In the process of the design, the principal objectives were that the selected technologies must collectively meet the technical output criteria already selected by the County Council whilst minimising the area of building required. Whilst many options were considered, none of these could meet all criteria or provide the flexibility in treatment processing that is offered with the submitted design.

4.8 Conclusion

Section 38(6) of the Planning and Compensation Act 2004 provides that those determining planning applications and appeals must have regard to the development plan and that decisions should be made in accordance with those plans unless material considerations indicate otherwise. The development proposals of the eRCF at Rivenhall are consistent with the objectives of national, regional and local waste management strategies and could

potentially satisfy the IWMC in relation to the requirements for the treatment and disposal of residual municipal waste.

The Site includes the Preferred Location WM1 identified in the Essex and Southend Waste Local Plan (2001) and the use of the Site for the development of the eRCF utilising Composting, Anaerobic Digestion, Dry Recyclable Recovery, Paper Recycling and Combined Heat and Power Plant at the Site is supported by the policies contained in the Plan.

The selection of technologies and introduction of the Pulping facility will deliver a fully integrated recycling and ‘closed *loop*’ waste treatment process at the Site.

The proposed eRCF will have to be considered against the policies identified in this Chapter. The impact of the proposal on the environment is carefully considered in the following Chapters of this EIA which demonstrate that the proposal is acceptable in terms of PPS10 and the key relevant development plan policies, set out in the Regional Spatial Strategy and ‘saved’ Structure and Local Plan policies.

The remaining chapters of this EIA evaluate the impact of the development against interests of acknowledged importance in the natural environment. The assessment in each Chapter sets out the actions for dealing with specific issues set out in the relevant planning policies outlined in this Chapter. The EIA is considered to establish that the development of eRCF will not have any significant negative effect on the area and is in accordance with development plan policy and there are not considered to be any material considerations that indicate otherwise.

Table 4-1: Assessment of the Proposal against Planning Policy

Instrument/Policy No.	Relevant Policy Matter	Proposal accords with policy	Proposal is potentially contrary to policy	Proposal is neutral to policy	Comments
European Waste Law and Policy					
Consolidated Framework Directive 2006/12/EC on Waste	Clarifies and rationalise the legislation applicable to waste. Includes principles of the waste hierarchy, proximity principle and self-sufficiency	✓			The proposal is consistent with the key principles of the directive.
Landfill Directive (99/31/EC)	Sets out European Policy to minimise (biodegradable) waste going to landfill	✓			The proposal is consistent with objectives set out in the directive.
<u>Waste Incineration Directive (2000/76/EC)</u>	Seeks to achieve this high level of environmental and human health protection.	✓			The proposal is consistent with objectives set out in the directive.
Integrated Pollution Prevention and Control (IPPC) Directive (Council Directive 96/61/EC) & Environmental Permitting (England and Wales) Regulations 2007	Securing the prudent use of natural resources	✓			The proposal is consistent with objectives set out in the directive.
Council Directive 92/43/EEC on the Conservation of Natural Habitats and of Wild Fauna and Flora and Conservation (Natural Habitats, &	Implements the Convention on the Conservation of European Wildlife and Natural Habitats (Bern Convention). Requires Member States to introduce a range of measures including the protection of species listed in the Annexes and	✓			There no designated European sites that will be affected by the eRCF. Appropriate mitigation measures are proposed in order to ensure that the development of the eRCF does not give rise to any unacceptable impacts in terms of the European protected species.

Instrument/Policy No.	Relevant Policy Matter	Proposal accords with policy	Proposal is potentially contrary to policy	Proposal is neutral to policy	Comments
c.) Regulations 1994.	Special Areas of Conservation (SACs).				
National Planning Law and Policy					
UK Waste Strategy for England 2007	Government's Waste Strategy pursuant to Article 7 of the Waste Framework Directive	✓			The proposal is consistent with the key policies and principles including waste hierarchy, proximity principle and self-sufficiency, and is intended to help ensure that Essex meets its targets for recycling, recovery and diversion from landfill.
PPS1 – Delivering Sustainable Development including the 'Planning System: General Principles & Planning and Climate Change – Supplement	Government's planning policy on delivering sustainable development	✓			The proposal will deliver a sustainable approach to the municipal waste management in North Essex.
PPS7 – Sustainable Development in Rural Area	Government's policy for sustainable development in the countryside			✓	Part of the Site is outside the Site WM1 and is on best and most versatile agricultural land, but there is justification for the development of such land given the limited availability of large brownfield sites in North Essex.
PPS 9 – Biodiversity and Geological Conservation	Government's objectives on biodiversity and geological conservation	✓			No significant negative impacts on ecology and nature conservation have been identified in the EIA that was carried out.
PPS 10 – Planning for Sustainable Waste Management	Provides guidance on planning for sustainable waste management	✓			The proposal is consistent with PPS10 guidance by diverting waste from landfill on a preferred site identified in the WLP.
PPS 12 – Local Development Frameworks	Government's policy on Local Development Frameworks			✓	Relevant planning policies in the development plan have been assessed (see below).
PPG 13 - Transport	Guidance aimed at promoting a more sustainable transport strategy		✓		Rather than increasing waste-related road traffic as such, the proposal will result in the redistribution of existing waste-related traffic to the local area.

Instrument/Policy No.	Relevant Policy Matter	Proposal accords with policy	Proposal is potentially contrary to policy	Proposal is neutral to policy	Comments
PPG 15 – Planning and the Historic Environment	Planning and the Historic Environment.	✓			The refurbishment, improvement and redevelopment of Woodhouse Farm will be beneficial to the preservation of the historic environment.
PPG 16 – Archaeology and Planning	Archaeology and planning	✓			Since the level of impact of the proposed scheme indicates that mitigation is required a ‘watching brief’ will be adopted during construction.
PPS 23 – Planning and Pollution Control	Provides guidance on planning and pollution control			✓	The proposal will be the subject of an application for an Environmental Permit to the Environment Agency.
PPG 24 – Planning and Noise	Government’s policy on planning and noise	✓			This proposal will not have a significant impact in terms of noise.
PPS25 – Development and Flood Risk	Government’s policy on flood risk	✓			This proposal will not have a significant impact in terms of flood risk.
East of England Plan – The Revision to the Regional Spatial Strategy for the East of England (May 2008)					
Policy WM1: Waste Management Objectives		✓			The proposal for the eRCF has been developed in response to the changes to ECC’s Joint Municipal Waste Management Strategy, and meet it’s new Outline Business Case (OBC) and in particular the need for energy recovery. It will meet or exceed ECC and Southend Borough Council’s LATS targets from 2008 onwards.
Policy WM2: Waste Management Targets	Targets should be adopted by all authorities and commercial waste producers to minimise waste and provide the basis for implementing the overall aim of recycling, composting and recovering value from waste.	✓			The proposal for the eRCF is consistent with the objectives of Policy WM2 in that it will have a vital role in ensuring that ECC will meet its recovery targets.
Policy WM3: Imported Wastes	After 2015 provision for the management of imported waste from London should be restricted to the landfill of residual waste. Allowance should only be made for specialist processing or treatment facilities	✓			The need for the Pulp Facility (Section 7.7.3 of the Planning Application Supporting Statement) is based entirely on the anticipated levels of feedstock requiring processing within the East of England. Nonetheless, should there be surplus capacity, and the need arose, the Pulp Facility could potentially serve a wider market, such as that from London.

Instrument/Policy No.	Relevant Policy Matter	Proposal accords with policy	Proposal is potentially contrary to policy	Proposal is neutral to policy	Comments
	which would not be viable without a wider catchment and which would enable recovery of more locally arising wastes.				
Policy WM4: Regional Waste Apportionment	Waste planning authorities should take responsibility for waste arising within their own administrative areas.	✓			The proposal for the eRCF is consistent with the objectives of Policy WM4 in that it will have a vital role in ensuring that sufficient waste management capacity is provided in Essex and Southend to ensure that the two authorities are able to manage their regional waste apportionment.
Policy WM5: Planning for Waste Management	Local Development Documents should include policies which identify the additional capacity required to manage their apportioned wastes.	✓			The Essex and Southend Waste Local Plan adopted 21 September 2001 identifies a number of Preferred Locations for new waste management facilities. These include the most of the present application site as Site WM1. Insofar as the proposed eRCF is to be developed on site WM1 it is consistent with the objectives of Policy WM5 of the RSS.
Policy SS1: Achieving Sustainable Development	Seeks to bring about sustainable development	✓			The proposal will deliver a sustainable approach to the municipal waste management in North Essex.
Policy SS2: Overall Spatial Strategy	Links in with Policy SS1 but directs most strategically significant growth to the region's major urban areas	✓			Proposal will provide a strategic waste management centrally located within the County of Essex with good access to the major urban areas and is therefore consistent with the objectives of the policy.
Policy ENV2: Landscape Conservation	Plans, policies, programmes and proposals of planning authorities and other agencies should, in accordance with statutory requirements, afford the highest level of protection to the East of England's nationally designated Landscapes.	✓			Proposal is consistent with the objectives of the policy.
Policy ENV3: Biodiversity and Earth	Plans, policies, programmes and proposals of planning authorities and	✓			The proposal is consistent with the objectives of Policy ENV3 in that it will have no significant negative impacts on ecology and nature

Instrument/Policy No.	Relevant Policy Matter	Proposal accords with policy	Proposal is potentially contrary to policy	Proposal is neutral to policy	Comments
Heritage	other agencies should ensure new development minimises damage to biodiversity and earth heritage resources by avoiding harm to local wildlife sites and, wherever possible, achieving net environmental gains in development sites.				conservation have been identified in the EIA that was carried out. There are no Regionally Important Geological/Geomorphological Sites located within 1 km of the Site.
Policy ENV4: Agriculture, Land and Soils	Plans, policies, programmes of planning authorities should: <ul style="list-style-type: none"> • promote and encourage the expansion of agri-environment schemes to: <ul style="list-style-type: none"> – increase the landscape, historic and wildlife value of farmland in accordance with regional priorities set out in other policies of this RSS; – maintain and enhance the resilience and quality of soils; – increase public access; – reduce diffuse pollution. 	✓			Part of the Site is on best and most versatile agricultural land, but there is justification for the development of such land given the limited availability of large brownfield sites in North Essex.
Policy ENV5: Woodlands	Plans, policies, programmes and proposals of planning authorities and other agencies should seek to achieve an increase in woodland cover by protecting and achieving better management of existing woodland and promoting new planting where consistent with landscape character.	✓			The proposal is consistent with the objectives of this policy in that it will result in the loss of 1.6 ha of this existing woodland, including some specimen oak trees, the perimeter belts of existing woodland (of 3.6 ha) would be retained and these combined with areas of new native species woodland (of 2.2 ha) to mitigate these losses.
Policy ENV6: The	Plans, policies, programmes and	✓			The proposal is consistent with the objectives of this policy in that it

Instrument/Policy No.	Relevant Policy Matter	Proposal accords with policy	Proposal is potentially contrary to policy	Proposal is neutral to policy	Comments
Historic Environment	proposals of local planning authorities and other agencies should identify, protect, conserve and, where appropriate, enhance the historic environment of the region, its archaeology, historic buildings, places and landscapes.				will result in the refurbishment, improvement and redevelopment of Woodhouse Farm will be beneficial to the preservation of the historic environment. A 'watching brief' will be adopted during construction in relation to any archaeology on site.
Policy WAT3: Integrated Water Management	The Environment Agency and water industry should work with local authorities and other partners to develop an integrated approach to the management of the water environment.	✓			Proposal is consistent with the objectives of the policy. Application includes assessment of impacts on groundwater, surface water, trade effluent, and flood risk.
Policy WAT4: Flood Risk Management	Sets out requirements for flood risk assessment in local development documents.	✓			This proposal will not have a significant impact in terms of flood risk.
'Saved' Policies from the Essex and Southend-on-Sea Replacement Structure Plan 1996–2011					
MIN4 - Sterilisation and Safeguarding of Mineral Sites	Seeks to ensure that workable mineral deposits will be safeguarded from developments that prejudice their working.	✓			To reduce the overall visual impact of the proposal overburden materials will be excavated and removed from the Site to lower the proposed RCF at least 11 m below ground level.
'Saved' Policies from the Essex and Southend Waste Local Plan (2001)					
W3A – Planning Principles	Sets of key principles against which planning applications will be considered.	✓			The development is consistent with the key principles of this policy.
W3C - Need	Major waste management facilities will only be granted consent where need for the facility has been demonstrated.	✓			The development will meet the need for a residual waste treatment facility in Essex.
W4A – Flood Control	Development will only be permitted where there would not be an	✓			The proposal will comply with all the criteria in this policy.

Instrument/Policy No.	Relevant Policy Matter	Proposal accords with policy	Proposal is potentially contrary to policy	Proposal is neutral to policy	Comments
	unacceptable risk of flooding.				
W4B – Water Pollution	Development will only be permitted where there would not be an unacceptable risk to water quality.	✓			The proposal will comply with all the criteria in this policy.
W4C – Highways Access	Access must be via an existing access road and junction.	✓			The proposal is consistent this policy. Access to the A120 will be via the existing quarry access.
W6A – Integrated Waste Management	WPAs will work with WDAs and WCAs to support recycling.	✓			The proposal is consistent with the objectives of this policy.
W7A – Waste Composting	Location of composting facilities.	✓			The proposal is consistent with the policy and will in part be located on preferred location WM1.
W7C - Anaerobic Digestion (AD)	Location for AD facilities.	✓			The proposal is consistent with the policy and will in part be located on preferred location WM1.
W7E - Materials Recovery Facilities (MRFs)	Location of MRFs				The proposal is consistent with the policy and will in part be located on preferred location WM1.
W8A - Proposed Sites	Sites for waste management facilities.	✓			The proposal will comply with all the criteria in this policy, although part of the Site will be outside the boundary of preferred location WM1 and access by water or rail is not practical.
W8B - Unidentified Sites	Locational criteria.	✓			This proposal demonstrates that Site WM1 of the Waste Local Plan is available and suitable for the particular waste stream that the proposal will serve. No alternative or more suitable non-identified locations are known to be available in the area.
W10A - Planning Conditions and Obligations	Planning Conditions and Obligations.			✓	The site will be operated in accordance with any conditions and legal agreements.
W10B - Content of Planning Applications	Details to be submitted with Planning Applications	✓			The ES of this application includes details of all the matters listed in this policy.
W10E	Planning Application Criteria.	✓			The proposal will comply with all the criteria in this policy, although part of the Site will be outside the boundary of preferred location WM1.
W10F - Hours of	Conditions regulating hours of			✓	

Instrument/Policy No.	Relevant Policy Matter	Proposal accords with policy	Proposal is potentially contrary to policy	Proposal is neutral to policy	Comments
Operation	operation.				
W10G - Public Rights of Way	Public Rights of Way will be safeguarded.	✓			Existing Public Rights of Way will be safeguarded.
'Saved' Policies from the Braintree District Local Plan Review (2005)					
RLP 27 - Location of Employment Land	Employment uses to be concentrated on suitable sites.			✓	The proposal is not located in a town or village, but is a recycling and composting facility to be located in part on preferred location WM1.
RLP 33 – Employment Policy Areas	Identified Employment Sites	✓			The proposal is a recycling and composting facility to be located in part on preferred location WM1.
RLP 34 - Buffer Areas between Industry and Housing	Buffer Areas between Industry and Housing will be retained.	✓			Industrial land uses are already established on this and adjacent sites, with buffer zones already in existence, and only 13 residential properties with a 1 km radius of the Site.
RLP 36 - Industrial and Environmental Standards	Planning Permission will not be granted where there would be unacceptable impacts on the surrounding area.	✓			An EIA has been carried out for this proposal, which did not discover any significant negative impacts on the environment.
RLP 54 - Transport Assessment	A Transport Assessment is required for major development proposals.	✓			A transport assessment has been carried out as part of the EIA.
RLP 62 - Development likely to give rise to Pollution, or the Risk of Pollution	Planning Permission will not be granted for development likely to give rise to pollution.	✓			The proposal will comply with all the criteria in this policy.
RLP 63 - Air Quality	An Air Quality Assessment will be required for development that may prejudice air quality objectives.	✓			The traffic increase on the local road network due to the development will be not significant in terms of change in air quality.
RLP 65 - External Lighting	Criteria for assessing development requiring external lighting	✓			The Site is located within a light sensitive area and therefore measures are incorporated to ensure that potential light pollution is minimised.
RLP 69 - Sustainable	Sustainable Drainage will be	✓			The proposal will comply with all the criteria in this policy.

Instrument/Policy No.	Relevant Policy Matter	Proposal accords with policy	Proposal is potentially contrary to policy	Proposal is neutral to policy	Comments
Drainage	required where appropriate.				
RLP 70 - Water Efficiency	Measures required to reduce demand for water.	✓			It is envisaged that throughout its operational life the RCF will be largely water self-sufficient.
RLP 71 - Water Supply, Sewerage and Drainage	Water Supply, Sewerage and Drainage must be adequate.	✓			The proposal will comply with all the criteria in this policy.
RLP 72 - Water Quality	Planning Permission will not be granted for development likely to have an unacceptable impact on water quality.	✓			The development does not pose an unacceptable risk to groundwater and surface water quality.
RLP 73 - Waste Minimisation	Proposals must include a statement detailing how waste will be minimised.	✓			The proposal will comply with all the criteria in this policy.
RLP 74 – Provision of Space for Recycling	Provision of space for separation and recycling waste.	✓			The proposal itself is a major waste management facility.
RLP 75 - Waste Reprocessing Facilities	Impact on adjoining uses and road network.			✓	The Site is not in an employment policy area.
RLP 76 – Renewable Energy	Renewable energy schemes will be permitted where no demonstrable harm to landscape, nature conservation or historic features.	✓			The proposal incorporates recovery of waste heat from power generation as part of a combined heat and power (CHP) scheme), without any unacceptable impacts on the landscape, nature conservation or historic features.
RLP 77 - Energy Efficiency	New development proposals must demonstrate optimum use of energy conservation.	✓			It is envisaged that the RCF will be a net provider in terms of energy.
RLP 78 - Countryside	The countryside will be protected for its own sake. Siting design and scale must be sympathetic to the rural landscape character.	✓			The proposal will comply with all the criteria in this policy.
RLP 79 - Special Landscape Area	Development likely to damage the Special Landscape Area will be	✓			The proposal will not significantly impact on the Upper Blackwater valley SLA.

Instrument/Policy No.	Relevant Policy Matter	Proposal accords with policy	Proposal is potentially contrary to policy	Proposal is neutral to policy	Comments
	refused.				
RLP 80 - Landscape Features and Habitats	Proposals must include an assessment of their impact on wildlife and must not be detrimental to distinctive landscape features.	✓			The impact assessments for landscape and visual effects, and ecology and nature conservation concluded that the proposal will not have a significant adverse impact.
RLP 81 - Trees, Woodlands, Grasslands and Hedgerows	Trees, Woodlands, Grasslands and Hedgerows must be retained or new planting undertaking to replace any loss.	✓			The proposal will comply with all the criteria in this policy.
RLP 83 - Local Nature Reserves, Wildlife Sites and RIGGS.	Development that will adversely affect Local Nature Reserves, Wildlife Sites and RIGGS will not be permitted.	✓			The only designated sites within a 1 km radius are three CWSs, which will not be impacted.
RLP 84 - Protected Species	Development that will adversely affect any protected species will not be permitted.	✓			The limited impacts on protected or biodiversity species above can be mitigated to a greater extent. Some minor residual impacts, nearly all indirect, will remain however.
RLP 86 - River Corridors	Development that would harm the nature conservation or recreational importance of any river corridors will not be permitted	✓			The ecological assessment shows that there will be no significant adverse impact on the River Blackwater.
RLP 87 - Protected Lanes	Development that will adversely affect any protected lanes will not be permitted.	✓			The proposal will not significantly impact on Protected Lanes.
RLP 88 - Agricultural Land	Development on best and most versatile agricultural land will only be permitted where sustainability considerations justify it.		✓		The loss of relatively small area of the Grade 3a land can be justified by the overriding need for the development.
RLP 90 - Layout and Design of Development	High standard of layout and design is required in all development.	✓			The proposal will comply with all the criteria in this policy.

Instrument/Policy No.	Relevant Policy Matter	Proposal accords with policy	Proposal is potentially contrary to policy	Proposal is neutral to policy	Comments
RLP 91 - Site Appraisal	Site Appraisal required for all development over 1 hectare.	✓			The site appraisal, in Volume 1, addresses each of the principles set out in Policy RLP 90.
RLP 94 – Public Art	Major developments should make provision for commissioning works of public art	✓			WWII murals from the ‘Elephant House’ will be reproduced and displayed as part of the scheme.
RLP 100 - Alterations and Extensions and Changes of Use to Listed Buildings	Alterations and Extensions and Changes of Use to Listed Buildings must not harm their setting, character or structure.	✓			The redevelopment of the on-Site Grade II Listed Buildings into an Education Centre will have a positive impact upon the heritage resource.
RLP 102 - Enabling Development	Criteria for enabling development.	✓			The restoration of the on-Site Grade II Listed Buildings will have a positive impact upon the heritage resource.
RLP 105 - Ancient Monuments and Sites of Archaeological Importance	Nationally important Ancient Monuments and Sites of Archaeological Importance must be preserved in situ.	✓			Since the level of impact of the proposed scheme indicates that mitigation is required regarding the potential archaeological resource, evaluation trenches will be excavated as part of the ongoing archaeological evaluation of the Site.
RLP 105 - Archaeological Evaluation	Archaeological Evaluation must be undertaken where development may put important archaeological deposits at risk.	✓			On completion of all archaeological fieldwork, a comprehensive programme of post-excavation assessment, analysis and reporting will be implemented.
RLP 106 - Archaeological Excavation and Monitoring	Where permission is granted archaeological excavation and monitoring will be required by condition.			✓	It is accepted that conditions may be imposed.
RLP 163 - Infrastructure and Community Facilities	Developments must provide improvements to infrastructure and community facilities where appropriate.	✓			The restoration of the on-Site Grade II Listed Buildings will have a positive impact upon the heritage resource.
RLP 164 - Environmental Impact Assessment	Environmental Impact Assessment must be submitted when required in accordance with the EIA regulations.	✓			An ES has been submitted with this planning application.